

OCONTO COUNTY

20-YEAR COMPREHENSIVE PLAN

VOLUME II: COUNTY RESOURCES

Prepared by:

Bay-Lake Regional Planning Commission
441 South Jackson Street
Green Bay, WI 54301
(920) 448-2820



Amended by:

Oconto County Planning
301 Washington St.
Oconto, WI 54153
(920) 834-6827



Adopted: June 25, 2009
Amended: March 19, 2015

Volume II: County Resources was prepared by the Bay-Lake Regional Planning Commission at the direction of the Oconto County Planning and Zoning Committee, assistance from the Oconto County Planning Advisory Committee, and support from other county departments. *Volume II: County Resources* was amended by Oconto County Planning in 2014 to include the requirements of the Farmland Preservation Program and the “Working Lands Initiative”.

The preparation of this document was financed through contract #06013-07 between Oconto County and the Bay-Lake Regional Planning Commission with financial assistance from the Wisconsin Department of Administration, Division of Intergovernmental Relations. Portions of the transportation element of this plan were underwritten by the Commission’s Regional Transportation Planning Program, which is funded by the Wisconsin Department of Transportation and portions of the economic element were underwritten by the Commission’s Economic Development Program, which is funded by the Economic Development Administration. Financial assistance was provided by the Wisconsin Department of Agriculture, Trade and Consumer Protection to amend this plan to include the requirements of the Farmland Preservation Program and the “Working Lands Initiative”.

RESOLUTION # 46 - 08

TO: THE HONORABLE CHAIRMAN AND MEMBERS OF THE OCONTO COUNTY BOARD OF SUPERVISORS

RE: Adoption of Volume II: Oconto County Resources Document

9 WHEREAS, Wisconsin Statutes 59.69(3) authorizes the preparation of a Comprehensive
10 Plan, in whole or in part, for the general purpose of guiding and accomplishing coordinated,
11 adjusted, and harmonious development of the County;

13 WHEREAS, *Volume II: Oconto County Resources* has been prepared by the Bay-Lake
14 Regional Planning Commission and contains information and maps regarding natural
15 resources, agricultural resources, cultural resources, population, housing, economic
16 development, transportation, utilities, community facilities, intergovernmental cooperation,
17 land use controls, and land use inventory for Oconto County;

19 WHEREAS, *Volume II: Oconto County Resources* has been prepared as a resource document
20 and component of the impending Oconto County Comprehensive Plan, which will be adopted
21 in accordance with Wisconsin Statutes 66.1001; and

23 WHEREAS, the Oconto County Planning and Zoning Sub-Committee held a public hearing on
24 July 21, 2008 to seek public comment on *Volume II: Oconto County Resources* and have
25 recommended approval to the County Board of Supervisors;

27 THEREFORE BE IT RESOLVED, that the Oconto County Board of Supervisors adopts the
28 document entitled: *Volume II: Oconto County Resources*.

Submitted this 21st day of August, 2008

BY: PLANNING & ZONING SUB-COMMITTEE

William Popp, Chairman
Ron Korzeniewski, Vice-Chair
Lawrence Hilbert, Secretary
Louis Winkler
Gerald Gehling

Reviewed by Corporation Counsel:

Vote:

Initials of _____ Date Approved _____

Ayes: 29 Nays: 0 Absent: 2

Initials of _____ Date Approved _____

STATE OF WISCONSIN } I, Judy Ferris
County Oconto } do hereby certify that
the above is a true and correct copy of the original
now on file in the office of the County Clerk and that
it was adopted by the Oconto County Board of Supervisors
on this date, 8/21/08 Judy Ferris
(Seal) County Clerk

(14)

1

PLANNING AND ZONING COMMITTEE RESOLUTION #01-15

2

3

Oconto County Planning and Zoning Committee

4

5 **Adoption of Amendments to the Oconto County 20-Year Comprehensive Plan including Farmland**
6 **Preservation Plan Requirements**

7

8 WHEREAS, the Wisconsin Department of Agriculture, Trade and Consumer Protections (DATCP) is an
9 agency responsible for administering Wisconsin's farmland preservation law pursuant to Wis. Stat. Ch. 91;
10 and

11

12 WHEREAS, in order for a county and its residents to participate in the farmland preservation program, a
13 county must have a state-certified farmland preservation plan pursuant to Wis. Stat. § 91.10 which clearly
14 identifies farmland preservation goals, objectives, policies and mapped areas that the county intends to
15 preserve for agricultural use; and

16

17 WHEREAS, pursuant to Wis. Stat. § 91.10 (2) the county shall include the farmland preservation plan in
18 its comprehensive plan and shall ensure that the farmland preservation plan is consistent with the
19 comprehensive plan; and

20

21 WHEREAS, Wis. Stat. § 59.69 authorizes the adoption of a Comprehensive Plan for the general purpose
22 of guiding and accomplishing coordinated, adjusted, and harmonious development of the County; and

23

24 WHEREAS, the Oconto County 20-Year Comprehensive Plan adopted in 2009 meets the requirements
25 set forth in Wis. Stat. § 66.1001; and

26

27 WHEREAS, the Oconto County 20-Year Comprehensive Plan is comprised of *Volume I: County Plan* and
28 *Volume II: Oconto County Resources*; and

29

30 WHEREAS, the Oconto County 20-Year Comprehensive Plan has been amended to include the
31 requirements of Wis. Stat. Ch. 91; and

32

33 WHEREAS, DATCP has reviewed the plan amendment and certified that the amendment to the Oconto
34 County 20-Year Comprehensive Plan meets applicable certification requirements under Wis.
35 Stat. § 91.18; and

36

37 WHEREAS, DATCP has certified the farmland preservation requirements of this plan amendment for a
38 period ending December 31, 2024 contingent upon county adoption of the amendment to the 20-Year
39 Oconto County Comprehensive Plan as certified, DATCP Order Certifying Plan through December 31,
40 2024 attached hereto as Exhibit A; and

41

42 WHEREAS, the Oconto County Planning and Zoning Committee held a public hearing on February 24,
43 2015 to seek public comment on amendments to *Volume I: County Plan and Volume II: Oconto County*
44 *Resources* and have recommended approval of the *Oconto County 20 - Year Comprehensive Plan* to the
45 County Board of Supervisors.

46

47 THEREFORE BE IT RESOLVED, that the Oconto County Planning and Zoning Committee hereby
48 recommends to the Oconto County Board of Supervisors that a comprehensive plan entitled *Oconto*
49 *County 20-Year Comprehensive Plan* be adopted as amended pursuant to Wis. Stat. § 59.69 and
50 66.1001(4).

51

52 Dated this 24th day of February, 2015.

53

54 Resolution introduced and adoption moved by Ken Linzmeyer

55

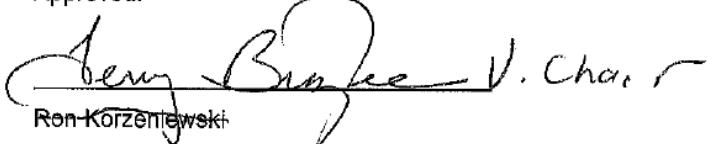
56 Motion for adoption seconded by Parcel Page

57

58 Voting Aye: 4 Nay: 0 Absent: 1

59

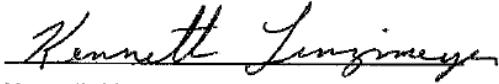
60 Approved:

61 
62 Ron Korzeniewski V. Chair

63 Planning and Zoning Committee Chair

64

65 Attest:

66 
67 Kenneth Linzmeyer

68 Kenneth Linzmeyer

69 Planning and Zoning Committee Secretary

70

71

72

73

74 Reviewed by Corporation Counsel:

75

76 Cam 02.18.2015

77

78 Initials of Date Approved

79 Corp. Counsel

ORDINANCE # 3045-15

TO: The Honorable Chairperson and Members of the Oconto County Board of Supervisors

**RE: ADOPTION OF AMENDMENTS TO THE OCONTO COUNTY 20-YEAR COMPREHENSIVE PLAN
INCLUDING FARMLAND PRESERVATION PLAN REQUIREMENTS.**

WHEREAS, on June 25, 2009 Oconto County Board of Supervisors adopted the Oconto County 20-Year Comprehensive Plan; and

WHEREAS, the Wisconsin Department of Agriculture, Trade and Consumer Protections (DATCP) is an agency responsible for administering Wisconsin's farmland preservation law pursuant to Wis. Stat. Ch. 91; and

WHEREAS, in order for a county and its residents to participate in the farmland preservation program, a county must have a state-certified farmland preservation plan pursuant to Wis. Stat. § 91.10 which clearly identifies farmland preservation goals, objectives, policies and mapped areas that the county intends to preserve for agricultural use; and

WHEREAS, Wis. Stat. § 59.69 authorizes the adoption of a Comprehensive Plan for the general purpose of guiding and accomplishing coordinated, adjusted, and harmonious development of the County; and

23 WHEREAS, the Oconto County 20-Year Comprehensive Plan adopted in 2009 meets the requirements
24 set forth in Wis. Stat. § 66.1001; and

26 WHEREAS, the Oconto County 20-Year Comprehensive Plan is comprised of *Volume I: County Plan* and
27 *Volume II: Oconto County Resources*; and

28
29 WHEREAS, the Oconto County 20-Year Comprehensive Plan has been amended to include the
30 requirements of Wis. Stat. Ch. 91; and

31
32 WHEREAS, DATCP has reviewed the plan amendment and certified that the amendment to the

33 County 20-Year Comprehensive Plan meets applicable certification requirements under Wis. Stat. §
34 91.18; and

36 WHEREAS, DATCP has certified the farmland preservation requirements of this plan amendment for a
37 period ending December 31, 2024 contingent upon county adoption of the amendment to the 20-Year
38 Oconto County Comprehensive Plan as certified, DATCP Order Certifying Plan through December 31,
39 2024; and

41 WHEREAS, this project included adoption of an updated public participation plan and included various
42 public participation opportunities through the farmland preservation planning process and amendment to
43 the Oconto County 20-Year Comprehensive Plan; and

45 WHEREAS, the Oconto County Planning and Zoning Committee held a public hearing on February 24,
46 2015 to seek public comment on amendments to *Volume I: County Plan* and to *Volume II: Oconto County*
47 *Resources*, which were preceded by a Class I notice provided as described in Wisconsin Statutes Chapter
48 985, that were published at least 30 days before the hearing was held, and the notice included all of the
49 following information:

51 1. The date, time and location of the hearing;
52 2. A summary of the proposed comprehensive plan amendment;

53 3. The name of the individual employed by Oconto County who may provide additional information
54 regarding the proposed ordinance;
55 4. Information relating to where and when the proposed Comprehensive Plan could be viewed
56 before the hearing, and how a copy of the Plan could be obtained; and,

57 WHEREAS, At least 30 days prior to the public hearing, written notice was provided to all of the following:

58 1. An operator who has obtained, or made application for, a permit that is described under Wis. Stat.
59 § 295.12 (3) (d);
60 2. A person who has registered a marketable nonmetallic mineral deposit under Wis. Stat. § 295.20;
61 3. Any other property owner or leaseholder who has an interest in property pursuant to which the
62 person may extract nonmetallic mineral resources, if the property owner or leaseholder
63 requests in writing that the local governmental unit provide the property owner or leaseholder
64 notice of the hearing described in Wis. Stat. § 66.1001(4)(d); and,

65 WHEREAS, on February 24, 2015, per Resolution #01-15, the Oconto County Planning and Zoning
66 Committee recommended to the Oconto County Board of Supervisors adoption of the Oconto County 20-
67 Year Comprehensive Plan as amended; and

68 WHEREAS, the Oconto County Board of Supervisors, having carefully reviewed the recommendations of
69 the Oconto County Planning and Zoning Committee, having determined that all procedural requirements
70 and notice have been satisfied, having given the matter due consideration, including consideration of the
71 farmland preservation requirements and amendments to the Oconto County 20-Year Comprehensive
72 Plan, and having determined that the Comprehensive Plan will continue to serve the general purposes of
73 guiding and accomplishing a coordinated, adjusted, and harmonious development of Oconto County,
74 which will, in accordance with existing and future needs, best promote the public health, safety, morals,
75 order, convenience, prosperity and the general welfare, as well as efficiency and economy in the process
76 of development and preserving of agricultural lands.

77 THEREFORE BE IT RESOLVED, the County Board of Supervisors, Oconto County, Wisconsin, does
78 ordain as follows:

79 Section 1: The Oconto County 20-Year Comprehensive Plan as amended and recommended by the
80 Oconto County Planning and Zoning Committee, on file in the Oconto County Planning and Zoning
81 Office, is hereby adopted.

82 Section 2: The County Clerk is directed to file a copy of the adopted Oconto County 20-Year
83 Comprehensive Plan as amended with all of the following entities:

84 1. Every governmental body that is located in whole or in part within the boundaries of Oconto
85 County;
86 2. The Clerk of every local governmental unit that is adjacent to Oconto County;
87 3. The Wisconsin Department of Administration;
88 4. The Wisconsin Department of Agriculture, Trade, and Consumer Protections;
89 5. The Bay-Lake Regional Planning Commission;
90 6. The primary public libraries that serve Oconto County.

91 Section 3: SEVERABILITY. Several sections of this ordinance are declared to be severable. If any
92 section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful, or
93 unenforceable, such decision shall only apply to the specific section or portion thereof of the ordinance.
94 The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms
95 are in conflict with the provisions of this ordinance are hereby repealed as to those terms in conflict.

105

106 Section 4: EFFECTIVE DATE. This ordinance will take effect immediately upon passage and publication
107 as provided by law.

108

109 Submitted this 19th day of March, 2015

110

111 BY: Oconto County Planning & Zoning Sub-Committee

112

113 Ron Korzeniewski, Chairperson
114 Terry Brazeau, Vice Chairperson
115 Kenneth Linzmeyer, Secretary
116 Darrel Pagel
117 David Christianson

118

119

120 Reviewed by Corporation Counsel:

Vote:

121

122

123

124

CKM 03.11.2015

Initials of Date Approved

Corp. Counsel

Ayes: 30 Nays: 0 Absent: 1

STATE OF WISCONSIN } I, Kim Pytleski
County Oconto do hereby certify
that the above is a true and correct copy of the
original now on file in the office of the County Clerk and
that it was adopted by the Oconto County Board of
Supervisors on this date.
Date: 2/19/15 Kim Pytleski
(Seal) County Clerk

Volume II

County Resources

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CHAPTER 5: NATURAL, AGRICULTURAL AND CULTURAL RESOURCES

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INTRODUCTION

This section provides an inventory of the existing natural, agricultural and cultural resource features found in Oconto County. The inventory provides an understanding of the physical characteristics of the county. Because they are major determinants of future development options, it is important to understand where these resources are located and how they relate to one another. Inventorying and defining them will help limit unnecessary public expenditures and minimize the negative impacts to these valued resources as development occurs.

NATURAL RESOURCES

Natural resources are materials that occur in nature and are essential or useful to humans such as water, air, land, trees, animals, plants, soil and minerals. Some are replaceable; others are not. Trees and fish are renewable resources and can be replaced. Nonrenewable resources that include clean groundwater and natural gas are not replaceable once they have been consumed.

Natural resources are often a defining feature for local communities. People depend on natural resources to provide a clean and abundant supply of groundwater; assure good air quality; and provide natural landscapes that are fundamental to a healthy and diverse biological community. Despite their importance, Wisconsin's natural resources are currently facing significant threats due to increasing human demands by a growing population. Direct impacts of current and projected development patterns include habitat loss and fragmentation, threats to water quality, and changes in climate. Therefore, it is important that communities plan appropriately in order to preserve their important natural features.

The following text describes the types and locations of Oconto County's many resources and briefly discusses the importance of them when planning for future growth of the county.

Geology

Quaternary (glacial) and bedrock geology characterize the terrestrial appearance and function of the county. Glacial geology refers primarily to the effects continental glaciations have had on the land over the past 20,000 years and to a lesser extent, the surface effects of more recent erosion and deposition activities. Bedrock geology refers to the much older, solid rock layers that lie beneath glacial sediments.

The geology that lies beneath the county has important implications for land use. Bedrock type, overlying soil composition and depth to bedrock affects excavation; foundations; location and effectiveness of site wastewater treatment systems; residential and industrial development locations; and cost effectiveness of construction and maintenance of highways and streets. The soil composition and depth to bedrock can also have an impact on the natural infiltration of surface waters. In addition, the type of bedrock will determine whether an effective pathway will be available for groundwater recharge as well as its susceptibility to contaminates, including those that naturally occur in the bedrock.

Bedrock

The bedrock underlying Oconto County is made up of seven distinct types from three geologic eras. As a result, the county can be split into three distinct regions based on the age of the bedrock.

- Bedrock in the Northern Highland Region, which lies in the northwestern portion of the county, is made up primarily of granite and mixtures of igneous and metamorphic rocks that are Precambrian (600 million years ago) in their origin.
- To the southeast of the Precambrian formation is the Central Plain Region. This region is characterized by the Cambrian (between 570 and 500 million years ago) group which consists of a variety of sandstones.
- As the bedrock continues southeast, the formations found are of the Ordovician Era (between 488 and 443 million years ago). This region is known as the Eastern Ridges and Lowlands. These formations include the Prairie du Chien group consisting of dolomite, the Saint Peter sandstone and the Platteville-Galena group consisting of dolomite and limestone.

In addition to these distinct regions, along the northern border of Oconto county is a narrow formation of quartzite, slate and iron.

Bedrock has not presented any significant development problems. Bedrock may impact development when found near the surface. Bedrock near the surface may hinder excavation therefore considerably increasing the cost of construction. In addition, conventional on-site septic systems cannot function properly where bedrock is near the surface.

Glacial

During the glacial period, Oconto County was completely covered by a sheet ice known as the Green Bay Lobe of the Labrador Ice Sheet. This sheet of ice was responsible for shaping the surface features that can be seen today throughout the County.

- The glacial drift in Oconto County consists primarily of clayey till. Glaciofluvial sediments in the form of an outwash plain, comprised of lake silt and clay, are located in areas adjacent to major water features and through the central portion of the county. The soils may be less than five feet thick in some areas and up to 200 feet in depth above the bedrock.
- **Map 5.1** illustrates the glacial “Pleistocene” geology of Oconto County, while **Map 5.2** details soil depth to Bedrock within the county.

Glacial deposits can be divided into two types: **till** and **glaciofluvial**.

Till, or unstratified drift, is a mixture deposited directly by the glacier that consists of clay, sand, gravel and boulders intermingled in any proportion.

Glaciofluvial deposits are moved by glaciers, sorted, and deposited by streams flowing from the melting ice. The deposits are stratified and may occur in the form of outwash plains, deltas, kame eskers, and kame terraces. These deposits consist of coarse to medium-grained sand and gravel with numerous cobbles, boulders and portions of till.

Topography

Glacial events occurring in Wisconsin, along with the type of underlying bedrock, have split Oconto County into three distinct regions.

- The Northern Highlands Region of Oconto County, which includes Mountain, Doty, Lakewood, Riverview, Townsend and parts of Brazeau, was once a mountainous area. Centuries of erosion and smothering have removed the mountains, leaving behind a number

of outcrops which can be seen in the Town of Mountain and the Town of Riverview near Crooked Lake. Some of the highest elevations in the state can be observed in this region as well. Thunder Mountain, located near the Oconto County-Marinette County border, rises 1,375 feet above sea level. McCaslin Mountain, located near the junction of Forest, Marinette and Oconto Counties, has been measured at 1,625 feet above sea level.

- The Central Plain Region of Oconto County includes Gillett, Maple Valley, Spruce, Underhill and portions of Brazeau. This area is covered by a hilly, undulating end moraine. A series of low ridges can also be found in the northeastern part of the central region.
- In southeast Oconto County the end moraine of the Central Plain Region eventually merges with the Eastern Ridges and Lowlands Region of the county with a broad, undulating ground moraine that slopes to the east. The entire ground moraine encompasses a number of depressions and basins and is scattered with lake and outwash plains.

In addition to the varying topography of these regions, there are also areas of steep slope that exist within Oconto County. Steep slopes are considered areas with a slope equal to or greater than 12 percent. These steep slope areas are more susceptible to soil erosion and may require special building and construction restraints such as retaining walls, major grading efforts and specialized erosion control measures. Certain soil types are characteristic of steep slope areas based on their composition.

- **Map 5.3** highlights potential areas of steep slope within the county based on soils characteristics.

Soils

The Natural Resources Conservation Service (NRCS) provides a detailed study of all soils in Oconto County in the *Soil Survey of Oconto County, Wisconsin* which was completed in 1985. The survey provides information on the suitability and limitations of soils for a variety of natural resource and engineering uses. Listed below are descriptions of the general soil types within Oconto County.

Soils Description

Soils are grouped into general soil associations that have similar patterns of relief and drainage. These associations typically consist of one or more major soils and some minor soils.

Northern Oconto, which is considered part of the Northern Highlands Region, is generally comprised of Menahga-Rousseau, Padus-Pena, and Lennan-Keweenaw soils that are well drained and nearly level to very steep. The Padus-Pena soils are the most commonly found type in the Northern Highlands.

Onaway-Solona-Seelyeville soils comprise the majority of the soils in the Central Plains Region located in the central portion of Oconto County. These soils are nearly level to very steep, well drained to somewhat poorly drained or very poorly drained, loamy and mucky soils on uplands.

Solona-Onaway-Iosco is the predominate soil of the Eastern Ridges and Lowlands of eastern Oconto County. These soils are nearly level to gently sloping, well drained to somewhat poorly drained, loamy and sandy soils on uplands.

Soil Limitations

Because certain limitations exist for various soil types, the composition and properties of soils should be evaluated prior to any development taking place. By utilizing the information provided by the *Soil Survey of Oconto County, Wisconsin* soil-related failures in various land uses can likely be avoided.

Private Sewage Systems

Private on-site wastewater treatment systems (POWTS) are systems that discharge effluent to groundwater through a subsurface infiltration system. Success of these on-site systems (i.e., drain-fields or mounds) is based on the depth and permeability of the soils where they are installed.

The *Soil Survey of Oconto County, Wisconsin*, provides information on the limitations of each type of soil for these sanitary facilities. Soil ratings are based on soil properties, site features and observed performance of the soils. There are three classes of limitations:

- A. *Severe limitations* mean soil properties or site features are so unfavorable or so difficult to overcome that these systems may require a special design that results in a significant increase in construction costs or possibly costly ongoing maintenance.
- B. *Moderate limitations* mean soil properties or site features are not favorable for the indicated use and may require special planning, design, or maintenance to overcome or minimize these limitations.
- C. *Slight limitations* mean soil properties and site features are generally favorable for the indicated use and limitations are minor and therefore easily overcome.

SPS 383 health and safety code allows new technologies for private sewage systems. The code allows the use of soil absorption systems on sites with at least six inches of suitable native soil. The revised code gives property owners the opportunity and flexibility to meet environmental performance standards with several treatment technologies.

As a way to mitigate these limitations, the revised SPS 383 health and safety code allows new technologies for private sewage systems. This will allow for infill development where it was not permitted previously by the former plumbing code as interpreted by the Department of Industry, Labor and Human Relations (DILHR).

land use planning and integrations of environmental corridors to address the adverse impacts related to development. Planning along with land use controls (e.g. zoning) will assist in achieving more efficient development patterns.

Basements

The *Soil Survey of Oconto County, Wisconsin* also provides information on the limitations of each soil for building site development including the construction of dwellings with basements. These limitations are also based on soil properties, site features and observed performance of the soils.

- Most of the severe limitation soils found in the county occur in wetland areas and locations adjacent to surface water features.

Nonmetallic Mineral Resources

Sand, gravel, and crushed stone are the primary minerals mined in the county. They are needed for constructing the sub-base for roads and are also the primary components in concrete that is used for the building of foundations, basement walls and sidewalks.

- There are several mining sites in Oconto County and surrounding area that extract sand, gravel and/or crushed stone. The *Soil Survey of Oconto County, Wisconsin* identifies soils that would be the best sources for quality sand, gravel, and crushed stone. These minerals are primarily found near river and stream channels, outwash plains, dunes, and eskers.

As Oconto County and other surrounding areas experience continued growth and development, the demand for sand, gravel and crushed stone will increase. As a result, these nonmetallic mineral resources should be identified and conserved for future mining consideration. However, residential development can also threaten the existence of these resources as competition for land increases. Therefore, it is important that land use controls are utilized to ensure the preservation of these resources so that future demands can be met.

Mining operations should also show that they have little negative impact on the neighboring properties or the surrounding areas. This not only includes noise and odors but also adverse effects on groundwater and significant wear on local roads.

Nonmetallic Mining Reclamation (NR 135)

Any new mines need to have a permit granted by the Wisconsin Department of Natural Resources (WDNR) and are subject to the requirements of NR 135.

- A. The reclamation plan is a detailed technical document with goals to successfully reclaim the area as well as limit any long-term negative impacts to the environment once the mine is abandoned.
- B. The WDNR defines successful reclamation as “the restoration of all areas disturbed by mining activities including aspects of the mine itself, waste disposal areas, buildings, roads and utility corridors.”
- C. Restoration is defined as “returning of the site to a condition that minimizes erosion and sedimentation, supports productive and diverse plants and animal communities, and allows for the desired post-mining land use.”

Depleted mining sites can be reclaimed as parkland, wildlife habitat, recreational land or other uses.

NR 135 also allows landowners to register marketable nonmetallic mineral deposits as a way to prevent future development that would interfere with the extraction of those deposits. As a result, registered sites are protected from local zoning or other decisions that permanently interfere with mining on the site for at least 20 years.

Water Resources

Watersheds

Oconto County consists of ten watersheds which are part of the larger Lake Michigan Basin. All of these watersheds drain indirectly into Lake Michigan through Green Bay or one of the county's major rivers.

- **Map 5.4** displays the location of each watershed. Additionally, a description of each watershed can be found in Appendix A of *Volume II: County Resources*.

Priority and Non-Priority Watersheds

Both point and non-point source pollution continues to have a tremendous impact on Wisconsin's watersheds. While rules can easily be put into place to regulate point source pollution, it is much more difficult to control nonpoint source pollution.

As a way to protect the state's watersheds from nonpoint source pollution, the Wisconsin Nonpoint Source Water Pollution Abatement Program (NPS Program) was created in 1978 by the State Legislature and is managed by the WDNR. This program selected priority watersheds based on numerous factors, including but not limited to, the potential for unique species to respond positively to nonpoint source controls and sensitivity to phosphorus loading. The program has provided financial and technical assistance to landowners and local governments to reduce nonpoint source pollution by addressing land management activities that contribute to urban and rural runoff.

Point source pollution can be defined as that which originates from a single point such as pipes, ditches, wells, and containers, while **nonpoint source pollution** cannot be traced to one definitive source. Although exact sources of nonpoint source pollution can be difficult to identify, activities such as farming, construction and mining are known to produce pollution that can be carried away by runoff into local watersheds.

- Table 5.1 lists each of the watersheds within Oconto County as well as their designation through this program (as of February 2007).

Table 5.1: Oconto County Watersheds

Classification	Watershed
Priority Watersheds	Little River Watershed
	Middle Peshtigo River and Thunder Rivers Watershed
	Pensaukee River Watershed
Non-Priority Watersheds	Little Peshtigo River Watershed
	Lower North Branch Oconto River Watershed
	Lower Oconto River Watershed
	Lower Peshtigo River Watershed
	South Branch Oconto River Watershed
	Suamico and Little Suamico River Watershed
	Upper Peshtigo River Watershed

Source: Wisconsin Department of Natural Resources, 2007; Bay-Lake Regional Planning Commission, 2005.

Regardless of their designation, nonpoint source pollution can have negative impacts on all of the county's watersheds. It is important to evaluate any new developments and land activities to determine their potential impacts on the applicable watershed. Many of these activities may not occur in the county; however, the activities undertaken upstream in adjacent communities can adversely impact the water quality in the area and pose a threat to the environment, economy and health of the county and its communities.

Surface Water

The surface waters in Oconto County primarily flow southeast to Green Bay. The major river systems within the county consist of the Little Suamico, Oconto, Little and Pensaukee Rivers. Oconto County has many lakes and streams that provide an abundant supply of surface water. The surface waters of the county provide quality habitat for waterfowl and wildlife in addition to recreational opportunities.

- Overall, Oconto County has 200 named lakes totaling 10,486 acres and 179 unnamed lakes totaling 567 acres. Additionally, the county contains 1,073 miles of streams which cover 12,814 surface acres. Tables 5.2 and 5.3 list the major surface water features in Oconto County including lakes and ponds greater than 100 surface acres and the major rivers and their tributaries. **Maps 5.5 and 5.6** notes their locations within the county.

Table 5.2: Oconto County Lakes and Ponds Greater than 100 Surface Acres

Name	Location	Map 5.6 Number
Anderson Lake	T30N, R17E, Section 3	1
Archibald Lake	T32N, R15E, Section 2	2
Bass Lake	T32N, R15E, Section 4	3
Berry Lake	T28N, R17E, Section 19	4
Boot Lake	T32N, R15E, Section 9	5
Boulder Lake	T31N, R15E, Section 21	6
Christie Lake	T28N, R18E, Section 19	7
Chute Pond	T31N, R16E, Section 36	8
Crooked Lake	T32N, R17E, Section 22	9
Horn Lake	T33N, R15E, Section 21	10
Kelly Lake	T29N, R19E, Section 6	11
Lake John	T33N, R16E, Section 16	12
Leigh Flowage	T30N, R19E, Section 30	13
Townsend Flowage	T33N, R15E, Section 22	14
Machickanee Flowage	T28N, R20E, Section 34	15
Maiden Lake	T32N, R16E, Section 7	16
Oconto Falls Pond	T28N, R19E, Section 26	17
Paya Lake	T32N, R16E, Section 10	18
Pickerel Lake	T33N, R15E, Section 11	19
Reservoir Pond and Explosion Lake	T33N, R15E, Section 28	20
Upper Wheeler Pond	T33N, R15E, Section 15	21
Waubee Lake	T33N, R16E, Section 13	22
Wheeler Lake	T33N, R16E, Section 22	23
White Potato Lake	T31N, R18E, Section 23	24

Source: "Surface Water Resources of Oconto County" Wisconsin Conservation Department, 1977; Bay-Lake Regional Planning Commission, 2006.

Table 5.3: Oconto County Major Rivers

Name	Location	Map 5.7 Number
First South Branch Oconto River	T31N, R16E, Section 31	25
Kelly Brook	T29N, R20E, Section 12	26
Little River	T28N, R21E, Section 30	27
Little Suamico River	T26N, R21E, Section 29	28
North Branch Little River	T28N, R21E, Section 30	29
North Branch Oconto River	T29N, R17E, Section 12	30
Oconto River	T29N, R22E, Section 16	31
Pensaukee River	T27N, R21E, Section 12	32
Peshtigo Brook	T29N, R17E, Section 12	33
South Branch Oconto River	T29N, R17E, Section 12	34

Source: “Surface Water Resources of Oconto County” Wisconsin Conservation Department, 1966; Bay-Lake Regional Planning Commission, 2006.

Wisconsin’s Outstanding and Exceptional Resource Waters

Wisconsin’s “Outstanding and Exceptional Resource Water Program” was designated by the state to maintain water quality in Wisconsin’s cleanest waters. Outstanding and Exceptional Resource Waters have been designated as such in NR 102.10 and NR 102.11 of the Wisconsin Administrative Code, Water Quality Standards for Wisconsin Surface Waters. An Outstanding Resource Water is a lake or stream having excellent water quality, high recreational and aesthetic value, high quality fishing, and free from point/nonpoint source pollution. An Exceptional Resource Water is a lake or stream exhibiting the same high quality resource values as an Outstanding Resource Water, but it may be impacted by nonpoint sources of pollution or have the potential for receiving a wastewater discharge from a non-sewered community in the future.

- Within Oconto County there are nine named bodies of water that are classified as Outstanding Resource Waters and an additional 34 that are classified as Exceptional Resource Waters. A complete list of these waters can be found in Appendix A of *Volume II: County Resources*. In addition, Oconto County contains 68 unnamed creeks that are also classified as Exceptional Resource Waters.

Wisconsin’s Impaired Waters

Section 303(d) of the Federal Clean Water Act requires each state to periodically submit to the U.S. Environmental Protection Agency (EPA) a list of impaired waters. Impaired waters are those that are not meeting the state’s water quality standards. The DNR last submitted an updated list to EPA in April 2004 and received approval in September 2004.

- Oconto County waters listed on the 303(d) impaired waters list are affected by air borne mercury contamination. The following bodies of water in Oconto County were included on the 2006 approved list of impaired waters:
 - Green Bay, which includes the Oconto River tributary from its mouth to the first dam;
 - Maiden Lake;
 - Oconto River Machickanee Flowage; and
 - Reservoir Pond.

Shorelands

Shorelands are viewed as valuable environmental resources both in rural and urbanized areas. As a result, the State of Wisconsin requires counties and incorporated communities to adopt shoreland/floodplain regulations to address the problems associated with development in shoreland and floodplain areas. Even though development within shoreland areas is generally permitted, specific design techniques must be taken into consideration. In more environmentally sensitive locations, any alteration of the shoreland is strictly regulated, and in some cases, not permitted under any circumstances.

The authority to enact and enforce shoreland and other zoning provisions is set forth in Chapter 59.692 of the Wisconsin Statutes and Wisconsin Administrative Codes NR 115,116, and 117. Oconto County has established by ordinance zoning standards for the use of all shorelands in the county located along navigable waters. See Chapter 11 of this document or a copy of the Oconto County Shoreland Ordinance for more information.

- Oconto County contains approximately 25 miles of Lake Michigan and Green Bay shoreline as illustrated by **Map 5.7**.

Coastal Resources

The Lake Michigan coastline offers a variety of natural resources (e.g., bluffs, beaches, wetlands, etc.); living resources (i.e., flora and fauna and unique habitats of the coast); and cultural resources (e.g., history, recreation and agriculture). It is important to protect these valuable assets as development in coastal areas typically leads to greater land disturbance, runoff, and pollutants.

Coastal development can affect the shape and use of the shoreline. Several issues to consider when planning include shoreline/bluff erosion, impacts to coastal wetlands, fluctuating lake levels, increased non-point pollution, economic impacts, wildlife habitats, and the unique historic and archeological resources of the area.

The preservation of coastal resources will go a long way in maintaining/improving community health and safety, aesthetics and economic viability (e.g., tourism, clean parks and beaches, recreational fishing) of the county.

Floodplains

Floodplains are normally defined as those areas, excluding the stream channel, subject to inundation by the 100-year recurrence interval flood event. This event has a one percent chance of occurring in any given year. Floodplains, as identified by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), provide for storm water retention, groundwater recharge, habitat for various types of waterfowl and wildlife and are considered a valuable recreational resource. Furthermore, floodplains serve to provide flood and erosion control by storing floodwaters, reducing flood velocities, diminishing flood peaks and reducing sedimentation.

When buildings are constructed in the floodplain, the floodplain's storage capacity becomes reduced and other functions of the floodplain can be adversely affected. This could cause future flood events to be of higher intensity and allow the

Shorelands are land areas within the following distances from the ordinary high water mark of navigable waters:

- A. 1,000 feet from a lake, pond or flowage; and
- B. 300 feet from a river or stream or to the landward side of the floodplain, whichever distance is greater.

flood to overwhelm areas outside of the historic floodplain. As a way to protect floodplains, Section 87.30(1) of the Wisconsin Statutes and Wisconsin Administrative Code NR 116 require counties, cities and villages to adopt floodplain zoning ordinances to address the problems associated with development in floodplain areas.

The Oconto County Floodplain Zoning Ordinance was adopted to promote public health, safety, and general welfare, and to minimize flood losses in areas subject to flood hazards. The ordinance regulates residential development, storage of hazardous materials, uses which may be detrimental to permitted uses in adjoining districts, sewage disposal, wells for drinking water, and wastewater ponds or facilities, except those permitted under Wisconsin Administrative Code (NR 110.15) within the FEMA designated floodplain area. In addition to state and county regulations, a number of local governments have adopted floodplain ordinances to address specific concerns within their communities.

- Floodplains in the county are generally located adjacent to the shorelines of Green Bay, major rivers and other surfaces waters located throughout the county. The floodplains within Oconto County are noted on **Map 5.8**.

Wetlands

Because of their importance, there are strict regulations regarding wetlands. Wisconsin Administrative Codes fall under the jurisdiction of the WDNR and mandate that shoreland wetlands be protected in both the rural and urban areas of the state. Wetlands not in the shoreland zone are protected from development by the federal government through Section 404 of the Clean Water Act and Wisconsin Administrative Code NR 103. It should be noted that all wetlands, no matter how small, are subject to WDNR and possible federal regulations, if they meet the state definition.

- Oconto County contains approximately 140,000 acres of wetlands. **Map 5.9** illustrates the WDNR inventoried wetlands greater than two acres. Prominent wetlands in the county include Christie Lake, Morgan Marsh, Jamison Marsh, Lena Swamp, Wolf Marsh, Brazeau Swamp, Peshtigo Brook Wetlands, County Line Swamp, West Shore Rivers Wetlands, Wesco Creek Swamp, and others adjoining the many lakes and streams of the county.

According to the WDNR, **wetlands** are areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophilic vegetation. Other common names for wetlands are swamps, bogs, and marshes. Wetlands act to provide scenic open spaces; act as natural pollution filters for lakes, streams and drinking water; act as groundwater discharge areas, and retain floodwaters; and provide valuable and irreplaceable habitat for many plants and animals.

Coastal Wetlands

Oconto County has a number of extensive wetland complexes, with the majority being located within 25 miles of the Green Bay shoreline. Wetlands located within close proximity to the coast provide rich habitat for plants and animals and greatly influence the larger ecosystem processes of the Great Lakes Ecosystem. As transition zones between land and water, coastal wetlands are often rich in species diversity and provide critical habitat for migratory and nesting birds, spawning fish, and rare plants.

Due to the role these lands play in improving and maintaining the health of Green Bay, Lake Michigan and the entire Great Lakes Ecosystem, the WDNR has identified ecologically Significant Coastal Wetlands along Lake Michigan as a way to guide future planning efforts.

- As a result of this project the Oconto Marsh, County Line Swamp, Pensaukee River Wetland Complex, Charles Pond, and Mud Creek Wetland were all designated Significant Coastal Wetlands. Further information pertaining to the Significant Coastal Wetland project can be found in the Significant Natural Features section of this chapter and the WDNR website.

Groundwater

Groundwater is stored in porous and permeable strata, more commonly known as aquifers. Oconto County's groundwater source is part of a large aquifer system called the Cambrian-Ordovician aquifer system. It is the second largest source of groundwater for public, agricultural, and industrial use in the northern segment, which consists of Wisconsin, Michigan, Minnesota, and Iowa. This aquifer is a complex multi-aquifer system with several aquifers separated by leaky confining units.

Groundwater is the water that occupies spaces between soil particles and rocks located below the earth's surface. Groundwater, lakes, and rivers are all connected as water commonly flows between them. Groundwater is also connected to the surface of the land by rain and melted snow which carry substances from the surface down to the groundwater and nearby wells.

One hundred percent of water used by municipalities and in homes in Oconto County comes from groundwater. Industrial water users in Oconto County use surface water and groundwater. Drinking water is supplied via municipal or private wells. As illustrated by Table 5.4, five municipalities in the county have 15 municipal wells that provide drinking water to 26 percent of county residents. In addition to municipal well, there have been over 12,000 private wells constructed in Oconto County.

Table 5.4: Municipal Drinking Water Systems in Oconto County

Municipality	Number of Wells	Aquifer Type	Population Served
City of Gillett*	3	Sand and gravel	1,356
Village of Lena	2	Bedrock	585
City of Oconto	3	Bedrock	4,505
City of Oconto Falls	3	Bedrock	2,892
Village of Suring	2	Gravel	601
	1	Sandstone	
Total	15		9,939

*City of Gillett planning 1 additional well in sand and gravel

Source: *Oconto County Groundwater Information for Comprehensive Planning*, 2006

Fertilizers, manure, land application of sewage, pesticides, on-site sewage disposal systems, chemical spills, leaking underground storage tanks, landfills, existing land uses, and landowner practices are all potential pollutants for drinking water wells. The susceptibility of groundwater to contamination from these activities can be highly variable depending on location. Depth to

bedrock, aquifer type, soil type, and depth to groundwater are all factors thought to influence susceptibility. Considering these factors, it can be concluded that groundwater is most susceptible to contamination in the northwest part of Oconto County where the sand and gravel aquifer is present and less susceptible in the south-central portion of the county where clay materials overlie the deeper bedrock aquifers.

Groundwater Management

In order to provide protection for groundwater resources, the WDNR has adopted maximum contaminant level (MCL) standards that apply to all public water supplies in the state. The standards regulate concentrations of pollutants in public water supplies (NR 809) and nitrate removal from public drinking water (NR 122).

Under Wisconsin's Groundwater Standards Law (NR 160), state programs for landfills, hazardous wastes, spills, wastewater, septic tanks, salt storage, fertilizer storage, pesticides, and underground storage tanks must comply with the established standards. In addition, Wisconsin Administrative Code chapters NR 140, 141, and 142 regulate groundwater quality, groundwater monitoring, well requirements and water management and conservation.

As development in the area continues to increase, so does the amount of impervious surfaces such as roofs and parking lots. It is important to understand that the amount of water that infiltrates to the groundwater depends on such factors as vegetation cover, slope, soil composition, and depth to the water table. Therefore, wise land use decisions, particularly in critical groundwater recharge areas and areas of shallow soils, could maintain the amount of water being recharged by the aquifers as well as limit contamination.

It is especially important to ensure protection of groundwater within the county from construction and agricultural runoff events. These events can lead to contamination of private wells, fish kills, and an influx of nutrients into surface waters which cause harmful algal blooms. Methods to protect groundwater resources include utilizing local planning and zoning tools, advocating for best management practices, implementing wellhead protection programs, and strictly enforcing regulations on private sewage systems.

Wellhead Protection Planning

Wellhead protection plans can be an effective method of protecting groundwater quality and quantity. These plans are developed to achieve groundwater pollution prevention measures within public water supply wellhead areas. As of June 2014, the Village of Suring and the City of Gillett have wellhead protection plans in place. The Village of Lena and City of Oconto Falls were either in the development phase of plan to begin development of a plan soon.

A wellhead protection ordinance is a zoning ordinance that implements the wellhead protection plan by controlling land uses in the wellhead protection area. As of June 2014, the Village of Suring is the only municipality to implement a wellhead protection ordinance.

Oconto County Manure Management Ordinance

In order to protect its groundwater and surface water resources, Oconto County has adopted an Animal Waste Management Ordinance. The intent of the ordinance is to provide protection to these resources by regulating permitting of storage facilities; nutrient management practices; permitting of new and expanding feedlots; and required removal of feed piles. The ordinance also regulates the enforcement of prohibitions including no overflow manure storage structures; no unconfined manure stacking (piling) within water quality management areas; no direct runoff

from feedlots or stored manure to waters of the state; and no unlimited livestock access to waters of the state where high concentrations of animals prevent adequate sod cover maintenance.

Runoff/Stormwater Management

In October 2002, the State of Wisconsin established Run-off Management Administrative Rules to address uncontrolled run-off from urban and rural land use activities. These administrative rules establish a variety of best management practices, performance standards, regulations and permit requirements that farms, cities and construction sites are required follow as a way to reduce polluted runoff.

The following are the eight rules written by the WDNR and one by the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) that are intended to reduce the effects of runoff:

- NR 120 Priority Watershed and Priority Lake Program
- NR 151 Runoff Management (Performance Standards and Prohibitions)
- NR 152 Model Ordinances for Construction Site Erosion Control and Post-Construction Storm Water Management
- NR 153 Targeted Runoff Management Grant Program
- NR 154 Best Management Practices and Cost-Share Conditions
- NR 155 Urban Nonpoint Source Water Pollution Abatement and Storm Water Management Grant Program
- NR 216 Storm Water Discharge Permits
- NR 243 Animal Feeding Operations
- ATCP 50 Soil and Water Resource Management Program

These rules have a direct impact on private actions and on local government activities. They require that certain local governments take specific action to control storm water. As more impervious surfaces are created, causing a decrease in the amount of land that is available for filtration; these rules may require local governments to construct costly stormwater diversion and storage facilities. Furthermore, construction and agricultural activities within the community can contribute heavily to pollution issues if these requirements are not followed properly. Therefore, it is important that these requirements are addressed through local planning activities by promoting and utilizing best management practices. These practices will help to preserve the quality of the groundwater supply, protect surface waters from pollution, and safeguard significant aquatic habitats. For more information regarding best management practices and nonpoint source pollution control, visit the WDNR's runoff management website.

Runoff refers to water from precipitation (stormwater), irrigation, or other sources that moves over and through the ground. These waters generally flow over impervious surfaces such as rooftops, driveways, sidewalks, streets and parking lots. As the water flows over these impervious surfaces it picks up and carries away natural and man-made pollutants, eventually depositing them into lakes, rivers, wetlands, coastal waters and groundwater supplies. The polluted run-off can destroy lake and river ecosystems, contaminate drinking water, and clog drainage ways with sediment which increases the likelihood of flooding.

- General nonpoint water pollution issues that have been identified as concerns in the county include:
 - Erosion of cropland soil in the middle and southern townships;
 - Erosion of soils on construction sites, particularly those along the shorelines;
 - Erosion of stream banks in agricultural areas;
 - Management of animal waste, particularly among medium-sized and expanding dairy operations;
 - Stormwater runoff in rural subdivisions located in the northern and southern part of the county; and
 - Pesticide and fertilizer runoff from agricultural and residential areas.

Woodlands

There are a total of 396,843 acres of woodlands within Oconto County. **Map 5.10** illustrates the upland woodlands and lowland woodlands (i.e., woodlands within wetlands). Upland woodlands constitute approximately 268,143 acres and the lowland woodlands cover 128,699 acres of land.

When planning future development, keep in mind that woodlands provide aesthetic views, wildlife habitat, and offer multiple recreational choices. Woodlands also maintain watershed cover, provide shade, serve as a windbreak, help reduce soil erosion, act as a noise barrier, and screen unsightly developments.

Ownership

Map 5.11 provides information on the ownership of the 396,843 acres of woodlands found in Oconto County.

Federal Land

Numerous valuable wildlife areas exist on the 138,000 acres of Nicolet National Forest in Oconto County. The U.S. Forest Service maintains the wildlife areas and creates new habitat through proper harvesting of wood products. Many new openings have been created, trails seeded, and certain tree species have been managed for wildlife food and cover. The same methods are used in the Oconto County Forest system.

State Land

Many State natural, scientific and wildlife and fishery areas exist in Oconto County. These areas are dedicated to the preservation of certain plant and animal species. Further information regarding these areas can be found in the Significant Natural Features portion of this chapter.

Oconto County Land

Several significant wildlife areas exist on Oconto County public land, such as the Brazeau Swamp, Machickanee forest, Peshtigo Brook, and the county Line Swamp. The future of Oconto County Forestland as a valuable wildlife habitat for deer and ruffed grouse is contingent upon maintaining aspen as a viable species, according to the management policy stated in the *Oconto County Forest Comprehensive Land Use Plan*.

Private Land

Many areas on private lands have a unique character that makes them attractive to wildlife. The creation and preservation of such areas are important to many wildlife species.

Wildlife Habitat

Wildlife habitat can be defined as areas that provide the arrangement of food, water, cover and space required to meet the biological needs of an animal. Different wildlife species have different requirements and these requirements vary over the course of a year. Also, different plants provide fruit and food in different seasons. Maintaining a variety of habitats generally benefits a much desired diverse wildlife. Woodlands, wetlands, floodplains and the water features within the county provide habitat for many species of wildlife. White-tailed deer, turkey, grouse, rabbits, gray squirrel, and chipmunks are some of the more well-known species found in the county. The inland surface waters of the county also provide habitat for fish and migratory fowl that frequent the area.

Connectivity is essential for the survival of numerous wildlife species. Many wildlife populations are unable to

flourish, and countless ecological processes will not function if natural connections are severed. A planned connection of natural landscape features and stream corridors – parks, State Natural Areas, riparian areas, wetlands, woodlands, and other green spaces – is critical to maintain fundamental ecological processes and services, and to maintain the health of wildlife populations and water quality.

Rare, Threatened, and Endangered Species

Oconto County is an ecologically rich county; made evident by the fact that over 133 rare mammals, birds, fish, turtles, reptiles, butterflies, invertebrates, plants, and communities occur within the county, including three federally listed species. Oconto County also has 33 state endangered or threatened species and one species of special concern. Many of the species found in Oconto County are considered rare because their populations and habitat are declining throughout their range. These species are of aesthetic, ecological, cultural, educational, historical, medicinal, recreational, and/or scientific importance to the land and people.

- Table 5.5 lists all state and federal endangered or threatened plants and animals in Oconto County.

Table 5.5: State and Federal Threatened or Endangered Species in Oconto County

Species Classification	Common Name	State Listing	Federal Listing
Bird	Bald Eagle	Special Concern	Threatened
Bird	Common Tern	Endangered	
Bird	Forster's Tern	Endangered	
Bird	Loggerhead Shrike	Endangered	
Bird	Piping Plover	Endangered	Endangered
Bird	Red-necked Grebe	Endangered	
Bird	Red-Shouldered Hawk	Threatened	



Town of Townsend

Bird	Yellow Rail	Threatened	
Butterfly	Karner Blue Butterfly	Endangered	Endangered
Butterfly	Northern Blue Butterfly	Endangered	
Butterfly	Swamp Metalmark	Endangered	
Fish	Greater Redhorse	Threatened	
Fish	Longear Sunfish	Threatened	
Fish	Redfin Shiner	Threatened	
Herptile	Eastern Massasauga Rattlesnake	Endangered	Future Candidate
Herptile	Western Ribbon Snake	Endangered	
Invertebrate	Pygmy Snaketail	Threatened	
Invertebrate	Slippershell Mussel	Threatened	
Mammal	Timber Wolf	Threatened	Threatened
Plant	Bog Bluegrass	Threatened	
Plant	Braun's Holly-Fern	Threatened	
Plant	Dwarf Huckleberry	Endangered	
Plant	Dwarf Milkweed	Threatened	
Plant	Fairy Slipper	Threatened	
Plant	Hert-Leaved Foam-Flower	Endangered	
Plant	Little Goblin Moonwort	Endangered	
Plant	Marsh Valerian	Threatened	
Plant	Pale Green Orchid	Threatened	
Plant	Ram's-Head Lady's-Slipper	Threatened	
Plant	Round-Leaved Orchid	Threatened	
Plant	Seaside Crowfoot	Threatened	
Turtle	Blanding's Turtle	Threatened	
Turtle	Wood Turtle	Threatened	

Source: Wisconsin Department of Natural Resources, 2006; Bay-Lake Regional Planning Commission, 2006.

Significant Natural Areas

A number of sites located within the county may be considered significant natural features. These areas may be designated as WDNR State Natural Areas, State Wildlife and Fishery Areas, Significant Coastal Wetlands, Land Legacy Places; or be included in the “Natural Areas Inventory,” conducted by the Scientific Areas Preservation Council of the WDNR.

The following text offers a brief description of the significant natural features designations.

WDNR State Natural Areas

The Wisconsin State Natural Areas program was established to designate sites that are in natural or near natural condition for scientific research, the teaching of conservation biology, and most of all, preservation of their natural values and genetic diversity for the future. These areas are not intended for intensive recreation use, but instead to serve the mission of the Natural Areas Program. Their mission is to locate and preserve a system of State Natural Areas harboring all types of biotic communities, rare species and other significant natural features native to Wisconsin. The State Natural Areas program, established in 1951 under ss. 23.27, 23.28 and 23.29 *Wis. Stats.*, is managed by the WDNR.

State Wildlife and Fishery Areas

State wildlife and fishery areas are lands that have been acquired by the WDNR in order to preserve wild lands and game for people interested in the outdoors. By managing these lands it is the intent of the WDNR to protect important habitat for wildlife while also keeping them open for public use.

Significant Coastal Wetlands

The Lake Michigan shoreline contains many significant coastal wetlands that form a complex arrangement of ecosystems supporting a diversity of natural features. The Natural Heritage Inventory Program of the WDNR – Bureau of Endangered Resources (WDNR-BER) has inventoried Significant Coastal Wetlands for the Great Lakes in Wisconsin in a report titled, *A Data Compilation and Assessment of Coastal Wetlands of Wisconsin's Great Lakes*.

Land Legacy Places

The WDNR has identified places that will play a critical role in meeting Wisconsin's conservation and outdoor recreation needs over the next 50 years in order to effectively plan for potential future conservation needs within the state. By designating an area as a "Legacy Place" the WDNR intends to guide future land use decisions about certain places. However, it does not supersede any existing state or local regulations.

Natural Areas Inventory

The "Natural Areas Inventory" (NAI) was conducted in 1976 and updated in 1980 under the direction of the Scientific Areas Preservation Council (SAPC) of the WDNR to identify natural areas along Wisconsin's Lake Michigan and Lake Superior coasts. The SAPC defined the NAI sites as "tract[s] of land or water so little modified by man's activity or sufficiently recovered that they contain intact native plant and animal communities believed to be representative of the pre-settlement landscape". The SAPC identified NAI sites independently of the State Natural Areas program; as a result, some sites fall under both programs.

- Table 5.6 details the significant natural features in Oconto County along with their designation(s).

Table 5.6: Significant Natural Areas, Oconto County

Significant Natural Area	Designation				
	State Natural Area	State Wildlife and Fishery Area	Significant Coastal Wetland	Land Legacy Place	Natural Area Inventory
Barney Creek	X				
Battle Creek Hemlocks	X				
Bonita Country	X				
Brazeau Swamp				X	
Camp Five Lake	X				
Cathedral Pines	X				
Charles Pond	X		X		
Charles Pond Unit - Green Bay West Shores		X			X
Chequamegon-Nicolet National Forests				X	
Copper Culture Cemetery					X
County Line Swamp			X		X
Diamond Roof	X				
Forbes Springs	X				
Glocke Lake	X				
Hagar Mountain	X				
LaFave Swamp	X				
Mud Creek Wetland			X		
Nelligan Lake	X				
North Branch Bottoms	X				
Oconto County Forest					X
Oconto Marsh			X	X	
Oconto Marsh Unit - Green Bay West Shores		X			X
Oconto River				X	
Oconto River (South-Branch) Fishery Area		X			
Pecor Point Unit - Green Bay West Shores		X			X
Pensaukee Lacustrine Forest					X
Pensaukee River Wetland Complex			X		
Pensaukee Unit - Green Bay West Shores		X			X
Peshtigo Brook Wildlife Area		X			
Peshtigo Harbor Unit - Green Bay West Shores		X			X
Priest Rock	X				
Rush Point Unit - Green Bay West Shores		X			X
Snow Falls Creek	X				
South Branch Beech Grove	X				
Suamico, Little Suamico and Pensaukee Rivers				X	
Sunrise Lake	X				
Tar Dam Pines	X				
Thunder Mountain	X				
Thunder River Swamp	X				
Tibbett Suamico Unit - Green Bay West Shores		X			X
Waupee Lake Swamp	X				
West Shore Green Bay Wetlands				X	

Source: Wisconsin Department of Natural Resources, 2006; Bay-Lake Regional Planning Commission, 2007.

Environmental Corridors

When considering future development, it is important to understand that environmental corridors serve many purposes such as protecting local water quality; serving as buffers between different land uses; use as a means of controlling, moderating, and storing floodwaters while providing nutrient and sediment filtration; and providing fish and wildlife habitat and recreational opportunities.

- **Map 5.12** contains the environmental corridors of Oconto County as defined by the Bay-Lake Regional Planning Commission (BLRPC). In order to produce this map, the BLRPC identified valuable coastal, natural and cultural resources throughout the county consistent with Wisconsin's Comprehensive Planning legislation. These features were mapped using the Commission's Geographic Information Systems (GIS) and include:
 - Navigable waters with a 75-foot setback;
 - Wetlands with a 50-foot buffer;
 - 100-year FEMA floodplains; and
 - Steep slopes (12 percent or greater);

Other features that can be considered part of the environmental corridor definition on an area-by-area basis include unique and isolated woodland areas, scenic viewsheds, unique geologic features, wetland mitigation sites and exceptional wildlife habitats.

Environmental corridors are strictly an advisory tool that can be utilized in various community planning efforts as a way to promote preservation of areas with environmental significance.

Parks and Open Space

Various natural settings in the county are utilized as recreational sites by the public.

- Table 5.7 lists the federal, state, county and community park and recreation areas located in the county. For more detailed information of each of the following parks and open space areas located in the county refer to Chapter 9 of *Volume II: County Resources* and **Map 9.5** of this document.

Table 5.7: Parks and Recreation Areas, Oconto County

Park Name	Geographic Location	Ownership
Bass Lake Picnic Grounds	Townsend	Federal
Breakwater Park	Oconto	Community
Copper Culture Mound State Park	Oconto	State
D.E. Hall County Park	Oconto	County
East Side Beach	Oconto Falls	Community
Grange County Park	Lena	County
Green Lake Picnic Ground	Mountain	Federal
North Bay Shore Recreation Area	Oconto	County

Environmental corridors are areas on the landscape that contain and connect natural areas, green space and scenic, historic, scientific, recreational, and cultural resources. They often lie along waterways and other natural features.

Environmental corridors are complex ecosystems that provide many ecological and human-valued services, such as improved water quality, means for wildlife movement, protection of natural resources, groundwater recharge, recreation areas and stormwater management, to name a few.

North River Road Access	Oconto	County
Oconto City Docks	Oconto	Community
Oconto City Park	Oconto	Community
Oughton Park	Townsend	Community
Patzer Park	Underhill	County
Pioneer Park	Stiles	County
Riverside County Park	Gillett	County
Riverside Memorial Park	Suring	Community
West Side Beach	Oconto Falls	Community
Wheeler Lake Picnic Ground	Lakewood	Community

Source: Oconto County, 2006; Bay-Lake Regional Planning Commission, 2006.

AGRICULTURAL RESOURCES

PRIME AGRICULTURAL SOIL TYPES

Prime farmland is considered land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. It has the combination of soil properties, growing season and moisture supply needed to produce sustained high yields of crops in an economic manner if it is treated and managed according to acceptable farming methods.

Farmland of statewide importance is land not identified as prime farmland on a nationwide basis but is important in Wisconsin for the production of various food, feed, fiber and forage crops.

Prime farmland only where drained are areas where soils have wetness limitations, but can be or are used effectively for agricultural production with installation of a tile drainage system.

Agriculture works hard for Oconto County every day. Family-owned farms, food processors and agriculture-related businesses generate thousands of jobs and millions of dollars of economic activity while contributing to local income and tax revenue. According to USDA Census of Agriculture, Oconto County farmers own and manage the resources on 189,389 acres of land, or 29 percent of all land in the county. This includes pastures, cropland and tree farms.

Prime Agricultural Soils

The USDA, Natural Resources Conservation Service (NRCS) defines prime agricultural soils as lands that have the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops, with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion.

According to the NRCS prime agricultural soils cover approximately 13 percent of Oconto County. **Map 5.13** contains areas in

Oconto County that can be classified as prime agricultural soils based on the NRCS “prime farmland” soil type.

Since agriculture plays an important role in the economic, cultural and social structure of Oconto County, it will be important to preserve these areas against future development. Once agricultural land is disturbed or replaced by another land use, it cannot be effectively returned to agricultural production.

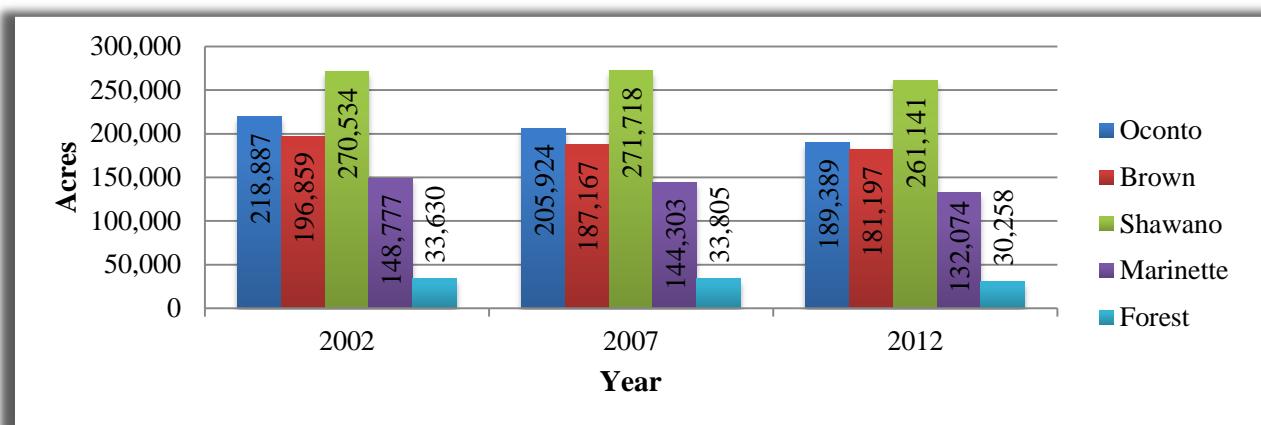


Agricultural Land Use

Land in Farms

The USDA Census of Agriculture compiles data on the amount of land in farms from each agricultural census, as shown in Figure 5.1. While the USDA amount of land in farms totals differ from the agricultural assessed totals, these two data sets allow for comparison and confirming of land use trends. The difference in data is most likely the result of a difference in the USDA definition of a farm and the assessor's determination of agricultural land. Generally the USDA's definition of a farm allows for more land to be considered a farm than what assessors have traditionally considered agricultural land. So while the totals are different, both sets of data confirm the overall loss of agricultural lands in Oconto County. Generally, the loss of agricultural land is a common trend across the region.

Figure 5.1: Regional Land in Farms



Source: USDA, Wisconsin Agricultural Statistics, Oconto County Planning, 2014.

Agricultural Assessment

Each year the Wisconsin Department of Revenue publishes the annual statement of assessments. This annual report is a useful tool in monitoring land use trends in the county. The statement of



assessment includes seven classes of which one assessment class is “Agricultural” (Class 4). Class 4 property includes all unimproved property used for farming. Agricultural land includes land that produces a crop or supports livestock, and to be classified as agricultural land a parcel must be “devoted primarily to agricultural use”. The other relevant assessment class when reviewing agriculture use is “Other” (Class 7). Class 7 includes buildings and improvements which support farming. Table 5.8 below gives the sum of the “Agricultural” and “Other” assessment categories for the years of 2002, 2007, and 2012. According to the statement of assessment for Oconto County, the county had 164,290 acres of agricultural assessed land and farm acreage in 2012. This is a decrease of 5,970 acres (3.5%) of agricultural land in the past decade. From 2007 to 2012 the rate of agricultural land loss was significantly less than the five years prior. The

decrease in number of agriculture acreage lost is representative of the recent recession and the decrease in residential development, whereas the period from 2002 to 2007 was more representative of typical non-recessionary residential development pressure.

Table 5.8: Assessed Agricultural Acres in Oconto County by Township

Location	Agricultural Assessed Acres			Change 2002-2007		Change 2002-2012		Change 2007-2012	
	2002	2007	2012	Number	Percent	Number	Percent	Number	Percent
Town of Abrams	5,999	4,739	4,604	-1,260	-21.0%	-1,395	-23.3%	-135	-2.8%
Town of Bagley	2,307	2,075	2,172	-232	-10.1%	-135	-5.9%	97	4.7%
Town of Brazeau	11,891	11,826	11,829	-65	-0.5%	-62	-0.5%	3	0.0%
Town of Breed	3,821	3,859	3,720	38	1.0%	-101	-2.6%	-139	-3.6%
Town of Chase	13,686	13,250	12,757	-436	-3.2%	-929	-6.8%	-493	-3.7%
Town of Doty	864	830	819	-34	-3.9%	-45	-5.2%	-11	-1.3%
Town of Gillett	12,659	12,617	12,623	-42	-0.3%	-36	-0.3%	6	0.0%
Town of How	8,295	8,211	8,219	-84	-1.0%	-76	-0.9%	8	0.1%
Town of Lakewood	190	62	55	-128	-67.4%	-135	-71.1%	-7	-11.3%
Town of Lena	13,508	13,056	12,851	-452	-3.3%	-657	-4.9%	-205	-1.6%
Town of Little River	14,896	13,941	13,869	-955	-6.4%	-1,027	-6.9%	-72	-0.5%
Town of Little Suamico	7,176	6,642	6,548	-534	-7.4%	-628	-8.8%	-94	-1.4%
Town of Maple Valley	8,981	9,197	9,222	216	2.4%	241	2.7%	25	0.3%
Town of Morgan	9,648	9,424	9,573	-224	-2.3%	-75	-0.8%	149	1.6%
Town of Mountain	607	648	686	41	6.8%	79	13.0%	38	5.9%
Town of Oconto	11,857	11,042	11,059	-815	-6.9%	-798	-6.7%	17	0.2%
Town of Oconto Falls	11,393	11,157	11,014	-236	-2.1%	-379	-3.3%	-143	-1.3%
Town of Pensaukee	6,357	6,478	6,697	121	1.9%	340	5.3%	219	3.4%
Town of Riverview	373	371	410	-2	-0.5%	37	9.9%	39	10.5%
Town of Spruce	12,213	11,840	11,708	-373	-3.1%	-505	-4.1%	-132	-1.1%
Town of Stiles	6,430	6,283	6,321	-147	-2.3%	-109	-1.7%	38	0.6%
Town of Townsend	570	757	732	187	32.8%	162	28.4%	-25	-3.3%
Town of Underhill	6,539	6,727	6,802	188	2.9%	263	4.0%	75	1.1%
Oconto County	170,260	165,032	164,290	-5,228	-3.1%	-5,970	-3.5%	-742	-0.4%

Source: Wisconsin Department of Revenue, Oconto County Planning, 2014.

Agricultural Land Sales and Conversion

Similar to the statement of assessment in monitoring land use trends related to agricultural lands is the annual publication developed by the USDA in conjunction with the Wisconsin Department of Revenue; Bureau of Equalization. This annual publication looks at the number of agricultural land real estate transactions within Oconto County. As Table 5.9 shows, between 1998 and 2012 there were 14,420 acres of agricultural land sold in the county. Of these acres 2,297 acres were converted to non-agricultural use.

When considering converting agricultural lands to non-agricultural use, the cost of developing these lands needs to be considered. For instance, farmlands provide revenues to local governments and require very few services. Conversely, residential land uses may cost communities more to provide services than gained through local property tax increases. This is evident in areas of widespread development as road maintenance, school transportation, police service and fire protection will likely increase the overall cost of services throughout the entire community.

Communities are encouraged to plan for continued growth of urbanized areas along with concentrated development of rural lands. This will help keep the cost of services down and assist with the preservation of Oconto County's valuable farmlands and rural landscape.

Table 5.9: Oconto County Agricultural Land Sales, 1998 - 2012

Agricultural Land Continuing in Agricultural Use				Agricultural Land Being Diverted to Other Uses			Total of all Agricultural Land		
Year	Number of Transactions	Acres Sold	Dollars per Acre	Number of Transactions	Acres Sold	Dollars per Acre	Number of Transactions	Acres Sold	Dollars per Acre
1998	17	903	\$1,192	10	510	\$1,346	27	1413	\$1,247
1999	18	1770	\$1,317	3	81	\$2,788	21	1851	\$1,381
2000	8	504	\$1,871	5	245	\$1,627	13	749	\$1,791
2001	14	1192	\$1,993	2	74	\$4,457	16	1266	\$2,137
2002	13	741	\$2,656	1	8	\$9,462	14	749	\$2,729
2003	5	1432	\$1,520	6	528	\$3,516	11	1960	\$2,058
2004	7	826	\$1,605	2	46	\$4,959	9	872	\$1,782
2005	4	273	\$4,342	1	23	\$4,428	5	296	\$4,348
2006	2	45	\$7,125	1	22	\$5,395	3	67	\$6,557
2007	12	664	\$3,654	1	20	\$6,912	13	684	\$3,750
2008	6	318	\$9,784	----	----	----	6	318	\$9,784
2009	3	197	\$4,101	1	30	\$2,667	4	227	\$3,911
2010	21	886	\$2,393	10	710	\$3,219	31	1596	\$2,761
2011	13	788	\$3,025	----	----	----	13	788	\$3,025
2012	27	1404	\$3,704	----	----	----	27	1404	\$3,704
Average 1998 - 2012	11.3	796.2	\$3,352	3.6	191.4	\$4,231	14.2	949.3	\$3,398
Total from 1998 - 2012	70	11,943	----	43	2,297	----	213	14,240	----

Note: Sales made under other than normal market conditions (such as family sales or foreclosures) are not included in this data.

Source: USDA, Wisconsin Agricultural Statistics, 1998 – 2012; Oconto County Planning, 2014.

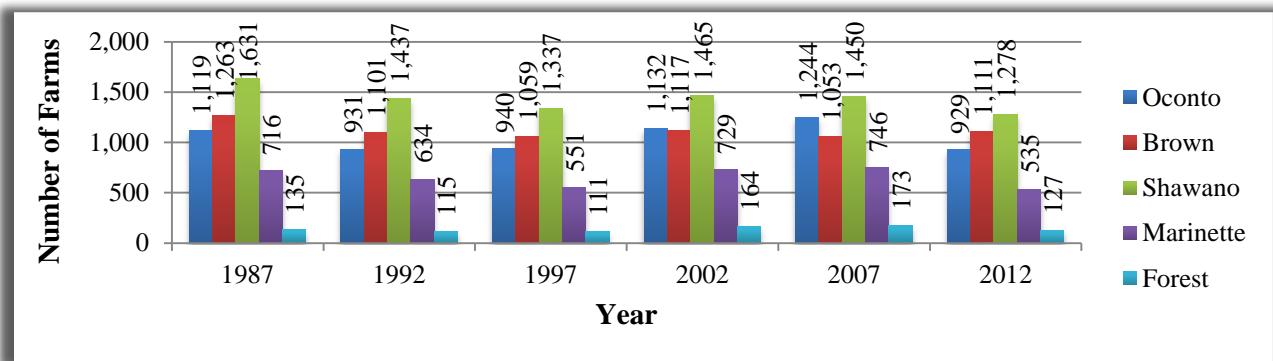
Agricultural Trends

Overall Farms

In 1987, there were 1,119 active farms spread throughout Oconto County. This number fell to 931 by 1992; however from 1992 to 2007, the number of farms steadily rose to a total of 1,244 farms in 2007. This trend of farm loss in the 1990's was also evident in surrounding counties. This trend did not continue looking at the period from 2002 to 2007 where the counties Brown and Shawano lost farms; while Marinette and Forest counties saw small total farm increases. Oconto County has experienced the greatest increase in total farm numbers (112 farms) within this time period. However, from 2007 to 2012 the county again experienced a sharp decline in total farms. From 2007 to 2012, Oconto County lost 315 farms, as shown in Figure 5.2, bringing the total farm number to its lowest point in the past 15 years. **Map 5.14**, shows the farms located across Oconto County.



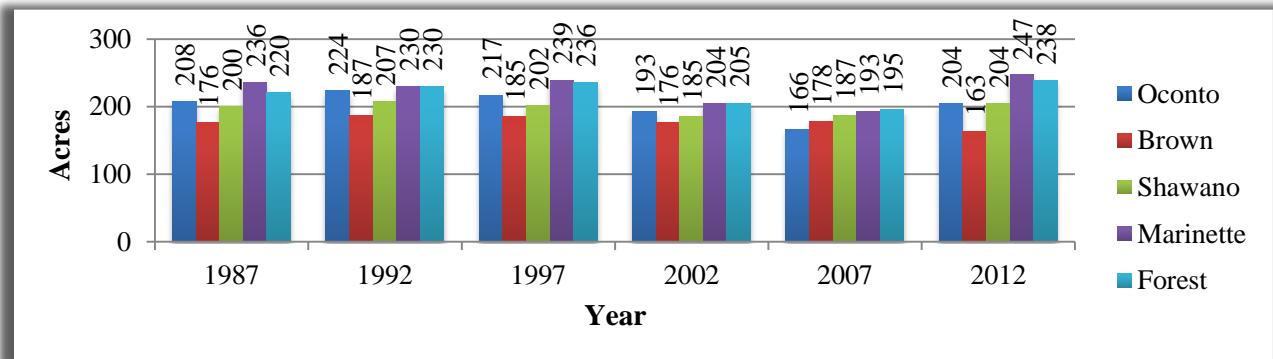
Figure 5.2: Regional Total Farms



Source: Wisconsin Department of Revenue, Oconto County Planning, 2014.

While total farms numbers have fluctuated, so too has the average farm size. The average farm size was on the decline from an average farm size of 208 acres in 1987 to an average farm size of 166 acres in 2007; however by 2012 the average farm size had grown to 204 acres. This past trend of declining average farm size and recent trend of increased average farm size can be found across the region, as shown in Figure 5.3.

Figure 5.3: Regional Average Farm Size



Source: Wisconsin Department of Revenue, Oconto County Planning, 2014.



Table 5.10 shows a breakdown of farms by size in Oconto County. From 1987 to 2007, farms from 1 to 179 acres in size have increased in number; while the farms from 180 to 999 acres in size decreased. The number of farms with 1000 acres or more has also increased from eight in 1987 to thirty three in 2012. The 1000 acre or greater farms were the only farms that increased in number from 2007 to 2012. As these large farming operations continue to grow and buy up smaller farms, we should expect to not only see the average farm size increase but also overall farm numbers decline.

Table 5.10: Oconto County Number of Farms by Size

Acres	1987	1992	1997	2002	2007	2012
1 to 9 acres	29	24	18	26	80	48
10 to 49 acres	115	103	124	226	376	278
50 to 179 acres	447	350	385	491	493	239
180 to 499 acres	459	379	337	313	211	179
500 to 999 acres	61	65	58	50	56	52
1000 acres or greater	8	10	18	26	28	33

Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Figures 5.4 and 5.5 show the percentage of total farms by size from 1987 to 2012.

Figure 5.4: Oconto County Farms by Size, 1987

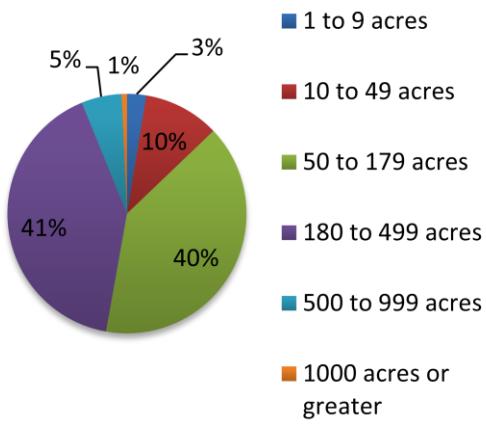
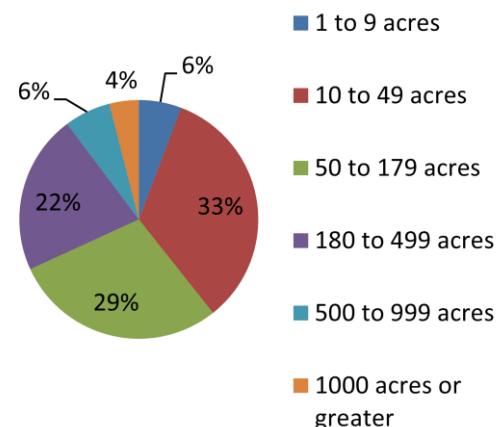


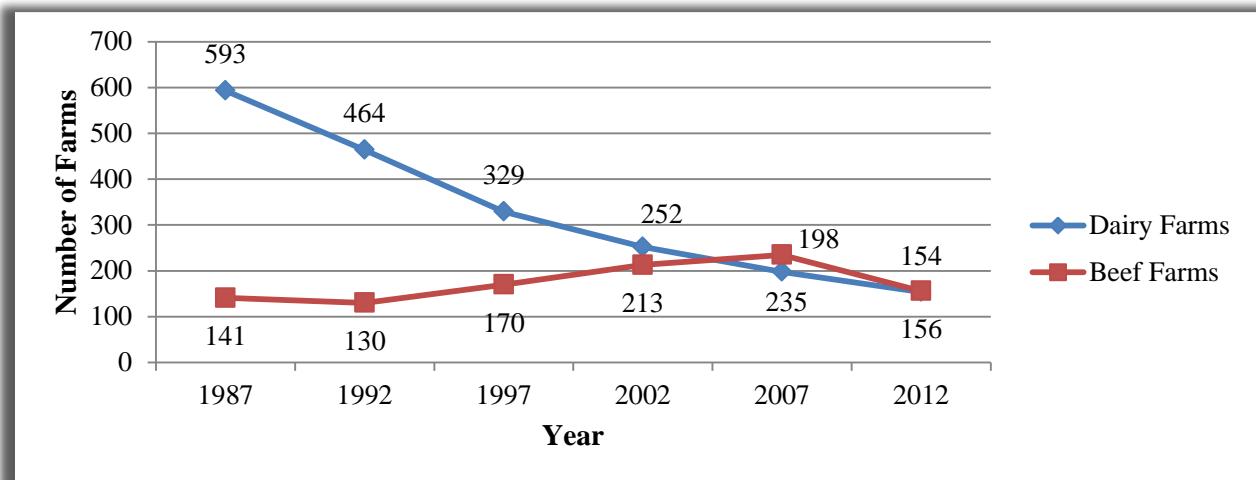
Figure 5.5: Oconto County Farms by Size, 2012



The total farm data includes both dairy and beef farms in Oconto County. Each of these farm types make up significant portions of the agricultural economy and each have trends that should

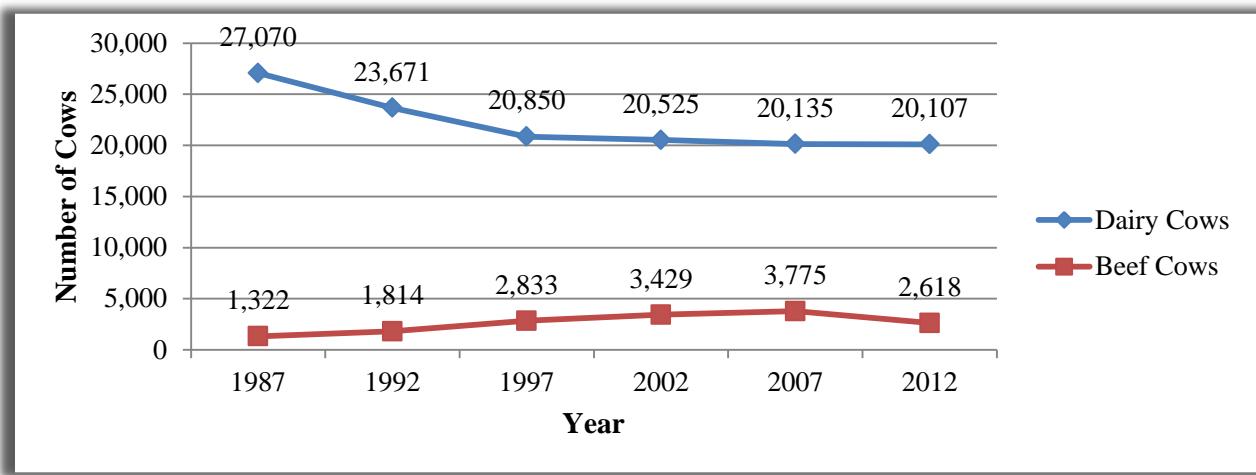
be considered as the county looks at the future of agriculture in Oconto County. Figure 5.6 and 5.7 compare dairy and beef farm numbers and respective herd sizes. The following sections give additional information and insight into the dairy and beef farms in Oconto County and neighboring counties.

Figure 5.6: Oconto County Dairy and Beef Farms



Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Figure 5.7: Oconto County Dairy and Beef Herd Size



Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Dairy Farms

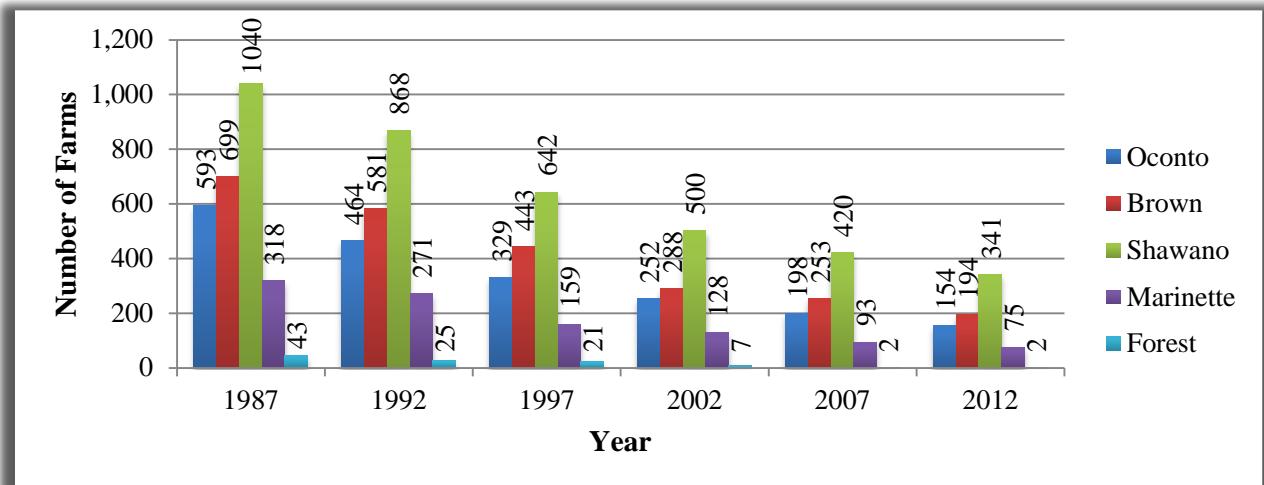
Oconto County has seen a sharp decrease in the total number of dairy farms. Since 1987, Oconto County experienced the loss of 439 dairy farms or 74 percent. This decline is a common trend across the area, as shown in Figure 5.8.

Oconto County like much of the region is also experiencing a slight decline in the size of the dairy herd, as shown in Figure 5.9. The limited



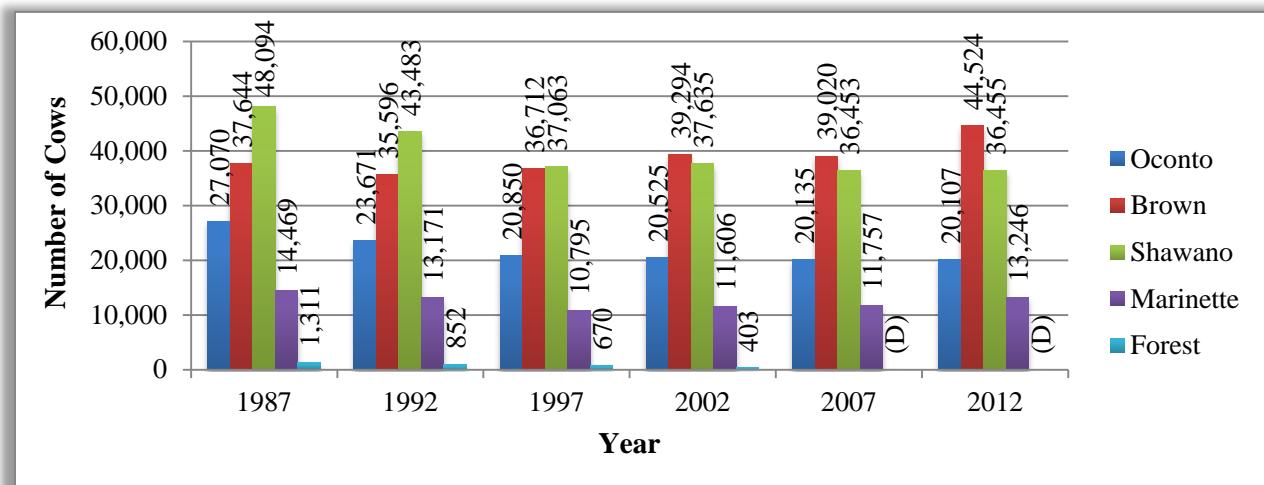
decline over the last 15 as compared to the decline in the number of farms can most likely be attributed to the growth and expansion of a few of the remaining farms into very large operations. Oconto County has seen the number of 1,000 plus acre farms increase from 18 in 1997 to 33 in 2012, refer to **Table 5.1**.

Figure 5.8: Regional Total Dairy Farms



Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Figure 5.9: Regional Total Dairy Herd Size

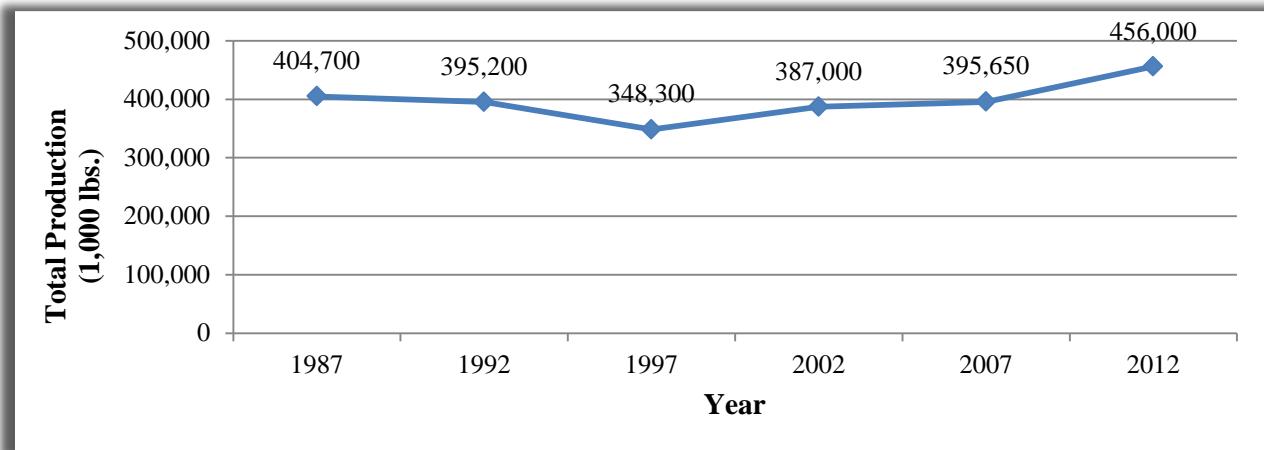


(D) - Means data withheld to avoid disclosing data for individual farms.

Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

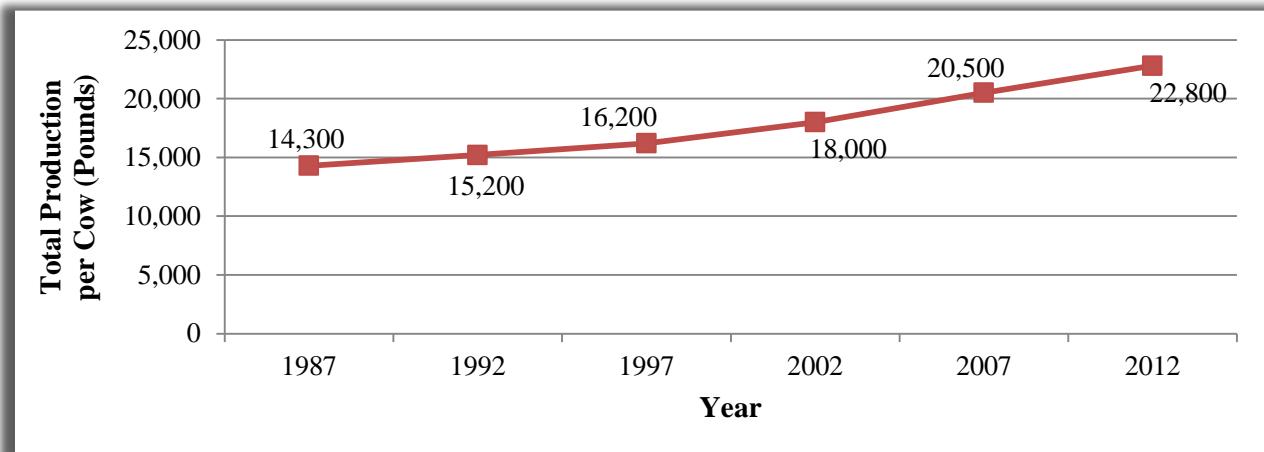
While the county has experienced losses in total dairy farms and number of dairy cows, advancements in the agricultural industry have allowed for growth in overall milk production as shown in Figures 5.10 and 5.11.

Figure 5.10: Oconto County Diary Production



Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Figure 5.11: Oconto County Dairy Production per Cow



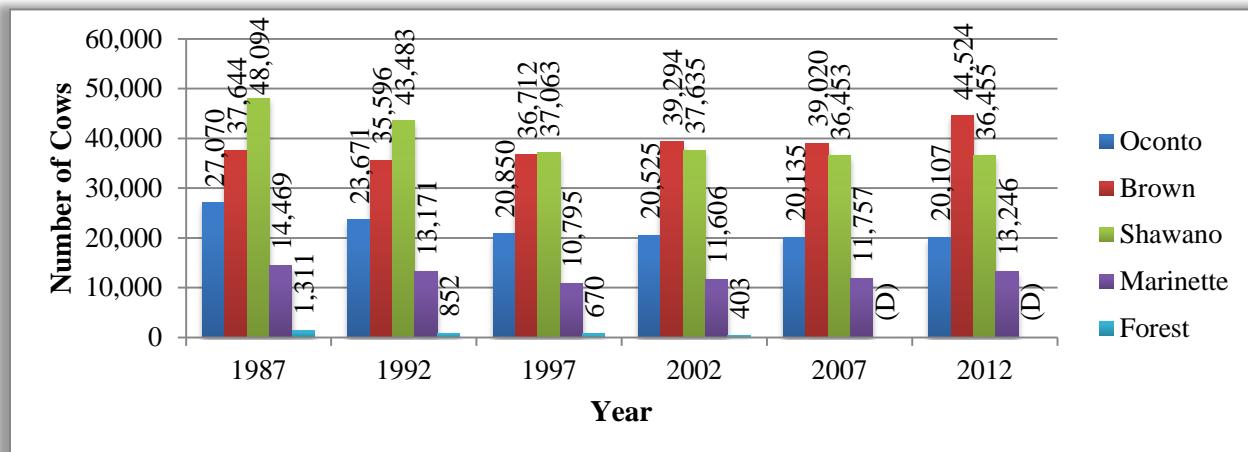
Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Beef Farms

Oconto County experienced a steady increase in the number of beef farms over past years. The total number of beef farms went from 141 in 1987 to 235 in 2007; however similar to dairy operations by 2012 the total number of beef farms dropped substantially to a total of 156. This rise and then recent decline is a common trend across the region as seen in, Figure 5.12. As expected the size of the beef herd varies with the number of beef farms in operation. The overall herd size hit a peak in 2007 when the total number of beef farms was at its highest point; by 2012 the herd size had fallen from 3,775 to 2,618 animals. This same trend can be seen across the region except for in Brown County where the number of farms and herd size have increased, as shown in Figure 5.13.



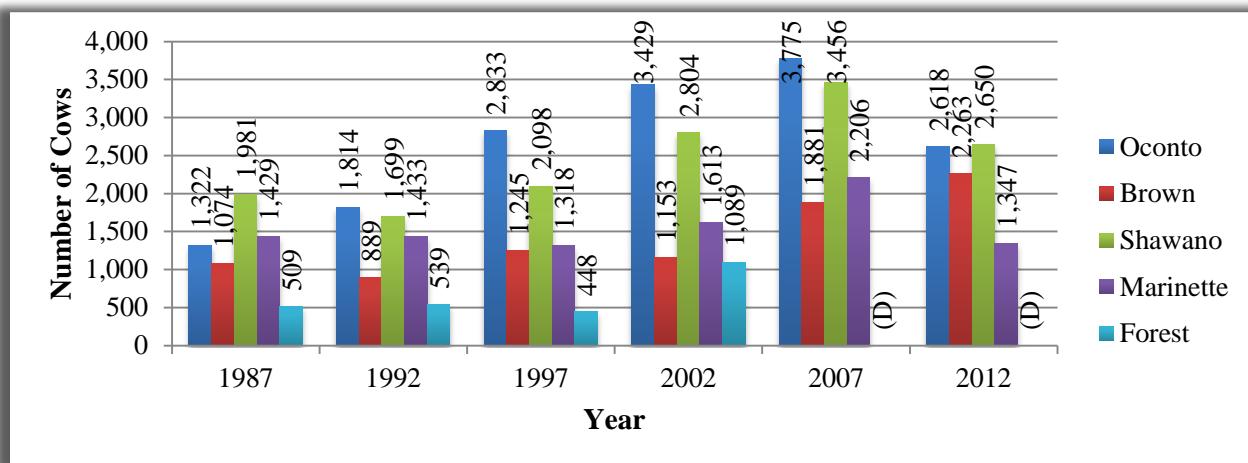
Figure 5.12: Regional Total Beef Farms



(D) - Means data withheld to avoid disclosing data for individual farms.

Source: USDA, Agricultural Statistics Service, Oconto County Planning, 2014.

Figure 5.13: Regional Total Beef Herd



(D) - Means data withheld to avoid disclosing data for individual farms.

Source: USDA, Wisconsin Agricultural Statistics, Oconto County Planning, 2014.

Concentrated Animal Feeding Operation (CAFO)

A Wisconsin animal feeding operation with 1,000 animal units (approximately 750 cows or 100,000 chickens) or more is considered a large Concentrated Animal Feeding Operation (CAFO). The Wisconsin Department of Natural Resources (DNR) may designate a smaller-scale animal feeding operation (fewer than 1,000 animal units) as a CAFO, if it has pollutant discharges to navigable waters or contaminates a well. The U.S. EPA delegates implementation of the Clean Water Act water pollutant permit and CAFO regulations to the Department of Natural Resources (DNR). The water quality protection permits ensure farms use proper planning, nutrient management, and structures

According to WDNR, a **CAFO** is any livestock or poultry operation with 1,000 or more animal units.

Wisconsin Administrative Code NR 243 defines an **animal unit** as a unit of measure used to determine the total number of single animal types or combination of animal types, as specified in s. NR 243.11, that are at an animal feeding operation.

and systems construction to protect Wisconsin waters. These permits apply only to water protection. They do not give the DNR authority to address air, odor, traffic, lighting, land use nor any of the social concerns people may have about large farms.

There are currently five Wisconsin Pollutant Discharge Elimination System (WPDES) permits issued to Oconto County dairy farms. These WPDES permitted operations must meet the requirements of NR 243. **Map 5.14** identifies farms by type across Oconto County, including the five permitted CAFOs. One of the permitted CAFOs operates at two locations and therefore six CAFO locations have been identified on the map.

Other Farm Types

In addition to the dairy and beef operations, Oconto County has many other specialized farm types that are contributing to the agricultural economy. For example in Wisconsin as of 2012, 13 of the 1,180 organic farms in operation; 6 of the 822 floriculture operations; 25 of the 868 cut Christmas tree operations were located in Oconto County. Often these specialized operations are a source of secondary income and would often be considered hobby farms. While there is no data as to the number of hobby farms in the county, hobby farming appears to be a growing trend across the region and will continue to add to the vital agricultural economy in the county.

Farm Operators

In Oconto County, the total numbers of farm operators has fluctuated over the years. With the current total number of operators being down nearly 24 percent in that past 5 years, as shown in Table 5.11. The average age of the farm operator has also risen slightly in the past 5 years from 55.8 to 59 years.

Table 5.11: Oconto County Operator Demographics

Year	Total Farm Operators	Total Female Operators	Principle Farm Operators		Avg. Number of Years on Present Farm for Principal Operator	Avg. Age of Farm Operators
			Male	Female		
2002	1670	496	1007	125	21.5	55.6
2007	1897	604	1085	159	20.3	55.8
2012	1450	464	826	103	23.3	59

Source: USDA, Wisconsin Agricultural Statistics, Oconto County Planning, 2014.

As shown in Table 5.12, the organizational structure of farms within Oconto County varies. However, a majority of the farms in the county are still operated by individuals or families.

Table 5.12: Oconto County Farm Organization

Year	Individuals or Families	Family Partnership	Family Corporations	Non-Family Corporations
2002	1050	61	20	1
2007	1095	96	47	5
2012	839	61	24	6

Source: USDA, Wisconsin Agricultural Statistics, Oconto County Planning, 2014.

Farm Production

A 2012 University of Wisconsin Extension study looked at relative employment for a wide variety of farm and food related industry in Wisconsin and compared them with employment statistics for similar industries around the country. Researchers then analyzed how these values changed between 2003 and 2013. The data as shown in Table 5.13 reveals a number of farm production industries (fur-bearing animal, dairy cattle, milk production, and poultry production) where Wisconsin industries appear to have a strong and growing competitive advantage. The study also identified: historically strong Wisconsin farm production industries that have declined in economic activity in recent years (such as corn farming, potato farming, berry farming, and other animal production); new, emerging farm production industries that have shown significant employment growth, and; industries that have been traditionally relatively weak in Wisconsin and have declined in employment. *For additional information on location quotient analysis refer to Chapter 7 – Economic Development.*

Table 5.13: Farm Production Clusters, Wisconsin

	Change LQ 2013	Share of LQ 03- 13	Share of Employment 2013
Strength & Growing (Potential Cluster?)			
Fur-bearing animal & rabbit production	16.30	5.28	0.02%
Dairy cattle & milk production	6.17	2.07	0.52%
Other poultry production	2.58	1.03	0.00%
Support activities for animal production	2.90	0.56	0.07%
Soil preparation, planting, & cultivating	1.00	0.48	0.02%
Hunting & trapping	1.11	0.30	0.00%
Floriculture production	1.03	0.05	0.04%
Strength & Declining (Potential Threat?)			
Corn farming	1.95	-0.20	0.03%
All other animal production	1.19	-1.08	0.01%
Berry, except strawberry, farming	2.16	-1.33	0.04%
Potato farming	3.59	-1.35	0.05%
Weakness but Growing (Potential Opportunity?)			
Beef cattle ranching, farming, & feedlots	0.65	0.32	0.03%
Oilseed & grain combination farming	0.47	0.30	0.01%
Other crop farming	0.37	0.20	0.02%
Other vegetable & melon farming	0.46	0.13	0.03%
Mushroom production	0.30	0.11	0.00%
All other grain farming	0.72	0.09	0.00%
Apple orchards	0.40	0.06	0.01%
Support activities for forestry	0.34	0.06	0.00%
Fishing	0.33	0.06	0.00%
Chicken egg production	0.77	0.01	0.01%
Weakness & Declining			
Nursery & tree production	0.64	-0.01	0.04%
Other postharvest crop activities	0.15	-0.06	0.01%
Logging	0.65	-0.07	0.03%
Hog & pig farming	0.31	-0.07	0.01%
Other food crops grown under cover	0.21	-0.17	0.00%

Source: UW-Extension Publication, “The Contribution of Agriculture to the Wisconsin Economy”, 2012.

Crops

Oconto County's close proximity to the waters of Green Bay and its vast amount of land create a unique landscape which provides for diverse agricultural opportunities. Vegetables, horticulture, maple syrup, fruits, crops, forestry, livestock and dairy production contribute to the breadth of agricultural products produced in the county. However, the majority of crops grown in Oconto County are grown for grain. Table 5.14 shows acreage and harvest totals for the most commonly planted crops from 2002 to 2012. Of these crops, corn and soybeans led in acres planted. Of these two primary crops planted in 2012, corn is the distinct leader with 46,073 acres planted, compared to 20,166 acres of soybeans planted.

Table 5.14: Oconto County Field Crop Acres and Total Harvested

	2002			2007			2012		
	Acres	Bushels	Bushels/Acre	Acres	Bushels	Bushels/Acre	Acres	Bushels	Bushels/Acre
Barley	228	11,060	49	207	9,776	47	500	13,947	28
Corn	35,964	4,214,316	117	47,417	4,639,742	98	46,073	6,982,282	152
Oats	2,271	127,356	56	1,564	83,894	54	1,131	52,226	46
Rye	175	5,610	32	41	1,150	28	108	4,683	43
Soybeans	11,745	449,700	38	16,669	469,610	28	20,166	890,996	44
Wheat	5,698	312,966	55	5,833	339,412	58	5,160	311,978	60
Winter Wheat	(D)	(D)	---	(D)	(D)	---	4,712	294,870	63

(D) - Means data withheld to avoid disclosing data for individual farms.

Source: USDA, Wisconsin Agricultural Statistics, Oconto County Planning, 2014.

Often not thought of as a crop, forestry is a significant land use in Oconto County and a variety of products, including: paper, lumber and maple syrup come from the forested parts of the county. The Farmland Preservation Program for the State of Wisconsin includes forestry as part of its agricultural uses.

Products and Markets

Dairy production continues to be a major agricultural industry in Oconto County. As of 2011, on-farm milk production generated an estimated \$80.8 million in sales, while milk processing generated an additional \$410.9 million. In terms of other top commodities like grain, cattle, vegetables; all were significantly less than milk in total sales. Horticulture contributes to diversity in Oconto County. The sales of Christmas trees, fruits and vegetables, greenhouse, nursery, and floriculture products totaled an estimated \$5.4 million in 2011.

In addition to the typical markets, more and more Oconto County farmers are selling direct to consumers through roadside stands, farmers' markets, auctions, pick-your-own operations and community supported agriculture (CSA). In all, in 2011 approximately 91 farms generated \$428,000 in direct-marketing sales.

Agricultural Enterprises

A 2012 University of Wisconsin Extension study looked at relative employment for a wide variety of farm and food related industry in Wisconsin and compared them with employment statistics for similar industries around the country. Researchers then analyzed how these values changed between 2003 and 2013. The data as shown in Table 5.15 reveals a number of food

processing industries (processed dairy, frozen specialties, spices and meat food products) where Wisconsin industries appear to have a strong and growing competitive advantage. The study also identified: historically strong Wisconsin industries that have declined in economic activity in recent years (such as cheese manufacturing); new, emerging industries that have shown significant employment growth, and; industries that have been traditionally relatively weak in Wisconsin and have declined in employment. *For additional information on location quotient analysis refer to Chapter 7 – Economic Development.*

Table 5.15: Food Processing Manufacturing Clusters, Wisconsin

	Change LQ 2013	Share of LQ 03- 13	Employment 2013
Strength and Growing (Potential Cluster?)			
Creamery butter mfg	17.29	1.94	0.04%
Dry, condensed, & evaporated dairy products	6.92	3.05	0.09%
Meat processed from carcasses	4.35	0.38	0.43%
All other miscellaneous food mfg	4.29	2.15	0.11%
Spice & extract mfg	3.38	1.21	0.07%
Fruit & vegetable canning	3.08	0.09	0.17%
Breweries	2.86	0.47	0.09%
All other food mfg	2.32	0.72	0.13%
Frozen fruit & vegetable mfg	2.06	0.84	0.06%
Sugar & confectionery product mfg	1.64	0.39	0.10%
Commercial bakeries	1.07	0.15	0.12%
Strength & Declining (Potential Threat?)			
Cheese mfg	14.53	-0.59	0.55%
Malt mfg	13.66	-4.84	0.01%
Frozen specialty food mfg	3.77	-0.24	0.19%
Fruit & vegetable canning & drying	2.68	-0.02	0.20%
Mayonnaise, dressing, & sauce mfg	2.10	-0.92	0.03%
Animal, except poultry, slaughtering	1.34	-0.32	0.17%
Weakness but Growing (Potential Opportunity?)			
Ice mfg	0.81	0.45	0.01%
Bottled water mfg	0.88	0.09	0.01%
Seafood product preparation & packaging	0.12	0.04	0.00%
Weakness & Declining			
Fluid milk mfg	0.82	-0.12	0.04%
Cookie & cracker mfg	0.90	-0.17	0.03%
Perishable prepared food mfg	0.79	-0.25	0.03%
Soft drink mfg	0.26	-0.26	0.02%
Ice cream & frozen dessert mfg	0.82	-0.36	0.01%

Source: UW-Extension Publication, “The Economic Impact of Agriculture in Wisconsin Counties”, 2012.

Economic Impacts of Agriculture

Agriculture has a significant economic impact in Oconto County, and is comprised of hundreds of family-owned farms as well as numerous enterprises providing equipment, services and other products farmers need to process, market and deliver food to consumers. The production, sales and processing of Oconto County’s farm products generate employment, economic activity,

income and tax revenue. It is estimated that agriculture contributed approximately 16 million in local, county and state tax revenue in 2008. Table 5.16 further shows the economic and labor impact that agriculture has in Oconto County.

Table 5.16: Oconto County Economics and Labor Impact of Agriculture

	1997	2002	2007	2012
Total Sales	\$66,618,000	\$73,988,000	\$115,830,000	\$165,909,000
Total Sales Average per Farm	\$70,870	\$65,360	\$93,111	\$178,589
Total Farm Production Expenses	\$51,328,000	\$55,883,000	\$83,215,000	\$125,912,000
Total Farm Production Expenses Average per Farm	\$54,662	\$49,149	\$66,893	\$135,535
Hired Farm Labor (Farms)	388	225	251	283
Hired Farm Labor (Workers)	1,250	1,258	1,018	1,107
Hired Farm Labor (Wages)	\$4,602,000	\$6,192,000	\$9,787,000	\$12,466,000
Total Government Payments	\$1,863,000	\$3,331,000	\$2,388,000	\$2,856,000
Total Farms Receiving Payments	575	551	622	507

Source: USDA, Wisconsin Agricultural Statistics, Oconto County Planning, 2014.

In 2012, Oconto County ranked ninth in the state and in the top one hundred for Christmas tree and woody shrub production. Oconto County also ranked twenty-second in the state and in the top one hundred nationally for dairy production, as shown in Table 5.17.

Table 5.17: Oconto County Agricultural Sales and State and National Rank, 2007 & 2012

	Oconto Agricultural Sales State and National Rank, 2007 and 2012			
	2007 State Rank	2007 National Rank	2012 State Rank	2012 National Rank
Livestock/Poultry (Total)	28 of 72	433 of 3,069	30 of 72	462 of 3,076
Dairy	26 of 70	90 of 2,493	22 of 68	98 of 2,038
Cattle/Calves	26 of 72	857 of 3,054	30 of 72	791 of 3,056
Poultry/Eggs	37 of 72	1,177 of 3,020	45 of 72	1,316 of 3,013
Hogs/Pigs	50 of 71	1,359 of 2,922	50 of 70	(D) of 2,827
Horses/Ponies/Mules/Burros/Donkeys	4 of 70	503 of 3,024	8 of 69	758 of 3,011
Sheep/Goats/Products	20 of 71	457 of 2,998	32 of 68	752 of 2,988
Crops including Nursery/Greenhouse (Total)	47 of 72	1,375 of 3,072	35 of 71	965 of 3,072
Grains	40 of 71	1,068 of 2,933	27 of 71	780 of 2,926
Vegetables/Melons/Potatoes	30 of 71	477 of 2,796	22 of 70	399 of 2,802
Fruit/Berries	56 of 70	1,091 of 2,659	51 of 70	1,184 of 2,724
Greenhouse/Nursery	26 of 70	760 of 2,703	35 of 71	899 of 2,678
Hay/Other Crops	30 of 72	923 of 3,054	27 of 71	805 of 3,049
Christmas Trees/Woody Shrubs	18 of 68	236 of 1,710	9 of 67	88 of 1,530
Total	34 of 72	757 of 3,076	34 of 72	703 of 3,077

(D) Withheld to avoid disclosing data for individual operations.

Source: 2007 & 2012 US Census of Agriculture; Oconto County Planning, 2014.

For more information on Oconto County's agricultural industry, refer to Chapter 7 – Economic Development.

Agricultural Infrastructure

Oconto County's agriculture industry has a greater impact to Oconto County than just producing milk or livestock. The agriculture industry needs infrastructure to operate, which in turn, provides economic opportunities for other businesses. For instance, farmers need machinery to work their fields, seeds to plant, fertilizer to buy, places to store grain, places to send milk and meat for processing, veterinarians to check on animals, etc. For this reason there are many other existing industries and jobs that are related to agriculture. The following is a list of agricultural infrastructure facilities and service providers that are located in Oconto County. This list was created by Oconto County Planning and Oconto County Land Conservation and reviewed by the Oconto County Planning and Zoning Committee, Land Conservation Committee, Planning Advisory Committee and other stakeholders. This is not a comprehensive list; however it provides examples of the various key facilities and services offered for Oconto County farmers. **Map 5.15** illustrates the location of the various agricultural infrastructure facilities and service providers in Oconto County.

Mills/Supply/Service

- Bay Lake Companies, LLC.
 - AgVentures (*Coleman, WI / Marinette County & Shawano, WI / Shawano County*)
 - Enviro-Pros (*Oconto Falls, WI & Shawano, WI / Shawano County*)
 - Grain Ventures, LLC. (*Oconto Falls, WI & Shawano, WI / Shawano County*)
- Gillett Milling Company Inc.
- Arndt Farm Supply & Service
- Suring Milling Company
- Murphy Feed & Supply, Inc.
- Zeitler Agri-Center (*Coleman, WI / Marinette County*)
- Tri-County Roasters, Inc. (*Pulaski, WI / Shawano County*)
- Pulaski Dry Grain (*Pulaski, WI / Brown County*)
- United Cooperative (*Pulaski, WI / Brown County*)
- Pulaski Warehouse (*Pulaski, WI / Brown County*)

Implement/Equipment Dealers

- ABTS Bou-Matic
- Ausloos Dairy Equipment, Inc.
- Behnke Sales and Service
- D&B Construction Equipment, Inc.
- Dumke Brothers Tractor & Implement
- County Line Implement Inc. (*Marinette County*)
- Vanderloop Equipment, Inc.
- Ullmers Dairy Equipment
- Riesterer & Schnell Inc. (*Pound, WI / Marinette County*)
- Beaver Machine, Inc. (*Coleman, WI / Marinette County*)

Implement/Equipment Manufacturers

- Patz Corporation (*Pound, WI / Marinette County*)

Dairy Processing

- Spring Side Cheese Corporation

- Suputo Cheese USA Inc.
- BelGioioso Cheese

Canning

- Allen Canning (Pulaski, WI / Brown County)
- Seneca Foods

Meat Processing

- Gillett Meats
- Meatski's Quality Meats & Seafood (Marinette County)
- Melotte's Meats
- County Line Meats, LLC

Veterinary Service

- Dair-Ray Veterinary Services
- Hometown Veterinary Clinic
- Northwoods Veterinary Clinic, LLC
- Animal Health Clinic, LLC (Coleman, WI / Marinette County)

Livestock Transport

- Graef Francis Livestock Trucking

Environmental Impacts of Agriculture

Most of the agricultural lands within the county are interspersed with water features, wetlands, steep slopes and other natural features that make up much of Oconto County's landscape. The integration of agriculture and natural resources can raise concerns. Soil erosion from farm fields and surface runoff of crop nutrients and agricultural chemicals can impact the quality of streams, rivers, lakes and underground aquifers, ultimately impacting drinking water supplies. Specific crop rotations, livestock and tillage practices all affect the amount of soil erosion and nutrient losses.

As a result, farm operators are encouraged to work with their local land conservation and UW-Extension staff to identify and implement specific resource conservation practices to better protect the environmental features in and around farms. If properly managed, agricultural lands and those areas not cropped such as woodlots and stream corridors have a positive impact on a community. These lands provide balanced habitat for wildlife and waterfowl, in addition to providing open space lands.

Preservation Programs

Many preservation programs are available at the county, state, and federal levels to assist with and promote agricultural conservation and natural resource protection. A listing of these programs, some of which are available in Oconto County can be found in **Appendix A**. Landowners looking for additional information should contact Oconto County Planning and Zoning, Oconto County Land Conservation, Natural Resource Conservation Service (NRCS), USDA Farm Service Agency, and the Wisconsin Department of Natural Resources (WDNR).

CULTURAL RESOURCES

Cultural resources are typically sites, structures, features and/or objects of some importance to a culture or community for scientific, aesthetic, traditional, educational, religious, archaeological, architectural or historic reasons.

Historic and Archeological Sites

The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures and objects that are significant in American history, architecture, archeology, engineering and culture.

- Table 5.18 is a listing of sites in the county that appear on the National Register of Historic Places as well as those that were identified by the Oconto County Historical Society as important historical and archeological sites.

Other structures of historic significance in the county that are not on the State and/or National Register, but are listed in the state's AHI inventory consist of the county courthouse, churches, hotels, historic homes, historic markers, etc. There is a possibility that several structures or sites may not be listed, and some of the listed structures may have been torn down. A comprehensive listing of AHI sites in Oconto County can be found on the Wisconsin Historical Society Website.

Preservation of historical and archeological sites located within the county can be important in retaining the character of the area. These sites help to educate the public about the history of the county while also providing tourism and recreation opportunities.

Table 5.18: Historic Places in Oconto County

Name	Location	Structure Age
National Register of Historic Places		
Arndt's Pensaukee Mill	Town of Pensaukee	1827
Beyer Home Museum	City of Oconto	1868
Boulder Lake Site	Town of Doty	
John G. Campbell House	City of Oconto	1892
Chute Pond Dam	Town of Mountain	
Citizens State Bank Building	City of Gillett	ca 1904
First Church of Christ, Scientist	City of Oconto	1886
Holt and Balcom Logging Camp No.1	Town of Lakewood	1880
Holt-Balcom Lumber Company Office	City of Oconto	1854
Huff Jones House	City of Oconto	1851
Daniel E. Krause Stone Barn	Town of Chase	1903
Mathey Building	Village of Lena	1916
Mountain Fire Lookout Tower	Town of Riverview	
Mountain School	Town of Mountain	1908
Oconto Main Post Office	City of Oconto	1922
Oconto County Courthouse	City of Oconto	ca 1877 & 1891
Oconto Site: Copper Culture State Park	City of Oconto	3000 - 4000 BC
Governor Edward Scofield House	City of Oconto	1869
Smyth Road Bridge	Town of Lakewood	
St. Mark's Episcopal Guild Hall and Vicarage	City of Oconto	1866 & 1871

CHAPTER 5 – NATURAL, AGRICULTURAL AND CULTURAL RESOURCES

St. Peter's and St. Joseph's Catholic Churches	City of Oconto	1899/1870
Weber Lake Picnic Ground Shelter	Town of Mountain	
West Main Street Historic District	City of Oconto	1860 - 1929
White Potato Lake Garden Beds Site	Town of Brazeau	ca 1200 - 1600 AD
Other Oconto County Historic and Archeological Sites		
Allouez Historical Marker	City of Oconto	
Arndt's Little Suamico Sawmill Complex	Town of Little Suamico	ca 1835
Bedora Mound Group	Town of Brazeau	ca 100 AD
E.A. Taylor's Pensaukee Stage Coach Stop and Hotel	Town of Pensaukee	ca 1855 & ca 1871
Fire Lookout Tower	Town of Mountain	1934
Fort Howard to Menominee Road	Town of Pensaukee	1855
Gardner's Sawmill and Grand Hotel	Town of Pensaukee	ca 1850 and 1872
Green Lake Picnic Ground Shelter	Town of Mountain	1937
Grosse Family Cemetery	Town of Little Suamico	ca 1850
Hauser Dental Office (former Bank Building)	City of Gillett	ca 1904
Indian School and Farm	Town of Stiles	ca 1870
Lena Museum and Log Cabin	Village of Lena	
Living Oak Trail Marker Tree	Oak Orchard	
Mercier Hotel	City of Oconto Falls	1895
Mountain CCC Camp	Town of Mountain	1930s
Mountain Log House	Town of Mountain	ca 1880
Murphy Saw Mill	Town of Lakewood	
Oconto Falls Tissue	City of Oconto Falls	1845
Paxkinano Village Site	Town of Oconto	
Spruce Elementary School	Town of Spruce	
St. Mark's Lutheran Church and Cemetery	Town of Spruce	1892
Stiles Dam and Iron Bridge	Town of Stiles	ca 1925 & ca 1920
Suzie's Hill and Rapids	City of Oconto	
Swamp Hotel	Town of Little River	ca 1912
Thomaston Fishing Settlement	Town of Little River	ca 1855 - 1871
Volk's Family Cemetery	City of Oconto Falls	ca 1855

Source: Wisconsin Historical Society, 2006; Oconto County Historical Society, 2006; Bay-Lake Regional Planning Commission, 2006; and Oconto County Planning, 2014.

Cultural Resources

Museums and Historic Attractions

The **Beyer Home Museum** was built in 1868 and was the first brick home built in the county. The museum contains Copper Culture artifacts, old Main Street Oconto store exhibits, carriages and electric cars.

Located just north of Gillett, the **Earthaven Museum** is a nonprofit educational facility that provides visitors with information about the earth sciences.

The **Holt and Balcolm Logging Camp** is the oldest logging camp in North America. Located in the Town of Lakewood, this historic site was built in 1880 and is now open to the public for viewing on a limited basis.

Known as the first structure built in the Town of Mountain, the **Mountain Log House Museum** now serves as a historical museum, information center, and a memorial to the Mountain pioneers.

The **Lena Museum and Log Cabin** features a small museum and is open to the public during summer months.

Community Design

Community design (character) deals with the large-scale organization and design of the county. An evaluation of community design is often subjective and requires personal judgment. In an effort to remove this subjectivity, the community design resources of the county have been inventoried that represent the building blocks and language of community design:

Landmarks

Landmarks are important reference points that represent a prominent feature of the landscape and have the ability to distinguish a locality, mark the boundary of a piece of land, or symbolize an important event or turning point in the history of the county.

Pathways

Pathways are linear features that represent both vehicular and pedestrian movement. Pathways provide connections between places, as well as along them. Whether a major arterial, local street, or undefined woodland trail, pathways are hierarchical and represent a degree of usage. The following pathways should be considered important aspects of the county's character.

Edges

Like pathways, edges are linear. Edges are important organizing elements that represent boundaries that can be soft or hard, real or perceived. They become increasingly important as a community grows so as to visually distinguish the edges of the county. These edges do not necessarily coincide with jurisdictional boundaries.

Districts

Districts encompass areas of commonality. These areas represent buildings and spaces where clearly defined and separate types of activities take place.

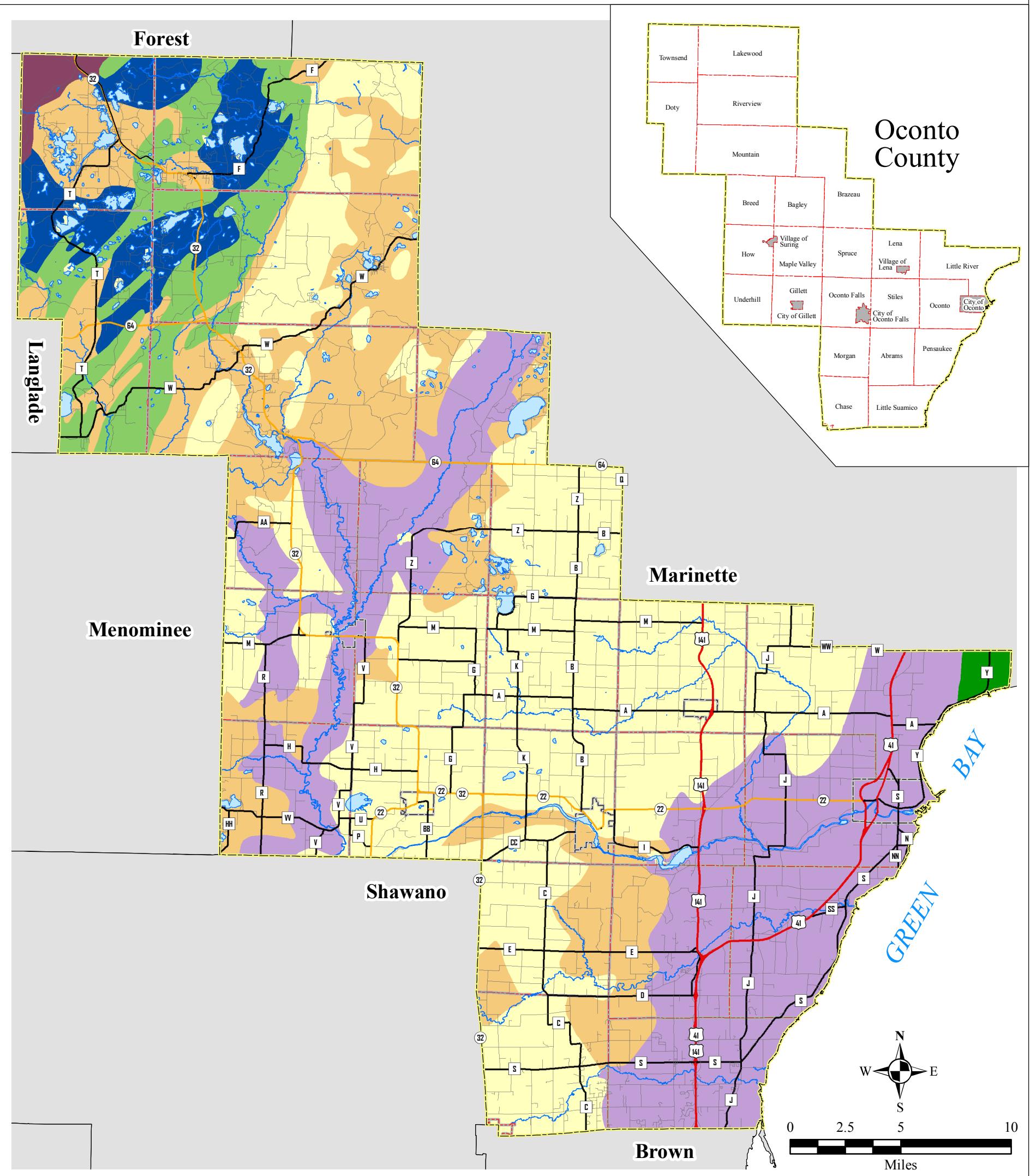
Nodes

Nodes are specific points of recognition. They are destinations and very often represent the core or center of a district. In addition, nodes are closely associated with pathways as they provide access to and from districts.

- There are a large number of landmarks, pathways, edges, districts and nodes located throughout Oconto County. Chapter 4 of *Volume I* provides further detail on these features.

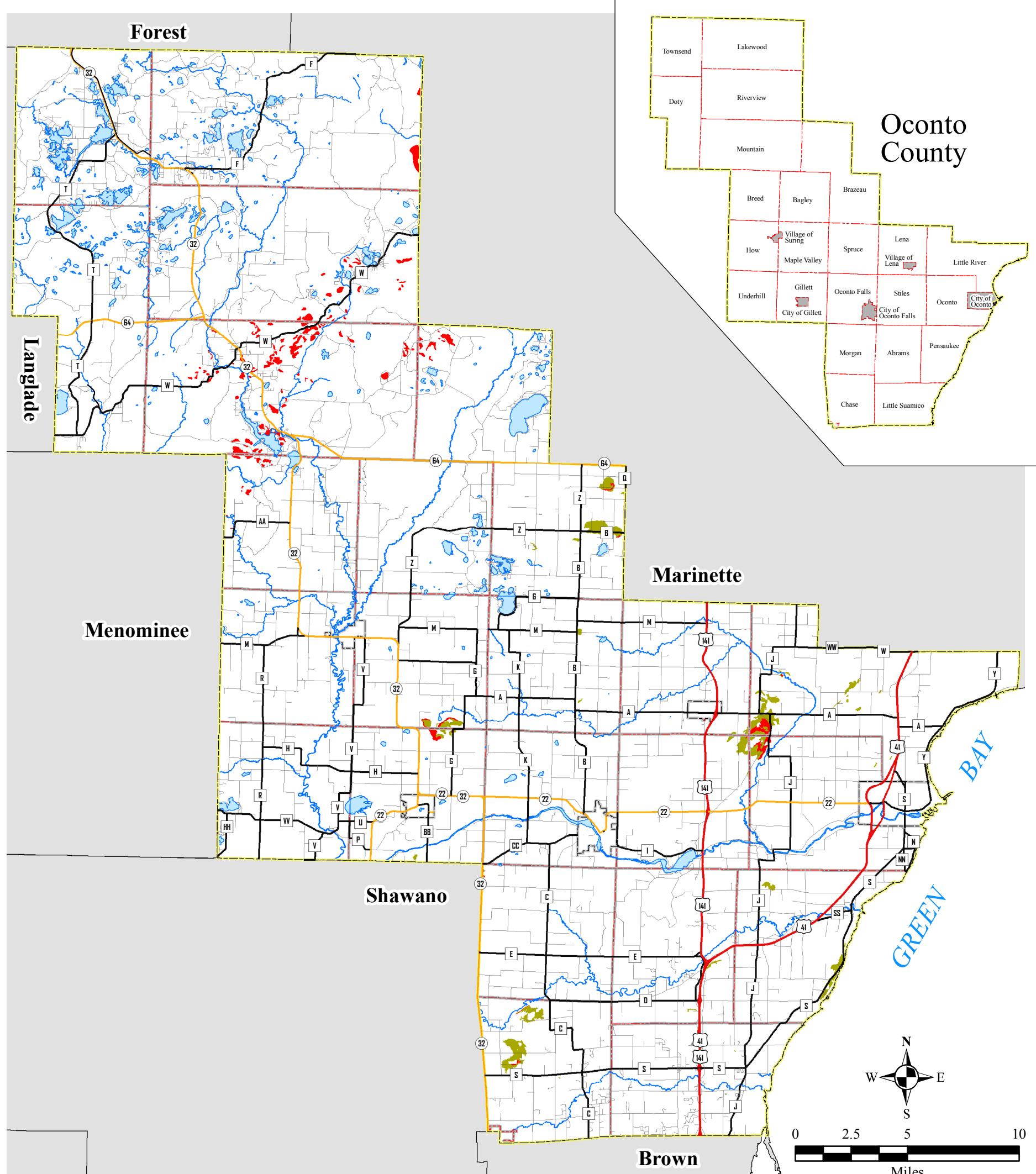
Pleistocene Geology

Oconto County, Wisconsin



Depth to Bedrock

Oconto County, Wisconsin



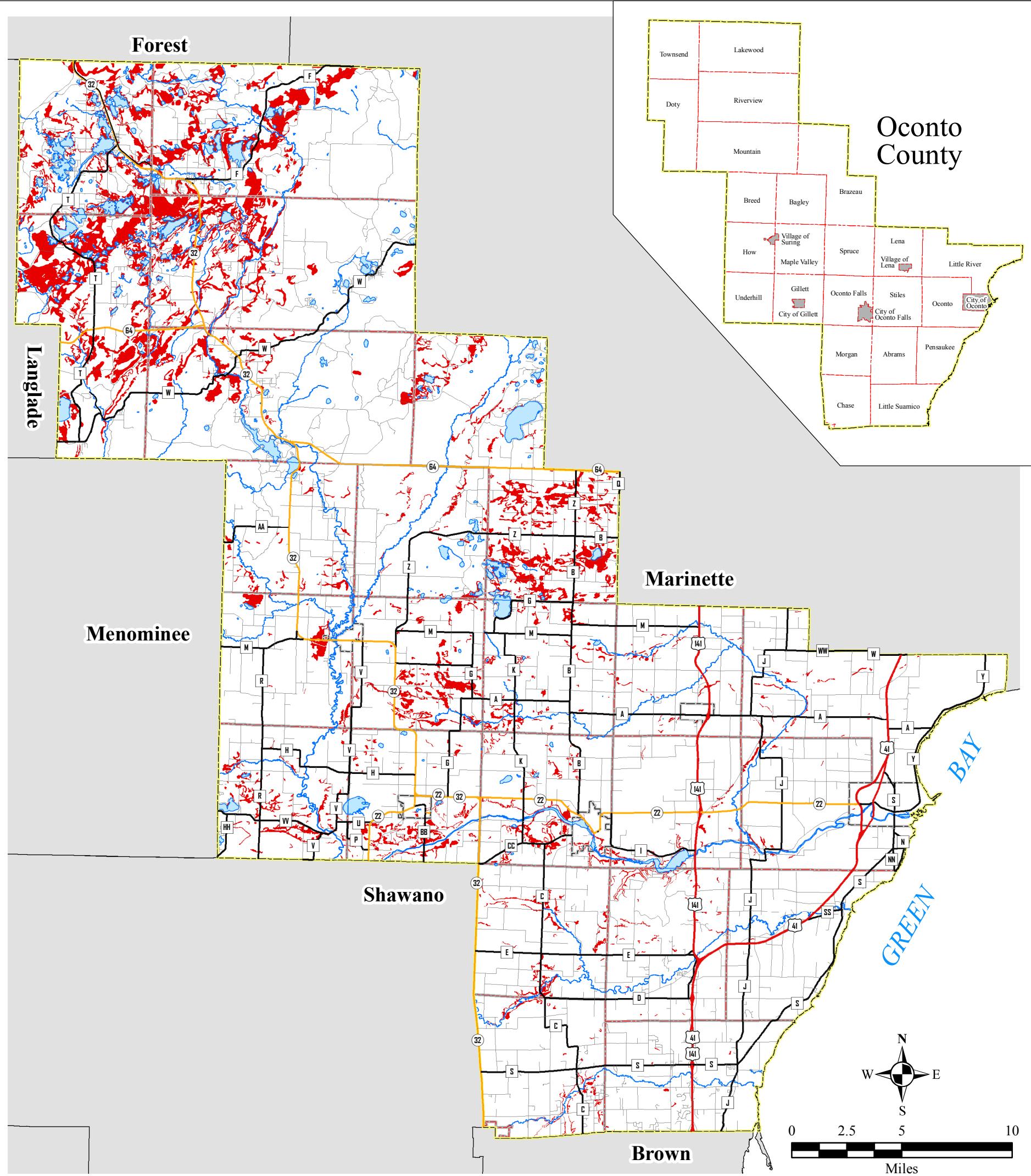
Base Map Features

- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers

- 10-20 Inches**
- 20-40 Inches**
- 60 Inches or Greater**

Steep Slope

Oconto County, Wisconsin



Base Map Features

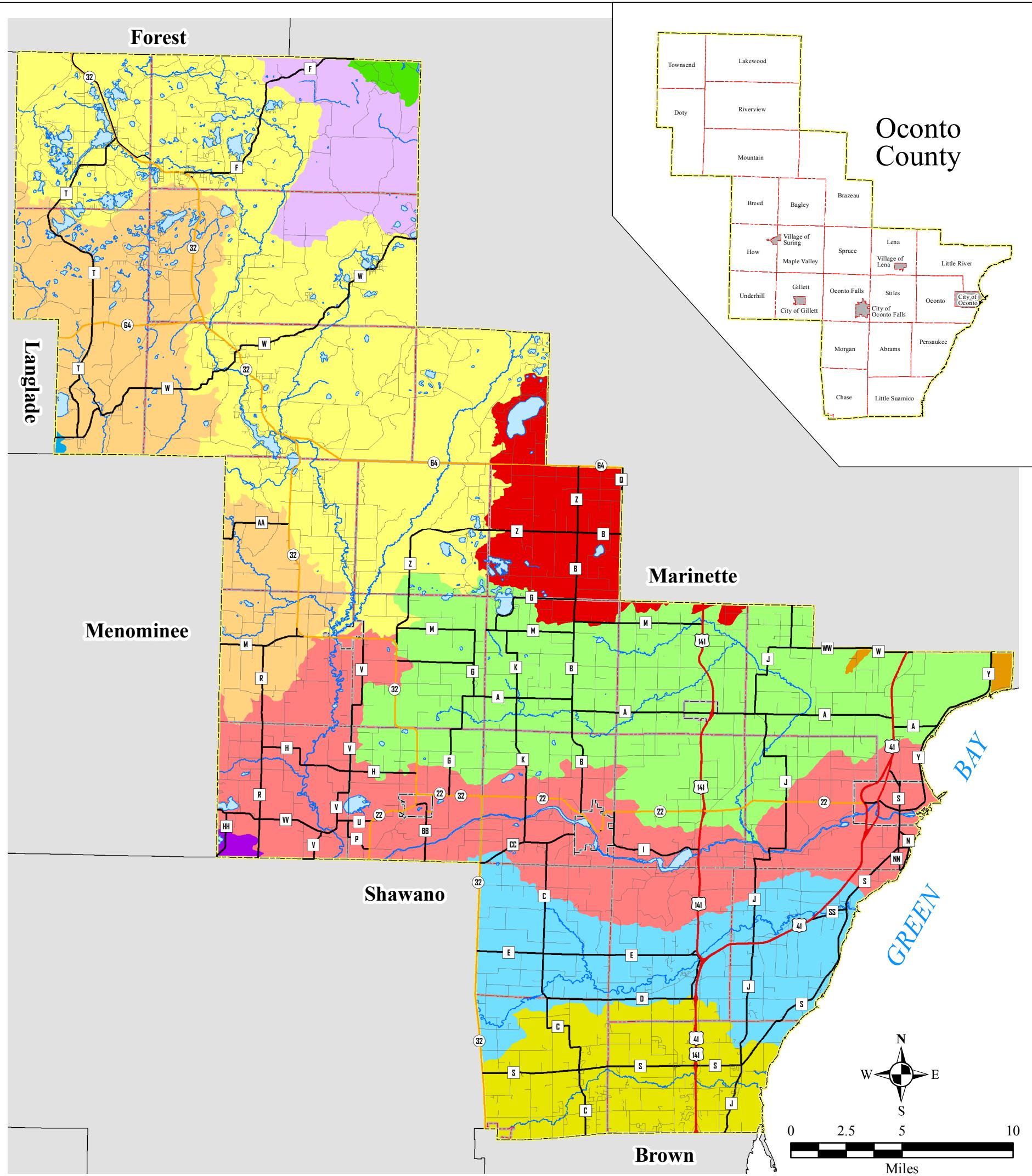
- Railroad
- Federal Highway
- State Highway
- County Highway
- Local Roads
- Township Boundary
- City/Village Boundary
- County Boundary
- Lakes and Rivers

Steep Slope 12% or Greater

Note: Steep Slopes are derived from soil characteristics and do not represent actual elevation.

Watersheds

Oconto County, Wisconsin



Base Map Features

- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers

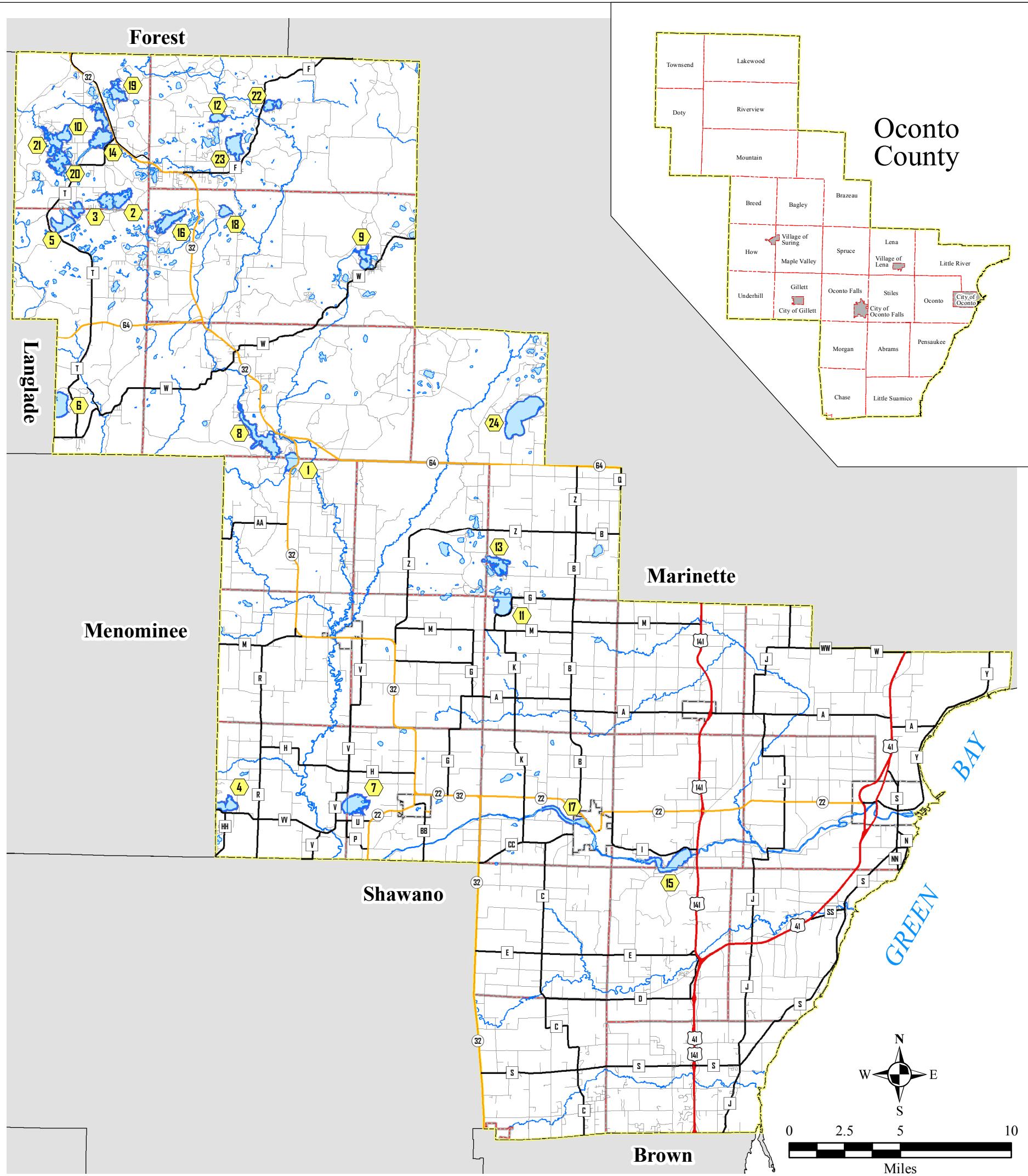
Little Peshtigo River	Pensaukee River
Little River	Shawano Lake
Lower North Branch Oconto River	South Branch Oconto River
Lower Oconto River	Suamico and Little Suamico Rivers
Lower Peshtigo River	Upper Peshtigo River
Middle Peshtigo and Thunder Rivers	Wolf River/Langlade and Evergreen Rivers

This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. Oconto County and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

Source: WDNR, 1992; Bay-Lake Regional Planning Commission, 2008; Oconto County Planning, 2014.

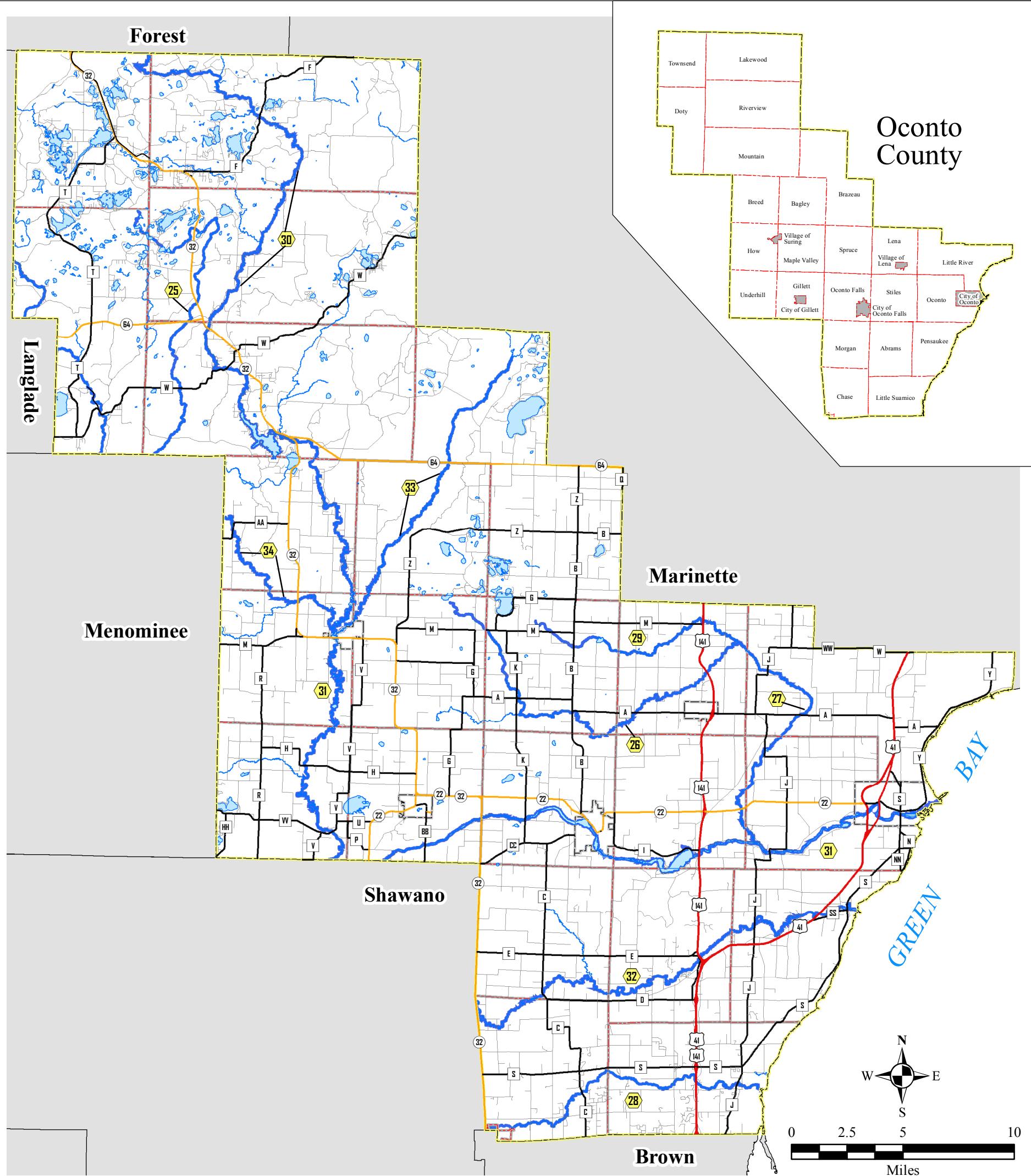
Major Lakes and Ponds

Oconto County, Wisconsin



Major Rivers and Creeks

Oconto County, Wisconsin

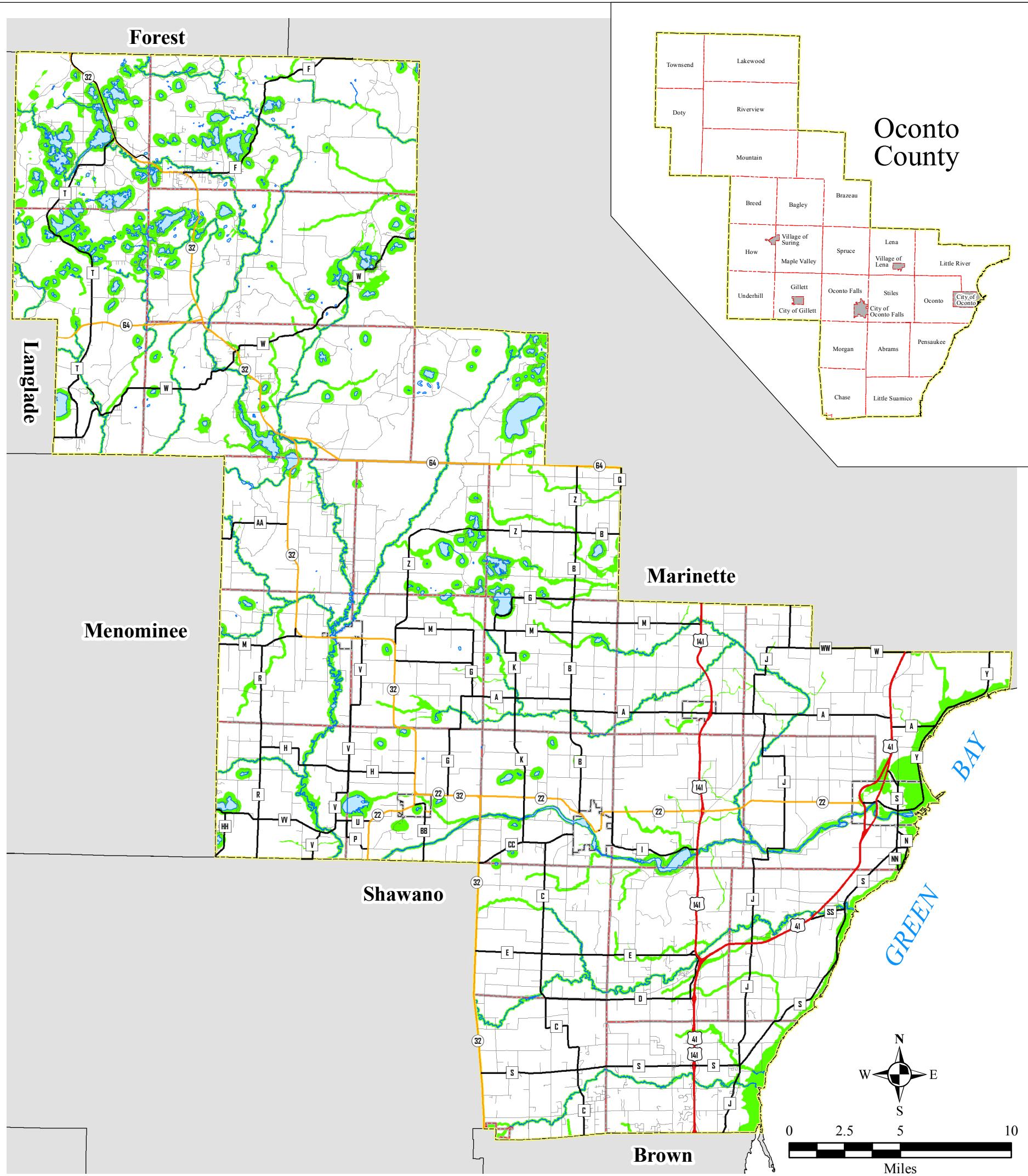


Base Map Features

- Railroad
- Federal Highway
- State Highway
- County Highway
- Local Roads
- Township Boundary
- City/Village Boundary
- County Boundary
- Lakes and Rivers

Shorelands

Oconto County, Wisconsin



Base Map Features

- Railroad
- Federal Highway
- State Highway
- County Highway
- Local Roads
- Township Boundary
- City/Village Boundary
- County Boundary
- Lakes and Rivers

Shorelands

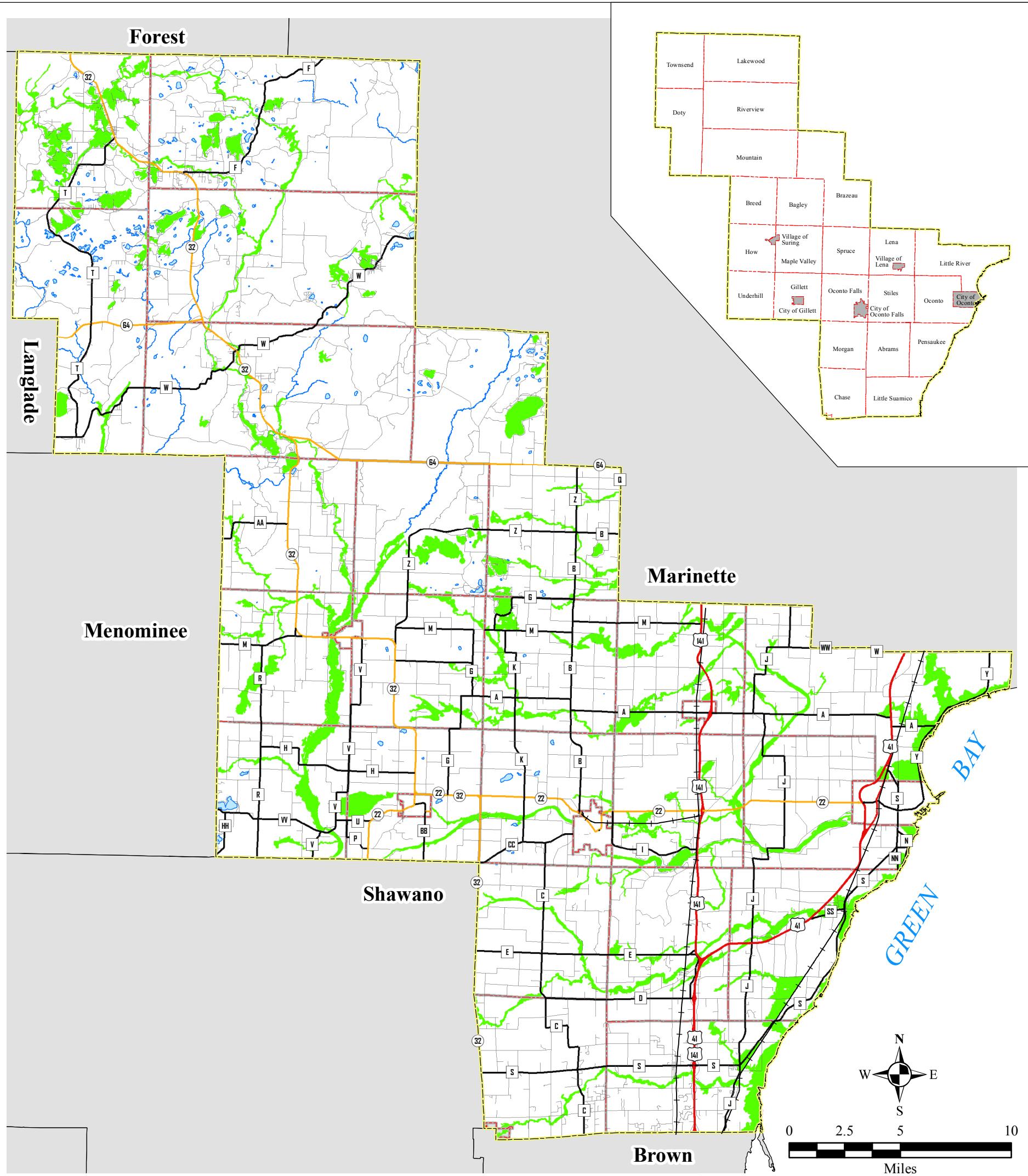
Note: Shorelands defined as, 1,000 feet from a lake, 300 feet from a river, or to the landward side of the floodplain, whichever distance is greater.

Floodplains

Oconto County, Wisconsin

Oconto County 20-Year Comprehensive Plan

5-55



Base Map Features

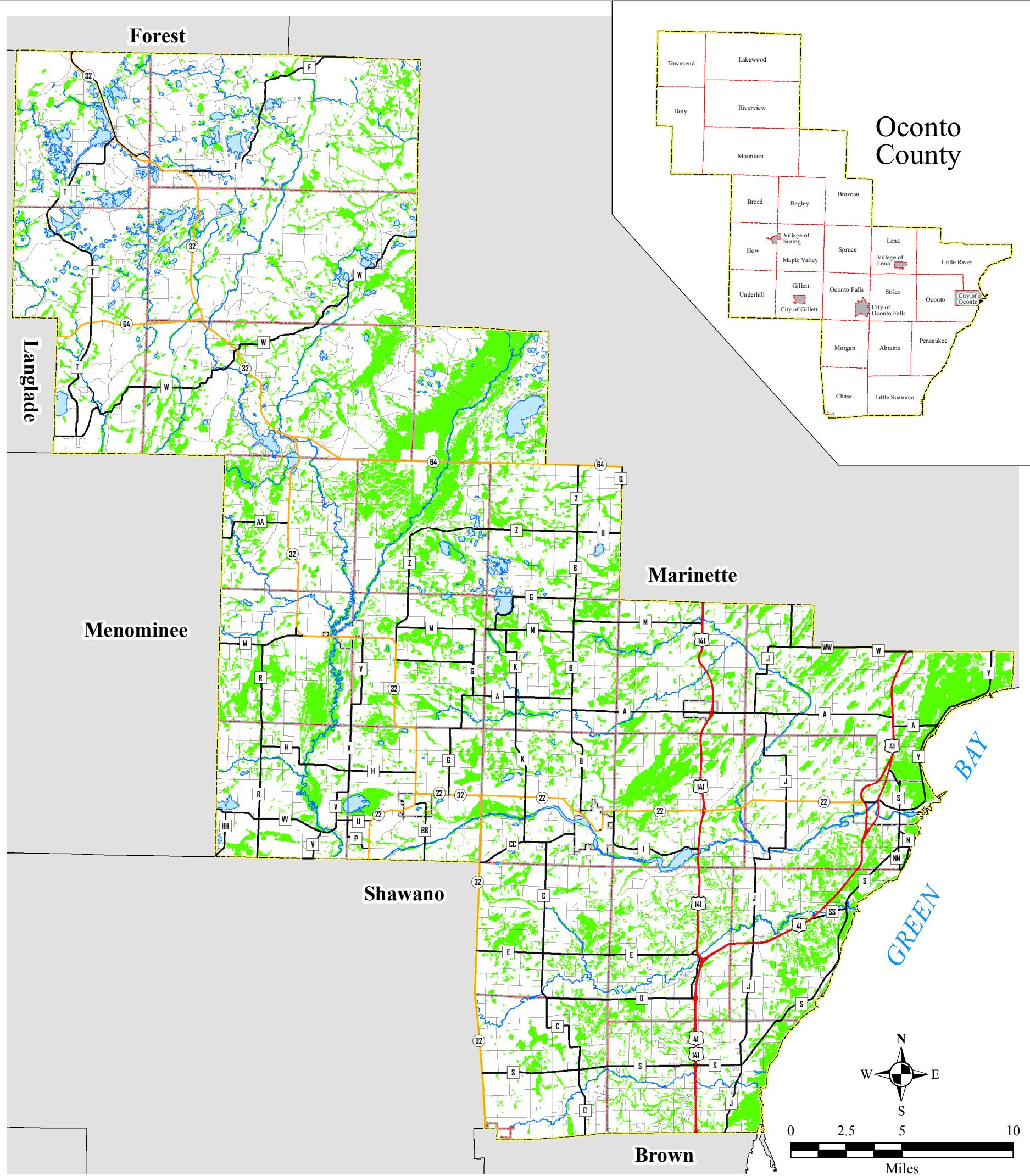
- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers

 100-Year Floodplain

This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only. Oconto County and the Bay-Lake RPC are not responsible for any inaccuracies herein contained. Source: FEMA, 2010; Bay-Lake Regional Planning Commission, 2008; Oconto County Planning, 2014.

Wetlands

Oconto County, Wisconsin



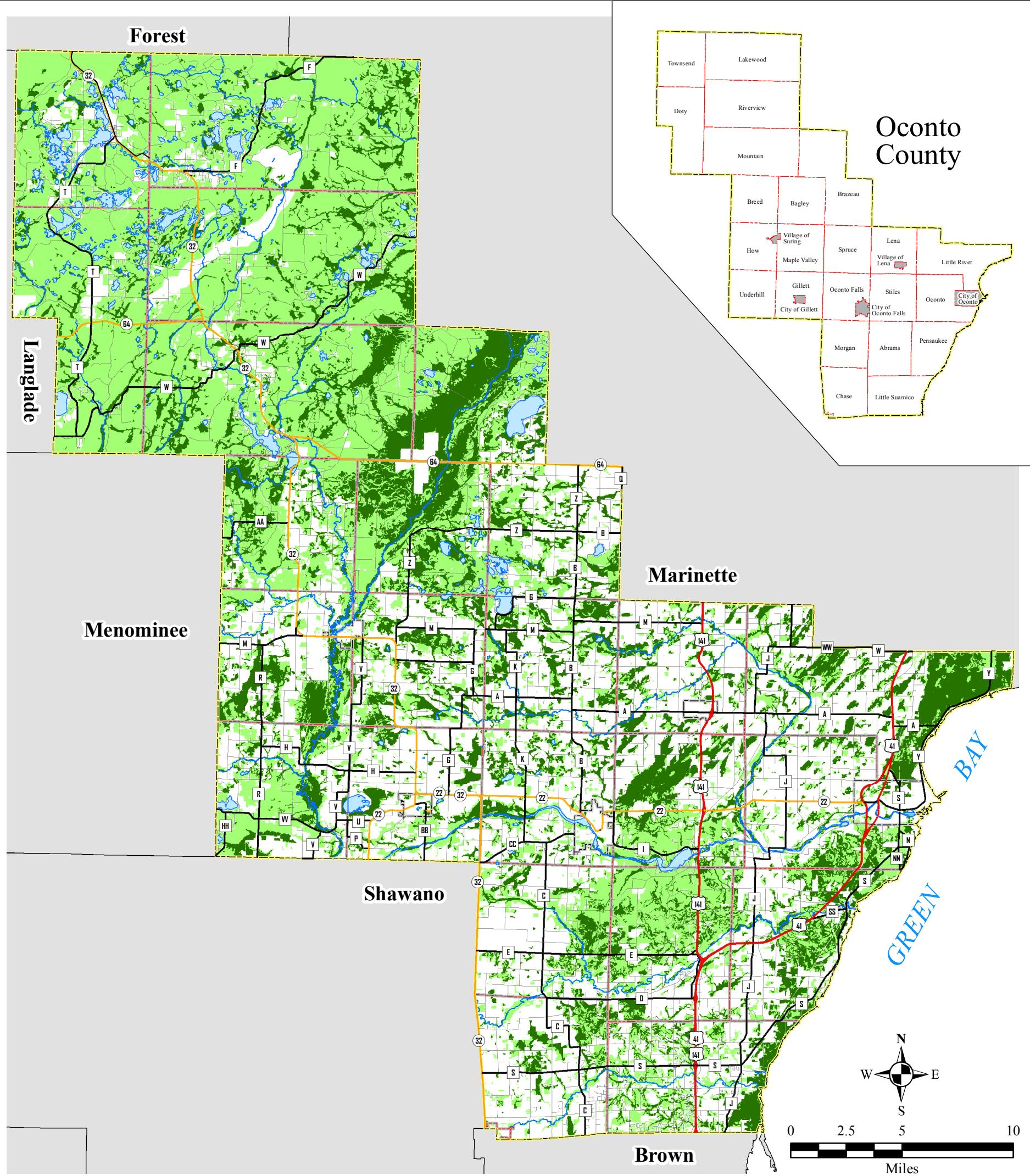
Base Map Features

- ↗ Railroad
- ↗ Federal Highway
- ↗ State Highway
- ↗ County Highway
- ↗ Local Roads
- ☒ Township Boundary
- ☒ City/Village Boundary
- ☒ County Boundary
- ↗ Lakes and Rivers

Wetland - 2 Acres or Greater

Woodlands

Oconto County, Wisconsin



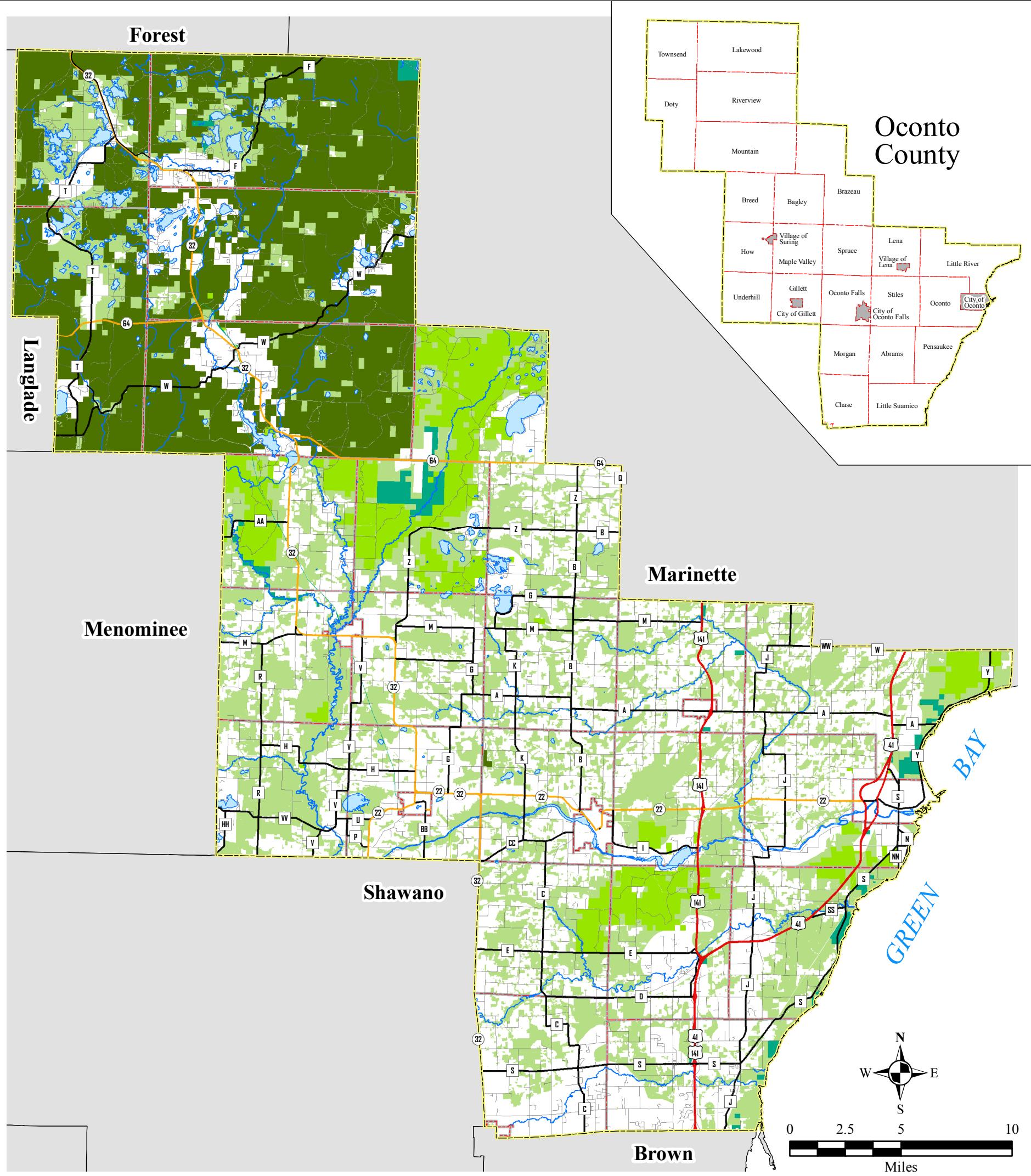
Base Map Features

- ↗ Railroad
- ↗ Federal Highway
- ↗ State Highway
- ↗ County Highway
- ↗ Local Roads
- ☒ Township Boundary
- ☒ City/Village Boundary
- ☒ County Boundary
- ☒ Lakes and Rivers

- Upland Woodlands
- Lowland Woodlands

Woodlands Ownership

Oconto County, Wisconsin



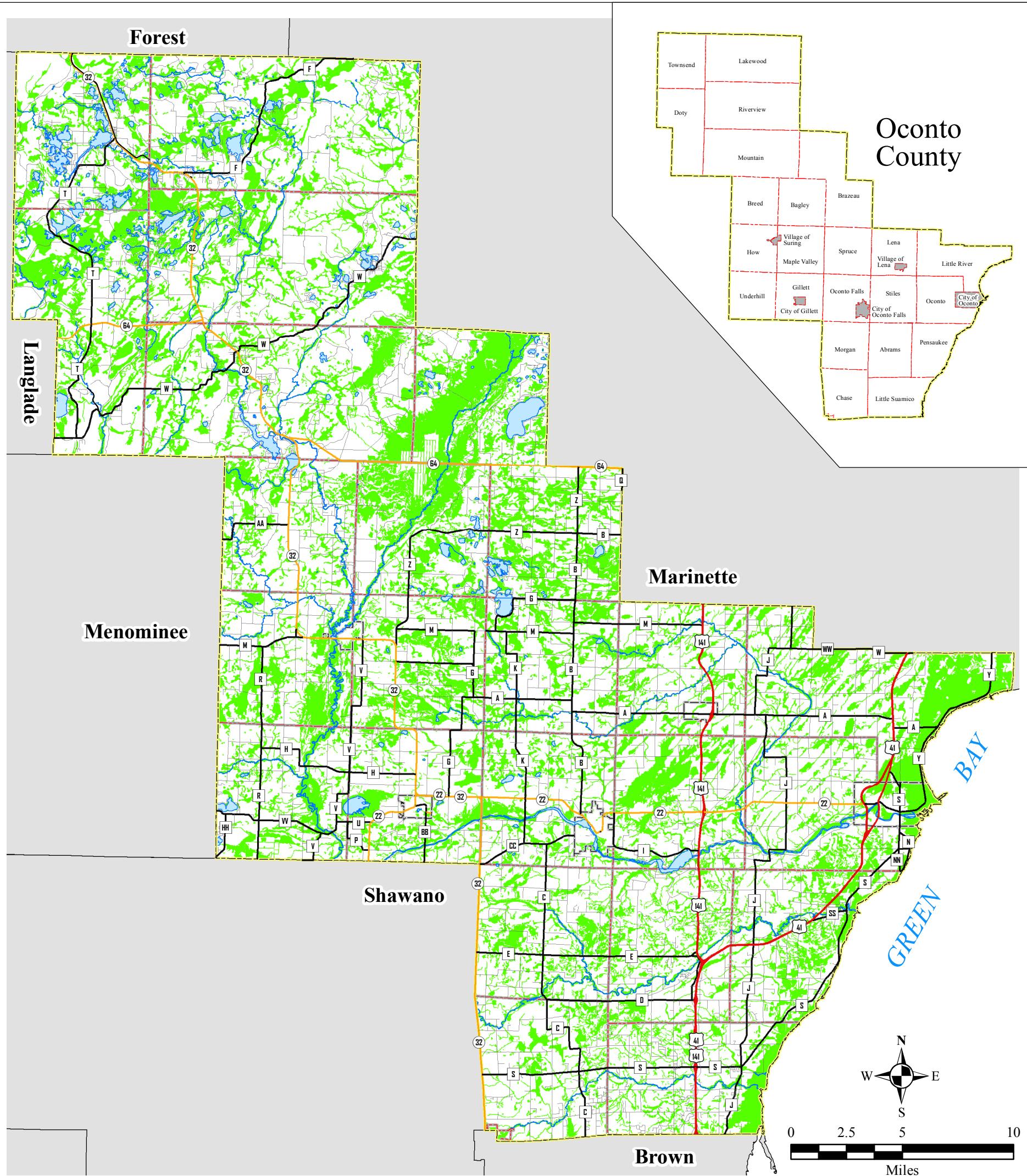
Base Map Features

- Railroad
- Federal Highway
- State Highway
- County Highway
- Local Roads
- County Boundary
- City/Village Boundary
- Township Boundary
- Lakes and Rivers

- Federal Woodlands
- State Woodlands
- County Woodlands
- Private Woodlands

Environmental Corridors

Oconto County, Wisconsin



Base Map Features

- Railroad
- Federal Highway
- State Highway
- County Highway
- Local Roads
- County Boundary
- City/Village Boundary
- Township Boundary
- Lakes and Rivers

Environmental Corridors

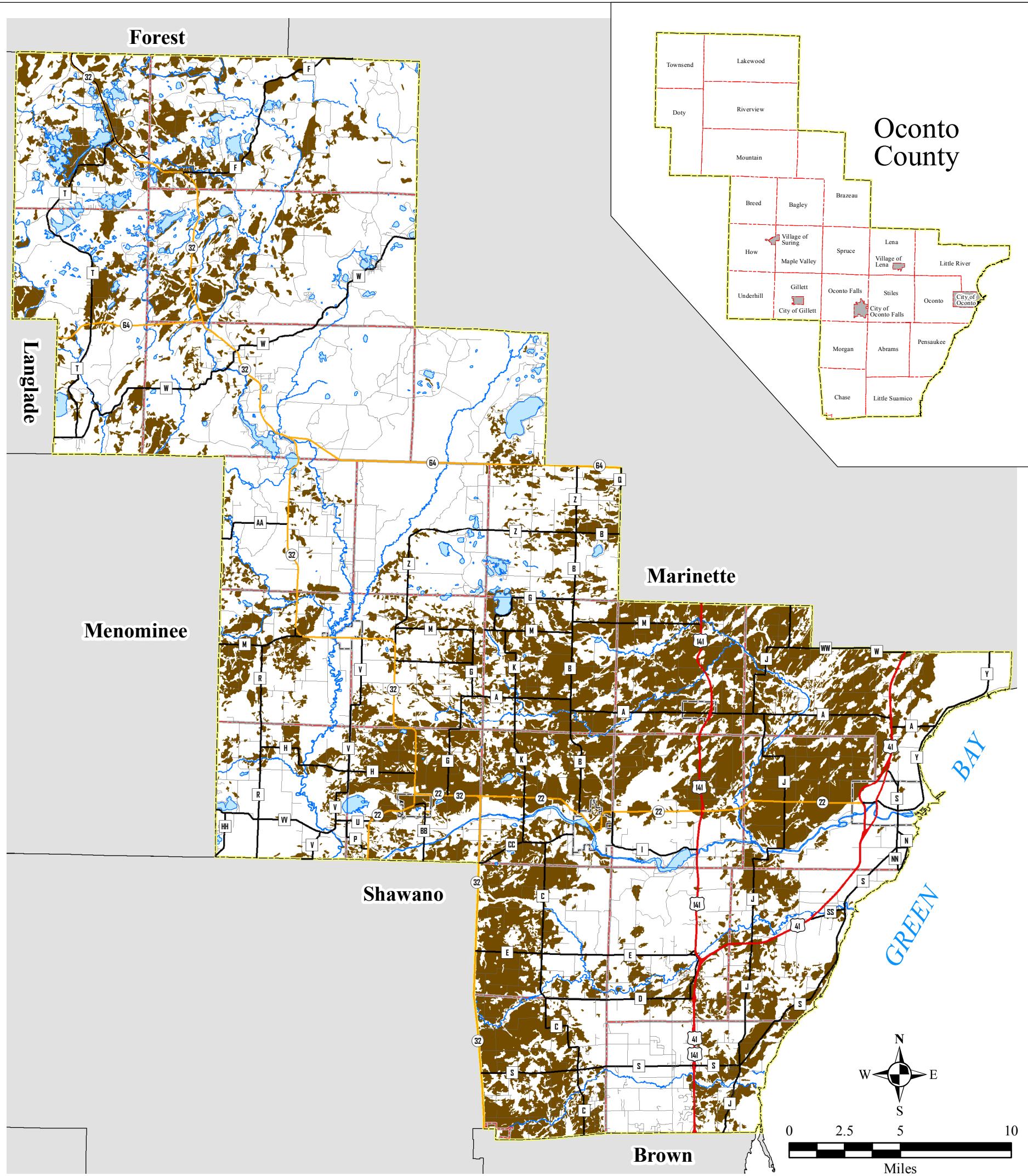
- Wetlands with 50-Foot Buffer
- 100 - Year Floodplains
- Steep Slope 12% or Greater
- 75-Foot Buffer of Surface Water

This map is neither a legally recorded map nor a survey, and is not intended to be used as either.
It is a compilation of records, information and data to be used for reference purposes only.

Oconto County and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.
Source: WDNR, 2006; FEMA, 1981, 1983, 1984, 1998; NRCS, 2004; Bay-Lake Regional Planning Commission, 2008; Oconto County Planning, 2014.

Prime Agricultural Soils

Oconto County, Wisconsin



Base Map Features

- ↗ Railroad
- ↖ Federal Highway
- ↘ State Highway
- ↙ County Highway
- ↖ Local Roads
- ↗ Township Boundary
- ↖ City/Village Boundary
- ↘ County Boundary
- ↖ Lakes and Rivers

Prime Agricultural Soils

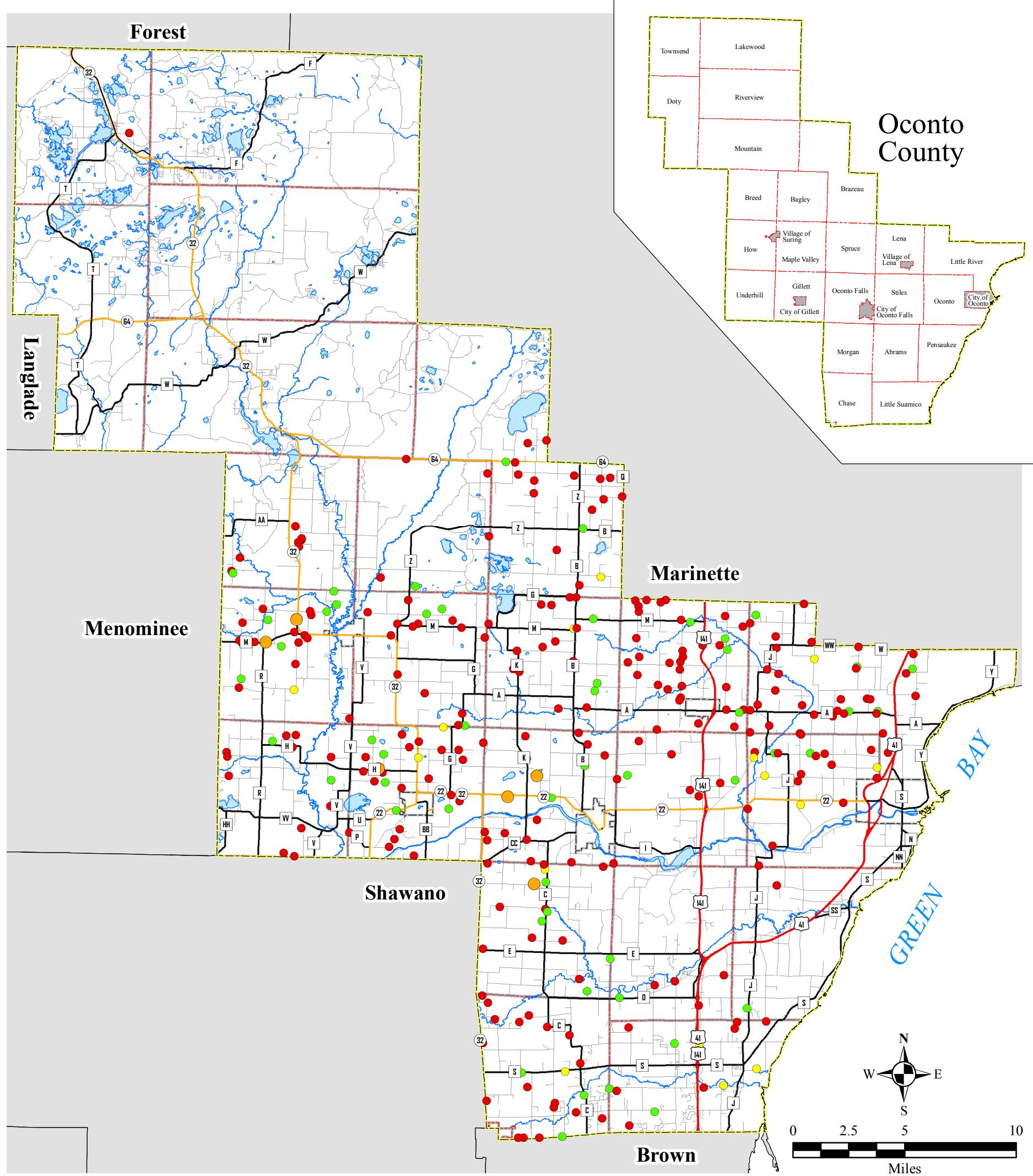
Note: Prime Agricultural Soils are based on the NRCS “Prime Farmland” soil classification. See text on page 5-20.

NRCS Soil Name

FpB - Fairport Fine Sandy Loam
FsB - Fence Very Fine Sandy Loam
KaB - Kennan Fine Sandy Loam
NeB - Nester Silt Loam
OcB - Oconto Fine Sandy Loam
OeB - Onaway Fine Sandy Loam
OmB - Onaway Fine Sandy Loam,
 Moderately Well Drained
OsB - Onaway Fine Sandy Loam,
 Sandy Substratum
PaB - Padus Fine Sandy Loam
TiB - Tilleda Fine Sandy Loam

Farms by Type

Oconto County, Wisconsin



Base Map Features

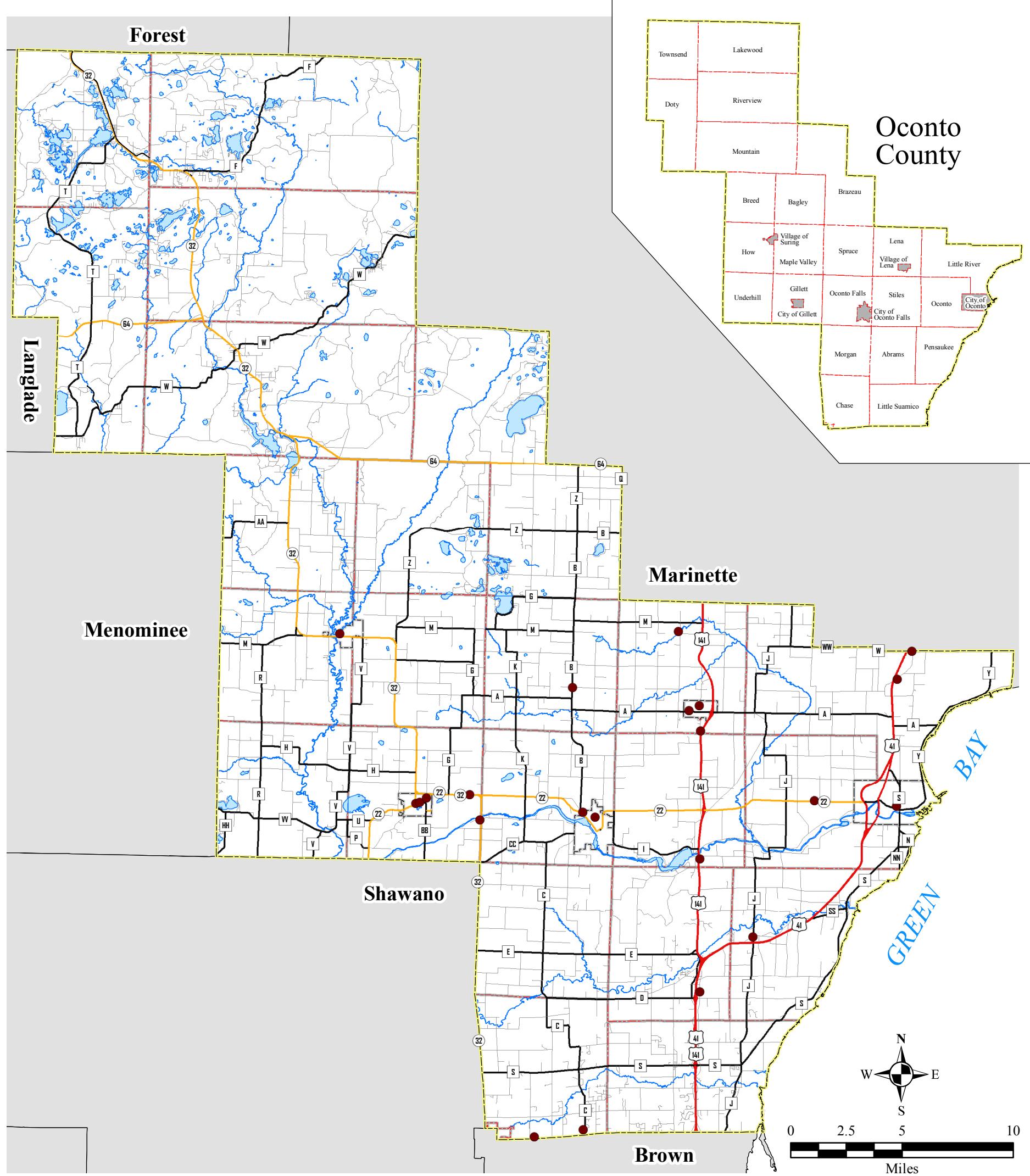
- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers

Farm Type

- CAFO*
- Beef
- Dairy
- No Animals

Agricultural Businesses

Oconto County, Wisconsin



Base Map Features

- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers

- Agricultural Businesses

CHAPTER 6: POPULATION AND HOUSING

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INTRODUCTION

An important element of the *Oconto County 20-Year Comprehensive Plan* is the following inventory and assessment of the county's past and current demographic and housing data. Observing historic changes in population and housing characteristics enables a community to track past growth patterns as well as reasonably predict future trends. Over time, these population characteristics directly influence Oconto County's housing, educational, community and recreational facility capacities, and its future economic development opportunities.

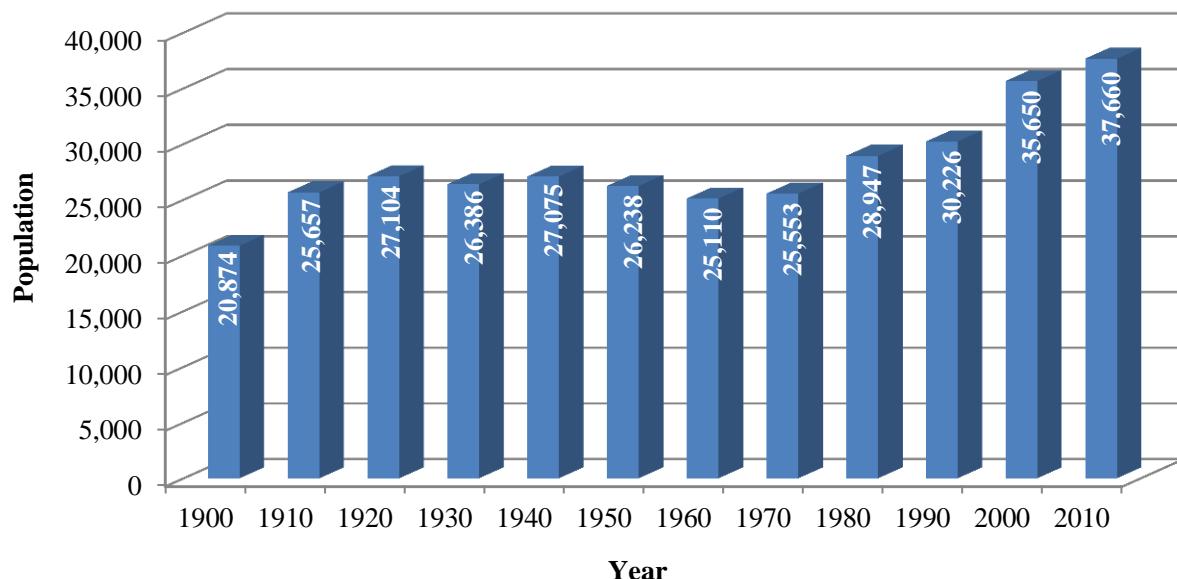
The housing portion of this chapter details information on the county's current housing stock; structural and occupancy characteristics; plus future housing demands based on demographic projections. The population and housing information detailed in this chapter provided some of the information necessary to develop the comprehensive housing strategies found *Volume I* of this document.

Population Characteristics

Historical Population Trends

Figure 6.1 illustrates the fluctuation in population Oconto County has experienced during the past century. Oconto County's highest population level of 39,567 in 2010 reflected a 90 percent or 18,693 person increase since 1900.

Figure 6.1: Historical Population Levels, Oconto County, 1900 - 2010



Source: U.S. Bureau of the Census, General Population Characteristics 1840-1970, Bay-Lake Regional Planning Commission, December 1975; Census 2000; Bay-Lake Regional Planning Commission, 2006; Census 2010; and Oconto County Planning, 2014.

Table 6.1 displays the change in the county's population levels since 1900 as well as the changes observed for Wisconsin during the same period. The largest periods of population expansion in the county occurred between 1900 and 1910 and between 1990 and 2000 with increases of 23

and 18 percent, respectively. In contrast, the county experienced sizable losses in population leading up to the 1930, 1950, and 1960 U.S. Census counts when the local farming industry was struggling and more people elected to relocate to metropolitan areas like the City of Green Bay to live and work. Historical population trends for all Oconto County communities can be found in Table 6.15 at the end of this chapter.

Table 6.1: Historic Population Levels, Oconto County and State of Wisconsin, 1900 - 2010

Year	Oconto County	% Change From Previous Decade	Wisconsin	% Change From Previous Decade
1900	20,874	-	2,069,042	
1910	25,657	22.9%	2,333,860	12.8%
1920	27,104	5.6%	2,632,067	12.8%
1930	26,386	-2.6%	2,939,006	11.7%
1940	27,075	2.6%	3,137,587	6.8%
1950	26,238	-3.1%	3,434,575	9.5%
1960	25,110	-4.3%	3,951,777	15.1%
1970	25,553	1.8%	4,417,731	11.8%
1980	28,947	13.3%	4,705,642	6.5%
1990	30,226	4.4%	4,891,769	4.0%
2000	35,650	17.9%	5,363,715	9.6%
2010	37,660	5.6%	5,686,986	6.0%

Source: U.S. Bureau of the Census, General Population Characteristics 1840-1970, Bay-Lake Regional Planning Commission, December 1975; Census 2000; Bay-Lake Regional Planning Commission, 2006; Census 2010; and Oconto County Planning, 2014.

Age and Sex Distribution

From 1980 to 2000, the county's population had several shifts in its age distribution (Figure 6.2) with a general trend towards older age groups. The most significant indicator of this movement is the decrease in the number of individuals between the ages of 20 and 34. In 1980, this group accounted for 21 percent of the county's population. By 2010, this group's representation dropped to 14 percent. During the same time 20-year period, the number of individuals between the ages of 35 and 49 steadily increased. In 1980, only 15 percent of the county's population was comprised of individuals in this age group. By 2000, this group represented 25 percent of the total population. However, by 2010 this group's representation dropped to 14 percent.

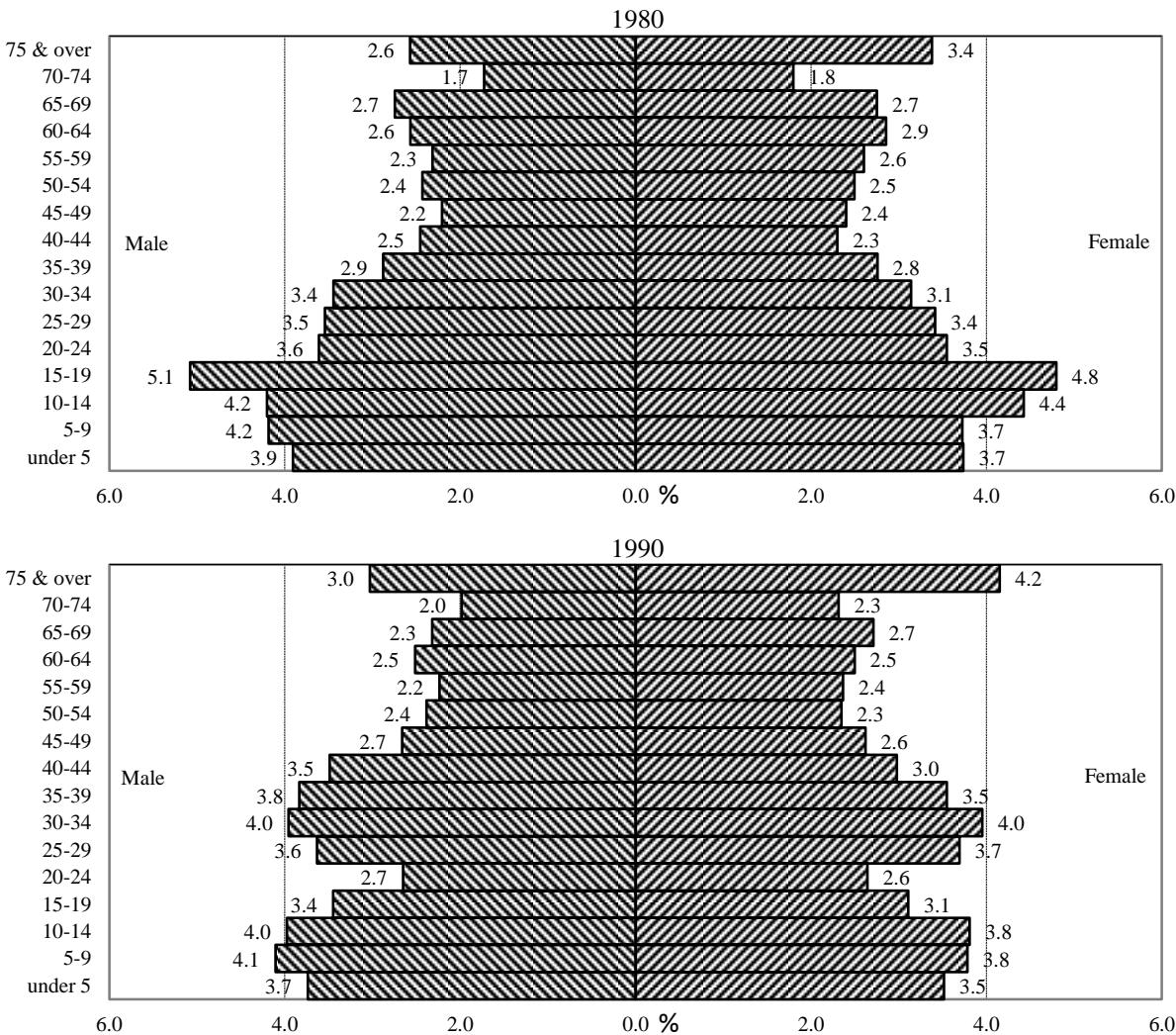
The county's population age 19 and under has steadily declined from 1980 to 2010. In 1980, these combined age groups comprised 34 percent of the total population. Thirty years later, that percentage had been reduced to 25 percent. Women in this age group comprised 16.6 percent of the population in 1980 compared to 17.4 percent for men. In 2000, the percentages had declined to 13.6 percent and 14.4 percent respectively. In 2010, the percentages had further declined to 11.8 percent for women and 12.8 percent for men. However, this trend has not yet extended to the elderly population. Since 1980 the retirement age (65 and older) population has remained stable, accounting for between 15 and 17 percent of the county's population each year. Despite this, with current trends showing an increase in those between the ages of 35 and 49, it would be expected that the number of people in the 65 and over age group would begin to increase over the next several decades. Between 1980 and 2010, the ratio of males to females in the county has

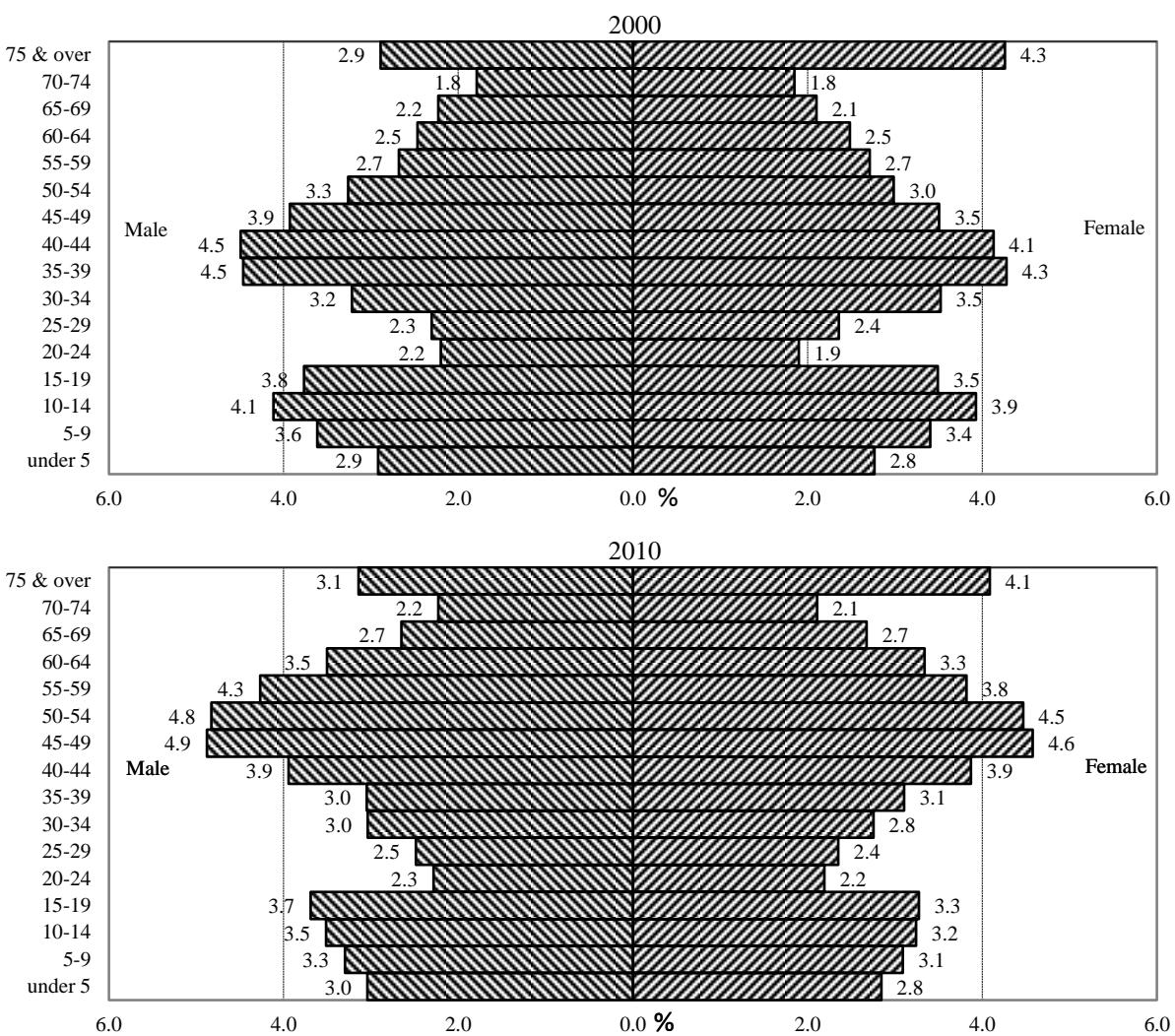
been relatively equal. However it is interesting to note that the number of females age 75 and over has consistently been higher than the number of males in the same age group, suggesting that females in the county tend to live longer than males.

Decade Population Pyramids

Figure 6.2 compares male and female age groups across the period between 1980 and 2010.

Figure 6.2: Population Pyramids, Oconto County, 1980, 1990, 2000 and 2010





Source: U.S. Bureau of the Census, 1980 Census of Population and Housing, STF 1A, Table 10; 1990 Census of Population and Housing, STF 1A, Table P012; 2000 Census of Population and Housing SF-1; 2010 Census of Population and Housing SF-1; and Oconto County Planning, 2014.

School Age, Working Age, and Retirement Age

Table 6.2 divides the population of Oconto County into three age groups: school age (5-17), working age (16-64) and those of retirement age (65+). Similar information for each of the communities in Oconto County can be found in Table 6.14 at the end of this chapter.

- The working age group accounted for nearly 80.6 percent of the county's total population in 2010. When considering an average retirement age of 65 years and subtracting that group from the working age group, the figure drops to 64 percent.
- In 2010, approximately 19 percent of the county's total population was school age (5-17), while the retirement age group (65+) consisted of 16 percent of the county's population.

Trends observed in the county as a whole are very similar to those observed throughout the State of Wisconsin.

Table 6.2: Population by Age Groups and Sex, Oconto County, 2010

Age Groups	Total	Male	Female	% of County	% of Wisconsin
School Age					
5-11	4,151	1,683	1,546	11.0	7.3%
12-14	1,457	745	712	3.9	2.6%
15-17	1,648	833	815	4.4	2.9%
Working and Voting Age					
16+	30,368	15,682	15,194	80.6	53.4%
16-64	24,346	12,556	11,790	64.6	42.8%
18+	29,228	15,009	14,379	77.6	51.4%
18-64	23,206	11,990	14,379	61.6	40.8%
Retirement Age					
65+	6,022	0	0	16.0	10.6%
Total Population	37,660	19,194	18,466		5,686,986

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, STF 1A, General Profile and Table P012; Bay-Lake Regional Planning Commission, 2006; 2010 Census of Population and Housing, STF 1A, General Profile and Table P012; and Oconto County Planning, 2014.

Median Age

Table 6.3 displays the gradual increase of median age for Oconto County and the State of Wisconsin from 1970 to 2010. Similar information for each community within Oconto County can be found in Table 6.15 at the end of this chapter.

- The county's median age has risen from 30.8 years in 1970 to 43.7 years in 2010. This increase in median age provides further proof that the population of Oconto County is aging. This trend of an increasing median age should be considered when planning for the future needs of the county as an aging population generally demands additional community and specialized services.

Table 6.3: Median Age, Oconto County and State of Wisconsin, 1970 - 2010

Geographic Location	1970	1980	1990	2000	2010
Oconto County	30.8	31.3	35.0	38.8	43.7
Wisconsin	27.2	29.4	32.9	36.0	38.5

Source: U.S. Bureau of the Census, General Population Characteristics, Wisconsin, 1970, Tables 33, 35; 1980 Table 14; 1990 STF 1A, General Profile; Census 2000; Bay-Lake Regional Planning Commission, 2006; Census 2010; and Oconto County Planning, 2014.

Seasonal Population

A review of Oconto County's large seasonal population is provided in Table 6.4.

- In 2010, the county had a total of 7,025 seasonal housing units, along with an average number of persons per household of 2.42. The result is an estimated 17,001 additional people in the county considered seasonal residents. In comparison in 2000, the county had a total of 4,837 seasonal housing units, along with an average number of persons per household of 2.52. The result is an estimated 12,189 additional people in the county considered seasonal

residents. A large majority of those individuals maintain seasonal homes in the northern part of the county.

- In 2010, seasonal residents in Oconto County represented 3.6 percent of the total estimated seasonal population that exists within the State of Wisconsin. This is up slightly from 3.4 percent in 2000.

Table 6.4: Estimated Seasonal Population, Oconto County and State of Wisconsin, 2000 - 2010

	Oconto County		Wisconsin	
	2000	2010	2000	2010
Population	35,652	37,660	5,363,675	5,686,986
Total Households	19,812	23,537	2,321,144	2,624,358
Persons Per Household	2.52	2.42	2.50	2.43
Total Seasonal Housing Units*	4,837	7,025	142,313	193,046
Estimated Seasonal Population**	12,189	17,001	355,783	469,102

*Seasonal housing includes seasonal, recreational, or occasional use units, but does not include other vacant

**Estimated Seasonal Population = (Total Seasonal Housing Units * Persons per Household) Source: U.S. Bureau of the Census, 2000 Census of Population and Housing; Bay-Lake Regional Planning Commission, 2006; 2010 Census of Population and Housing; and Oconto County Planning, 2014.

Population Projections

Assessing population projections based on past demographic information is an important step in determining the county's future need for housing, community facilities, transportation, and other population-influenced amenities. They can also be used to forecast future expenditures, revenues, and tax receipts.

In 2013, the Wisconsin Department of Administration (WDOA) Demographic Services Center prepared population projections to the year 2040 for each community and county in the state by utilizing figures from three varying time periods.

- According to the WDOA formula, Oconto County is projected to have a population peak of 45,430 in 2035. This represents an increase of 7,770 persons, or 20.6 percent, from the 2010 Census count of 37,660 persons.
- WDOA projections show potential population declines for many of the northern counties in the state including Oconto County. For Oconto County WDOA projects that the Oconto County population will begin to decline after 2035. The main reason for this projected population decrease for many of these northern counties is due to the higher percentages of older residents will be most affected by natural decrease as time progresses.

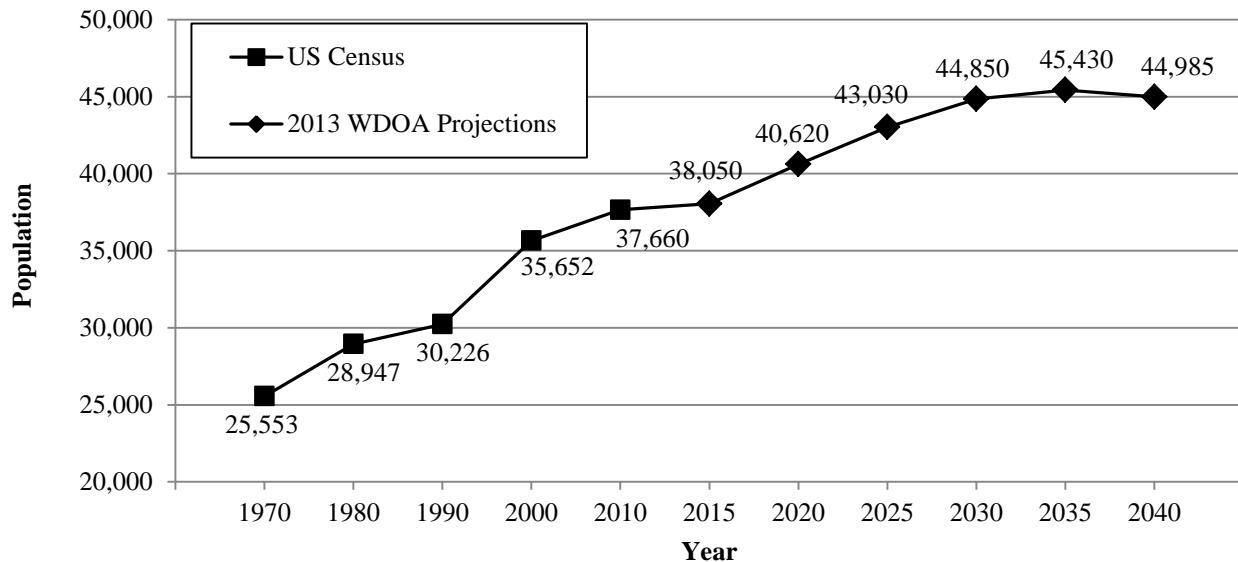
Table 6.5 outlines WDOA projections for Oconto County in five-year increments. Figure 6.3 presents the county's actual 1970-2010 U.S. Census counts and the 2013 WDOA projections. Population trends and WDOA projections for all communities within Oconto County can be found in Table 6.17 at the end of this chapter.

Table 6.5: Population Projections, Oconto County and State of Wisconsin, 2015 - 2040

Geographic Location	WDOA Population Projections						# Change 2010 - 2040	% Change 2010 - 2040
	2015	2020	2025	2030	2035	2040		
Oconto County	38,050	40,620	43,030	44,850	45,430	44,985	7,325	19.5%
Wisconsin	5,783,015	6,005,080	6,203,850	6,375,910	6,476,270	6,491,635	804,649	14.1%

Source: U.S. Bureau of the Census, Census of Population and Housing, 1970 - 2010; Wisconsin Department of Administration, Official Population Projections, 2004; Bay-Lake Regional Planning Commission, 2006; Wisconsin Department of Administration, Official Population Projections, 2013; and Oconto County Planning, 2014.

Figure 6.3: Population Trends and Projections, Oconto County, 1970 - 2040



Source: U.S. Bureau of the Census, Census of Population and Housing, 1970 - 2010; Wisconsin Department of Administration, Official Population Projections, 2013; and Oconto County Planning, 2014.

Seasonal Population Projections

As noted later in this chapter, seasonal housing accounted for 18.6 percent of the total housing in the county in 2010. Therefore, it is important to consider the number of additional persons that may potentially be residing throughout the county on a seasonal basis.

By utilizing WDOA's final household projections for Wisconsin municipalities, the number of future seasonal housing units can be estimated. Assuming the 2010 ratio of seasonal housing units to occupied housing units stays constant, the number of future seasonal housing units can be projected using this ratio:

$$(Projected \ occupied \ housing \ units * Ratio \ of \ seasonal \ housing \ units \ to \ occupied \ housing \ units) = Projected \ seasonal \ housing \ units^1.$$

Projections for future seasonal housing units can then be used to project future seasonal populations: $(Projected \ persons \ per \ household * Projected \ seasonal \ housing \ units) = Projected \ seasonal \ population$.

¹ For seasonal housing projections please see the "Projected Seasonal Housing Units" portion of this chapter.

Table 6.6 illustrates seasonal population projections for Oconto County and the state of Wisconsin for 2015 – 2040. Seasonal population projections for all communities within Oconto County can be found in Table 6.18 at the end of this chapter.

Table 6.6: Seasonal Population Projections, Oconto County and State of Wisconsin, 2015 - 2040

Geographic Location	Estimated 2010 Seasonal Population	Projected Seasonal Population					
		2015	2020	2025	2030	2035	2040
Oconto County	17,001	17,234	18,355	19,479	20,246	20,478	20,220
Wisconsin	469,102	477,999	495,888	510,883	525,437	533,730	533,991

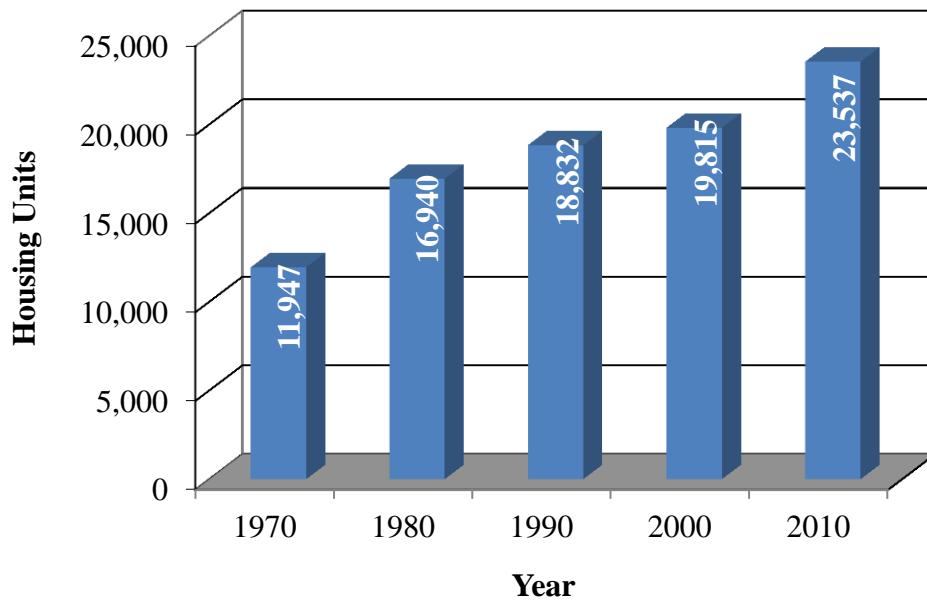
Source: U.S. Bureau of the Census, Census of Population and Housing, 2010; Bay-Lake Regional Planning Commission, 2006; Wisconsin Department of Administration Final Household Projections for Wisconsin Municipalities, 2013, and Oconto County Planning, 2014.

HOUSING CHARACTERISTICS

Total Housing Unit Levels by Decade

As illustrated by Figure 6.4 and Table 6.7 the total number of housing units in Oconto County has increased by 66 percent from 1970 to 2010. During this time, the number of available housing units in the county has increased consistently on a per decade basis. The county experienced the largest growth in the number of housing units between 1970 and 1980 when 4,993 units were added. Total housing units between 1970 and 2000 for all communities within Oconto County can be found in Table 6.17 at the end of this chapter.

Figure 6.4: Historic Housing Unit Levels, Oconto County, 1970 - 2010



Source: U.S Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF 1A; State of Wisconsin Demographic Services Center, Table DP-1; 2000 Census of Population and Housing, STF 1A; Bay-Lake Regional Planning Commission, 2006; 2010 Census of Population and Housing; and Oconto County Planning, 2014.

Table 6.7: Total Housing Units, Oconto County, 1970 - 2010

Geographic Location	Year				
	1970	1980	1990	2000	2010
Oconto County	11,947	16,940	18,832	19,815	23,537
Wisconsin	1,472,466	1,863,897	2,055,774	2,321,144	2,624,358
Percent Change					
	1970-80	1980-90	1990-2000	2000-2010	1970-2010
Oconto County	41.8	11.2	5.2	18.8	97.0
Wisconsin	26.6	10.3	12.9	13.1	78.2

Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF 1A; Census 2000; Bay-Lake Regional Planning Commission, 2006; Census 2010; and Oconto County Planning, 2014.

Housing Types - Units in Structure

According to the 2008 - 2012 American Community Survey 5-Year Estimates Census, one unit detached structures comprised nearly 82.3 percent of the total occupied housing units in Oconto County (Table 6.8). The second largest housing type found in the county was manufactured homes at 8.8 percent of the total available housing. Countywide, there appears to be a lack of multi-family type living arrangements of 5 to 20 or more units. This may be due to the lack of large incorporated communities that generally provide this type of housing for its residents.

Table 6.8: Units in Structure Estimates, Oconto County, 2010

Unit Type	Oconto County		Wisconsin	
	Number	Percent	Number	Percent
1 unit, detached	13,195	82.3	1,743,064	66.5
1 unit, attached	144	0.9	115,098	4.4
2 units	385	2.4	177,240	6.8
3 or 4 units	160	1.0	100,435	3.8
5 to 9 units	353	2.2	125,677	4.8
10 or more	369	2.3	272,052	10.0
Manufactured homes	1,411	8.8	98,118	3.7
Other	16	0.1	426	0.0
Total	16,033	100.0	2,632,110	100.0

Source: U.S. Bureau of the Census, 2008-2012 American Community Survey; and Oconto County Planning, 2014.

Housing Occupancy and Tenure

According to the 2010 Census, Oconto County had 15,415 occupied housing units accounting for 65.5 percent of the housing in the county. The remaining 34.5 percent was attributed to vacant

units including units used for seasonal, recreational, or occasional purposes (Table 6.9). Of the 15,415 occupied units, 12,788 were owner-occupied while 2,627 were renter-occupied.

Seasonal Housing

Of the 8,122 vacant units in the county, 7,025 or 86.5 percent were for seasonal, recreational, or occasional use. This means seasonal housing accounted for 29.8 percent of the total housing in the county in 2010. It is important to note that housing types can vary as they are converted from seasonal to year-round residences (or vice-versa). This occurs for a variety of reasons including retirement of the home owners or a change in ownership. These fluctuations in housing types can result in varying needs for emergency, healthcare, and other public services.

Housing occupancy and tenure for Oconto County and the State of Wisconsin are shown in Table 6.9. Similar figures for all communities in the county can be found in Table 6.22 at the end of this chapter.

Table 6.9: Housing Occupancy, Tenure and Status, Oconto County, 2000 - 2010

Occupancy Status	2000		2010		2000-2010	
	Number	Percentage	Number	Percentage	# Change	% Change
Total housing units	19,812	100	23,537	100	3,725	18.8%
Occupied housing units	13,979	70.6	15,415	65.5	1,436	10.3%
Vacant housing units	5,833	29.4	8,122	34.5	2,289	39.2%
Tenure						
Occupied housing units	13,979	100	15,415	100	1,436	10.3%
Owner occupied	11,598	83	12,788	83	1,190	10.3%
Renter occupied	2,381	17	2,627	17	246	10.3%
Vacancy Status						
Vacant housing units	5,833	100	8,122	100	2,289	39.2%
For rent	139	2.4	242	3	103	74.1%
Rented or Sold, not occupied	60	1	64	0.8	4	6.7%
For sale only	192	3.3	326	4	134	69.8%
For seasonal, recreational, or occasional use	4,837	82.9	7,025	86.5	2,188	45.2%
For migratory workers	1	0	0	0	-1	-100.0%
Other vacant	604	10.4	465	5.7	-139	-23.0%

Source: Census 2000; Census 2010; Bay-Lake Regional Planning Commission, 2006; and Oconto County Planning, 2014.

Age of Housing

Approximately 21 percent of the housing structures in Oconto County were built prior to 1940 (Table 6.11). Between 1940 and 2010 an average of 2,116 housing units were added each decade. The structures added over this 60 year span account for about 80 percent of the housing structures in the county.

Table 6.10: Housing Units by Year Structure Built, Oconto County

Year Structure Built	Oconto County		Wisconsin	
	Number	Percent	Number	Percent
2010 or later	64	0.4	4,573	0.2
2000 to 2009	2,645	16.5	285,792	12.5
1980 to 1999	4,666	29.1	541,862	23.7
1960 to 1979	3,383	21.1	571,585	25.0
1940 to 1959	1,924	12.0	404,682	17.7
1939 or earlier	3,335	20.8	477,845	20.9
Total	16,033	100.0	2,286,339	100.0

Source: U.S. Bureau of the Census, 2008-2012 American Community Survey; and Oconto County Planning, 2014.

Condition of Housing Stock

The large number of housing units built prior to 1960 may be an indicator of the overall condition of the housing stock in Oconto County.

According to the Wisconsin Department of Commerce, the definition of a substandard unit is a housing unit which is in need of major repair or replacement in three or more of the following areas: roof, electrical, heating, plumbing, foundation/structure (including interior walls/floors/ceilings), siding, doors/windows and well/septic or water/sewer laterals.

With 5,259 housing being built prior to 1960 (Table 6.10), the possibility exists that several homes may be substandard based on conditions described by this definition.

Housing Values

In 2012, the majority of Oconto County's housing units (nearly 44.2 percent) were valued between \$50,000 and \$150,000 (Table 6.11). The median value of specified owner-occupied housing units was \$146,900. In comparison, Wisconsin has a median value of \$169,000.

Table 6.11: Values of Specified Owner - Occupied Housing Units, Oconto County and State of Wisconsin, 2012

Value	Oconto County		Wisconsin	
	Number	Percent	Number	Percent
Less than \$50,000	930	7.0	80,448	5.1
\$50,000 to \$99,000	2,865	21.6	211,002	13.5
\$100,000 to \$149,000	3,006	22.6	342,128	21.8
\$150,000 to \$199,000	2,479	18.7	340,204	21.7
\$200,000 to \$299,999	2,736	20.6	360,453	23.0
\$300,000 to \$499,000	1,032	7.8	173,162	11.0
\$500,000 to \$999,999	181	1.4	49,096	3.1
\$1,000,000 or more	55	0.4	11,882	0.8
Total	146,900	100.0	1,568,375	100.0

*Note: Census housing values may not be the actual assessed values; they are based on what the homeowner perceives the housing unit is worth.

Source: U.S. Bureau of the Census, 2008-2012 American Community Survey; and Oconto County Planning, 2014.

Housing Costs - Rents and Mortgage

Providing affordable housing to meet the needs of current and future Oconto County residents is an important element of planning. Housing number, type, and location greatly impacts the economic development, transportation, utilities, natural features, and various other aspects of a comprehensive plan.

According to the U.S. Department of Housing and Urban Development (HUD), housing affordability is defined as paying no more than 30 percent of household income for housing.

Rent and Income Comparison

According to the 2012 estimates, the median gross rent for renter-occupied housing units in the Oconto County was \$573; this is up from \$429 in 2000.

The 2012 estimates also show that approximately 956 or 41.1 percent, of the 2,327 renter-occupied housing units paid more than 30 percent or more of their household income in gross rent. This compares to 497, or 24 percent, of 2,113 specified renter-occupied housing units paying more than 30 percent of their income in gross rent in 2000. These occupants are considered to be living in non-affordable housing.

Owner Costs and Income Comparison

For owner-occupied housing units with a mortgage in 2012, the median monthly owner cost in the county was \$1,294. This is up from \$853 in 2000.

For owner-occupied units without a mortgage in 2012, the median monthly cost was \$440, compared to \$264 in 2000.

The 2012 estimates show that approximately 2,857 out of 8,688 (32.9 percent) owners with a mortgage paid more than 30 percent of their household income for monthly owner costs. This 32.9 percent are considered to be living in non-affordable housing. For comparison in 2000, 1,235 out of 7,428 (17 percent) owners with a mortgage paid more than 30 percent of their 1999 income for monthly owner costs. This 17 percent are considered to be living in non-affordable housing.

Housing Projections

Projected Occupied Housing Units

The WDOA housing projections were used to assess housing units in the Oconto County to 2040. Table 6.12 illustrates each of these projections.

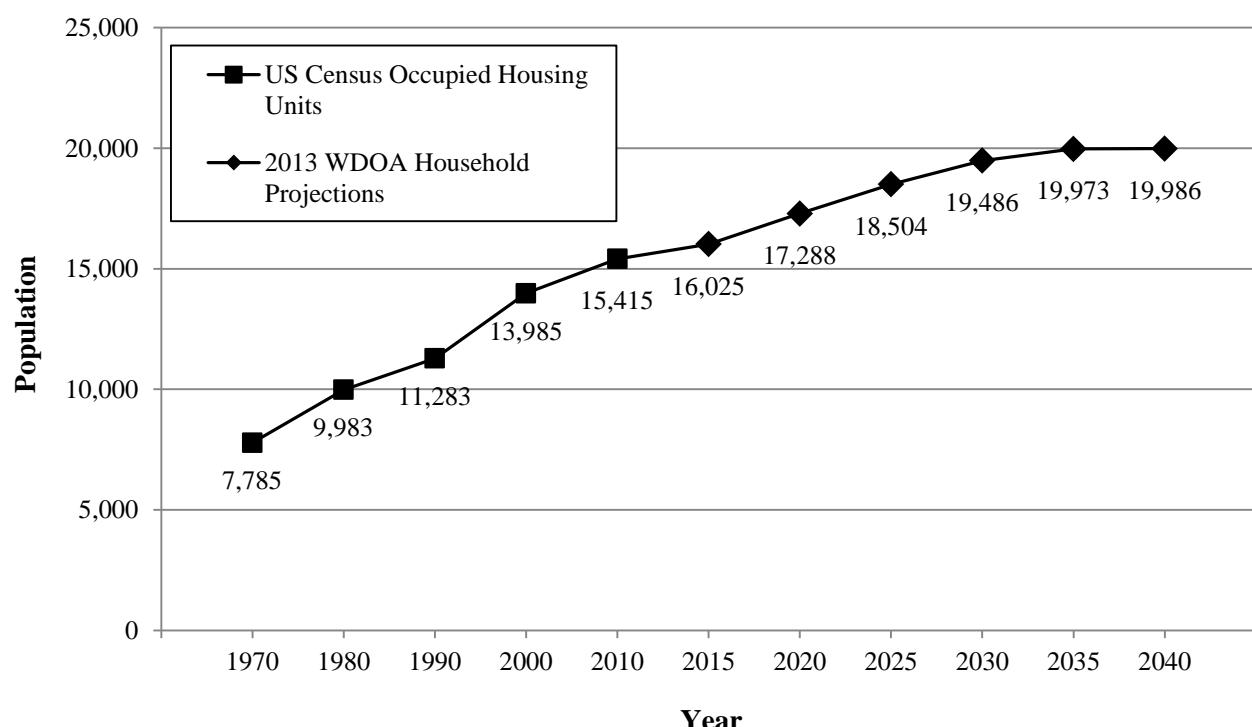
- *WDOA Final Household Projections for Wisconsin Municipalities* – The present projections represent the momentum of population change in an area in the absence of physical constraints or political restrictions. Long term population projections, particularly for small areas, required consideration of historical data series of approximately equal length. While a five-year population projection requires little information beyond a solid benchmark and some sense of trends in the recent past, while a long-term projection is informed by recent as well as earlier data. Once the historical data are assembled, more recent data was given greater influence in the projection process. Table 6.21 provides WDOA projections for each of the municipalities within Oconto County.

Table 6.12: Occupied Housing Unit Trends and Projects, 1970 - 2040

Oconto County	1970	1980	1990	2000	2010	2015	2020	2025	2030	2035	2040
US Census	7,785	9,983	11,283	13,985	15,415						
2013 WDOA Projections						16,025	17,288	18,504	19,486	19,973	19,986

Source: Wisconsin Department of Administration, 2013; Oconto County Planning, 2014.

Figure 6.5: Occupied Housing Unit Trends and Projections, Oconto County, 1970 - 2040



Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, Series 100, Table 2; 1980 Census of Population and Housing, Table 45; 1990 Census of Population and Housing, STF 1A; 2000 Census of Population and Housing, Table DP-1; Bay-Lake Regional Planning Commission, 2006; Wisconsin Department of Administration Final Household Projections for Wisconsin Municipalities, 2015-2040, April 2014 ; and Oconto County Planning, 2014.

Projected Seasonal Housing Units

As noted later in this chapter, in 2010 seasonal housing accounted for 29.8 percent of the total housing in the county. Therefore, it is important to consider the number of additional housing units that may potentially be built throughout the county for seasonal, recreational, or occasional use.

By utilizing WDOAs final household projections for Wisconsin municipalities, the number of future seasonal housing units can be estimated. Assuming the 2010 ratio of seasonal housing units to occupied housing units stays constant, the number of future seasonal housing units can be projected using this ratio (*projected occupied housing units * ratio of seasonal housing units to occupied housing units = projected seasonal housing units*). Table 6.13 illustrates seasonal

housing unit projections for Oconto County and the state of Wisconsin for 2015 – 2040. Seasonal housing unit projections for all communities within Oconto County can be found in Table 6.22 at the end of this chapter.

Table 6.13: Seasonal Housing Unit Projections, Oconto County and State of Wisconsin, 2015 - 2040

Geographic Location	2010 Total Occupied Housing Units	2010 Seasonal Housing Units	Projected Seasonal Housing Units					
			2015	2020	2025	2030	2035	2040
Oconto County	15,415	7,025	7,307	7,883	8,438	8,886	9,108	9,114
Wisconsin	2,279,768	193,046	200,838	211,014	220,206	228,449	234,089	236,276

Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, Table DP-1; WDOA Final Household Projections for Wisconsin Municipalities, 2000 – 2025, January 2004; Bay-Lake Regional Planning Commission, 2007; WDOA Final Household Projections for Wisconsin Counties, 2010 – 2040, April 2014; and Oconto County Planning, 2014.

Subsidized and Special Needs Housing

There are a number of agencies located in Oconto County to help locate, finance, and develop housing for persons with various physical and mental disabilities or other special needs. The Oconto County Department of Human Services has information on what is available through several organizations such as WHEDA, NEWCAP, and the Veteran's Administration.

Housing Development Environment

Due to the overall rural nature of the area and rather small incorporated communities, Oconto County has a limited number of public utilities and services. However, the county more than makes up for those deficiencies by offering current and future residents some excellent quality of life features. The entire county has a wonderful scenic landscape comprised of several hundred acres of publicly owned land, lakes and streams, rich farming fields; long stretches overlook Green Bay of Lake Michigan; major highways- US Highways 141 and 41 and State Highways 22, 32, and 64; competitive tax rate; and a location just north of one of the most dynamic metropolitan areas in the state. These features, in addition to the trend in which people desire more open space to live, make Oconto County a very desirable place to live.

Oconto County

Population and Housing Tables

by Community

Table 6.14: Historical Population Levels, Oconto County Municipalities, 1900 - 2010

Geographic Location	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Town of Abrams	796	834	805	759	820	884	1,181	1,347	1,757	1,856		
Town of Bagley	227	156	242	211	197	209	272	271	333	291		
Town of Brazeau	437	765	1,166	1,106	1,135	933	916	924	1,039	1,169	1,408	1,284
Town of Breed	327	406	462	537	422	391	402	563	564	657	712	
Town of Chase	1,474	1,152	1,142	1,081	1,091	952	932	1,026	1,256	1,375	2,082	3,005
Town of Doty				66	125	103	81	93	154	184	249	260
Town of Gillett	1,249	1,300	1,370	1,080	1,029	1,003	957	935	1,059	1,026	1,085	1,043
Town of How	1,083	965	797	821	777	746	627	565	592	564	563	516
Town of Lakewood		215	320	411	360	382	351	469	516	607	875	816
Town of Lena	894	1,345	1,466	936	970	884	823	877	851	790	757	727
Town of Little River	1,042	1,207	1,198	1,076	1,011	1,048	928	859	940	1,003	1,065	1,094
Town of Little Shamico	944	1,375	1,327	1,148	1,098	1,049	989	1,138	1,969	2,637	3,877	4,799
Town of Maple Valley	870	1,163	1,074	989	934	880	742	679	715	690	670	662
Town of Morgan	655	733	778	813	884	633	670	726	815	882	984	
Town of Mountain	482	623	889	546	572	490	373	530	735	730	860	822
Town of Oconto	1,068	1,133	1,026	972	1,102	993	974	934	999	1,251	1,335	
Town of Oconto Falls	1,154	733	829	855	909	887	843	895	1,033	1,014	1,139	1,265
Town of Pensaukee	1,768	1,831	901	795	822	860	869	863	1,000	979	1,214	1,381
Town of Riverview				271	243	252	260	321	417	483	829	725
Town of Spruce	1,029	1,148	1,077	924	960	927	834	818	805	776	871	835
Town of Stiles	897	923	836	738	806	816	792	845	1,261	1,243	1,465	1,489
Town of Townsend		323	386	409	380	383	463	735	715	963	979	
Town of Underhill	631	851	960	825	736	691	600	613	664	668	846	882
Village of Lena ((1921))				413	469	526	506	569	585	590	529	564
Village of Pulaski [#] (1910)	239	718	839	979	1,210	1,540	1,717	1,875	2,200	3,060	3,539	
Village of Suring (1914)		294	421	437	546	513	499	581	626	605	544	
City of Gillett (1944)					1,410	1,374	1,288	1,356	1,303	1,256	1,386	
City of Oconto ((1869))	5,646	5,629	4,920	5,030	5,362	5,055	4,805	4,667	4,505	4,474	4,708	4,513
City of Oconto Falls (1919)		1,427	1,914	1,921	1,888	2,050	2,331	2,517	2,500	2,584	2,843	2,891
Oconto County	20,874	25,657	27,104	26,386	27,075	26,238	25,110	25,553	28,947	30,226	35,652	37,660
Wisconsin	2,069,042	2,333,860	2,632,067	2,939,006	3,137,587	3,434,575	3,951,777	4,417,731	4,705,642	4,891,769	5,363,715	5,686,986

(-) = Year incorporated;

[#] Includes village population of Oconto, Brown and Shawano counties

Source: U.S. Bureau of the Census, Census of Population and Housing, 1970-2010; Bay-Lake Regional Planning Commission, 2006; Oconto County Planning, 2014.

Table 6.15: Population by Age Groups, Oconto County Municipalities, 2010

Geographic Location	School Age				Working and Voting Age					Retirement Age		Total Population	
	5-11	12-14	15-17	16+	16-64	16-64	18+	18-64	18-64	65+			
Town of Abrams	157	8.5	77	4.1	89	4.8	1,488	80.2	1,279	68.9	1,427	76.9	1,218
Town of Bagley	15	5.2	14	4.8	12	4.1	246	84.5	177	60.8	239	82.1	170
Town of Brazeau	103	8.0	29	2.3	44	3.4	1,088	84.7	742	57.8	1,060	82.6	714
Town of Breed	36	5.1	25	3.5	35	4.9	609	85.5	462	64.9	570	80.1	434
Town of Chase	378	12.6	170	5.7	184	6.1	2,188	72.8	1,982	66.0	1,992	66.3	1,861
Town of Doty	5	1.9	8	3.1	1	0.4	242	93.1	145	55.8	240	92.3	144
Town of Gillett	83	8.0	49	4.7	50	4.8	859	82.4	697	66.8	795	76.2	659
Town of How	38	7.4	15	2.9	26	5.0	430	83.3	335	64.9	399	77.3	316
Town of Lakewood	39	4.8	17	2.1	24	2.9	727	89.1	464	56.9	697	85.4	448
Town of Lena	58	8.0	27	3.7	23	3.2	589	81.0	494	68.0	553	76.1	478
Town of Little River	94	8.6	37	3.4	48	4.4	868	79.3	702	64.2	806	73.7	673
Town of Little Suamico	475	9.9	219	4.6	254	5.3	3,727	77.7	3,372	70.3	3,460	72.1	3,200
Town of Maple Valley	51	7.7	18	2.7	23	3.5	557	84.1	423	63.9	397	60.0	408
Town of Morgan	87	8.8	23	2.3	38	3.9	800	81.3	687	69.8	757	76.9	661
Town of Mountain	35	4.3	19	2.3	27	3.3	729	88.7	504	61.3	689	83.8	481
Town of Oconto	133	10.0	44	3.3	62	4.6	1,074	80.4	896	67.1	995	74.5	849
Town of Oconto Falls	118	9.3	59	4.7	43	3.4	1,016	80.3	811	64.1	962	76.0	780
Town of Pensaukee	106	7.7	51	3.7	56	4.1	1,136	82.3	952	68.9	1,071	77.6	913
Town of Riverview	20	2.8	10	1.4	15	2.1	670	92.4	413	57.0	656	90.5	403
Town of Spruce	60	7.2	26	3.1	37	4.4	680	81.4	503	60.2	644	77.1	482
Town of Stiles	129	8.7	59	4.0	63	4.2	1,211	81.3	1,010	67.8	1,126	75.6	965
Town of Townsend	41	4.2	19	1.9	32	3.3	879	89.8	571	58.3	844	86.2	552
Town of Underhill	72	8.2	32	3.6	44	5.0	709	80.4	580	65.8	658	74.6	550
Village of Lena	63	11.2	17	3.0	14	2.5	431	76.4	346	61.3	406	72.0	336
Village of Suring	67	12.3	19	3.5	22	4.0	421	77.4	284	52.2	403	74.1	273
City of Gillett	104	7.5	56	4.0	76	5.5	1,096	79.1	846	61.0	1,017	73.4	796
City of Oconto	417	9.2	164	3.6	179	4.0	3,584	79.4	2,870	63.6	3,324	73.7	2,744
City of Oconto Falls	245	8.5	128	4.4	126	4.4	2,282	78.9	1,786	61.8	2,114	73.1	1,688
Oconto County	3,229	8.6	1,457	3.9	1,648	4.4	30,368	80.6	24,346	64.6	28,393	75.4	23,206
State of Wisconsin	519,494	9.1	225,050	4.0	236,505	4.2	4,506,907	79.2	3,729,593	65.6	3,173	0.1	3,570,180

Source: 2010 Census; and Oconto County Planning, 2014.

Table 6.16: Median Age, Oconto County Municipalities, 1970 - 2010

Geographic Location	1970	1980	1990	2000	2010
Town of Abrams	25.5	31.3	33.0	37.2	42.3
Town of Bagley	42.3	34.0	36.9	40.5	50.1
Town of Brazeau	29.8	35.1	42.9	44.5	51.0
Town of Breed	35.5	34.7	44.2	42.7	48.5
Town of Chase	21.0	24.3	29.7	33.4	36.6
Town of Doty	47.5	48.2	51.3	52.6	61.2
Town of Gillett	31.8	31.8	33.4	38.4	44.7
Town of How	27.1	29.2	33.6	38.8	46.7
Town of Lakewood	48.0	46.0	45.1	51.0	56.8
Town of Lena	19.9	24.1	30.3	37.6	41.5
Town of Little River	28.6	30.5	33.1	38.9	42.4
Town of Little Suamico	27.0	26.6	30.4	35.4	41.6
Town of Maple Valley	28.2	34.2	34.8	40.0	47.8
Town of Morgan	25.8	28.5	30.7	37.9	43.5
Town of Mountain	46.5	41.2	47.5	44.9	53.0
Town of Oconto	24.4	28.4	33.0	37.8	44.5
Town of Oconto Falls	26.7	27.6	35.4	38.5	43.8
Town of Pensaukee	26.4	29.4	35.1	38.6	45.3
Town of Riverview	46.5	43.8	55.7	55.1	59.8
Town of Spruce	31.2	32.6	37.9	40.4	45.8
Town of Stiles	25.5	27.4	32.3	38.6	44.3
Town of Townsend	48.8	41.9	46.0	52.6	58.3
Town of Underhill	32.7	31.8	35.2	39.3	43.0
Village of Lena	26.8	31.8	33.4	35.2	37.8
Village of Suring	38.2	38.8	43.5	42.3	43.2
City of Gillett	44.2	42.7	39.5	37.1	41.1
City of Oconto	33.4	33.2	33.8	36.9	39.6
City of Oconto Falls	29.7	32.1	37.1	37.4	38.1
Oconto County	30.8	31.3	35.0	38.8	43.7
Wisconsin	27.2	29.4	32.9	36.0	38.5

Source: U.S. Bureau of the Census, Census of Population, General Population Characteristics, Wisconsin, 1970, Tables 33, 35; 1980 Table 14; 1990 STF 1A, General Profile; Census 2000; Bay-Lake Regional Planning Commission, 2006; Census 2010; and Oconto County Planning, 2014.

Table 6.17: WDOA Population Projections, Oconto County Municipalities, 2000 - 2040

Geographic Locations	US Census 2010	WDOA Population Projections						# Change 2010 - 2040	% Change 2010 - 2040
		2015	2020	2025	2030	2035	2040		
Town of Abrams	1,856	1,880	2,030	2,170	2,285	2,335	2,330	474	25.5%
Town of Bagley	291	285	295	305	305	300	285	- 6	-2.1%
Town of Brazeau	1,284	1,285	1,340	1,390	1,420	1,405	1,365	81	6.3%
Town of Breed	712	725	780	835	880	900	900	188	26.4%
Town of Chase	3,005	3,100	3,410	3,720	3,985	4,140	4,200	1,195	39.8%
Town of Doty	260	265	290	310	330	340	340	80	30.8%
Town of Gillett	1,043	1,025	1,060	1,090	1,100	1,080	1,040	- 3	-0.3%
Town of How	516	520	540	555	560	555	535	19	3.7%
Town of Lakewood	816	830	885	935	970	985	975	159	19.5%
Town of Lena	727	715	735	750	755	740	710	- 17	-2.3%
Town of Little River	1,094	1,100	1,165	1,225	1,270	1,280	1,255	161	14.7%
Town of Little Suamico	4,799	5,020	5,530	6,025	6,450	6,700	6,795	1,996	41.6%
Town of Maple Valley	662	660	695	720	735	730	710	48	7.3%
Town of Morgan	984	995	1,065	1,140	1,195	1,215	1,210	226	23.0%
Town of Mountain	822	820	860	895	920	915	895	73	8.9%
Town of Oconto	1,335	1,350	1,455	1,555	1,635	1,670	1,665	330	24.7%
Town of Oconto Falls	1,265	1,275	1,370	1,460	1,535	1,565	1,560	295	23.3%
Town of Pensaukee	1,381	1,395	1,510	1,625	1,715	1,760	1,765	384	27.8%
Town of Riverview	725	725	765	795	820	820	805	80	11.0%
Town of Spruce	835	835	875	910	930	925	900	65	7.8%
Town of Stiles	1,489	1,495	1,590	1,680	1,745	1,760	1,735	246	16.5%
Town of Townsend	979	990	1,065	1,135	1,190	1,210	1,205	226	23.1%
Town of Underhill	882	890	955	1,015	1,060	1,080	1,070	188	21.3%
Village of Lena	564	560	585	605	620	615	595	31	5.5%
Village of Pulaski [#]	0	0	0	0	0	0	0	0	0.0%
Village of Suring	544	535	545	555	550	535	505	- 39	-7.2%
City of Gillett	1,386	1,370	1,450	1,520	1,565	1,570	1,540	154	11.1%
City of Oconto	4,513	4,515	4,725	4,910	5,020	4,990	4,845	332	7.4%
City of Oconto Falls	2,891	2,890	3,050	3,200	3,305	3,310	3,250	359	12.4%
Oconto County	37,660	38,050	40,620	43,030	44,850	45,430	44,985	7,325	19.5%
Wisconsin	5,686,986	5,783,015	6,005,080	6,203,850	6,375,910	6,476,270	6,491,635	804,649	14.1%

Source: U.S. Bureau of the Census, Census of Population and Housing, 1980-2000; Wisconsin Department of Administration, for years cited; Bay-Lake Regional Planning Commission, 2006; Wisconsin Department of Administration, Official Population Projections, 2013; Oconto County Planning, 2014.

Table 6.18: Seasonal Population Estimates and Projections, Oconto County Municipalities, 2010 - 2040

Geographic Location	Estimated 2010 Seasonal Population	Projected Seasonal Population					
		2015	2020	2025	2030	2035	2040
Town of Abrams	110	112	121	129	136	139	138
Town of Bagley	266	260	269	278	278	274	260
Town of Brazeau	2,034	2,034	2,121	2,201	2,248	2,224	2,161
Town of Breed	679	692	745	798	841	860	860
Town of Chase	12	12	13	15	16	16	17
Town of Doty	965	984	1,077	1,151	1,225	1,262	1,262
Town of Gillett	69	68	70	72	73	71	69
Town of How	65	65	68	70	70	70	67
Town of Lakewood	2,032	2,067	2,204	2,328	2,415	2,453	2,428
Town of Lena	36	35	36	37	37	36	35
Town of Little River	196	197	209	220	228	229	225
Town of Little Suamico	133	139	153	167	178	185	188
Town of Maple Valley	102	102	107	111	114	113	110
Town of Morgan	25	25	27	29	30	31	31
Town of Mountain	1,776	1,772	1,858	1,934	1,988	1,977	1,934
Town of Oconto	64	65	70	75	79	80	80
Town of Oconto Falls	104	105	113	120	126	129	128
Town of Pensaukee	216	218	236	254	268	275	275
Town of Riverview	2,317	2,315	2,443	2,539	2,618	2,618	2,570
Town of Spruce	411	411	430	448	457	455	443
Town of Stiles	138	139	148	156	162	163	161
Town of Townsend	2,652	2,682	2,885	3,075	3,224	3,278	3,264
Town of Underhill	330	333	357	380	397	404	400
Village of Lena	5	4	5	5	5	5	5
Village of Pulaski	0	0	0	0	0	0	0
Village of Suring	20	19	19	20	19	18	17
City of Gillett	16	16	17	17	18	18	17
City of Oconto	66	66	69	71	73	72	69
City of Oconto Falls	29	29	31	32	33	33	32
Oconto County	17,001	17,234	18,355	19,479	20,246	20,478	20,220

*Reflects WDOA corrections for total occupied housing units.

Source: U.S. Bureau of the Census, 2010; WDOA Final Household Projections for Wisconsin Counties, 2015 – 2040, April 2014; and Oconto County Planning, 2014.

Table 6.19: Total Housing Units, Oconto County Municipalities, 1970 - 2010

Geographic Location	Year					Percent Change				
	1970	1980	1990	2000	2010	1970-80	1980-90	1990-2000	2000-2010	1970-2010
Town of Abrams	294	396	535	700	797	34.7	35.1	30.8	13.9	171.1
Town of Bagley	130	223	228	229	255	71.5	2.2	0.4	11.4	96.2
Town of Brazeau	742	1,109	1,377	1,347	1,520	49.5	24.2	-2.2	12.8	104.9
Town of Breed	218	462	535	322	636	111.9	15.8	-39.8	97.5	191.7
Town of Chase	268	380	449	696	1,055	41.8	18.2	55.0	51.6	293.7
Town of Doty	253	598	583	438	700	136.4	-2.5	-24.9	59.8	176.7
Town of Gillett	299	386	412	442	454	29.1	6.7	7.3	2.7	51.8
Town of How	174	216	252	229	257	24.1	16.7	-9.1	12.2	47.7
Town of Lakewood	614	1,055	1,177	1,183	1,433	71.8	11.6	0.5	21.1	133.4
Town of Lena	232	282	294	300	319	21.6	4.3	2.0	6.3	37.5
Town of Little River	348	421	429	457	520	21.0	1.9	6.5	13.8	49.4
Town of Little Suamico	425	723	978	1,403	1,895	70.1	35.3	43.5	35.1	345.9
Town of Maple Valley	221	306	327	323	361	38.5	6.9	-1.2	11.8	63.3
Town of Morgan	190	249	285	335	423	31.1	14.5	17.5	26.3	122.6
Town of Mountain	673	1,064	1,191	883	1,274	58.1	11.9	-25.9	44.3	89.3
Town of Oconto	300	356	387	491	577	18.7	8.7	26.9	17.5	92.3
Town of Oconto Falls	298	380	411	484	562	27.5	8.2	17.8	16.1	88.6
Town of Pensaukee	337	461	482	562	691	36.8	4.6	16.6	23.0	105.0
Town of Riverview	683	1,180	1,326	1,552	1,639	72.8	12.4	17.0	5.6	140.0
Town of Spruce	402	508	553	587	582	26.4	8.9	6.1	-0.9	44.8
Town of Stiles	308	522	566	620	687	69.5	8.4	9.5	10.8	123.1
Town of Townsend	886	1,318	1,489	1,450	1,769	48.8	13.0	-2.6	22.0	99.7
Town of Underhill	294	417	447	468	505	41.8	7.2	4.7	7.9	71.8
Village of Lena	177	228	254	227	275	28.8	11.4	-10.6	28.2	55.4
Village of Pulaski*	519	701	877	1,254	1,525	35.1	25.1	43.0	141.6	193.8
Village of Suring	194	278	282	269	268	43.3	1.4	-4.6	38.7	38.1
City of Gillett	510	612	628	546	656	20.0	2.6	-13.1	7.1	28.6
City of Oconto	1,701	1,833	1,841	2,040	2,094	7.8	0.4	10.8	19.9	23.1
City of Oconto Falls	776	977	1,114	1,231	1,333	25.9	14.0	10.5	58.6	71.8
Oconto County**	11,947	16,940	18,832	19,815	23,537	41.8	11.2	5.2	18.8	97.0
Wisconsin	1,472,466	1,863,897	2,055,774	2,321,144	2,624,358	26.6	10.3	12.9	13.1	78.2

* Includes village housing units of Oconto, Brown and Shawano counties.

** Oconto County total does not include Village of Pulaski housing units from Brown or Shawano counties.

Source: U.S. Bureau of the Census, 1970, Series 100, Table 2; 1980 Census of Population and Housing, STF 1A, Table 4; 1990 Census of Population and Housing, STF 1A; 2000 Census; Bay-Lake Regional Planning Commission, 2006; 2010 Census; and Oconto County Planning, 2014.

Table 6.20: WDOA Total Occupied Housing Unit Projections, Oconto County Municipalities, 2015 - 2040

Geographic Location	2010 Census	Projected Total Occupied Housing Units						# Change 2010 - 2040	% Change 2010 - 2040
		2015	2020	2025	2030	2035	2040		
Town of Abrams	724	755	826	894	953	988	1,000	276	38.1%
Town of Bagley	126	127	133	139	141	141	136	10	7.9%
Town of Brazeau	571	589	621	653	675	678	668	97	17.0%
Town of Breed	312	327	356	386	412	428	434	122	39.1%
Town of Chase	1,018	1,082	1,205	1,331	1,443	1,522	1,565	547	53.7%
Town of Doty	146	153	170	184	198	207	210	64	43.8%
Town of Gillett	409	414	433	451	461	460	449	40	9.8%
Town of How	215	223	235	244	249	251	245	30	14.0%
Town of Lakewood	398	417	450	481	506	521	523	125	31.4%
Town of Lena	286	290	302	312	318	316	307	21	7.3%
Town of Little River	424	439	471	501	526	538	535	111	26.2%
Town of Little Suamico	1,772	1,909	2,129	2,349	2,546	2,684	2,760	988	55.8%
Town of Maple Valley	291	299	319	334	345	348	343	52	17.9%
Town of Morgan	391	407	441	478	507	523	528	137	35.0%
Town of Mountain	386	397	421	444	462	466	462	76	19.7%
Town of Oconto	519	541	590	638	680	704	712	193	37.2%
Town of Oconto Falls	499	518	564	608	647	670	677	178	35.7%
Town of Pensaukee	567	590	646	704	752	783	795	228	40.2%
Town of Riverview	378	389	416	438	457	464	462	84	22.2%
Town of Spruce	368	379	402	423	438	442	436	68	18.5%
Town of Stiles	603	624	671	718	756	773	773	170	28.2%
Town of Townsend	464	483	526	568	603	622	628	164	35.3%
Town of Underhill	350	364	395	425	450	465	467	117	33.4%
Village of Lena	251	257	271	284	295	297	291	40	15.9%
Village of Pulaski	0	0	0	0	0	0	0	0	0.0%
Village of Suring	232	234	240	245	243	234	218	- 14	-6.0%
City of Gillett	592	602	644	682	708	716	707	115	19.4%
City of Oconto	1,872	1,928	2,038	2,138	2,205	2,210	2,158	286	15.3%
City of Oconto Falls	1,251	1,287	1,371	1,451	1,509	1,520	1,497	246	19.7%
Oconto County	15,415	16,024	17,286	18,503	19,485	19,971	19,986	4,571	29.7%
Wisconsin	2,279,768	2,371,815	2,491,982	2,600,538	2,697,884	2,764,498	2,790,322	510,554	22.4%

	2010 Census	2015	2020	2025	2030	2035	2040	# Change 2010 - 2040	% Change 2010 - 2040
								2010 - 2040	2010 - 2040
Town Total	11,217	11,716	12,722	13,703	14,525	14,994	15,115	3,898	34.8%
Village Total	483	491	511	529	538	531	509	26	5.4%
City Total	3,715	3,817	4,053	4,271	4,422	4,446	4,362	647	17.4%
City/Village Total	4,198	4,308	4,564	4,800	4,960	4,977	4,871	673	16.0%

Source: Wisconsin Department of Administration, 2014; and Oconto County Planning, 2014.

Table 6.21: Seasonal Housing Unit Projections, Oconto County Municipalities, 2015 - 2040

Geographic Location	2010 Total Occupied Housing Units	2010 Seasonal Housing Units	Projected Seasonal Housing Units					
			2015	2020	2025	2030	2035	2040
Town of Abrams	724	43	45	49	53	57	59	59
Town of Bagley	126	115	116	121	127	129	129	124
Town of Brazeau	571	904	932	983	1,034	1,069	1,073	1,058
Town of Breed	312	298	312	340	369	394	409	415
Town of Chase	1,018	4	4	5	5	6	6	6
Town of Doty	146	542	568	631	683	735	768	780
Town of Gillett	409	27	27	29	30	30	30	30
Town of How	215	27	28	30	31	31	32	31
Town of Lakewood	398	991	1,038	1,120	1,198	1,260	1,297	1,302
Town of Lena	286	14	14	15	15	16	15	15
Town of Little River	424	76	79	84	90	94	96	96
Town of Little Suamico	1,772	49	53	59	65	70	74	76
Town of Maple Valley	291	45	46	49	52	53	54	53
Town of Morgan	391	10	10	11	12	13	13	14
Town of Mountain	386	834	858	910	959	998	1,007	998
Town of Oconto	519	25	26	28	31	33	34	34
Town of Oconto Falls	499	41	43	46	50	53	55	56
Town of Pensaukee	567	89	93	101	111	118	123	125
Town of Riverview	378	1,207	1,242	1,328	1,399	1,459	1,482	1,475
Town of Spruce	368	181	186	198	208	215	217	214
Town of Stiles	603	56	58	62	67	70	72	72
Town of Townsend	464	1,257	1,308	1,425	1,539	1,634	1,685	1,701
Town of Underhill	350	131	136	148	159	168	174	175
Village of Lena	251	2	2	2	2	2	2	2
Village of Pulaski	0	0	0	0	0	0	0	0
Village of Suring	232	9	9	9	10	9	9	8
City of Gillett	592	7	7	8	8	8	8	8
City of Oconto	1,872	28	29	30	32	33	33	32
City of Oconto Falls	1,251	13	13	14	15	16	16	16
Oconto County	15,415	7,025	7,303	7,878	8,432	8,880	9,101	9,108
Wisconsin	2,624,358	193,046	200,840	211,016	220,208	228,451	234,092	236,279

Source: U.S. Bureau of the Census, 2010 Census; WDOA Final Household Projections for Wisconsin Municipalities, 2015 – 2040, January 2014; and Oconto County Planning, 2014.

Table 6.22: Housing Occupancy and Tenure, Oconto County Municipalities, 2010

Geographic Location	Occupied			Vacant			Total Units	Percent Occupied	Percent Vacant
	Owner	Renter	Total	Seasonal, Recreational or Occasional Use	Other	Total			
Town of Abrams	673	51	724	43	15	73	797	90.8	9.2
Town of Bagley	110	16	126	115	8	129	255	49.4	50.6
Town of Brazeau	512	59	571	904	21	949	1,520	37.6	62.4
Town of Breed	282	30	312	298	14	324	636	49.1	50.9
Town of Chase	943	75	1,018	4	19	37	1,055	96.5	3.5
Town of Doty	138	8	146	542	3	554	700	20.9	79.1
Town of Gillett	365	44	409	27	9	45	454	90.1	9.9
Town of How	189	26	215	27	5	42	257	83.7	16.3
Town of Lakewood	348	50	398	991	14	1,035	1,433	27.8	72.2
Town of Lena	247	39	286	14	11	33	319	89.7	10.3
Town of Little River	376	48	424	76	10	96	520	81.5	18.5
Town of Little Suamico	1,662	110	1,772	49	42	123	1,895	93.5	6.5
Town of Maple Valley	262	29	291	45	13	70	361	80.6	19.4
Town of Morgan	367	24	391	10	15	32	423	92.4	7.6
Town of Mountain	331	55	386	834	12	888	1,274	30.3	69.7
Town of Oconto	471	48	519	25	21	58	577	89.9	10.1
Town of Oconto Falls	447	52	499	41	16	63	562	88.8	11.2
Town of Pensaukee	519	48	567	89	20	124	691	82.1	17.9
Town of Riverview	348	30	378	1,207	12	1,261	1,639	23.1	76.9
Town of Spruce	302	66	368	181	20	214	582	63.2	36.8
Town of Stiles	544	59	603	56	13	84	687	87.8	12.2
Town of Townsend	426	38	464	1,257	19	1,305	1,769	26.2	73.8
Town of Underhill	319	31	350	131	8	155	505	69.3	30.7
Village of Lena	147	104	251	2	7	24	275	91.3	8.7
Village of Pulaski	0	0	0	0	0	0	0	0.0	0.0
Village of Suring	142	90	232	9	16	36	268	86.6	13.4
City of Gillett	385	207	592	7	15	64	656	90.2	9.8
City of Oconto	1,209	663	1,872	28	72	222	2,094	89.4	10.6
City of Oconto Falls	724	527	1,251	13	15	82	1,333	93.8	6.2
Oconto County	12,788	2,627	15,415	7,025	465	8,122	23,537	65.5	34.5

Source: Census 2010; and Oconto County Planning, 2014.

CHAPTER 7: ECONOMIC DEVELOPMENT

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INTRODUCTION

The Economic Development chapter of the *Oconto County 20-Year Comprehensive Plan* provides an assessment of the county's labor force and economic base. This includes information on labor force characteristics such as educational attainment, unemployment rates, and industry and employment forecasts. A review of the economic base consists of revenues by industry, location quotient analysis, and an analysis of community finances. Many of these characteristics and trends are compared to the State of Wisconsin as a way to measure the county's economic standing against the rest of the state. This chapter also contains a summary of the county's economic strengths and weaknesses with respect to attracting and retaining businesses and whether or not there is sufficient land and sites for future businesses and industries. In addition, there is an identification, evaluation and promotion of environmentally contaminated areas for redevelopment as potential future commercial and industrial sites.

The Oconto County Economic Development Corporation (OCEDC) is a public/private partnership with a mission to stimulate development of the local economy, provide support to existing and prospective employers, serve as a professional resource to local units of government and promote tourism opportunities within Oconto County. The OCEDC is an important component in growing and diversifying the county's economy and promoting all the many benefits of doing business in Oconto County.

The purpose of this inventory is to establish a set of strategies to promote the diversification, retention, and expansion of Oconto County's economy. These strategies consist of a set of goals, objectives, policies, and programs that work in conjunction with Oconto County's General Design Plan found in Chapter 3 of this comprehensive plan. Refer to Chapter 4 of this document for a detailed listing of these development strategies.

Economic Development components

For Oconto County to maintain a strong, growing economy, economic development activities must function as a part of the entire socio-economic environment. This is accomplished through the development of strategies linked to four primary economic development components: *1) infrastructure; 2) business development; 3) workforce development; and 4) community cash flow*. These components in-turn consist of several individual elements that influence the quality and effectiveness of economic development activities within the county. This section describes each of the four economic development components and their significance within Oconto County.

Infrastructure Development

Infrastructure provided by both government and private business is the support system needed for producing and delivering goods and services. Examples of infrastructure include:

- Utilities (e.g., water, sanitary and storm sewer, gas, electric, natural gas)
- Transportation services (e.g., roads, parking lots, airports, ports, rail, signage, sidewalks, trails)
- Social infrastructure (e.g., schools, hospitals, government and other public services)
- Communications infrastructure (e.g., internet, T1, telephone, radio, television, cable, satellite, cellular)

Oconto County must be able to identify current and future needs and work with both local communities and the private sector to ensure adequate infrastructure is in place to support future businesses.

Business Development

- *Business development* refers to business retention, expansion, attraction, and start-up activities. A business retention and expansion program should identify and monitor existing and changing needs of core employers. It is important to appropriately remove or offset obstacles that restrict growth of existing businesses. Most often, business retention activities include establishment of workforce development programs, increasing access to technology, and providing valuable information and data critical to making business decisions.
- *Business attraction* activities are designed to encourage businesses looking to expand or relocate to do so in Oconto County. In order to attract new businesses, a community must provide a competitive and attractive environment. Marketing and promotion activities are used to promote the county's positive attributes, such as a positive business climate, key quality of life elements, skill level of the workforce, and available services.
- *Entrepreneurship and new business development* is instrumental in the diversification of the county's economic base through the creation of new jobs that expand the local economy. Building an effective support system for promising businesses is an important responsibility of local economic development organizations. An effective support system may consist of adequate land available with public infrastructure (e.g., streets and utilities), inexpensive incubator space with services, multi-modal transportation options, high speed internet access, and permits for home-based businesses can easily be obtained.

Workforce Development

Oconto County needs a well-rounded workforce to stay competitive, keep existing businesses strong, retain young people in the county, and raise the area's general standard of living. Workforce development programs are primarily provided through partnerships with local job centers, local school districts, and institutions of higher education. Occasionally, local employers will provide instructors and equipment for use in these training programs. Companies have found it more economical to share training resources and facilities with other employers. The result is a better working relationship among those businesses participating in such collaborative training programs.

Community Cash Flow

As Oconto County pursues new dollars coming into the county, it can look at two primary sources: those brought in by individuals; and those brought in by organizations, businesses or governments.

- New dollars brought in by individuals consist of earned income (wage and salary) and transfer income (government payments and investment dividends).
- New dollars brought in by entities or institutions cover a wide range of sources, including tourism revenue, aids for roads and human services, shared revenue, and government contracts or grants.

Strengths, Weaknesses, Opportunities, and Threats

Strategic planning for economic development requires identification of Oconto County's assets and limitations through a thorough evaluation of the four aforementioned economic components. The analysis of Oconto County's economic Strengths, Weaknesses, Opportunities, and Threats (S.W.O.T.) provides a broad overview of where the county is currently and what its economic composition may be in the future. If Oconto County is to develop and maintain a vibrant and diversified economic foundation, the county needs to maximize its strengths, offset its weaknesses, take advantage of its opportunities, and minimize its threats.

On February 20, 2007, 35 individuals representing the Oconto County Planning Advisory Committee (O.C.P.A.C.), local community and county officials, business leaders, and key civic and non-profit organizations participated in an economic S.W.O.T. workshop. Those people participating in the workshop were divided into four groups and asked to provide input as to the county's economic strengths, weaknesses, opportunities, and threats. The following responses were determined by each group to be their priorities for these four categories:

Strengths:

Group 1	Group 2
<ul style="list-style-type: none"> • Hwy 41/141, STH 32 • Water features – Lakes, Green Bay, Creeks, Rivers 	<ul style="list-style-type: none"> • Workforce ethics/skilled • Waterways – lakes/streams, natural resources
Group 3	Group 4
<ul style="list-style-type: none"> • Agriculture and Ag. Support Businesses • Highways • Tourism 	<ul style="list-style-type: none"> • OCEDC • Campgrounds • Lakes and water • Large Ag. base

Weaknesses:

Group 1	Group 2
<ul style="list-style-type: none"> • Lack of employment opportunities • Existing jobs are lower paying 	<ul style="list-style-type: none"> • Lack manufacturing jobs • Limited/lack infrastructure for manufacturing
Group 3	Group 4
<ul style="list-style-type: none"> • Lack of industry • Void of technology availability 	<ul style="list-style-type: none"> • Distance to ports • Tech schools not affordable • Lack of high school <u>trades</u> • Poor academic attainment

Opportunities:

Group 1	Group 2
<ul style="list-style-type: none"> • Future services for aging community • Good manufacturing workforce 	<ul style="list-style-type: none"> • State and Federal money for development • Promote tourism with established programs/lakes/streams/trails, etc.
Group 3	Group 4
<ul style="list-style-type: none"> • Tax incentives for businesses • Keep rail and roads in good condition • Expand tourism 	<ul style="list-style-type: none"> • New business development • Countywide business recruitment

Threats:

Group 1	Group 2
<ul style="list-style-type: none"> • Not enough high paying jobs in county • Loss of family farms 	<ul style="list-style-type: none"> • Adjacent big cities draw our opportunities away • Transition to world economy • Closing of mill in Oconto Falls • Loss of big manufacturing • High state taxes drive business out
Group 3	Group 4
<ul style="list-style-type: none"> • Groundwater contamination • State mandates • Increasing taxation 	<ul style="list-style-type: none"> • Lower school standards • Annexation vs. local cooperation • No training for local officials

The results of the S.W.O.T. process were instrumental in drafting the economic development goals and identifying appropriate tools for the implementation of this portion of the Comprehensive Plan. The complete results of the S.W.O.T. workshop can be found in Appendix C of *Volume II: County Resources*.

Labor Force Characteristics

A key component to successful economic development is the quality and quantity of the area's labor force. The overall skill level of the workforce dictates what types of businesses Oconto County will be able to attract and support in the future. This section focuses on several characteristics of the county's labor force including general information on education levels; incomes; the types of occupations in which individuals are employed; the types of business in which people are working; commuting patterns; unemployment rates; labor participation rates; and a review of how these characteristics influence the region's employment forecast.

Educational Attainment

The education levels attained by a community's residents are often a good indicator of the type of jobs and the general standard of living found throughout Oconto County. Communities and Counties with higher percentages of people with a post high school education will be able to attract employers offering higher paying professional and technical positions. U.S. Bureau of Census 2012 estimates the population in Oconto County age 25 and over to be 26, 844.

- The percentage of individuals residing in Oconto County with a high school diploma is estimated at 43.2 percent, which is significantly better than the state average of 33.1 percent.
- 2012 estimates for Oconto County show that 11.1 percent of those 25 and over hold an associate's degree; 10 percent hold a bachelor's degree; and 3.8 percent hold a graduate or professional degree.

Median Household Income

Table 7.1: Median Household Income, Oconto County and State of Wisconsin, 1989 - 2012 provides a comparison of median household incomes for Oconto County and State of Wisconsin for 1989, 1999 and 2012.

- The 2012 estimated median household income for Oconto County was \$50,763 compared to \$41,201 in 1999. Both figures are significantly below the State of Wisconsin for these same time periods. However, it does represent an encouraging 23.2 percent increase for the county during that 10 year time span.
- The county's median income of \$50,763 in 2012 was 96 percent of the state's median income for the same year, compared to 94 percent in 1999.

Median household income is one measure of average household income. It divides the household income distribution into two equal parts: one-half of the households fall below the median line while the other one-half are above it. The median household income is a good indicator of the general economic well-being of all households in the county.

Table 7.1: Median Household Income, Oconto County and State of Wisconsin, 1989 - 2012

Location	1989	1999	2012*	% Change 1989 - 2012	% Change 1999 - 2012
Oconto County	22,927	41,201	50,763	79.7%	23.2%
Wisconsin	29,442	43,791	52,627	78.7%	20.2%

* US Census Bureau Estimate, 2012

Source: U.S. Census Bureau; 2008-2012 American Community Survey; and Oconto Planning, 2014.

Occupation

Many of the available employment opportunities for a majority of the county's residents are located within the communities that comprise the Green Bay Metropolitan Area. According to U.S. Bureau of Census 2012 estimates there were 18,731 employed persons 16 years and over.

- According to 2012 estimates, the majority of Oconto County residents were employed in management, professional and related service fields (27.7 percent); or production, transportation, and material moving occupations (22.8 percent). This is reversed from the 2000 numbers where production, transportation, and material moving held the majority. The larger manufacturing plants and trucking firms in the cities of Green Bay and Marinette still account for the high percentage of workers in the production, transportation, and material moving sector, however closures and a down economy have had a definite impact on this job sector. The county's public school systems, Oconto County, hospitals, and several larger manufacturers may explain why greater percent of the county's residents work in occupations within the management, professional, and sales fields.

Industry

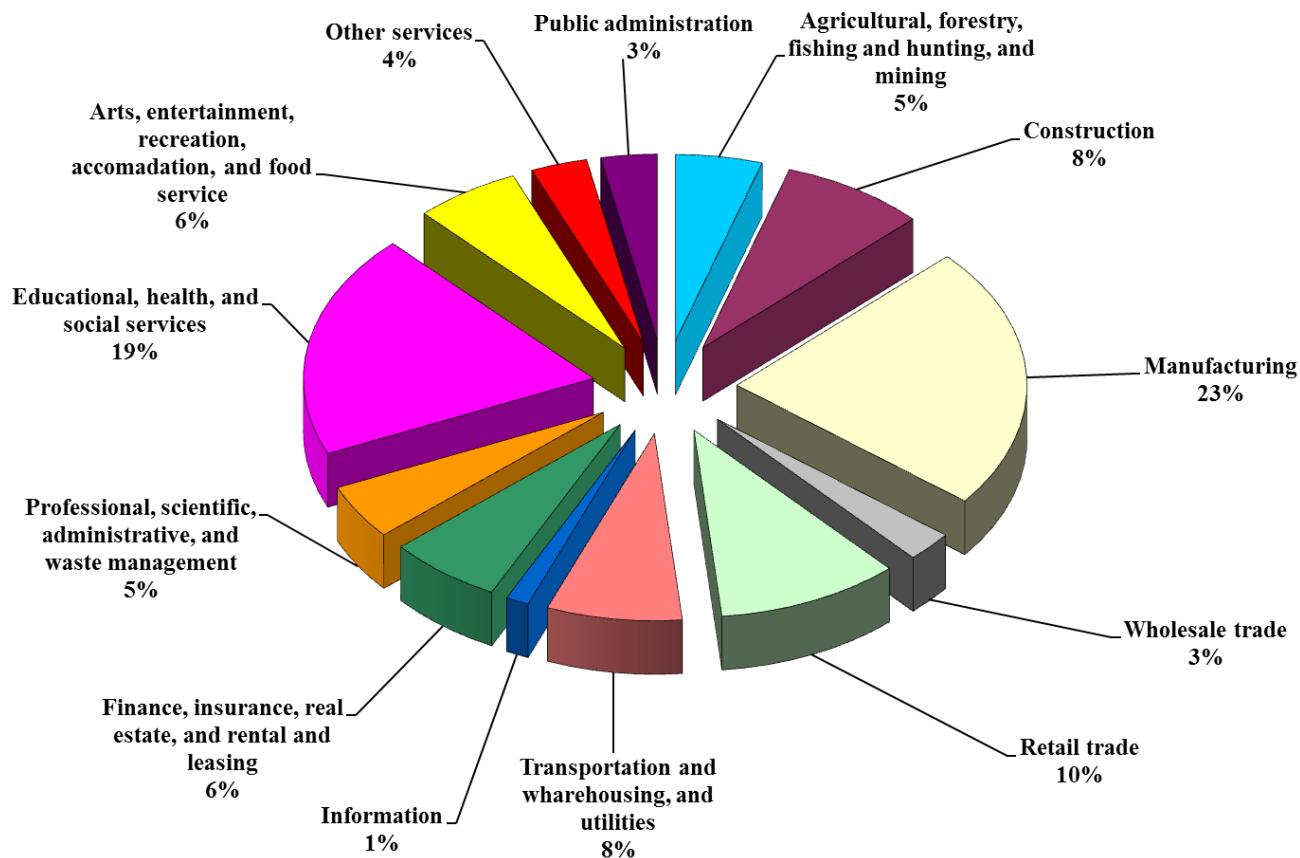
Table 7.2 and Figure 7.1 show employment by major industry group for Oconto County. In 2012, 22.7 percent of employed county residents worked in manufacturing followed by educational, health and social services at 19.4 percent. The remaining 58 percent of the employed population was evenly distributed among the other 11 industries. These percentages are similar to those of the state. Manufacturing remains the economic engine for the county and is strongly supported by the educational, health and social services industry.

Table 7.2: Employed Persons by Industry Group, Oconto County, 2000 - 2012

Industry	Oconto County			
	2000 Number	Percentage	2012 Estimate	Percentage
Agricultural, forestry, fishing and hunting, and mining	1,112	6.3	905	4.8
Construction	1,346	7.6	1,512	8.1
Manufacturing	5,126	29.0	4,257	22.7
Wholesale trade	463	2.6	490	2.6
Retail trade	1,517	8.6	1,913	10.2
Transportation and warehousing, and utilities	1,263	7.1	1,414	7.5
Information	210	1.2	241	1.3
Finance, insurance, real estate, and rental and leasing	733	4.1	1,188	6.3
Professional, scientific, administrative, and waste management	730	4.1	892	4.8
Educational, health, and social services	2,723	15.4	3,639	19.4
Arts, entertainment, recreation, accommodation, and food service	1,286	7.3	1,102	5.9
Other services (except public administration)	640	3.6	590	3.1
Public administration	531	3.0	588	3.1
Total	17,680	100.0	18,731	100.0

Source: U.S. Bureau of the Census, 2000 Census, DP-3; Bay-Lake Regional Planning Commission, 2006; U.S. Census Bureau, 2008 – 2012 American Community Survey; Oconto County Planning, 2014.

Figure 7.1: Percent Employment by Industry Group, Oconto County, 2012



Source: Bay-Lake RPC, 2006; U.S. Census Bureau, 2008 – 2012 American Community Survey; Oconto County Planning, 2014.

Commuting Patterns

Commuting patterns highlight the counties that have a strong economic base and are able to attract workers from surrounding communities and counties. Conversely, they also identify areas that lack local employment opportunities for their residents or perhaps serve as “bedroom” communities that may offer a greater number of, and perhaps more affordable, housing options in comparison to other locations.

Identifying and tracking commuting patterns is a labor market concept that refers to where workers live and to which county and/or community they travel to for their jobs. According to 2012 estimates, approximately 44.4 percent (8,159) of the 18,378 employed Oconto County residents worked within Oconto County. In comparison in 2000, 50 percent (8,784) of the 17,444 worked within Oconto County. The 2012 estimates show 54.6 percent or 10,034 working residents of Oconto County commuted out of the county for work. In comparison in 2000, 8,660 working residents of Oconto County commuted out of the county for work.

Significantly more Oconto County residents travel south each day than their Brown County counterparts (7,395 versus 625). This disparity is reflective of the difference

both of the population and the employment opportunities available in the two counties.

Unemployment Rate

The unemployment rate is the proportion of the civilian labor force (age 16 and older) that is currently unemployed and actively seeking employment. It excludes persons in the armed forces and those residents under age 16. Persons not employed and not looking for work are not counted as part of the labor force; therefore, they are not counted as unemployed.

Table 7.3 and Figure 7.2 highlight the fluctuations in Oconto County's civilian labor force since 2000. Variations in the number of persons in the labor force are the result of many factors including shifts in the age and sex characteristics of the population; the proportion of citizens age 16 and over working or seeking employment; and seasonal occupations.

Companies looking to expand operations frequently inquire about areas with higher unemployment rates or excess labor as potential employees of their businesses. With rapidly growing economies in many parts of the Upper Midwest, one of the major criteria companies use in selecting an area in which to locate is the amount of available labor already skilled or have the potential for obtaining the skills they are seeking for their particular operations.

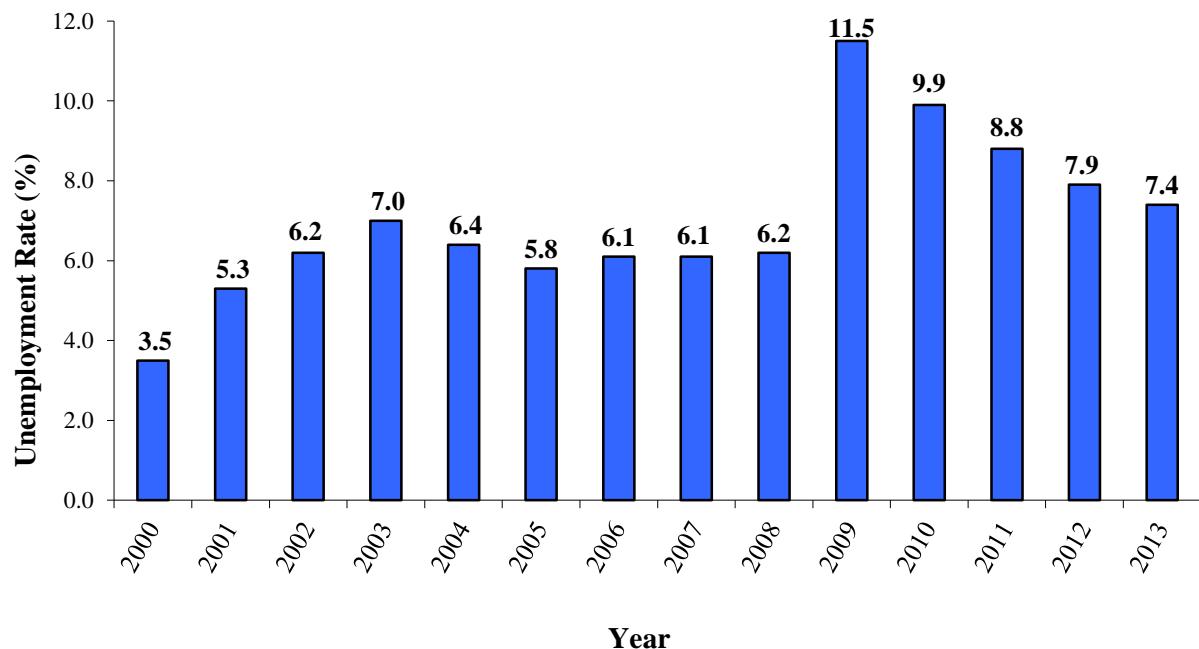
- The WDOA population estimate for Oconto County in 2012 was 37,829. The U.S. Bureau of Census estimates the 2012 employed civilian labor force at 18,731 or 49.5 percent of Oconto County's population.
- The county's labor force increased by an estimated 1,754 workers, or 9.5 percent, from 2000 to 2012.
- The number of employed Oconto County residents increased an estimated 1,051 workers from 17,680 in 2000 to 18,731 in 2012. This translates to a 5.9 percent increase in employed residents between 2000 and 2012.
- The number of unemployed Oconto County residents has fluctuated from 682 or 3.5 percent in 2000 compared to 1,479 or 7.4 percent in 2013.

Table 7.3: Civilian Labor Force Estimates, Oconto County, 2000 - 2013

Year	Total Civilian Labor Force	Employed	Unemployed	% Civilian Labor Force Unemployed
2000	19,493	18,811	682	3.5
2001	19,901	18,849	1,052	5.3
2002	19,962	18,724	1,238	6.2
2003	20,375	18,950	1,425	7.0
2004	20,513	19,206	1,307	6.4
2005	20,325	19,144	1,181	5.8
2006	20,657	19,407	1,250	6.1
2007	20,406	19,165	1,241	6.1
2008	20,278	19,011	1,267	6.2
2009	20,702	18,323	2,379	11.5
2010	20,596	18,560	2,036	9.9
2011	20,105	18,334	1,771	8.8
2012	19,896	18,323	1,573	7.9
2013	19,921	18,442	1,479	7.4

Source: U.S. Bureau of Labor Statistics; Oconto County Planning, 2014

Figure 7.2: Unemployment Rate, Oconto County, 2000 - 2013



Source: U.S Bureau of Labor Statistics; Oconto County Planning, 2014.

Labor Participation Rate

The fraction of the working-age population, generally 16 years and older, that is employed or seeking employment is referred to as the **labor force participation rate** (LFPR). The LFPR is a strong economic measure that is sometimes a better indicator of the area's labor market health than its unemployment rate.

According to the Wisconsin Department of Workforce Development, in 2012 approximately 65.4 percent of Oconto County's population, age 16 and older, was in the labor force. This marks a slight decrease from the last several years and a decline from pre-recessionary levels. The county's labor force participation rate reached a recent high point of 66.3 percent in 2011, but has declined in recent years as retirement effects have started to be observed. Like the state and nation, the county's LFPR is projected to decrease over the coming decades due to an aging, retiring population.

As outlined in Chapter 6, Oconto County currently has a slightly older than average population in comparison to the State of Wisconsin. This is projected to continue as individuals age 65 and over comprise a larger percentage of the population while the younger portion of the population decreases proportionately. From a labor market perspective, the implications of declining labor force participation rate due to a growing and aging population points to future labor shortages in certain industries and occupations.

Industry and Employment Forecast

As recovery from the recent recession continues, many of the trends of the past decade will continue to be evident. The following being likely to occur in Oconto County and across the region:

- Manufacturing is currently the largest employing industry sector in the region and will remain the largest industry sector.
- Occupations in manufacturing are expected to move away from general labor positions to more semi-skilled and skilled operator and technician jobs. This is due primarily to production processes that have integrated more efficient technology.
- The education and health services sector is projected to see continued growth.
- The personal care aide occupation is projected to show strong growth by adding nearly 11,500 jobs from 2010 - 2020.

Local Employment Forecast

- From 1990 to 2013, the manufacturing and educational, health, and social services industries continued to have the largest share of employment for residents of Oconto County as seen in Table 7.4. This county trend does follow the regional trend and is expected to continue for the next several years.
- According to the Wisconsin Department of Workforce Development, the 25 occupations that are projected to grow the fastest during the 2010 – 2020 time period include:
 - Carpenters
 - Bicycle Repairers
 - Cargo & Freight Agents
 - Glaziers
 - Iron Workers
 - Event Planners
 - Interpreters
 - Diagnostic Medical
 - Market Research Analyst & Marketing Specialist
- Actuaries
- Personal Care Aides
- Heating, Cooling, Refrigeration Mechanics and Installers
- Security System Installer
- Personal Financial Advisor
- Veterinary Technicians
- Metal-Refining Operators
- Health Educators
- Medical Scientists
- Insurance Sales Agents
- Physical Therapist Aides
- Database Administrators
- Respiratory Therapists

- Insulation Workers, Mechanical
- Software Developers
- Masons
- Northeast Wisconsin Technical College, St. Norbert College, the University of Wisconsin-Green Bay, and the University of Wisconsin-Marinette will be important components in educating the area's workforce for these growing fields.

ECONOMIC BASE

Revenues by Industry

Table 7.4 provides an overview of how much each industry contributes to the overall Oconto County economy. While manufacturing continues to be one of the cornerstones of Oconto County's economy by contributing nearly 20 percent of the total earnings provided by all industries; the health care industry has shown steady growth which is projected to continue. After total earnings fell in 2010 for Oconto County, the projections show anticipated growth which would indicate a local economy that is regaining strength and is growing again.

Table 7.4: Earnings by Industry Type, Oconto County, 1980 - 2040

Earnings by Industry (in millions of 2005 dollars)	1980	1990	2000	2010	2020 Projected	2030 Projected	2040 Projected	% Change 2010- 2020	% Change 2010- 2030	% Change 2010- 2040
Farm	43.38	30.22	16.79	26.48	28.31	27.89	27.14	6.9	5.3	2.5
Forestry, Fishing, and Other	1.87	1.61	2.41	4.12	4.84	5.27	5.68	17.6	28.1	37.9
Mining	1.20	1.66	2.39	0.39	1.27	1.55	1.87	228.5	302.3	385.2
Utilities	1.75	3.09	4.02	3.09	3.50	3.72	3.77	13.2	20.5	22.0
Construction	17.61	18.69	37.76	22.66	29.24	32.45	35.56	29.1	43.2	56.9
Manufacturing	57.68	79.99	101.16	78.01	97.83	114.03	130.71	25.4	46.2	67.6
Wholesaling	15.17	12.56	15.76	18.47	23.08	23.87	24.04	25.0	29.3	30.2
Retail Trade	18.85	23.20	29.84	29.80	29.29	29.92	30.16	-1.7	0.4	1.2
Transportation & Warehousing	8.43	14.85	23.82	15.22	17.02	18.20	19.20	11.8	19.6	26.1
Information	1.16	1.61	2.19	1.75	1.84	2.09	2.35	5.2	19.8	34.5
Finance and Insurance	4.08	5.55	7.16	9.35	13.10	16.74	21.06	40.0	79.0	125.1
Real Estate and Rental and Lease	1.03	1.40	3.85	3.49	3.21	3.67	4.14	-7.9	5.3	18.8
Professional & Technical Service	5.02	6.47	10.86	8.13	10.14	12.50	15.19	24.7	53.7	86.8
Management	0.09	0.11	0.19	0.12	0.22	0.25	0.27	81.5	105.9	128.6
Administrative and Waste Services	0.80	1.11	2.52	2.44	2.30	2.66	3.03	-5.8	8.8	24.2
Educational Services	0.30	0.39	0.71	0.58	0.63	0.75	0.88	9.3	29.9	52.8
Health Care and Social Assistance	12.95	16.71	26.97	38.27	48.08	62.40	79.84	25.7	63.1	108.6
Arts, Entertainment, Recreation	1.38	1.75	2.65	2.24	2.90	3.19	3.46	29.3	42.1	54.1
Accommodation & Food Service	6.08	7.70	11.44	10.30	10.78	11.57	12.18	4.7	12.4	18.3
Other Services	15.43	19.51	27.29	26.74	30.14	31.66	32.65	12.7	18.4	22.1
Federal Civilian Government	4.61	6.03	6.52	7.38	7.20	7.40	7.50	-2.5	0.3	1.6
Federal Military	0.97	2.04	1.99	4.51	5.01	6.38	8.08	11.2	41.6	79.2
State and Local Government	26.80	41.42	60.21	69.74	83.80	100.94	120.29	20.2	44.7	72.5
Total Earnings	246.64	297.66	398.47	383.25	453.72	519.08	589.04	18.4	35.4	53.7

Source: United States Department of Labor, Bureau of Labor Statistics 1980-2040

Agriculture

According to a 2011 UW-Extension report entitled, *Oconto County Agriculture: Value and Economic Impact*, agriculture:

- Provided jobs for 3,997 county residents, or 30 percent, of the county's entire workforce.
- Contributed \$788 million, or 45 percent, of the county's total business sales and 181.4, million or 28 percent of the county's total income. Of this \$788 million, \$565.6 million is the result of the sale of all farm and value-added products, \$195.5 million in business to business purchases, and \$27.2 million in the spending of earnings of those in agriculture related occupations.
- Paid nearly \$15.9 million in taxes (not including all property taxes paid to local schools).
- The county's milk producers and dairy industry contribute over 491.7 million to the county's economy with the market value of production per farm in Oconto County increasing from \$60,322 in 1997 to \$65,322 in 2002. The on-farm production and sale of milk accounts for \$80.8 million whereas the processing accounts for an additional \$410.9 million.
- The production of landscape trees and plants, as well as landscape and grounds maintenance, are rapidly growing segments of Oconto County's agricultural industry. Horticulture generates \$5.4 million in county economic activity and creates many full-time and seasonal jobs.

Tourism

Sitting on Green Bay of Lake Michigan, Oconto County is strategically located in and adjacent to some of Wisconsin's most beautiful forests. The county has plenty to offer everyone – the outdoor enthusiast, people interested in cultural/historical attractions, and those individuals seeking unique shopping venues. Tourism is a vital component of Oconto County's local economy. Businesses that cater to tourism such as resorts, motels, campgrounds, bed and breakfasts, and retail stores are expanding services to meet the diverse needs of the thousands of people who come to the county to take advantage of the walking and biking trails, the many parks, golf courses, historic sites, and area attractions.

The following information was taken from the Wisconsin Department of Tourism's 2005 Tourism Economic Impact Study conducted by David-Peterson Associates, Inc. and the Wisconsin Department of Tourism's 2013 Economic Impact Study.

- In 2012, Oconto County ranked 35th in the state for visitor spending. This ranking has improved from a 2006 ranking of 46th.
- Travelers spent an estimated \$77 million in Oconto County in 2013 up from \$72 million in 2012 and \$70 million in 2006.
- It is estimated that employees earned approximately \$15 million in wages generated from visitor spending.
- Traveler spending in 2013 supported 861 full-time equivalent jobs up from 828 in 2012. However this is down from 1,807 in 2006.
- Local revenues (property taxes, sales taxes, lodging



taxes, etc.) collected as a result of travelers amounted to an estimated \$7.73 million in 2013.

- When this study was first initiated in 1993, travelers spent \$22 million in Oconto County. By 2006, travelers spent \$70 million and by 2013, travelers spent \$77 million.

Major Employers

Oconto County boasts a variety of large employers from both the public and private sectors. Residents of Oconto County have a number of employment opportunities both within the county and in the adjacent Green Bay Metropolitan Area. The public sector employers include the county, CESA 8, and a school district. Saputo Cheese USA, Inc., is the largest private employer. The private industries are from a number of different sectors including manufacturing, health care, and food processing. The size and diversity of these employers provide a solid economic foundation for the county and its many communities.

Table 7.5: Top Ten Employers, Oconto County, 2013

Establishment	Product or Service	Size (Sept. 2013)
SAPUTO CHEESE USA INC	Cheese manufacturing	250-499 employees
COMMUNITY MEMORIAL HOSPITAL INC	General medical and surgical hospitals	250-499 employees
COUNTY OF OCONTO	Executive and legislative offices, combined	250-499 employees
KCS INTERNATIONAL INC	Boat building	100-249 employees
UNLIMITED SERVICES OF WISCONSIN INC	Current-carrying wiring device manufacturing	100-249 employees
CESA 8	Administration of education programs	100-249 employees
VISIONS OF NEW LLC	Residential mental retardation facilities	100-249 employees
BEYOND ABILITIES LLC	Residential mental retardation facilities	100-249 employees
GILLETT PUBLIC SCHOOL	Elementary and secondary schools	100-249 employees
SHARPE CARE NURSING & REHABILITATION	Nursing care facilities	100-249 employees

Source: WI DWD, Bureau of Workforce Training, QCEW, OEA special request, Sept. 2013; Oconto County Planning, 2014.

Employment by Economic Division

The future of Oconto County requires an understanding of the local, county, and regional economies. The Economic Base Analysis technique divides the economy into basic and non-basic sectors.

- The basic sector is made up of local businesses that are dependent on external factors. Manufacturing and local resource-oriented firms depend principally upon non-local factors and usually export their goods. Having strong basic sector employment and industry will strengthen and further diversify Oconto County's economy.
- The non-basic sector is comprised of those firms that depend largely upon local business conditions. These are retail and service industries.

Location Quotient Analysis

The Location Quotient (LQ) is used to identify the basic and non-basic sectors of a local economy. The analysis used in Table 7.6 uses the United States as the standard for comparison with the county's economy.

When the LQ increases over time, this suggests that the county's economy is getting closer to reaching and exceeding local demands. The most notable changes in the county's economy since 1990 are the *declines* in utilities; warehousing and transportation; and services, and the *increases* in employment in construction; agriculture, forestry, and fishing; and local government. Overall, Oconto County's economy is quite diversified providing a number of different employment opportunities for its residents.

A **Location Quotient** highlights how the balance of employment in a local economy compares to the balance in employment in the region as a whole. The proportion of jobs in each local industrial sector is measured, as a ratio, against its corresponding sector at the regional level. To conduct a **Location Quotient (LQ) Analysis**, nine basic economic divisions are used:

Four goods-producing sectors: agriculture; forestry and fishing; mining; construction; and manufacturing; and

Five services-producing sectors: transportation and public utilities; wholesale trade; retail trade; finance, insurance and real estate; and services.

- **If the LQ is less than 1.0**, that industry is not meeting local demand and implies that the goods or services of that sector are being "imported" from somewhere else within the region.
- **An LQ equal to 1.0** suggests that the local employment is exactly sufficient to meet the local demand for a given good or service.
- **An LQ greater than 1.0** suggests that local employment produces more goods and services than the local economy can use; therefore these goods and services are exported to non-local areas.

Table 7.6: Employment by Industry Group, Oconto County and United States, Location Quotient Analysis, Oconto County, 1990 - 2010

Item	Oconto County			United States			% Change 1990-2010		% Change 2000 - 2010		Oconto County Location Quotient		
	1990	2000	2010	1990	2000	2010	Oconto	U.S.	Oconto	U.S.	1990	2000	2010
Total full-time and part-time employment	12,031	14,361	13,797	138,331,000	165,370,900	173,767,300	19.4	25.6	-3.9	5.1			
Farm Employment	1,582	1,507	1,434	3,153,000	3,117,000	2,665,000	-4.7	-15.5	-4.8	-14.5	5.77	5.57	6.20
Forestry, Fishing, Related Activities, etc.	81	105	156	765,702	851,369	827,612	29.6	8.1	48.6	-2.8	1.22	1.42	2.17
Mining	45	5	51	878,716	757,028	1,181,733	-88.9	34.5	920.0	56.1	0.59	0.08	0.50
Utilities	65	53	43	755,189	621,792	579,721	-18.5	-23.2	-18.9	-6.8	0.99	0.98	0.85
Construction	548	906	831	7,333,591	9,540,276	8,915,810	65.3	21.6	-8.3	-6.5	0.86	1.09	1.07
Manufacturing	2,560	3,072	2,063	18,123,110	17,750,600	12,208,260	20.0	-32.6	-32.8	-31.2	1.62	1.99	1.95
Wholesale Trade	438	386	457	5,705,702	6,270,704	6,047,168	-11.9	6.0	18.4	-3.6	0.88	0.71	0.87
Retail Trade	1,125	1,408	1,442	16,089,090	18,455,410	17,763,030	25.2	10.4	2.4	-3.8	0.80	0.88	0.93
Transportation and Warehousing	417	514	440	4,272,516	5,466,127	5,506,755	23.3	28.9	-14.4	0.7	1.12	1.08	0.92
Information Employment	81	91	68	3,069,908	4,031,319	3,210,958	12.3	4.6	-25.3	-20.3	0.30	0.26	0.24
Finance and Insurance	222	278	455	6,803,901	7,833,627	9,651,626	25.2	41.9	63.7	23.2	0.38	0.41	0.54
Real Estate	267	364	465	4,385,020	5,446,611	7,459,338	36.3	70.1	27.7	37.0	0.70	0.77	0.72
Professional and Technical Service	304	377	356	7,298,603	10,023,600	11,730,420	24.0	60.7	-5.6	17.0	0.48	0.43	0.35
Management of Companies and Enterprise	5	7	5	1,366,316	1,801,701	2,039,057	40.0	49.2	-28.6	13.2	0.04	0.04	0.03
Administrative and Waste Services	124	211	195	5,803,301	9,903,091	10,479,730	70.2	80.6	-7.6	5.8	0.25	0.25	0.21
Educational Services	30	43	42	2,032,033	2,825,869	4,075,536	43.3	100.6	-2.3	44.2	0.17	0.18	0.12
Health Care and Social Assistance	786	1,023	1,329	11,184,890	15,025,200	19,059,610	30.2	70.4	29.9	26.9	0.81	0.78	0.80
Arts, Entertainment, and Recreation	168	222	204	2,202,407	3,199,143	3,777,316	32.1	71.5	-8.1	18.1	0.88	0.80	0.62
Accommodation and Food Service	875	1,041	949	8,323,106	10,574,510	12,049,340	19.0	44.8	-8.8	13.9	1.21	1.13	0.91
Other Services, Except Public Administration	738	806	797	7,555,907	8,937,910	9,859,317	9.2	30.5	-1.1	10.3	1.12	1.04	0.93
Federal Government, Civilian	125	129	129	3,233,004	2,892,979	3,036,976	3.2	-6.1	0.0	5.0	0.44	0.51	0.49
Military	147	119	105	2,717,996	2,067,021	2,101,023	-19.0	-22.7	-11.8	1.6	0.62	0.66	0.58
State and Local	1,298	1,649	1,781	15,281,000	17,977,000	19,542,000	27.0	27.9	8.0	8.7	0.98	1.06	1.05

Source: U.S. Department of Commerce, Bureau of Economic Analysis, REIS 1969-2010; Bay-Lake Regional Planning Commission, 2006; and Oconto County Planning, 2014.

Threshold Analysis

Export Base (“Basic Employment”)

In 2010, three “basic employment areas” within the Oconto County economy were considered exporters: farm employment, construction, and manufacturing. They produce more goods and services than the local economy can use and export excess goods to other areas.

Non-Export Base (“Non-Basic Employment”)

Several industries stand out with lower LQs: professional and technical service; administrative and waste service; utilities; and transportation and warehousing. These industries are not meeting local demand for given goods or services and therefore import those needed services from other counties.

County Finances

Table 7.7: Comparative Tax Appropriations, Oconto County, 2000 - 2013

illustrates a history of the taxes levied and collected in Oconto County from 2000 to 2013. The county’s full assessed value grew by 80 percent or 1.65 billion from 2000 to 2008. In 2009 the county’s full assessed value began to decline and this decline continued through 2013. In this time period, the full assessed value declined by approximately 5 percent or 186 million. Over the period from 2000 to 2013 the total property tax increased by nearly \$25.4 million or 62 percent. These numbers are a good indication the county was growing at a healthy and steady rate, prior to the latest recession beginning in late 2007.

Table 7.7: Comparative Tax Appropriations, Oconto County, 2000 - 2013

Year Levied	Full Value	Total Property Tax	State Tax Credit	Full Value Rate		Taxing Jurisdiction Share				
				Gross	Effective	School	Vocational	County	Local	Other
2000	\$2,045,717,800	\$40,964,791	\$2,678,148	0.02002	0.01871	\$19,842,209	\$2,824,722	\$10,969,548	\$6,311,021	\$1,017,292
2001	\$2,255,310,300	\$45,384,122	\$2,866,799	0.02012	0.01885	\$21,384,245	\$3,619,227	\$12,811,245	\$6,347,569	\$1,221,836
2002	\$2,471,809,200	\$48,400,285	\$3,054,788	0.01958	0.01834	\$22,547,060	\$3,956,878	\$13,989,713	\$6,572,949	\$1,333,691
2003	\$2,741,651,900	\$50,807,007	\$3,244,654	0.01853	0.01734	\$23,360,273	\$4,240,489	\$15,046,346	\$6,719,057	\$1,440,835
2004	\$2,895,927,000	\$54,646,338	\$3,266,948	0.01887	0.01774	\$25,854,923	\$4,383,113	\$15,605,256	\$7,251,024	\$1,552,024
2005	\$3,077,200,600	\$55,262,071	\$3,298,885	0.01795	0.01688	\$25,473,579	\$4,561,627	\$16,003,970	\$7,601,113	\$1,621,787
2006	\$3,377,804,700	\$57,157,666	\$4,173,885	0.01692	0.01568	\$26,441,928	\$4,901,479	\$16,468,084	\$7,693,459	\$1,652,716
2007	\$3,528,606,900	\$59,667,517	\$4,740,602	0.01690	0.01556	\$28,151,671	\$5,107,897	\$16,797,449	\$7,879,860	\$1,730,650
2008	\$3,697,931,500	\$61,193,443	\$5,210,471	0.01654	0.01513	\$28,410,156	\$5,406,129	\$17,172,456	\$8,286,109	\$1,918,590
2009	\$3,656,668,300	\$63,428,864	\$5,098,040	0.02250	0.02108	\$29,829,218	\$5,554,642	\$17,491,118	\$8,582,158	\$1,971,728
2010	\$3,652,522,200	\$65,865,740	\$4,998,042	0.01803	0.01666	\$31,453,537	\$5,827,517	\$17,633,341	\$9,049,445	\$1,901,897
2011	\$3,599,182,300	\$66,236,509	\$4,949,390	0.01840	0.01703	\$31,678,528	\$5,798,270	\$17,790,126	\$9,132,911	\$1,836,679
2012	\$3,530,555,100	\$65,693,564	\$4,994,479	0.01861	0.01719	\$31,025,064	\$5,788,031	\$17,989,592	\$9,090,388	\$1,800,486
2013	\$3,512,155,600	\$66,330,093	\$5,016,103	0.01889	0.01746	\$31,362,143	\$5,770,002	\$18,168,493	\$9,173,660	\$1,855,793

Source: Wisconsin Department of Revenue, City, Village and Town Taxes, for years cited; and Bay-Lake Regional Planning Commission, 2008; Oconto County Planning, 2014.

The ability to finance development and infrastructure projects is calculated by general obligation debt capacity. The aggregate amount of indebtedness, including existing indebtedness of any municipality, shall not exceed five percent of the value of the taxable property located in the municipality.

Oconto County's as of December 31, 2013, was debt free and had a debt margin of \$175,627,780. The county's existing debt dropped from \$4.13 million in 2007 to \$0 in 2010 and the county has maintained debt free status since 2010. Oconto County has experienced declining values since 2008. Even with the recent decline in values, the lack of debt means that the county has access to considerable financing for future projects to include emergency infrastructure or facilities improvements, if necessary.

Table 7.8: Public Indebtedness, Oconto County, 2000 - 2014

Year	Full Value	Debt Limit*	Existing Debt	Debt Margin
2000	\$2,045,717,800	\$102,285,890	\$6,966,933	\$95,318,957
2001	\$2,255,310,300	\$112,765,515	\$6,398,071	\$106,367,444
2002	\$2,471,809,200	\$123,590,460	\$5,675,986	\$117,914,474
2003	\$2,741,651,900	\$137,082,595	\$4,909,265	\$132,173,330
2004	\$2,895,927,000	\$144,796,350	\$4,105,000	\$140,691,350
2005	\$3,077,200,600	\$153,860,030	\$3,325,000	\$150,535,030
2006	\$3,377,804,700	\$168,890,235	\$5,370,000	\$163,520,235
2007	\$3,528,606,900	\$176,430,345	\$4,130,000	\$172,300,345
2008	\$3,697,931,500	\$184,896,575	\$2,850,000	\$182,046,575
2009	\$3,656,668,300	\$182,833,415	\$1,725,000	\$181,108,415
2010	\$3,652,522,200	\$182,626,110	\$0	\$182,626,110
2011	\$3,599,182,300	\$179,959,115	\$0	\$179,959,115
2012	\$3,530,555,100	\$176,527,755	\$0	\$176,527,755
2013	\$3,512,555,600	\$175,627,780	\$0	\$175,627,780

*Debt Limit equals five percent of the full value.

Source: Wisconsin Department of Revenue, Bureau of Local Finance Assistance, Equalized Value and Debt Limit Value, for years cited; Bay-Lake Regional Planning Commission, 2008; and Oconto County Planning, 2014.

Existing Site Inventory and Analysis

As detailed on the county's 2007 land use map (**Map 11.1**), there are 1,231 acres designated as commercial land and an additional 1,909 acres of industrial land.

Evaluation of Environmentally Contaminated Sites for Commercial and Industrial Uses

According to the Wisconsin Department of Natural Resources (WDNR), there have been 468 environmental incidences that have occurred in Oconto County with the first being noted in 1980. Please refer to the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the WDNR website for further details on these listings.

According to the WDNR, 41 incidences remain open as of January 2007 while 427 have been closed. A majority of the open cases are leaking underground storage tanks or a site that has been identified as having some level of contaminated soil or groundwater. During the Comprehensive Planning process, county officials should be familiar with these sites. Local community officials should also understand the type and location of the incidences occurring within their municipalities. These areas may be prime locations for redevelopment for another land use such as commercial or industrial development.

Depending on the type of incident, it will fall under the jurisdiction of the Wisconsin Department of Agriculture, Trade, and Consumer Protection; Wisconsin Department of Commerce; or the Wisconsin Department of Natural Resources either in their Waste Management Division or the Remediation or Redevelopment Division. The incident will have been identified by type with a status report as described below.

Types of Activities

Abandoned Container (AC): An abandoned container, with potentially hazardous contents, has been inspected and recovered. No known discharge to the environment has occurred. If the container discharged a hazardous substance, a SPILL activity will be created at this location.

Leaking Underground Storage Tank (LUST): A LUST site has contaminated soil and/or groundwater with petroleum, which includes toxic and cancer causing substances. However, given time, petroleum contamination naturally breaks down in the environment (biodegradation). Some LUST sites may emit potentially explosive vapors.

Environmental Repair (ERP): ERP sites are sites other than LUSTs that have contaminated soil and/or groundwater. Examples include industrial spills (or dumping) that need long term investigation, buried containers of hazardous substances, and closed landfills that have caused contamination. The ERP module includes petroleum contamination from above-ground (but not from underground) storage tanks.

SPILLS: A discharge of a hazardous substance that may adversely impact, or threaten to impact public health, welfare or the environment. Spills are usually cleaned up quickly.

General Property Information (GP): This activity type consists of records of various milestones related to liability exemptions, liability clarifications, and cleanup agreements that have been approved by DNR to clarify the legal status of the property.

Case Status

Open Status: This status pertains to Spills, LUST, ERP, VPLE and Abandoned Container activities in need of clean up or where cleanup is still underway.

Conditionally Closed Status: These activities are where cleanup actions were approved, but the site closure will not be approved pending receipt of documentation of abandonment of wells or disposal of soil.

Closed Status: This category includes activities where investigation and cleanup of the contamination has been completed and the state has approved all cleanup actions.

Historic Spill: These Spills are where cleanups may have been completed prior to 1996 and no end date is shown. Spill Activities in this category show Historic status. Please contact the regional spills coordinator if you need more information.

General Property: These areas involve liability exemptions, liability clarifications, etc. to clarify the legal status of the property. The same property may include other open or closed activities, e.g. Spills, LUST, etc.

No Remediation or Redevelopment Action Required: 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.

Designation of Business and Industrial Development

Areas for future industrial or commercial business development have been designated throughout Oconto County through this planning process. For more information regarding the locations designated for this type of development and the commercial and industrial development strategies laid out by the County see Chapter 3: Future Land Use Plan of *Volume I: County Plan*.

Oconto County

Economic Development Tables

Table 7.9: Median Household Income, Oconto County Municipalities, 1989, 1999, and 2012

Geographic Location	1989	1999	2012	Percent Change 1989 - 2012	Percent Change 1999 - 2012
Town of Abrams	\$30,313	\$51,250	\$64,737	113.6	26.3
Town of Bagley	\$20,938	\$36,875	\$50,833	142.8	37.9
Town of Brazeau	\$20,608	\$34,750	\$43,259	109.9	24.5
Town of Breed	\$20,750	\$36,103	\$38,281	84.5	6.0
Town of Chase	\$30,556	\$55,385	\$77,045	152.1	39.1
Town of Doty	\$12,273	\$32,188	\$37,083	202.2	15.2
Town of Gillett	\$25,852	\$41,053	\$51,050	97.5	24.4
Town of How	\$22,054	\$39,167	\$43,804	98.6	11.8
Town of Lakewood	\$19,500	\$33,869	\$32,404	66.2	-4.3
Town of Lena	\$24,600	\$45,556	\$55,288	124.7	21.4
Town of Little River	\$22,292	\$40,804	\$52,159	134.0	27.8
Town of Little Suamico	\$33,304	\$60,160	\$83,598	151.0	39.0
Town of Maple Valley	\$21,667	\$35,795	\$50,385	132.5	40.8
Town of Morgan	\$30,167	\$50,221	\$56,477	87.2	12.5
Town of Mountain	\$16,364	\$30,598	\$32,112	96.2	4.9
Town of Oconto	\$25,114	\$45,721	\$55,455	120.8	21.3
Town of Oconto Falls	\$27,625	\$49,531	\$54,226	96.3	9.5
Town of Pensaukee	\$30,625	\$48,098	\$62,050	102.6	29.0
Town of Riverview	\$16,833	\$32,550	\$39,063	132.1	20.0
Town of Spruce	\$22,986	\$35,658	\$44,773	94.8	25.6
Town of Stiles	\$26,900	\$43,882	\$47,263	75.7	7.7
Town of Townsend	\$15,134	\$28,456	\$44,028	190.9	54.7
Town of Underhill	\$18,359	\$31,905	\$48,125	162.1	50.8
Village of Lena	\$22,778	\$30,000	\$43,167	89.5	43.9
Village of Suring	\$19,559	\$26,023	\$32,266	65.0	24.0
City of Gillett	\$15,329	\$36,667	\$37,625	145.4	2.6
City of Oconto	\$18,816	\$34,589	\$37,325	98.4	7.9
City of Oconto Falls	\$21,500	\$34,884	\$39,144	82.1	12.2
Oconto County	\$22,927	\$41,201	\$50,763	121.4	23.2
State of Wisconsin	\$29,442	\$43,791	\$52,627	78.7	20.2

Source: U.S. Bureau of the Census, 1990 Census of Population and Housing, STF 3A Table P080A; U.S. Bureau of the Census, 2000, DP-3; Bay-Lake Regional Planning Commission, 2006; U.S. Census Bureau, 2008-2012 American Community Survey; and Oconto County Planning, 2014.

Table 7.10: Educational Attainment (Age 25 and Over), Oconto County Municipalities, 2012

Geographic Location	Less than 9th Grade		9th to 12th grade, no diploma		High school graduate (includes equivalency)		Some college, no degree		Associate degree		Bachelor's degree		Graduate or professional degree	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Town of Abrams	41	3.1	75	5.6	582	43.6	217	16.3	195	14.6	157	11.8	65	4.9
Town of Bagley	16	5.2	35	11.5	133	43.9	52	17.0	23	7.5	39	12.8	6	2.0
Town of Brazzeau	43	4.2	116	11.4	427	41.9	243	23.9	93	9.1	64	6.3	32	3.1
Town of Breed	50	10.0	33	6.6	257	51.5	84	16.8	42	8.4	14	2.8	19	3.8
Town of Chase	47	2.6	38	2.1	753	41.4	409	22.5	216	11.9	275	15.1	82	4.5
Town of Doty	5	2.3	14	6.3	101	45.7	50	22.6	26	11.8	12	5.4	13	5.9
Town of Gillett	10	1.4	90	12.5	376	52.4	112	15.6	67	9.3	43	6.0	20	2.8
Town of How	14	3.4	31	7.5	185	44.9	58	14.1	67	16.3	36	8.7	21	5.1
Town of Lakewood	14	1.9	52	7.2	313	43.6	194	27.0	57	7.9	58	8.1	30	4.2
Town of Lena	20	3.7	44	8.2	293	54.4	87	16.1	52	9.6	34	6.3	9	1.7
Town of Little River	22	3.1	63	8.8	344	47.8	114	15.8	94	13.1	60	8.3	23	3.2
Town of Little Suanico	168	0.5	182	5.4	1,213	36.0	916	27.2	374	11.1	515	15.3	152	4.5
Town of Maple Valley	26	5.3	42	8.4	238	48.5	101	20.6	43	8.8	34	6.9	8	1.6
Town of Morgan	47	6.6	26	3.6	312	43.7	124	17.4	89	12.5	88	12.3	278	3.9
Town of Mountain	35	5.7	67	10.4	273	42.4	112	17.4	75	11.6	38	5.9	42	6.5
Town of Oconto	43	4.5	79	8.4	414	43.8	191	20.2	89	9.4	86	9.1	44	4.7
Town of Oconto Falls	41	4.7	41	4.7	422	48.5	126	14.5	104	12.0	114	13.1	22	2.5
Town of Pensaukee	34	3.4	67	6.7	464	46.6	163	16.4	121	12.1	109	10.9	996	3.8
Town of Riverview	29	4.0	91	12.6	341	47.0	126	17.4	61	8.4	62	8.6	15	2.1
Town of Spruce	11	2.1	60	11.3	203	38.2	98	18.4	72	13.5	54	10.2	34	6.4
Town of Stiles	36	3.2	107	9.6	396	35.6	219	19.7	169	15.2	135	12.1	51	4.6
Town of Townsend	4	5.3	77	10.0	349	45.3	162	21.0	51	6.6	55	7.1	35	4.5
Town of Underhill	38	6.2	70	11.5	285	46.7	119	19.5	55	9.0	29	4.8	14	2.3
Village of Lena	12	3.7	30	9.3	151	46.7	67	20.7	28	8.7	28	8.7	7	2.2
Village of Suning	30	8.8	32	9.4	140	41.1	72	21.1	33	9.7	18	5.3	16	4.7
City of Gillett	56	5.6	109	11.0	476	47.9	162	16.3	83	8.4	81	8.1	27	2.7
City of Oconto	117	3.7	268	8.5	1,419	45.0	662	21.0	391	12.4	196	6.2	101	3.2
City of Oconto Falls	60	3.1	251	12.9	745	38.2	368	18.9	218	11.2	246	12.6	60	3.1
Oconto County	966	3.6	2,201	8.2	11,597	43.2	5,422	20.2	2,980	11.1	2,684	10.0	1,020	3.8
State of Wisconsin	133,010	3.5	243,219	6.4	1,257,896	33.1	809,462	21.3	357,227	9.4	665,051	17.5	338,226	8.9

Source: Bay-Lake Regional Planning Commission, 2006; U.S. Census Bureau, 2008-2012 American Community Survey; and Oconto County Planning, 2014.

Table 7.11: Employed Persons by Occupation, Oconto County Municipalities, 2012

Geographic Location	Management, professional, and related		Service		Sales and office		Farming, fishing, and forestry		Construction, extraction, and maintenance		Production, transportation, and material moving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Town of Abrams	336	31.0	164	15.1	258	23.8	6	0.6	32	3.0	191	17.6
Town of Bagley	49	26.8	8	4.4	45	24.6	17	9.3	33	18.0	31	16.9
Town of Brazeau	165	26.3	105	57.4	138	22.0	9	1.4	67	10.7	143	78.1
Town of Breed	57	18.6	38	12.4	54	17.6	19	6.2	44	14.3	95	30.9
Town of Chase	517	31.7	194	11.9	344	21.1	5	0.3	219	13.4	201	12.3
Town of Doty	24	29.6	18	22.2	24	29.6	0	0.0	4	4.9	11	13.6
Town of Gillett	111	21.1	65	12.4	84	16.0	33	6.3	79	15.0	71	13.5
Town of How	81	27.7	35	12.0	48	16.4	19	6.5	42	14.4	67	22.9
Town of Lakewood	59	17.5	90	26.7	90	26.7	7	2.1	42	12.5	49	14.5
Town of Lena	70	16.4	51	11.9	110	25.7	23	5.4	48	11.2	130	30.4
Town of Little River	133	27.7	56	11.6	102	21.2	8	1.7	44	9.1	61	12.7
Town of Little Suamico	1,038	38.1	26	1.0	489	17.9	36	1.3	327	12.0	330	12.1
Town of Maple Valley	61	17.9	40	11.8	65	19.1	44	12.9	34	10.0	96	28.2
Town of Morgan	143	27.6	74	14.3	96	18.5	25	4.8	58	11.2	66	12.7
Town of Mountain	78	26.4	34	11.5	51	17.3	3	1.0	28	9.5	101	34.2
Town of Oconto	173	26.7	97	15.0	105	16.2	9	1.4	85	13.1	178	27.5
Town of Oconto Falls	190	28.9	97	14.7	156	23.7	39	5.9	77	11.7	99	15.0
Town of Pensaukee	198	26.2	100	13.2	171	22.6	3	0.4	91	12.0	194	25.6
Town of Riverview	60	23.7	53	20.9	46	18.2	6	2.4	63	24.9	25	9.9
Town of Spruce	159	37.6	48	11.3	76	18.0	8	1.9	39	9.2	93	22.0
Town of Stiles	219	25.8	169	19.9	164	19.3	25	2.9	62	7.3	211	24.8
Town of Townsend	80	25.6	59	18.8	92	29.4	6	1.9	46	14.7	30	9.6
Town of Underhill	99	22.5	69	15.7	88	20.0	24	5.5	61	13.9	99	22.5
Village of Lena	60	23.6	37	14.6	53	20.9	0	0.0	26	10.2	78	30.7
Village of Suring	41	27.9	32	21.8	10	6.8	3	2.0	10	6.8	51	34.7
City of Gillett	126	18.5	121	17.7	179	26.2	63	9.2	57	8.4	136	19.9
City of Oconto	463	23.9	337	17.4	487	25.2	0	0.0	147	7.6	500	25.9
City of Oconto Falls	414	27.3	247	16.3	356	23.4	29	1.9	133	8.8	340	22.4
Oconto County	5,204	27.8	2,706	14.4	3,981	21.3	469	2.5	2,091	11.2	4,280	22.8
State of Wisconsin	961,679	33.7	50,069	1.8	683,794	23.9	29,102	1.0	222,069	7.8	290,511	10.2

CHAPTER 8: TRANSPORTATION

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INTRODUCTION

This chapter provides an inventory of the existing transportation facilities within Oconto County. This detailed transportation facility and services inventory includes descriptions of the various modal elements of the county's transportation system. Those elements include the county's highway system, transit systems (where applicable), elderly and disabled transportation services, intercity bus service, bicycle transportation, pedestrian transportation, waterborne, rail, air service, and commercial trucking. The detailed description of the highway and road system includes the functional classification of roads within the county, traffic counts, traffic flow capacity, crash history, access controls, and an evaluation of the current internal traffic circulation system.

This chapter also includes an inventory and analysis of applicable transportation plans, including county functional and jurisdictional studies, transportation corridor plans, rural transportation plans, state and local airport plans, state railroad plans, state, regional and local bicycle plans, state and local pedestrian plans, state and local transit plans, as well as any other special transportation plans that are applicable. In addition, this element of the plan will compare local plans to the existing transportation plans developed at the state, regional and county level. Attached as Appendix E of *Volume II: County Resources*, is a comprehensive list of federal and state programs that offer financial and/or technical assistance to the county and local communities to maintain, expand, or enhance their transportation systems.

Inventory of Transportation Facilities

The transportation facility inventory concluded Oconto County currently has jurisdiction over, and responsibility for, approximately 313 miles of highway. The county's jurisdictional responsibility relative to its highway system includes maintenance, repair and reconstruction of the highways as required. The primary funding source for maintaining, rehabilitating and reconstructing the county highway system is the state's disbursement of general transportation aids. Through this funding program, the state provides a payment to the county for costs associated with such activities as road reconstruction, filling potholes, snow removal, and marking pavement. The county's local transportation system is complimented by USH 41, USH 141, STH 22, STH 32 and STH 64; as well as an extensive county trunk highway system, providing access to urban areas located within Oconto County, to larger urban areas within the region and the state.

The transportation facility inventory also determined the county has access to rail; no public transit services operating within any county municipality; limited special transportation services for the county's elderly and disabled residents; private intercity bus service; local air service (Oconto County Airport); and, regional private and public passenger-air service at Austin Straubel International Airport in Green Bay.

Streets and Highways

There are several basic considerations useful in assessing the county's highway system. Those considerations include the functional classification of the existing roads, the annual average daily traffic and an evaluation of the system's capability to handle present and projected future traffic volumes. In addition, vehicle crash data is useful in determining problem areas relative to safety. This information can provide an indication of the improvements that may be needed during the planning period.

Wisconsin is unique in comparison to the other 49 states because it does not own or operate one single highway maintenance truck or piece of highway maintenance equipment. The Oconto County Highway Department is responsible for the maintenance of all State and US Highways located in the County.

Functional Class

The county's highways and roads, which make up the principal component of the transportation circulation system, may be divided into three categories, or functional classes, and include: 1) arterial highways, 2) collector roads; and, 3) local streets and roads. The three categories are determined by the function that the highway, street or road serves in relation to traffic patterns, land use, land access needs and traffic volumes. The highway system for the Oconto County, shown in **Map 8.1**, has been functionally classified based on criteria identified in Table 8.1.

Arterial Highways

The function of an arterial highway is to move traffic over medium to long distances, often between regions as well as between major economic centers, quickly, safely and efficiently. Arterial highways are further categorized into either "major" or "minor" arterials based on traffic volumes. The primary arterial highways located within Oconto County are USH 41, USH 141, STH 22, STH 32 and STH 64.

USH 41

USH 41 is classified as a principal arterial highway. In Wisconsin, USH 41 extends from I-94 southwest of the City of Kenosha to the USH 41 Bridge in the City of Marinette, and has an approximate overall length of 224 miles. In 1930 the last section of gravel surfaced USH 41, between the City of Oconto and the Oconto/Marinette County line, was paved. In 1967, USH 41 was realigned onto new highway bypassing the southern Oconto County communities of Brookside and Pensaukee, with the former route being turned back to local control and the portion through Pensaukee being designated as CTH SS. In 1972, the portion of USH 41/USH 141 from the northern end of the freeway near Suamico north of Green Bay to the USH 41/USH 141 "split" at Abrams was converted to four-lane, divided highway. In 1989 the portion of USH 41 from Peshtigo to the southern limits of Marinette was converted to four-lane, divided highway.

In 1991 and 1992, the interchange at the USH 41/USH 141 "split" at Abrams was constructed and the portion of USH 41 from the split northeasterly to the southern limits of the City of Oconto was converted to four-lane, divided expressway along its existing alignment.

Table 8.1: Functional Classification Criteria for Rural Roads and Highways

RURAL PRINCIPAL ARTERIALS				Supplemental Criteria	Mileage Percent of System Range
Population Service*	Basic Criteria			Supplemental Criteria	Mileage Percent of System Range
	Land Use Service	Spacing	Current ADT		
Connect places =50,000 with other places =50,000	Provide access to major recreation areas of the state.	Maximum: 30 miles between Principal Arterials	=6,000	None	2.0% to 4.0% statewide
Connect places 5,000 - 49,999 with places =50,000					

*A place is considered served by a principal arterial if the principal arterial either penetrates its boundary or comes within 10 miles of the center of the place and penetrating service is provided by a minor arterial.

RURAL MINOR ARTERIALS				Supplemental Criteria	Mileage Percent of System Range
Population Service*	Basic Criteria			Supplemental Criteria	Mileage Percent of System Range
	Land Use Service	Spacing	Current ADT		
Connect places 1,000 - 4,999 to places =50,000	Serve all traffic generating activities with an annual visitation of 300,000, if not served by a principal arterial.	Maximum: 30 miles between Arterials	=2,000	1. Alternate population connection 2. Major river crossing/ restrictive topography	4.0% to 8.0% statewide
Connect places 5,000 - 49,999 to other places 5,000 - 49,999					
Connect places 1,000 - 4,999 to places 5,000 - 49,999, or with principal arterials					

*A place is considered served by a minor arterial if the minor arterial either penetrates its boundary or comes within two miles of the center of the place and a major collector provides penetrating service.

Table 8.1: Functional Classification Criteria for Rural Roads and Highways (continued)

RURAL MAJOR COLLECTORS*		Basic Criteria		Supplemental Criteria	
Must meet any two of the criteria below or the Parenthetical Current ADT Alone	Current ADT***	Must meet two of the criteria below plus 90% of Current ADT	Mileage Percent of System Range		
Population Service**	Land Use Service	Spacing	Current ADT***		
Connect places 1,000 - 4,999 to other places 1,000 - 4,999	Land Use Service Index =16.	Maximum: 10 Miles between Major Collectors or Higher Function Routes	=1,000 (=4,000)	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchange with a freeway 5. Parallel to a principal arterial	5.0% to 18.0% countywide Most counties should be at 7.0% to 14.0%
Connect places 500 - 999 to places 5,000 - 49,999					
Connect places 500 - 999 to other places 500 - 999					
Connect places 100 - 499 to places =50,000					
Connect places 100 - 499 to places 5,000 - 49,999					
Connect places 100 - 499 to places 1,000 - 4,999					
Connect places 100 - 499 to places 500 - 999, or with higher function routes					

*Loop routes and stub ended routes less than five miles long and meeting the basic criteria for a major collector should be limited to a minor collector classification.

**A place is considered served by a major collector if the major collector comes within a half mile of the center of the place.

***The roadway or highway segment must be a minimum of a half mile long.

Table 8.1: Functional Classification Criteria for Rural Roads and Highways (continued)

RURAL MINOR COLLECTORS				Basic Criteria	Supplemental Criteria		
Must meet any two of the criteria below or the Parenthetical Current ADT Alone				Must meet two of the criteria below plus 90% of Current ADT			
Population Service*	Land Use Service (served if within one half mile of place)	Spacing	Current ADT**		Mileage Percent of System Range		
Connect places 100 - 999 to other places 100 - 999	Land Use Service Index =8	Maximum: 10 Miles between Minor Collectors or Higher Function Routes	=400 (=1,600)	1. Alternate population connection 2. Major river crossing 3. Restrictive topography 4. Interchange with a freeway 5. Parallel to a principal arterial	5.0% to 10.0% countywide		
Connect places 50 - 99 to places =50,000							
Connect places 50 - 99 to places 5,000 - 49,999							
Connect places 50 - 99 to places 1,000 - 4,999							
Connect places 50 - 99 to places 500 - 999							
Connect places 50 - 99 to places 100 - 499, or with higher function routes							
*A place is considered served by a minor collector if the minor collector comes within a half mile of the center of the place.				**The roadway or highway segment must be a minimum of a half mile long.			
RURAL LOCAL ROADS							
All public roads not classified as arterials or collectors.		65.0% to 75.0% countywide					
Source: Wisconsin Department of Transportation, <i>Functional Classification Criteria</i> , 2003; and Bay-Lake Regional Planning Commission, 2006.							

In 1999, the interchanges at CTH S (at the unincorporated community of Sobieski) and at the USH 41 & USH 141 "split" (at Abrams) were completed as part of the ongoing conversion of the portion of USH 41/USH 141 from Suamico (in Brown County) to the community of Abrams to full freeway standards. In 2000, the interchange at Brown Road was completed and USH 41/USH 141 from Suamico northerly to Abrams was now a fully-controlled access freeway facility.

Over the past decade USH 41 has been upgraded so that nearly 90 percent of the existing route is currently four-lane (or more) divided highway, with a total of 87 percent built to either freeway or expressway standards. The 21 mile section of USH 41 from just west of the City of Oconto to the City of Peshtigo is currently the only section of USH 41 in the state that remains a two-lane roadway.

The Wisconsin Department of Transportation (WisDOT) is continuing to take steps to expand USH 41 from Oconto to Peshtigo. In 1989, the roadway was identified as a backbone route in WisDOT's Corridors 2020 Plan, which meant the roadway received high priority status for improvement funding. In 2005, the final Environmental Impact for the USH 41 Expansion Project was completed and released to the public. In 2009, the City of Oconto bypass was complete. This along with the Peshtigo bypass provide travelers with uninterrupted travel with a highway constructed to a four-lane divided highway with access management that will allow for uninterrupted travel with a 65 mph speed limit.

This upgrade to USH 41 provides for two 12-foot driving lanes in each direction with 10-foot outside shoulders, of which eight feet will be paved, and six-foot inside shoulders, of which three feet will be paved. The standard width of the median will be 60 feet. Roundabouts also used to improve traffic flow in Oconto and Peshtigo.

The expansion of USH 41 from the City of Oconto to the City of Peshtigo will provide additional roadway capacity to serve existing and projected traffic volumes and improve the safety and efficiency of the roadway. Costs and environmental impacts will be kept at a minimum during this process.

USH 141

USH 141 debuted along with the rest of the US Highway system in late 1926 as an alternate route to USH 41 between Milwaukee and Green Bay. It replaced STH 17 from downtown Milwaukee to Manitowoc and took over the route of STH-16 from Manitowoc to downtown Green Bay. At that time, the highway running northerly from Abrams to Niagara was part of STH 57.

Before the construction of Interstate 43 between the cities of Milwaukee and Green Bay, USH 141 provided the primary north to south highway link between the two major urban areas along Lake Michigan. Presently, the southern terminus (beginning point) of USH 141 is the I-43 exit (Exist 178) near the Village of Bellevue, just southeast of downtown Green Bay. The highway's northern terminus in Wisconsin (ending point) is the Michigan state line on the Menominee River Bridge in the City of Niagara. The total length of USH 141, in Wisconsin, is slightly more than 102 miles.

Historically, USH 141 was to only provide an alternate route to USH 41 from Milwaukee to Green Bay, sticking close to the Lake Michigan shore while its "parent" route traveled inland via

Fond du Lac, Oshkosh and Appleton, however within a few years after being designated, it was extended northerly from Green Bay into Michigan at Iron Mountain, then northwesterly back into Wisconsin and once again into Michigan and northerly to a new terminus at USH 41 near Covington. Beginning in 1980 and 1981, the Milwaukee to Green Bay portion was replaced by I-43, leaving only the portion from Green Bay northerly.

For over three decades, the portion of USH 141 from Green Bay, through Oconto County has slowly been upgraded to freeway and expressway standards. Starting with the portion of USH 41/USH 141 from Velp Avenue on Green Bay's west side, northerly in the early-1970s to 2000 when the last segment of expressway just south of Abrams was converted to fully-controlled access freeway. Just a few years later, existing USH 141 from Abrams northerly began to be upgraded to expressway standards, first to just north of STH 22 (2002), then northerly past Lena on a new bypass (2005) with a further extension to the Village of Coleman and the Village of Pound in Marinette County, again with a bypass, opened to traffic in 2006 which was completed in 2007. No further expressway upgrades north of STH 64 are currently programmed, however.

STH 22

STH 22 originates in the City of Oconto and travels west into Shawano County and south through the central part of Wisconsin.

STH 32

STH 32 begins at the Illinois border and from there travels more than 325 miles north and slightly west through the state to its end at the Michigan state line at Land O' Lakes. The state highway was designated the "32nd Division Memorial Highway" commemorating the 32nd Division of Wisconsin and Michigan National Guard troops that were formed in 1917 and fought in WW I and WW II. STH 32 provides a somewhat direct link between the northern Wisconsin communities of Eagle River, Three Lakes, Crandon, Laona, Lakewood, Suring, Gillett and Pulaski to Green Bay and Milwaukee.

STH 64

STH 64 begins at the corner of Marinette Avenue and Hall Avenue in the City of Marinette. From there, STH 64 travels more than 275 miles west across the state, through Marinette and Oconto Counties, to its ending point at the Minnesota state line on the Saint Croix River Bridge between Houlton and Stillwater, Minnesota.

Initially, STH 64 ran only 18 miles from STH 38 (now USH 141) at the Village of Pound to STH 15 (now USH 41) in Marinette. By 1921, sources show that STH 64 was either complete or under construction all the way across the state to Stillwater, Minnesota. The highway was complete from the City of Marinette to the City of Antigo (although it did run along present CTH M from today's USH 141 into Suring), from Goodrich to Bloomer, and from STH 79 (now STH-128) east of Forest through to the Minnesota state line. In 1926, the highway was routed via its current corridor from Mountain to Pound, with the old routing east from Suring designated STH 157 for a time.

Collector Highways

The primary function of the county roads that are classified as "collectors" is to provide general "area to area" routes for local traffic. Collector roads take traffic from the local road system (and the land based activities supported by the local roads) and provide relatively fast and efficient

routes to arterial highways, farm markets, agricultural service centers and larger urban areas. With an overall socioeconomic trend that is characterized by the decline of small and medium agricultural concerns, and a significant increase in the number of rural single-family residential properties, collector streets generally serve the same function but with different trip purposes. Collector roads typically serve low to moderate vehicle volumes and medium trip lengths between commercial centers at moderate speeds. Collector roads serve to distribute traffic between local and arterial roads, between home and the work place, home and the place of worship, home and school and between the home and those places where business and commerce are conducted. Major county (collector) roads in Oconto County include:

CTH C

CTY C travels from Brown County (at STH 29) north through the Town of Chase, to Morgan to its end at CTH CC. CTH CC then travels east into the City of Oconto Falls.

CTH B

County Highway B travels from Oconto Falls north to Klondike and then east to the Village of Coleman in Marinette County. From Coleman, CTH B travels east intersecting with USH 41 just south of the City of Marinette.

CTH R

Intersects with STH 32 just west of the Village of Suring and travels west and south, eventually connecting to STH 22 just north of the City of Shawano into Shawano County.

CTH E

Intersects with USH 141 just north of the USH 141/USH 41 split and travels west, eventually connecting to STH 32 half way between Pulaski to the south and STH 22 to the north.

CTH A

County Highway A begins on the east side of the county crosses USH 41 and travels west to USH 141 and the Village of Lena. From Lena, the county highway travels west and north connecting to STH 32 just east of the Village of Suring.

CTH S

County Trunk Highway S begins in the City of Oconto and then travels south and west, crossing USH 41/USH 141 and ending at its intersection with STH 32 just north of the Village of Pulaski.

CTH T

CTH T begins at its intersection with STH 32 at Townsend, and from there, travels southwesterly crossing STH 64 and intersecting with CTH WW just east of STH 55 and White Lake.

CTH F

CTH F begins at its intersection with STH 32 at Lakewood, and from there, travels northeasterly through the National Forest, to its end at CTH C east of Silver Cliff in Marinette County.

CTH W

CTH W begins at its intersection with CTH T and CTH WW, east of White Lake, and from there travels northeast through the county through Mountain, and then to the Village of Crivitz in Marinette County.

Local Roads

The primary and most important function of local roads and streets is to provide direct access to adjacent lands. Local roads and streets are constructed to serve individual parcels of land and properties. They also tend to serve the ends of most trips within the urban and rural areas of the County. All roads not classified as arterial or collector facilities within the county are classified as local streets.

Local Mileage Certification

Oconto County and any local government that has increased or decreased the mileage of its roads or streets is required to file a certified plat with DOT by December 15th of each year. Local governments with no changes in total local road and street miles are required to file a certified plat or a certified statement that no mileage increases or decreases have occurred. In addition, the county and each of its communities are required to provide WisDOT with a numeric based evaluation of the pavement condition of each segment of road and street within their jurisdiction on a biannual basis.

Table 8.2 lists each community within Oconto County and the mileage of roads under their respective jurisdiction, by function.

Table 8.2: Road Miles by Functional Classification and Jurisdiction, Oconto County, 2006

Geographic Location	Gross Miles	County Miles	Local Road/Street Miles	County Jurisdiction			Local Jurisdiction		
				Arterial	Collector	Local	Arterial	Collector	Local
Town of Abrams	66.59	10.43	56.16		10.43				56.16
Town of Bagley	50.86	6.28	44.58		6.28			12.48	32.1
Town of Brazeau	122.89	13.87	109.02		13.37	0.5		9.26	99.76
Town of Breed	62.24	3.57	58.67		3.57			4	54.67
Town of Chase	75.03	14.85	60.18		14.85			1.9	58.28
Town of Doty	78.12	17.66	60.46		17.66			3.72	56.74
Town of Gillett	58.29	12.48	45.81		10.82	1.66			45.81
Town of How	51.72	8.22	43.5		8.22				43.5
Town of Lakewood	110.35	10.34	100.01		10.34			7.5	92.51
Town of Lena	55.18	8.35	46.83		8.35			0.5	46.33
Town of Little River	89.33	27.32	62.01		19.82	7.5		3.54	58.47
Town of Little Suamico	103.28	13.9	89.38		13.9			0.68	88.7
Town of Maple Valley	56.51	19.73	36.78		19.73				36.78
Town of Morgan	64.35	13.53	50.82		13.53				50.82
Town of Mountain	101.34	9.39	91.95		9.39			7.81	84.14
Town of Oconto	69.99	14.58	55.41		10.96	3.62		5.18	50.23
Town of Oconto Falls	64.7	15.08	49.62		15.08			2	47.62
Town of Pensaukee	74.53	17.25	57.28		17.25				57.28
Town of Riverview	105.17	6.77	98.4		6.77			4.69	93.71
Town of Spruce	68.74	26.51	42.23		26.51			1.5	40.73
Town of Stiles	55.11	4.76	50.35		4.76			3.89	46.46
Town of Townsend	100.83	4.84	95.99		4.84			1.7	94.29
Town of Underhill	62.59	24.74	37.85		24.37	0.37			37.85
Village of Lena	5.08	1.18	3.9		1.18				3.9
Village of Pulaski	0.1		0.1					0.1	
Village of Suring	6.9		6.9						6.9
City of Gillett	11.01	1.08	9.93		1.08			1.16	8.77
City of Oconto	43.62	5.31	38.31		5.31			5.4	32.91
City of Oconto Falls	23.74	1.37	22.37		1.37			2	20.37
Total Mileage	1,838.19	313.39			299.74			79.01	1,445.79

Source: Wisconsin Information System for Local Roads, 2006; and, Bay-Lake Regional Planning Commission, 2006.

Traffic Counts

An analysis of past and present traffic volumes is beneficial in determining the traffic conditions in a community. Traffic volumes are usually presented as an Annual Average Daily Traffic (AADT) figure, and are calculated for a particular intersection or a segment of road. In the past, the Wisconsin Department of Transportation, as part of its traffic count program, provided highway traffic volumes from selected highways and roads for all state communities on a rotating basis, providing those counts for a county and each of its communities once every three years. For Oconto County, traffic volumes were last counted in 2009. The average daily traffic volumes on principal and minor arterial highways are shown on **Map 8.2** and listed in Table 8.3. The daily traffic counts are taken for 48 hours, and are reported as a 24-hour average weekday count for a specific data collection period.

Beginning in 2006, principal arterials and minor arterials over 5,000 ADT will continue to be counted by WisDOT every three years. Minor arterials under 5,000 ADT and collectors over 5,000 ADT will be counted every 6 years. Collectors under 5,000 ADT are to be counted every 10 years. Special counts can be requested for highways where significant projects are planned.

Traffic on the USH 41/141 freeway has increased dramatically, particularly at the south and north bound on-ramps at CTH S and CTH D. At CTH D, annual average daily traffic has increased by as much as 70 percent on the north bound off-ramp, between 2001 and 2003; and by 60 percent on the south bound on-ramp. At CTH S, average traffic increases have been less pronounced with an increase of approximately 17 percent on the south bound on-ramp and 20 percent on the south bound off-ramp. Although, at some locations, traffic has fluctuated significantly between 2001 and 2009 and/or 2012 on the county's U.S. and State highways the total traffic volume in 2012 was still well within the highways capacity to handle the traffic. Steep increases and decreases are sometimes the result of local conditions at the time of the traffic volume count.

The following tables list the average annual daily traffic counts for USH 41, USH 141, STH 22, STH 32, STH 64, and various county highways.

Table 8.3: Annual Average Daily Traffic, Select Oconto County Highways, 2001 - 2012

US, State, County Highway Count Location	2001	2003	2006	2009	2012	Number Change 2001- 2009	Percent Change 2001 -2009	Number Change 2001 - 2012	Percent Change 2001 -2012
USH 41/USH 141									
Interchange at Brown Road									
south - on ramp	2,100	2,200	2,200	2,500	2,200	400	19.05	100	4.76
south off ramp	360	310	320	350	350	(10)	(2.78)	(10)	(2.78)
north on ramp	430	480	420	420	380	(10)	(2.33)	(50)	(11.63)
north off ramp	2,200	2,300	2,500	2,400	2,200	200	9.09	-	-
north of Brown Road	26,700	28,800	27,900	27,100	26,800	400	1.50	100	0.37
south of Brown Road	28,100	36,700	32,400	35,900	32,200	7,800	27.76	4,100	14.59
Interchange at CTH S									
south - on ramp	1,800	2,100	2,200	2,300	2,300	500	27.78	500	27.78
south off ramp	500	600	660	670	700	170	34.00	200	40.00
north on ramp	540	630	670	700	760	160	29.63	220	40.74
north off ramp	1,700	2,000	2,100	2,200	2,400	500	29.41	700	41.18
south of Lade Road	24,100	24,500	25,500	26,300	*	2,200	9.13	*	*
Interchange at CTH D									
south - on ramp	1,000	1,600	1,700	1,700	1,700	700	70.00	700	70.00
south off ramp	540	890	1,000	1,000	1,100	460	85.19	560	103.70
north on ramp	660	940	1,000	1,100	1,100	440	66.67	440	66.67
north off ramp	1,000	1,700	1,700	1,700	1,800	700	70.00	800	80.00
north of CTH D	23,100	24,200	24,200	25,700	23,100	2,600	11.26	-	-

**Data Unavailable*

Table 8.3: Annual Average Daily Traffic, Select Oconto County Highways, 2001 - 2012, continued

US, State, County Highway Count Location	2001	2003	2006	2009	2012	Number Change 2001 - 2009	Percent Change 2001 - 2009	Number Change 2001 - 2012	Percent Change 2001 - 2012
USH 41									
east of split	10,800	11,100	10,800	10,400	8,500	(400)	(3.70)	(2,300)	(21.30)
north bound	5,400	5,600	6,300	6,400	6,600	1,000	18.52	1,200	22.22
south bound	5,400	5,500	6,200	6,700	6,300	1,300	24.07	900	16.67
west of CTH J	11,200	10,300	10,800	10,400	8,500	(800)	(7.14)	(2,700)	(24.11)
east of CTH J	11,200	10,300	10,300	11,600	11,400	400	3.57	200	1.79
south of the City of Oconto	11,100	10,300	10,400	11,500	*	400	3.60	*	*
north of the City of Oconto	11,700	10,400	10,300	10,000	*	(1,700)	(14.53)	*	*
south of CTH A	12,000	10,500	10,200	9,100	*	(2,900)	(24.17)	*	*
north of CTH A	10,600	8,900	10,000	8,700	*	(1,900)	(17.92)	*	*
USH 141									
north of STH 22 Interchange	9,700	10,700	10,400	10,900	*	1,200	12.37	*	*
south of STH 22 Interchange	9,600	11,300	9,800	10,800	*	1,200	12.50	*	*
south - on ramp	1,200	1,200	1,200	1,200	1,300	-	-	100	8.33
south off ramp	770	720	840	1,100	990	330	42.86	220	28.57
north on ramp	770	820	890	1,000	1,000	230	29.87	230	29.87
north off ramp	1,200	1,100	1,200	1,200	1,100	-	-	(100)	(8.33)
south of CTH I				13,500	12,800	*	*	*	*
at CTH A (Lena) Interchange									
south - on ramp			940	1,100	990	*	*	*	*
south off ramp			360	460	380	*	*	*	*
north on ramp			370	520	410	*	*	*	*
north off ramp			1,100	1,200	1,100	*	*	*	*
south of Village of Lena	9,700	10,700	10,400	10,900	*	1,200	12.37	*	*
north of Village of Lena	8,000	7,600	9,400	9,800	*	1,800	22.50	*	*
Marinette County line	7,800	8,800	8,300	8,800	*	1,000	12.82	*	*

*Data Unavailable

Table 8.3: Annual Average Daily Traffic, Select Oconto County Highways, 2001 - 2012, continued

US, State, County Highway Count Location	2001	2003	2006	2009	2012	Number Change	Percent Change	Number Change	Percent Change
						2001 - 2009	2001 - 2009	2001 - 2012	2001 - 2012
STH 32									
south of STH 22	2,900	2,300	2,300	2,500	2,100	(400)	(13.79)	(800)	(27.59)
north of the City of Gillett	4,400	4,200	3,100	3,700	3,700	(700)	(15.91)	(700)	(15.91)
north of CTH H	3,600	3,000	2,900	2,500	*	(1,100)	(30.56)	*	*
south of intersection with STH 64	3,100	3,600	3,500	3,300	3,100	200	6.45	-	-
north of intersection with STH 64	4,500	4,000	4,100	5,400	*	900	20.00	*	*
south of intersection with STH 64 west	3,900	3,600	4,300	5,100	3,700	1,200	30.77	(200)	(5.13)
south of intersection with CTH F	3,800	4,000	4,000	4,900	3,600	1,100	28.95	(200)	(5.26)
at Lakewood	4,000	4,500	4,900	5,200	5,100	1,200	30.00	1,100	27.50
at Townsend	3,900	4,300	4,300	4,400	4,200	500	12.82	300	7.69
STH 22/STH 32									
west of STH 32	6,100	5,600	5,300	5,400	5,200	(700)	(11.48)	(900)	(14.75)
STH 22									
east of USH 141	3,300	4,000	4,000	4,200	*	900	27.27	*	*
west of USH 141	4,900	5,500	5,200	4,700	6,100	(200)	(4.08)	1,200	24.49
east of STH 32	4,300	4,200	4,300	4,000	*	(300)	(6.98)	*	*
west of City of Gillett	3,700	4,200	4,200	3,800	*	100	2.70	*	*
north of Shawano County line	3,200	3,200	2,700	3,000	3,200	(200)	(6.25)	-	-
STH 64									
south of White Potato Lake	1,100	1,200	1,200	1,600	*	500	45.45	*	*
east of intersection with STH 32	1,100	1,400	1,300	1,600	1,500	500	45.45	400	36.36
west of intersection with STH 32	1,200	1,300	1,300	1,400	1,300	200	16.67	100	8.33

**Data Unavailable*

Source: WisDOT, 2014; Bay-Lake Regional Planning Commission, 2006; and Oconto County Planning, 2014.

Table 8.3: Annual Average Daily Traffic, Select Oconto County Highways, 2001 - 2009, continued

US, State, County Highway Count Location	2001	2003	2006	2009	2012	Number Change 2001-2009	Percent Change 2001-2009
CTH C							
South of CTH S	1,200	1,400	1,400	1,100	*	(100)	(8.33)
North of CTH S	740	950	950	850	830 (2011)	110	14.86
South of CTH E	760	830	830	740	*	(20)	(2.63)
North of CTH E	900	970	970	910	*	10	1.11
CTH B							
south of CTH A	1,700	1,500	1,500	1,300	*	(400)	(23.53)
north of CTH A	2,000	1,700	1,500	1,500	*	(500)	(25.00)
south of CTH Z	990	990	790	790	*	(200)	(20.20)
east of CTH Z	1,000	1,000	1,000	1,100	*	100	10.00
CTH A							
west of USH 41	830	840	840	1,700	*	870	104.82
east of CTH J	980	980	1,800	1,800	*	820	83.67
east of Village of Lena	1,800	1,800	*	2,500	*	700	38.89
west of Village of Lena	1,700	1,600	1,600	*	*	*	*
west of USH 41	*	*	1,800	1,500	*	*	*
east of CTH B	1,000	900	900	900	*	(100)	(10.00)
CTH S							
east if USH 41/USH 141	1,500	1,500	1,500	2,600	*	1,100	73.33
west of USH 41/USH 141	3,000	3,100	3,100	3,700	*	700	23.33
east of CTH C	1,700	1,900	1,900	*	*	*	*
east of STH 32	990	1,200	1,200	1,300	*	310	31.31
CTH CC							
east of STH 32	730	760	760	600	*	(130)	(17.81)
east of CTH K	870	870	870	770	*	(100)	(11.49)
east of Oconto Falls city limits	1,300	1,500	1,500	1,300	*	-	-
CTH BB							
south of Gillett	1,000	1,200	1,200	780	*	(220)	(22.00)
east of STH 22/WashingtonStreet	2,500	2,400	2,400	1,900	*	(600)	(24.00)
CTH R							
south of CTH VV	2,800	2,900	3,000	3,300	*	500	17.86
south of CTH H	2,300	2,100	2,100	2,800	*	500	21.74
south of CTH M	2,200	2,000	2,000	2,500	*	300	13.64
CTH M							
west of STH 32	2,400	2,400	2,400	2,900	*	500	-
CTH Z							
south of STH 64	870	940	940	870	*	-	-
CTH T							
southwest of STH 32	1,300	1,400	1,400	1,500	*	200	15.38
north of STH 64	650	610	610	770	*	120	18.46
CTH F							
east of STH 32	1,400	1,200	1,200	2,300	*	900	64.29

Source: WisDOT, 2014; Bay-Lake Regional Planning Commission, 2006; and Oconto County Planning, 2014.

Traffic Flow Capacity

The streets and roads that serve the state, the region, and the county and local communities are designed and engineered to accommodate a maximum level of traffic as shown on Table 8.4. The

maximum total capacity of a two-lane, two-way highway under ideal conditions is 2,000 vehicles per hour in both lanes, as determined by the Peak Hourly Traffic (PHT), regardless of traffic distribution by direction. The maximum capacity values given in Table 8.7 should be considered as the average maximum volume on various types of streets under ideal conditions.

Table 8.4: Uninterrupted Traffic Flow Capacities Under Ideal Conditions

Highway Type	Capacity Peak Hourly Traffic
Multi-Lane and Divided Highways	2,000 vehicles per lane
Two-Lane, Two-Way Highways	2,000 vehicles both lanes
Three-Lane, Two-Way Highways	4,000 vehicles both lanes

Source: Highway Capacity Manual, Highway Research Board of the Division of Engineering and Industrial Research, 1985; Bay-Lake Regional Planning Commission, 2007.

As the comparison of the recorded average annual daily traffic, peak hourly traffic and the traffic flow capacities indicate, at present, there are no roads or streets within the county exceeding their design capacity.

Traffic Crashes

Vehicle crash reports are filed by the county and city police departments with the Wisconsin Department of Transportation. The reports provide the detail of the time, location, type and severity of the crash that has occurred. These reports are often excellent indicators of problems with road and street alignments, construction, and geometric design of the street. The number, location and severity of accidents can often indicate problem areas (in terms of traffic safety) which may be alleviated through a variety of measures including alterations in the street geometry, enlargement of the intersection turning radii, placement of more prominent signs, relocation of access drives and speed changes.

Level of Service

A highway's level of service is a measure of its capacity to serve the traffic demands placed on it. Traffic and roadway design factors such as average daily traffic volumes, peak hour volumes, truck percentages, number of driving lanes, lane widths, vertical grades, passing opportunities, and numbers of access points affect its level of service. Levels of service range from 'A' to 'F' in order of decreasing operational quality.

Level of Service 'A'

- Unrestricted free flow.
- Drivers virtually unaffected by others.
- High level of freedom to select speed and maneuver.
- Excellent level of driver comfort and convenience.

Level of Service 'B'

- Slightly restricted stable flow.
- Drivers aware of use by others.
- Slight restriction in speed and maneuvering.
- Good level of driver comfort and convenience.

Level of Service 'C'

- Moderately restricted stable flow.
- Driver operation completely affected by others.
- Moderate restriction in speed and maneuvering.
- Fair level of comfort and convenience.

Level of Service 'D'

- Heavily restricted flow.
- Driver operation completely-affected by others.
- Severe restriction in speed and maneuvering.
- Poor level of driver comfort and convenience.

Level of Service 'E'

- Unstable flow (approach greater than discharge flow)
- Slow speeds and traffic backups; some stoppage.
- Total restriction in vehicle maneuvering.
- High driver frustration.

Level of Service 'F'

- Forced flow (approach greater than discharge flow)
- Stop and go movements with long backups and delays.
- Forced vehicle maneuvers.
- Maximum driver frustration.

Levels of service 'A' and 'B' are desirable in both rural and urban areas, while levels 'D' through 'F' are considered poor. An intermediate level of service 'C' provides for stable operation, but traffic flow approaches a level at which small increases in traffic may cause a substantial deterioration in the level of service.

Access Controls

Access management is a means to maintain the safe and efficient movement of traffic along arterial highways by controlling the number and location of intersecting streets and driveways. State statutes allow counties, cities and villages (through an adopted ordinance) to control access on county highways that have traffic counts in excess of 1,000 vehicles daily.

Driveway Permits

Driveways to local roads and streets may also impair vehicle safety, if improperly sited and/or designed.

Wisconsin State Statutes allow communities to issue permits for all new driveways. This enables a community to prohibit driveways because they are considered unsafe due to location (at the base or top of hills, within a specified distance from an intersection, etc.). The permit process can also regulate the size and design of driveway.

Elderly and Disabled Transportation System

Elderly and disabled transportation systems refer to those programs providing rides through scheduled bus services, volunteer programs with private vehicles, etc. Current transportation services for elderly and disabled persons are provided through programs administered by the Oconto County Commission on Aging. Transportation is provided by wheelchair accessible buses, an eight-passenger van, and by volunteer drivers using personal vehicles. The Oconto County Department of Human Services also provides limited transportation service to the county's disabled population. This service is door-to-door is provided by appointment. Medical and nutritional trips are priority, followed by work, recreational and business trips.

The Oconto County Commission on Aging' advisory committee sets policy and oversees the special transportation services provided by the county. This important service is provided by paid and volunteer staff utilizing both publicly and privately-owned vehicles. The cost of the special transportation services is borne by state subsidy through the Wisconsin Department of Transportation's Section 85.21 (Special Transportation for the Elderly and Disabled Transportation) grant program, county funds (20 percent of the state grant), donations and fares collected from passengers.

Intercity Bus

In the past, nearly every small community in the state was connected by an intercity bus service, which traditionally served the elderly, those who could not drive, students, and those individuals unable to afford alternative forms of transportation. Following World War II, intercity bus systems helped to fill a void for "affordable transportation" created by the decline of passenger rail service. Unfortunately, intercity bus service suffered the same fate as passenger rail. As intercity bus ridership decreased, the number of intercity bus routes operating within the state also declined. At present, intercity bus routes tend to serve only the largest urban centers and those smaller urban areas adjacent to a route connecting two larger cities.

Greyhound Bus service through Oconto County was discontinued in early 2007. However, connections to Milwaukee, Chicago, Madison and Minneapolis can be made from the City of Green Bay.

Air Service

The air transportation facilities serving Oconto County businesses and residents include public as well as the private or semi-public airport facilities. At the regional level, the primary commercial-passenger and air freight service is provided by Austin Straubel International Airport, located near the City of Green Bay. The facility is owned and operated by Brown County. Austin Straubel International Airport is a full service regional connector being served by six passenger airlines serving seven destinations; Atlanta, Chicago, Cincinnati, Detroit, Las Vegas, Milwaukee and Minneapolis. An alternative choice for passenger service is Mitchell International Airport located in Milwaukee. It provides a wider range of continental and international destinations, as well as services and fares unavailable at Austin Straubel Airport.

In addition to Austin Straubel International Airport, Oconto County and the City of Oconto jointly own and operate a facility on approximately 240 acres located in the town of Oconto, immediately to the southwest of the City of Oconto. The J. Douglas Bake Memorial Airport is

classified as a general utility airport capable of handling single and larger twin engine aircraft and smaller corporate jets.

There are also several privately owned airstrips located within Oconto County providing general small craft services and/or recreational flights to the public. These small, private airport facilities offer minimal services, and are generally utilized by recreational fliers. Private facilities are generally characterized by short (2,000' to 3,000') turf covered runways accommodating small single engine and light twin engine aircraft.

Harbors and Marinas

There are two harbors servicing Oconto County. Both harbors are classified as commercial ports, although commercial activity is restricted to commercial fishing and limited launches of small recreational craft.

Oconto Harbor

Oconto Harbor is located at the mouth of Oconto River on the west shore of Green Bay of Lake Michigan. The harbor consists of an entrance channel, two parallel piers and a turning basin. The head of navigation is approximately 0.5 miles upstream of the river's mouth and does not extend to the city.

Harbor Channel

A dredged entrance channel leads from deep water in Green Bay of Lake Michigan between two piers to a turning basin inside the mouth of the river. The outer ends of the north and south piers are marked by lights. In July, 2003, the controlling depths were 12.1 at the entrance channel to the piers, then 7.6 feet (8.1 feet at mid channel) in the southeast section of the wide harbor channel between the piers and to the turning basin. The northwest section of the wide harbor channel had a controlling depth of 4.4 feet. The turning basin had depths of 4 to 7.8 feet in the northwest and southeast sections of the turning basin. A spoil bank, about 100 feet wide and extending about 500 feet into the center of the turning basin from the southwest end, has a minimum depth of 2.3 feet.

In 2005, the river was dredged to a depth of 6.0 to 6.5 feet. In 2013, the river was again dredged to return the river to the 2005 depths as well as expand the depth of the dredged areas to 8.5 feet and also increase the width of the existing channel.

Industrial and Commercial Uses

At present, the primary commercial use of the harbor is limited to commercial fishing uses. However, Cruisers Yachts, a manufacturer of 18 to 29 foot pleasure craft located just downstream of the Brazeau Avenue Bridge, uses the river for testing boats.

Recreational Uses

Marinas on the north side of the river provide transient berths, gasoline, water, electricity, sewage pump-out, limited marine supplies and launching ramps. A 15-ton hoist is available for hull and engine repairs.

There are approximately six public and private launch lanes and 50 dock spaces available to recreational boaters in the Breakwater Harbor accommodating boats up to 50 feet. All but two of the launch lanes and two of the dock spaces are upstream of the federal navigation project. Recreational boating facilities include two public parks, a public marina, a private marina and a

private yacht club. Breakwater Harbor is a public marina owned and operated by the City of Oconto. This marina has water, electricity, restrooms, boater showers, pavilion, pump out station, garbage pickup, and security cameras. The private marina facilities consist of the Oconto River Marine and the Oconto Yacht Club. The marina is located approximately 0.95 miles upstream from the river's mouth on the north bank of the Oconto River. The marina, which is approximately four acres in size, has a ramp, gas, electricity, slips, water, restrooms, pump out and full boat repair facilities. The Oconto Yacht Club is located approximately 1.33 miles upstream from the mouth of the river on the north bank of the Oconto River. The Oconto Yacht Club is about seven acres in size, and has one boat ramp and 50 dock spaces.

Pensaukee Harbor

The Pensaukee Harbor is classified as a recreational port by the Wisconsin Department of Transportation. It is located approximately four miles south of the Oconto Harbor on the west shore of the Green Bay of Lake Michigan at the mouth of the Pensaukee River.

A dredged entrance channel leads from deep water in the bay to the mouth of the Pensaukee River. A lighted buoy marks the dredged channel, and a light marks the pier ruins on the north side of the entrance channel. In July, 2002, the controlling depth was 2.7 feet along the south edge of the channel with a mid-channel depth ranging between 6.6 and 5.5 feet.

The only facilities available at Pensaukee Harbor are for fish tugs which moor on the south side of the river mouth.

Industrial and Commercial Uses

There are no water related industrial uses of the harbor. In 1982, commercial uses consisted of approximately 12 commercial fishing boats utilizing the Pensaukee Harbor compared to four vessels in 2003. All but one of the fishing docks is located on the south bank of the Pensaukee River within 2,200 feet of the mouth. There is a fish processing plant on the south bank at the river's mouth. There are no other commercial uses of the harbor.

Water Related Recreational Uses

There are two boat launching ramps located across the river from one another approximately 2,000 feet upstream from the river's mouth. The ramp on the north side is in a state of disrepair and is unusable. The second ramp has restrooms available to the public. There are no other public or private recreational boating facilities in the harbor.

Harbor Cove

Harbor Cove Marina is located on the Oconto River. In 2004, the marina offered 34 permanent slips and two transient slips. The marina can accommodate vessels up to 35 feet with a water depth of five feet. Facilities include electricity.

Breakwater Park and Harbor

The Breakwater Park and Harbor is a municipal marina operated by the City of Oconto Park and Recreation Department. The facility has 14 slips for permanent and transient guests. The marina offers amenities such as electrical and water hook-ups, fishing piers, a pavilion and public restrooms.

Oconto Yacht Club

This marina is located on the north shore of the Oconto River. The marina offers 37 permanent and transient slips to its guests.

Hi Seas Marina

This marina is located on the western shores of Green Bay of Lake Michigan in Oconto. The marina offers 80 permanent slips and 10 transient slips. It can accommodate vessels up to 45 feet with a water depth of five feet. Facilities include gasoline, diesel fuel and pump out services. Special features include a dock attendant, a travel lift, indoor storage, showers and restrooms. A service department is located on site.

Bicycle Transportation System

Bicycle transportation systems are comprised of designated and marked routes and marked on-road facilities or separated paths. At present there are no formal bicycle routes or bicycle transportation facilities (does not include recreational trails) located within Oconto County.

Railroads

In Oconto County, rail service is provided by the Canadian National Railroad Company (the CN) and the Escanaba-Lake Superior Railroad Company (the E&LS).

The Canadian National (CN) track originates approximately 105 miles north, in the City of Ishpeming, Michigan. The track traverses south from Ishpeming through the Upper Peninsula, through the Cities of Marinette and Peshtigo, and then to the City of Oconto. From Oconto the CN runs south to the City of Green Bay. CN is classified as a Class I railroad by the Wisconsin Department of Transportation generating over \$50 million dollars in annual revenues. CN is one of the larger operating rail lines in the State of Wisconsin. In 2000, over 730,000 carloads of freight were carried by rail in the state with about 70 percent of that freight inbound for Wisconsin businesses and corporations.

The Escanaba & Lake Superior Railroad (E&LS) is a privately owned (shortline) railroad company operating in Northeastern Wisconsin and the Upper Peninsula of Michigan. Under current ownership, the E&LS has expanded from the original core line of 65 miles purchased in 1978, to over 235 miles of operating railroad in 2005. E&LS is headquartered in Wells, Michigan with an additional office located in Green Bay, Wisconsin.

The Escanaba and Lake Superior was originally incorporated more than a century ago, in 1898. On March 10, 1980, the Escanaba and Lake Superior acquired the former Chicago – Milwaukee, Saint Paul & Pacific track from the City of Green Bay northward to Channing and Ontonogan, Michigan. The 208 mile mainline of the E&LS stretches from Ontonagon, Michigan on the shores of Lake Superior to Green Bay. In addition to the mainline, two key branches are the 6-mile Stiles Junction to the City of Oconto Falls line and the 21-mile Crivitz to Marinette, line. Other lines currently owned and operated by the E&LS include Channing to Republic, and Channing to Wells. The E&LS operates on trackage rights over the Canadian National Railroad from North Escanaba, Michigan to Pembine, Wisconsin. It also connects with Canadian National at Green Bay, North Escanaba, Pembine, and Iron Mountain.

Inventory and Analysis of Applicable Transportation Plans

The following section of this chapter presents information on existing state, regional, county, and local transportation related plans that may apply to Oconto County.

State Highway Plan

The *Wisconsin State Highway Plan 2020* responded to key issues facing the State Trunk Highway system relative to both immediate and future needs. The plan emphasized three areas: pavement and bridge preservation; traffic movement; and safety. With the cooperation of its transportation partners, WisDOT developed a 21-year strategic plan to address the highway system's current condition, analyze future uses, assess financial constraints, and outline strategies to address Wisconsin's infrastructure preservation, traffic movement, and safety needs.

The state plan does not identify or anticipate the need for future expansion of STH 22, STH 32 or STH 64 within this 20-year planning horizon. The plan, does however, identify methods for preserving capacity and improving safety on those segments of the system where expansion is not currently an identified option. The preservation and safety management tools identified by the plan, which are consistent with *Oconto County 20-Year Comprehensive Plan*, include corridor preservation, management of highway access, and where needed, specific geometric improvements such as widening lanes, straightening curves, adding turn lanes, adding travel lanes, and improving intersections.

State Airport Plan

The *Wisconsin State Airport System Plan 2020* (SASP 2020) provides a framework for the preservation and enhancement of public use airports to meet current and future aviation needs of Wisconsin. The plan determined the number, location and type of aviation facilities required to adequately serve the state's aviation needs over a 20-year planning period, 2000 through 2020. The plan defined the State Airport System and established the current and future role of each airport in the system. The Oconto County plan recognizes the role these airports play in the regional economy and the need to maintain them at as high level of service as is attainable.

State Railroad Plan

The *Wisconsin State Rail Plan 2020* (SRP 2020) provides the policy framework for the preservation and enhancement of the Wisconsin State Rail System. This will be a long-range plan with a horizon year of 2020.

The SRP 2020 will define the rail system's role in the movement of people and goods within the context of Wisconsin's multi-modal transportation system. The plan will assess the rail system's current condition and determine a course for the future considering performance objectives, needed improvements, and alternatives to fund them.

A rail crossing inventory and analysis is being conducted in conjunction with the State Rail Plan. Policies and programs relative to rail crossings will be developed.

State and Regional Bicycle Plans

In December of 1998, the *Wisconsin State Bicycle Transportation Plan* was published by the Wisconsin Department of Transportation, Division of Investment Management, Bureau of Planning. The plan was developed by the State Bicycle Plan Advisory Committee with written and technical assistance provided by the Bureau of Transportation Safety.

This plan has two primary goals: to increase levels of bicycling throughout Wisconsin, doubling the number of trips made by bicycles by the year 2010; and to reduce crashes involving bicyclists and motor vehicles by at least 10 percent by the year 2010. The State Bicycle Plan objectives are

structured around the 4-E's of transportation safety: engineering (and planning), education, enforcement, and encouragement. There are two *Engineering and Planning Objectives*: to plan and design new and improved transportation facilities to accommodate and encourage use by bicyclists; and to expand and improve a statewide network of safe and convenient routes for bicycle transportation and touring, including safe and convenient access to and through the state's urban areas. The *Education Objective* is to expand the range of education activities, such as driver licensing and training, bicycle safety education, traffic law enforcement, and provision of public service information to provide consistent safety messages and training to all roadway users. The *Enforcement Objective* is to improve enforcement of laws to prevent dangerous and illegal behavior by motorists and bicyclists. The *Encouragement Objective* is to encourage more trips by bicycles by promoting the acceptance and usefulness of this mode.

The recommendations of the State Bicycle Plan include intercity and urban/suburban improvement actions. Bicycle provisions for wide curb lanes, bike lanes, or paved shoulders should be made within urban areas. Where suitable accommodations for bicyclists now exist, new highway improvements will be planned to continue an acceptable level of service and safety for bicyclists. The State Bicycle Plan identifies general bicycling conditions within intercity areas. The two primary variables by which roads were classified for cycling were the volume of traffic and the paved width of roadway. The State Bicycle Plan indicates that "caution is advised" for bicycle travelers utilizing higher-volume roadways, such as major county trunk highways, due to the amount of traffic and the width of the road pavement. Lower-volume roadways are designated as "suitable for bicycling" based on the light traffic volumes and roadway width. Major arterial highways are classified as "not recommended for bicycling" because of relatively high traffic volumes, moderate to high truck traffic volumes, and narrow road shoulder width. The State's Bicycle Plan only assesses conditions on state highways and county trunk highways. The plan assumes that all local town roads are suitable for bicycling, basing that assumption on the low traffic volumes currently on average town roads. Serious consideration should be given to the accommodation of bicyclists when roadway projects are planned and designed.

The *Bicycle Transportation Facility Plan for the Bay-Lake Region*, like the state plan, also sought to identify new and improved transportation facilities to accommodate and encourage use by bicyclists, and to develop, over time, a region-wide network of safe and convenient routes for bicycle transportation and touring, including safe and convenient access to and through the region's urban communities and rural communities. The primary focus of the plan was to identify routes connecting all communities and destination points and to determine what improvements were needed to make those routes safer for bicycle travel.

Both plans recommend the development of bicycle facility plans for each county and local community to provide increased access and connections to the state and regional system.

State Pedestrian Plan

The *Wisconsin Pedestrian Policy Plan 2020* outlines statewide and local measures to increase walking and to promote pedestrian comfort and safety. The plan provides a policy framework addressing pedestrian issues and clarifies WisDOT's role in meeting pedestrian needs. It establishes actions and policies to better integrate pedestrian facilities into the transportation system over the next twenty years.

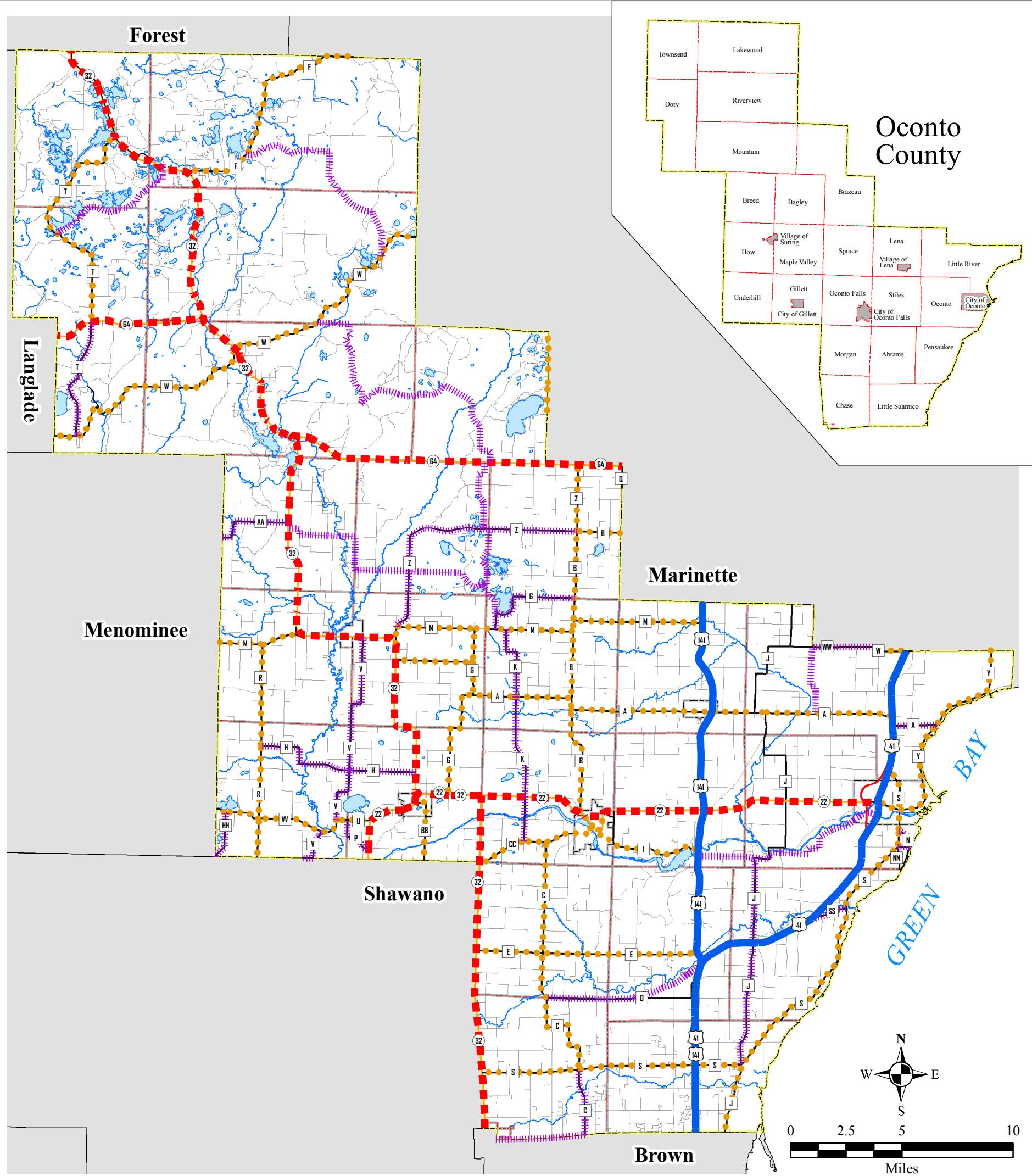
The state plan also provides recommendations to assist local officials in meeting their community's pedestrian transportation responsibilities. The plan outlines specific design guidance for local officials found in WisDOT's Facilities Development Manual (FDM); state funding for local pedestrian projects provided primarily through the General Transportation Assistance (GTA) Program; and safety and education program funding provided by WisDOT to local agencies.

FUNDING AND TECHNICAL ASSISTANCE PROGRAMS

A complete list of state and federal programs specific to the provision of transportation facilities and services is found in Appendix E of *Volume II: County Resources*.

Functional Classification

Oconto County, Wisconsin



Base Map Features

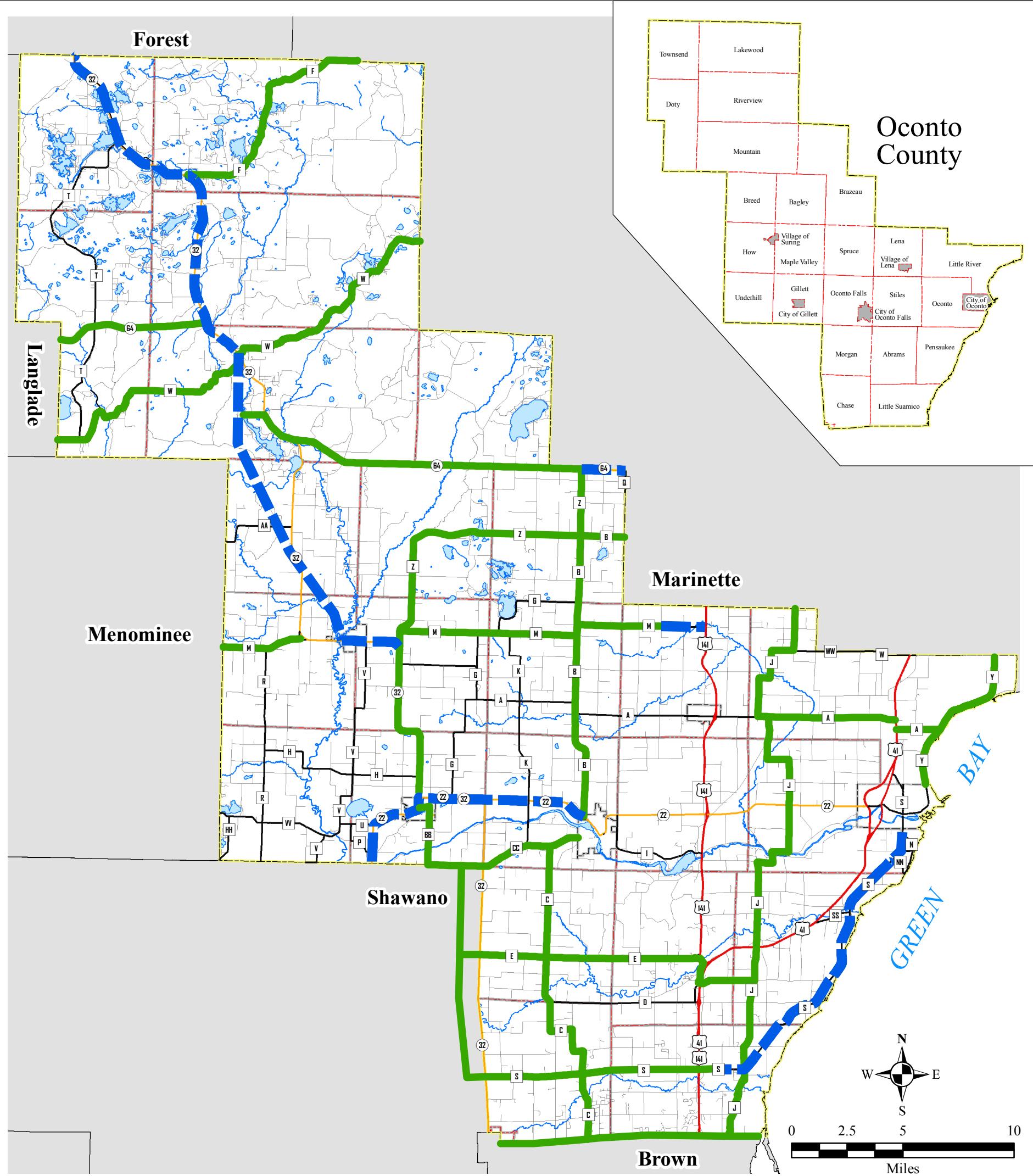
- ↗ Railroad
- ↖ Federal Highway
- ↘ State Highway
- ↖ County Highway
- ↘ Local Roads
- County Boundary
- City/Village Boundary
- Township Boundary
- Lakes and Rivers

Road Categories

- ↖ Principal Arterial
- ↖ Minor Arterial
- ↘ Major Collector
- ↖ Minor Collector

Recommended Bicycle Facilities

Oconto County, Wisconsin



Base Map Features

- ↗ Railroad
- ↗ Federal Highway
- ↗ State Highway
- ↗ County Highway
- ↗ Local Roads
- County Boundary
- City/Village Boundary
- Township Boundary
- Lakes and Rivers



Existing Bicycle Routes

Routes and route segments that provide direct or nearly direct access between major destination points and that currently provide suitable or moderately suitable accommodations for bicyclists.



Proposed Bicycle Routes

Routes and route segments that with improvement would provide the most efficient regional connectivity between major destination points but currently do not provide suitability accommodations for bicyclists.

CHAPTER 9: UTILITIES AND COMMUNITY FACILITIES

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INTRODUCTION

Public utilities and community facilities are the very infrastructure that supports a healthy, safe, and sustainable environment for individuals to live, work, and recreate. Utilities and community facilities include sanitary sewer service, storm water management, water supply, solid waste disposal, on-site wastewater treatment technologies, recycling facilities, parks, telecommunications facilities, power-generating plants and transmission lines, cemeteries, health care facilities, child care facilities and additional public services such as police, fire and rescue facilities, libraries, and schools. The availability, quality, and level of service are all contributing factors to the attractiveness of a community and surrounding areas. Individuals and businesses tend to locate in areas with supportive infrastructure in place that will enable them to be successful and comfortable.

This chapter inventories the location, use, and capacity of existing utilities and community facilities that serve Oconto County and its communities. An assessment of existing facilities is made to determine any current or future issues that may cause potential problems in meeting future development needs. A large portion of the information for this chapter was obtained via a survey that was completed by all communities participating in this multi-jurisdictional planning process and from Comprehensive Plans previously completed by the other communities.

ELECTED OFFICIALS AND COMMITTEES

Oconto County Board of Supervisors

Oconto County is governed by an elected Board of Supervisors that represent 31 Supervisory Districts. These districts cover the county's 23 towns, two villages, and three cities. Districts were formed so each Supervisor represents approximately 1,000 county residents. All Supervisors serve a two-year term. A chairperson and vice-chairperson are elected by the Supervisors to ensure agenda items are handled appropriately and efficiently. The County Board of Supervisors oversees the many services provided by Oconto County, some of which are mandated by the state or federal governments.

The Oconto County Board of Supervisors has the responsibility of:

- adopting and enforcing policies;
- establishing an operating budget;
- overseeing human resources;
- generating revenues through grants
- taxes, and fees;
- making land use decisions via zoning; and
- ensuring services meet defined levels and quality

Much of this work is done through committees comprised of Supervisors and supported by county staff.

Oconto County Committees

• Board of Adjustments	• Economic Development and Tourism
• Emergency Management	• Extension Education
• Finance/Insurance	• Forest, Parks and Recreation/Land Information Systems
• Health and Human Services	• Highway
• Land Conservation	• Law Enforcement/Judiciary

- Personnel and Wages
- Planning and Zoning
- Solid Waste
- MAR-OCO Landfill Committee
- Public Property
- Technology Services

Oconto County Administrative Coordinator

The Administrative Coordinator is the administrator and coordinator of countywide functions, providing services to the county board. County board committees, county committees, boards and commissions and to elected officials, appointed officials and department heads. Under the general supervision of the County Board and the Personnel and Wages Committee, the Administrative Coordinator is to coordinate and direct administrative functions of county government with the administrative authority of the statutory administrator, except that the County Board retains the power to appoint boards and commissions, and department heads, and also the power to remove department heads.

UTILITIES INVENTORY AND ANALYSIS

Electric Service

Integrys (Wisconsin Public Service), We Energies, and Oconto Electric Cooperative supply the majority of electric service to Oconto County communities and their residential, farm, commercial, and industrial customers.

The City of Oconto Falls purchases its electric supply from Wisconsin Public Power Inc. (WPPI). Oconto Falls Municipal Utilities then distributes that power to customers throughout the city. The Town of Breed utilizes a Rural Electrification Association.

Transmission Lines

Electricity is transmitted along a number of high voltage electric transmission lines owned and operated by the American Transmission Company (ATC). The major transmission lines within Oconto County include a 345-kV line that runs south from the Kingsford Hydroelectric Power Plant, owned by We Energies and located along the Menominee River, to the Morgan substation located just south of Oconto Falls. In addition, there are several 138 and 69-kV lines originating either from the Pulliam Power Plant in Green Bay or the Weston Power Plant located outside of Wausau. Both facilities are coal burning power plants owned by Wisconsin Public Service.

ATC is planning to construct a new 50-mile transmission line from the Morgan substation south of Oconto Falls to a new substation, called Werner West, in the New London area. This project is expected to be completed in the summer of 2009.

- **Map 9.1** illustrates the location of the primary transmission lines that distribute electricity to Oconto County residents.

Natural Gas

Natural gas is provided in areas of Oconto County by Integrys (Wisconsin Public Service) and We Energies. Service is provided to at least some, if not all, customers in the towns of Abrams, Bagley, Brazeau, Breed, Chase, Doty, How, Lakewood, Lena, Little River, Little Suamico, Maple Valley, Morgan, Mountain, Oconto, Pensaukee and Townsend as well as the villages of

Lena and Suring and the City of Oconto by Integrys (Wisconsin Public Service), while We Energies provides service to communities located in the southwest portion of the county.

Renewable Energy Sources

Renewable Energy Sources are sources that are essentially inexhaustible. Such sources include water, solar, wind and biomass (e.g., wood, waste, geothermal, wind, photovoltaic, and solar thermal energy). Currently, there is one anaerobic digester operating in Oconto County. It is the Suring Dairy Digester, LLC located at 9101 State Highway 32 northwest of the Village of Suring. The digester produces biogas for energy consumption on the farm with excess sold back onto the electrical grid.

Telecommunication Facilities

Telecommunications facilities include broadcasting, two-way radio, fixed point microwave, commercial satellite, and cellular radio. Local telephone service is available through a number of providers. There are a variety of service providers also offering cellular and long distance telephone services.

A number of companies provide dial-up internet service to portions of the county. Additional lines also transmit high-speed internet such as T1, DSL, and cable. However, these higher speed internet capabilities are only available to limited areas of the county. Various satellite services now offer access to high speed internet as well and are available to virtually all communities in the county.

Cable television is provided to the incorporated communities and in a limited number of towns. Dish and Direct TV offer satellite TV services to most areas of Oconto County.

Water Supply

Municipal water systems serve the majority of residential, commercial and industrial users in the cities of Gillett, Oconto, and Oconto Falls and the villages of Suring and Lena. These five municipal water systems are supplied from groundwater through community wells. Each community's water system has been deemed sufficient to meet the everyday needs of their residents and in those rare instances where large quantities of water are needed for a short period of time to combat a structural, grassland, or forest fire.



City of Oconto Falls Water Utility

Source: http://www.ci.ocontofalls.wi.us/new_page_2.htm

Even though the current municipal water systems are considered adequate to service a forecasted increase in new users, the need to expand and/or upgrade these systems will be dependant on the types and numbers of new residential units and businesses that will locate within the five communities over the next 20 years. Maintenance of wells, towers, pumps, lift stations, and piping will continue to be a priority as the current systems age and new development dictates a greater level of service and capacity.

The towns of Oconto County are not serviced by municipal water systems and rely on private individual or shared wells.

Sanitary Sewer Service

Waste Water Treatment Facilities

Wastewater in the urbanized and the more developed rural areas of Oconto County is treated by municipal wastewater treatment facilities. The sanitary sewer systems collect, pump, treat, and dispose of sewage discharged from residences, office buildings, and businesses. Municipal wastewater treatment systems encompass the following areas:

- City of Oconto and parts of neighboring towns (Oconto County-Green Bay West Shore Sewer Service Area)
- City of Gillett
- Village of Lena
- Village of Suring
- City of Oconto Falls

The present municipal wastewater treatment systems are considered adequate at this time and for the next few years based on population projections. However, each system will need ongoing maintenance and their capacities evaluated on an ongoing basis as new development occurs in and adjacent to these municipal systems.

Sewer Service Area's and Sanitary Sewer Districts

The sewer service area boundary is delineated using an area's 20-year population projection, an acceptable residential population density, and a forecast of non-residential users, all of which result in acreage demand and allocation. The service area excludes major areas found to be environmentally unsuitable for sewer development. Land included in the service area is deemed appropriate and economical to receive service; however, the governmental entities providing sewer service are not obligated to service specific areas. **Map 9.2** provides locations for each of the sanitary districts found in Oconto County.

The Oconto County-Green Bay West Shore SSA encompasses the City of Oconto and sanitary sewer districts within the towns of Little River, Oconto, Pensaukee, Abrams, and Little Suamico. The SSA covers 14,438.5 acres, or 22.56 square miles.

A **sewer service area** is an identified geographic area where sewer services will most appropriately be made available sometime in the future. Delineating a service boundary is a critical step in designing sewage collection and treatment facilities to serve existing and future residents of the Sewer Service Area (SSA) that are cost effective and environmentally sound.

A sanitary sewer district is an independent special district providing wastewater collection, treatment, and disposal services to residents and businesses in a pre-determined geographic area. A board oversees the district and establishes an annual operating budget. An annual charge is based on the number of users in the district, type of user (residential, commercial, industrial) geographic area, and type of treatment and disposal. Users are assessed a fee that is collected bi-annually by the district to cover costs associated with the facilities. In addition to the sanitary sewer districts within the Oconto County-Green Bay West Shore SSA, there are a number of other districts located in Oconto County. They are the:

- Krakow Sanitary District in Shawano County serves the northwest corner of the Town of Chase and southwest corner of the Town of Morgan
- Town of Lakewood Sanitary District

- Kelly Lake Sanitary District
- Brazeau Sanitary District

Private Onsite Wastewater Treatment Systems

A private onsite wastewater treatment system (POWTS) is a system employing biological and mechanical processes to remove the viruses, bacteria, and other contaminants contained in the wastewater discharged from a dwelling or public building. The most common POWTS are conventional seepage trenches and beds; seepage pits; mound systems; and at-grade systems. Holding tanks are also regulated as a POWTS.

Chapter SPS 383 health and safety code sets parameters, options, prohibitions, and limitations for the design of POWTS. The purpose of this chapter is to establish uniform standards and criteria for the design, installation, inspection and management of a private onsite wastewater treatment system, so it will protect public health by maintaining safe ground and surface waters. The code gives property owners the opportunity and flexibility to meet environmental performance standards with new treatment technologies where conventional systems were not previously permitted. As a result, communities should promote improved land use controls, orderly development patterns, and shared on-site systems to protect against the contamination of all water resources with the increase in use of these expanded systems.

Storm Sewer

The storm sewer system is designed to carry mainly rainfall runoff away from developed areas. The primary purpose of the storm sewer system is to drain excess rainfall to prevent flooding and provide drainage for roads and adjacent properties. These systems are not designed or meant to handle sewage.

Storm sewer systems consist of curbed streets, gutters, and a variety of storm pipelines with the inlets found at curbs or low-lying outdoor areas. Storm sewer systems are primarily found in the county's five incorporated communities. The towns of Abrams (5 percent) and Lakewood (25 percent) have storm sewer mechanisms in place to handle runoff in the more densely populated areas of their towns. The runoff is carried in underground pipes or open ditches and discharges (untreated) into streams or other surface water bodies. In the rural areas, stormwater primarily drains through a series of maintained ditches and culverts.

Although storm sewer systems are efficient at dispersing water to avoid flooding; traditionally they have not included treatment of runoff. From a regional standpoint, stormwater management in the Lake Michigan Basin has gained more attention with regards to water quality issues as more development creates greater runoff and increased susceptibility to water pollution.

Drainage Districts

Drainage districts are special purpose districts formed to drain land, primarily for agricultural purposes. Drainage districts control the flow of water in large areas of the state, and have a major impact on agriculture, land use, and the environment. Some districts have been in existence since the 1880s. Approximately one-third of Wisconsin farms depend upon constructed drains to remove excess water from their land. Most drains are operated by a single landowner or by voluntary cooperation among neighbors. However, approximately 10 percent of the drains are organized under Chapter 88, Wisconsin Statutes, as drainage districts that are governed by county drainage boards. A county drainage board oversees all the drainage districts within each county. The Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)

helps county drainage boards comply with state drainage laws, including ch. 88, Wis. Stats., and ch. ATCP 48, Wis. Adm. Code.

Because old drainage specifications were unclear, lost or destroyed, it has led to costly problems and legal disputes. New law changes require county drainage boards to update the specifications for all drainage districts. For each drainage district, a county drainage board must create a professional quality map set showing drainage district boundaries, drain alignments, drain cross-sections and drain grade profiles. Drainage boards must also develop plans to maintain drainage districts according to the updated specifications. County drainage boards must assess drainage district landowners in order to pay for drainage district specifications, maintenance plans and other costs. Drainage boards assess annual fees according to the benefits that landowners derive from the drainage district and the expense for maintaining the district.

There is one functioning drainage district in Oconto County. It is called the First Drainage District of Oconto County encompassing portions of the towns of Lena and Stiles and the entire Village of Lena. **Map 9.3** illustrates the First Drainage District. The county's second drainage district, the Pensaukee Drainage District, was formed in the 1920's, but it is currently a non-functioning district encompassing an area that does include portions of the towns of Chase and Morgan and the Village of Pulaski.

COMMUNITY FACILITIES INVENTORY AND ASSESSMENT

Administrative Facilities

Oconto County Administration Center and Courthouse

The county's administration center is located at 301 Washington Street in the City of Oconto. The facilities house the County Administrative Coordinator, County Clerk, Circuit Court Judge, Family Court, District Attorney, Child Support, Register in Probate, Corporation Counsel, and County Treasurer. The departments of Emergency Management, Finance, Forestry/Park/Recreation, Land Information, Maintenance, Planning/Zoning/Solid Waste, Register of Deeds, Sheriff, Technology Services, UW-Extension, Veteran Services, and Victim Witness are housed in this facility as well.



Oconto County Courthouse

Source: <http://www.wrdaonline.org/CountyPhotos/Oconto.jpg>

Other County Facilities

- Health and Human Services, departments of Community Services, Economic Support, Public Health, and Family Services, 501 Park Avenue, Oconto
- Health and Human Services, Department of Vocational Services, 222 West Park Street, Gillett
- Land Conservation, 111 Arbutus Avenue, City of Oconto
- Medical Examiner, 300 East Walnut Street, City of Green Bay
- Main Highway Facility, Tractor Street, City of Oconto

- Highway Department storage, maintenance, and repair facilities:
 - Town of Mountain at 14608 Old 32
 - Town of Maple Valley at 8835 CTH M and Z intersection
 - Town of Chase at 8413 Major Lane, Sobieski
- Oconto County Historical Society, 917 Park Avenue, City of Oconto
- Oconto County Satellite Office, Town of Townsend

Solid Waste Disposal & Recycling Facilities

Waste is collected and disposed of either by public works departments, through private haulers, or residents who transport their own refuse to designated areas. The waste is then hauled to the MAR-OCO Landfill located on N7785 Schaffer Road in the Town of Stephenson in Marinette County. The cities of Gillett, Oconto, and Oconto Falls and villages of Lena and Suring have weekly curb side pickup. The towns either have garbage collection centers, contract with a private hauler, or ask residents to dispose of their trash on their own.

Recycling is regulated under Chapter 287 of the Wisconsin Statutes. Enacted in 1990, the Recycling Law effectively made recycling a mandatory activity by prohibiting certain materials from being disposed in landfills within the state. The Recycling Law allows yard waste, waste oil, and waste tires to be burned with energy recovery. A Wisconsin community must have an approved recycling program in order to use a Wisconsin landfill for disposal of municipal solid waste generated in that community.

The individual municipalities within Oconto County are the responsible units for implementing recycling programs. The cities of Gillett, Oconto, and Oconto Falls have weekly curb side pickup of recyclables. The villages of Suring and Lena, as well as each of the towns, maintain a local recycling drop-off center for their residents. For a list of those sites by community with hours of operation, individuals may visit the Oconto County website.

Oconto County Solid Waste Department cooperatively works with all the municipalities to manage the recycling of state banned materials. Since 1995, the items listed below are banned from disposal in landfills and are collected at recycling centers. Some items may have a cost of disposal.

- Lead
- Newspapers
- Major appliances
- Aluminum cans
- Corrugated cardboard
- Yard waste
- Bi-metal
- Cans
- Plastic containers²
- Acid batteries
- Glass bottles and jars
- Magazines
- Used motor oil
- Steel (tin) cans
- Office paper
- Steel/aluminum
- Tires

²Currently only plastic food and beverage containers numbered one and two (#1 and #2) must be recycled. DNR has granted a waiver to collection requirements and disposal restrictions for plastic containers made of resins numbered three through seven (#3 - #7) and for polystyrene foam packaging.

Also, all businesses and institutions must recycle computers and fluorescent bulbs unless they are managed as a hazardous waste.

Road Maintenance

The Highway Department's responsibility is to maintain the County and State Trunk Highway System for safety and convenience of people traveling through Oconto County. The Highway Department provides general, winter, and roadside maintenance for State and County Trunk Highways and parks throughout the County. General maintenance includes: patching, crack filling and seal coating of pavement, shoulder maintenance and vegetation control, bridge and culvert maintenance, litter pickup, guard rail installation and maintenance, signing, pavement marking and traffic control. Winter maintenance includes: plowing State and County Trunk highways, shoveling of bridges, and application of salt to State and County Trunk highways and bridges. Roadside maintenance includes: cleaning and maintaining the buildings and grounds at each park facility. In addition, the department provides road construction, pavement resurfacing (black topping), bridge repair, culvert repair and installation and gravel crushing. All the above mentioned services are available to towns, cities, and villages upon request.

The Main Highway Facility is on Tractor Street in the City of Oconto with additional Highway Department storage, maintenance, and repair facilities located in the:

- Town of Mountain at 14608 Old 32
- Town of Maple Valley at 8835 CTH M and Z intersection
- Town of Chase at 8413 Major Lane, Sobieski

Most of the Oconto County communities have their own equipment and staff to perform grass cutting, basic road maintenance, and the upkeep of municipal equipment.

Facility Maintenance

The Oconto County Courthouse Maintenance Department, under the direction of the Maintenance Engineer, maintains the courthouse complex and grounds. Services of the department include: preventative maintenance, repair, remodeling, light construction, cleaning and grounds maintenance. In addition to these services, the engineer provides consultation to other department heads, elected officials, program directors and assists in coordinating major construction/renovation projects with architects and contractors. The Maintenance Department picks up all mail addressed to the Courthouse Complex and sorts it for the various departments.

Postal Services

Postal services for Oconto County residents and businesses are provided by U.S. Post Offices located in the following communities:

- Town of Abrams, 5886 Main Street
- Town of Krakow, N4805 State Highway 32
- Village of Coleman, 153 W. Main Street
- Village of Lena, 133 E. Railroad Street
- City of Oconto Falls, 145 N. Franklin Street
- Village of Pulaski, 306 St. Augustine Street
- Village of Pound, 151 W. Main Street
- Village of Suring, 507 Main Street
- City of Gillett, 205 E. Main Street
- City of Oconto, 141 Congress Street

- Town of Mountain, 14092 State Highway 324
- Town of Townsend, 17912 Front Street
- Town of Little Suamico, 1145 Grosse Road
- Town of Lakewood, 15283 State Highway 32
- Village of Cecil, 107 E. Freeborn Street

Private parcel carriers (UPS, DHL, FedEx, etc.) also serve the county.

Protective and Emergency Services

Law Enforcement and Protection

The Oconto County Sheriff's Department provides police protection to the towns and maintains mutual aid agreements with the cities of Oconto, Oconto Falls, and Gillett, and the villages of Lena and Suring. The Oconto County Sheriff's Department is located at 301 Washington Street in the City of Oconto. There is also a satellite office located in the Town of Townsend.

The Sheriff's Department has a total of 26 sworn deputies that cover the county, state, and town roadways in Oconto County. There are three marked patrol squads plus a Lieutenant scheduled 24 hours a day. One squad covers a north patrol zone, one the central zone, and the other a south zone. The department provides assistance to fire departments, rescue squads, and city and village police departments as needed. All Oconto County Sheriff's Department patrol squads carry automatic defibrillators.

Oconto County maintains a countywide emergency 911 system. The 911 calls are received at the county's central dispatch center located at 301 Washington Street in the City of Oconto.

Each of the incorporated communities maintains their own Police Departments which are listed below:

- City of Oconto Police Department located in the City Hall at 1210 Main Street
- City of Gillett Police Department located in the City Hall at 150 N. McKenzie Avenue.
- City of Oconto Falls Police Department located in the City Hall at 500 N. Chestnut Avenue.
- Village of Suring Police Department located in the Village Hall at 604 E. Main Street.
- Village of Lena Police Department located in the Village Hall at 117 E. Main Street.

Oconto County Jail

The Oconto County jail was built in 1969. It has a maximum capacity of 60 adult inmates and 12 juvenile male inmates. Male and female adult inmates are housed at the jail. Female juveniles are housed at outside detention centers. The jail has two maximum security cell blocks, one minimum security dorm, and one huber dorm. Oconto County contracts with neighboring counties to utilize their jails to alleviate inmate overcrowding.

Fire Station/Protection

Fire protection for Oconto County residents is provided by a number of local fire departments listed below. Service areas for each of these departments are illustrated on **Map 9.4**.

- Town of Abrams Fire Department located at 5844 Oak Orchard, Abrams
- Town of Brazeau Fire Department located at 10892 Parkway Road, Brazeau

- Town of Doty Fire and Rescue Department located at 1684 Star Lake Road, Doty
- Town of Gillett Fire Department located on Gillett Town Hall Road and State Highway 32
- Town of Lakewood Fire Department located on North Road, Lakewood
- Town of Little River Fire Department located at County Highway A, Little River
- Town of Little Suamico Fire Department located at 5974 County Road S, Little Suamico
- Green Valley – Morgan Fire Department located at 5746 North Oak Avenue, Green Valley
- Town of Mountain Fire Department located at 13824 State Highway 32/64
- Pulaski Tri-County Volunteer Fire Department, Inc. located at 600 East Glenbrook Drive, Pulaski
- Town of Townsend Fire Department located at 17937 Front Street, Townsend
- Town of Riverview Fire Department located at 15471 State Highway 32, Mountain
- Village of Lena Fire Department located at 220 Second Street, Lena
- Village of Suring Fire Department located at 210 North Heasley Street, Suring
- City of Gillett Fire Department located on Park Street, Gillett
- City of Oconto Falls Fire Department located at 188 Cherry Avenue, Oconto Falls
- City of Oconto Fire Department located at 1210 Main Street, Oconto



Each department maintains mutual aid agreements with neighboring departments to ensure there is adequate response and coverage during large fire events.

Each of the departments looks to continually upgrade equipment such as radios, hoses, turn-out gear, imaging devices, and pagers to meet state standards. A few departments are seeking to purchase new trucks and replace older lesser capacity vehicles. The towns of Brazeau, Doty, and Lakewood are planning to build new fire stations while the City of Oconto Falls and the Town of Doty are seeking to expand existing facilities to better accommodate department functions.

Insurance Service Office (ISO) - Public Protection Classification (PPC)

The adequacy of fire protection within a fire protection district is evaluated by the Insurance Service Office (ISO). ISO collects information on municipal fire-protection efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data using their Fire Suppression Rating Schedule (FSRS) and assigns a Public Protection Classification (PPC) - a number from 1 to 10. Class 1 represents the best protection, and Class 10 indicates that the area's fire protection does not meet ISO's minimum criteria. Communities PPC numbers in Oconto County range from Class 4 to Class 10.

A community's PPC depends on the analysis of several components of fire protection including:

- fire alarm and communication systems including telephone systems, telephone lines, staffing, and dispatching systems;
- the fire department including equipment, staffing, training, and geographic distribution of fire companies; and
- the water supply system including the condition and maintenance of hydrants, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires.

In addition, according to the National Fire and Police Association, fire protection should meet the following standards:

A **high density residential**³ community should have a fulltime staff and chief and an average response time of 4 minutes.

A **medium density residential**⁴ community should have a staff that is partly on-call and an average response time of 6 minutes.

A **low density residential**⁵ community should have all on-call staff, but does not need fulltime staff and an average response time of 8 minutes.

ISO helps communities evaluate their public fire-protection services. The program provides an objective, countrywide standard that helps fire departments in planning and budgeting for facilities, equipment, and training. Throughout the United States, insurers of homes and business property use ISO's Public Protection Classifications in calculating premiums.

EMS/Ambulance

All areas of the county are covered by the following EMS/ambulance service providers in or adjacent to Oconto County. **Map 9.5** displays the service areas of each of the EMS/ambulance providers covering Oconto County. The emergency services are provided by a combination of paid volunteer and fulltime staff.

- Oconto Falls Area Ambulance Service located at 831 S. Main Street, Oconto Falls.
- Town of Brazeau Rescue Squad located at 12071 Parkway Road, Pound.
- Gillett Area Ambulance Service located on Park Street with a squad in the Village of Suring.
- NEW Para-Medic Rescue located at 235 W. Pulaski Street, Pulaski.
- Mountain Ambulance Service located on State Highway 32, Mountain.
- Lakewood/Townsend Ambulance Service located at 16003 Village View Road, Townsend.
- Coleman Area Rescue located on County Road CP, Coleman.
- County Rescue Service located at 1765 Allouez Avenue, Green Bay.
- Village of Suring Rescue located at North Heasley Street, Suring

³ High density residential development is defined as residential development with 3 or more units per acre.

⁴ Medium density development with 1 to 2.99 units per acre.

⁵ Low density development having less than one unit per acre.

The EMS/ambulance departments are continually upgrading equipment, squads, and training for the fire and first responders. The Town of Brazeau is looking to build a new facility to house the fire and ambulance departments. The City of Oconto Falls is adding living quarters onto the ambulance building.

Oconto County Emergency Management

Oconto County Emergency Management directs and supports response agencies and departments during the event of a disaster or emergency. Emergency Management provides organized analysis, planning, decision making and assignment of available resources to mitigate (lessen the effect of or prevent), prepare for, respond to and recover from the effects of all hazards.

Education

Five public school districts are located in Oconto County as illustrated on **Map 9.6**. The locations of buildings for each district are listed below:

Oconto Unified School District includes the:

- Oconto Elementary School (grades EC-4) located at 810 Scherer Road, Oconto
- Oconto Middle School (grades 5-8) located at 400 Michigan Avenue, Oconto
- Oconto High School (grades 9-12) located at 1717 Superior Avenue, Oconto



Oconto Elementary School

Source: <http://www.oconto.k12.wi.us/education/school/school.php?sectionid=4>

Oconto Falls School District includes the:

- Abrams Elementary School (grades EC-5) located at 300 Elm Street, Abrams
- Oconto Falls Elementary School (grades EC-5) located at 415 E. Maria Volk Drive, Oconto Falls
- Washington Middle School (grades 6-8) located at 102 S. Washington Street, Oconto Falls
- Oconto Falls High School (grades 9-12) located at 210 N. Farm Road, Oconto Falls
- Spruce Charter School (grades 1-5) located at 7904 County A West, Lena

Gillett School District is located at 208 W. Main Street, Gillett

Suring Public School District is located at 411 E. Algoma Street, Suring

Lena Public School District is located at 304 E. Main Street, Lena

In addition to the county's five public schools, there are several surrounding districts that serve residents of Oconto County. The **Pulaski School District** serves portions of the towns of Chase, Morgan, and Little Suamico. The **Wabeno School District** covers all of the towns of Lakewood and Townsend and parts of the towns of Doty and Riverview. The **Coleman School District** serves a section of the Town of Brazeau. The **Peshtigo School District** encompasses the northern area of the Town of Little River.

Several private schools educate the residents of Oconto County. These schools are:

- Saint Anthony Grade School located at 253 N. Franklin Street, Oconto Falls
- St. John Lutheran Grade School located at 8905 St. John Road, Suring
- Maranatha Seventh-day Adventist School, 510 McCarthy Road, Lena
- Assumption BVM Elementary School, 109 E Pulaski Street, Pulaski

Children also have the option to be home schooled or utilize the open enrollment program to receive education in public school districts located outside of Oconto County. There is an alternative learning center in the basement of the Senior Center.

Oconto County is part of the Northeast Wisconsin Technical College (NWTC) District of The Wisconsin Technical College System. The main NWTC campus is located in Green Bay, while a Community and Regional Learning Center is located in the City of Oconto Falls at 649 E. Jackson Street.

There are a number of four-year universities and two-year technical colleges serving Oconto County. They include the UW-Green Bay, St. Norbert College, Rasmussen College, University of Wisconsin Center-Marinette County (City of Marinette) and the College of Menominee Nation in Keshena.

Libraries

Six public libraries are located within Oconto County. They are jointly supported by the local communities and Oconto County. Each library is a member of the eight county Nicolet Federated Library System (NFLS). NFLS provides member libraries with interlibrary loan, reference referral, open access to all member libraries, and other patron services as well as staff continuing education and training, access to the internet, professional consultation, and other technical services.

- Farnsworth Public Library, 715 Main Street, City of Oconto
- Gillett Public Library, 200 E. Main Street, City of Gillett
- Lakes Country Public Library, 15325 State Highway 32, Town of Lakewood
- Lena Public Library, 200 Main Street, Village of Lena
- Oconto Falls Public Library, 251 N. Main Street, City of Oconto Falls
- Suring Public Library, 604 E. Main Street, Village of Suring

Health Care

Hospitals

There are two hospitals in Oconto County. HSHS St. Clare Memorial Hospital is full service medical facility located in the City of Oconto Falls. HSHS St. Clare Memorial offers 24-hour emergency services and a variety of traditional and specialty services. HSHS St. Clare Memorial has clinics in Gillett, Oconto, Oconto Falls, Lena, Suring, and Mountain. The Bellin Health Oconto Hospital and Clinic is located in the City of Oconto. It is an 11,000 square-foot facility with a 4-bed inpatient unit, 24-hour Level IV Emergency Department with x-ray, laboratory, and observation services.

Residents of the county also utilize these nearby hospitals:

- Aurora BayCare Medical Center in Green Bay;
- Bellin Memorial Hospital in Green Bay;
- St. Mary's Hospital Medical Center in Green Bay;
- St. Vincent's Hospital in Green Bay;
- Langlade Memorial Hospital in Antigo;
- Shawano Medical Center in Shawano; and
- Bay Area Medical Center in Marinette.

In addition to the hospitals and clinics, there are a number of specialized healthcare facilities found throughout the county providing such services as chiropractic, dental, orthopedic, and vision care.

Child Care Facilities

Within Oconto County, there are 26 licensed/certified childcare facilities most of which are privately owned. Fifteen of the facilities are classified as family (up to 8 enrolled) and eleven are classified as group (9 or more enrolled). They operate full-time, first shift (average 6 A.M. to 6 P.M.) hours. Information detailing each childcare facility's classification, hours, days of operation, and capacity is available through the Wisconsin Department of Health and Family Services. Residents also utilize in-home/private unlicensed childcare facilities.

Adult Care Facilities

Oconto County has several adult care facilities that include nursing homes, Adult Family Homes (AFH), Community Based Residential Facilities (CBRF), and assisted rental housing.

An April 2007 Wisconsin Department of Health and Family Services inventory indicated Oconto County had two AFHs, six CBRFs, and four nursing homes. In addition, there is one residential care complex and one adult day care facility.

Oconto County has experienced an increasing median age (from 30.8 years in 1970 to 38.8 years in 2000 and to 43.7 years in 2010), resulting in adjustments in planning for housing stock, health care, etc. The demand for elderly housing/adult care facilities will become increasingly more important in the county over time.

Adult Family Homes (AFHs) are facilities where three or four adults who are not related to the operator reside and receive care, treatment or services that are above the level of room and board and that may include up to seven hours per week of nursing care per resident.

Community Based Residential Facilities (CBRFs) are facilities where five or more unrelated people live together in a community setting. Services provided include room and board, supervision, support services, and may include up to three hours of nursing care per week.

A **nursing home** is a place of residence for people who require constant medical care, at a lower level than a hospital. Usually the residents are elderly, but the term can apply to places of care for the mentally or physically ill.

Cemeteries

There are a combined total of 56 cemeteries located within Oconto County.

- City of Oconto (3)
- Town of Brazeau (3)
- Town of Breed (1)
- Town of Oconto (3)
- Town of Underhill (3)
- Town of Townsend (1)
- Town of Gillett (5)
- Town of How (7)
- Town of Lakewood (2)
- Town of Morgan (1)
- Town of Stiles (2)
- City of Gillett (1)
- Town of Mountain (2)
- Town of Pensaukee (1)
- Town of Chase (3)
- Town of Little River (3)
- Town of Maple Valley (4)
- Town of Little Suamico (2)
- Town of Spruce (5)
- Town of Lena (2)
- Town of Oconto Falls (2)

Some smaller family cemeteries can be difficult to identify and may not be included in this inventory. In addition, cemeteries in communities adjacent to Oconto County are also utilized for burials.

Parks and Recreation

The Oconto County Forestry and Parks Department operates six parks, nine boat landings; cooperates with local groups to maintain two cross country ski clubs/trails, a bridal trail, six fishing facilities for those physically challenged; maintains eight dams; and contracts for the maintenance of 420 miles of snowmobile and 64 miles of ATV trails. The following is an inventory of Oconto County owned outdoor park/recreational sites. **Map 9.7** identifies the location of each park within the county by the number listed below. A detailed description of the parks can be found on the Oconto County website or by contacting the Oconto County Tourism Office.

County-Owned Facilities

- D. E. Hall County Park
- Patzer Park
- Riverside County Park
- Chute Pond
- Coulliardville Park
- Anderson Lake Boat Landing
- Chute Pond East Shore Landing
- North River Road Access
- Grange County Park
- Pioneer Park
- Wheeler Lake Picnic Ground
- North Bay Shore Recreation Park
- Machickanee Flowage Access
- Iron Bridge Access
- Chute Pond South Shore Landing

Other Recreation Facilities

Local Parks

These county facilities are complemented by local municipal owned and operated parks and recreation systems. In addition, these recreational outlets are supplemented by a number of federal and state owned facilities as well as some privately held and maintained sites. With over 36 parks and campgrounds located throughout the county, residents can enjoy have access to and enjoy a wide range of recreational opportunities close to home.

Marinas

There are four marinas located in the County:

- Breakwater Harbor and Park is located in the City of Oconto.
- Oconto Yacht Club is located in the City of Oconto.
- Harbor Cove is located in the City of Oconto.
- Hi Seas Marina is located in the City of Oconto.

Golf Courses

There are seven golf courses located throughout Oconto County. They are:

- Irish Greens Golf Club, 2946 Logtown Road, City of Oconto (9 holes)
- Oconto Golf Club, 532 Jefferson St, City of Oconto (9 holes)
- Black Bear Trail Golf Course, 501 Golf Course Road, Village of Suring (18 holes)
- Pine Acres Golf Course, 3235 County Road EE, Town of Abrams (9 holes)
- McCauslin brook Golf Course, 17067 Club House Road, Town of Lakewood (18 holes)
- Parkway Golf Course, 9004 Mulligan Way, Town of Brazeau (18 holes)
- River Island Golf Course, River Island Drive, City of Oconto Falls (9 holes)
- Sandalwood County Club, 2954 Sandalwood Road, Town of Abrams (18 holes)



Oconto Golf Club

Source: Bay-Lake Regional Planning Commission, 2006

Trails

Table 9.1 provides further information on each of the trail types described in the text below.

Mountain Biking/Touring

There are four established mountain bike trails in Oconto County, totaling 98 miles. Trails range from easy gravel surface to advanced. Oconto County has a network of 2,073 miles of county trunk and town roads that are more “bicycle friendly”.

Snowmobiling

Nine snowmobile clubs in Oconto County, listed below, maintain approximately 420 miles of trails.

- Bag & Bra Joyriders Snowmobile Club Inc.
- Chase Sno Chasers Snowmobile Club Inc.
- Chute Pond Snowmobile Club Inc.
- Gillett Area Sno Riders Inc.
- Oconto Falls Sno Jokers
- Iron Snowshoe Snowmobile Club, Inc.
- Lena Snowdrifters Snowmobile Club, Inc.
- Paul Bunyan Riders Snowmobile Club Inc.
- Red Arrow Snowmobile Club, Inc.
- Snow Jokers Snowmobile Club, Inc.

Cross-County Skiing

Four cross-country ski trail systems, covering over 37 miles, are located in the Nicolet National Forest and throughout Oconto County. This includes the Jones Springs Area Trail, the Lakewood Cross-Country Ski Trail, the Machikanee County Forest System, and the Marantha Ski Trail. Many of these trails serve as multi-use trails depending on the season.

Horse Riding

Three major trails in Oconto County provide opportunities for horseback riding. The Nicolet State Recreation Trail covers the largest distance providing 32 miles of trail length, while the Oconto River State and the Outback Riders trails cover 10 and eight miles respectively. All of these trails are multi-use systems.

Hiking

There are 11 trails located throughout Oconto County that can be utilized for hiking.

ATVing

Oconto County offers over 100 miles of ATV trails in county forests and on town roads. ATV use is restricted to this trail system and on private lands with the owner's permission. ATV trails are open May 1 — October 31. Dirt bikes and off road vehicles are not allowed on the trails. Many of these ATV trails are maintained by local ATV clubs which are listed below:

- Gillett Rail Runners ATV Club
- Red Arrow Snowmobile/ATV Club
- Dusty Trails ATV Club
- Crooked Trails ATV Club

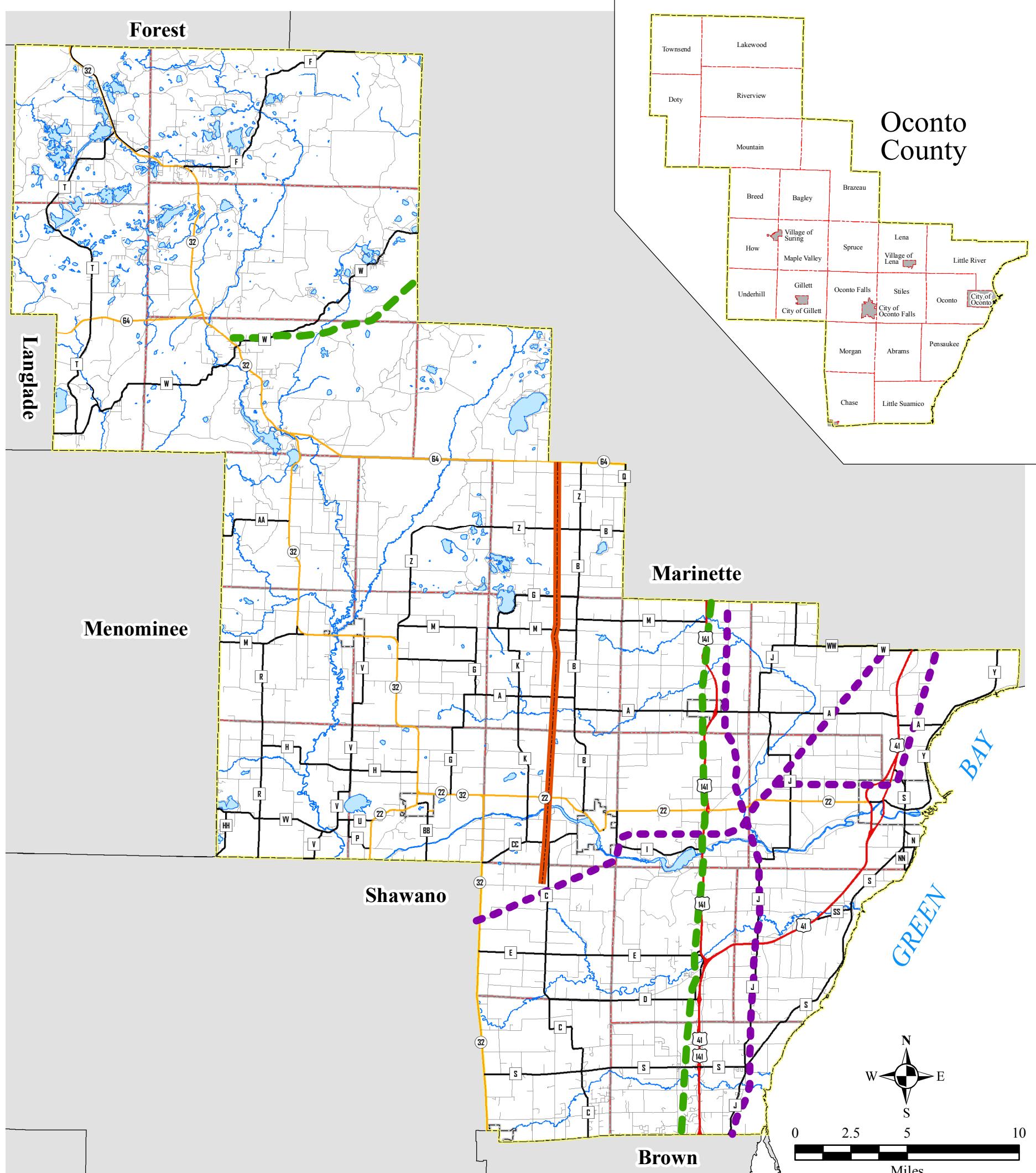
Table 9.1: Oconto County Trails

Name	Length (miles)	Hiking	Mountain Biking	Horse	ATV	Cross-Country Skiing	Location
Boulder Lake	2	●	●				Doty
Chute Pond Overlook Trail	2/3	●					Mountain
Jones Spring Area Trail	11	●				●	Doty
Lakewood Cross-Country Ski Trail	14	●	●			●	Lakewood
Machickanee Ski Trail	8	●	●			●	Abrams
Nicolet Nordic Ski Trail	12	●	●				Mountain
Nicolet State Recreation Trail	32	●	●	●	●		Gillett, Maple Valley, How, Breed, Mountain, Riverview, Lakewood, Townsend
Popple Ridge	15	●					Doty
Quartz Hill Trail	1 1/4	●	●				Townsend
Outback Riders	10			●			Abrams
Dusty Trails ATV	100	●	●		●		Breed, Bagely, Brazeau
Oconto River State Trail	8	●	●	●			Oconto
Marantha Ski Trail	4				●	●	Doty

Source: Oconto County 2007 Discovery Guide, 2007 and Bay-Lake Regional Planning Commission 2007.

Power Transmission Facilities

Oconto County, Wisconsin



Base Map Features

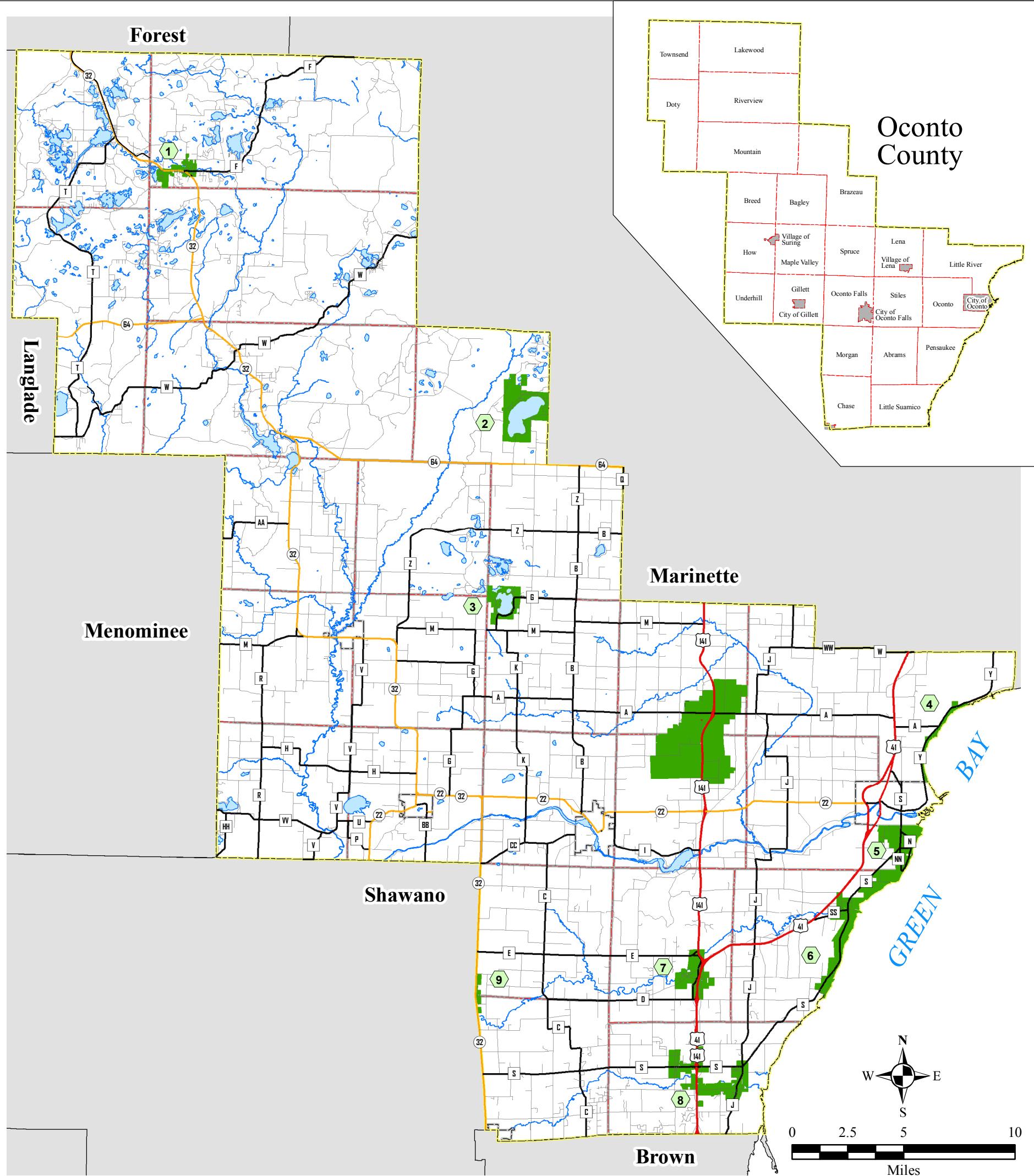
- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers

Power Transmission Lines

- 69 kV
- 138 kV
- 345 kV

Sanitary Districts

Oconto County, Wisconsin



Base Map Features

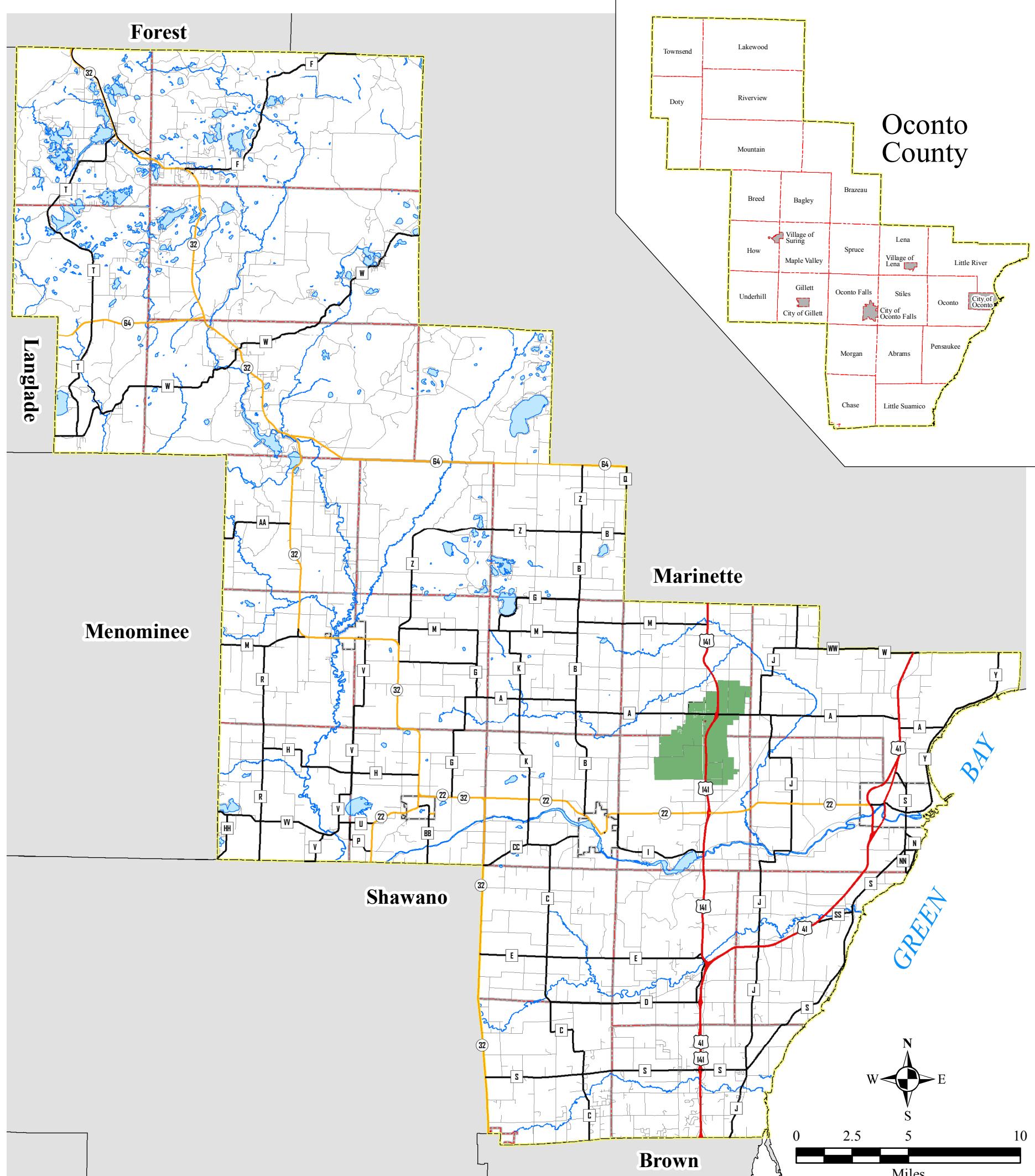
- ~ Railroad
- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers



Sanitary Districts

Drainage District

Oconto County, Wisconsin



Base Map Features

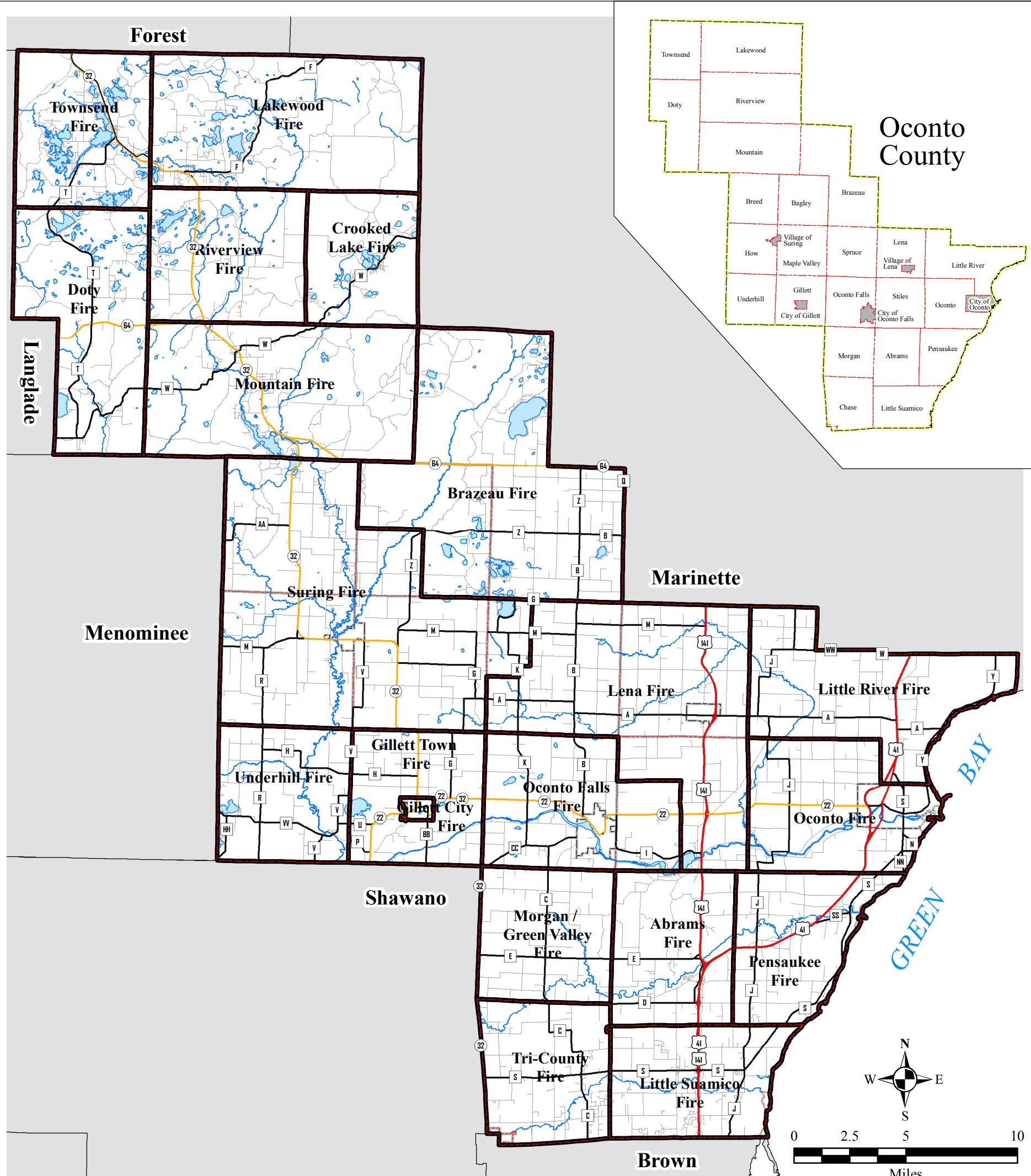
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- ✓ Federal Highway
- ✓ State Highway
- ✓ County Highway
- ✓ Local Roads
- ☒ Township Boundary
- ☒ City/Village Boundary
- ☒ County Boundary
- ☒ Lakes and Rivers



Stiles/Lena 1st Drainage District

Fire Department Service Areas

Oconto County, Wisconsin



Base Map Features

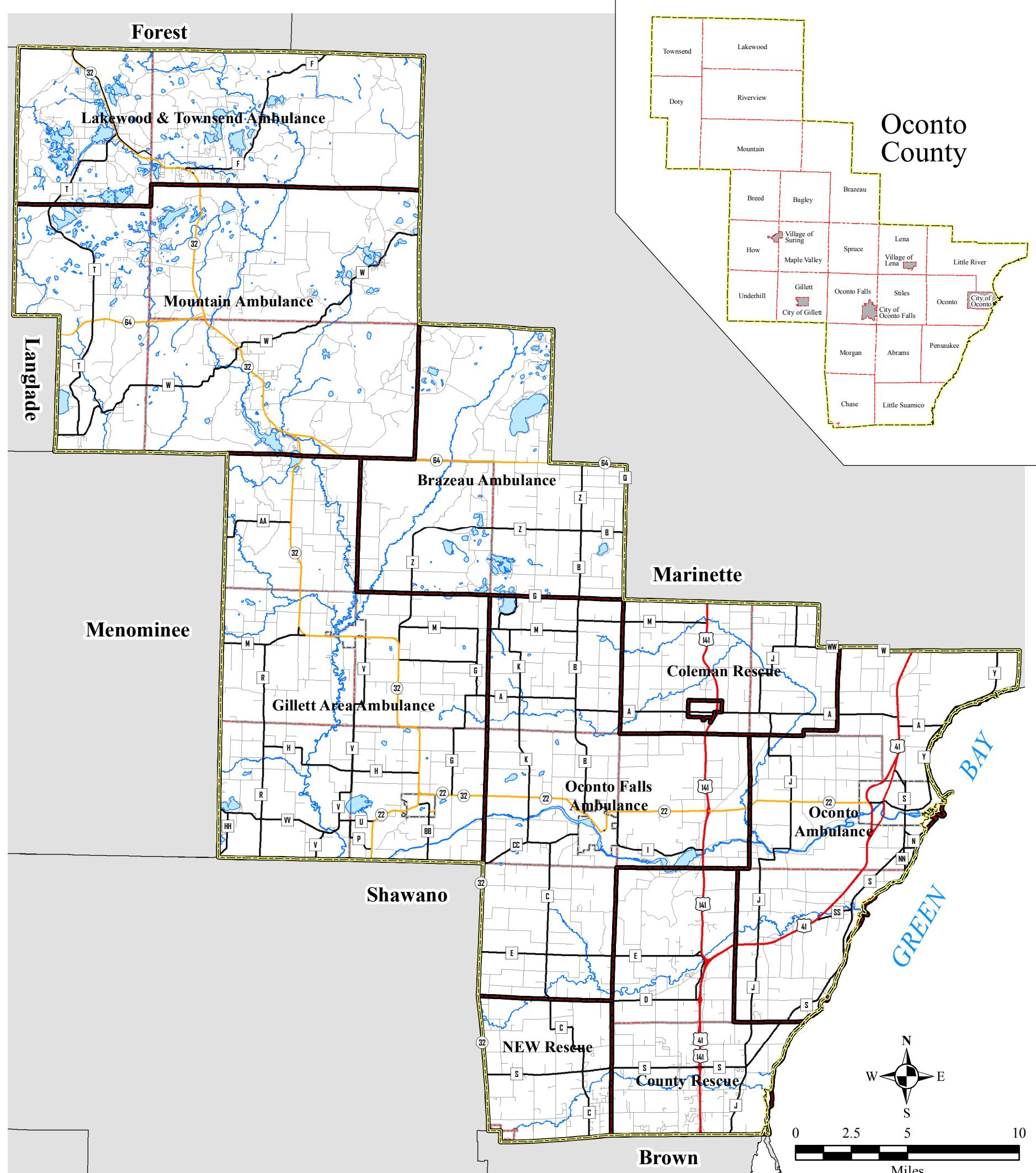
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- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers



Fire Department Service Area Boundary

Ambulance & Rescue Service Areas

Oconto County, Wisconsin



Base Map Features

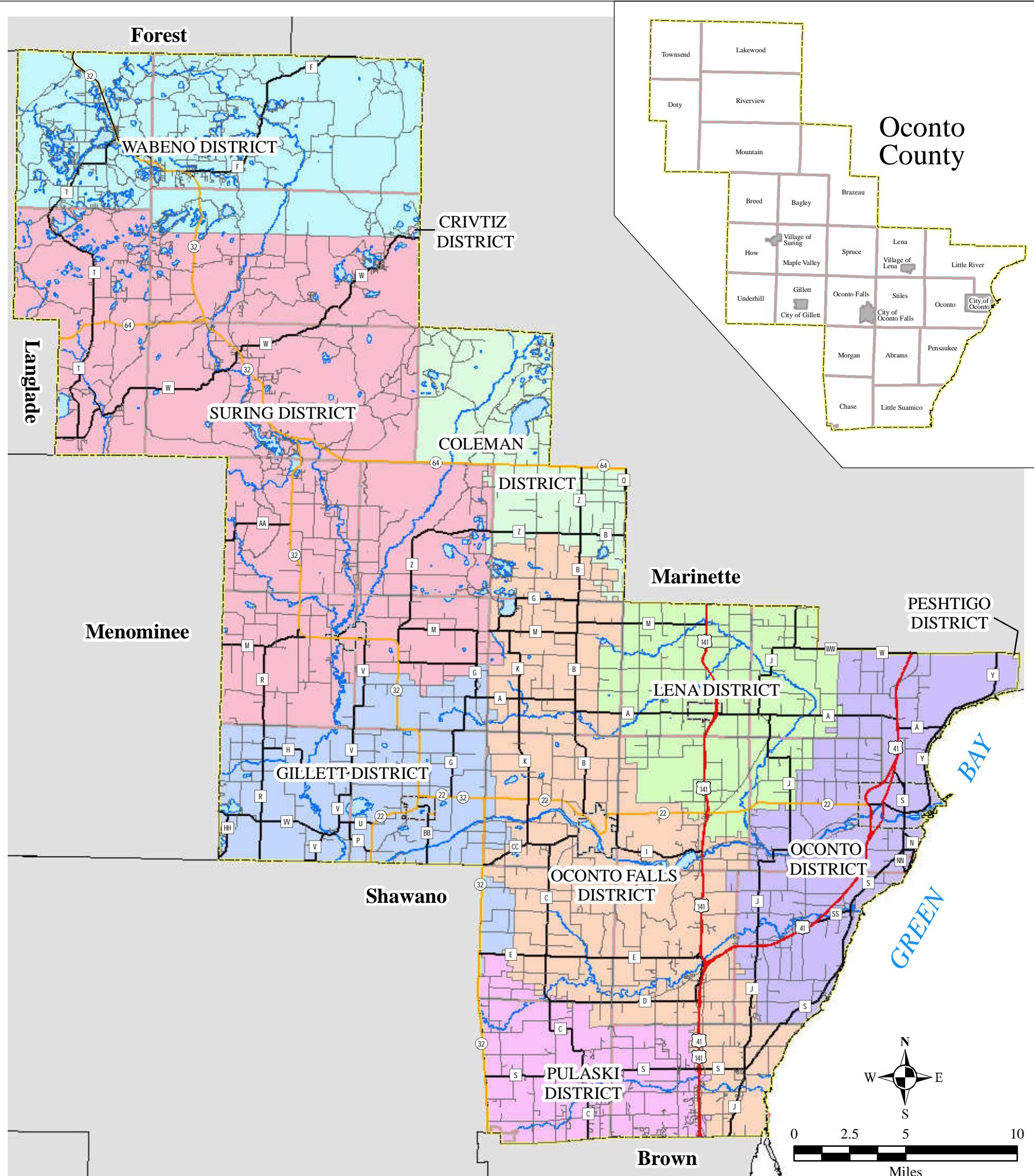
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- ~ Federal Highway
- ~ State Highway
- ~ County Highway
- ~ Local Roads
- ~ Township Boundary
- ~ City/Village Boundary
- ~ County Boundary
- ~ Lakes and Rivers



Ambulance / Rescue Service Areas

School Districts

Oconto County, Wisconsin



School Districts

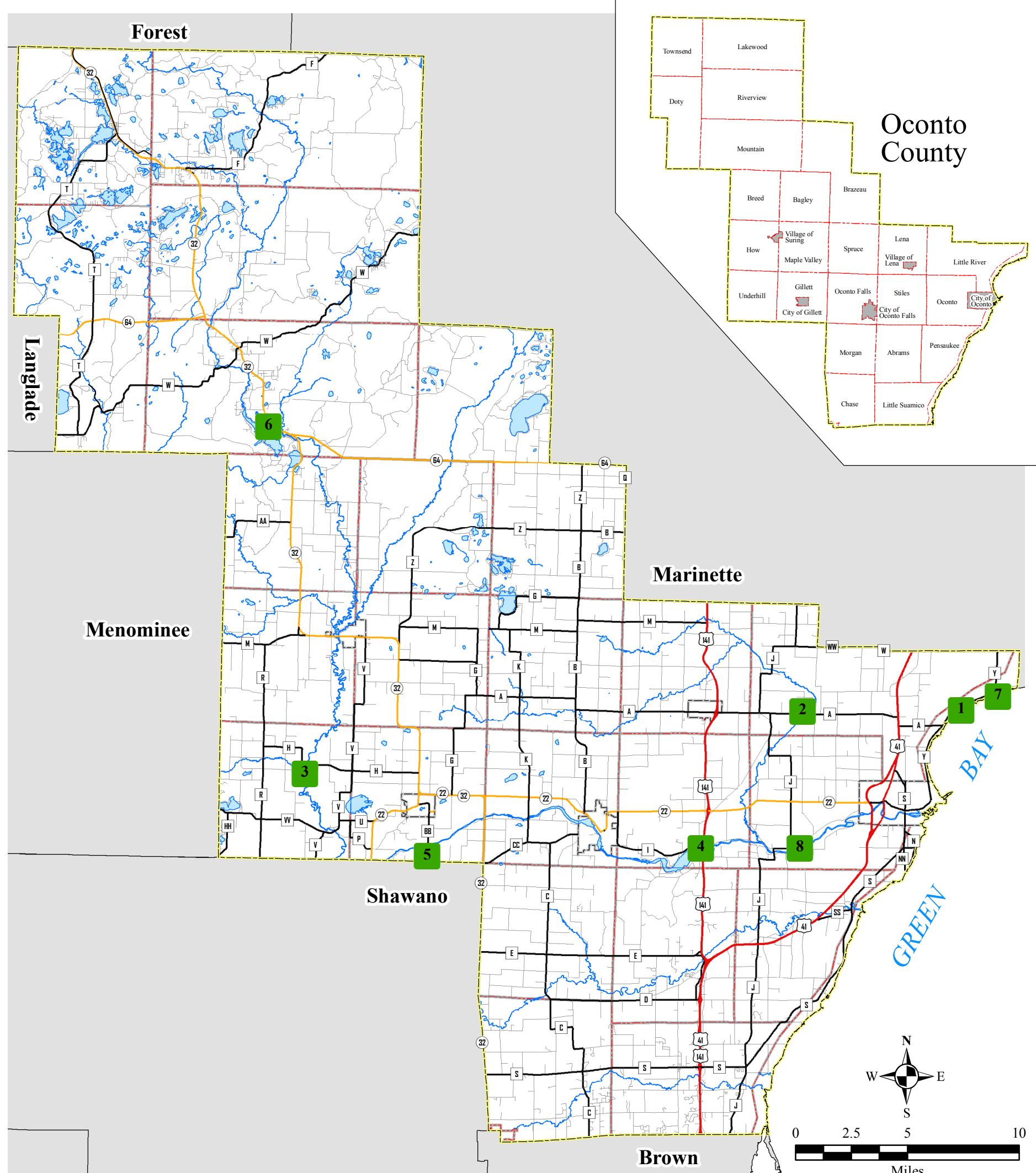
Base Map Features

- Railroad
- Federal Highway
- State Highway
- County Highway
- Local Roads
- Township Boundary
- City/Village Boundary
- County Boundary
- Lakes and Rivers

	Coleman District		Oconto Falls District
	Crivitz District		Peshtigo District
	Gillett District		Pulaski District
	Lena District		Suring District
	Oconto District		Wabeno District

County Park and Recreation Facilities

Oconto County, Wisconsin



CHAPTER 10: INTERGOVERNMENTAL COOPERATION

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INTRODUCTION

This chapter of *Volume II: County Resources* examines the working relationships various entities and governmental units have with one another and how these relationships may impact the capability of the county and local communities to implement their comprehensive plans. An inventory was conducted of existing intergovernmental agreements, shared resources, and consolidated services between Oconto County, local municipalities, surrounding communities and counties, school districts, technical college, service providers, civic and recreation groups, regional planning commission, sanitary districts, and state and federal governments.

Three Intergovernmental Cooperation Workshops, one in each of the planning clusters, were held in April 2008 to gather input on current positive working relationships; existing or potential land use conflicts; and to identify potential solutions to these conflicts. Representatives from each of the communities within the planning cluster were invited to attend the workshop, along with neighboring municipalities, school districts, civic and recreational clubs, Oconto County staff, Wisconsin Department of Natural Resources, Wisconsin Department of Transportation, and other entities and departments that may have an interest in or direct impact on the implementation of comprehensive plans. Approximately 30 people attended each of the cluster workshops.

Several examples of the positive working relationships, current and future issues and conflicts, and potential conflict resolutions identified by attendees of the workshops are listed later in this chapter. A comprehensive list of responses from each of the three Intergovernmental Cooperation Workshops can be found in Appendix F of *Volume II: County Resources*.

Existing Intergovernmental Activities

Oconto County covers a large land mass of 998 square miles with an estimated 38,958 residents in 2007. The county contains three cities, two villages, and 23 towns. Oconto County is bordered by Brown County to the south; Shawano and Menominee counties to the west; Forest and Marinette counties to the north; and Green Bay of Lake Michigan along the eastern border. With this expansive area, residents are served by 16 fire districts; eight ambulance districts; nine public school districts; one technical college; and a number of recreation clubs, civic groups, and governmental districts. More information about emergency services and public school districts is can be found in Chapter 9 of *Volume II: County Resources*.

Oconto County is as unique as any county in Wisconsin with its extraordinary natural features, varied landscape, defining history, and diverse economic base. The county's diversity along with individual community personalities offer challenges when it comes to coordinating land use issues and regulations. Joint efforts such as continued communication of common visions, establishment and enforcement of uniform land use controls, and the implementation of development strategies and recommendations will assist the county in resolving issues of mutual interest and promote consistency between the implementation and maintenance of local comprehensive plans.

Oconto County Municipalities

- City of Gillett
- City of Oconto Falls
- Village of Suring
- Town of Bagley
- Town of Breed
- Town of Doty
- Town of How
- Town of Lena
- Town of Little Suamico
- Town of Morgan
- Town of Oconto
- Town of Pensaukee
- Town of Spruce
- Town of Townsend
- City of Oconto
- Village of Lena
- Town of Abrams
- Town of Brazeau
- Town of Chase
- Town of Gillett
- Town of Lakewood
- Town of Little River
- Town of Maple Valley
- Town of Mountain
- Town of Oconto Falls
- Town of Riverview
- Town of Stiles
- Town of Underhill

Relationships

The county has a good working relationship with its local jurisdictions and neighboring counties. Oconto County maintains countywide zoning in the unincorporated areas, including shoreland and floodplain zoning and issuance of sanitary permits. Oconto County does also maintain a Land Division Ordinance.

Several towns have adopted their own ordinances to address specific issues within their municipal boundaries. These local ordinances are either more restrictive than the county ordinances, or address a local issue of concern for which there is no county regulation (e.g., subdivision ordinances).

The cities and villages within Oconto County enforce their own zoning and have jurisdiction over municipal services. As a result, the county has a more limited relationship with these communities than with the towns.

Oconto County includes all towns, cities, and villages in the *Oconto County Multi-Hazards Mitigation Plan* as well as the *Oconto County Farmland Preservation Plan*, and in the future, the *Oconto County Comprehensive Outdoor Recreation Plan*.

In June of 1990, Marinette and Oconto counties entered into joint ownership of the Marinette County Landfill located in the Town of Stephenson. The facility was renamed the Mar-Oco Landfill.

Siting Public Facilities

Most county administrative offices are located at the Oconto County Courthouse or in separate offices located in other areas of the City of Oconto. The Health and Human Service's

Department of Vocational Services is in the City of Gillett. There are Highway Department storage, maintenance, and repair facilities in the City of Oconto, and towns of Mountain, Maple Valley, and Chase. The Oconto County Sheriff Satellite Office is located in the Town of Townsend.

The Oconto County Parks Department operates six parks and nine boat landings; provides maintenance on eight dams; and cooperates with local groups to maintain two cross country ski clubs/trails, a bridal trail, and six fishing facilities for physically challenged individuals. The county contracts with local vendors for the maintenance of 420 miles of snowmobile and 64 miles of ATV trails.

Sharing Public Services

The towns have mutual aid agreements with the Oconto County Sheriff's Department for police protection, the Oconto County Highway Department for infrastructure upgrades and maintenance, and solid waste for collection of state banned recycling materials. Many of the incorporated communities defer to the county's Shoreland Ordinance and have signed mutual aid agreements with the county for police, road services, and management of solid waste. Oconto County owns property throughout the county including the incorporated communities (e.g., County Fairgrounds in the City of Gillett), which requires additional mutual assistance.

School Districts

There are nine public school districts serving the residents of Oconto County. They are Oconto, Oconto Falls, Gillett, Lena, Suring, Pulaski, Wabeno, Peshtigo, and Coleman. In addition, a number of private schools provide alternative learning environments. Oconto County is part of the Northeast Wisconsin Technical College (NWTC) District of The Wisconsin Technical College System. The main NWTC campus is located in Green Bay, while a Community and Regional Learning Center is located in the City of Oconto Falls.

Relationship

The relationship Oconto County and the local communities have with the public school districts is considered positive and open. The county and the individual municipalities can provide input on school facilities, future development projects, etc.

Siting School Facilities

The siting of new school facilities, such as athletic fields, school forests, off-sight classrooms, and buildings is mainly conducted by the school districts. Oconto County has little input on the siting of these facilities; however, local communities have been involved in those plans to avoid duplication and costs, evaluate recreational facilities, and promote mutual planning on future development and development trends.

Sharing School Facilities

The county has no formal agreement with the school districts for shared use of school facilities. Some of the local communities maintain an understanding with the school district to allow school buildings and recreational facilities to be used by the general public at little or no cost.

Region

Oconto County is a member of the Bay-Lake Regional Planning Commission. The Commission's annual work program includes economic development, natural resources, transportation, and community planning. Through a historically positive working relationship,

the Commission has facilitated the preparation of a variety of local and regional plans, reports and studies that relate directly to planning within Oconto County.

Oconto County is part of the Northeast Wisconsin Technical College (NWTC) District of The Wisconsin Technical College System. NWTC works with local communities and school districts to secure space and facilities for classes.

The Nine Towns Association is a consortium of communities in northern Oconto County that meet regularly to discuss common issues and work to develop solutions to these problems. This group includes the towns of Townsend, Lakewood, Doty, Riverview, Mountain, Brazeau, Breed, and Bagley.

State

The county's relationship with the State of Wisconsin involves many topics. Ongoing positive relationships have been maintained with transportation (WisDOT), Health and Services, Emergency Management, Administration, and Natural Resources (WDNR). Local communities deal most often with WisDOT and the WDNR. Their relationships with these state agencies have been generally positive.

Federal

The U.S. Forest Service manages approximately 138,000 acres of the Nicolet National Forest in Oconto County. People use these forestlands to camp, picnic, fish, swim, backpack, hike, bike, boat, view wildlife, ATV, snowmobile, and ski. The relationship linking Oconto County and the Forest Service can be described as workable due to the fact the National Forest is one of the county's most important and popular economic assets. The ongoing cooperation and dialog between the county and forest service will help ensure there the county continues to see the economic benefits of the forest. However, local government concerns have been expressed regarding the need for continued forest harvesting practices, forest road improvements and maintenance payments, and direct communication with forest management staff.

Plans and Agreements

Cooperative Boundary Plan

Section 66.0301 of Wisconsin Statutes allows municipalities to enter into agreements that foster intergovernmental cooperation regarding developments and other planning issues including the siting and financing of projects that cross municipal boundaries. A Cooperative Boundary Plan is any combination of cities, villages, towns, county, school district, sanitary district, regional planning commission, etc. that may determine the boundary lines between themselves under a cooperative plan approved by the Wisconsin Department of Administration (WDOA). The cooperative plan must be made with the general purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory covered by the plan which will, in accordance with existing and future needs, best promote public health, safety, morals, order, convenience, prosperity or general welfare. Cooperative boundary plans cover at least a 10-year period. Additionally, cooperative boundary agreements are a tool to promote service sharing between local units of government.

Currently, Oconto County has an agreement with Marinette County on the operations of the Mar-Oco Landfill. None of the local communities have entered into a cooperative boundary plan with the county or any other municipality, district, or other noted entity.

Mutual Aid Agreements

Local governments can enter into agreements with neighboring governmental entities for the performance of any and all functions which the parties to the agreement are authorized to perform. Several communities have entered into mutual aid agreements with neighboring municipalities as well as Oconto County to provide services to their residents. Many of the mutual aid agreements involve emergency services (police, fire, and rescue) and to maintain roads and infrastructure.

Land-Use Related Extraterritorial Authorities

Cities and villages in Wisconsin have several types of extraterritorial authority that may affect land development in adjacent towns. Under the Wisconsin Statutes, cities and villages have authority to exercise extraterritorial planning, platting (subdivision review), and official mapping by right.

In order to exercise extraterritorial zoning, cities and villages must work cooperatively with the adjoining town(s) to develop an extraterritorial zoning ordinance and map. Wisconsin Statutes allow cities and villages authority to assert zoning control over an area extending 1.5 to 3 miles around their border, depending on their size. The cities of Gillett, Oconto, Oconto Falls, and villages of Lena, Pulaski, Suamico, and Suring are limited to 1.5 miles. To exercise extraterritorial zoning, a committee must be formed with members of the affected city/village and town. This committee is charged with determining land uses and zoning in the extraterritorial area and must approve zoning changes. The committee is given two years to complete its work, although a one-year extension is allowed. Cities and villages also have extraterritorial authority over offensive industries and smoke emissions. Cities, villages, and towns have limited extraterritorial authority over navigational aids and uses surrounding airports owned by the city, village, or town.

Cities and villages have the option of exercising extraterritorial plat review authority, which affects the same area defined by extraterritorial zoning. If the incorporated community uses this authority, they have the right to review and approve land divisions within this area. The purpose of the extraterritorial plat review is to give cities and villages some control over development patterns along their borders. Unlike extraterritorial zoning, extraterritorial subdivision review does not have a time limit.

The cities of Gillett, Oconto, and Oconto Falls, and the villages of Lena, Pulaski, Suamico, and Suring are not currently exercising their extraterritorial zoning or official mapping rights. However, these incorporated communities are enforcing their extraterritorial plan review right.

Annexation

Wisconsin law does not allow cities and villages to annex property without the consent of landowners. While they can reject annexation petitions, often the only time property owners in unincorporated areas petition for annexation is when they have problems with septic systems or wells that pose health and environmental concerns. As a result, territory is often annexed into cities and villages in a rather haphazard manner, resulting in odd municipal boundaries. This in turn can negatively affect service delivery.

On the other hand, towns do not have much control over annexation either, which is commonly initiated by individual property owners as they want to develop at urban densities and thus, need public utilities. The loss of existing residents and businesses or undeveloped land through

annexation often results in an overall loss of population and/or tax base in the towns. It is likely that annexation issues will occur in the future as the incorporated communities expand to provide municipal services to growing areas along their borders. It may be possible to minimize border conflicts through use of cooperative boundary agreements and other mechanisms aimed at coordination of development along jurisdictional borders.

Positive Working Relationships

During the three Intergovernmental Cooperation Workshops held in April 2008, a number of positive working relationships were noted as having been established amongst a number of municipalities, county departments, organizations, civic groups, emergency services districts, and schools. Some examples of these positive working relationships include:

- Shared services (emergency-mutual aid)
- Cooperation with ATV/Snowmobile Clubs
- Senior meal delivery available throughout the county
- Satellite Sheriff Department office
- Communities working together on a sign ordinance and protection of lakeshores
- Municipalities participating in joint spring clean-up efforts
- Trans-county and town agreements for road maintenance and snow plow
- Mar-Oco Landfill
- Countywide and county funded Oconto County Economic Development Corporation
- Cooperation between county, communities, and DNR on resource materials and recreation development
- Cluster meetings – good source of information-education
- Coordination between county and local zoning

Existing or Potential Land Use issues and conflicts

The Intergovernmental Cooperation Workshops also identified some existing or potential land use issues and conflicts. Some examples include:

- Growing elderly population in the northern areas of the county and the need to plan for appropriate services
- Regulations to apply weight limits on agriculture equipment like what is done on commercial vehicles
- The need for regulations to limit garbage being dumped in the county forest
- Future developments should have proper sanitary systems
- Compatible and enforceable ordinances
- Zoning notification (i.e. use of residential district)
- Large farms depleting aquifers
- Development of highway corridors

- Lack of knowledge of school district boundaries when people buy property and build homes, especially a problem with sub-divisions located in two districts.

The comprehensive plan recommendations for both Oconto County and the local communities should identify strategies to address many of these concerns.

Potential RESolutions

As Oconto County continues to develop, it is important to identify possible resolutions to the current and potential land use issues and conflicts noted during the Intergovernmental Cooperation Workshops. Participants identified overall better communications within each community and with neighboring municipalities, the county, and state and federal departments would be the best solution to resolving current and future land use problems and expanding the number of positive working relationships. In addition, respondents felt continuing or expanding upon any existing positive relationships would be effective in addressing any current or future issues. Some examples of potential resolutions are listed below:

- Expand and further promote county and local websites, posting of more agendas, materials, etc.
- Deputizing board members, etc. to be able to hold people who litter on town and forestry roads until police arrive
- Create an option for site plan and design review through county zoning ordinance
- Uniform buffer zone around farm operations
- Area planning-stay aware of surrounding development
- More agreements with other communities and supported with county assistance
- No tipping fees for volunteers who pick-up garbage
- Better distribution of information both internally and externally
- Creation of extraterritorial boundary agreements
- Continued mutual aid of fire/rescue, etc.
- Compatible lot sizes with neighboring communities
- Enforce regulations equally and fairly
- More planning meetings of this type to bring different peoples and ideas together

CHAPTER 11: LAND USE CONTROLS AND INVENTORY

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INTRODUCTION

The previous chapters found in *Volume II: County Resources* provide background data and other pertinent information for the development of the county and local comprehensive plans. This chapter provides highlights from the countywide land use inventory conducted in 2007. The inventory determined where and what types of land uses exist within Oconto County and the acreages dedicated to those land uses. The mapping of existing land uses and understanding of definable development patterns will help assist Oconto County and local units of government better determine where lands are most suitable for development and appropriately allocate acreages needed for future residential, commercial, industrial, and other types of developed land uses. The presence of sanitary districts, adjacent land uses, existing infrastructure, preservation areas, environmental corridors, and other natural features will also influence the type and location of future development. To best promote the location and type of future land uses, an inventory of land use controls currently enforced by Oconto County is provided within this chapter.

EXISTING LAND USE CONTROLS

This section inventories and discusses land use controls and regulations that may affect or restrict the use of land for specific purposes within Oconto County. These controls should be reviewed periodically to ensure they appropriately facilitate implementation of the county and local community comprehensive plans.

Planning Documents

Comprehensive Plan

As of 2009, Oconto County had not previously completed or adopted a comprehensive plan. Oconto County partnered with 16 of its municipalities to submit a multi-jurisdiction planning application to the Wisconsin Department of Administration to assist in covering the cost of preparing or updating their comprehensive plans. Through this joint planning process, Oconto County was able to prepare and adopt its first comprehensive plan. In 2014, the Oconto County Comprehensive Plan was amended to include the requirements of the Farmland Preservation Plan. This amendment takes the place of the original Oconto County Farmland Preservation Plan adopted in 1985.

Land Use Regulations

Oconto County Zoning Ordinance

Oconto County maintains and administers a zoning ordinance covering the unincorporated areas of the county. The cities and villages within the county administer their own zoning ordinances. Oconto County uses the zoning ordinance to promote public health, safety, and welfare; to protect natural resources; and to maintain community character. The established zoning districts help to avoid land use conflicts, protect environmental features, promote economic development, and assist in the accomplishment of land use objectives identified by a comprehensive plan. Please refer to the Oconto County Zoning Ordinance for more detailed information on zoning districts, regulations, restrictions, permitted uses, and zoning maps.

According to s. 66.1001, Wis. Stats., all land use related actions (regulations, etc.) of local governmental units are required to be consistent with their adopted comprehensive plan. As a result, the county zoning ordinances shall be reviewed and updated to be made consistent with the adopted comprehensive plan and any subsequent updates to the plan.

Oconto County Land Division Ordinance

Oconto County enforces a Land Division Ordinance. The ordinance applies to “any act of division of a lot, parcel, or tract which existed on the effective date of this ordinance by the owner thereof or his agent for the purpose of transfer of ownership or building development where the act of the division creates one or more new lots, parcels, tracts or units, if the lot, parcel, tract or unit being created is equal to or smaller in area than ten (10) acres in size, determined by the right of way.” Please refer to the Oconto County Land Division Ordinance for further information.

Oconto County Floodplain Ordinance

Oconto County recognizes that uncontrolled development within floodplains or too close to rivers or streams can be an issue of public health, safety, and general welfare of its residents. The Oconto County Zoning Ordinance regulates development in flood hazard areas for the protection of life, health and property while providing a uniform basis for the preparation, implementation and administration of sound county floodplain regulations.

Areas regulated by the Oconto County Zoning Ordinance include all areas that would be covered by the “Regional Flood.” These areas are divided up into three districts:

1. The *Floodway District (FW)* consists of the channel of a river or stream and those portions of the floodplain adjoining the channel carrying the regional flood waters.
2. The *Floodfringe District (FF)* consists of that portion of the floodplain between the regional flood limits and the floodway.
3. The *General Floodplain District (GFP)* consists of all areas which have been or may be hereafter covered by flood water during the regional flood. It includes both the floodway and floodfringe districts.

Oconto County should continue to work closely with the WDNR, FEMA, and other appropriate agencies when updates to the Oconto County Flood Insurance Rate Maps and the Oconto County Zoning Ordinance are proposed. For more information about floodplain zoning in Oconto County refer to the Oconto County Zoning Ordinance.

Oconto County Shoreland Ordinance

The Oconto County Zoning Ordinance establishes zoning standards for use of shorelands along navigable waters. The shoreland standards apply to lands:

1. within unincorporated communities that lie within 1,000 feet of the ordinary high water mark of navigable lakes, ponds or flowages; and
2. within 300 feet of the ordinary high water mark of all navigable rivers or streams, or to the landward side of the floodplain, whichever distance is greater.

The Oconto County Zoning Ordinance also establishes minimum lot sizes for parcels within the shoreland zone, setbacks of buildings and structures from the water, and standards for the

alteration of surface vegetation and land surfaces. For more detailed information regarding regulations, setbacks, excavating, etc. in shoreland areas, refer to the county's zoning ordinance.

CURRENT LAND USE INVENTORY

A complete inventory of Oconto County land uses was completed by the Bay-Lake Regional Planning Commission in 2007-08. A Standard Land Use Classification system was used to properly identify the type and location of the varied land uses seen throughout the county. The three Wisconsin regional planning commissions that border Lake Michigan and Lake Superior (Bay-Lake RPC, Southeastern Wisconsin RPC, and Northwestern Wisconsin RPC) adopted the land use classification system in June 1975 for land use inventories conducted in conjunction with the Coastal Zone Management Development Program. A list of those detailed land use codes can be found in Appendix G of *Volume II: County Resources*.

Land Use Categories

The following list of land use categories is based on a methodology created by the Bay-Lake Regional Planning Commission for conducting a land use inventory only. This list is *not* intended to create specific definitions for regulatory purposes.

Residential - Use of land for non-transient-occupant dwelling units, both transportable and permanent structures. The residential category is divided into the following subcategories: *Single Family, Two Family, Multi-Family, Mobile Home, and Group Quarters*.

Commercial - Use of land for retail sales or trade of goods and/or services, including enclosed participatory sports, lodging, and commercial headquarters.

Industrial - Use of land for fabrication of products, for wholesaling of products, for long-term storage of products, and for extraction (mining) or transformation of materials.

Transportation - Use of land for corridors for the movement of people or materials, including related terminals and parking facilities. This land use includes motor vehicle, air, marine, rail, and non-motorized-related transportation.

Communication/Utilities - Use of land for generation, processing, and/or transmission of electronic communication or of water, electricity, petroleum or other transmittable products, and for the disposal, waste processing and/or recycling of byproducts.

Institutional/Governmental Facilities - Use of land for public and private facilities for education, health, or assembly; for cemeteries and related facilities; and for all government facilities used for administration or safety except public utilities and areas of outdoor recreation.

Outdoor Recreation - Use of land for out-of-doors sport and general recreation facilities, for camping or picnicking facilities, for nature exhibits, and for the preservation or protection of historical and other cultural amenities.

Agriculture/Silviculture - Use of land for growth or husbandry of plants and animals and their products and for associated facilities such as sheds, silos and other farm structures. This category also includes the cropland and pasture areas primarily used for the cultivation of plants in addition to grasses for grazing. Also included in this category are areas identified as *Farmland Preservation Areas*.

Natural Areas - Use of land for water areas; land used primarily in a natural state for their natural functions including wetlands, grasslands and prairies, and woodlands; land undergoing change from natural areas to another land use; and conservancy areas.

Other Natural Areas - Use of land for wetlands, grassland/prairies, and woodlands not categorized elsewhere.

Water - Use of land for open water areas, including natural and impounded lakes and streams.

Planning Area

According to the 2007 land use inventory, Oconto County encompasses approximately 1,016 square miles, equating to 650,766 acres. As summarized in Table 11.1, just over 94 percent of the county is classified as undeveloped, while existing development covers approximately six percent of the county. Residential development comprises nearly one-half of the county's developed land uses. The county's land use is illustrated on **Map 11.1**. Oconto County's detailed land use calculations are shown in Appendix H of *Volume II: County Resources*.

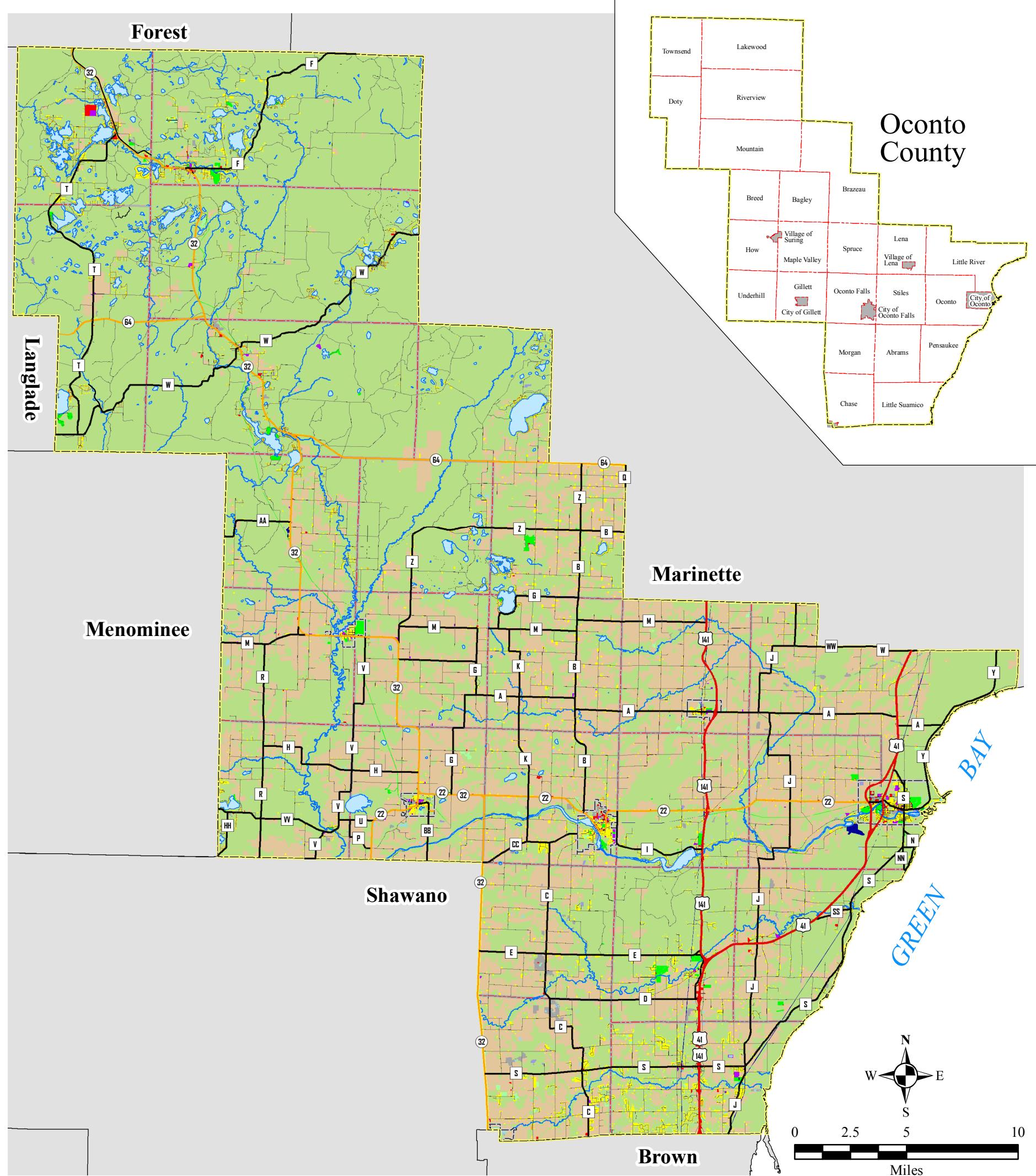
Table 11.1: Oconto County Land Use, 2008

Land Use Type	Total (acres)	Developed Land (%)	Total Land (%)
DEVELOPED			
<i>Single Family</i>	20,074.3	33.65	52.36
<i>Two Family</i>	26.8	0.04	0.07
<i>Multi-Family</i>	76.4	0.13	0.20
<i>Mobile Homes</i>	1,069.4	1.79	2.79
<i>Vacant Residential</i>	70.7	0.12	0.18
Residential	21,317.6	55.61	55.61
Commercial	1,231.0	3.21	0.19
Industrial	1,909.0	4.98	0.29
Transportation	6,343.7	16.55	0.97
Communications/Utilities	359.8	0.94	0.06
Institutional/Governmental	767.5	2.00	0.12
Recreational	2,710.7	7.07	0.42
Agricultural Structures	3,697.8	9.65	0.57
Total Developed Acres	38,337.1	100.00	5.89
Land Use Type	Total (acres)	Undeveloped Land (%)	Total Land (%)
UNDEVELOPED			
Croplands/Pasture	169,997.9	27.76	26.12
Woodlands	396,916.4	64.81	60.99
Other Natural Areas	30,677.3	5.01	4.71
Water Features	14,837.7	2.42	2.28
Total Undeveloped Acres	612,429.3	100.00	94.11
Total Land Area	650,766.4		

Source: Bay-Lake Regional Planning Commission, 2008.

2007 Land Use

Oconto County, Wisconsin



Base Map Features

- ~~ Railroad
- ~~ Federal Highway
- ~~ State Highway
- ~~ County Highway
- ~~ Local Roads
- ~~ Township Boundary
- ~~ City/Village Boundary
- ~~ County Boundary
- ~~ Lakes and Rivers

Residential	Governmental/Institutional
Mobile Homes	Parks and Recreation
Commercial	Open Space/Fallow Fields
Industrial	Agricultural
Roads	Water Features
Transportation	Woodlands/Natural Areas
Communications/Utilities	

This map is neither a legally recorded map nor a survey, and is not intended to be used as either. It is a compilation of records, information and data to be used for reference purposes only.

Oconto County and the Bay-Lake RPC are not responsible for any inaccuracies herein contained.

Source: NRCS, 2004; Bay-Lake Regional Planning Commission, 2008; Oconto County Planning, 2014.

VOLUME II - APPENDIX A
NATURAL, AGRICULTURAL, AND CULTURAL RESOURCES

Priority and Non-Priority Watersheds

Little Peshtigo River Watershed is located in southwestern Marinette County and extends in eastern Oconto County. The land use is largely agricultural with scattered areas of wetlands and small, forested areas. There are some water quality problems resulting from nonpoint sources runoff into the lakes and streams. This watershed drains into the Peshtigo River.

Little River Watershed was designated a priority watershed in 1983. It is located in northern Oconto and southern Marinette Counties on the east shore of Green Bay. It includes the lands draining to Little River and its tributaries. The Little River joins with the Oconto River about 11 stream miles from Green Bay. The watershed covers 218 square miles: 205 square miles in Oconto County and 13 square miles in Marinette County. The watershed is mostly rural in nature with about two-thirds of the area in agricultural use and one-third in uncultivated wetlands. Dairy farming is the major type of agriculture in the area, with few other types of livestock operations and very little cash grain. The only incorporated area within the watershed is the Village of Lena. Sources of nonpoint pollutants include upland erosion, stream bank erosion, barnyard runoff, and manure spreading runoff.

Lower North Branch Oconto River Watershed lies in central Oconto County with small portions extending into Marinette and Menominee Counties, along with overlapping into the Headwaters Basin (Forest and Langlade Counties). There are a number of inland lakes throughout the basin and wetlands are abundant in the southeastern portion of the watershed. A large part of the watershed is forested with some areas of agricultural lands found in the lower reaches of the Peshtigo Brook.

Lower Oconto River Watershed is located in central Oconto County with small portions extending into northern Shawano and eastern Menominee counties and drains into Green Bay. There is some agricultural activity along with a few small communities and three hydroelectric power dams in this watershed.

Lower Peshtigo River Watershed is located in southeastern Marinette County where the Peshtigo River drains into Green Bay. The watershed includes the City of Peshtigo and part of the City of Marinette. A portion of the watershed is forested with some agricultural use. There are some large areas of wetlands in the watershed.

Middle Peshtigo and Thunder Rivers Watershed was designated a priority watershed in 1995. The Middle Peshtigo and Thunder Rivers Watershed is located in central Marinette County and northeastern Oconto County. The land use in this 194-mile basin consists of mostly forested areas with some rural residential, recreational, and a small amount of agriculture in the southeast portion of the watershed. Sources of nonpoint pollutants include runoff from agriculture and forestry areas.

Pensaukee River Watershed was designated a priority watershed in 1994 or 1996. The Pensaukee River Watershed is a 164-square mile drainage basin located approximately 25 miles north of the City of Green Bay and 12 miles east of the City of Shawano. Most of the watershed's population lies in rural unincorporated areas. Farming is of vital importance to this area's economy, as agriculture companies are the predominant land use in the watershed. Sources of rural nonpoint pollutants include sediment from crop and stream bank erosion, polluted runoff from barnyards and feedlots, and runoff from winter-spread with livestock manure. Population trends in the watershed appear stable, with population and new home construction projected to increase

steadily through the year 2015. This is due largely in part to the expansion of State Highway 29 west from Green Bay, as well as the previous expansion of U.S. Highway 41 north of the City of Green Bay.

South Branch Oconto River Watershed is situated in west-central Oconto County, extending into Menominee County and a small portion in Langlade County (Headwaters Basin). The majority of the streams in this watershed are trout waters. Most of the inland lakes are located in the northern half of the watershed, and wetlands areas are found in the southern half of the watershed.

Suamico and Little Suamico Rivers Watershed is located in Brown County and southern Oconto County and includes the Village of Suamico. The watershed, which drains to Green Bay, is a mix of urban and agricultural land uses and is rapidly urbanizing. Sources of nonpoint pollutants include erosion from construction sites, runoff from impervious surfaces, agricultural runoff, stream bank erosion, and sedimentation.

Upper Peshtigo River Watershed originates in Forest County (Headwaters Basin) and most of the watershed is within the Headwaters Basin. The watershed extends into Marinette County including Caldron Falls Flowage and a small portion of Oconto County. It is largely forested with abundant wetlands throughout much of the watershed. Some recreational and agricultural lands are present as well.

Outstanding and Exceptional Resource Waters

Table A.1: Named Waters Classified as Outstanding or Exceptional Resource Waters

Waterbody Name	Portion within Classification	Status*
Archibald Creek	All	ERW
Archibald Lake	All	ORW
Baldwin Creek	All	ERW
Bass Lake (T32N R15E S9)	All	ORW
Battle Creek	All	ERW
Bear Paw Lake	All	ORW
Bonita Creek	All	ERW
Boot Lake	All	ORW
Brehmer Creek	All	ERW
Chain Lake	All	ORW
Coopman Creek	All	ERW
Dump Creek	All	ERW
East Fork Thunder Creek	All	ERW
Fenske Creek	Below T33N R16E S8	ERW
First South Branch Oconto River	Below HWY 32	ORW
Forbes Creek	All	ERW
Hay Creek	All	ERW
Hills Pond Creek	All	ORW
Hines Creek	All	ERW
Jones Creek	All	ERW
Knowles Creek	All	ERW
Little Waupee Creek	All	ERW
McCaslin Brook	Above HWY F to Townsend Flowage	ERW
McCauley Creek	All	ERW
McDonald Creek	All	ERW
McPherson Creek	All	ERW
Messenger Creek	Above HWY B	ERW
Mosquito Creek	All	ERW
Mountain Creek	All	ERW
North Branch Oconto River	Above HWY 32 & HWY 32 to Chute Pond	ERW
North Fork Thunder River	All	ERW
Pat Creek	All	ERW
Second South Branch Oconto River	Below junction with Deadman Creek	ORW
Shadow Creek	All	ERW
Snowfalls Creek	All	ERW
South Branch Beaver Creek	All	ERW
South Branch Oconto River	Above Menominee Reservation to HWY 32	ORW
South Branch Oconto River	HWY 32 to mouth of river	ERW
South Fork Thunder River	All	ERW
Splinter Creek	Below T28N R20E S28	ERW
Waupee Creek	McCauley Creek to old HWY 64	ERW
West Thunder Creek	All	ERW
Wiscobee Creek	Above Wiscobee Lake	ERW

*ORW refers to Outstanding Resource Water while ERW refers to Exceptional Resource Water

Source: Wisconsin Department of Natural Resources, 2006.

Preservation Programs

County Programs

Farmland Preservation Program

The purpose of this program is to preserve agricultural land and open spaces by promoting orderly land use planning and development and by promoting soil and water conservation. Landowners that participate in the program are eligible for state tax credits. In order to be eligible for the program, land must be located in a certified farmland preservation zoning district or in a designated agricultural enterprise area.

Land & Water Resource Management Plan Implementation

The purpose of this program is to control soil erosion and reduce nonpoint source water pollution. The program provides a cost share and technical assistance to landowners to install soil and water conservation practices. The following agricultural conservation practices may be utilized but not limited to; grass waterways, diversions, critical area stabilization, terraces, grade stabilization structure, sediment basin, barnyard runoff control practices, rural well abandonment, manure storage abandonment and roof runoff system.

Oconto County Cost Share Program

The purpose of this program is to provide financial assistance control soil erosion and reduce nonpoint source water pollution.

Animal Waste Management Regulations Ordinance

The purpose of this Ordinance is to assure the safe handling and spreading of animal waste as well as to regulate the location, design, construction, alteration, operations, and maintenance of all animal feeding operations and livestock waste storage facilities. The Oconto County Land and Water Conservation Department shall receive and review all permit applications. See the Oconto County Animal Waste Management Ordinance, Chapter 18 of Oconto County's Code of Ordinances.

Wisconsin Nonpoint Runoff Rule Implementation

This program provides technical and financial assistance to landowners that do not meet nonpoint pollution control rules. Farms are evaluated to determine if they are compliant with the rules. If they are found to be out of compliance, technical and financial assistance may be available.

State and Federal Conservation Programs

Agricultural Enterprise Areas (AEA)

The Agricultural Enterprise Area (AEA) concept was established in 2009 as part of the state's Working Lands Initiative. By definition an AEA is a contiguous land area devoted primarily to agricultural use and locally targeted for agricultural preservation and development.

If land is in an AEA, part of a Farmland Preservation Agreement, and meets eligibility and conservation requirements, the farmer can receive a tax credit of \$5 per acre. Land in an AEA does not have to contain Exclusive Agricultural Zoning.

The designation of an AEA is voluntary and can be initiated by land owners or local governments by filing a petition with the State of Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). Petitions filed with DATCP must meet minimum criteria, but additional evaluation criteria may be used to review competing petitions. As a minimum the

land subject of the petition must be identified as being in a farmland preservation area in the county's Farmland Preservation Plan, be a contiguous land area, and primarily be used for agriculture.

Purchase of Agricultural Conservation Easements (PACE) – Farmland Preservation Program

The PACE program provides state funding for the purchase of agricultural conservation easements. An agricultural conservation easement allows a landowner to be compensated for limiting development on his or her farmland. Easements are permanent and are carried over to subsequent landowners if the property is sold. The Department of Agriculture, Trade and Consumer protection (DATCP) will provide funding to cooperating local entities (local governments or non-profit organizations) for the purchase of easements from willing landowners. Local entities purchase the easements and may be reimbursed for up to 50 percent of the easement cost by the PACE program. The state and local entities will then be co-holders of the easement. PACE funded easements are intended to strengthen areas that have been planned and designated as local farmland preservation areas in a certified county farmland preservation plan.

Conservation Reserve Program (CRP) and Conservation Reserve Enhancement Program (CREP)

The purpose of these programs is to reduce erosion, increase wildlife habitat, improve water quality, and increase forestland. Landowners that set aside agricultural land to conduct program practices are eligible for annual land rental payments. Program practices may include tree planting, grass cover, small wetland restoration and prairie/oak savannah restoration.

Conservation Security Program (CSP)

The purpose of this program is to promote good land stewardship and implement conservation practices. Agricultural operations in select watersheds are eligible to receive payments for program participation. Payments to agricultural operations are based on the amount of participation and enhancements.

Environmental Quality Incentives Program (EQIP)

The purpose of EQIP is to provide technical and financial help to landowners that install or implement structural and management practices on agricultural lands. Landowners that participate in the program may be eligible for cost sharing.

Farmland and Ranch Lands Protection Program (FRPP)

The purpose of this program is to maintain prime farmland in agricultural uses through permanent agricultural easements. The program provides funding to state, tribal, or local government programs for the purchase of development rights on prime agricultural land. Program funds are used to pay for up to 50 percent of the permanent easement cost.

Managed Forest Law (MFL)

The purpose of this program is to promote good forest management; property tax incentives/reduction is available to participating landowners. In order to participate, a landowner must follow and approved management plan (plan is free) and must own 10 contiguous acres (80% must be capable of producing merchantable timber).

Targeted Runoff Management (TRM) Grants

The purpose of this program is to control polluted runoff from agricultural sites and urban areas. Grants are available to help fund various Best Management Practices, purchase of property, and property easements. Local units of government, special purpose districts, tribal commissions and regional planning agencies are eligible for grants.

Wisconsin Forest Landowner Grant Program (WFLGP)

The purpose of this program is to assist landowners in protecting and enhancing forest lands, prairies and waters. Program practices include forest stewardship plan development, reforestation, timber stand improvement, fish and wildlife habitat enhancement, fire hazard reduction, invasive species control, watershed protection and wetland restoration. Qualifying landowners may be eligible for cost sharing.

Wetland Reserve Program (WRP)

The purpose of this program is to restore wetlands that were previously altered for agricultural uses. Most private wetlands that were converted to agricultural uses prior to 1985 are eligible. Wetland restoration and wildlife habitat establishment/protection sites that are the most beneficial are selected for restoration.

State and Federal Financial Programs

Dairy 2020 Early Planning Grant Program

This program awards grants for business and feasibility planning to dairy producers and processors considering a modernization or expansion project. Grants of up to \$3,000 may be awarded for professional services to develop a comprehensive business plan for the start-up, modernization, or expansion of a Wisconsin dairy farm.

Dairy 2020 Milk Volume Production Program (MVP)

The purpose of this program is to assist dairy producers that are undertaking capital improvement projects that will result in a significant increase in Wisconsin's milk production. The MVP program offers a low interest loan of 2% to farmers who are looking to increase the size of their herd. MVP loans have a term of seven (7) years with a fixed interest rate of 2% for the life of the loan. Repayment is deferred for the first year, followed by interest only payments in the second year. Principal and interest payments will be made during years three (3) through seven (7).

Farm Service Agency (FSA): Beginning Farmer Loans and Guarantees

The purpose of this program is to make loans available for farmers to use towards farm ownership and operating costs. The FSA provides direct and guaranteed loans to beginning farmers and ranchers who are unable to obtain financing through commercial credit sources. This program is for farmers and ranchers who have operated for more than 3 years and less than 10.

FSA: Direct Loans

Direct loans are made and serviced by FSA officials, who also provide borrowers with supervision and credit counseling. Farm ownership and operating loans are the main types of loans available under the direct loan program. With a direct farm ownership loan, you can purchase farmland, construct or repair buildings and other fixtures. Operating loans may be used to purchase items such as livestock, farm equipment, feed, minor improvements to buildings, family subsistence, and to refinance debts under certain conditions.

FSA: Guaranteed Farm Loans

FSA guaranteed loans provide lenders (i.e. banks, farm credit system institutions, credit unions) with a guarantee of up to 95% of the loss of principal and interest on a loan. Farmers and ranchers apply to an agricultural lender, who then arranges for the guarantee. The FSA guarantee permits lenders to make agricultural credit available to farmers who do not meet the lender's normal underwriting criteria. With a direct farm ownership loan, you can purchase farmland, construct or repair buildings and other fixtures. Operating loans may be used to purchase items such as livestock, farm equipment, feed, minor improvements to buildings, family subsistence, and to refinance debts under certain conditions.

WHEDA: Beginning Farmer Bonds

The purpose of the Wisconsin Housing and Economic Development Authority (WHEDA) – Beginning Farmer Bond program, uses bond funds to be used for the purchase a first farm including land, equipment, livestock, or buildings. Bonds can be used for transactions between related persons.

WHEDA: Crop

The purpose of the Wisconsin Housing and Economic Development Authority (WHEDA) – Crop program is to make loans to farmers, which can be used to buy animal feed, seed, fertilizer, pesticides, or to pay land rent, custom hire, crop insurance, feeder animals, tillage services, equipment rental and repair, or utilities for commodity production.

WHEDA: Farm

The purpose of the Wisconsin Housing and Economic Development Authority (WHEDA) – Farm program is to make loans to farmers, which can be used for a farm expansion or for the modernize an existing operation. The loan can be used to purchase agricultural assets including machinery, equipment, buildings, land, and livestock. The money can also be used to make improvements to farm buildings and land for agricultural purposes.

WHEDA: Agribusiness Guarantee Program

The purpose of the Wisconsin Housing and Economic Development Authority (WHEDA) – Agribusiness Guarantee program is to make loans to farmers for projects developing products, markets, method of processing or marketing for a Wisconsin-grown commodity. The maximum guarantee of 80% on loans can be used for equipment, land, buildings, working capital, inventory and marketing expenses.

State and Federal Technical Assistance Programs

AgrAbility of Wisconsin

The purpose of the AgrAbility program is to promote success in agriculture for people with disabilities through the development of a customized assistance plan based on the type of farm operation, type of disability, and the needs of the individual with a disability and their family. This plan could include: equipment and worksite modification, farm job restructuring, community and health care coordination, peer support involvement, etc. The Wisconsin AgrAbility Project is a cooperative effort of the University of Wisconsin Extension Service, University of Wisconsin Biological Systems Engineering and Easter Seals Wisconsin.

Center for Dairy Profitability

The purpose of the Center for Dairy Profitability is to develop, coordinate and conduct effective interdisciplinary educational and applied research programs, emphasizing business management, human resource management, production systems, and finance and marketing systems that enhance dairy profitability. In keeping with this mission statement, the Center's website has a variety of software programs, spreadsheets, and CDROMS to improve production efficiency and profitability. The Center also has a real-time internet financial benchmarking site.

Dairy 2020 Initiative

The purpose of the Dairy 2020 Initiative is to help Wisconsin dairy business, through cooperation at all levels, find ways to improve the business climate and competitive position of the Wisconsin Dairy Industry, enhance individual business profitability, and enrich the quality of life for Wisconsin's dairy farmers and their rural communities.

Dairy Business Innovation Center (DBIC)

The DBIC is a non-profit Wisconsin corporation offering technical assistance to dairy producers and cheese processors for product development, business planning, market development and other services. The Center boasts a team roster of more than 15 world-class dairy experts and is led by a stakeholder board.

Milk Money

The Milk Money program is a UW-Extension outreach program of the University of Wisconsin Department of Dairy Science supported by the Wisconsin Milk Marketing Board and offered to all Wisconsin dairy producers. Milk Money uses the 'team' management concept to help producers improve milk quality.

Wisconsin Farm Center

The Wisconsin Farm Center provides services to Wisconsin farmers and agribusinesses to promote the vitality of the state's agricultural economy and rural communities. Also, they provide services in the areas of financial counseling and analysis, mediation, employment and training, farm succession and two-generation linking, legal information related to FSA programs and Rural Electric Power Services.

Wisconsin Farmer's Resource Guide

The Wisconsin Farmer's Resource Guide is a directory for farmers and rural citizens to find helpful information and services offered by public and private agencies across the state. Whether you need legal aid or want to apply for a loan, seek job training or financial counseling, this guide will help you find the right person to talk to.

State and Federal Young Farmer Programs

Farm Link

The Wisconsin Department of Agriculture, Trade and Consumer Protection Farm Link Program provides farm succession information and assistance linking farmers with other farmers and beginning farmers. The program is a coordinated network of resources available to assist new dairy farmers and also assists retiring farmers. The mission is to "develop and sustain a coordinated network of resources and policies to assist dairy farm entry and transfer in Wisconsin".

Wisconsin Farm Bureau Federation Young Farmer Program

The Wisconsin Farm Bureau Federation Young Farmer Program is a leadership program for farmers under the age of 35. The Young Farmer Program provides leadership and skills development opportunities, along with the chance for young farmers to meet and network with other young farmers.

State and Federal Environmental Assistance Programs

Discovery Farms

Discovery Farms is a University of Wisconsin program designed to address the environmental research needs of agricultural producers. Through addressing those needs, Discovery Farms is working to assure a healthy environment and a healthy farm economy. Discovery Farms is part of UW-Extension and the College of Agriculture and Life Sciences at UW-Madison, and have a relationship with the Wisconsin Agriculture Stewardship Initiative.

Wisconsin Business Environmental Assistance Partnership (WBEAP)

The WBEAP helps Wisconsin business and communities understand environmental regulations, prevent pollution, and establish continuous improvement. WBEAP is a working partnership between the Department of Commerce (Small Business Clean Air Assistance Program), Agriculture, Trade, & Consumer Protection (Agrichemical Program), and the UW Extension (Solid and Hazardous Waste Education Center). WBEAP can help with air pollution regulations, environmental innovation, environmental management systems, fertilizer & pesticide management, industrial & community recycling, renewable energy & energy conservation, stormwater control plans, and waste minimization.

Wisconsin Focus on Energy

Focus on Energy works with eligible Wisconsin residents and businesses to install cost effective energy efficiency and renewable energy projects. Focus information, resources and financial incentives help to implement projects that otherwise would not be completed, or to complete projects sooner than scheduled. Its efforts help Wisconsin residents and businesses manage rising energy costs, promote in-state economic development, protect our environment and control the state's growing demand for electricity and natural gas.

Wisconsin Public Service

The Wisconsin Public Service agency offers programs to increase the energy efficiency of farming operations.

APPENDIX A – NATURAL, AGRICULTURAL, AND CULTURAL RESOURCES

VOLUME II - APPENDIX B
OCONTO COUNTY HOUSING PROGRAMS AND RESOURCES

There are a number of housing programs and tools available to assist Oconto County officials in obtaining and maintaining the desired housing environment they wish to provide their residents. An important first step in the successful utilization of those resources is ongoing education of citizens and local officials regarding the contents of the Housing Chapter of this comprehensive plan and on the importance of providing quality and affordable housing for all Oconto County residents. Elected and appointed county officials, as well as the citizens, need to understand the strong correlation between quality housing and the economic development, natural/cultural resources, land use, community facilities and transportation components of the county.

The following is a list of programs and resources available to implement the housing strategies found in Chapter 4 of this comprehensive plan. Some local implementation tools that compliment this list of programs and resources are Oconto County's zoning ordinances and enforcement regulations.

Local and Regional Programs

Oconto County Department of Health and Human Services provides a variety of housing related assistance to residents of the county to include refugee assistance, information on independent living services, and energy assistance. www.co.oconto.wi.us

NEWCAP, Inc. is a 41-year-old, private non-profit Community Action Agency located in the City of Oconto whose mission is to look for and help eliminate the causes of poverty that keep people from being independent and self-sufficient. Services include Housing Choice Voucher Program, Section 8 Voucher Family Self-Sufficiency Program, Tenant Based Rental Assistance Program, and Home buyer Program. www.newcap.org

Northeast Wisconsin Community Action Program (NEWCAP) Inc. is a locally controlled, private, not-for-profit organization governed by a Board of Directors made up of low-income, public, and private sector representatives. The involvement of low-income representatives in various aspects of the agency's operation makes NEWCAP unique among human service organizations. The federally mandated mission of NEWCAP is to work toward the elimination of the causes of poverty by enabling and assisting low-income people to attain the skills, motivation, and opportunities necessary for them to become self-sufficient and independent. The organization services Oconto, Brown, Shawano, Menominee, Langlade, Oneida, Forest, Florence, Marinette, and Vilas Counties. The following are the housing related services provided by NEWCAP. www.newcap.org Not all these programs are available in every county:

- The Section 8 Voucher Housing Assistance Program
- The Section 8 Voucher Family Self-Sufficiency (FSS) Program
- The HOME Homebuyer Program
- The State Shelter Subsidy Grant Program
- The Weatherization Program

Tax increment financing (TIF) is a tool available to cities and villages in Wisconsin under section 66.1105 of the Wisconsin Statutes for redeveloping blighted areas. TIF can be used to cover costs of public works or improvements including costs for demolition, land assembly, public improvements, and new buildings. Under TIF, new private development creates higher property values, thus creating a greater tax base (the tax increment). This increment, or a portion

of the increment, is set aside for reinvestment in the area. Tax increment financing could be used to assist in the building or rehabilitation of affordable housing for middle- and lower-income households.

State Programs

Wisconsin Department of Commerce Bureau of Housing (BOH) helps expand local affordable housing and supports services to people without housing. The fifteen federal and state programs managed by the Bureau aid elderly persons, people with disabilities, low and moderate income residents, and the homeless population. The Bureau works closely with local governments and non-profit housing organizations to deliver financial and technical housing assistance and to strengthen the capabilities of housing organizations. More than \$40 million is distributed annually to improve the supply of affordable housing for Wisconsin residents. The bureau:

- administers federal housing funds such as Home Investment Partnerships, (HOME) and CDBG;
- administers a variety of programs for persons with Special Needs (Homeless);
- provides state housing funds through local housing organizations;
- coordinates housing assistance programs with those of other state and local housing agencies; and
- develops state housing policy and provides housing information and technical assistance.
www.commerce.wi.gov/housing

The Wisconsin Housing and Economic Development Administration (WHEDA) also manages several federal housing programs. One program, the Low Income Housing Tax Credit Program, encourages housing development by providing private investors with income tax credits when they invest in low income housing development. Tax credits are allocated to housing projects on a competitive basis.

Information about WHEDA programs can be obtained by telephoning (800) 362-2761 or by visiting its web site at www.wheda.state.wi.us.

Wisconsin Historical Society's Division of Historic Preservation administers a 25-percent state income tax credit for repair or rehabilitation of historic homes. The tax credit is available to owner-occupants of non-income-producing historic residences. The property must be listed in, or eligible for, the State or National Register, or be determined to contribute to a State or National Register historic district. Eligible activities are limited to exterior work, rehabilitation or structural, electrical, mechanical, and plumbing systems.

www.wisconsinhistory.org/hp/architecture/tax_credit.asp

Wisconsin Department of Veterans Affairs makes available a variety of home acquisition and improvement programs for qualifying veterans and their dependents. These programs include the Home Purchase Program, Home Improvement Loan Program (HILP) may be used for additions, garage construction, repairs and remodeling (i.e., replace a roof, install new windows, a new furnace or a central air conditioning system) of a veteran's residence; and Primary Mortgage Loan (PML), that is different from the USDVA Home Loan Guaranty Program.
www.homeloans.va.gov

The Energy Assistance Bureau, within the Wisconsin Division of Energy, provides services to Wisconsin qualified residential households with energy assistance and weatherization needs. The Wisconsin Home Energy Assistance Program (WHEAP) administers the federally funded Low Income Home Energy Assistance Program (LIHEAP) and Public Benefits Energy Assistance Program. LIHEAP and its related services help over 100,000 Wisconsin households annually. In addition to regular heating and electric assistance, specialized services include emergency fuel assistance, counseling for energy conservation and energy budgets, pro-active co payment plans, and emergency furnace repair and replacement. Services are provided locally through county social services offices, Tribal governments, private non-profit or other government agencies. www.heat.state.wi.us

Federal Programs

U.S. Department of Agriculture -Rural Development offers subsidized direct loans and non-subsidized guaranteed loan funds for the purchase and construction of homes by households in qualified rural areas of the state. The community must be of 20,000 or less, and there are special programs for Native Americans. Rural Development also provides low-interest mortgage loans for single family, owner-occupied residential home repair in rural areas. Some grants are available for very low-income elderly households. It provides funding through the 504 and the Housing Preservation Grant programs. www.rurdev.usda.gov/wi/programs/rhs/

U.S. Department of Housing and Urban Development provides vital public services through its nationally administered programs. It oversees the Federal Housing Administration (FHA), the largest mortgage insurer in the world, as well as regulates the housing industry business. The mission of the Office of Housing is to:

- Contribute to building and preserving healthy neighborhoods and communities;
- Maintain and expand homeownership, rental housing and healthcare opportunities;
- Stabilize credit markets in times of economic disruption;
- Operate with a high degree of public and fiscal accountability; and
- Recognize and value its customers, staff, constituents and partners.

Within the Office of Housing are three business areas:

1. HUD's Single Family programs include mortgage insurance on loans to purchase new or existing homes, condominiums, manufactured housing, houses needing rehabilitation, and for reverse equity mortgages to elderly homeowners.
2. HUD's Multifamily programs provide mortgage insurance to HUD-approved lenders to facilitate the construction, substantial rehabilitation, purchase and refinancing of multifamily housing projects, and healthcare facilities.
3. HUD's Regulatory programs are designed to assist homeowners and homebuyers to regulate real estate transactions. www.hud.gov

US Department of Veterans Affairs offers a number of programs and services for veterans and their dependents. In the area of housing, the department has several grants and loans available. Many of the programs are made available through the State Department of Veterans Affairs or local veteran's affairs offices. www.va.gov

National and Regional Not for Profit Organizations

Habitat for Humanity has local affiliates and is responsible for raising funds, recruiting volunteers, identifying project sites and constructing owner-occupied housing for the benefit of participating low-income families. Their goal is to eliminate inadequate and poverty housing throughout the world. www.habitat.org

Movin' Out, Inc. creates opportunities for people with disabilities and their families to purchase and maintain their own homes, in housing and neighborhoods that are safe, affordable, accessible, and integrated. Movin' Out, Inc. is a housing organization providing information and assistance, housing counseling, and gap financing for purchase and rehabilitation to Wisconsin households with a member who has a permanent disability. www.Movin-out.org.

Tomorrow's Home Foundation was created in 2000 for several purposes:

- Assist disabled persons in the purchase of a manufactured or modular home via a downpayment assistance grant;
- Provide emergency assistance grants designed to provide critical repairs so that individuals and families can stay in their manufactured or mobile home;
- create a method and mode for disposing of old, uninhabitable mobile homes that were blighting the countryside; and
- educate the manufactured and modular housing industry.

As a public charity, the Foundation provides a way to give back to the community for industry members and a method to assist populations that are underserved by other programs. For example, many other charitable and public service agencies do not provide housing assistance to persons in mobile home parks. The Tomorrow's Home Foundation fills this void.

www.tomorrowshomefoundation.org

WiFrontDoorHousing is a web-based community service that is intended to better connect providers of housing and housing services to renters who are looking for these types of housing opportunities. Their goal is to provide access to up-to-date housing information with user-friendly tools. These tools are customized for each of our user groups: renters, landlords, property managers, and the housing agency staff that help people find and keep housing. www.wifrontdoor.org

Rural Housing, Inc. was created in 1970 by the Rural Electrical Cooperatives as a statewide non-profit. Over the years, they have had federal, state, and private funding. They have served hundreds of rural communities and non-profit organizations with technical assistance, grant applications and advice. They have assisted thousands of low-income families with information, funds to repair their septic and wells, assistances for rent, and funds to purchase homes or stay in their homes. Millions of dollars have been leveraged for the very low-income rural residents of Wisconsin to:

- Assist low-income families obtain adequate, safe and sanitary housing;
- Help low-income households acquire appropriate water and wastewater services;
- Enable small communities and local organizations to more effectively address the needs of those with substandard shelter;

- Demonstrate new services and new approaches to address rural housing problems; and
- Alert the public and private sectors about the housing, water, and community development needs of low-income rural residents. www.wisconsinruralhousing.org

The Wisconsin Partnership for Housing Development works with local governments as consultants to help them understand their housing needs and find solutions, and as technical advisors that work under contract to HUD to help local governments design new housing programs or create local housing partnerships. Putting together the right combination of people and resources is essential to finding effective approaches to local or regional housing problems. We have experience in working with neighborhoods, villages, cities, counties and metropolitan areas, as well as grassroots community leaders and those most directly affected by poor housing and declining neighborhoods. www.wphd.org

Catholic Charities agencies strengthen their communities by empowering the people within them. They help families and individuals overcome tragedy, poverty, and other life challenges. Every agency is unique. They share a common goal of providing the services and programs that their particular community needs the most. Over 220,000 compassionate volunteers, staff, and board members comprise the driving force behind the Catholic Charities network. Their commitment goes beyond meeting peoples' daily needs. They build hopeful futures by helping people take control of their lives. www.catholiccharitiesinfo.org

NeighborWorks® America is comprised of local organizations and Neighborhood Housing Services of America, which has successfully built healthy communities since 1978. Together, with national and local partners, NeighborWorks creates new opportunities for residents while improving communities. NeighborWorks America is national nonprofit organization created by Congress to provide financial support, technical assistance, and training for community-based revitalization efforts. www.nw.org

APPENDIX B – OCONTO COUNTY HOUSING PROGRAMS AND RESOURCES

VOLUME II - APPENDIX C
ECONOMIC S.W.O.T. WORKSHOP RESULTS

ECONOMIC S.W.O.T. WORKSHOP RESULTS

Wisconsin State Statute 66.1001 requires the *Oconto County 20-Year Comprehensive Plan* include an element that specifically focuses on economic development. This element provides a detailed description and analysis of the county's current economic climate. To gather input on the most important economic development issues facing the county, an Economic S.W.O.T. Exercise (Strengths, Weaknesses, Opportunities, and Threats) was conducted on February 20, 2007. Thirty-five people attended the workshop. Several other residents were not able to attend the workshop but provided additional input. All responses were recorded and listed below.

The participants were divided into four groups. They were asked to provide input as to the county's economic strengths, weaknesses, opportunities, and threats. After each group was completed with the exercise, they were asked to identify the priority issues in each category from the lists they compiled. The top issues in each of the four categories were determined and noted in the tables below. This input will be instrumental in preparing the county's economic development strategies found in Chapter 3 of the Comprehensive Plan. These development strategies will help Oconto County promote its strengths, minimize its weaknesses, take full advantage of its opportunities, and offset its potential threats.

Strengths

Strengths are existing resources and capabilities that can be used as a basis for developing a successful growth plan.

TOP STRENGTHS

Group 1	Group 2
<ul style="list-style-type: none"> • Hwy 41/141, STH 32 • Water features – Lakes, Green Bay, Creeks, Rivers 	<ul style="list-style-type: none"> • Workforce ethics/skilled • Waterways – lakes/streams, natural resources
Group 3	Group 4
<ul style="list-style-type: none"> • Agriculture and ag. Support businesses • Highways • Tourism 	<ul style="list-style-type: none"> • OCEDC • Campgrounds • Lakes and water • Large ag. base

ADDITIONAL STRENGTHS

- Abundance of public waterways
- Access to road information (maps)
- Agriculture land rich
- ATV trails
- Availability of high quality health care
- Availability of low cost housing
- Availability of public land – ex. Nicolet Forest and Machickanee Forest
- Available buildings
- Beautiful farm land
- Beautiful lakes
- Businesses willing to stay

- Clean water
- Daycare
- Daycare (kids/adults)
- Diversified industries
- Diversity of farms
- Educations
- Established industrial parks
- Excellent education
- Excellent medical facilities
- Existing businesses
- Existing industrial parks (Oconto, Oconto Falls, Gillett, Suring, Mountain)
- Existing NWTC campus in Oconto Falls
- Existing recreation trail (old railroad right-of-way)
- Forests with wood product
- Four lane highway
- Fresh air
- Good elementary and high school systems
- Good road systems
- Great fishing and hunting
- Great people
- Healthcare
- Higher income seasonal residents
- Highways (2 responses)
- History
- Housing subdivisions
- Industrial parks
- Land for new housing
- Land available/develop campgrounds, recreation areas
- Local government
- Lots of small parks (rec.)
- Major highways
- Many main streets in smaller towns
- Medical facilities (2 responses)
- Natural beauty and woodlands
- Natural resources (lakes, forest, trails, hunting)
- Oconto River
- Opportunities for businesses
- Outdoor recreation (hunting, fishing, camping, etc.)
- Prime land for business development
- Promotion of agriculture
- Public infrastructure
- Public land with access
- Public safety services
- Quarries

- Reasonable housing
- Recreational opportunities (3 responses)
- Recycling program
- Reliable workforce with good work ethics
- Retail and small business (i.e. gift shops)
- R-R
- Rural area near bigger city
- Schools
- Schools – primary/secondary
- Snowmobile trails
- Skilled workers
- Small communities
- Sportsman (person) clubs
- Suring Golf Course and other recreation
- Take care of aging population
- Tech. training close by
- TIF financing
- Tourism
- Tourist
- Tourist attractions
- Town festivals
- Trail system
- Trained workforce
- Unemployed residents looking for work
- Utilities/electrical and communication
- Water features
- Waters of Green Bay
- Waterways
- Work ethic
- Work ethics (3 responses)

Weaknesses

A weakness is a limitation or the absence of certain strengths that keep the county from achieving its objectives.

TOP WEAKNESSES

Group 1	Group 2
<ul style="list-style-type: none"> • Lack of employment opportunities • Existing jobs are lower paying 	<ul style="list-style-type: none"> • Lack manufacturing jobs • Limited/lack infrastructure for manufacturing
Group 3	Group 4
<ul style="list-style-type: none"> • Lack of industry • Void of technology availability 	<ul style="list-style-type: none"> • Distance to ports • Tech schools not affordable • Lack of high school <u>trades</u> • Poor academic attainment

ADDITIONAL WEAKNESSES

- 50 percent of workforce leaves county daily
- A better related between DNR and community
- Aging population (3 responses)
- A younger and more open minded county board
- Attitude and lack of vision of some business owners
- Bring raw materials from distance
- Businesses are leaving the industrial parks in the county (why?)
- Cliquish population
- County cut in half at Hwy ZZ – tourism/homes
- Distance between north/south boundaries keeps county fragmented
- Distance for necessities
- Forest products lack market
- Higher standard of living
- High-tech jobs are virtually non-existent in this county
- Inability to come up with funds to supplement grants
- Infrastructure (telecommunication, utilities, etc.)
- Insufficient commercial development
- Lack 2 year and 4 year education
- Lack mentors/leaders willing to get involved
- Lack of advanced technology – WiFi
- Lack of air and rail
- Lack of attracting educated persons with new ideas
- Lack of attention to transportation – roads
- Lack of county promotion
- Lack of employment opportunities
- Lack of high tech. skills
- Lack of higher education opportunities
- Lack of investors

- Lack of manufacturing jobs
- Lack of snow
- Lack of support system
- Lack of time
- Lack professional workforce
- Lack skill/professional jobs
- Lack technology in rural areas
- Leadership resistance to change
- Length of county
- Loss of small farmer
- Loss of valuable workforce – commuters
- Loss of younger highly educated people
- Loss small business in cities
- Low pay small employers
- Need higher paying jobs, better salaries
- No border agreements for shared services
- No central location county seat
- No infrastructure in unincorporated areas
- No large industry
- No religious owned businesses
- No YMCA/YWCA
- Not being aware of localities
- Not developing/taking advantage more of the existing natural resources
- Not enough industrial building
- Not enough skilled workers (trades)
- Not enough trails – connected
- Not many high tech manufacturing jobs in the county
- Not many shopping malls to keep families in the county
- Not many turn-key buildings available for business
- Not willing to experiment
- Numerous small farms
- Overnight lodging
- Population's educational attainment
- Public perception of area as cold, old fashion, cheese-heads
- Qualified leadership is not always available
- Raw materials except wood needs to be transported into the county
- Residents resistant to change
- Retain college and tech college graduates
- Separation between communities (distance)
- Service industry lacks access to good, reliable workforce in northern part of the county
- Shortage of skilled labor force
- Signage rules
- Some businesses are not getting their needs met by the OCEDC
- Tourist – lack of information

- Trans. Lines closing/failing
- Tunnel thinking
- Weather (2 responses)
- We need to have college graduates return to our county
- Work ethic
- Younger people not involved
- Zoning

Opportunities

An opportunity is any favorable situation or resource that could enhance economic development.

TOP OPPORTUNITIES

Group 1	Group 2
<ul style="list-style-type: none">• Future services for aging community• Good manufacturing workforce	<ul style="list-style-type: none">• State and Federal money for development• Promote tourism with established programs/lakes/streams/trails, etc.
Group 3	Group 4
<ul style="list-style-type: none">• Tax incentives for businesses• Keep rail and roads in good condition• Expand tourism	<ul style="list-style-type: none">• New business development• Countywide business recruitment

ADDITIONAL OPPORTUNITIES

- Abundance of forest land
- A clean river runs the entire length of the county
- Accessibility of good transportation systems –rail, highways, airport
- Affordable housing
- Ag. land for biofuels exist now
- Airport
- Amount of available land for future business
- Available labor due to high unemployment
- Availability of agricultural land (bio-energy development)
- Avoid urban sprawl
- Better use of technology
- Better zoning of our townships
- Bring back skilled workers
- Business' kept in specific areas
- Catering to aging population services and housing
- Close proximity to metropolitan area
- Community involvement
- Competition for workforce may increase wages
- Consolidate our school management positions
- Country roads and recreation trail could be used for more recreational activities
- Countywide marketing strategies
- Countywide room tax
- Develop additional ATV trails throughout the county
- Develop bedroom communities
- Develop trail system with organizations
- Develop waterpark
- Educational facilities available for developing small business leadership
- Empty facilities
- Ethanol/biodiesel plants

- Existing vacant structures
- Expand on history
- Expansion of ATV trails
- Forest as resource
- Forestry
- Good drinking water
- Grant money for various programs
- Highway traffic
- Increased gas prices keep workforce in county
- Increases in tourism
- Inexpensive land
- Labor
- Lakes, streams – promote and develop trails
- Land for development
- Leadership for development
- Libraries funding
- Many vacant buildings
- More campsites
- More golf courses
- More hunting
- More tourism marketing
- OCEDC available for research and development of existing and new businesses
- Promote tourism w/established businesses and utilize our local natural resources
- Recreational opportunities
- Residential development
- Service businesses based on resource draw
- State and federal grants
- Space availability in existing industrial parks
- Tax credits
- Tech school remedial classes
- Technical and college level education available within commuting distances
- TIF
- Tourism resources and development (2 responses)
- Tourist
- Water features and harbors
- Willing lenders
- Willingness of communities to bring industry into the county
- Wood resources
- Workforce exists

Threats

Threats are potential obstacles the county faces concerning economic development.

TOP THREATS

Group 1	Group 2
<ul style="list-style-type: none">• Not enough high paying jobs in county• Loss of family farms	<ul style="list-style-type: none">• Adjacent big cities draw our opportunities away• Transition to world economy• Closing of mill in Oconto Falls• Loss of big manufacturing• High state taxes drive business out
Group 3	Group 4
<ul style="list-style-type: none">• Groundwater contamination• State mandates• Increasing taxation	<ul style="list-style-type: none">• Lower school standards• Annexation vs. local cooperation• No training for local officials

ADDITIONAL THREATS

- Ability to maintain quality school systems
- Airline pollution
- Ag waste products
- Aging population
- Annexation vs. local cooperation
- Better higher education out of county
- Bigger retail vs. small business villages or cities
- Blue laws – no alcohol sales
- Bored young people
- Branch plants vs. local owners
- Bus. That disregard community/surrounding
- By-passes
- C A F O
- Close minds
- Declining school enrollment
- Decrease in standard of living in the county
- DNR
- Drug problem
- Ecological groups
- Economy
- Empty storefronts
- Energy crisis
- Environmental regulations
- Foreign competition
- Frustration
- Gas fuel prices

- Gas prices – costing more to import
- High taxes
- Increased demand for municipal services
- Increased risk of groundwater contamination
- Insufficient public utilities
- Job opportunities in neighboring counties (loss of skilled workforce)
- Lack of good highway planning – west side of county
- Lack of good school that teach to the needs of the a changing economy
- Lack of knowledge in new tech
- Lack of local control versus state and federal
- Lack of space for existing businesses to grow
- Lack of tech. services available
- Local government levy limits
- Local governments
- Local roads are suitable for industrial traffic
- Loss of business overseas
- Loss of existing businesses
- Loss of jobs due to business closings
- Low agriculture prices
- Low wages
- Lower school standards
- Natural resources that are ignored
- Newcomers seen as threats to “locals”
- North vs. south attitudes
- No training for local officials
- Overpopulation
- Perception that there is nothing north of Green Bay
- Pollution of our great river
- Poorly maintained retail buildings for occupancy
- Proposed roundabouts
- Recession/depression
- Residential growth and amenities needed
- Resistance to change
- Resources such as manpower, money, natural resources being drained by the war in Iraq
- RR loss
- Ruining our shoreline
- School districts not involved in economic development planning
- Shrinking shorelines
- Terrorism
- Too many jobs going off-shore
- Too close to Green Bay
- Trade deficit
- Urban sprawl along Bayshore
- Under funded Economic development programs

- Untrained workforce
- Urbanization
- War is alienating our country resulting in a loss of foreign markets
- Weather
- Wisconsin DOT putting in roundabouts on 32
- Wisconsin taxes – too high
- World economy – jobs going overseas
- Zoning mandates

VOLUME II - APPENDIX D
ECONOMIC DEVELOPMENT RESOURCES

This section briefly explains the programs and resources available on each government level that are designed to help build economic development capacity through infrastructure expansion and to offer resources necessary to develop and grow businesses.

Federal

US Department of Commerce, Economic Development Administration (EDA)

EDA was established to work with states and regional planning commissions (economic development districts) to generate new jobs, retain existing jobs, and stimulate industrial and commercial growth in economically distressed areas and regions of the United States. The purpose of its program investments is to provide economically distressed communities with a source of funding for planning, infrastructure development, and business financing that will induce private investment in the types of business activities that contribute to long-term economic stability and growth. EDA's investments are strategically targeted to increase local competitiveness and strengthen the local and regional economic base. There are a number of investment programs offered by EDA.

The **Public Works Program** to empower distressed communities to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs and investment. The **Economic Adjustment Assistance Program** assists state and local interests to design and implement strategies to adjust or bring about change to an economy. The program focuses on areas that have experienced or are under threat of serious structural damage to the underlying economic base. The **Research and Technical Assistance Program** supports research of leading edge, world class economic development practices as well as funds information dissemination efforts. The Technical Assistance Program helps fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in distressed areas from making optimal decisions on local economic development issues. EDA's **Partnership Planning Programs** help support local organizations (Economic Development Districts, Indian Tribes, and other eligible areas) with their long-term planning efforts and their outreach to the economic development community on EDA's programs and policies. (source: www.eda.gov)

US Department of Housing and Urban Development

The **Economic Development Initiative (EDI)** provides grants to local governments to enhance both the security of loans guaranteed through the **Section 108 Loan Program** and the feasibility of the economic development and revitalization projects they finance. EDI has been the catalyst in the expanded use of loans through the Section 108 Program by decreasing the level of risk to their CDBG funds or by paying for some of the project costs. There are congressionally earmarked and competitive EDI grants. Competitive EDI grants can only be used in projects also assisted by the Section 108 Loan Program. Eligible activities include property acquisition, rehabilitation of public owned property, and economic development activities.

The **Brownfields Economic Development Initiative (BEDI)** is a key competitive grant program HUD administers to stimulate and promote economic and community development. BEDI is designed to assist cities with the redevelopment of abandoned, idled, and underused industrial and commercial facilities where expansion and redevelopment is burdened by real or potential environmental contamination. The purpose of the BEDI program is to spur the return of brownfields to productive economic use through financial assistance to public entities in the

redevelopment of brownfields, and enhance the security or improve the viability of a project financed with Section 108- guaranteed loan authority. Therefore, BEDI grants must be used in conjunction with a new Section 108-guaranteed loan commitment.

The **Section 108 Loan Guarantee Program** is a loan guarantee provision of the CDBG program. It provides communities with a source of financing for economic development, housing rehabilitation, public facilities, and large-scale physical development projects. Eligible applicants include entitlement communities. Activities eligible for Section 8 financing include economic development activities eligible under CDBG, acquisition of real property, rehabilitation of public property, installation of public facilities. The principal security for the loan guarantee is a pledge by the applicant public entity of its current and future CDBG funds. The maximum repayment period for a Section 8 loan is twenty years. (source: www.hud.gov)

USDA Rural Development

The US Department of Agriculture through its Rural Development offices offer a variety of funding options for many types of business ventures to include agriculture, manufacturing, processing, services, commercial, and retail. Rural Development is also instrumental in providing much needed financial resources to communities for infrastructure improvements and expansions primarily for waste water and water treatment facilities. They have direct and guaranteed loans for businesses and communities in addition to a number of grants.

The **Rural Business Opportunity Grant Program** provides technical assistance, training, and planning activities that improve economic conditions in rural areas of 50,000 people or less. A maximum of \$1.5 million per grant is authorized. **Rural Utilities Service (RUS) Grant Program** is designed to promote economic development and/or job creation projects including, but not limited to: project feasibility studies, start-up costs, incubator projects, and other reasonable expenses. Grants can be provided to rural communities through RUS borrowers to be used for revolving loan funds for community facilities and infrastructure, and for assistance in conjunction with rural economic development loans.

The **Rural Business Enterprise Grants Program (RBEG)** is available to public bodies, private nonprofit corporations, and federally-recognized Indian Tribal groups to finance and facilitate development of small and emerging private business enterprises located in areas outside the boundary of a City, or unincorporated areas of 50,000 or more and its immediately adjacent urbanized or urbanizing area. The small, or emerging business to be assisted must have less than 50 new employees, less than \$1 million in gross annual revenues, have or will utilize technological innovations and commercialization of new products and/or processes to be eligible for assistance. Funds can be used for a variety of things including, but not limited to: construction of buildings and plants, equipment, access streets and roads, parking areas, utility and service extensions, and a variety of other costs.

The **Intermediary Relending Program** money is lent to private non-profit organizations, any state or local government, an Indian Tribe, or a cooperative that is relent to by the intermediary to the ultimate recipients. The ultimate recipient must not be able to receive financing at reasonable rates or terms. (source: www.rurdev.usda.gov/wi/programs/index.htm)

US Department of Commerce National Oceanic and Atmospheric Administration (NOAA)

The **Coastal Zone Management Program (CZMP)** assists local and state governments in managing and revitalizing coastal areas for mixed-use development. The competing goals of commercial and industrial development, tourism, environmental protection, transportation and recreation are discussed in coastal management plans. The CZMP seeks to maintain the economic welfare of coastal communities and ecosystems through intergovernmental cooperation. The CZMP supports states through financial contributions, technical advice, participation in state and local forums, and through mediation. Wisconsin CZMP programs currently protect wetland ecosystems, reduce non-point pollution sources, reduce erosion and assist in meeting state and regional coastal goals. (source: www.coastalmanagement.noaa.gov/programs)

US Environmental Protection Agency

The **Brownfields Assessment and Cleanup Cooperative Agreements** objectives are to provide funding to inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites; to capitalize a RLF fund; and to carryout cleanup activities at brownfield sites that are owned by the grant recipient. Eligibility for the assessment, RLF, and cleanup grants includes a general purpose unit of local government. This is a competitive grant program. There are separate guidelines for each of the three areas. Grant amounts are based on size and type of contamination, ranging from \$200,000 to \$350,000. (source: <http://epa.gov/brownfields/pilot/htm>)

US Department of the Interior - National Park Service

The **Land and Water Conservation Fund (LWCF)** is a visionary and bipartisan program, established by Congress in 1964 to create parks and open spaces, protect wilderness, wetlands, and refuges, preserve wildlife habitat, and enhance recreational opportunities. States receive individual allocations of LWCF grant funds based on a national formula. Then states initiate a statewide competition for the amount available to award via matching grants. (source: www.nps.gov/ncrc/programs/lwcf)

Small Business Administration (SBA)

The SBA provides financial, business counseling and training, and business advocacy to foster the development and success of small businesses. Financial assistance comes in the form of loans and grant programs including the **7(a) Loan Guarantee, Prequalification Loan, 7(m) Micro Loan, CDC/504 Loan, CAPlines Program, and 8(a) Business Development Program**. (source: www.sba.gov/wi/WI_FINANCING.html)

State

Wisconsin Department of Commerce

The federally funded **Community Development Block Grant (CDBG)** program can be used for housing, economic development and public facility improvements. The program is designed to assist economically distressed smaller communities with improvements to such things as utilities and streets, fire stations, community centers, and housing rehabilitation, as well as many other improvements needed by a community. The **CDBG-Economic Development (CDBG-ED)** program assists large businesses that will invest substantial private funds and create approximately 100 jobs as they expand or relocate in Wisconsin. Funds are awarded to a

community, which then loans the funds to a business. The [**Major Economic Development \(MED\) Program**](#) is designed to assist businesses that will invest private funds and create jobs as they expand in or relocate to Wisconsin. The [**Rural Economic Development \(RED\) Program**](#) provides working capital or fixed asset financing for businesses with fewer than 50 employees.

Specifically, the [**CDBG-Public Facilities for Economic Development \(PFED\)**](#) program is designed to assist communities with expanding or upgrading their infrastructure to accommodate businesses that have made a firm commitment to create jobs and invest in the community. The [**CDBG-Public Facilities \(CDBG-PF\)**](#) component helps eligible local governments upgrade community facilities, infrastructure, and utilities for the benefit of low- to moderate-income residents. The Main Street Program offers a variety of resources to include façade grants and technical and financial assistance to stimulate the revitalization of their respective areas. The [**Brownfields 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. The [**Community-Based Economic Development Program \(CBED\)**](#) is designed to promote local business development in economically-distressed areas. The program awards grants to community-based organizations for development and business assistance projects and to municipalities for economic development planning. The program helps community-based organizations plan, build, and create business and technology-based incubators, and can also capitalize an incubator tenant revolving-loan program. The [**CDBG-Blight Elimination and Brownfield Redevelopment Program \(BEBR\)**](#) can help small communities obtain money for environmental assessments and to remediate brownfields. The [**CDBG-Emergency Grant Program**](#) can help small communities repair or replace infrastructure that has suffered damages as a result of catastrophic events.

The [**Community Development Zone \(CDZ\)**](#) designation is a tax credit program for businesses planning to expand, relocate or start in the designated Community Development Zones (CDZ). CDZs in the BLRPC district include the cities of Green Bay, Sturgeon Bay, Two Rivers, and Manitowoc; and the Counties of Florence, Marinette, and Oconto. These tax credits are to be applied against a company's Wisconsin income tax liability. These credits are based on the number of new jobs that a company creates, and the wage level and benefit package that are offered to the employees. The [**Enterprise Development Zone \(EDZ\)**](#) program provides tax incentives to new or expanding businesses whose projects will affect distressed areas. Based on the economic impact of a proposed business project, the Department of Commerce will be able to designate an enterprise development zone. A zone is "site specific" and applies to only one business.

To complement the bricks and mortar component of Commerce, there is funding specifically earmarked for employee training. Eligible businesses looking to train a significant number of its current or incoming workforce can apply for and receive a direct grant from Commerce for [**Customized Labor Training \(CLT\)**](#). Companies with a few employees seeking training are eligible for the [**Business Employees Skills Training \(BEST\) Program**](#). The focus of both programs is on the training or retraining of employees to incorporate new technologies or manufacturing processes.

Commerce provides financial resources to encourage the development of small businesses. Potential entrepreneurs can access an [**Early Planning Grant \(EPG\)**](#) of up to \$3,000 to obtain professional services necessary to evaluate the feasibility of a proposed start-up or expansion or develop a business plan. The [**Entrepreneurial Training Grant Program \(ETG\)**](#) is a

comprehensive course designed to provide hands-on assistance in the writing of a business plan. The technical assistance can be provided by the Small Business Development Center (SBDC) at UW-Green Bay or the regional Service Core of Retired Executives (SCORE) office.

Other programs offered by Commerce include: the [**Employee Ownership Assistance Loan \(EOP\) Program**](#) can help a group of employees purchase a business by providing individual awards up to \$15,000 for feasibility studies or professional assistance. The business under consideration must have expressed its intent to downsize or close. The [**Industrial Revenue Bonds \(IRB\)**](#) are municipal bonds whose proceeds are loaned to private persons or to businesses to finance capital investment projects. All Wisconsin municipalities, cities, villages, and town are authorized to issue IRBs. The [**Technology Development Fund \(TDF\) Program**](#) helps Wisconsin businesses research and develop technological innovations that have the potential to provide significant economic benefit to the state. The [**Technology Development Loan \(TDL\)**](#) program helps Wisconsin businesses develop technological innovations that have the potential to provide significant economic benefit to the state. This program is designed to help businesses commercialize new technology.

The [**Minority Business Development \(MBD\) Loan Program**](#) provides low interest loans to assist minority-owned companies with land and equipment purchase, working capital, and construction. The [**Wisconsin Trade Project Program**](#) can help small export-ready firms participate in international trade shows. The [**Milk Volume Production \(MVP\) Loan Program**](#) enables farmers to increase milk production by offering loan interest loans to purchase additional dairy cattle. The [**Dairy 20/20 Early Planning Grant Program**](#) covers third party services to assist the applicant with start-up, modernization, or expansion of a dairy operation. (source: www.commerce.state.wi.us)

Wisconsin Department of Transportation

The [**Transportation Economic Assistance \(TEA\) Grants**](#) provide up to 50% of costs to governing bodies, private businesses, and consortiums for road, rail, harbor, and airport projects that help attract employers to Wisconsin, or encourage business and industry to remain and expand in the state. Grants up to \$1 million are available for transportation improvements that are essential for an economic development project. The amount of DOT provided funding is dependent on the number of jobs being created or retained. The 50% local match portion can come from a combination of local, federal, state, or in-kind services.

In 1979, the [**Harbor Assistance Program \(HAP\)**](#) was created to assist harbor communities along the Great Lakes and Mississippi River in maintaining and improving waterborne commerce. Port projects typically include dock reconstruction, mooring structure replacement, dredging, and construction of facilities to hold dredged materials. The [**Freight Rail Infrastructure Improvement Program \(FRIP\)**](#) and [**Freight Rail Preservation Program \(FRPP\)**](#) were created to maintain and improve rail services throughout Wisconsin.

The [**State Infrastructure Bank \(SIB\) Program**](#), similar to a private bank, offers a range of loans and credit options to help finance eligible surface transportation projects. The money can be used in conjunction with other programs. SIBs offer Wisconsin the ability to undertake transportation projects that would otherwise go unfunded or experience substantial delays. Communities can borrow the money to provide needed transportation infrastructure improvements to help preserve, promote, and encourage economic development and/or promote transportation efficiency, safety, or mobility. The Wisconsin SIB program is a revolving loan

program providing capital for transportation projects from loan repayments and interest earned from money remaining in the bank. Eligible projects include constructing or widening a road linking an inter-modal facility and providing better access to commercial and industrial sites. WisDOT charges 2 percent interest on the loan principal, with projects amortized up to 25 years. Eligible applicants are local units of government, Amtrak Railroad, private non-profit organizations, and Transit Commissions. (source: www.dot.wisconsin.gov)

Wisconsin Department of Tourism

Funding is available for local communities and regions to design their own marketing effort. The most popular and utilized program is the **Joint Marketing Grant (JEM)**. The grants are to assist in paying for the costs associated with developing a stronger advertising and public relations campaign to promote tourism. (source: <http://agency.travelwisconsin.com/Programs/programs/shtm>)

Wisconsin Department of Agriculture, Trade, and Consumer Protection

Financial resources are provided to help grow and diversify the state's agriculture industry. The **Agricultural Development and Diversification (ADD)** grant is awarded to projects that may create new opportunities within agriculture through new value-added products, new market research, new production or marketing techniques, or alternative crops or enterprises. Maximum grants are \$50,000. Eligible applicants are individuals, associations, agri-businesses, and industry groups. (source: <http://datcp.state.wi.us>)

Wisconsin Department of Administration

The Wisconsin Coastal Management Program was established in 1978 under the Federal Coastal Zone Management Act. Coastal management is defined as achieving a balance between natural resource preservation and economic development along our Great Lakes coasts. All counties adjacent to Lakes Superior and Michigan are eligible to receive funds. Coastal Management Grants are available for coastal land acquisition, wetland protection and habitat restoration, non-point source pollution control, coastal resources and community planning, Great Lakes education, and public access and historic preservation. (source: www.doa.state.wi.us)

Wisconsin Department of Natural Resources

Brownfields, Green Space, and Public Facilities grants help local governments clean-up brownfield sites intended for long-term public benefit, including green spaces, development of recreational areas or other uses by local governments. A city, village, town, county, redevelopment authority, community development authority, or housing authority is eligible to apply for funds. Eligible costs include remedial action plans and/or costs to develop a Remedial Action Plan. No grant may exceed \$200,000. The match requirement (20-50 percent) is determined by the amount of the grant. Site access and completed Phase I and II Environmental Site Assessments are required to receive a grant. Application deadline has been each year in January. (source: <http://dnr.wi.gov/org/caer/cfa/cfindex.html>)

Wisconsin Housing and Economic Development Authority (WHEDA)

WHEDA is responsible for a number of housing and economic development functions. It works with local and state economic development professionals, businesses, and lending institutions to help an individual expand or modernize a farm or business. **Loan Guarantees, direct loans, New Market Tax Credits, and interest rate subsidies** are utilized within a financial package to help ensure the project has the best chance for long term success. (source: www.wheda.com)

Other state resources include: *Impact Seven, Inc.*, is one of the more recognizable statewide organizations that provide micro-loans for small business start-ups and expansions. (source: www.impactseven.org) The *Wisconsin Women's Business Initiative Corporation (WWBIC)* also provides micro-loans to predominately women, minorities, and those of lower incomes. (source: www.wwbic.com) The *Wisconsin Business Development Finance Corporation (WBD)* provides financial assistance and resources to business and lenders throughout the state. (source: www.wbd.org) The *Wisconsin Innovation Network (WIN)* is one of the priority areas of the *Wisconsin Technology Council*. WIN is a community-based economic development organization dedicated to fostering innovation and entrepreneurship. (source: www.wisconsintechnologycouncil)

Regional

The Bay-Lake Regional Planning Commission (BLRPC)

The Bay-Lake Regional Planning Commission serves as an economic development district for the US Department of Commerce-Economic Development Administration. Potential EDA funded projects must be reviewed by the BLRPC for eligibility of federal funding. The BLRPC also provides technical assistance to local ED organizations and offers grant writing and administration services for various state and federal funding sources. (source: www.baylakerpc.org)

Northeast Wisconsin Regional Economic Partnership (NEWREP)

All eight counties of the BLRPC are part of Commerce's Eastern Wisconsin Technology Zone. The program provides income tax incentives for high-tech development in the region. The zone is designed to enhance the region's attractiveness to high-tech businesses and workers, build on the success of the biotechnology and manufacturing companies in the region, attract auxiliary companies, and help existing companies increase productivity. (source: www.northeastwisconsin.org)

New North, Inc.

The **New North** is the 18 county region in northeast Wisconsin. The New North brand unites the region both internally and externally, signifying the collective economic power behind the 18 counties. This consortium of business, economic development, chambers of commerce, workforce development, civic, non-profit, and education leaders are working to have the area recognized as competitive region for job growth while maintaining our superior quality of life. It represents a strong collaboration between the 18 counties that have come together behind the common goals of job growth and economic viability for the region. The power of the New North region working together is far greater than one county or one business alone. (source: www.thenewnorth.org)

Small Business Development Centers (SBDC)

SBDCs are located within the eleven 4-year universities. The SBDCs counselors offer advice, training, and resources to promote entrepreneurship and small business growth. Programs focus on minority entrepreneurship, startup business solutions, and established business solutions. Specific programs include business plan reviews and one-to-one business counseling. (source: www.wisconsinsbdc.org)

SCORE

SCORE is a more than 11,500 member volunteer association sponsored by the U.S. Small Business Administration. It matches volunteer business-management counselors with present and prospective small business owners in need of expert advice. [SCORE](http://www.sba.gov) has experts in virtually every area of business management. Local SCORE chapters offer workshops and no cost one-to-one counseling. (source: www.sba.gov)

Community Action Agencies

The purpose of **Community Action Agencies (CAA)**, as stated in the Economic Opportunity Act (EOA of 1964), is to stimulate a better focusing of all available local, state, private and federal resources upon the goal of enabling low-income families, and low-income individuals of all ages in all geographic areas, to attain the skills, knowledge, and motivations, and secure the opportunities needed, for them to become fully self-sufficient. The local CAA serving Oconto County is NEWCAP, Inc. located in the City of Oconto. It operate a variety of programs including their operation of Head Start, weatherization, housing, employment and training programs, family development, economic development, commodity distribution, senior and youth services, and many other valuable programs. In addition to providing direct services, CAAs often serve as program sponsors or grantees overseeing, although not necessarily directly operating programs. (source: www.newcap.org)

Utilities

Area utilities offer economic development assistance to communities and businesses in a number of ways to include the development of business plans, making available grants and loans, providing loan guarantees, and facilitating educational forums. Area utilities include:

- **Wisconsin Public Service Corporation** (www.wisconsinpublicservice.com),
- **Alliant Energy** (www.alliantenergy.com),
- **Rural Energy Cooperatives** (www.meuw.org), and
- **SBC** (www.sbc.com).

County and Local

University of Wisconsin Extension Office

The Community Resource Development Agent/Educator offers small business management assistance workshops or one-on-one counseling, as well as information on county revolving loan funds and other sources of financing. The local Extension agent for Oconto County is located within the county courthouse. (source: www.uwex.edu)

County Economic Development Officials/Contacts

Oconto County established a non-profit countywide economic development corporation (EDC) to serve as the catalyst for economic development and tourism promotion in the county. The EDC focuses on job creation, job retention, and the overall economic well-being of the county. The organization also promotes existing businesses, offers a marketing outlet for the county, and promotes events that are unique to the county that will benefit the area economically. Oconto County is served by the Oconto County Economic Development Corporation located in the City of Oconto. (source: www.ocontocounty.org)

VOLUME II - APPENDIX E
TRANSPORTATION RESOURCES

The following are brief descriptions of the transportation programs administered by the Wisconsin Department of Transportation (WisDOT). The programs are divided into two categories: 1) formula driven programs for which funding is based on population and/or road mileage; and 2) competitive funding programs.

Wisconsin Department of Transportation

General Transportation Aid (GTA)

Town road improvements, construction and maintenance are funded, in part, through the state's disbursement of general transportation aids. The state provides a payment to each county and municipality in the state to pay a portion of the local governments' costs for such activities as road and street reconstruction, filling potholes, snow removal, grading shoulders, marking pavement, and repair of curb and gutters. The statutory "rate per mile" is \$1,825 for 2004. Beginning in 2000, each municipality was required to establish and administer a separate segregated account from which moneys may be used only for purposes related to local highways and must deposit into that account all state or federal money for local highway purposes.

Local Mileage Certification

Each local government that increased or decreased the mileage of its roads is required to file a certified plat with DOT by December 15th of each year. Local governments with no changes in their total local road miles are required to file a certified plat or a certified statement that no mileage increases have occurred. Beginning in 2001, the requirement for local governments to file certified plats with county clerks was eliminated and the mileage certification process was changed from an every other year activity to an annual activity. State GTA payments are based on the certified mileage of each local unit of government.

Local Roads Improvement Program (LRIP)

This program provides funding to local units of government for the costs associated with improving seriously deteriorating county highways, town roads, and municipal streets in cities and villages under the authority of the local unit of government. Projects are required to have a minimal design life of 10 years. This is a biennial program with all funds being distributed the first year. Applications are submitted through the county highway commissioners by November 15th of the odd numbered years.

There are three entitlement components for funding road improvements: 1) County Highway Improvement component (CHIP); 2) Town Road Improvement component (TRIP); and 3) cities and villages under Municipal Street Improvement component (MSIP). In addition, LRIP funds three statewide discretionary programs; CHIP-D County Highway Discretionary Improvement Program; 2) Trip-D Town road Discretionary Improvement Program; and 3) MISP-D Municipal Street Discretionary Improvement Program for cities and villages.

All LRIP projects are locally let, with up to 50 percent of the costs reimbursed by WisDOT upon completion, and the remainder matched by the local unit of government. Eligible projects include, but are not limited to, design and feasibility studies; and bridge replacement or rehabilitation, reconstruction, and resurfacing. Ineligible projects include, but are not limited to, new roads, seal coats, ditch repair, and/or curb and gutter construction.

Local Bridge Program

This program includes two separate programs 1) a statewide local bridge entitlement program and 2) a high cost local bridge program (high cost bridges are those that cost more than \$5 million and exceed 475 feet in length). It funds 80 percent of project costs to replace and rehabilitate structures on the Federal Bridge Register in excess of 20 feet. Bridges with sufficiency ratings less than 50 are eligible for replacement and those with sufficiency ratings less than 80 are eligible for rehabilitation.

Counties set priorities for funding within their area, with projects funded on a statewide basis. Local bridge projects are solicited by local WisDOT transportation office (District 3) staff during the winter of the odd numbered years, with program approval in summer of the odd numbered years. The program has a three-year cycle.

Flood Damage Aids

This program provides local governments with financial assistance to replace or improve roads or roadway structures that have had major damages caused by flooding.

County Forest Aid Program

This program provides assistance to counties that have eligible roads located within county forests. It is intended to defray the costs for the improvement and maintenance of public roads within a county forest.

Rural and Small Urban Area Public Transportation Assistance Program - Section 5311

Allocations to the State are set at the federal level. Funds may be used for operating assistance, and capital assistance. Eligible public transportation services include public transportation service operating or designed to operate in non-urbanized areas (a non-urbanized area is one that has a population of 50,000 or less).

Specialized Transportation Assistance Program for Counties - Section 85.21

Allocations under this formula program are based upon the proportion of the state's elderly and disabled population located in each county, subject to two minimums: no county can receive less than a one-half percent of the total annual appropriation; and no county can receive an allocation smaller than they received in 1992. A local match of 20 percent is required. Eligible expenditures include:

- directly provided transportation service for the elderly and disabled;
- purchase of transportation service from any public or private organization;
- a user-subsidy for the elderly or disabled passenger for their use of the transportation service;
- volunteer driver escort reimbursement;
- performing or purchasing planning or management studies on transportation;
- coordinating transportation services;
- performing or purchasing in-service training relating to transportation services; and/or
- purchasing capital equipment (buses, vans, etc.) for transportation services.

The following provides a brief description of *competitive* federal and state transportation grant programs.

Local Transportation Enhancement Program (TE)

Administered by WisDOT, the TE program provides funding to local governments and state agencies for projects that enhance a transportation project. Federal funds will cover up to 80 percent of the project, while the project sponsor is responsible for providing at least a 20 percent match. There are 12 eligible project categories;

- providing facilities for bicycles and pedestrians;
- providing safety and educational activities for pedestrians and bicyclists;
- acquiring scenic easements and scenic or historic sites;
- sponsoring scenic or historic highway programs; including the provision of tourist and welcome centers;
- landscaping and other scenic beautification;
- preserving historic sites;
- rehabilitating and operating historic transportation buildings and structures;
- preserving abandoned railway corridors;
- controlling and removing outdoor advertising;
- conducting archaeological planning and research;
- mitigating water pollution due to highway runoff or reducing vehicle caused wildlife mortality; and
- establishing transportation museums.

Surface Transportation Program - Discretionary (STP-D)

The STP-D program encourages projects that foster alternatives to single occupancy vehicle trips, such as rehabilitation and purchase of replacement vehicle for transit systems, facilities for pedestrians and bicycles, system-wide bicycle planning, and a wide-range of transportation demand management (TDM) projects. Communities over 5,000 are eligible to apply for the funds through the competitive application process.

Transportation Demand Management Programs

Transportation Demand Management consists of policies and programs designed to reduce the number of single occupant vehicles (SOV) trips in a region, especially during peak travel periods. There are two grant programs, the TDM Grant Program and Wisconsin Employment Transportation assistance Program (WETAP).

1. *TDM Grant Program* provides funding to successful grant recipients to implement projects that encourage innovative solutions and alternatives to reducing SOV trips. WisDOT accepts applications annually. Eligible applicants may include local governments, chambers of commerce, and others as defined by the program. The required local match is 20 percent of the project costs.
2. *Wisconsin Employment Transportation Assistance Program (WETAP)* is a joint program between the Wisconsin Department of Workforce Development (DWD) and WisDOT. It provides funding to help low-income people access, or retain or advance in employment with the goal of meeting the entire population's transportation needs. This program is funded with combined federal and state dollars, and requires a local match.

Application requirements include the development of regional job access plans that identify the need for transportation services and illustrate the alternatives proposed for the program. Plans should be developed between public transit providers, local units of government, transportation planners, human service agencies, low-income individuals and other interested parties

Transportation Economic Assistance (TEA Grant) Program

This program provides a 50 percent state grant to governing bodies, private businesses, and consortiums for road, rail, harbor and airport projects that are necessary to help attract employers to Wisconsin, or to encourage business and industry to remain and expand in Wisconsin.

Wisconsin's Rustic Roads Program

The Wisconsin Legislature established the Rustic Roads program in 1973 to help citizens and local units of government preserve what remains of Wisconsin's scenic, lightly traveled country roads.

Unique brown and yellow signs mark the routes of all officially-designated Rustic Roads. These routes provide bikers, hikers, and motorists an opportunity to leisurely travel through some of Wisconsin's scenic countryside. A small placard beneath the Rustic Roads sign identifies each Rustic Road by its numerical designation within the total statewide system. Each Rustic Road is identified by a 1 to 3 digit number assigned by the Rustic Roads Board. To avoid confusion with the State Trunk Highway numbering, a letter "R" prefix is used such as R50 or R120. The Department of Transportation pays the cost of furnishing and installing Rustic Roads marking signs.

An officially designated Rustic Road shall continue to be under local control. The county, city, village or town shall have the same authority over the Rustic Road as it possesses over other highways under its jurisdiction. A Rustic Road is eligible for state aids just as any other public highway. To qualify for the Rustic Road program, a road:

- should have outstanding natural features along its borders, such as rugged terrain, native vegetation, native wildlife, or include open areas with agricultural vistas which independently or in combination uniquely set this road apart from other roads.
- should be a lightly traveled local access road, one which serves the adjacent property owners and those wishing to travel by auto, bicycle, or hiking for purposes of recreational enjoyment of its rustic features.
- should be one neither scheduled nor anticipated for major improvements which would change its rustic characteristics.
- should have, preferably, a minimum length of 2 miles and, where feasible, should provide a completed closure or loop, or connect to major highways at both ends of the route.

A Rustic Road may be dirt, gravel or paved road. It may be one-way or two-way. It may also have bicycle or hiking paths adjacent to or incorporated in the roadway area. The maximum speed limit on a Rustic Road has been established by law at 45 mph. A speed limit as low as 25 mph may be established by the local governing authority.

The application information page includes a letter to prospective applicants explaining the Rustic Roads Program, petition, description and resolution forms to use in working with local government officials, and the state administrative codes governing the program. More information can be obtained by contacting your town chairman or the county highway commissioner or visit the WisDoT's website for more information.

VOLUME II - APPENDIX F
INTERGOVERNMENTAL WORKSHOP RESULTS

“Central Cluster”

Intergovernmental Cooperation Workshop
April 9, 2008, Breed Town Hall

Land Use Issues and Conflicts/Positive Working Relationships

- Agriculture operations
- Transportation infrastructure
- Cooperation with ATV/Snowmobile Clubs
- Senior meal delivery available throughout the county
- Increasing communication through future planning meetings
- Inability to recruit volunteers to provide emergency services
- Population growth in the southern part of the county
- Growing elderly population in the northern areas of the county and the need to plan for appropriate services
- Continue to plan and address issues
- Regulations to apply weight limits on agriculture equipment like what is done on commercial vehicles
- Sex offender registrations not being done
- Municipalities participating in joint spring clean-up efforts
- Not enough designated sites for public hunting
- The need for regulations to limit garbage being dumped in the county forest
- Future developments should have proper sanitary systems
- Maintain compatible comprehensive plans with neighboring communities
- Notices not being forwarded to other parties within the individual communities
- Compatible and enforceable ordinances
- Zoning notification (i.e. use of residential district)
- Renewable energy opportunities
- More agreements with other communities and supported with county assistance
- Random discarding of tires
- Oconto County and Local websites
- Burning barrels
- Empty mobile homes
- Junk yards
- Community development should be shared to save resources
- Agriculture land should be saved-preserved
- Need more parks and recreation
- Bordering issues need to be resolved among communities and the county
- Deputizing of board members, etc. to be able to hold people who litter on town and forestry roads until police arrive
- The county planning committee that hold meetings for zoning permits don't listen to the people
- Quarrels between existing and establishments (homes) and new dwellers
- Large farms depleting aquifers

- Lack of knowledge of school district boundaries when people buy property and build homes, especially a problem with sub-divisions located in two districts.
- The need to allocate more land for recreation, such as base ball diamonds. No communication between schools and towns.
- People do not care what is going on unless it directly impacts their property
- One hand does not know what the other hand is doing
- Clarification of road maintenance between townships
- County police works well
- Ambulance sharing well
- County ordinances for wind turbines and signage
- Monitoring the need for upgrading and expanding sewer system
- Joint planning within the incorporated communities' extraterritorial boundary
- Rural sprawl will increase the need for law enforcement services within those areas
- Demand for law enforcement services will necessary cause the withdrawal of some law enforcement resources from performing ancillary functions.

Potential Resolutions:

- Expand and further promote county and local websites, posting of more agendas, materials, etc.
- No tipping fees for volunteers who pick-up garbage
- The availability of land for economic development
- More communication between all entities
- Better distribution of information both internally and externally
- Continued mutual aid of fire/rescue, etc.
- Compatible lot sizes with neighboring communities
- Enforce regulations equally and fairly
- More planning meetings of this type to bring different peoples and ideas together
- Greater communication between residents and town officials
- Consolidation of fire departments
- Communication with school district
- County consolidation of landfill and recycling rules
- Consolidation of townships and courts
- Boundary agreements-developments, road maintenance
- Downtown Main Street beautification in conjunction with the State Highway 22 upgrades planned for 2012.

“Southern Cluster”

Intergovernmental Cooperation Workshop
April 16, 2008, County Courthouse

Land Use Issues and Conflicts/Positive Working Relationships

- Shared services (emergency-mutual aid)
- Extra territorial planning area between Oconto Falls and Stiles
- Trans-county and town agreements for road maintenance and snow plow
- Agreements for joint sanitary with Little Suamico and Pensaukee and Oconto (future)
- Cluster meetings – good source of information-education
- Learn more about shared emergency services (fire and rescue)-Chase
- Town of Lena – good fire mutual aid with neighbors – open to working with others
- Chase – like to have agreement with Pulaski to stop further annexation
- Mar-Oco landfill – good working relationship with Marinette County
- Good relationship between Village and Town of Lena – recycling facility
- Political climate – disagreement – how will this impact communities?
- Like to see farmland preservation – through ordinances and buffers to avoid nuisance lawsuits
- Shared fire services (Green Valley and Morgan) good relationship
- Powerline revenue from ATC (Morgan)
- Concerns about rapid growth in Chase and Abrams and its impact on Town of Morgan
- Huge opportunity between DNR and southern communities for cooperation in environmental protection
- Within Town of Little Suamico – good relationship between town departments
- Would like to see better enforcement of ordinances and conditional uses in commercial areas (Town of Little Suamico) – would benefit town residents to add more commercial - spread out tax base
- Town of Little Suamico – would like one location to locate town officials – make it easier for residents
- Benefit – place to bring hazardous wastes – more locations – more education on what to do with materials – more often have “clean sweeps” – rotate around the county
- Clean sweeps are expensive
- Cooperation between Village of Suamico and Little Suamico – start talks about border development and transportation issues related to that development – Brown Rd. Commercial opportunities
- Encourage Oconto County to do NEWS (National Emergency Management System)
- Emergency response – county has established evacuation procedures – EM Director continuing to work on plans and continue making location contacts
- Lots of lessons learned in emergency response from Riverview tornado
- County recently updated 911 system – has mutual aid with surrounding communities/ counties to help with disaster response
- Need for information on evacuation centers throughout county – where are they??
- Lots of support from entire county and surrounding communities/counties during tornado

- Suggestion that towns should work on having own emergency response plans to handle emergencies
- Coordination between county and local zoning
- ATC, fire department, ambulance
- Areas around us are being developed (Abrams and Chase) and could affect us
- Major residential development near Suamico/Little Suamico border and impact on transportation
- Commercial development at Brown Road exit
- NIMs compliance to match up with Suamico/Brown County
- Appointed person for economic development meetings
- Meet with adjoining municipality regarding extraterritorial land – initial verbal agreement
- Comprehensive zoning
- Potential conflict of town ordinances with county ordinances
- Subdivision road “connectivity” at edge matching
- Transportation: county/town agreements for road maintenance and snow plowing
- Economic Development: countywide and county funded OCEDC
- Solid waste: recycling county/town cooperation/operation - MAROCO Marinette and Oconto counties
- Extension: sharing of services with Oconto and Marinette
- Potential conflicts: \$, “turf issues”, state and local laws preventing cooperation, politics (sometimes the best political decision is not the best action), time, staff
- Recycling center – shared facilities
- Volunteer fire department, public services (Towns of Lena, Stiles, Spruce, Little River)
- Surrounding agricultural land (possibility of rezoning/annexation)
- Cooperation with Town of Pensaukee & DNR to develop boat launch facility on Pensaukee River
- General cooperative relationship between DNR and Oconto County Forest on resource material and recreation development
- Cooperative agreements between DNR and City of Oconto on management of Oconto Marsh
- Working relationship between WDNR, WDOT and Oconto Airport to deal with security issues
- Increased residential development can negatively impact important environmental features
- Increased recreational demands may lead to conflicts
- This region is extremely important environmentally and future development should be planned with that in mind
- Cooperation with Village of Suamico in providing park facilities
- Mutual aid agreements on wildland fire suppression between WDNR and many town and village fire departments
- Change in political party’s resulting in funding political resolution on path forward
- Better relationship with surrounding communities
- Discussion on mutual issues
- Development of Hwy 141 corridor
- Discussion on subdivisions that could later be annexed
- Sharing fire department , rescue squad, and recycling services

- Discussing concerns on established and possible incoming development
- Preserve farmland with necessary ordinances
- Support summer recreation programs
- Save agriculture farmland
- Shared services (fire)
- Keep water ways free (keep housing off water ways)
- Oconto – Marinette landfill (MAROCO) positive
- Positive: All work together, town and sanitary and planning
- No central government building results in communication barrier. Residents seeking information on planning, information being given, information not properly communicated to town planning
- Enforcement of ordinances and/or conditions on conditional use permits
- Initiatives/incentives for commercial to locate in town but yet, promote preservation of farmland – some type of incentive
- Promote recreational use along shore: swimming, hiking, preserve shoreline, limit development
- Concerned about Abrams and Chase residential development and the pressure it will put on the Town of Morgan's development in terms of services provided
- Plan to develop with bordering town
- These cluster meetings are good to work together with other towns
- Sharing sanitary district services; Town of Oconto and Pensaukee – lack of number of clients
- Can't get existing ordinances from our own town board. Lack of technology
- Mutual aid for department is a plus
- Prevent further annexing from village
- Places for rid of hazardous materials
- Fire protection with Little Suamico
- Industrial Parks
- The bordering issues have been working out real well
- We have been hearing from many people about the community ideas and values
- The availability of land in the present time is real tight and hard to get
- The grants for park and rec. are really hard to get. Most of it is based on promises, but not results
- Positive working relationship between the town and the Little Suamico Sanitary District – examples: ongoing communications, coordinated development review process
- Positive working relationship between the town and the Little Suamico Fire Department – examples: shared facilities, cooperative funding
- Mutual aid between area fire departments/districts
- Agreement with County Rescue Services for EMS – long term contract
- Positive working relationships with other southern Oconto County towns – examples: ongoing communication, comprehensive planning
- Positive working relationship with Oconto County – examples: coordinated development review process, road construction and road maintenance services, etc.
- Challenge of zoning ordinance enforcement through Oconto County – county and town both have limited resources

- Lack of capacity in the court system to properly prosecute zoning and other ordinance violations
- Potential for annexation of town land by the Village of Suamico over the long term
- Need for more dynamic county zoning ordinance to meet the town's site planning and design review needs

Potential Resolutions

- Sharing of information between communities (e.g. meeting minutes)
- Informal get-togethers to share information between towns and county
- Information discussions between incorporated communities and towns re. extraterritorial planning areas
- Tri-county emergency services and new – meetings to share
- Inter and Intra communication
- Shared planning
- Standardized ordinances – consistency with county – remove duplication and unnecessary items
- Sharing information on troubles between neighbors – local Pow-wow's
- Locate funding sources – to continue these meetings and planning processes
- Communities place own ordinances on a website so public can access
- Get town websites out to public – make people aware that they are out there – also promote county websites – utilize newspapers to promote
- Opportunities to identify more park and ride locations – work with DOT – especially along highway 41 – also looking to improve amenities at existing sites (tie into transit, bike racks added)
- Put in bike/ped trails and other facilities when DOT does transportation projects to pre-empt development that will occur once highway in-trying to reduce number of cars on road or how far people have to drive
- More professional mapping to share community visions
- Officials should be open minded to new solutions and communicating with others
- Maintain and talk about shared goals that already exist
- Recognize value and importance of natural resources in Oconto County – resources are a “global treasure” – continue and work more on preserving
- Continue cooperation between towns and communities in training with government agencies (i.e. DNR and local fire) – lead to more successes
- Communication and cooperation
- Coordination between towns and county to find more efficient ways to implement and enforce ordinances – let county help as much as they can
- Allow comprehensive plans to guide decision making process at community and county level
- Work with county so they can help with enforcement of ordinances
- Cooperative agreement with other towns that border
- Area planning with bordering towns
- Ordinance for towns should be reviewed to see if the county already have – county can reinforce, town can not
- Sharing information on problems within the local neighboring, so we can work out the problems (local)

- Sewer conflicts with Little Suamico and Pulaski (village)
- Resolutions and ordinances need to be reviewed; brought up to date, clarified and not duplicate the county
- Joint planning with neighbor towns for police protection, court system and sewer district development
- Compare mapping with neighbor towns to avoid conflicts, i.e. home developments adjacent to farm or quarry operations
- Any transportation issues in the southern cluster? Provide 7 Park and Rides to encourage carpooling
- Reduce barrier of State Highways/bike/ped. Options in developing area
- Town of Abrams and Town of Pensaukee share monthly meeting minutes
- Town of Pensaukee website
- Sharing sanitary district with neighboring Little Suamico
- Attend surrounding meetings
- Buffer zones around farm operations
- Official mapping – good communication
- Area planning – stay aware of surrounding development
- Try to attend joint plan committee meetings
- Increase shared services (facilities – sewer/water – without annexation)
- Land acquisition for development. No room to developer offer to develop
- Communication of potential development along border between Suamico/Little Suamico. Residential and commercial potential for development plan (commercial and transportation)
- Mutual aid agreements between Little Suamico/Suamico. Encourage Little Suamico to begin or continue with NIMS compliance
- Ongoing meetings regarding ATC money. Meetings with Tim Magnin on emergency planning
- Keeping adjoining municipality aware of events concerning extraterritorial land
- Informal get-togethers with town/cities/village/county about all issues affecting local government. Learn more about what each other does. Possible solutions for problems.
- Incentives to create joint operations
- Reduce duplication of services – law enforcement, libraries (school and city both have)
- Standardization of ordinances/resolutions/services
- Get information out to residents such as website
- Expand the menu of county zoning districts to meet the needs of the town
- Create an option for site plan and design review through the county zoning ordinance
- Hire a shared clerk/administrator for the Towns of Little Suamico and Chase
- Based on the similar needs of their high-growth areas, work cooperatively with the Town of Chase to develop a consistent development review process and related regulations
- Develop a cooperative boundary agreement with the Village of Suamico and potentially include provisions for the shared delivery of sewer and water utilities
- Work cooperatively with the Village of Suamico, the Town of Abrams, Oconto County, and the WDOT to manage growth along the Highway 41 corridor

“Northern Cluster”

Intergovernmental Cooperation Workshop
April 30, 2008, Mountain Community Center

Land Use Issues and Conflicts/Positive Working Relationships

- Work with Forest Service on forest roads
- Satellite office and billboards
- Mutual agreements – humane officer
- Consistency of maintenance on shared roads
- Protection of lakeshores – recog. by 9 towns
- Combine emergency services – lack of personnel and resources – hire??
- More development of recreation –multi-modal trails
- Regular meetings
- Mountain ambulance service
- Cooperation of towns during disaster – mutual aids
- Communication on status of recreation routes
- Mutual aid agreements outside of Oconto County – Langlade, Menominee, etc.
- Inconsistent ordinance enforcement – sign ordinance on CTH T
- Stay open minded dealing with town issues
- Forest roads – maintenance
- No consistency in “no wakes”
- Addition of professional health care positions
- Seniors/elderly housing
- Need for employment opportunities for young population
- Forest Service – difficult to work with
- Wind turbines – private
- Communication with DOT – trail development
- Sewage disposal – enforcement
- High cost of gasoline
- Siting of manure storage facilities
- Mega farms
- Lowering lake levels

Potential Resolutions

- Full-time police protection – summer months
- Addition of municipal court
- Liaison with Forest Service
- More give and take for regulations
- Better enforcement of “no wake” – find way to allow county to enforce “no wake”
- Consistent enforcement of “junk” ordinance – County
- Zoning enforcement – County and Town ordinances
- County pays for satellite office and expand services

- Share information with surrounding towns e.g. – website, agendas, minutes – information friendly
- More public notice of 9 town meetings – 9 Towns means “9 Towns not 6”
- Full-time Administrators in towns
- Combine emergency services – if feasible – one point of contact and admin.
- LOSA – “Length of Service Award”
- Hired full-time emergency staff versus volunteer status – investigate feasibility
- Efficiency – sanitary services – tapping into Lakewood
- Keep tax dollars here

VOLUME II - APPENDIX G
LAND USE INVENTORY CODES

Bay-Lake Regional Planning Commission				
Land Use Inventory Summary Form				
CODE	LAND USE CLASSIFICATION		CODE	LAND USE CLASSIFICATION
100	RESIDENTIAL		600	INSTITUTIONAL/GOVERNMENTAL
200	COMMERCIAL		700	OUTDOOR RECREATION
300	INDUSTRIAL		800	AGRICULTURE/SILVICULTURE
400	TRANSPORTATION		900	NATURAL AREAS
500	COMMUNICATION/UTILITIES			
100	RESIDENTIAL		500	COMMUNICATION/UTILITIES
110	Single Family Residential		510	Generation/Processing of Communication/Utilities
111	Single Family Residential Garage		511	Electric Power Plants
130	Two Family		512	Wind Turbine
150	Multi-Family		514	Telephone and Telegraph Terminals/Dispatch Centers
151	Multi-Family Garage		516	Radio/Television Stations
170	Group Quarters		521	Natural Gas Terminals/Plants
180	Mobile Homes		525	Other Liquid Fuel Terminal Plants
190	Land Under Residential		535	Water Supply Filter Treatment Plants
	Development		537	Water Supply Wells
199	Vacant Residence		540	Transmission of Communication/Utilities
			541	Major Electric Power Transmission Lines R/W
200	COMMERCIAL		542	Electric Power Substations
210	Retail Sales		546	Radio/Television Transmission Towers/Antennae
230	Shopping Centers		551	Major Natural Gas Transmission Lines R/W
250	Retail Services		552	Natural Gas Substations
270	Office Parks		555	Other Major Liquid Fuel Transmission Lines R/W
299	Vacant Commercial		556	Other Liquid Fuel Substations
			572	Water Supply Booster/Pumping Stations
300	INDUSTRIAL		577	Water Supply Storage Tanks/Reservoirs
310	Manufacturing		580	Waste Processing/Disposal/Recycling
340	Wholesaling		581	Trash/Garbage Landfills
360	Extractive		582	Other Trash/Garbage Dumps
380	Storage		583	Sewage Treatment Plants
381	Open		584	Sewage Sludge or Water Supply Chemical Disposals
382	Enclosed		585	Fly Ash and Other Fire Residue Disposal
399	Vacant Industrial		586	Auto Salvage/Recycling/Disposals
			587	Abandoned Landfill
400	TRANSPORTATION		588	Yard Waste
410	Motor Vehicle Related		591	Solid Waste Separation/Recycling Plants
411	Federal Highways		595	Incinerators
412	State Highways		599	Vacant Communication/Utilities
413	County Highways			
414	Local Streets and Roads			
415	County Forest Roads			
416	Federal Forest Roads			
417	Off-Street Parking			
418	Bus Terminals			
419	Truck Terminals			
420	Other Motor Vehicle Related			
440	Rail Related			
460	Air Related			
480	Marine Related			
484	Piers/Docks			
490	Nonmotorized Related			
499	Vacant Transportation			

APPENDIX G – LAND USE INVENTORY CODES

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DETAILED LAND USE TABULATION

CODE	LAND USE CLASSIFICATION	ACRES
100	RESIDENTIAL	21,317.6
110	Single Family Residential	20,057.0
130	Two Family	26.8
150	Multi-Family	72.5
170	Group Quarters	3.9
180	Mobile Homes	1,069.4
190	Land Under Residential Development	17.3
199	Vacant Residence	70.7
200	COMMERCIAL	1,231.0
210	Retail Sales	880.5
230	Shopping Centers	3.7
250	Retail Services	298.8
270	Office Parks	0.7
299	Vacant Commercial	47.4
300	INDUSTRIAL	1,909.0
310	Manufacturing	303.3
340	Wholesaling	12.6
360	Extractive	1,459.1
381	Storage - Open	37.8
382	Storage - Enclosed	75.9
399	Vacant Industrial	20.4
400	TRANSPORTATION	6,343.7
410	Motor Vehicle Related	5,650.6
440	Rail Related	515.1
460	Air Related	178.0

CODE	LAND USE CLASSIFICATION	ACRES
500	COMMUNICATION/UTILITIES	359.8
511	Electric Power Plants	28.1
514	Telephone and Telegraph Terminals/Dispatch Centers	3.8
516	Radio/Television Stations	1.8
521	Natural Gas Terminals/Plants	11.2
535	Water Supply Filter Treatment Plants	0.9
540	Transmission of Communications/Utilities	1.0
542	Electric Power Substations	23.2
546	Radio/Television Transmission Towers/Antennae	10.3
552	Natural Gas Substations	2.7
556	Other Liquid Fuel Substations	0.5
572	Water Supply Booster/Pumping Stations	1.0
577	Water Supply Storage Tanks/Reservoirs	2.5
580	Waste Processing/Disposal/Recycling	35.0
581	Trash/Garbage Landfills	71.5
582	Other Trash/garbage Dumps	16.4
583	Sewage Treatment Plants	52.1
584	Sewage Sludge or Water Supply Chemical Disposal	4.0
586	Auto Salvage/Recycling/Disposals	81.6
588	Yard Waste	6.4
591	Solid Waste Separation/Recycling Plants	5.8
599	Vacant Communication/Utilities	0.1

CODE	LAND USE CLASSIFICATION	ACRES
600	INSTITUTIONAL/GOVERNMENTAL FACILITIES	767.5
610	Administrative Institutions/Governmental Facilities	91.3
611	Administrative Buildings	24.1
612	Post Offices	3.7
614	Municipal Garages	39.5
630	Safety Institutions/Government Facilities	1.8
631	Police/Fire Stations/Offices	21.1
637	Ancillary Municipal Safety Facilities	1.2
641	Pre-School/Day Care	11.8
642	Primary Schools	143.3
643	Middle Schools	15.9
644	Secondary Schools	31.4
647	Two-Year Colleges/Universities	1.4
651	Libraries	3.8
652	Community Center	7.8
655	Museums	1.1
661	Hospitals	7.0
663	Clinics	19.2
665	Long-Term Health Care Facilities	8.3
680	Assembly Institutions/Government Facilities	2.6
681	Fairgrounds	22.9
684	Fraternal Organizations/Clubhouses	37.4
690	Religious and Related Facilities	6.8
691	Churches/Temples/Synagogues	103.0
694	Cemeteries	151.6
699	Vacant Institutional/Governmental	9.6

CODE	LAND USE CLASSIFICATION	ACRES
700	OUTDOOR RECREATION	2,710.7
721	Designated Historic/Cultural/Archaeological Sites	5.1
731	Campgrounds	448.6
735	Lawns/Yards	11.0
736	Parks/Parkways/Forest-Related Picnic Areas	317.4
737	Separate Picnic Areas	6.8
741	Playfields/Ball Diamonds/Volleyball Courts	77.9
745	Swimming/Wading Pools	0.0
746	Tennis Courts	2.7
747	Trails	605.1
751	Athletic Fields	55.3
761	Golf Courses	924.4
762	Golf Driving Ranges	112.3
766	Archery/Gun/Skeet Ranges	91.4
768	Hunting Preserves	6.8
769	Race Tracks	2.5
781	Boat Launching Sites/Areas	30.0
782	Other Water Access Sites/Areas	5.8
783	Marinas	7.6
800	AGRICULTURE/SILVICULTURE	174,674.2
805	Open Space	978.5
810	Croplands/Pastures	169,134.0
830	Long-Term Specialty Crops	361.4
850	Animal Husbandry	148.4
851	Fish Hatchery/Aquaculture	15.9
870	Farm Buildings/Accessories	3,665.4
880	Commercial Forests	338.2
899	Vacant Agriculture/Silviculture	32.4

CODE	LAND USE CLASSIFICATION	ACRES
900	NATURAL AREAS	441,452.9
911	Lakes	5,900.4
912	Reservoirs and Ponds	6,240.7
913	Rivers and Streams	2,447.9
914	Canals and Channels	36.5
936	Wildlife Refuge	212.2
950	Other Natural Areas, including Wetlands	27,419.4
951	Woodlands	396,916.4
952	Wetlands	2,256.3
954	Beaches	1.7
960	Other Publicly Owned Areas	21.4
TOTAL		650,766.4

VOLUME II - APPENDIX I
GLOSSARY OF TERMS

Planning and Zoning Definitions

Alley: a permanently reserved public or private secondary means of access to an abutting property.

Accessory Structure: a detached subordinate structure located on the same lot as and incidental to the principal structure.

Accessory Use: a use incidental to and on the same lot as a principal use. *See also “accessory structure” and “principal building”.*

Acre: a unit of area used in land measurement and equal to 43,560 square feet. This is approximately equivalent to 4,840 square yards, 160 square rods, 0.405 hectares, and 4,047 square meters.

Adaptive Reuse: the conversion of obsolescent or historic buildings from their original or most recent use to a new use.

Adequate Public Facilities Ordinance (APFO): an ordinance that ties development approvals to the availability and adequacy of public facilities. Adequate public facilities are those facilities relating to roads, sewer systems, schools, and water supply and distribution systems.

Administrative Appeal (Appeal): a quasi-judicial* process before the local zoning board to review a contested ordinance interpretation or an order of an administrative zoning official.

Adverse Impact: a negative consequence to the physical, social, or economic environment.

Aesthetic Zoning: the regulation of building or site design to achieve a desirable appearance.

Affordable Housing: housing that has its mortgage, amortization, taxes, insurance, and condominium and association fees constituting no more than 30% of the gross household income per housing unit. If the unit is rental, then the rent and utilities constitute no more than 30% of the gross household income per rental unit. *See s. COMM 202.01, Wis. Admin. Code.*

Agriculture: the use of land for farming, dairying, pasturage, apiculture (bees), aquaculture (fish, mussels), horticulture, floriculture, viticulture (grapes), or animal and poultry husbandry; this includes the necessary accessory uses for packing, treating, or storing the produce from these activities. *See also ss. 30.40(1) and 91.01(1), Wis. Stats.*

Agricultural Conservation Easement: conservation easements that restrict specifically farmland from development or specified farming practices and give farmers income, property, and estate tax reductions.

Agricultural Protection Zoning: a method for protecting agricultural land use by stipulating minimum lot sizes or limitations on non-farm use.

Air Rights: the ownership or control of all land, property, and that area of space at and above it at a height that is reasonably necessary or legally required for the full use over the ground surface of land used for railroad or expressway purposes.

Amendment: a local legislative act changing a zoning ordinance to make alterations, to correct errors, or to clarify the zoning ordinance. A class 2 notice must be published and a public hearing must be held before a county board may adopt a proposed amendment. *See s. 59.69, Wis. Stats.*

Amenities: features that add to the attractive appearance of a development, such as underground utilities, buffer zones, or landscaping.

Americans with Disabilities Act (ADA): a congressional law passed in 1990, which provides a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities as well as clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities.

Amortization: a method of eliminating nonconforming uses (usually minor structures) by requiring the termination of the nonconforming use after a specified period of time, which is generally based on the rate of economic depreciation of the use or structure.

Annexation: the process of incorporating an area of land in a township into a municipality. *See ch. 66, subch. II, Wis. Stats.*

Appellate Body: a body authorized to review the judgments made by administrative officers. For example, a board of adjustment hears appeals of the decisions of a county zoning administrator.

Aquatic and Terrestrial Resources Inventory (ATRI): a public and private partnership to gather, link, and make available data used for decisions affecting Wisconsin's landscape; a systematic and comprehensive information management system developed by the Wisconsin DNR to improve environmental and resource management decisions.

Aquifer: a geologic formation, usually comprised of saturated sands, gravel, and cavernous and vesicular rock, that carries water in sufficient quantity for drinking and other uses.

Aquifer Recharge Area: the surface area through which precipitation passes to replenish subsurface water bearing strata of permeable rock, gravel, or sand.

Architectural Control/ Review: regulations and procedures requiring the exterior design of structures to be suitable, harmonious, and in keeping with the historic character or general style of surrounding areas.

Area Variance (Variance): the relaxation of a dimensional standard in a zoning ordinance decided by a local zoning board. *See ss. 59.69, 60.61, 60.62 and 62.23, Wis. Stats.*

Arterial: a major street, which is normally controlled by traffic signs and signals, carrying a large volume of through traffic.

Bargain Sale: the sale of land (to a conservation organization, for example) at less than market value.

Base Flood: a flood that has a one percent chance of being equaled or exceeded in any give year, commonly called a 100- year flood. *See also “floodplain”.*

Benchmark: a performance- monitoring standard that allows a local government to periodically measure the progress of a local comprehensive plan’s goals and policies; also, a fixed and recorded elevation point from which another, relative elevation can be surveyed.

Berm: A low earthen ridge constructed as a landscaping feature or to direct runoff or deflect noise.

Best Management Practices (BMPs): the conservation measures and management practices intended to lessen or avoid a development’s impact on surrounding land and water.

Billboard: a sign that identifies or communicates a message related to an activity conducted, a service rendered, or a commodity sold at a location other than where the sign is located.

Block: a unit of land or contiguous lots or parcels bounded by a roadway or other barrier.

Board of Appeals/ Board of Adjustment (BOA): a board of appointed individuals that hears appeals on variances and exceptions. Board of Appeals applies to cities, villages, and towns, whereas Board of Adjustment applies to counties.

Brownfields: lands contaminated by spills or leaks and that are perceived to be unsuitable for future development due to its hazardous nature or owner liability concerns.

Buffer Area: an area separating two incompatible types of development or a development and sensitive natural resources.

Build Out: the maximum, theoretical development of land as permitted under zoning regulations.

Build Out Analysis: a projection, based on the maximum, theoretical development of all lands, of the impact of a community’s cumulative growth.

Building Coverage: *See “lot coverage”.*

Building Line: the line parallel to the street line that passes through the point of the principal building nearest the front lot line.

Building Scale: the relationship between the volume of a building and its surroundings, including the width of street, amount of open space, and volume of surrounding buildings. Volume is determined by the three- dimensional bulk (height, width, and depth) of a structure.

Bulk Regulations: standards that establish the maximum size of structures on a lot and the location where a building can be, including coverage, setbacks, height, impervious surface ratio, floor area ratio, and yard requirements.

Bundle of Rights Concept of Property: *See “rights”.*

Business Improvement Districts (BID): an area within a municipality consisting of contiguous parcels subject to general real-estate taxes other than railroad rights- of-way and that may include railroad rights- of- way, rivers, or highways continuously bounded by the parcels on at least one side. *See s. 66.1109(1)(b), Wis. Stats.*

Business Incubator: retail or industrial space, which may offer shared or subsidized management support such as information and advice on regulations, advertising, promotion, marketing, inventory, labor relations, and finances and facility support such as clerical staff, security, electronic equipment, and building maintenance that is affordable to new, low profit- margin businesses.

By Right: a use that complies with all zoning regulations and other applicable ordinances and that is permitted without the consent of a review board.

Capital Improvement: a physical asset that is large in scale or high in cost.

Capital Improvements Plan/ Capital Improvements Program (CIP): a city’s or county’s proposal of all future development projects and their respective cost estimates listed according to priority.

Capital Improvement Programming/ Capital Improvement Planning: the scheduling of budgetary expenditures for infrastructure to guide and pace development.

Carrying Capacity Analysis: an assessment of a natural resource’s or system’s ability to accommodate development or use without significant degradation.

Census: The census of population and housing, taken by the U.S. Census Bureau in years ending in 0 (zero). Article I of the Constitution requires that a census be taken every ten years for the purpose of reapportioning the U.S. House of Representatives.

Census Tract: a relatively permanent county subdivision delineated to present census data.

Central Business District (CBD): the primary, downtown commercial center of a city.

Certificate of Appropriateness: a permit issued by a historic preservation review board* approving the demolition, relocation, or new construction in a historic district.

Certificate of Compliance: an official document declaring that a structure or use complies with permit specifications, building codes, or zoning ordinances.

Cesspool: a buried chamber such as a metal tank, perforated concrete vault, or covered excavation that receives wastewater or sanitary sewage to be collected or discharged to the surrounding soil.

City: an incorporated municipality. Cities are divided into the four following classes for administration and the exercise of corporate powers:

- a) Cities of 150,000 population and over- 1st class cities
- b) Cities of 39,000 and less than 150,000 population- 2nd class cities.
- c) Cities of 10,000 and less than 39,000 population- 3rd class cities.
- d) Cities of less than 10,000 population- 4th class cities.

See ch. 62, Wis. Stats.

Clear Zone: an area within a roadway right- of- way that is free of any obstructions, thus providing emergency vehicle access.

Closed (Executive) Session: a governmental meeting or portion closed to everyone but its members and members of its parent body for purposes specified in state law. Governmental meetings are subject to Wisconsin's 'Open Meetings Law.' *See s.19.81- 19.98, Wis. Stats.*

Cluster Development Zoning (Clustering): concentrating the total allowable dwelling units on a tract of land into higher densities on a smaller portion of the tract, leaving the remaining land as open space. For example, in a five- acre minimum lot zoned area, 10 units would be constructed on 50 acres; however, 10 units could also be 'clustered' on 20 acres (allowing minimum two- acre lots), leaving the remaining 30 acres as common open space.

Collector: a street designed to carry a moderate volume of traffic from local streets to arterial* streets or from arterial streets to arterial streets.

Combination Zones: a zone that is placed over another, now underlying zone and that adds or replaces existing requirements of the underlying zone.

Commercial District: a zoning area designated for community services, general business, interchange of services, and commercial recreation.

Common Open Space: squares, greens, parks, or green belts intended for the common use of residents.

Community Development Block Grant (CDBG): a grant program administered by the U.S. Department of Housing and Urban Development (HUD), the state departments of Administration and Commerce, and the Wisconsin Housing and Economic Development Authority (WHEDA) that provides money for community rehabilitation and development. *See s.16.358 and 560.045, Wis. Stats.*

Community Development Zone: Zones meeting certain requirements and designated by the state Department of Commerce for the purpose of administering tax benefits designed to encourage private investment and to improve both the quality and quantity of employment opportunities. The Community Development Zone Program has more than \$38 million in tax benefits available to assist businesses that meet certain requirements and are located or willing to locate in one of Wisconsin's 21 community development zones. *See s.560.70, Wis. Stats. See also "enterprise development zone".*

Community of Place: *See "sense of place".*

Comprehensive Plan: a county development plan or city, village, town, or regional planning commission master plan prepared under and meeting the content requirements outlined in s.66.1001, *Wis. Stats.* Comprehensive plans provide a vision and general idea of how land should be used to assure public health, safety, and welfare.

Concurrency Management System: the process used to determine that needed public services are concurrent with a development's impacts.

Concurrency Test: an analysis of public facilities' ability to accommodate a development; in other words, adequate capacity of facilities must precede or be concurrent with a development's demand.

Conditional Use: a land use, construction activity, or structural development, which must be tailored to the site conditions and adjacent property uses through a public and technical review process, that is listed as a conditional use in a zoning district.

Conditional Use Permit: a permit issued by a zoning administrator, if the applicant meets certain additional requirements, allowing a use other than a principally permitted use.

Conditional Zoning: special conditions an owner must meet in order to qualify for a change in a zoning district designation.

Condominium: real estate and improvements where portions are designated for separate ownership and the remainder for common ownership. *See s.703.02, Wis. Stat.*

Congestion Mitigation and Air Quality Program (CMAQ): a program under the U.S. Department of Transportation intended to fund transportation projects and programs in non- attainment and maintenance areas that reduce transportation- related emissions.

Conservation Areas: environmentally sensitive and valuable lands protected from any activity that would significantly alter their ecological integrity, balance, or character except in cases of overriding public interest.

Conservation Development Zoning: a type of cluster development zoning that emphasizes a planned unit development for preserving open space, wetlands, natural landscaping, floodplains, or other prioritized resources as well as for preventing stormwater runoff.

Conservation Easement: a recorded legal agreement between a landowner and a qualified conservation agency that transfers development rights from the owner to the agency to protect natural or historic features. *See s. 700.40, Wis. Stats.*

Conservation Reserve Program: a federal Department of Agriculture program that pays farmers to convert ‘erodible’ cropland into vegetative cover.

Consolidated Metropolitan Statistical Area (CMSA): a statistical area defined by the U.S. Census; a large metropolitan statistical area with a population of one million or more that includes one or more primary metropolitan statistical areas (PMSA). *See also “metropolitan statistical area” and “primary metropolitan statistical area” in this category.*

Contested Case: a hearing similar to a court proceeding where parties have a right to review and object to evidence and cross-examine witnesses who testify.

Contiguous Properties: properties sharing a property line.

Cooperative Agreement: an agreement between two or more organizations to share in the financing or managing of a property, providing of services, or some other joint venture. *Also see ss. 66.0307, 150.84, and 299.80, Wis. Stats. for specific examples of authorized agreements.*

County: a political subdivision of the state. Counties are delineated in ch. 2, *Wis. Stats.* Wisconsin has 72 counties. *See ch. 59, Wis. Stats.*

cul de sac : a circular end to a local street [French, “bottom of the bag”]

Dedication: the transfer of property from private to public ownership.

Deed Restriction: a limitation, which is recorded with the county register of deeds and to which subsequent owners are bound, on development, maintenance, or use of a property.

Design Guideline: an activity standard that preserves the historic or architectural character of a site or building.

Design Review/ Control: an aesthetic evaluation, considering landscape design, architecture, materials, colors, lighting, and signs, of a development’s impact on a community

Design Standards: criteria requiring specific dimensional standards or construction techniques. *See also “performance standards”.*

Detachment: the transposition of land from a municipality back into a township. *See s. 66.0227, Wis. Stats.*

Developer: a person or company that coordinates the ownership, financing, designing, and other activities necessary for the construction of infrastructure or improvements.

Development: an artificial change to real estate, including construction, placement of structures, excavation, grading, and paving.

Development Values: the economic worth of land based upon the fair market price after residential, commercial, or industrial structures have been added.

District: a part, zone, or geographic area within the municipality where certain zoning or development regulations apply.

Down Zoning: a change in zoning classification that permits development that is less dense, intense, or restrictive. *See also “up zoning”.*

Dwelling Unit: the space in a building that comprises the living facilities for one family. *See also “multifamily,” “single-family attached,” and “single-family detached dwelling”.*

Easement: written and recorded authorization by a property owner for the use of a designated part of the property by others for a specified purpose. *See also “conservation easement”.*

Ecological Impact: a change in the natural environment that could disrupt wildlife habitat or vegetation, or that could cause air, water, noise, or soil pollution.

Economic Unit: units of land that, although they may be separated from one another physically, are considered one economically.

Eminent Domain: the right of a government unit to take private property for public use with appropriate compensation to the owner. *See ch. 32, Wis. Stats.*

Enabling Act: legislation authorizing a government agency to do something that was previously forbidden. *See also “takings”.*

Enterprise Development Zone: zones meeting certain statutorily defined criteria and designated by the state Department of Commerce for providing tax incentives to new or expanding businesses whose projects will affect distressed areas. An enterprise development zone is “site specific,” applying to only one business, and is eligible for a maximum of \$3.0 million in tax credits. The department can designate up to 79 zones, which can each exist for up to seven years. The department is allowed to vary zone benefits to encourage projects in areas of high distress. *See s.560.70, Wis. Stats. See also “community development zone”.*

Environmental Corridors: linear areas of natural resources that are critical to maintaining water quality and quantity and to providing habitat linkages that maintain biological diversity. Environmental corridors are often associated with rivers and streams.

Environmental Impact Ordinance: a local legislative act requiring an assessment of the potential harmful environmental effects of a pending development so that steps to prevent damage can be taken.

Environmental Impact Report (EIR): a report that assesses an area's environmental characteristics and then determines the impact that a proposed development will have.

Environmental Impact Statement (EIS): a statement prepared under the National Environmental Policy Act (NEPA) or Wisconsin Environmental Policy Act (WEPA) predicting the impacts a proposed government action is likely to have on the environment and describing the affected environment and the alternative actions considered. *See s.1.11, Wis. Stats., P.L.91-190, 42 USC 4331, NR 150, Wis. Admin. Code.*

Environmental Nodes: discrete, inherently non- linear areas of natural resources that are sometimes isolated from areas with similar resource features. Planning objectives often include linking environmental nodes.

Environmentally Sensitive Areas: areas such as wetlands, steep slopes, waterways, underground water recharge areas, shores, and natural plant and animal habitats that are easily disturbed by development.

Esplanade: waterfront area intended for public use.

Estate Management Strategies: strategies enacted during a landowner's lifetime or upon her death to help preserve family lands and farms.

Ex parte Contact: communication, which is normally prohibited, with a decision maker in a quasi- judicial proceeding, which is not part of a public hearing or the official record in a matter.

Exactions: compensation, which may take the form of facilities, land, or an actual dollar amount, that a community requires from a developer as condition of the approval of a proposed development project. Exactions may be incorporated into the community's zoning code or negotiated on a project- by- project basis; but, they must reflect the type and extent of the expected adverse impacts of the development.

Executive Session: *See "closed session".*

Extraterritorial Zoning: a local government's authority to zone areas outside its boundaries. Under Wisconsin law, the extraterritorial zone for 1st, 2nd, and 3rd class cities extends 3 miles beyond the corporate limits. The limit extends 1½ miles beyond the municipal boundary for 4th class cities and villages. *See s.62.23(7a), Wis. Stats.*

Exurban Area: the area beyond a city's suburbs.

Fee Simple Acquisition: the purchase of property via cash payment.

Fee Simple Interest in Property: absolute ownership of and with unrestricted rights of disposition to land. This describes the possession of all rights to property except those reserved to the state. *See "rights".*

Fiscal Impact Analysis: the projection of the costs and benefits of additional or new facilities, rentals, or remodeling of existing facilities, including data relative to increased instructional, administrative, maintenance, and energy costs and costs for new or replacement equipment.

Fiscal Impact Report: a report projecting the costs and revenues that will result from a proposed development.

Floating Zone: an unmapped zoning district that is described in ordinance and on the zoning map only when an application for development is approved.

Floodplains: land that has been or may be covered by flood water during a 'regional flood' as is defined in NR 116, Wis. Adm. Code. The floodplain includes the floodway and floodfringe, and is commonly referred to as the 100- year floodplain.

- *Floodfringe:* that portion outside of the floodway covered by water during a regional flood.

This term is generally associated with standing water, but may under local floodplain zoning ordinances, be developed for specified purposes if development is protected from flooding.

- *Floodway:* *the channel of a river or stream and those portions of the floodplain adjoining the channel required to discharge a regional flood.*

This term is generally associated with flowing water and is required by local floodplain zoning ordinances to remain undeveloped and free of obstructions. *See also "base flood".*

Forest Crop Law: a program enacted in 1927 that exempts DNR approved privately owned forest land from general property taxes but instead requires the owner to make an acreage share payment or a state contribution. Under the program, land is taxed at a constant annual rate while its timber is taxed after harvest. Entries into the FCL closed as of 1 January 1986 with enactment of the Managed Forest Law. Today about 25,000 landowners, owning more than 2.5 million acres, are enrolled in the three existing forest tax laws: Forest Crop Law, Woodland Tax Law, and Managed Forest Law. *See ch. 70, Wis. Stats.*

Front Lot Line: the lot line separating an interior lot from the street, or the shortest lot line of a corner lot to a street.

Gentrification: the resettlement of low and moderate- income urban neighborhoods by middle and high- income professionals.

Geographic Information System (GIS): computer technology, tools, databases, and applications that provide spatial (geographic) data management, analysis, and mapping capabilities to support policy evaluation, decision- making, and program operations.

Geologic Review: an analysis of geologic features on a site, including hazards such as seismic hazards, surface ruptures, liquefaction, landslides, mud slides, erosion, and sedimentation.

Gift Credit: a dollar or in-kind matching amount (labor, supplies, land donation, etc.) required to secure funds for a development.

Global Positioning System (GPS): a computerized tool for determining longitudinal and latitudinal coordinates through the use of multiple orbiting satellites.

Green Spaces: *See “open spaces”.*

Growth Management: the pacing of the rate or controlling of the location of development via law enactment to manage a community's growth.

Growth Trend Series: In a growth series, the starting value is multiplied by the step value to get the next value in the series. The resulting product and each subsequent product is then multiplied by the step value.

Hamlet: a predominantly rural, residential settlement that compactly accommodates development.

Hamlet Lot: a small residential lot in a contiguous group with adjacent and fronting lots oriented toward each other in some ordered geometric way and forming a boundary with the surrounding countryside.

Hazardous Substance: any substance or combination of substances, including solid, semisolid, liquid or gaseous wastes, which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration, or physical, chemical, or infectious characteristics. This term includes irritants, strong sensitizers, explosives, and substances that are toxic, corrosive, or flammable. *See s.292.01(5), Wis. Stats.*

Heavy Industry: the basic processing and manufacturing of products from raw materials; or, a use engaged in the storage or manufacturing processes using flammable or explosive materials or those that potentially involve offensive conditions. *See also “light industry”.*

Highly Erodible Soils: soils highly susceptible to erosion as determined by an equation that considers soil type, slope, and amount of rainfall but does not consider current land management or vegetative cover. These soils are often identified in county soil survey books.

Historic Area: an area designated by an authority, having buildings or places that are important because of their historical architecture or relationship to a related park or square or because those areas were developed according to a fixed plan based on cultural, historical, or architectural purposes.

Historic Preservation: the research, protection, restoration, and rehabilitation of historic properties.

Historic Property: a building, structure, object, district, area, or site, whether on or beneath the surface of land or water, that is significant in the history, prehistory, architecture, archaeology, or culture of Wisconsin, its rural and urban communities, or the nation. *See s.44.31(3), Wis. Stats. See s.13.48(1m)(a), Wis. Stats.*

Homeowner's Association: a nonprofit organization made up of property owners or residents who are then responsible for costs and upkeep of semiprivate community facilities.

Home Rule: constitutional provisions in some states that give local units of government substantial autonomy. Wisconsin is a “strong” home rule state.

Incorporation: orderly and uniform development of territory from town to incorporated status. *See ch. 66, subch. II, Wis. Stats.*

Impact Fees: cash contributions, contributions of land or interests in land, or any other items of value that are imposed on a developer by a political subdivision to offset the community's costs resulting from a development. *See s. 66.0617, Wis. Stats.*

Impervious Surface: a ground cover such as cement, asphalt, or packed clay or rock through which water cannot penetrate; this leads to increases in the amount and velocity of runoff and corresponds to increases in soil erosion and nutrient transport.

Improvements: the actions taken to prepare land, including clearing, building infrastructure such as roads and waterlines, constructing homes or buildings, and adding amenities.

Incentive Zoning: the granting of additional development possibilities to a developer because of the developer's provision of a public benefit.

Industrial District: a district designated as manufacturing, research and development, or industrial park.

Infill: the development of the last remaining lots in an existing developed area, the new development within an area already served by existing infrastructure and services, or the reuse of already developed, but vacant properties. *See also “redevelopment”.*

Infrastructure: public utilities, facilities, and delivery systems such as sewers, streets, curbing, sidewalks, and other public services.

Installment Sale: a real estate transaction in which the landowner and the recipient negotiate terms for the property to be transferred over an extended period of time rather than all at once.

Intermodal Surface Transportation Efficiency Act, 1991 (ISTEA): a federal transportation act that authorized the first 23 “high priority corridors” of the total 42 authorized by the ISTEA, the National Highway System Designation Act (1995), and the Transportation Equity Act for the 21st Century.

Intelligent Transportation System (ITS): a system of technologies, including traveler information systems to inform motorists of weather and road conditions, incident management systems to help emergency crews respond more efficiently to road incidents, and commercial vehicle operations to increase freight transportation efficiency, intended to relieve state highway congestion.

Interim Zone of Influence: a procedure for the exchange of information or resolution of conflicts on certain proposed land- uses between a city or town and the county.

Interim Zone/ Development Controls: *See “moratorium”.*

Judicial Appeal: the review of a local zoning decision by the state judicial system.

Land: soil, the ground surface itself, a subdivision, a tract or parcel, a lot, an open space, or the physical elements below ground.

Land Banking: the obtaining, holding, and subsequent release of lands by a local government for controlled development or conservation.

Land Exchange: a transaction where a public agency or nonprofit organization exchanges a land parcel for another land parcel with high conservation value.

Land use Intensity System (LUI): a comprehensive system created in the mid- 1960s by the U.S. Federal Housing Administration for determining or controlling the intensity of land development.

Land use Inventory: a study, cataloging the types, extent, distribution, and intensity of current and future uses of land in a given area.

Land use Plan: the element of a comprehensive plan that designates and justifies the future use or reuse of land. See s.66.1001, *Wis. Stats.*

Landfill: a disposal facility for solid wastes. *See ch.289, Wis. Stats.*

Land Trust: a private, nonprofit organization that protects natural and cultural resources through conservation easements, land acquisition, and education.

Large- Lot Zoning: a requirement that each new house be constructed on a minimum number of acres (generally, five or more acres). Developments that feature large- lot zoning may include the dispersal of some impacts, less efficient infrastructure, and greater areas of land use.

Leapfrog Development: new development separated from existing development by substantial vacant land.

Leaseback: *See “purchase/ leaseback”.*

Level of Service (LOS): a measurement of the quantity and quality of public facilities.

Light Industry: the manufacture and distribution of finished products, including processing, fabrication, assembly, treatment, packaging, incidental storage, and sales. *See also “heavy industry”.*

Limited Development: the development of one portion of a property to finance the protection of another portion.

Linear Trend Series: In a linear series, the step value, or the difference between the first and next value in the series, is added to the starting value and then added to each subsequent value.

Lot: a parcel of land that is occupied or intended for occupancy, including one main building and any accessory buildings, open spaces, or parking spaces. *See also “through lot”.*

Lot Area: the area of a horizontal plane bounded by the vertical planes through front, side, and rear lot lines.

Lot Averaging: the design of individual adjoining lots within a residential subdivision where the average lot is the minimum prescribed area for the zoning district.

Lot- by- Lot Development: a conventional development approach where each lot is treated as a separate development unit conforming to all land- use, density, and bulk requirements.

Lot Coverage: the total when an area of a lot covered by the total projected surface of all buildings, impervious surfaces, or vegetative coverage is divided by the gross area of that lot.

Lot Depth: the average horizontal distance between the front and rear lot lines.

Lot Line: the property lines at the perimeter of a lot.

Lot Width: the distance between side lot lines. This is generally measured at the front setback, but the specific protocol varies between jurisdictions.

LULU: a locally unwanted land use. *See also “NIMBY,” “NIABY,” and “NIMTOO”.*

Main Street Program: a comprehensive revitalization program established in 1987 to promote and support the historic and economic redevelopment of traditional business districts in Wisconsin. The Main Street Program is administered by the state Department of Commerce.

Managed Forest Law: a law enacted in 1985, replacing the Forest Crop Law and Woodland Tax Law, that exempts DNR approved privately owned forest land from general property taxes but instead requires the owner to pay an annual acreage payment, a state contribution, a yield tax, or a withdrawal penalty. Landowners have the option to choose a 25 or 50 year contract period. Enrollment is open to all private landowners owning ten or more acres of woodlands. Today about 25,000 landowners, owning more than 2.5 million acres, are enrolled in the three existing forest tax laws: Forest Crop Law (FCL), Woodland Tax Law (WTL), and Managed Forest Law (MFL). *See ch. 70, Wis. Stats.*

Manufactured Housing: a structure, containing within it plumbing, heating, air- conditioning, and electrical systems, that is transportable in one or more sections of certain sizes and is built on a permanent chassis, and when connected to the required utilities, is designed to be used as a dwelling with or without a permanent foundation. Such housing must comply with the standards established under the National Manufactured Housing Construction and Safety Standards Act. *See 42 USC 5401 to 5425 and ch.409, Wis. Stats.*

Map: a drawing or other representation that portrays the spatial distribution of the geographic, topographic, or other physical features of an area.

Median age: The midpoint age that separates the younger half of a population from the older half.

Metropolitan Statistical Area (MSA): a statistical area defined by the U.S. Census; a freestanding metropolitan area (i.e. an area with a minimum population of 50,000 and adjacent communities with a high degree of economic and social integration) or a Census Bureau defined urbanized area with a population of 100,000 or greater (75,000 in New England), not closely associated with other metropolitan areas. Nonmetropolitan counties surround these areas typically. *See also “consolidated metropolitan statistical area” and “primary metropolitan statistical area”.*

Mini- Lot Development: a development containing lots that do not meet the minimum size or other requirements.

Mitigation: the process of compensating for the damages or adverse impacts of a development.

Mitigation Plan: imposed development conditions intended to compensate for the adverse impacts of the development.

Mixed- Use Development: a development that allows multiple compatible uses to be in close proximity to one another in order to minimize transportation infrastructure impacts and to create a compact, efficient neighborhood; for example, single family, multifamily, commercial, and industrial uses are located within a reasonable proximity to each other.

Modernization: the upgrading of existing facilities to increase the input or output, update technology, or lower the unit cost of the operation.

Moratorium: a temporary development freeze or restriction pending the adoption or revision of related public policies or provisions of public infrastructures or services.

Multifamily Dwelling: a building or portion occupied by three or more families living independently of each other.

Multimodal Transportation: an integrated network of various transportation modes, including pedestrian, bicycle, automobile, mass transit, railroads, harbors, and airports.

Municipality: a city, village, town, or other unit of local government. The application of this term varies and it often has specific legal meanings.

National Environmental Policy Act (NEPA): a congressional act passed in 1969, establishing a national environmental policy. NEPA requires federal agencies to consider the environmental effects of decisions early in their decision- making processes and to inform the public of likely impacts. Environmental impact statements (EISs) are prepared consistent with this law. The act also established the Council on Environmental Quality. *See P.L. 91- 190, 42 U.S.C. 4321- 4347. See also “environmental impact statement” and “Wisconsin Environmental Policy Act (WEPA)”.*

National Register of Historic Places in Wisconsin: places in Wisconsin that are listed on the national register of historic places maintained by the U.S. Department of the Interior, National Park Service.

Neighborhood Plan: a plan that provides specific design or property- use regulations in a particular neighborhood or district.

Neighborhood Unit: the model for American suburban development after World War II based around the elementary school with other community facilities located at its center and arterial streets at its perimeter.

Neotraditional Development: a land- use approach that promotes neighborhoods with a variety of housing and architectural types, a central gathering point, and interconnecting streets, alleys, and boulevards edged with greenbelts.* *See also “New Urbanism” and “smart growth”.*

Net Acre: an acre of land excluding street rights- of- way* and other publicly dedicated improvements such as parks, open space, and stormwater detention and retention facilities.

New Urbanism: an approach to development that includes the reintegration of components such as housing, employment, retail, and public facilities into compact, pedestrian- friendly neighborhoods linked by mass transit. *See also “Neotraditional development” and “smart growth”.*

NIABY: Not in anyone’s backyard. *See also “LULU,” “NIMBY,” and “NIMTOO”.*

NIMBY: Not in my backyard. *See also “LULU,” “NIABY,” and “NIMTOO”.*

NIMTOO: Not in my term of office. *See also “LULU,” “NIMBY,” and “NIABY”.*

Nonconforming Activity: an activity that is not permitted under the zoning regulations or does not conform to off- street parking, loading requirements, or performance standards.

Nonconforming Building: any building that does not meet the limitations on building size or location on a lot for its use and district.

Nonconforming by Dimension: a building, structure, or parcel of land that is not compliant with the dimensional regulations of the zoning code.

Nonconforming Lot: a use or activity which lawfully existed prior to the adoption, revision, or amendment of an ordinance but that fails to conform to the current ordinance.

Nonconforming Use: a use (or structure) that lawfully existed prior to the adoption or amendment of an ordinance but that fails to conform to the standards of the current zoning ordinance.

Noncontributing Building: a building or structure that does not add to the historic architecture or association or cultural values of the area.

North American Industry Classification System (NAICS): a classification system developed by the United States, Canada, and Mexico to provide comparable industrial production statistics collected and published in the three countries. The NAICS replaces the Standard Industrial Classification (SIC) system and provides for increased comparability with the International Standard Industrial Classification (ISIC) system developed and maintained by the United Nations. *See also “Standard Industrial Classification (SIC)”.*

Office Park: a large tract that has been planned and developed as an integrated facility for a number of separate office buildings and that considers circulation, parking, utilities, and compatibility.

One-Unit, Attached: This is a 1-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.

One-Unit, Detached: This is a 1-unit structure detached from any other house; that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides. Mobile homes or trailers to which one or more permanent rooms have been added or built also are included.

Open Session: a meeting that is in accordance with Wisconsin’s ‘Open Meetings Law.’ *See s.19.85- 19.98, Wis. Stats.*

Open (Green) Spaces: a substantially undeveloped area, usually including environmental features such as water areas or recreational facilities. *See also “common open spaces”.*

Ordinance: a local law; a legislative enactment of a local governing body.

Orthophoto Quad: an aerial photograph that has been adjusted, via the correcting of distortions and inaccuracies due to plane tilt, elevation differences, or the curvature of the earth’s surface, to reflect as accurately as possible the actual topography of the earth’s surface.

Outright Donation: the donation of land to a unit of government or a qualified charitable land conservation management organization.

Outright purchase: the acquisition of land for the benefit of the public.

Overlay Zone: an additional land use or zoning requirement that modifies the basic requirements of the underlying designation.

Parcel: *See “lot”.*

Pedestrian Friendly: a development that is primarily accessible to pedestrians rather than automobiles and with an emphasis on street sidewalks rather than parking.

Performance Standards: general criteria established to limit the impact of land uses or development. *See also “design standards”.*

Pervious Surface: a ground cover through which water can penetrate at a rate comparable to that of water through undisturbed soils.

Planned Unit Development: land under unified control to be developed in a single development or a programmed series of phases. A planned development includes the provisions, operations, maintenance, facilities, and improvements that will be for the common use of the development districts, but which will not be maintained at general public expense.

Plan Commission: an appointed local government commission authorized to make and adopt a master plan, consistent with s.66.1001, *Wis. Stats.*, for the physical development of the city. *See s.62.23, Wis. Stats.*

Plat: a map of a lot, parcel, subdivision, or development area where the lines of each land division are shown by accurate distances and bearings.

Point System: numerical values assigned to a development’s impacts on a community’s resources.

Political Subdivision: a city, village, town, county, sanitary district, school district, inland lake protection and rehabilitation district, or other special purpose unit of government.

Pre- acquisition: a technique where one organization (usually a private land trust) purchases a property and holds it until another organization (usually a government agency) can allocate the funds to purchase it.

Preservation: leaving a resource undisturbed and free from harm or damage. While ‘preservation’ is often used interchangeably with ‘conservation,’ the latter entails a connotation of prudent resource use.

Primary Metropolitan Statistical Area (PMSA): a statistical area defined by the U.S. Census; an area within a consolidated metropolitan statistical area consisting of a large urbanized county or cluster of counties that demonstrates very strong internal economic and social links, in addition to close ties to other portions of the larger area. *See also “metropolitan statistical area” and “consolidated metropolitan statistical area”.*

Prime Agricultural Land: land determined by local governments to be important for sustaining agricultural operations and that are often protected from conversion to other uses. *See ch.91, Wis. Stats.*

Prime Farmland: farmland classified by the Natural Resources Conservation Service as best for the crop production of row, forage, or fiber because of level topography, drainage, moisture supply, soil texture and depth, and susceptibility to erosion and runoff. Ideally, prime farmland allows least cost to both the farmer and the natural resources. *See ch.91, Wis. Stats.*

Principal Building: the building, including all parts connected, where the primary use of the lot is conducted.

Private Road: a way open to traffic, excluding driveways, established as a separate tract for the benefit of adjacent properties.

Privately Owned Waste- Treatment Systems (POWTS): sewage treatment and disposal systems, which are also called on- site sanitary systems, that are not connected to sewer lines or wastewater treatment plants.

Public Dedication: reserving land in a subdivision for public use such as a school or park.

Public Road: public property dedicated and reserved for street traffic.

Purchase of Development Rights (PDR): a public or private government initiative that acquires the development rights of property to limit development and protect natural features or open space. *See also “rights” and “transfer of development rights”.*

Purchase/ Leaseback: an arrangement where a community purchases a natural area and then either leases it back with special lease restrictions or sells it back with deed restrictions designed to protect the natural features of the property.

Quarter, Quarter Zoning: a development standard that limits non-farm development to one house per 40 acres (1/4 of 1/4 of the original 640- acre section).

Quasi- Judicial Decisions: “resembling a court,” quasi- judicial decision making must follow rules of due process and is midway between legislative and administrative functions. Examples of quasi- judicial decisions include variances, appeals, and conditional- use permits.

Quasi- Public Use/ Facility: a use conducted or a facility owned or operated by a nonprofit or religious institution that provides public services.

Rear- lot Line: a lot line, opposite the front lot line, that generally does not abut a public roadway.

Redevelopment: any proposed replacement of existing development. *See also “infill”.*

Redevelopment Authority: an authority, known as the “redevelopment authority of the city of [city name],” created in every city with a blighted area. This authority, together with all the necessary or incidental powers, is created to carry out blight elimination, slum clearance, and urban renewal programs and projects as set forth in Wisconsin Statutes. *See s.66.1333 (3)(a) 1, Wis. Stats .*

Reforestation: the planting or replanting of forest plants.

Regional Plan: a plan that covers multiple jurisdictions, often within the administrative area of a regional planning commission, and that can be prepared jointly by cooperating municipalities, regional planning commissions, state agencies, or other entities.

Requests for Proposals (RFP): a document describing a project or services and soliciting bids for a consultant’s or contractor’s performance.

Requests for Qualifications (RFQ): a document describing the general projects, services, and related qualifications of bidding consultants or contractors.

Reservation of Site: *See “public dedication”.*

Reserved Life Estate: an arrangement where a landowner sells or donates property to another party (for example, a conservation organization) while retaining the right to lifetime use.

Revolving Fund: a conservation fund, replenished through donations or selling of the land to another conservation organization or a government agency, used to purchase land or easements.

Rezoning: an amendment to a zoning map or zoning ordinance that changes the zoning- district designation and use or development standards.

Right of First Refusal: an agreement between a landowner and another party (for example, a land trust) that gives the other party a chance to match any third- party offer to purchase lands.

Right of Way (ROW): a strip of land occupied by or intended to be occupied by a street, crosswalk, walkway, utility line, or other access.

Rights (The Bundle of Rights Concept of Property): government and private owners each hold portions of the bundle of rights in real property.

Owner property rights include:

- *Right to Use:* the right to improve, harvest, cultivate, cross over, or not to use.
- *Right to Lease:* the right to lease for cash or the right to hold a cash, including a share lease or third or fourth lease, a crop share lease, a one year lease, or a perpetual lease.
- *Right of Disposition:* the right to sell, to bequeath, to mortgage, or to establish trusts on all or part of a property.

Government property rights include:

- *Eminent domain: the right to purchase land for public use*
- *Escheat: the right for the succession in title where there is no known heir*
- *Regulation*
- *Taxation*

Riparian Areas: the shore area adjacent to a body of water.

Roadway Setback: the required or existing minimum distance between a public roadway (measured from the centerline or edge of right- of- way) and the nearest point on a structure.

Scenic Corridor: a linear landscape feature that is visually attractive (for example, stream corridors or blufflines).

Scenic Easement: an easement* intended to limit development in order to preserve a view or scenic* area.

Seasonal Dwelling: a dwelling not used for permanent residence or not occupied for more than a certain number of days per year. The standard varies between jurisdictions.

Secondary Dwelling Unit: an additional dwelling unit in a freestanding building or above a residential garage and located within or on the same lot as the principal dwelling unit.

Sense of Place: the constructed and natural landmarks and social and economic surroundings that cause someone to identify with a particular place or community.

Set Back: the minimum distance a building, structure, or activity can be separated from a designated feature such as a waterway or bluffline.

Shoreland: a state mandated water resource protection district that Wisconsin counties must adopt.

Shorelands include lands adjacent to navigable waters within 1,000 feet of the ordinary high- water mark of a lake, pond, or flowage and within 300 feet of the ordinary high- water mark or floodplain of a river or stream.

Shoreland- Wetland: shorelands that are designated as wetlands on Wisconsin Wetlands Inventory maps. See *Wis. Stats.*

Shoreline Stabilization: the placement of structural revetments or landscaping practices to prevent or control shoreline erosion.

Side Lot Line: a lot line that is neither a front lot line nor a rear lot line.

Single- family Attached Dwelling: one of two or more residential buildings having a common wall separating dwelling units.

Single- family Detached Dwelling: a residential building containing not more than one dwelling unit surrounded by open space.

Sign: any device that is sufficiently visible to persons not located on the lot that communicates information to them.

Site Plan: a scaled plan, which accurately and completely shows the site boundaries, dimensions and locations of all buildings and structures, uses, and principal site development features, proposed for a specific lot.

Sliding Scale Zoning: a ratio of dwelling units to land acreage that concentrates development on smaller lots by increasing the minimum lot size for houses built on larger parcels.

Smart Growth: an approach to land- use planning and growth management that recognizes connections between development and quality of life. The features that distinguish smart growth approaches vary. In general, smart growth invests time, attention, and resources in restoring community and vitality to center cities and older suburbs. In developing areas, the approach is more town- centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial, and retail uses. Smart- growth approaches preserve open space and other environmental amenities. The term is also used to refer to Wisconsin's comprehensive planning law. See s.66.1001, *Wis. Stats.* See also "New Urbanism" and "Neotraditional development".

Special Designation: the protection of scenic river corridors and other valuable resources through state or federal means such as recognition, acquisition, or technical assistance.

Special District/ Special Purpose Unit of Government: a government entity that is responsible for performing specific tasks and oversight essential to a community's or region's well-being. Special districts include sanitary districts, metropolitan sewerage districts, drainage districts, inland lake protection and rehabilitation districts, business improvement districts, tax incremental financing districts, architectural conservancy districts, and port authorities.

Special Exception: *See “conditional use”.*

Spot Zoning: a change in the zoning code or area maps that is applicable to no more than a few parcels and generally regarded as undesirable or illegal because it violates equal treatment and sound planning principles.

Stand: a number of plants growing in a continuous area. Examples include ‘a stand of hardwood’ or ‘a stand of timber’.

Standard Industrial Classification/ Standard Industrial Code (SIC): an industry classification system to facilitate the collection, tabulation, presentation, and analysis of data relating to establishments and to ensure that data about the U.S. economy published by U.S. statistical agencies are uniform and comparable. *See also “North American Industry Classification System (NAICS)”.*

Statewide Comprehensive Outdoor Recreation Plan (SCORP): a plan that aims to offer a research base and overall guidance for all providers of Wisconsin’s outdoor recreation, including federal, state, county, city, village, and town governments, resorts and other businesses, and a variety of other public and private organizations. Ideally, SCORP is used in conjunction with other planning documents such as property master plans, community park and open space plans, the State Trails Strategic Plan, six- year development plans, and county and regional planning commission plans.

Stewardship Program: a state bonding program established by the Wisconsin Legislature in 1989 and re- authorized in 1999 that provides funds to protect environmentally sensitive areas and to maintain and to increase recreational opportunities across the state.

Stormwater Detention/ Stormwater Retention: the storage of stormwater runoff.

Stormwater Management: the reduction of the quantity of runoff, which affects flooding, or of pollutants generated at a development site and carried in stormwater.

Story: a space in a building between the surface of any floor and the surface of the next above floor or roof.

Subdivision: the description (usually by survey) and recording of separate land parcels or lots.

Summary Abatement: a legal action taken to suppress the continuation of an offensive land use. *See also “tax abatement”.*

Sustainability: long- term management of ecosystems intended to meet the needs of present human populations without compromising resource availability for future generations.

Sustainable Development: development that meets the needs of the present generation without compromising the needs of future generations.

Takings: government actions that violate the Fifth Amendment to the U.S. Constitution, which reads in part, “nor shall private property be taken for public use, without just compensation.” Such actions include regulations that have the effect of “taking” property. The Supreme Court has established four clear rules that identify situations that amount to a taking and one clear rule that defines situations that do not.

The court has found “takings” in the following circumstances:

- *where a landowner has been denied “all economically viable use” of the land;*
- *where a regulation forced a landowner to allow someone else to enter onto the property;*
- *where the regulation imposes burdens or costs on a landowner that do not bear a “reasonable relationship” to the impacts of the project on the community; and*
- *where government can equally accomplish a valid public purpose through regulation or through a requirement of dedicating property, government should use the less intrusive regulation, for example, prohibiting development in a floodplain property.*

The Supreme Court has also said that where a regulation is intended merely to prevent a nuisance, it should *not* be considered a taking.

Tax Abatement: a release of a certain tax liability for a specific period of time and under certain circumstances. *See also “summary abatement”.*

Tax Increment: additional tax revenue resulting from a property- value increase; the amount obtained by multiplying the total of all property taxes levied on all taxable property within a tax- incremental district in a year by a fraction having as a numerator the value increment for that year in the district and as a denominator that year’s equalized value of all taxable property in the district. In any year, a tax increment is “positive” if the value increment is positive and “negative” if the value increment is negative. *See s.66.1105, Wis. Stats.*

Tax Increment Financing (TIF): a local governmental financing of private- sector redevelopment, anticipating the additional revenues of the tax increment.* *See s.66.1105, Wis. Stats.*

Town: the political unit of government; a body corporate and politic, with those powers granted by law. *See ch. 60, Wis. Stats.*

Township: all land areas in a county not incorporated into municipalities (cities and villages).

Tract: an indefinite stretch or bounded piece of land; in subdivisions, a tract is often divided into individual lots.

Traditional Neighborhood: a compact, mixed- use neighborhood where residential, commercial, and civic buildings are within a close proximity. *See also “Neotraditional development” and “New Urbanism”.*

Traffic Calming: the process of increasing pedestrian safety via decreasing automobile speed and volume.

Traffic Impact Analysis: an analysis of the impacts of traffic generated by a development.

Traffic Impact Mitigation Measure: an improvement by a developer intended to reduce the traffic impact created by a development.

Transfer of Development Rights: a technique, involving the designation of development (receiving) zones and protected (sending) zones, for guiding growth away from sensitive resources and toward controlled development centers by transferring development rights from one area to another via local law authorization such as a deed or easement. *See also “rights” and “purchase of development rights”.*

Transit- Oriented Development (TOD): moderate or high- density housing concentrated in mixed- use developments* that encourages the use of public transportation.

Transitional Use: a permitted use or structure that inherently acts as a transition or buffer between two or more incompatible uses.

TRANSLINKS 21: a statewide transportation system plan prepared by the Wisconsin Department of Transportation in response to federal and state laws.

Transportation Demand Management (TDM): a strategy that alleviates roadway stress by reducing vehicle density via the increasing of passengers per vehicle.

Transportation enhancements (ISTEA & TEA- 21): funds contributed by the federal highway transportation program to enhance cultural, aesthetic, and environmental aspects of local transportation and transit systems.

Underlying Zoning District: a term referring to a zoning district when it is affected by an overly district.

Undevelopable: an area that cannot be developed due to topographic or geologic soil conditions.

Unified Development Code: the combining of development regulations into a single zoning code.

Universal Transverse Mercator Grid (UTM): a civilian grid system, which uses only numbers and can be handled by digital mapping software and Geographic Information Systems.

Unnecessary Hardship: a unique and extreme inability to conform to zoning ordinance provisions due to physical factors; and, one of three tests a property must meet in order to qualify for a zoning variance.

Up Zoning: changing the zoning designation of an area to allow higher densities or less restrictive use. *See also “down zoning”.*

Urban Area: the area within a municipal boundary that is serviced by infrastructure; an intensively developed area with a relatively large or dense population.

Urban Forest: all trees and associated vegetation in and around a city, village, or concentrated development.

Urban Growth Area: an area designated for urban development and usually designed to protect open space or resources beyond its boundaries.

Urban Growth Boundary: the perimeter of an urban growth area.

Urban Sprawl: low- density, automobile- dependent, and land- consumptive outward growth of a city; the spread of urban congestion and development into suburban and rural areas adjoining urban areas.

Utility Facilities: any above ground structures or facilities used for production, generation, transmission, delivery, collection, or storage of water, sewage, electricity, gas, oil, or electronic signals.

Variance: a relaxation of dimensional standards by a local zoning board in compliance with statutory criteria. *See s.59.99(7), Wis. Stats.*

Vehicle Miles Traveled (VMT): a measure of automobile and roadway use.

Village: an incorporated area with a population under 5,000. *See ch. 61, Wis. Stats.*

Watershed: the area where precipitation drains to a single body of water such as a river, wetland, or lake.

Wellhead Protection: a plan to determine the water collecting area for a public well, identify the pollution sources within that area, and detect, prevent, and remedy potential contamination to the collecting area.

Wetlands Inventory Map: a map of wetlands classified according to their vegetation, hydrology, and types of human influence, developed by the Wisconsin Department of Natural Resources, used to identify wetlands for protection.

Wetlands Reserve Program: a federal program with state partnering to restore the functions and values of wetlands and to preserve riparian areas through conservation easements and wetland reconstruction.

Wildlife Habitat Incentives Program: a program that awards landowners federal cost- sharing funds after the installation of improvements to wildlife or fishery habitat.

Wisconsin Administrative Code (Wis. Admin. Code): a component of state law that is a compilation of the rules made by state agencies having rule- making authority. These rules provide the detailed provisions necessary to implement the general policies of specific state statutes

Wisconsin Environmental Policy Act (WEPA): a state law establishing a state environmental policy. WEPA requires state agencies to consider the environmental effects of decisions early in their decision-making processes and to inform the public of likely impacts and alternatives that were considered. Environmental impact statements (EISs) are prepared consistent with this law. *See also “environmental impact statement” and “National Environmental Policy Act (NEPA)”. See NR 150, Wis. Admin. Code, and s.1.11, Wis. Stats.*

Wisconsin Initiative for Statewide Cooperation on Landscape Analysis and Data (WISCLAND): a partnership between government agencies, private companies, and nonprofit groups to collect, analyze, and distribute landscape information.

Wisconsin Register of Historic Places: a listing of districts, sites, buildings, structures, and objects that are significant in national, state, or local history, architecture, archaeology, engineering and culture. The Wisconsin register of Historic Places is maintained by the Wisconsin State Historical Society. *See s. 44.36, Wis. Stats.*

Woodland Tax Law: a law enacted in 1954 that extended land eligibility of the Forest Crop Law to owners of small forest parcels. Entries into the WTL closed as of 1 January 1986 with enactment of the Managed Forest Law. Today about 25,000 landowners, owning more than 2.5 million acres, are enrolled in the three existing forest tax laws: Forest Crop Law, Woodland Tax Law, and Managed Forest Law. *See ch. 70, Wis. Stats.*

Zero Lot Line: the location of a building in such a manner that one or more of its sides rests directly on its lot line.

Zone: an area designated by an ordinance where specified uses are permitted and development standards are required.

Zoning Inspector: an appointed position to administer and enforce zoning regulations and related ordinances.

Zoning Permit: a permit issued by the land- use or zoning administrator authorizing the recipient to use property in accordance with zoning- code requirements.

Source: *Land-Use Lingo: A Glossary of Land-Use Terms*, WDNR, 2001.

Note: All references are to 1999-2000 Wisconsin Statutes.