

## Acknowledgements

### Local Government

The elected and appointed officials, administrative staff and residents of the following municipalities:

Town of Black Creek	Town of Kaukauna	Village of Hortonville
Town of Bovina	Town of Liberty	Village of Kimberly
Town of Buchanan	Town of Maine	Village of Little Chute
Town of Center	Town of Maple Creek	Village of Nichols
Town of Cicero	Town of Oneida	Village of Shiocton
Town of Dale	Town of Osborn	Village of Wrightstown
Town of Deer Creek	Town of Seymour	
Town of Ellington	Town of Vandenbroek	City of Appleton
Town of Freedom		City of Kaukauna
Town of Grand Chute	Village of Bear Creek	City of New London
Town of Greenville	Village of Black Creek	City of Seymour
Town of Hortonville	Village of Combined Locks	

East Central Wisconsin Planning Commission

### Outagamie County Board of Supervisors

Chairperson – Jeff Nooyen

Vice-Chairperson – Joy Hagen

Sergeant-at-Arms – Robert Stadel

Parliamentarian – Joseph P. Guidote, Jr., Corporation Counsel

District 1 – Cathy Thompson  
District 2 – Nadine Miller  
District 3 – Dominic Renteria  
District 4 – Katrin Patience  
District 5 – Dan Gabrielson  
District 6 – Curt Konetzke  
District 7 – Lee Hammen  
District 8 – Nick Thyssen  
District 9 – Justin Krueger  
District 10 – Christine Lamers  
District 11 – Daniel Dillenberg  
District 12 – Jim McDaniel  
District 13 – Jason Wegand  
District 14 – Donald DeGroot

District 15 – Brian Peterson  
District 16 – Kelly Schroeder  
District 17 – Chris Croatt  
District 18 – Cathy Spears  
District 19 – Pete Marcks  
District 20 – Mike Thomas  
District 21 – Travis Thyssen  
District 22 – Joy Hagen  
District 23 – Ronald Klemp  
District 24 – Jerry Iverson  
District 25 – Jeff Nooyen  
District 26 – Eric Davidson  
District 27 – Dean Culbertson  
District 28 – Kevin Sturn

## Outagamie County

### Comprehensive Plan 2040: *The Shared Path Forward*

---

District 29 – Bob Buchman  
District 30 – Mike Woodzicka  
District 31 – Dennis Clegg  
District 32 – Debbie Vander Heiden

District 33 – BJ O'Connor-Schevers  
District 34 – Daniel Rettler  
District 35 – Daniel Melchert  
District 36 – Keith Suprise

### Comprehensive Plan 2040 Steering Committee

Bob Buchman, County Board District 29  
Chris Croatt, County Board District 17  
Mary Dorn, Public Health Manager – Health & Human Services  
Dan Gabrielson, County Board District 5  
Lee Hammen, County Board District 7  
Kara Homan, Director – Development & Land Services

Brian Massey, Director – Financial Services  
Dean Steingraber, Highway Commissioner – Highway Department  
Debbie Vander Heiden, County Board District 32  
Abe Weber, Director – Appleton International Airport

### Outagamie County Staff

#### Development & Land Services Department:

Kara Homan, AICP, Director\*  
Dave Johnson, Principal Planner (retired)  
Isaac Uitenbroek, Senior Planner  
Steve Swanson, Zoning Administrator  
Traci Meulemans, GIS Spatial Analysis  
Jon Arndt, GIS Engineer  
Hillary Pattermann, Administrative Assistant  
Jeff Sanders, LTE Contract Planner  
Daniel Zhou, Intern

#### Financial Services Department:

Brian Massey, Director\*  
Craig Moser, Deputy Director of Department & Board Relations

#### Land Conservation Department:

Greg Baneck, County Conservationist  
Jeremy Freund, Stormwater Engineer

#### Highway Department:

Dean Steingraber, PE, Highway Commissioner\*  
Andy Rowell, PE, Highway Engineer

#### Parks Department:

Loren Dieck, Parks Director

#### HHS-Public Health Division:

Mary Dorn, MPH, BSN, RN, Manager\*

#### Appleton International Airport

Abe Weber, Director\*

*\*Also serves on the Steering Committee.*

## Volume I: Existing Conditions - Table of Contents

### I. Introduction

Geographic Setting & General Background .....	7
Historical Snapshot .....	8
Current Highlights .....	10

### II. The Comprehensive Plan

Introduction .....	11
Project Timeline.....	12

### III. Plan Oversight

Introduction .....	13
Steering Committee .....	13
Land Use Advisory Group.....	16
County Board & Committees of Jurisdiction.....	16

### IV. Community Engagement

Overview of Planning Process .....	17
Initial Meetings with Communities .....	17
Visioning Sessions.....	18
Composite Rural Summary Report .....	18
Composite Urban / Urbanizing Summary Report.....	22
Final Community Review Meetings .....	22

## V. Population Profile

Introduction .....	23
County Population, 1970-2040 .....	24
Age & Gender Characteristics.....	32
Diversity & Nationality .....	33
U.S. Military Veterans.....	34

## VI. Housing Profile

Introduction .....	35
Housing Units & Households .....	36
Housing Value & Affordability .....	37

## VII. Education & Income Profile

Introduction .....	39
Education & Income .....	43

## VIII. Economic Profile

Introduction .....	44
Employment Growth .....	45
Economic Base Analysis.....	45
Economic Strengths & Weaknesses .....	46
Economic Data & Trends .....	48

## IX. Transportation Profile

Introduction .....	49
Highways & Roads.....	49
Airports .....	52
Transit .....	53
Rail Service.....	55



---

Water Transportation .....	55
Bicycle & Pedestrian Facilities .....	57
Transportation Data .....	60

## X. Agricultural Resources Profile

Introduction .....	61
Livestock Siting Regulations .....	61
General Trends .....	63

## XI. Natural Resources Profile

Geography & Geology .....	64
Metallic and Nonmetallic Mineral Resources .....	65
Topography .....	65
Soils .....	65
Water Resources .....	67
Wetland Resources .....	73
Woodland Resources .....	74
Wildlife Resources .....	74

## XII. Cultural Resources Profile

Introduction .....	76
Archaeological Resources .....	76
Cultural & Historic Resources .....	77

## XIII. Utilities & Community Facilities Profile

Introduction .....	83
County Parks & Recreation Areas .....	83
State Recreational Resources .....	84
Water & Wastewater Treatment Facilities .....	86

Solid Waste & Recycling .....	88
Utilities .....	88
Telecommunications .....	89
Healthcare & Social Infrastructure .....	90
Public Health & Social Services .....	90
Cemeteries .....	92
Educational Resources .....	92
Public Safety .....	94
Emergency Management .....	94
Outagamie County & Municipal Facilities .....	95

#### XIV. Intergovernmental Profile

Introduction .....	97
County Intergovernmental Agreements .....	97
Oneida Nation .....	102
Drainage Districts .....	102
Regional Planning Commission/MPO .....	105
Boundary Agreements .....	106

#### XV. Land Use Profile

Introduction .....	107
Land Use Trends .....	107
Land Consumption Projections .....	109
Property Value Trends .....	110
Land Suitability .....	113
Existing Land Use Tools .....	117
Brownfields .....	119

## I. Introduction

### Geographic Setting & General Background

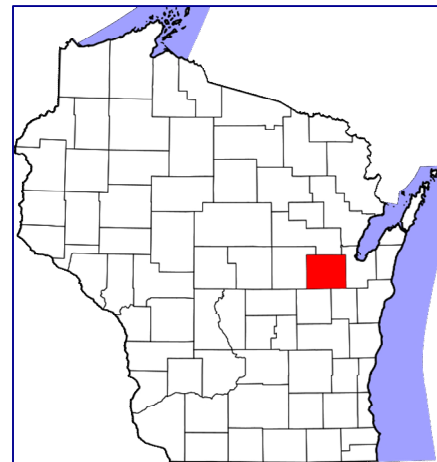
Outagamie County is located in east central Wisconsin, north of Lake Winnebago and southwest of Green Bay, between latitudes 44°14' and 44°36' N. and longitudes 88°11' and 88°44' W. The county is rectangular in shape and has an area of approximately 646 square miles. Adjoining counties include Shawano to the north, Brown to the east, Calumet and Winnebago to the south, and Waupaca to the west.

The estimated population of Outagamie County in 2018 was 184,541.<sup>1</sup> It is comprised of fourteen incorporated municipalities and twenty civil towns. At an estimated 2017 population of 73,832<sup>2</sup>, Appleton is the largest city and county seat. The Fox River Valley, a roughly 40 mile long riparian depression extending from Lake Winnebago to Green Bay, is the focal point for the Outagamie community, commerce, and culture.



Outagamie County includes:

- ▲ The Towns of Black Creek, Bovina, Buchanan, Center, Cicero, Dale, Deer Creek, Ellington, Freedom, Grand Chute, Greenville, Hortonville, Kaukauna, Liberty, Maine, Maple Creek, Oneida, Osborn, Seymour, and Vandenbroek.
- ▲ The Villages of Bear Creek, Black Creek, Combined Locks, Harrison\*, Hortonville, Howard\*, Kimberly, Little Chute, Nichols, Shiocton, and Wrightstown
- ▲ The Cities of Appleton\*, Kaukauna\*, New London\*, and Seymour
- ▲ The Oneida Nation\*



\* Indicates units of government within multiple counties.

<sup>1</sup> Source: Wisconsin Department of Administration-Demographic Services Center, 2019.

<sup>2</sup> Source: American Fact Finder, United States Census Bureau, 2019.

# Outagamie County

## Comprehensive Plan 2040: *The Shared Path Forward*

### Historical Snapshot<sup>3</sup>

Pre-

- 1600s Outagamie (Fox), Sioux, Algonquin, Sauk, Mascoutin, Menominee, Kickapoo, Potawatomi, and Ho-Chunk (Winnebago) tribes
- 1600s French take possession
- 1634 French explorer Jean Nicolet visits area en route to Lake Winnebago
- 1760 Trading post established by Dominique DuCharme on bank of Fox River
- 1762 Great Britain claims land following French & Indian War (Seven Years War)
- 1783 Becomes part of United States following Revolutionary War
- 1789 Made part of Northwest Territory
- 1800 Made part of Indiana Territory
- 1809 Included in Illinois Territory
- 1813 First permanent non-Indian settlement established in present-day Kaukauna
- 1818 Attached to Michigan Territory; Brown County (including present-day Outagamie County) established
- 1818 Grignon saw mill established on Fox River
- 1821 First movement of Oneida Nation settled in Grand Chute/Kaukauna area
- 1836 Included in Wisconsin Territory
- 1836 'Treaty of the Cedars' concludes between Menominee Nation and United States on the banks of Fox River in present-day Little Chute; cedes 4 million acres to US
- 1838 Wisconsin Territorial Governor Henry Dodge requests funding from Congress to build Fox River Locks System
- 1838 Oneida Indian Reservation established
- 1840s First permanent settlers in Appleton
- 1846 Amos Lawrence establishes Lawrence University
- 1848 Wisconsin admitted to the Union as the 30th state
- 1848 Alonzo E. Horton establishes Village of Hortonville and Town of Hortonville
- 1849 Village of Lawesburg founded (in present day Grand Chute); incorporated into Appleton in 1853
- 1851 Outagamie County created from Brown County (population of 4,000)
- 1853 Village of Appleton becomes first incorporated community



Courtesy Historical Marker Database



Lawrence University Main Hall, courtesy Lawrence University

<sup>3</sup> Sources: History of Outagamie County, Wisconsin, Ryan, Thomas Henry; 19.11; Outagamie County Asylum, 2019; Outagamie County Fair, 2019; Courthouse History, 2019; Outagamie County Comprehensive Plan, 2008.

- 1853 Excavation of Lawrence University Main Hall begins
- 1871 Courtney Woolen Mill open on Fox River in Appleton
- 1878 Rabbi Mayer Samuel Weisz moves to Appleton; son later changes name to Harry Houdini
- 1880s Major industries including Fox River Paper Company, Kaukauna Lumber and Manufacturing Company, Appleton Machine Company, Eagle Manufacturing Company, Riverside Fiber and Paper Company, and Wisconsin Tissue Paper Company established
- 1882 First Outagamie County Courthouse built in Appleton; Henry Rogers' home (Hearthstone Historic House) becomes first private residence in the world to be illuminated by hydroelectricity
- 1885 First Outagamie County Fair held in Seymour
- 1885 "Hamburger Charlie" Nagreen invents the hamburger in Seymour
- 1889 Outagamie County Health Center founded near present day site of Fox Valley Technical College
- 1889 The Cedars renamed the Village of Kimberly after John A. Kimberly
- 1899 Village of Little Chute incorporated
- 1906 Barteau Bridge opens over Shioc River
- 1913 Hortonville Opera House constructed
- 1920 Combined Locks incorporated as village
- 1923 History Museum at the Castle. Originally Appleton Masonic Temple, constructed
- 1940s First Outagamie County Airport opens on Ballard Road
- 1942 Current Outagamie County Courthouse constructed
- 1956 Robert Plamann sells 113 acres to Outagamie County for \$1.00; becomes Plamann Park
- 1963 Groundwork begins on Outagamie County Airport in the Town of Greenville
- 1965 Wisconsin International raceway opens as K-K Sports Arena in Town of Buchanan
- 1974 Mosquito Hill Nature Center opens
- 1984 Fox River mall opens in Town of Grand Chute
- 1995 Fox Cities Stadium opens
- 2002 Fox Cities Performing Arts Center opens
- 2018 New Outagamie County Government Center opens



From top: Hortonville Opera House, courtesy WeddingWire; Outagamie County Airport, courtesy Appleton International Airport; Mosquito Hill Nature Center, courtesy waupacanow.com; Neuroscience Group Field at Fox Cities Stadium, courtesy TripAdvisor



# Outagamie County

## Comprehensive Plan 2040: *The Shared Path Forward*

---

### Current Highlights

- ▲ With a 2010 population of 184,541, Outagamie County is the 6<sup>th</sup> most populous in the state.<sup>4</sup>
- ▲ Between 2000 and 2018, Outagamie County added 10,674 new residents. Only Dane County, Brown County, and Waukesha County added more.<sup>5</sup>
- ▲ With an overall grade of A- and a Public School Grade the same, Niche.com identified Outagamie County as the 9<sup>th</sup> best Wisconsin County in which to live.<sup>6</sup>
- ▲ US News & World Report ranked Outagamie County the 173<sup>rd</sup> healthiest county in the nation. Other Wisconsin counties in the top 200 included Ozaukee (16<sup>th</sup>), Washington (35<sup>th</sup>), Waukesha (59<sup>th</sup>), Door (120<sup>th</sup>), Green (135<sup>th</sup>), St. Croix (155<sup>th</sup>), La Crosse (158<sup>th</sup>), Jefferson (172<sup>nd</sup>), Dane, (182<sup>nd</sup>), and Kewaunee (189<sup>th</sup>).<sup>7</sup>
- ▲ As of March 2019, Outagamie County ranked #3 in the state for incoming investment, #3 for new building permits, #3 for municipal bonds, and #5 for GDP growth.<sup>8</sup>
- ▲ Based upon per capita income, Outagamie County is the 11<sup>th</sup> wealthiest county in Wisconsin.<sup>9</sup>
- ▲ With a median age of 37.8 years, Outagamie County is the 15<sup>th</sup> youngest in the state.<sup>10</sup>
- ▲ Outagamie is the 5<sup>th</sup> best county in Wisconsin for outdoor activities, 8<sup>th</sup> best for families, and 11<sup>th</sup> best to buy a house.<sup>11</sup>
- ▲ With a total population of 392,660, Outagamie, Calumet, and Winnebago Counties combine to form the 3<sup>rd</sup> largest Combined Statistical Area in Wisconsin.<sup>12</sup>

---

<sup>4</sup> Source: Official Final Estimates, 1/1/2018, Wisconsin Counties, Wisconsin Department of Administration, 2019.

<sup>5</sup> Source: US Census Bureau, 2019.

<sup>6</sup> 2019 Best Counties to Live in Wisconsin, Niche.com, 2019.

<sup>7</sup> Source: Healthiest Communities, U.S. News & World Report, 2019.

<sup>8</sup> Source: SmartAsset, 2019.

<sup>9</sup> Source: US Census Bureau: US Census 2010.

<sup>10</sup> Source: US Census Bureau: American Community Survey, 2015.

<sup>11</sup> Source: Niche.com, 2019.

<sup>12</sup> US Census and US Office of Management and Budget, 2010.

## II. The Comprehensive Plan

### Introduction

A comprehensive plan is a document used by local government to guide community development and preservation actions. It is comprised of a vision, goals, recommendations, data, graphics, and maps related to housing, transportation, economic development, and natural resources (among others), which guide public land use, development and infrastructure policy.

In 1999, the State Legislature passed Act 9, Wisconsin's Comprehensive Planning Law (Section 66.1001, Wis. Stats.). The law requires that towns, villages, cities, and counties that administer zoning regulations, subdivision regulations, or an official map do so consistent with an adopted comprehensive plan. The legislation provides a framework for comprehensive planning. Under the law, a comprehensive plan must include nine specific elements describing current conditions and providing a direction for addressing future needs. These elements include:

- *Issues & Opportunities.* Background information on the County and detailed demographic data related to population, education, income, and employment, among others.
- *Housing.* Detailed assessment of the current housing stock and a plan to ensure that future housing will meet the needs of all residents.
- *Transportation.* A comprehensive description of the existing transportation network and a plan for providing multi-modal systems to meet future demand.
- *Utilities & Community Facilities.* An analysis of current facilities including water and sewer service, stormwater, electricity and natural gas, parks and recreation, healthcare, schools, and public safety (including police and fire stations), among others; and a plan to ensure that those facilities are adequate to meet future needs.
- *Agricultural, Natural, and Cultural Resources.* A description of the County's resource base and the efforts necessary to preserve that base in the long-term.
- *Economic Development.* Plans and programs to promote the stabilization, retention, diversification, and expansion of the economic base and quality employment opportunities.
- *Land Use.* A detailed description of current land uses and a future land use plan to guide development during the next twenty years.
- *Intergovernmental Cooperation.* A list of existing intergovernmental agreements and the identification of opportunities for future coordination and collaboration.
- *Implementation.* A compilation of the programs and specific actions the County will take to implement the comprehensive plan.

Unlike a zoning or subdivision ordinance, the comprehensive plan is not a regulatory tool. It is a guidance document reflecting and representing community visions that provides a road map for future growth and preservation actions. Its text, tables, graphics, and maps must encapsulate the values of the community within an easy to read and understand document; one that informs stakeholders, provides direction to developers, and guides decision-making.

# Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward

## Project Timeline

OUTAGAMIE COUNTY COMPREHENSIVE PLAN - 2040  
Planning Process Overview & Timeline  
Updated 08/02/2019





### III. Plan Oversight

#### Introduction

The County Board, in adopting the Public Participation Plan (PPP) for this Plan, created a framework for plan development, review, oversight and adoption. Below is a summary of the various groups and committees involved in guiding development of the plan. A full copy of the PPP can be found in Appendix I.

#### Steering Committee

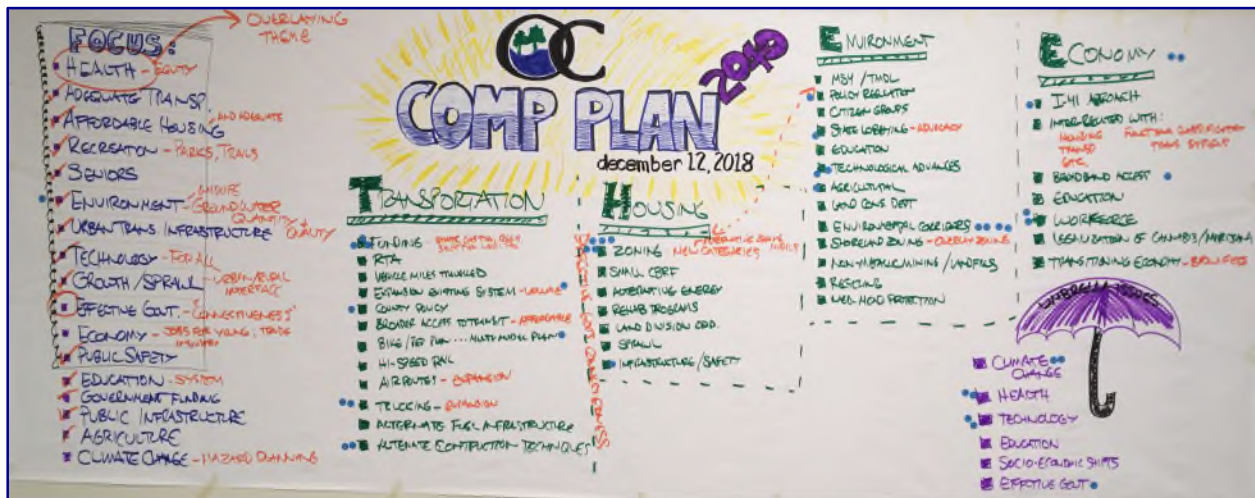
The *Comprehensive Plan Steering Committee* (hereafter, the Steering Committee) was appointed by the Outagamie County Board of Supervisors on May 8, 2018. Its purpose was to shepherd the planning process, provide guidance to the Project Team, and recommend to the County Board the adoption of the updated comprehensive plan. Please see the 'Acknowledgements' section at the beginning of this document for Steering Committee membership. Minutes for all Steering Committee meetings can be found in Appendix II.

#### Visioning Session

On October 1, 2018, the Project Team hosted the first meeting of the Steering Committee. The purpose of the meeting was to discuss the *Public Participation Plan* and project goals and to review the Process Overview & Timeline. Please refer to Vol. 3: Appendices, Appendix A for a copy of the adopted Public Participation Plan.

On December 12, 2018 the Steering Committee and select County staff participated in a visioning session aimed at identifying land use and implementation priorities for consideration during the comprehensive plan development process. The session was facilitated using a process known as graphic recording. Particularly effective within group settings, the meeting management technique encourages freethinking and the rapid generation of ideas. It evokes enthusiasm, encourages interaction and cooperative participation, and allows participants to visualize their ideas and build upon each other's comments.

# Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward



Wall graphic prepared during December 12, 2018 Outagamie Comprehensive Plan Steering Committee Visioning Session

## Participants

- ▲ Greg Baneck – Director, Land Conservation Department
- ▲ Amie Bastian – Manager, Aging & Long Term Support
- ▲ Bob Buchman – County Board Supervisor, District 29 \*
- ▲ Chris Croatt – County Board Supervisor, District 17 \*
- ▲ Mary Dorn – Public Health Manager, Health & Human Services \*
- ▲ Dan Gabrielson – County Board Supervisor, District 5 \*
- ▲ Lee W. Hammen – County Board Supervisor, District 7 \*
- ▲ Debbie Vanderheiden, County Board Supervisor, District 32\*
- ▲ Mike Hibbard – Naturalist, Mosquito Hill
- ▲ Kara Homan – Director, Development & Land Services \*
- ▲ Brian Massey – Director, Financial Services \*
- ▲ Craig Moser – Deputy Executive Administrator
- ▲ Hillary Pattermann – Administrative Assistant, Development & Land Services
- ▲ Bonnie Elias Planner – Supervisor, ADRC of Outagamie County
- ▲ Dean Steingraber – Highway Commissioner \*
- ▲ Steven Swanson – Zoning Administrator, Development & Land Services
- ▲ Scott Volberding – Operations & Maintenance Manager, Appleton International Airport

\* Indicates Steering Committee member

The three-phased session began with a discussion aimed at identifying general focus areas to be considered during plan development. This list was then refined into four overlying themes and six 'umbrella issues' (see image above). During the final phase, attendees placed adhesive dots onto the wall graphic adjoining the issues to which they each placed the highest importance. The numbers appearing in parentheses within the summaries presented on the following pages reflect this preliminary prioritization effort.

*General Focus Areas*

- ▲ (1) Environment – groundwater (quantity and quality); wildlife
- ▲ Adequate transportation
- ▲ Affordable housing – and adequate [housing]
- ▲ Agriculture
- ▲ Climate change – hazard planning
- ▲ Economy – jobs for young; trade; industry
- ▲ Education - system
- ▲ Effective government – “connectedness”
- ▲ Government funding
- ▲ Growth / Sprawl – urban / rural interface
- ▲ Health – equity; overlaying theme
- ▲ Public infrastructure
- ▲ Public safety
- ▲ Recreation – parks, trails
- ▲ Seniors
- ▲ Technology – for all
- ▲ Urban transportation infrastructure

*Overlying Themes: Transportation*

- ▲ (3) Funding – state; gas tax’ registration sales tax; wheel tax
- ▲ (2) Alternate [highway/roadway] construction techniques
- ▲ (2) Trucking – expansion
- ▲ (1) Bicycle / Pedestrian Plan – multimodal
- ▲ (1) County policy
- ▲ (1) Expansion of existing system – volume
- ▲ Air routes – expansion
- ▲ Alternative fuel infrastructure
- ▲ Broader access to transit – affordable
- ▲ High-speed rail
- ▲ Regional Transportation Authority (RTA)
- ▲ Vehicle miles travelled

*Overlying Themes: Housing*

- ▲ (5) Zoning – new categories; alternative zoning models
- ▲ (1) Infrastructure / safety
- ▲ Alternative energy
- ▲ Land division ordinance
- ▲ Rehab programs
- ▲ Small Community Based Residential Facility (CBRF)
- ▲ Sprawl

*Overlying Themes: Environment*

- ▲ (4) Environmental corridors
- ▲ (2) Technological advances
- ▲ (1) Agricultural
- ▲ (1) Policy regulation
- ▲ (1) State lobbying – advocacy
- ▲ Citizen groups
- ▲ Education
- ▲ Land Conservation Department
- ▲ MS4 / TMDL
- ▲ Nonmetallic mining / landfills
- ▲ Recycling
- ▲ Shoreland zoning – overlay zoning
- ▲ Wellhead protection

# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

---

### *Overlying Themes: Economy*

- ▲ (2) Workforce
- ▲ (1) Broadband access
- ▲ (1) 'I-41 Approach'
- ▲ Education
- ▲ Interrelated with: housing, transportation, functional classification transportation systems, etc.
- ▲ Legalization of cannabis / marijuana
- ▲ Transitioning economy – brownfields

### *Umbrella Issues*

- ▲ (2) Climate change
- ▲ (2) Health
- ▲ (2) Technology
- ▲ (1) Effective government
- ▲ Education
- ▲ Socio-economic shifts

### Steering Committee Review Sessions

After the December 2018 Visioning Session, the Steering Committee met in August 2019 to review Volume One of the plan; in September 2019 to review the Vision, Guiding Principles, Goals and Recommendations, and community review strategy; and again in November 2019 to review the final draft of the plan, prior to recommending adoption to the County Agriculture, Extension, Land Conservation & Zoning Committee (hereinafter, the Zoning Committee).

### Land Use Advisory Group

The Land Use Advisory Group was established in accordance with the Public Participation Plan. The group met in September 2019 to review the framework for land use, and associated goals and recommendations that were pertinent to land use and development policy. A follow-up survey was sent to get more detailed feedback on land use and development related items contained within the plan. A summary of the group's meeting and survey results can be found in Appendix III.

### County Board & Committees of Jurisdiction

The County Board's Committees of Jurisdiction (Highway, Recycling & Solid Waste; Agriculture, Extension & Zoning; Property, Airport, Recreation & Economic Development; Finance; and Health & Human Services) reviewed and discussed the overall plan vision, guiding principles, and goals and recommendations pertinent policy areas during their regularly scheduled meetings in October, 2019. These review sessions were designed to ensure a general understanding of the planning process, review the general direction of the plan, answer questions, and obtain feedback on the plan framework before finalizing the draft plan for public hearing.

The County Board considered and approved Ordinance G--2019-20 at their meeting on January 28, 2020, after supportive recommendations to approve by the Comprehensive Plan Steering Committee, and subsequently by the County's Agriculture, Extension and Zoning Committee (which serves as the county's "Planning & Zoning Commission"). Approval documents pertaining to the Zoning Committee and County Board can be found in Appendix VIII.

## IV. Community Engagement

### Overview of Planning Process

The creation of the updated comprehensive plan was guided by a *bottom-up / top-down* planning process (see box at right). The advantage of this bidirectional approach is it lays out a framework consistent with the Planning Law while providing opportunities for Outagamie County's towns, villages, and cities to provide *meaningful collaboration*. The three-phased engagement effort was municipality-focused and included *Initial Meetings*, *Visioning Sessions*, and *Presentations of the First Draft of the Comprehensive Plan Framework*.

### Initial Meetings with Municipalities

Beginning in June 2018, the Outagamie County Director of Development and Land Services and project planners (hereafter, the Project Team) met with representatives of each municipality in the County. The intent of these meetings was to:

- ▲ Introduce the Project Team
- ▲ Explain the purpose and process of updating the comprehensive plan
- ▲ Gather information regarding key issues and concerns from the perspective of local government
- ▲ Schedule *Visioning Sessions* for those communities interested in engaging more directly in the process of developing the plan

#### Definition

*Bottom-Up Planning* is a method of planning, wherein the process of defining objectives and the ways to achieve them begins at the lowest levels of the organization. These objectives are then integrated into the framework of goals and strategies at higher levels. A concern with the Bottom-Up approach is that it tends to lack context and a unifying vision.

*Top-Down Planning* is a method of planning that involves defining objectives (and the ways to achieve them) at the highest levels of the organization. It begins with the creation of an overall project goal, develops a framework for achieving that goal, and identifies the specific steps necessary to reach a successful conclusion to the project. Each phase is presented to lower levels of the organization for review and comment. The main critique of Top-Down planning is that it lacks opportunities for meaningful feedback.

*Top-Down and Bottom-Up Planning* offers a more inclusive, bidirectional approach to the planning process. Initial goals are formulated via the Steering Committee (the Top), consistent with the overall strategy and based on input from the bottom (Community Input), and presented to the Communities for review and revision. The process is coordinated in both directions. Clear communication within the organization and throughout the planning process is an important aspect of bidirectional planning.

The Project Team also met with East Central Wisconsin Regional Planning Commission (hereafter, ECWRPC) to obtain land use information on a broader, regional perspective. The results of the initial meetings are presented under the Composite Rural and Composite Urban/Urbanizing Summary Report headings beginning on the following page.

## Visioning Sessions

Between September 11, 2018 and December 3, 2018 the Project Team facilitated a series of visioning sessions with seventeen rural towns and small villages in the County. More than one hundred people participated in the sessions, the purposes of which were to introduce the process of developing the comprehensive plan, present updated population and demographic data for each municipality, and engage attendees in a visioning exercise intended to describe their 'ideal future'. During the exercise participants were asked to imagine it was the year 2040 and indicate, through a series of directed questions, what their community would like 20 years into the future. The focus was on five general land use categories: housing, transportation, economic development, parks and recreation, and preservation. The results are presented below and on the following pages.

## Composite Rural Summary Report

### Initial Meetings

(Numerals in parentheses indicate multiple municipalities identifying the same issue or concern)

#### *Issues & Concerns:*

- |  |   |
|--|---|
| ▲ (17) Roads / road funding                                  | ▲ (2) Limited commercial / industrial development       |
| ▲ (7) Better communication / coordination with County        | ▲ (2) Rural character                                   |
| ▲ (6) Internet service                                       | ▲ (2) [Need for] subdivisions                           |
| ▲ (4) Lack of growth   | ▲ Business development on STH 54                        |
| ▲ (4) Police coverage  | ▲ Conflict between agricultural and residential parcels |
| ▲ (3) Annexation / extraterritorial zoning                   | ▲ Dairy farms replaced by cash crops                    |
| ▲ (3) Intergovernmental issues with neighbors – shared roads | ▲ Drug problems   |
| ▲ (3) Lack of utilities / sewer & water                      | ▲ Economic development assistance                       |
| ▲ (3) Quiet farming community                                | ▲ Equity between small and large farms                  |
| ▲ (3) Zoning issues  | ▲ Groundwater   |
| ▲ (2) Budget (not including roads)                           | ▲ Growth  |
| ▲ (2) Consolidation of farms                                 | ▲ Levy limits   |
| ▲ (2) County parks / trails                                  | ▲ Mini storage units                                    |
| ▲ (2) Development pressure                                   | ▲ Phosphorus at treatment plant                         |
| ▲ (2) Drainage / drainage district                           | ▲ Recycling program                                     |
| ▲ (2) Exclusive agriculture – AEA                            | ▲ Retaining local business                              |
| ▲ (2) Improve permitting process (for development)           | ▲ Surface water   |
| ▲ (2) Land division issues                                   | ▲ Tornado sirens  |
|  | ▲ Tri-D program only pays ½                             |



---

Visioning Sessions

(Numerals in parentheses indicate multiple individuals identifying the same vision)

*By 2040, housing includes...*

- |   |                                      |
|---|--------------------------------------|
| ▲ (41) Single-family dwellings                                    | ▲ (2) Improved permitting process    |
| ▲ (40) Senior housing   | ▲ (2) Mobile homes                   |
| ▲ (24) Multi-family   | ▲ (2) No tiny houses                 |
| ▲ (16) Same as now  | ▲ (2) Townhouses                     |
| ▲ (13) Subdivisions   | ▲ Attractive to young people         |
| ▲ (12) Condominiums   | ▲ Comparable in value                |
| ▲ (12) Duplex / Quadplex  | ▲ Equestrian subdivisions            |
| ▲ (10) More / better housing                                      | ▲ Fly-in subdivisions                |
| ▲ (10) Small / tiny houses  | ▲ Fewer housing units                |
| ▲ (8) Accessory dwelling units                                    | ▲ Golf course housing                |
| ▲ (8) Affordable  | ▲ Less farmland                      |
| ▲ (7) Farms / farmsteads / hobby farms                            | ▲ Livestock allowed                  |
| ▲ (7) Large lots – low density                                    | ▲ Migrant worker units               |
| ▲ (6) Better maintained – raze abandoned / condemned units        | ▲ Modular homes                      |
| ▲ (5) Accessible housing – one-story dwellings; ranch-style homes | ▲ No condominiums                    |
| ▲ (5) Sewer & water   | ▲ No mansions                        |
| ▲ (4) Green space / parks   | ▲ No sewer & water                   |
| ▲ (3) Diversity of housing  | ▲ Quiet                              |
| ▲ (3) Multigenerational housing                                   | ▲ Recreation dwellings               |
| ▲ (3) Neighborhoods – neighborhood association                    | ▲ Rentals                            |
| ▲ (3) No apartments   | ▲ Road frontage – maintain; increase |
| ▲ (3) No mobile homes   | ▲ Safety – policing                  |
| ▲ (3) No subdivisions   | ▲ Seniors move elsewhere             |
|   | ▲ Smaller lots                       |
|   | ▲ Sustainable / green                |
|   | ▲ Yurts                              |

*By 2040, the transportation system includes...*

- |  |   |
|--|---|
| ▲ (39) Alternative-fueled vehicles – infrastructure  | ▲ (6) Senior transportation                     |
| ▲ (39) Roads and highways – better maintained; wider | ▲ (6) Flying vehicles – airplanes, drones       |
| ▲ (25) Trails – non-motorized                        | ▲ (4) Same as now                               |
| ▲ (17) ATVs / UTVs / golf carts on roads             | ▲ (4) Trails – motorized                        |
| ▲ (16) Public transit – bus; train; commuter rail    | ▲ (4) Taxis – incl. Uber, Lyft                  |
| ▲ (13) Personal vehicles                             | ▲ (3) Autonomous / self-driving vehicles        |
| ▲ (8) Implements of Husbandry                        | ▲ (2) Car share services, Zip cars              |
| ▲ (6) Additional revenue                             | ▲ (2) Trucks                                    |
|  | ▲ Fix gas tax as it relates to non-gas vehicles |
|  | ▲ Floating vehicles                             |

## Outagamie County, Wisconsin

### Comprehensive Plan 2040: The Shared Path Forward

---

- ▲ Gravel roads
- ▲ Meals on Wheels
- ▲ More funding
- ▲ No ATVs on roads
- ▲ No trains or buses
- ▲ Park & ride
- ▲ Zip bikes

*By 2040, economic development includes...*

- ▲ (35) Internet – broadband / high-speed
- ▲ (34) Agriculture and ag-related
- ▲ (25) Home occupations / Home-based business
- ▲ (18) Small business
- ▲ (15) Industry / manufacturing
- ▲ (13) Grocery
- ▲ (10) Convenience store / gas station
- ▲ (10) Dining
- ▲ (10) Same as now
- ▲ (5) Services – salons; laundry; boutiques
- ▲ (5) Support / retain local business – programs; incubator
- ▲ (4) Better utilities
- ▲ (3) Bars, pubs
- ▲ (3) Better cell reception
- ▲ (3) Commercial
- ▲ (3) Country store / general store, co-op
- ▲ (3) Live / work units
- ▲ (3) No large industry / industrial parks
- ▲ (3) Repair shops
- ▲ (3) Stores / shops
- ▲ (2) Beautification
- ▲ (2) Big Box
- ▲ (2) Fewer farms / less agricultural land
- ▲ (2) Hardware
- ▲ (2) Healthcare
- ▲ (2) Niche markets
- ▲ (2) Tourism – ecotourism
- ▲ Arts & entertainment
- ▲ Childcare
- ▲ Economic development grants / programs
- ▲ Enforcement ordinance for eyesores
- ▲ Increased tax base
- ▲ Land for development
- ▲ Lawn care / garden store
- ▲ Mixed-use
- ▲ No big box stores
- ▲ Nonprofits
- ▲ Rental units
- ▲ Technology
- ▲ Warehouses
- ▲ Zoning flexibility

*By 2040, parks and recreation includes...*

- ▲ (52) Trails – pedestrian/bicycles; sidewalks
- ▲ (32) Same as is now
- ▲ (27) New parks / playgrounds / gathering places
- ▲ (17) Trails – ATV / UTV
- ▲ (13) Passive recreation – open space, green space
- ▲ (9) Access to water – boat landings; canoe & kayak launches; fishing area; water trails
- ▲ (7) Town / Village Hall – activities
- ▲ (6) Athletic facilities – fields, courts
- ▲ (6) Maintain / improve current parks
- ▲ (5) Camping – on Wolf River; Embarrass River
- ▲ (5) Community center / senior center; YMCA
- ▲ (5) Deer Creek Wildlife Area facilities – picnic area, trails
- ▲ (2) Community gardens – organic
- ▲ (2) County Trail(s)
- ▲ (2) Dog park
- ▲ (2) Trails – equestrian
- ▲ Access to technology



- 
- ▲ Coordination with neighboring municipalities
  - ▲ Disk golf
  - ▲ Family recreation
  - ▲ Forests
  - ▲ Local events
  - ▲ No trails
  - ▲ Outdoor recreation plan
  - ▲ Shops

*By 2040, we have successfully preserved...*

- ▲ (41) Agriculture
- ▲ (31) Rural atmosphere / landscape / quietness
- ▲ (19) Small town 'charm' / neighborliness
- ▲ (16) Green space / open space / undeveloped land / nature
- ▲ (15) Fire Department / EMS
- ▲ (13) Land base / boundaries
- ▲ (9) Wooded areas
- ▲ (7) Hunting
- ▲ (6) History / historic resources
- ▲ (6) Water quality – rivers and streams; creeks
- ▲ (5) Local industry / business
- ▲ (5) Wetlands
- ▲ (4) Churches
- ▲ (4) Community events – picnics; fundraisers
- ▲ (4) No development / less development
- ▲ (3) Accessible government
- ▲ (3) Clean air / clean water
- ▲ (3) Family
- ▲ (3) No subdivisions
- ▲ (2) Bank / Credit Union
- ▲ (2) Community as is
- ▲ (2) Current housing – quality
- ▲ (2) Freedom, independence
- ▲ (2) Intergovernmental cooperation
- ▲ (2) Large residential lots
- ▲ (3) Low taxes
- ▲ (2) Parks
- ▲ (2) Post Office
- ▲ (2) Roads
- ▲ (2) Subdivisions
- ▲ (2) Town Hall
- ▲ Ability to have livestock
- ▲ Attractive community
- ▲ Backyard fire pits
- ▲ Balance of small single-family homes
- ▲ Cemeteries
- ▲ County assistance
- ▲ Environmental conscious
- ▲ Farmland Preservation / Working Lands
- ▲ Gardens
- ▲ Growth
- ▲ Home improvement incentives
- ▲ New business
- ▲ Local school
- ▲ Mosquito Hill
- ▲ No CAFOs
- ▲ No low-income housing
- ▲ No traffic
- ▲ Nothing
- ▲ Open enrollment
- ▲ Our baseball team
- ▲ Pesticide law
- ▲ Private housing
- ▲ Recreation
- ▲ Reduced pollution
- ▲ Tax base
- ▲ Walking trails
- ▲ Wildlife
- ▲ Work ethic

## Composite Urban / Urbanizing Summary Report

### Initial Meetings

(Numerals in parentheses indicate multiple municipalities identifying the same issue or concern)

#### *Issues & Concerns:*

- ▲ (21) Infrastructure, transportation – funding; STH 441; STH 15; STH 96; multiple County roads; implements of husbandry; French Road; regional connectivity; local control over speed limits on County roads
- ▲ (13) County Parks / Trails – recreation
- ▲ (9) Bicycle / pedestrian facilities
- ▲ (7) OC Admin Rule – urbanization of county roads
- ▲ (7) Annexation / boundary agreements – growth planning
- ▲ (7) Housing – affordable; rentals; Section 8; no County housing authority; seniors and millennials; expansion of subdivision with golf course
- ▲ (6) Economic development – regional approach; downtown; I-41 strategy; tourism; industrial development
- ▲ (6) MS4 / TMDL
- ▲ (5) Infrastructure, non-transportation – stormwater; sewer and water
- ▲ (4) Fox River / Fox River System Navigational Authority – locks; invasive species; shoreline restoration
- ▲ (4) Housing – seniors
- ▲ (3) Broadband
- ▲ (3) Multi-modal, excluding bicycle / pedestrian – dial-a-ride; specialized transportation
- ▲ (3) Solid waste – landfill; collection; recycling; food waste; transportation routes
- ▲ (2) Agriculture – CAFOs; preservation
- ▲ (2) Airport – overlay; growth; bird netting
- ▲ (2) Groundwater – arsenic; drawdown
- ▲ (2) Levy limit
- ▲ (2) Marketing / Branding – gateway planning
- ▲ Mosquito Hill – master plan

## Final Community Review Meetings

Ten community review sessions were held throughout the County in October of 2019, primarily with Town Boards and/or Plan Commissions for smaller communities; and with administrative staff (Planning, Public Works, Parks, Administrators, etc) for larger communities. Each session reviewed the key issues and opportunities, proposed vision, guiding principles, goals and recommendations, and the future land use framework. For communities that were unincorporated, individual review of the County's Future Land Use map for their particular community was also included. A special discussion on I41 future multi-modal infrastructure was included for meetings with communities abutting the I41 corridor, at the request of WisDOT, to aid the State's environmental review and design efforts for the I41 reconstruction effort. Feedback from these meetings was used to update the future land use & transportation maps, and the plan goals and recommendations prior to final review by the Steering Committee.

## V. Population Profile

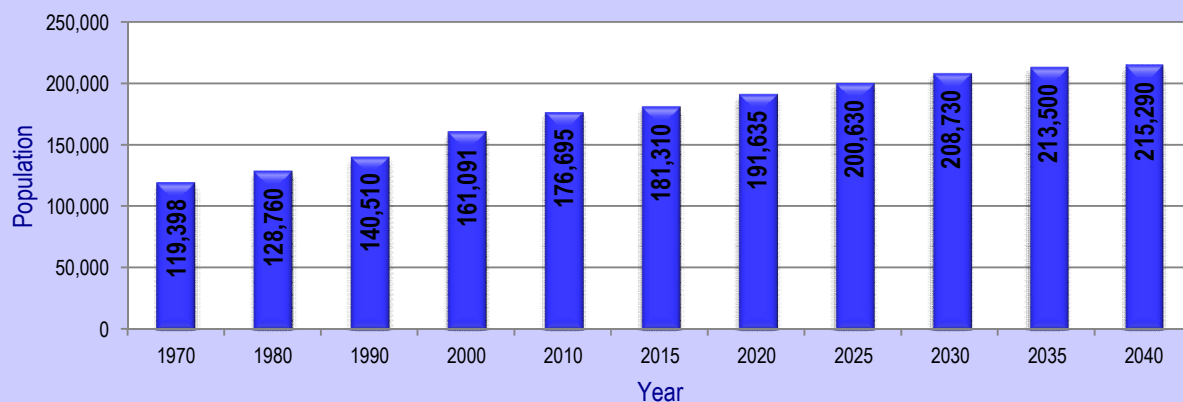
### Introduction

The process of developing the comprehensive plan begins with a profile of the people who live and work in Outagamie County. The information presented on the following pages provides important background information allowing elected officials and staff to forecast needs related to development, housing, and community facilities, among others. The demographic data contained within this section will play a key role in identifying the direction the comprehensive plan takes in preparing for the future. The purpose of the various profiles that follow is to identify trends and patterns that will allow for a better understanding of the planning context in Outagamie County.

#### Decennial Census vs. American Community Survey

The information presented under the year '2000' columns in the population tables that appear throughout this chapter is drawn from the 2000 US Census, the last to utilize the long survey census format. Beginning in 2010, the US Census Bureau distributed an abbreviated survey instrument that resulted in the collection of much more limited demographic data. The 2010 Census has since been supplemented with additional information gathered through the annual American Community Survey (ACS). The ACS is an ongoing statistical survey by the U.S. Census Bureau sent to approximately 250,000 addresses monthly. It regularly gathers information previously contained in the long form of the decennial census. The data listed under the '2017' heading throughout this document results from the most recent ACS survey.

Figure 1: Population and Projected Population for Outagamie County, 1970-2040



Source: Wisconsin Department of Administration - Demographic Services Center, 2019

## County Population, 1970-2040

- ▲ Outagamie County had an estimated 2018 population of 184,541<sup>13</sup>
- ▲ The population density of the County is 284 persons per square mile, representing a 14% increase from 2000
- ▲ The bulk of the population (approximately three quarters) is concentrated in the Fox Cities, with the City of Appleton being the largest municipality
- ▲ Outagamie County added 20,218 residents between the years 2000 and 2015, with nearly three quarters of that increase occurring in five municipalities: Town of Greenville (4,459), Town of Grand Chute (3,517), City of Kaukauna (2,865), City of Appleton (2,537), and Town of Buchanan (1,108)

---

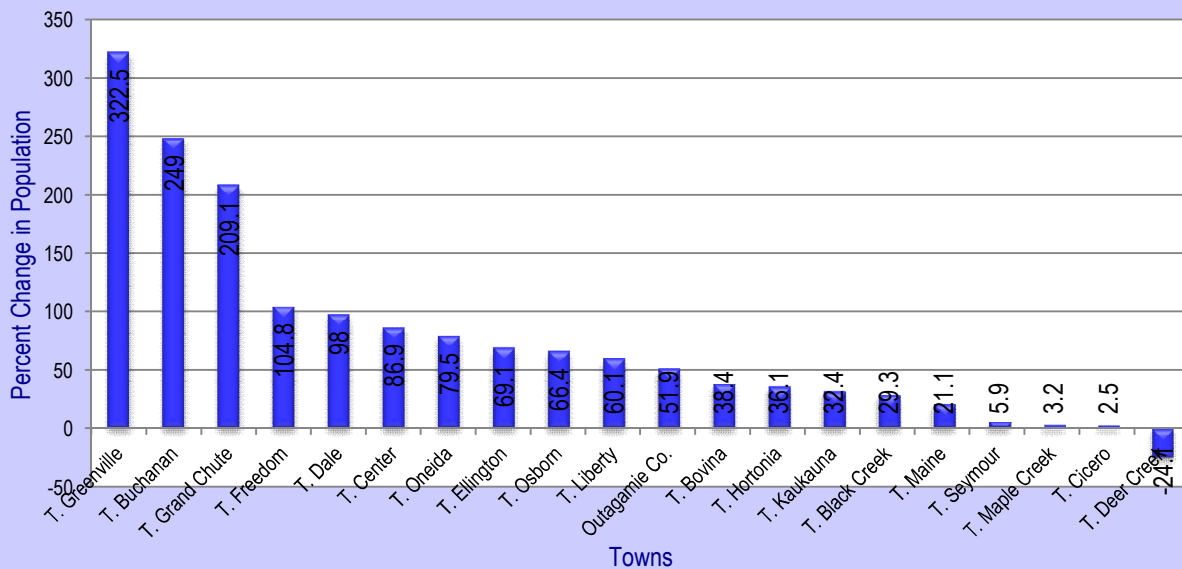
<sup>13</sup> Source: Wisconsin Department of Administration-Demographic Services Center, 2019.

Table 1: Population of Outagamie County Towns, 1970-2015

Municipality	1970	1980	1990	2000	2010	2015	Change, 1970-2015 Number	Percent
T. Black Creek	968	1,149	1,169	1,268	1,259	1,252	284	29.3%
T. Bovina	837	822	957	1,130	1,145	1,158	321	38.4%
T. Buchanan	1,987	1,742	2,484	5,827	6,755	6,935	4,948	249.0%
T. Center	1,853	2,570	2,716	3,163	3,402	3,463	1,610	86.9%
T. Cicero	1,079	1,062	1,126	1,092	1,103	1,106	27	2.5%
T. Dale	1,405	1,620	1,818	2,288	2,731	2,782	1,377	98.0%
T. Deer Creek	855	826	724	682	637	649	-206	-24.1%
T. Ellington	1,696	1,865	2,099	2,535	2,758	2,868	1,172	69.1%
T. Freedom	2,926	3,746	4,114	5,241	5,842	5,991	3,065	104.8%
T. Grand Chute	7,089	9,529	14,490	18,392	20,919	21,909	14,820	209.1%
T. Greenville	2,675	3,310	3,806	6,844	10,309	11,303	8,628	322.5%
T. Hortonia	804	869	883	1,063	1,097	1,094	290	36.1%
T. Kaukauna	961	998	939	1,116	1,238	1,272	311	32.4%
T. Liberty	544	609	702	834	867	871	327	60.1%
T. Maine	725	816	791	831	866	878	153	21.1%
T. Maple Creek	586	652	695	687	619	605	19	3.2%
T. Oneida	2,624	3,499	3,858	4,147	4,678	4,711	2,087	79.5%
T. Osborn	724	786	784	1,029	1,170	1,205	481	66.4%
T. Seymour	1,135	1,189	1,217	1,216	1,193	1,202	67	5.9%
T. Vandenbroek	1,653	1,538	1,291	1,351	1,474	1,531	-122	-7.4%
Outagamie Co.	119,398	128,760	140,510	161,091	176,695	181,310	61,912	51.9%

Source: Wisconsin Department of Administration – Demographic Services Center, 2019.

Figure 2: Percent Change in Population for Outagamie County Towns, 1970-2015



Source: Wisconsin Department of Administration - Demographic Services Center, 2019

# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

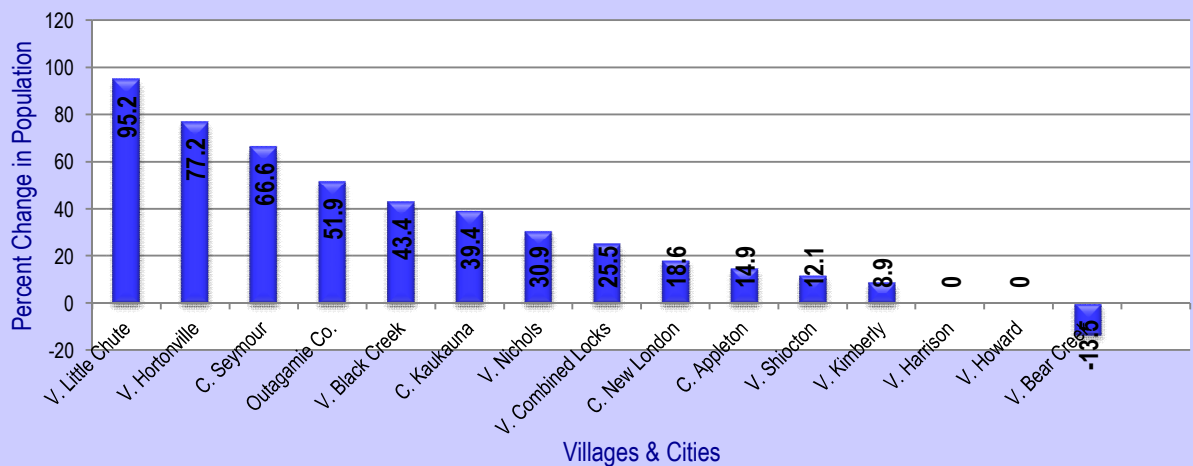
Table 2: Population of Outagamie County Villages & Cities, 1970-2015

Municipality	1970	1980	1990	2000	2010	2015	Change, 1970-2015 Number	Percent
V. Bear Creek	520	454	418	415	448	450	-70	-13.5%
V. Black Creek	921	1,097	1,152	1,192	1,316	1,321	400	43.4%
V. Combined Locks	2,771	2,573	2,190	2,422	3,328	3,477	706	25.5%
V. Harrison*						0	n/a	n/a
V. Hortonville	1,524	2,016	2,029	2,357	2,711	2,700	1,176	77.2%
V. Howard*				0	0	0	n/a	n/a
V. Kimberly	6,131	5,881	5,406	6,146	6,468	6,677	546	8.9%
V. Little Chute	5,522	7,907	9,207	10,476	10,449	10,778	5,256	95.2%
V. Nichols	207	267	254	307	273	271	64	30.9%
V. Shiocton	830	805	913	954	921	930	100	12.1%
V. Wrightstown*					151	155	n/a	n/a
C. Appleton*	52,976	53,424	56,177	58,301	60,045	60,838	7,862	14.9%
C. Kaukauna	11,374	11,310	11,982	12,983	15,462	15,848	4,476	39.4%
C. New London	1,368	1,269	1,334	1,467	1,610	1,623	255	18.6%
C. Seymour	2,194	2,530	2,782	3,335	3,451	3,436	1,242	56.6%
Outagamie Co.	119,398	128,760	140,510	161,091	176,695	181,310	61,912	51.9%

\* Indicates municipality located within multiple counties; population figures include only that portion located within Outagamie County.

Source: Wisconsin Department of Administration – Demographic Services Center, 2019.

Figure 3: Percent Change in Population for Outagamie County Villages and Cities, 1970-2015



Source: Wisconsin Department of Administration - Demographic Services Center, 2019

Table 3: Projected Population of Outagamie County Towns, 2015-2040

Municipality	2015	2020	2025	2030	2035	2040	Change, 2015-2040 Number	Percent
T. Black Creek	1,252	1,280	1,300	1,310	1,300	1,275	23	1.8%
T. Bovina	1,158	1,195	1,235	1,265	1,270	1,265	107	9.2%
T. Buchanan	6,935	7,600	8,605	9,280	9,795	10,180	3,245	47.0%
T. Center	3,463	3,625	3,765	3,900	3,960	3,975	512	14.8%
T. Cicero	1,106	1,110	1,115	1,120	1,105	1,075	-31	-2.8%
T. Dale	2,782	3,010	3,195	3,370	3,490	3,555	773	27.8%
T. Deer Creek	649	645	645	640	630	605	-44	-6.8%
T. Ellington	2,868	3,060	3,225	3,380	3,485	3,535	667	23.3%
T. Freedom	5,991	6,485	6,870	7,225	7,460	7,600	1609	26.9%
T. Grand Chute	21,909	23,980	25,700	27,320	28,500	29,270	7,361	33.6%
T. Greenville	11,303	12,450	13,650	14,800	15,710	16,390	5,087	45.0%
T. Horton	1,094	1,150	1,190	1,225	1,240	1,235	141	12.9%
T. Kaukauna	1,272	1,360	1,430	1,500	1,545	1,570	298	23.4%
T. Liberty	871	895	920	940	945	940	69	7.9%
T. Maine	878	910	940	960	970	965	87	10.0%
T. Maple Creek	605	590	580	565	540	510	-95	-1.6%
T. Oneida	4,711	4,965	5,165	5,345	5,435	5,455	744	15.8%
T. Osborn	1,205	1,295	1,370	1,445	1,495	1,520	315	26.1%
T. Seymour	1,202	1,205	1,215	1,215	1,200	1,170	-32	-2.7%
T. Vandenbroek	1,531	1,640	1,740	1,740	1,900	1,935	404	26.4%
Outagamie Co.	181,310	191,635	200,630	208,730	213,500	215,290	33,980	18.7%

Source: Wisconsin Department of Administration – Demographic Services Center, 2019.

Table 4: Projected Population of Outagamie County Villages & Cities, 2015-2040

Municipality	2015	2020	2025	2030	2035	2040	Change Number	Percent
V. Bear Creek	450	470	485	495	500	500	50	11.1%
V. Black Creek	1,321	1,385	1,435	1,480	1,500	1,495	174	13.2%
V. Combined Locks	3,477	3,855	4,170	4,475	4,705	4,870	1,393	40.1%
V. Harrison*	0	0	0	0	0	0	n/a	n/a
V. Hortonville	2,700	2,895	3,030	3,150	3,220	3,250	550	19.9%
V. Howard*	0	0	0	0	0	0	n/a	n/a
V. Kimberly	6,677	7,025	7,335	7,610	7,760	7,815	1,138	17.4%
V. Little Chute	10,778	10,740	10,950	11,100	11,070	10,900	122	1.1%
V. Nichols	271	260	250	245	235	220	-51	-18.8%
V. Shiocton	930	940	955	960	950	930	0	--
V. Wrightstown*	155	170	190	205	215	225	70	45.2%
C. Appleton*	60,838	62,800	64,500	65,850	66,200	65,600	4,762	7.8%
C. Kaukauna	15,848	17,120	18,120	19,050	19,680	20,020	4,172	26.3%
C. New London	1,623	1,690	1,745	1,790	1,810	1,800	177	10.9%
C. Seymour	3,436	3,535	3,610	3,680	3,680	3,640	204	5.9%
Outagamie Co.	181,310	191,635	200,630	208,730	213,500	215,290	33,980	18.7%

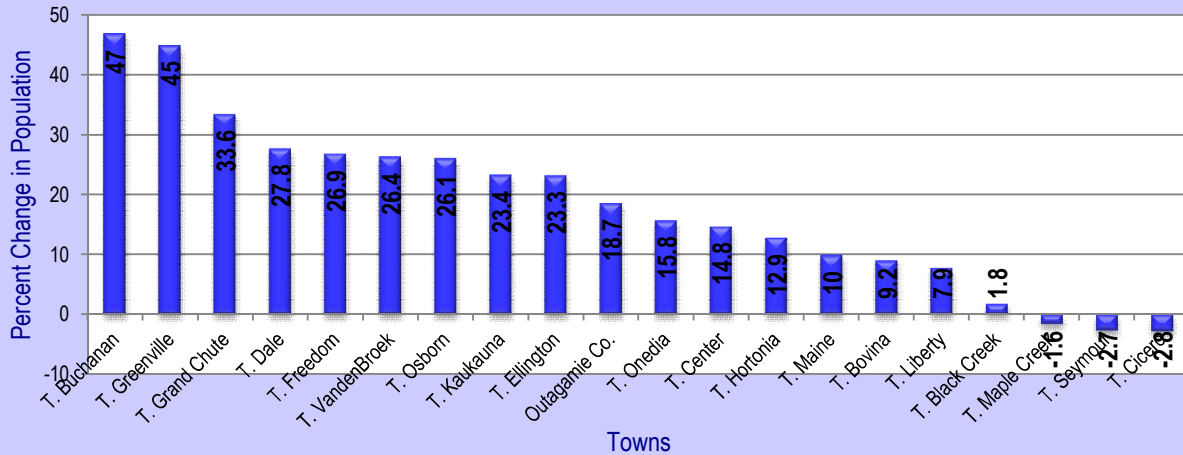
\* Indicates municipality located within multiple counties; population figures include only that portion located within Outagamie County.

Source: Wisconsin Department of Administration – Demographic Services Center, 2019.

# Outagamie County, Wisconsin

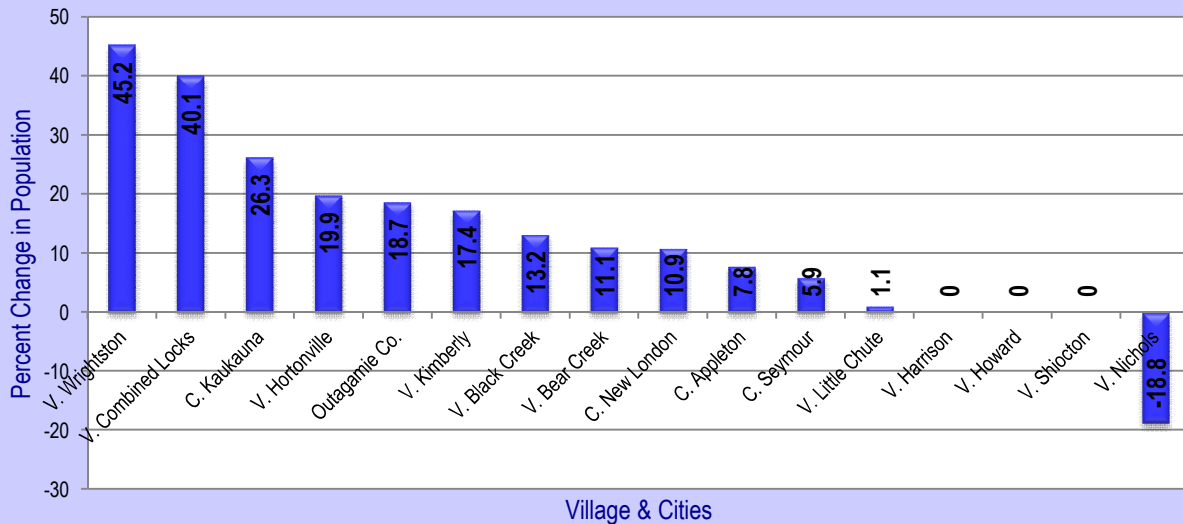
## Comprehensive Plan 2040: The Shared Path Forward

Figure 4: Percent Change in Projected Population for Outagamie County Towns, 2015-2040



Source: Wisconsin Department of Administration - Demographic Services Center, 2019

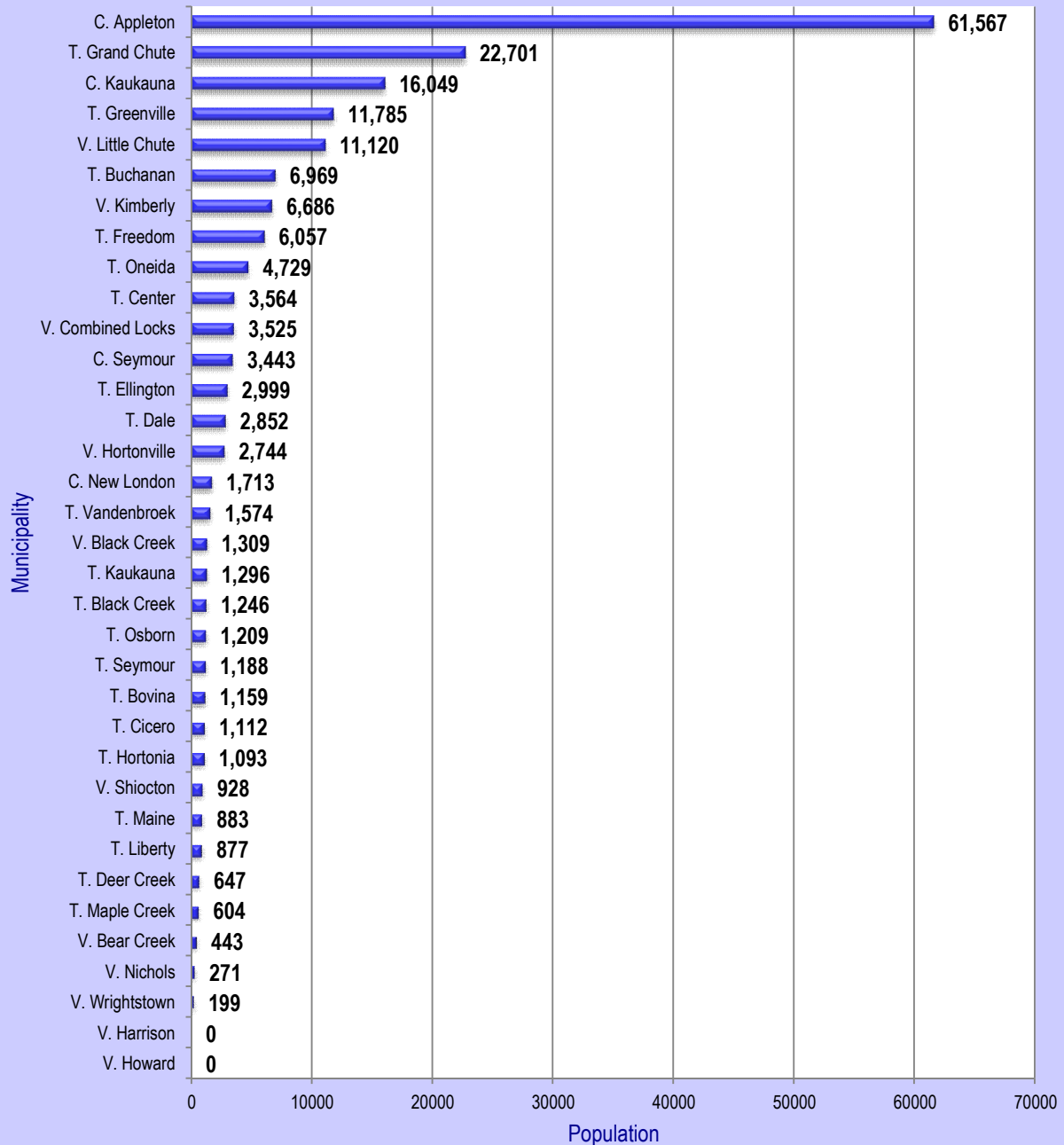
Figure 5: Percent Change in Population for Outagamie County Villages and Cities, 2015-2040



Source: Wisconsin Department of Administration - Demographic Services Center, 2019

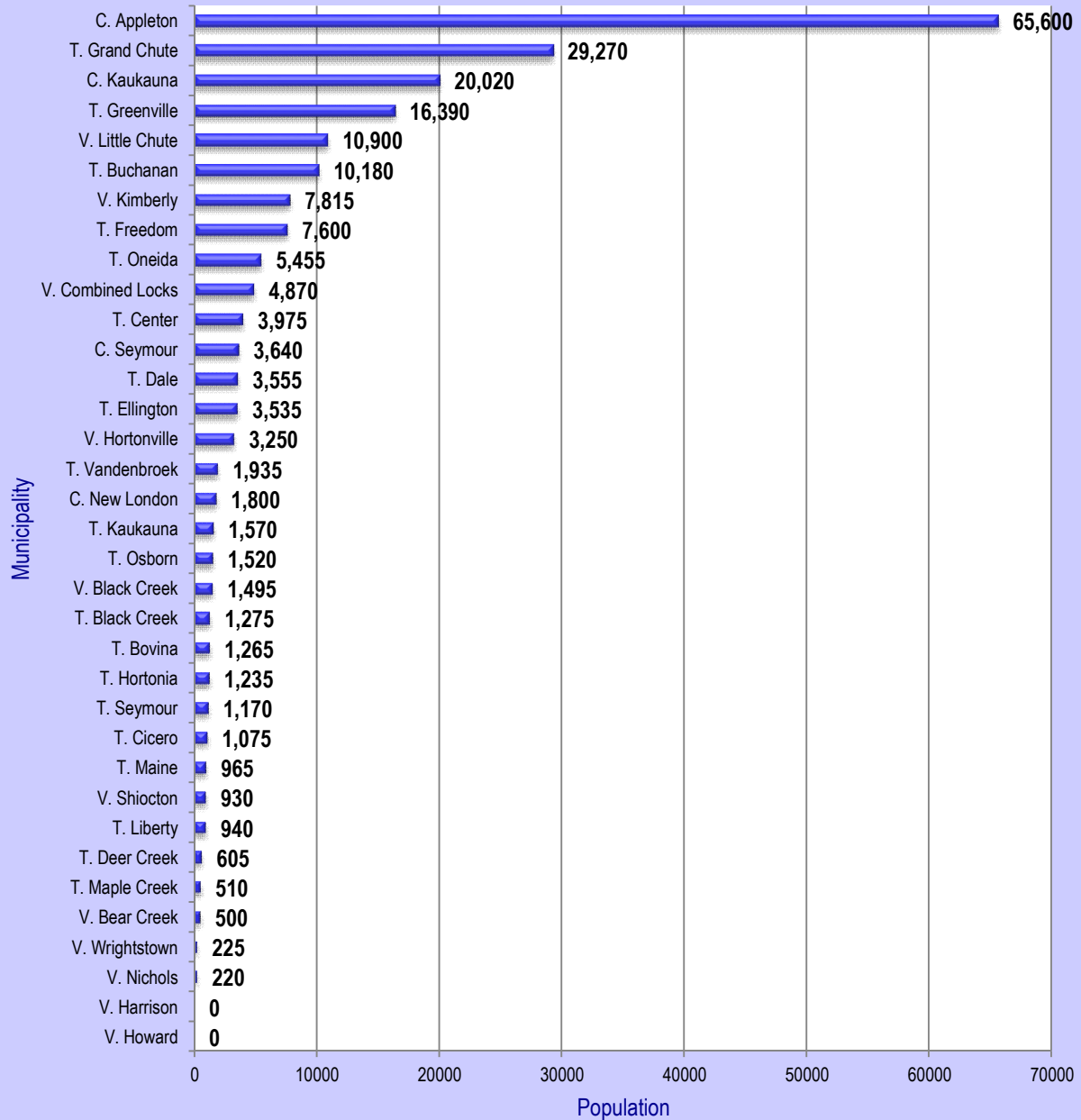


Figure 6: Outagamie County Municipalities by Estimated 2018 Population

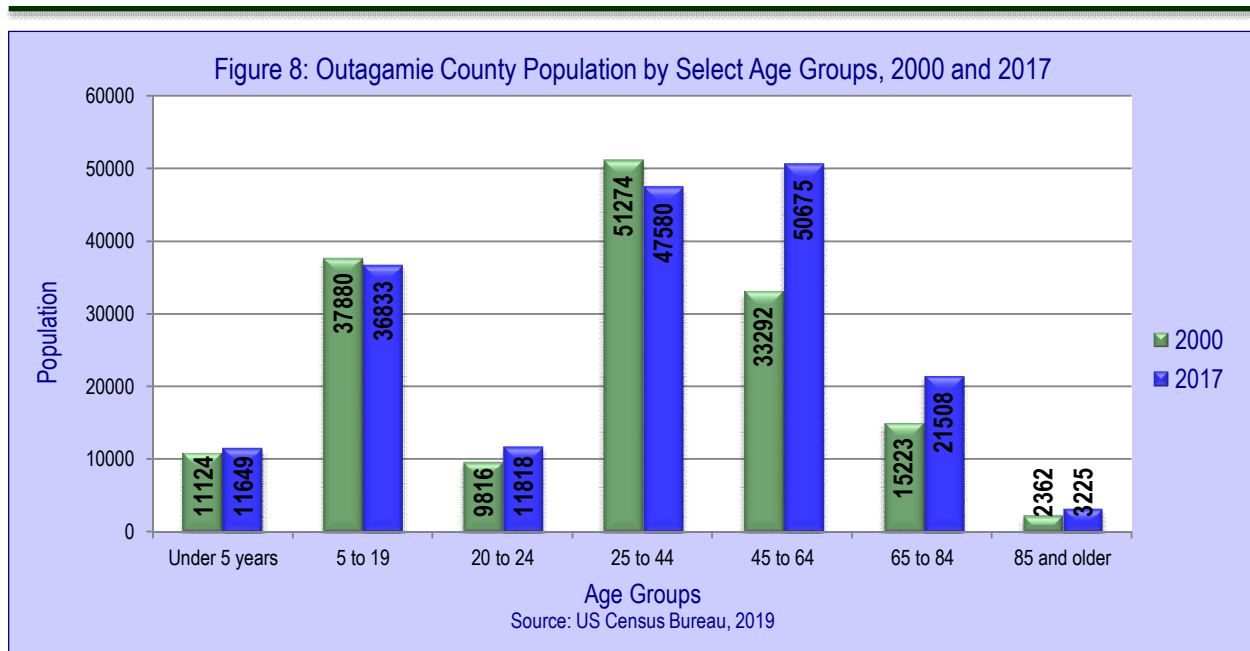


Outagamie County, Wisconsin  
Comprehensive Plan 2040: The Shared Path Forward

Figure 7: Outagamie County Municipalities by Projected Population, 2040



Source: Wisconsin Department of Administration - Demographic Services Center, 2019

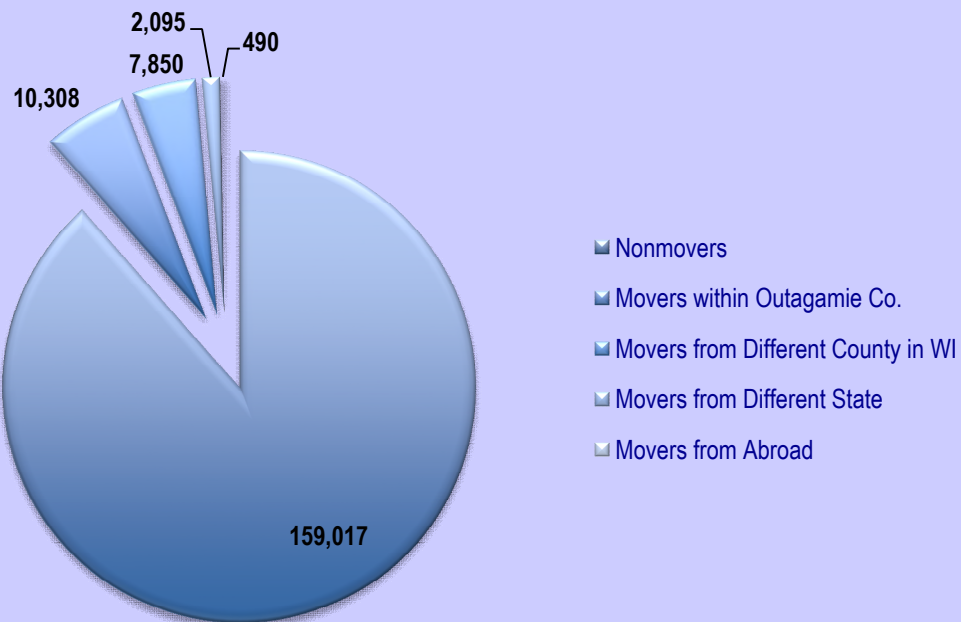


Age	Description	Characteristics	Community Needs
Under 5	Infants, toddlers, and pre-school / kindergarten	Entirely dependent upon others	Healthcare, daycare, schools
5 to 19	School aged children and young adults	Dependent upon others for lodging, food, education, and most other needs	Schools, parks, sports fields, safe pedestrian and bicycle facilities, part-time employment
20 to 24	Post high school young adults	Somewhat dependent upon others for certain needs; job and career training (college, trades, military, etc.)	Affordable rental housing, part- and full-time employment opportunities, multi-modal transportation systems, entertainment, coffee shops, high-speed/broadband internet access
24 to 44	Established adults	Increasing earning and spending potential; traditional child-raising years	Community needs include diversity in housing choices, public safety, healthcare, dining alternatives, family-friendly entertainment options, diverse retail, childcare services, career opportunities, banking and insurance, high-speed/broadband internet access
45 to 64	Mature adults	Prime earning years, often 'empty nesters'	Similar to previous group with less emphasis on programs, facilities, and services for youth, high-speed/broadband internet access
65 to 84	Retirement-age	Decreased earnings from employment, sustained activity level, increasing healthcare costs	Community needs include healthcare, multi-modal transportation alternatives, recreation opportunities, diverse housing options, high-speed/broadband internet access
85 +	Post retirement	Decreased earning, spending, and activity level	Similar to previous group with greater emphasis on around the clock care

## Age & Gender Characteristics

- ▲ As of the 2017 ACS, the gender distribution in Outagamie County is 50.1% female, 49.9% male
- ▲ 27% of residents are under the age of 20; 14% are 65 years of age and older
- ▲ Outagamie County has 36,392 millennials (residents ages 20-34); this represents 95% of the national average for an area this size<sup>14</sup>
- ▲ 51,779 individuals (28% of the total population) have reached the age of 'retirement risk' classified as 56 years of age and older<sup>15</sup>

Figure 9: Outagamie County Residency Migration Patterns, 2017



<sup>14</sup> Source: 2018 Outagamie County Economic Overview, EMSI and ECWRPC.

<sup>15</sup> Source: 2018 Outagamie County Economic Overview, EMSI and ECWRPC.

Table 6: Outagamie County Population by Race & Ethnicity, 2000 and 2017

Race / Ethnicity	2000	2017	Change Number	Percent
One Race	159,401	180,243	20,842	13.1%
Two or More Races	1,570	3,045	1,475	94.0%
White	151,101	164,765	13,664	9.1%
Black or African American	867	2,294	1,427	164.6%
American Indian and Alaska Native	2,471	3,026	555	22.5%
Asian Indian	278	1,022	744	267.6%
Chinese	215	568	353	164.2%
Filipino	80	145	65	81.3%
Japanese	58	25	-33	-56.9%
Korean	161	170	9	5.6%
Vietnamese	60	149	89	148.3%
Other Asian	2,743	4,086	1,343	49.0%
Native Hawaiian	13	10	-3	-23.1%
Guamanian or Chamorro	7	5	-2	-28.6%
Samoan	4	20	16	400.0%
Other Pacific Islander	32	0	-32	--
Mexican	2,317	6,297	3,980	171.8%
Puerto Rican	159	427	268	168.6%
Cuban	44	49	5	11.4%
Other Hispanic or Latino	687	890	203	29.6%

Source: United States Census Bureau, 2019

## Diversity & Nationality

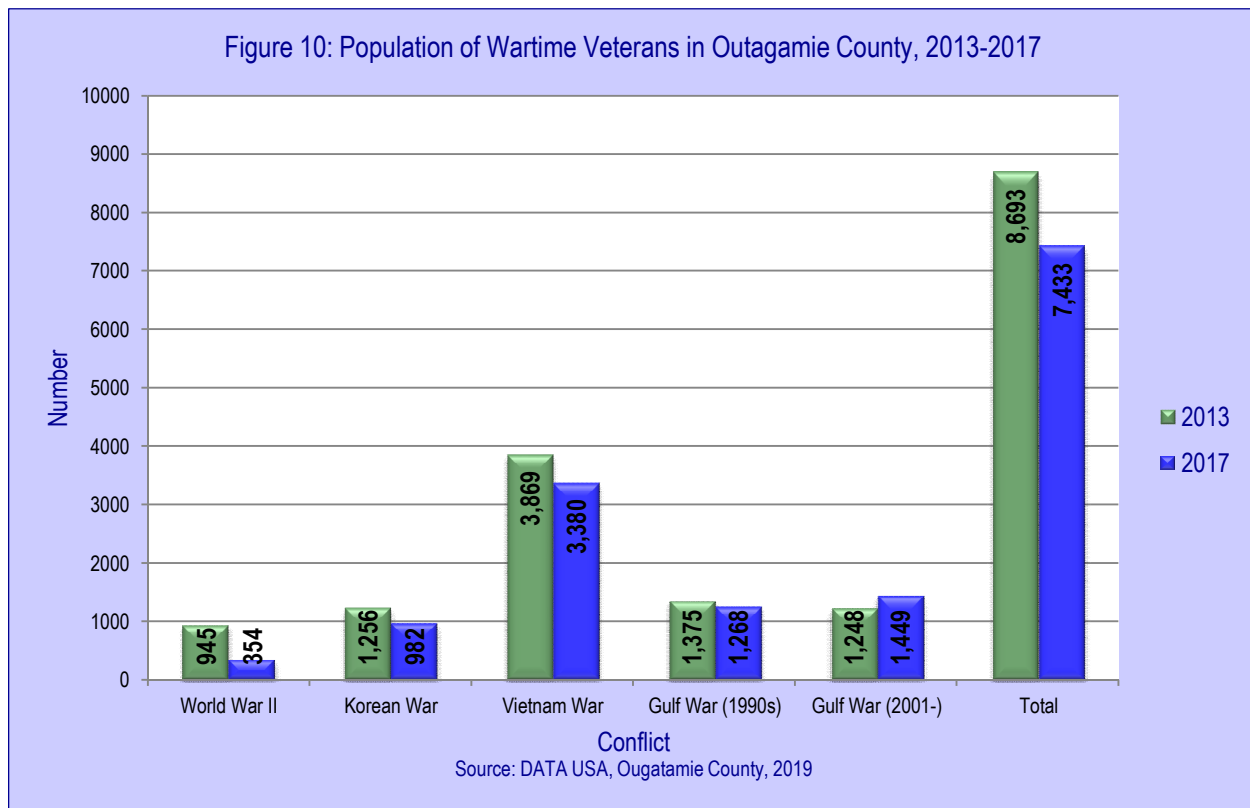
- Between 2000 and 2017 the population of Outagamie County residents self-identified as belonging to a minority group nearly doubled, from 5.2% to 10.1%
- Hispanics and Latinos represent 4.2% of Outagamie County's population followed by Asians (3.8%), some other race (2.3%), Native Americans (2.2%), African Americans (1.9%), two or more races (1.7%), and Pacific Islanders (0.1%)
- The 'racially diverse' population of the County is 12.5%, well below the 40% national average<sup>16</sup>
- As of 2017, 3.99% of Outagamie County residents were born outside of the United States, lower than the national average of 13.7%<sup>17</sup>

<sup>16</sup> Source: 2018 Outagamie County Economic Overview, EMSI and ECWRPC.

<sup>17</sup> Source: US Census Bureau, 2017.

## U.S. Military Veterans

- ▲ Federal law defines a veteran as “a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable”<sup>18</sup>
- ▲ A wartime veteran is an individual who served in the active military forces, during a period of armed conflict or who received the armed forces expeditionary or other campaign service medal during an emergency condition and who was discharged or released under other than dishonorable conditions<sup>19</sup>
- ▲ 11,711 residents of Outagamie County were veterans of the armed forces as of October 2017<sup>20</sup>
- ▲ Wartime veterans represented 64% of all veterans
- ▲ Between 2013 and 2017 the number of WW II veterans in Outagamie County fell by 63%, from 945 to 354<sup>21</sup>
- ▲ The number of all wartime veterans decreased by 15%



<sup>18</sup> Source: Title 38 US Code of Federal Regulations, 2019.

<sup>19</sup> Source: Title 38 US Code of Federal Regulations, 2019.

<sup>20</sup> US Department of Veterans Affairs, National Center for Veterans Analysis and Statistics, 2019.

<sup>21</sup> Source: US Census Bureau, 2017.

## VI. Housing Profile

### Introduction

Housing is a basic human necessity providing shelter from the elements. It is also a prominent feature of the built environment and a driver of transportation patterns; a consumptive good and an investment for building financial security; and, a determinant of social interaction and achievement. The type of housing desired by people may vary depending on age, income, marital and family status, and geographic location, among others. A supply of high quality, well-designed housing is vital to a healthy and prosperous community. The styles, sizes, and types of available housing options create community character and establish a connection between residents and their neighborhoods. The purpose of the Housing Profile is to describe the current housing stock and identify deficiencies.

#### Definition

*Household.* The US Census Bureau defines a household as an individual or a group of people living together in a single dwelling unit. This may include a family, a single person, or a group of unrelated individuals sharing a house or an apartment, but excludes those persons living within group quarters (i.e., nursing homes, halfway houses, dormitories, etc.).

Table 7: Outagamie County Housing Stock

Category	Number		Number		Change		Year Constructed	Age	
	2000		2017		2000-2017			Number	Percent
	Number	Percent	Number	Percent	Number	Percent			
Total Units	73,149	100%	75,875	100%	2,726	37.1%	Since 2014	786	1.0%
Occupied Units	69,648	95.2%	72,288	95.3%	2,640	37.9%	2010-2013	2,315	3.1%
Vacant Units	3,501	4.8%	3,587	4.7%	86	2.5%	2000-2009	10,731	14.1%
Owner-Occupied	49,738	68.0%	50,989	65.6%	1,251	25.2%	1990-1999	12,653	16.7%
Renter-Occupied	19,910	27.2%	21,299	28.1%	1,389	7.0%	1980-1989	9,283	12.2%
1-unit, detached	36,569	50.0%	53,136	70.0%	16,567	45.3%	1970-1979	10,884	14.3%
1-unit, attached	1,323	1.8%	4,034	5.3%	2,711	204.9%	1960-1969	7,074	9.3%
2 to 4 units	6,856	9.4%	6,179	8.1%	-677	-9.9%	1950-1959	7,161	9.4%
5 to 9 units	2,773	3.8%	4,512	6.0%	1,739	62.7%	1940-1949	3,763	5.0%
10 or more units	3,351	4.6%	7,049	9.3%	3,698	110.4%	Pre-1940	11,225	14.8%
Mobile Homes	1,220	1.7%	965	1.3%	-255	-20.9%	Total	75,875	100%

Source: US Census Bureau, 2019

Table 8: Actual and Projected Households and Household Size for Outagamie County, 2010-2040

	2010	2020	2025	2030	2035	2040
Total Households	69,648	78,660	83,330	87,751	90,835	92,586
Avg. Household Size	2.49	2.40	2.37	2.34	2.31	2.28

Source: US Census Bureau and Wisconsin Department of Administration – Demographic Services Center, 2019

# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

### Housing Units & Households

- ▲ The 22,938 additional housing units projected for 2040 represents a 33% increase from 2010
- ▲ The size of households in the US has fallen from 3.3 in 1970 to 2.53 in 2010
- ▲ As of 2016, 28% of American households had just one occupant, more than double the rate in 1960 (13%)<sup>22</sup>

Table 9: Outagamie County Housing Units by Value, 2000 and 2017

Value	Owner-Occupied Units				Change in Number
	2000		2017		
	Number	Percent	Number	Percent	
Specified Owner-Occupied Units	38,015	100%	50,989	100%	
Less than \$50,000	655	1.7%	1,450	2.8%	795
\$50,000 to \$99,999	16,623	43.7%	6,247	12.3%	-10,376
\$100,000 to \$149,999	12,754	33.5%	14,582	28.6%	1,828
\$150,000 to \$199,999	5,100	13.4%	12,597	24.7%	7,497
\$200,000 to \$299,999	2,237	5.9%	10,897	21.4%	8,660
\$300,000 to \$499,999	527	1.4%	4,035	7.9%	3,508
\$500,000 to \$999,999	110	0.3%	920	1.8%	810
\$1,000,000 or more	9	>0.1%	261	0.5%	252
	2000		2017		Change
Median Value	\$106,000	\$160,100	\$54,100	Median Value	\$106,000
Gross Rent	Rental units				Change in Number
	2000		2017		
	Number	Percent	Number	Percent	
Specified Renter-Occupied Units	16,515	100%	20,602	100%	4,087
Less than \$500	6,723	40.7%	2,204	10.7%	-4,519
\$500 to \$999	8,613	52.2%	14,507	70.4%	5,894
\$1,000 to \$1,499	407	2.5%	3,473	16.9%	3,066
\$1,500 or more	181	1.1%	418	2.1%	237
No cash rent	593		697		104
	2000		2017		Change
Median Rent	\$534		\$769		\$

Source: US Census Bureau, 2019

<sup>22</sup> Source: US Census Bureau, 2016.



### Housing Affordability

The most commonly used affordability calculator was developed by the US Department of Housing and Urban Development (HUD). It compares current income to existing housing costs.

Under HUD guidelines, housing is considered affordable when it costs no more than 30% of total household income, on a monthly and annual basis. Residents should be able to live in safe and decent housing for less than one-third of their household income. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.

### Housing Value & Affordability

- ▲ As of 2017, one in five individuals holding a mortgage paid 30% or more of monthly income for housing
- ▲ Nearly forty percent of renters did the same
- ▲ 50.7% of homeowners pay \$3,000 or more in property taxes per year<sup>23</sup>

Table 10: Monthly Income Allocated to Housing in Outagamie County, 2017

<u>Owner Occupied Housing</u>		
Percent of Income	Number of Households	Percent of Households
Less than 20%	17,464	51.4%
20% to 24.9%	5,829	17.1%
25% to 29.9%	3,709	10.9%
30% to 34.9%	1,957	5.8%
35% or more	5,043	14.8%
Total (with mortgage)	34,002	100%
Not computed	129	%
<u>Renter Occupied Housing</u>		
Percent of Income	Number of Households	Percent of Households
Less than 20%	7,311	35.7%
20% to 24.9%	2,851	13.9%
25% to 29.9%	2,413	11.8%
30% to 34.9%	1,391	6.8%
35% or more	6,480	31.7%
Total	20,446	100%
Not computed	853	%

Source: US Census Bureau-American Community Survey, 2017.

<sup>23</sup> Source: US Census Bureau, 2017.

Outagamie County, Wisconsin  
Comprehensive Plan 2040: The Shared Path Forward

Table 11: Residential Building Permits for New Construction by Municipality, 2017

Municipality	Single-Family	Two-Family	Multi-Family	Total	Value
T. Black Creek	2	0	0	2	\$500,000
T. Bovina	3	0	0	3	\$1,085,000
T. Buchanan	12	1	0	13	\$4,268,219
T. Center	0	0	0	19	\$6,557,900
T. Cicero	3	0	0	3	\$480,000
T. Dale	12	0	0	12	\$4,667,000
T. Deer Creek			Nothing submitted		
T. Ellington	37	0	0	0	\$11,766,944
T. Freedom	14	0	0	0	\$5,226,258
T. Grand Chute	82	4	13	99	\$39,402,024
T. Greenville	63	4	0	67	\$18,291,404
T. Hortonia	5	0	0	5	\$910,000
T. Kaukauna			Nothing submitted		
T. Liberty	2	0	0	2	\$400,000
T. Maine			Only remodels/repairs		
T. Maple Creek			Only remodels/repairs		
T. Oneida	5	0	0	5	\$1,795,000
T. Osborn	3	0	0	3	\$954,817
T. Seymour	0	0	0	0	\$0
T. Vandenbroek	2	0	0	0	\$700,000
<b>Subtotal – Towns</b>	<b>264</b>	<b>9</b>	<b>13</b>	<b>286</b>	<b>\$96,974,627</b>
V. Bear Creek			Only remodels/repairs		
V. Black Creek			Only remodels/repairs		
V. Combined Locks	11	0	0	11	\$3,130,976
V. Harrison*	57	0	3	60	\$15,090,160
V. Hortonville	10	2	0	12	\$2,277,500
V. Howard*			Nothing submitted		
V. Kimberly	6	4	0	10	\$2,878,000
V. Little Chute	32	2	4	38	\$10,032,000
V. Nichols	0	0	0	0	\$0
V. Shiocton	1	0	0	1	\$150,000
V. Wrightstown*	18	0	0	18	\$4,836,143
C. Appleton*	44	0	5	49	\$17,005,400
C. Kaukauna	63	10	0	73	\$12,435,500
C. New London			Nothing submitted		
C. Seymour	7	0	0	7	\$1,391,000
<b>Subtotal – Villages and Cities</b>	<b>249</b>	<b>18</b>	<b>12</b>	<b>279</b>	<b>\$69,226,679</b>
<b>County Total</b>	<b>513</b>	<b>27</b>	<b>25</b>	<b>565</b>	<b>\$166,201,306</b>

\* Municipalities located in Outagamie County and adjoining county.  
Source: Outagamie County 2017 Growth Report

## VII. Education & Income Profile

### Introduction

The level of educational attainment in a population functions as a quality of life indicator. Generally, a high level of educational attainment reflects a skilled population with higher earnings potential. The relationship between education and income is strong. Education is often referred to as an investment in human capital. In general, those with more education earn higher incomes (see Figure 11).<sup>24</sup> The higher income that results from a college degree is sometimes referred to as the ‘college wage premium.’ Research shows that this premium has grown over time.<sup>25</sup> In addition, in general, the more skills people have, the more employable they are, particularly in sought-after industries like technology, finance, and healthcare. As a result, workers with more education have a lower average unemployment rate than those with less education.

However, correlation is not causation. The relationship between education, income, and wealth is strong; however, education alone does not cause higher income (and wealth). While at least some of the college wage premium is due to the knowledge and skills acquired through education, other factors, are surely at play including:

- *Natural ability.* Those with high intellectual ability are more likely to complete college, and that ability contributes to success in the job market as well.
- *Assortative mating (‘like marries like’).* Highly educated people tend to marry other highly educated people—which can double the wage premium and increase household income.
- *Inheritance.* People with more education are more likely to have parents with accumulated wealth and, thus, are more likely to receive an inheritance.
- *Better health and longer lifespans.* People with more education tend to be healthier, which enables them to work longer (increasing lifetime earnings) and live longer (collecting more lifetime benefits from Social Security and pensions).<sup>26</sup>

Income and wealth inequality have been on the rise in the United States for decades. Research indicates that the level of education is strongly related to both income and wealth. Households with higher levels of education tend to have more liquid assets to withstand financial storms, diversify their savings (investments), and maintain low levels of debt relative to assets. These financial behaviors are effective strategies for building income into wealth. Because much of wealth building can be tied to financial decision-making, it is likely that financial literacy can play a key role in reducing wealth inequality over time.

---

<sup>24</sup> Education, Income, and Wealth. Scott A Wolla and Jessica Sullivan, Economics, Federal Reserve Bank of St. Louis, 2017.

<sup>25</sup> Higher Education, Wages, and Polarization. Rob Valeta, Federal Reserve Bank of San Francisco Economic Letter. January 12, 2015;

<sup>26</sup> The Demographics of Wealth: How Age, Education and Race Separate Thrivers from Strugglers in Today's Economy. Ray Boshara, William R. Emmons, and Bryan Noeth. Essay No. 2: Education and Wealth, May 2015.

# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

Figure 11: Educational Attainment of Population Age 25 Years and Older for Outagamie County, 2000 and 2017

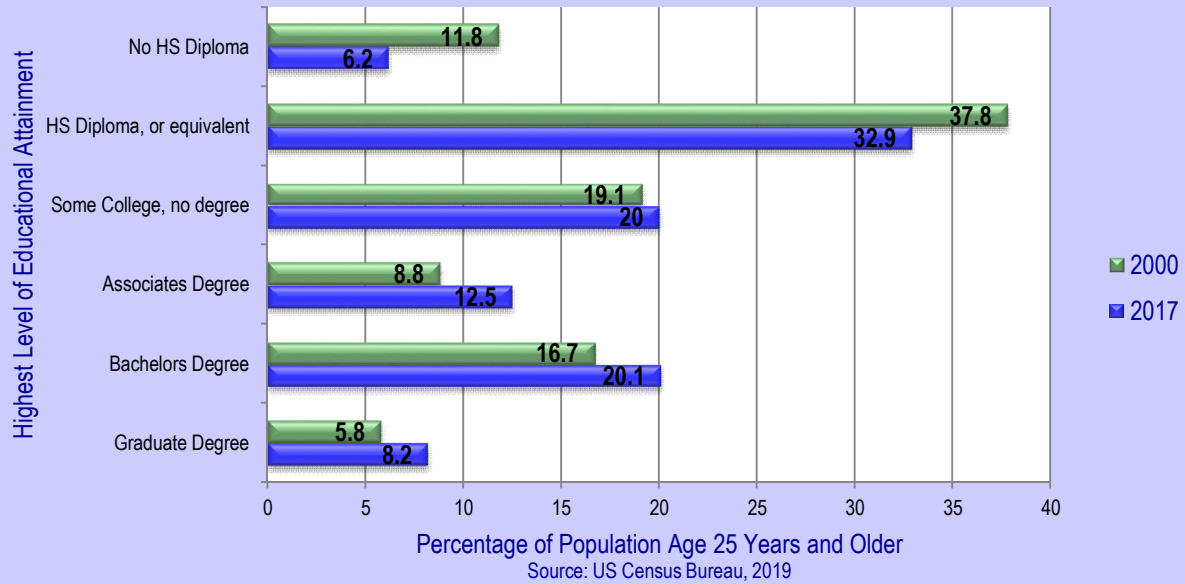


Figure 12: Median Weekly Earnings by Educational Attainment in the United States, 2017

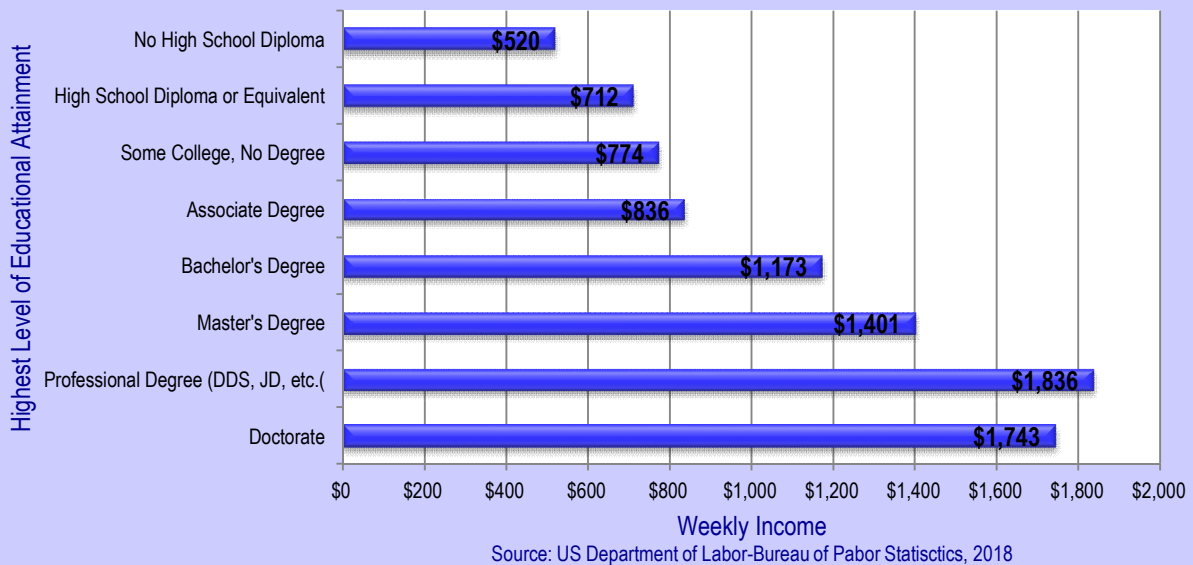


Figure 13: Poverty Rate by Educational Attainment for Residents 25 years of Age and Older in the United States, 2017

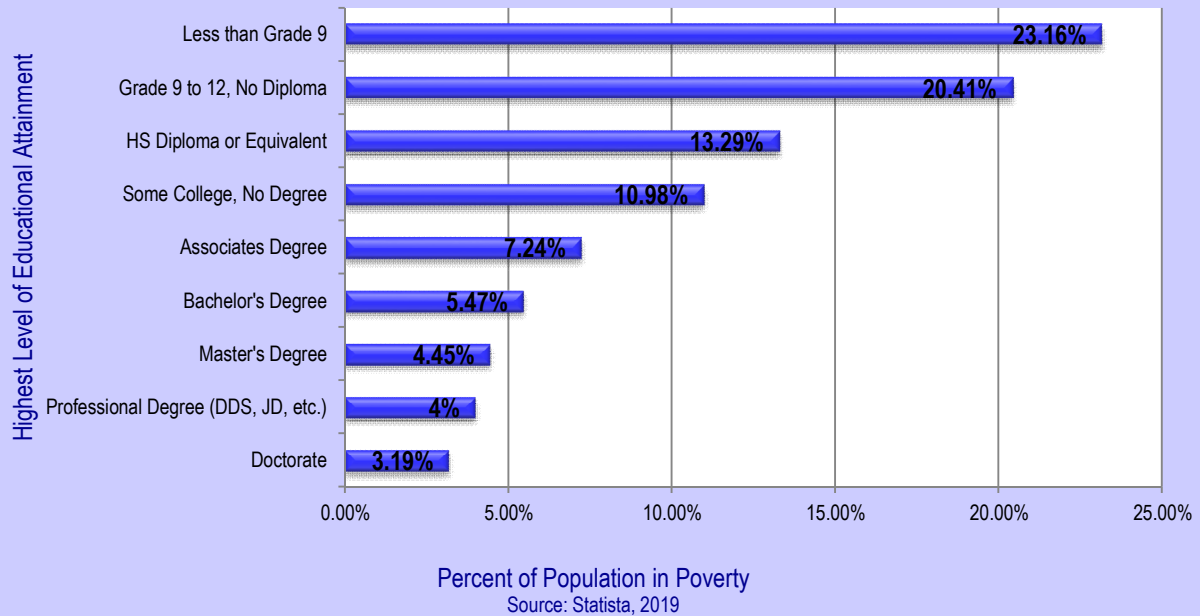
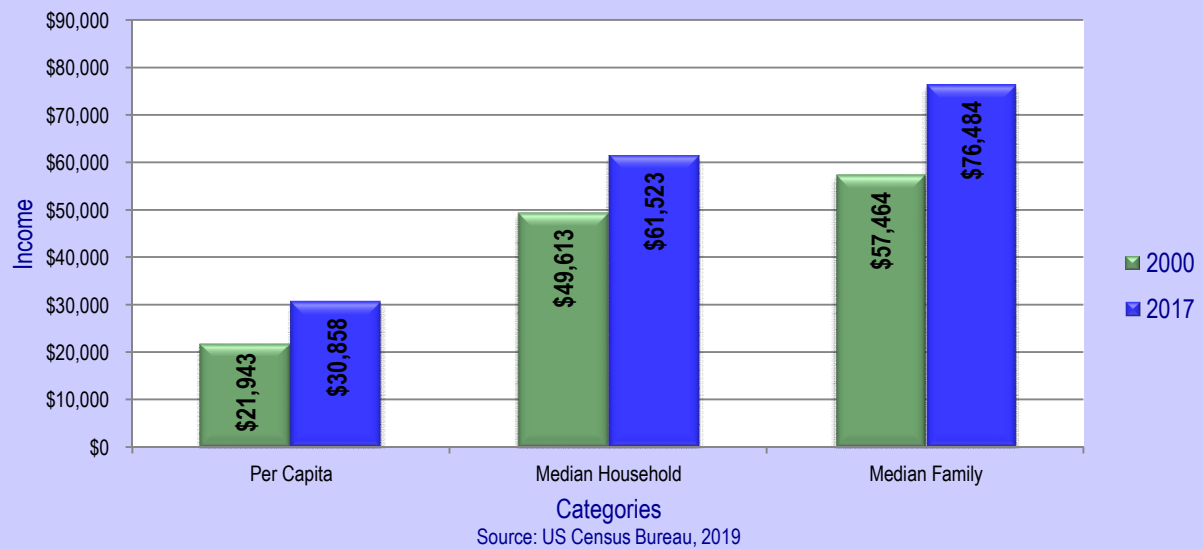


Figure 14: Outagamie County Income, 2000 and 2017



# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

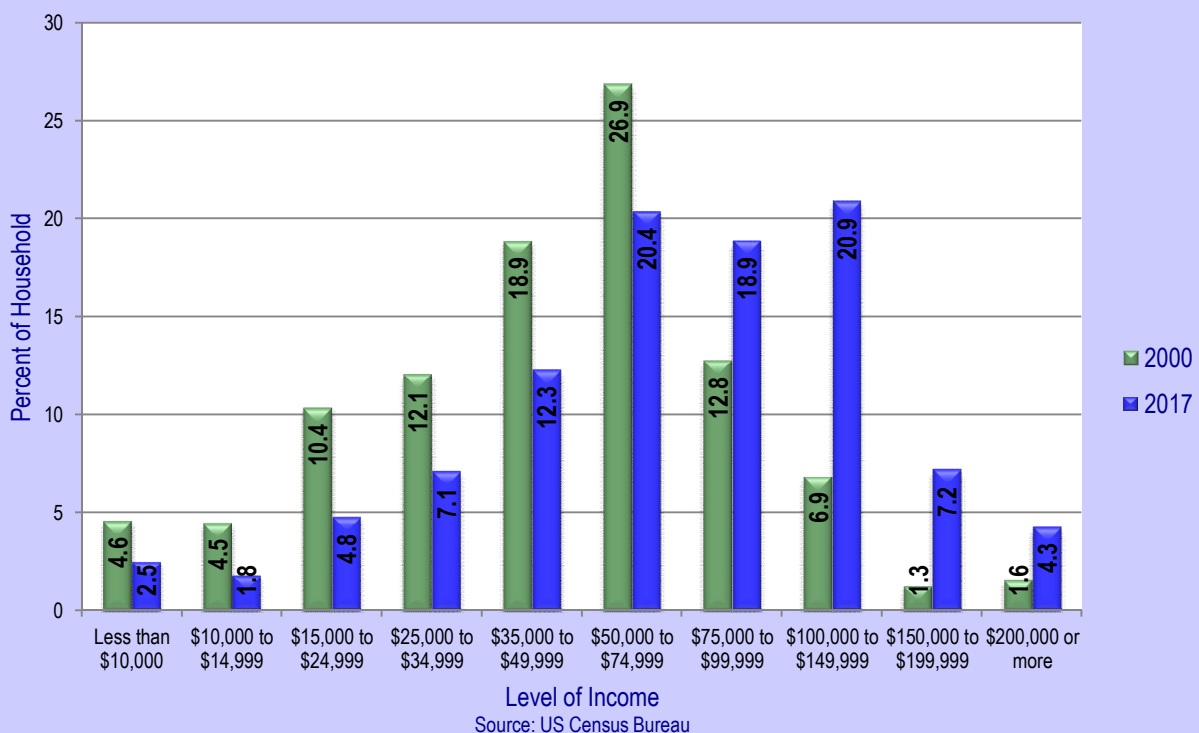
### Income Categories

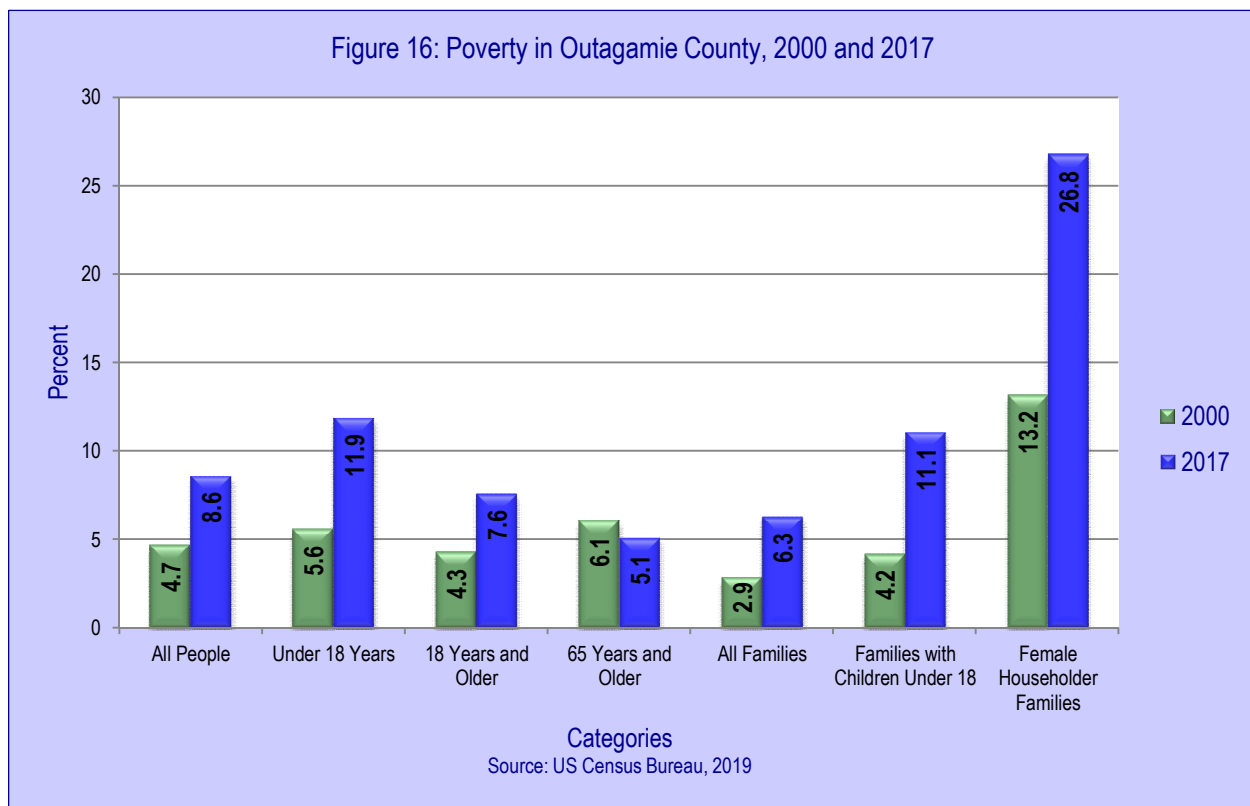
The three most common categories of income used by demographers and economists to assess municipalities are per capita, median household, and median family. *Per capita income* is the sum of annual income divided by the total number of residents, including children and other groups of individuals who do not actually earn income. *Median household income* is the middle point of household incomes reported in a community (households include families, married couple households, and individual households). *Median family income* is the middle income reported by families.

### Median vs. Mean Income

Census data related to income is reported as a median figure. This represents the middle point of all incomes reported. It is not the same as a mean (or average) income. For example, if four people reported their income at \$30,000 and one person reported their income at \$100,000, the median income would be \$30,000. In the same scenario, the mean income would be \$44,000, which does not accurately depict where the majority (i.e. four people versus only one) reported their income.

Figure 15: Household Income Distribution for Outagamie County, 2000 and 2017





## Education & Income

- ▲ The percentage of County residents with a college degree rose from 31.3 to 40.8 since 2000
- ▲ 19.5% of residents possess a Bachelor's Degree, 0.9% above the national average
- ▲ 11.9% hold an Associate's Degree (3.9% above national)
- ▲ In 2016, universities/colleges in Outagamie County awarded a total of 3,372 degrees<sup>27</sup>
- ▲ Males have an average income 37% higher than the average income of females when employed in common jobs (\$63,348 vs. \$46,291)<sup>28</sup>
- ▲ Income inequality (measured using the Gini index<sup>29</sup>) is 0.453, which is lower than the national average<sup>30</sup>

<sup>27</sup> Source: US Census Bureau, 2017.

<sup>28</sup> Source: US Census Bureau, 2017.

<sup>29</sup> The Gini index is a statistical measure of distribution developed by the Italian statistician Corrado Gini in 1912. It is often used as a gauge of economic inequality, measuring income distribution or, less commonly, wealth distribution among a population. The coefficient ranges from 0 (or 0%) to 1 (or 100%), with 0 representing perfect equality and 1 representing perfect inequality. Values over 1 are theoretically possible due to negative income or wealth.

<sup>30</sup> Source: US Census Bureau, 2017.



## VIII. Economic Profile

### Introduction

Economic conditions have a direct impact on the supply, demand, and costs of housing, infrastructure, and other services within the County. A vibrant economy is essential for community wellbeing. It effects nearly every aspect of community life including the ability to earn a living, develop skills and access training, attract new residents and businesses, and to access services.<sup>31</sup>

Table 12: Outagamie County Labor Force, 2000 and 2017

Category	2000		2017	
	Number	Percent	Number	Percent
Population 16 years and older	121,728	100%	144,197	100%
In labor force	88,481	72.7%	102,026	70.8%
Employed	85,596	70.3%	98,822	68.5%
Unemployed	2,830	2.3%	3,159	2.2%
Armed Forces	55	>0.1%	45	>0.1%
Not in labor force	33,247	27.3%	42,171	29.2%
Actual Unemployment Rate	3.2%		3.1%	

Source: US Census Bureau, 2019

#### Definitions

**Labor Force.** The labor force is the sum of employed and unemployed persons who are 16 years of age and older and who are willing and actively seeking work. Institutionalized persons are not included in the labor force.

**Unemployment.** The unemployment rate is calculated by dividing the sum of the Labor Force by the total number of unemployed. The unemployment rate does not count those not in the Labor Force.

Table 13: Outagamie County Employment by Industry Sector, 2000 and 2017

Sector	2000		2017		Change, 2000-2017	
	Number	Percent	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting, mining	1,636	1.9%	1,186	1.2%	-450	-27.5%
Arts, entertainment, recreation	5,577	6.5%	8,451	8.6%	2,874	51.5%
Construction	6,171	7.2%	6,756	6.8%	585	9.5%
Educational svcs, health care, social assist.	13,762	16.1%	19,439	19.7%	5,677	41.3%
Finance, insurance, real estate	6,905	8.1%	6,770	6.9%	-135	-2.0%
Information	1,637	1.9%	1,583	1.6%	-54	3.3%
Manufacturing	23,197	27.1%	22,047	22.3%	-1,150	-5.0%
Other service, except public administration	3,764	4.4%	3,674	3.7%	-90	-2.4%
Professional, scientific, management	5,690	6.6%	8,562	8.7%	2,872	50.5%
Public administration	1,668	109%	2,660	2.7%	992	59.5%
Retail trade	9,381	11.0%	10,551	10.7%	1,170	12.5%
Transportation, warehousing, utilities	3,318	3.9%	3,916	4.0%	598	18.0%
Wholesale trade	2,890	3.4%	3,227	3.3%	337	11.7%
Total	85,596	100%	98,822	100%	13,226	15.5%

Source: US Census Bureau, 2019

<sup>31</sup> Excerpted from 'A Guide to Preparing the Economic Development Element of a Comprehensive Plan,' Wisconsin Economic Development Institute, August 2003.

Table 14: Average Annual Wage by Industry Sector in Outagamie County and the State of Wisconsin, 2016

Sector	Outagamie County	State of Wisconsin	Outagamie County as Percent of Wisconsin
All industries	\$45,339	\$46,031	98.5%
Natural Resources	\$35,750	\$36,560	97.8%
Construction	\$63,047	\$58,668	107.5%
Manufacturing	\$27,456	\$55,328	103.8%
Trade, Transportation, & Utilities	\$37,769	\$38,893	97.1%
Information	\$55,745	\$67,842	82.2%
Financial Activities	\$62,913	\$66,967	93.9%
Professional & Business Services	\$46,735	\$57,134	81.8%
Education & Health	\$48,980	\$46,790	104.7%
Leisure & Other Hospitality	\$13,982	\$17,018	82.2%
Other Services	\$25,507	\$28,157	90.6%
Public Administration	\$45,820	\$45,690	100.3%

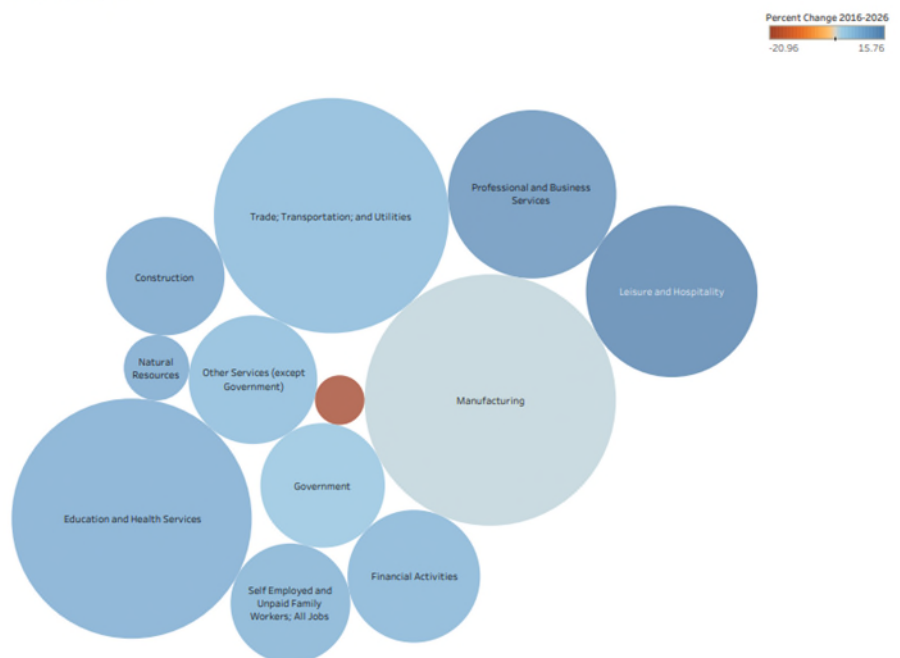
Source: Wisconsin Department of Workforce Development, Labor Market Information, QCEW, June 2017

## Employment Growth

Wisconsin Department of Workforce Development prepared employment projections to aid in determining what industry sectors will be growing or contracting. The graph below illustrates growth rates between 2016 and 2026, by supersector, for the Bay Area Workforce Area, which includes Outagamie County.

Bay Area Workforce Projections, 2016-2026. Percent Change (DWD, 2019)

Chart Long Term



## Economic Base Analysis

Calculating a county's location quotients (LQs) provides a means to evaluate a county's economic base. The LQ compares how specialized a geographic unit is when compared to a larger geography (e.g. comparing a county to state or nation). LQs above 1 indicate strength in a particular industry; the higher the value above 1 the stronger the industry's specialization. 2018 LQs were calculated, by annual employment, for 4-digits NAICS codes, of which the top 20 are listed on the following page, along with additional sector specific data.

## Outagamie County, Wisconsin

### Comprehensive Plan 2040: The Shared Path Forward

Table 15. 2018 Location Quotient by 4-digit NAICS Code, Outagamie County

LQ Rank	Annual Average Emplmnt - LQ	NAICS 4-Digit Industry	# of Establish-ments	Annual Average Employment	Annual Wages per Employee
1	17.77	NAICS 3221 Pulp, paper, and paperboard mills	4	1,242	\$ 74,432
2	13.68	NAICS 3114 Fruit and vegetable preserving and specialty	5	1,740	\$ 58,906
3	10.78	NAICS 3132 Fabric mills	3	418	\$ 63,357
4	9.11	NAICS 3222 Converted paper product manufacturing	23	1,819	\$ 62,354
5	8.92	NAICS 3115 Dairy product manufacturing	10	971	\$ 62,050
6	8.4	NAICS 3332 Industrial machinery manufacturing	14	742	\$ 80,100
7	7.6	NAICS 3339 Other general purpose machinery manufacturing	19	1,521	\$ 65,010
8	4.75	NAICS 3231 Printing and related support activities	39	1,512	\$ 49,870
9	3.82	NAICS 3329 Other fabricated metal product manufacturing	15	774	\$ 58,323
10	3.59	NAICS 3327 Machine shops and threaded product mfg.	48	960	\$ 58,349
11	3.42	NAICS 3219 Other wood product manufacturing	12	586	\$ 41,425
12	3.04	NAICS 5241 Insurance carriers	19	2,626	\$ 70,713
13	2.81	NAICS 7224 Drinking places, alcoholic beverages	109	817	\$ 12,395
14	2.76	NAICS 4231 Motor vehicle and parts merchant wholesalers	17	716	\$ 70,448
15	2.73	NAICS 5614 Business support services	19	1,802	\$ 32,473
16	2.71	NAICS 4853 Taxi and limousine service	7	151	\$ 17,610
17	2.35	NAICS 4237 Hardware and plumbing merchant wholesalers	32	481	\$ 70,321
18	2.3	NAICS 2362 Nonresidential building construction	32	1,391	\$ 86,791
19	2.16	NAICS 3344 Semiconductor and electronic component mfg.	5	593	\$ 46,075
20	2.16	NAICS 4238 Machinery and supply merchant wholesalers	71	1,123	\$ 72,759
21	2.11	NAICS 2382 Building equipment contractors	175	3,393	\$ 66,849
22	1.83	NAICS 3259 Other chemical product and preparation mfg.	3	114	\$ 73,698
23	1.81	NAICS 4412 Other motor vehicle dealers	14	213	\$ 46,536
24	1.78	NAICS 4236 Appliance and electric goods merchant whls.	17	466	\$ 73,446
25	1.75	NAICS 3335 Metalworking machinery manufacturing	6	235	\$ 72,717

Source: 2018 Annual, Private Sector Data; Quarterly Census of Employment and Wages - Bureau of Labor Statistics

## Strengths, Weaknesses, Opportunities & Threats<sup>32</sup>

A SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was done as part of the planning process for the *Driving the Future: A Strategy for Fostering Collaborative Economic Development along the I41 Corridor* report, of which Outagamie County was included. The report defines a SWOT analysis as follows:

- STRENGTHS. Advantages that can be built on to grow and strengthen the regional economy
- WEAKNESSES. Liabilities and obstacles to economic development that could limit the region's growth potential
- OPPORTUNITIES. Assets and positive trends that hold significant potential for increased regional prosperity and the attraction of new businesses, investments, and talent
- THREATS. Unfavorable external factors and trends that could negatively impact the regional economy

The results of the 2018 analysis appear on the following page.

<sup>32</sup> Source: ECWRPC 2018. *Driving the Future*; Excerpts from pg. 4-5.



## STRENGTHS

- Vibrant and stable manufacturing base.
- The corridor is an employment center for the larger region, drawing in thousands of commuting workers daily.
- High-quality, postsecondary educational institutions.
- Ongoing downtown and riverfront development efforts in many communities.
- Multiple organizations in the region supporting economic development.
- High level of collaborative initiatives (for example, NEW ERA, NEW Manufacturing Alliance, New North, IT Alliance).
- Events and attractions that bring in large numbers of outside visitors to the region and present a global brand (for example, Green Bay Packers, AirVenture, Mile of Music festival, Tiltetown District).



## WEAKNESSES

- Talent availability (current and future) is the overriding challenge employers face.
- Negative net domestic migration in recent years (more domestic residents leaving the region than arriving).
- Shortage of workforce housing—especially higher quality housing options.
- Perceived disconnect between employers and economic development practitioners.
- Gaps in the regional entrepreneurship and innovation ecosystem.
- Lack of racial and ethnic diversity within the population.
- Lack of coordination among economic development organizations in the region, creating confusion within the business community.



## OPPORTUNITIES

- Foster a greater understanding within the five counties of why the I-41 Corridor is an economic region.
- Greater alignment and coordination of existing local and regional economic development initiatives, for example, a regional talent summit to engage employers on devising strategies to meet future talent challenges.
- A comprehensive regional talent initiative for attraction and retention.
- Engage former residents through a regional “come home” campaign.
- Leverage existing festivals and events for investment and talent attraction.
- Regional and national promotion of assets and successes.
- Internal marketing for talent retention and networking.



## THREATS

- Retirement associated with an aging workforce.
- Loss of skilled and professional talent to larger metro areas in the state (Milwaukee and Madison) and the Midwest (Chicago, Minneapolis–Saint Paul) seeking higher pay and urban amenities.
- Risk-averse culture in the region and state limits growth potential, in comparison to communities that place a higher priority on innovation and entrepreneurship.
- Major employers vulnerable due to ongoing and potential acquisitions, technology disruptions, and changing consumer behaviors.
- Expansion of existing businesses to markets outside the region.

Source: ECWRPC 2018. Driving the Future; Page 4-5.

## Economic Data & Trends

- ▲ As of 2018, the Outagamie County economy employed 98.8k people (1.34% higher than 2017).<sup>33</sup>
- ▲ Between 2013 to 2018, jobs in Outagamie County increased by 5.9% (from 109,894 to 116,359), falling short of the national rate of 7.4%<sup>34</sup>
- ▲ More than eighty percent of the 13,226 jobs gained between 2000 and 2017 came from the Educational Services, and Health Care and Social Assistance (5,677), Arts, Entertainment, and Recreation, and Accommodation and Food Services (2,874), and Professional, Scientific, and Management, and Administrative and Waste Management Services (2,872) industry sectors.
- ▲ The largest industries were Manufacturing (22,047 people), Health Care & Social Assistance (12,220), and Retail Trade (10,551)<sup>35</sup>
- ▲ The highest paying industries were Management of Companies & Enterprises (\$69,519), Utilities (\$63,194), and Public Administration (\$51,657).<sup>36</sup>
- ▲ Between 2000 and 2017, the County lost 1,150 manufacturing jobs and 450 jobs in the agricultural and extraction sectors.
- ▲ By 2023, the number of jobs in the County is projected to grow by 3.8%<sup>37</sup>

---

<sup>33</sup> Source: US Census Bureau, 2017.

<sup>34</sup> Source: 2018 Outagamie County Economic Overview, EMSI and ECWRPC.

<sup>35</sup> Source: US Census Bureau, 2017.

<sup>36</sup> Source: US Census Bureau, 2017.

<sup>37</sup> Source: 2018 Outagamie County Economic Overview, EMSI and ECWRPC.



## IX. Transportation Profile

### Introduction

Transportation infrastructure supports the varied needs of residents, local businesses, visitors, and through-traffic. An efficient transportation system must accommodate pedestrians, bicyclists, transit services, rail, air, and water in addition to motor vehicles. A well-balanced network is a major factor affecting growth and quality of life.

### Highways & Roads

Highways and roads within Outagamie County consist of a combination of federal, state, county, and local roads, as depicted in the Transportation Map. The Outagamie County Highway department maintains an interconnected county highway network that provides connectivity between the federal, state, and local road networks in rural, suburban, and urban communities.

The majority of traffic flow occurs with the southeastern portion of the county, within the “Fox Cities” metropolitan area. Larger volumes of traffic are also experienced between New London and Grand Chute along the Hwy 15 corridor, which is slated for reconstruction in the coming years. County-wide traffic counts are depicted in Map #: *Annual Traffic Counts*.

### Rustic Roads<sup>38</sup>

- ▲ Rustic Road R-53. R-53 is 4.1 miles in length and located in one of the richest agricultural areas in the Fox River Valley. Visitors will find a double arch bridge, an old schoolhouse that serves as the town hall, a century farm, an old stone silo, Apple Creek, and a resource conservation area abundant with wildlife. Construction of this road dates back to 1857.
- ▲ Rustic Road R-61. Many wooded areas, wetlands and agricultural uses are adjacent to the road’s 3.3-mile course. R-61 crosses several streams and stretches along several wetland areas that are part of the Wolf River watershed. Several large white pines can be spotted along this road, often in combination with large stands of trees.

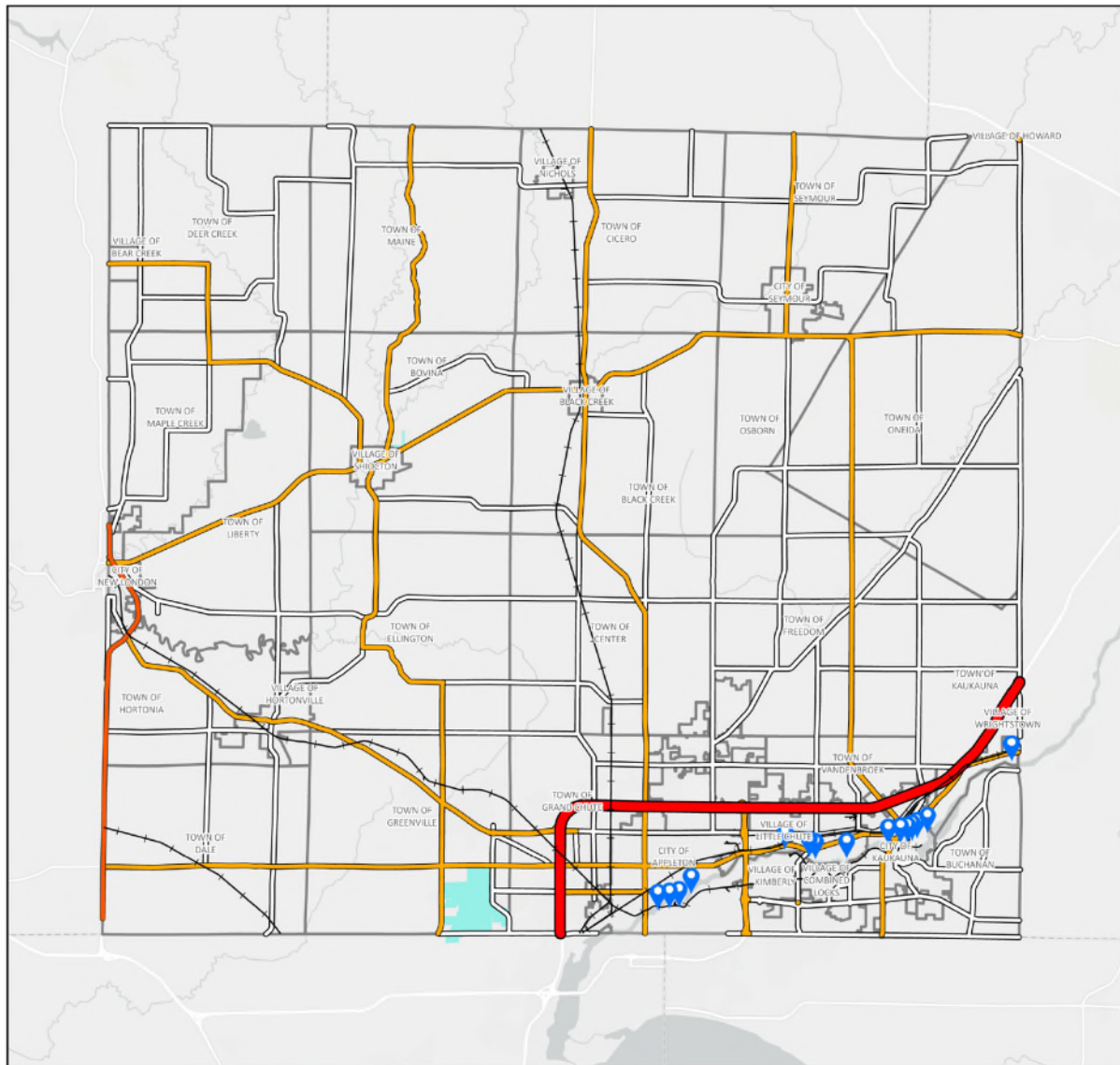


From top: R-53 and R-63,  
courtesy Wisconsin  
Department of Transportation








<sup>38</sup> Excerpted from Wisconsin Department of Transportation Rustic Roads, 2019.

# Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward

**MAP #: 1** Transportation Map



**Legend**

-  Navigation Locks
-  Railroads
-  Interstate
-  US Highway
-  State Road
-  County Road
-  Airports

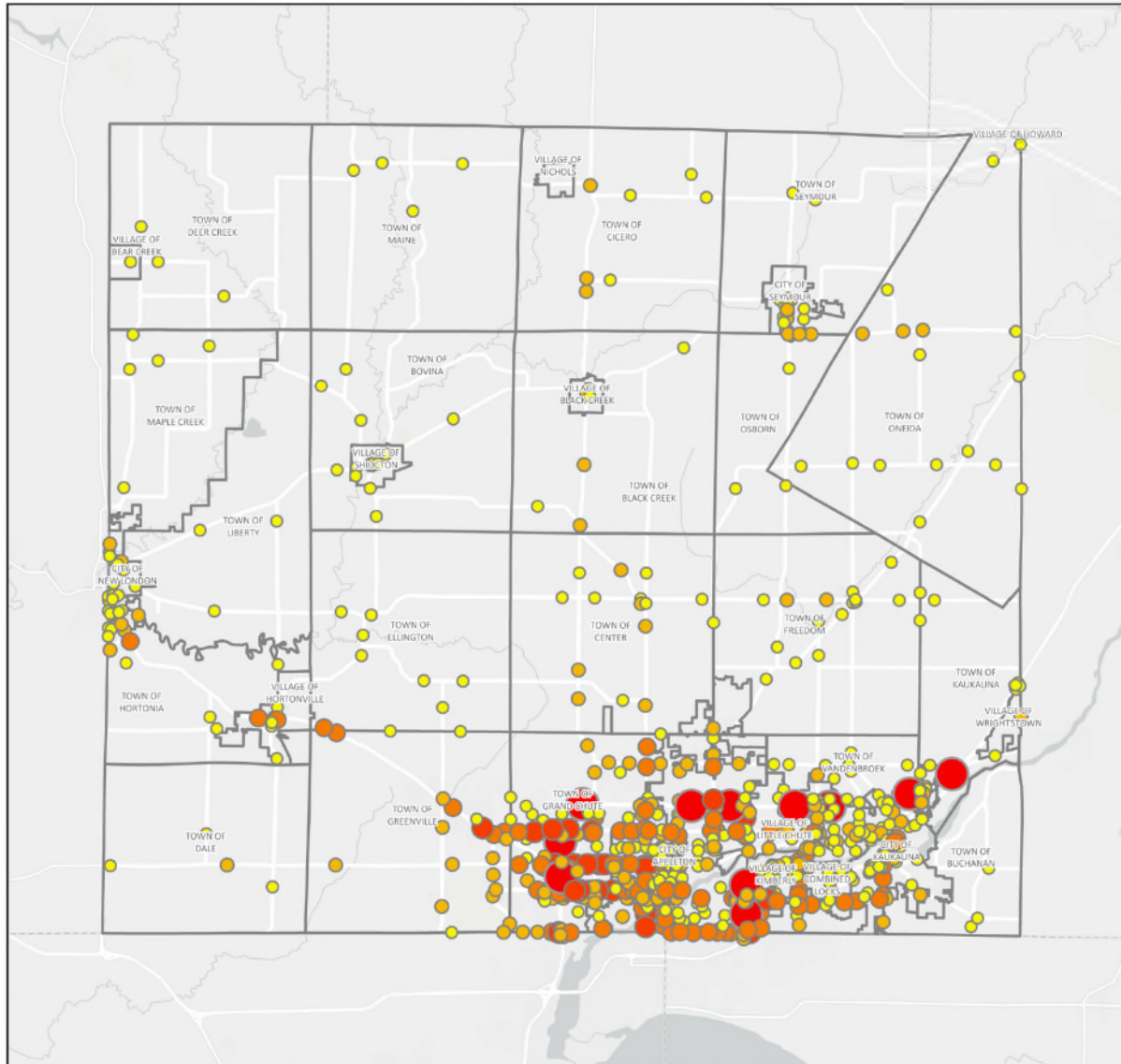


0 1 2 3 4 Miles

Data Source: Outagamie County GIS



**MAP #: 2** Annual Average Daily Traffic Counts



**Legend**

Traffic Counts - annual average daily traffic (AADT)

- 5,000-9,999
- 10,000-19,999
- 20,000-39,999
- 40,000-74,999
- 75,000+



0 1 2 3 4 Miles

Data Source: Wisconsin Department of Transportation AADT Counts

## Airports

### Appleton International Airport.

Appleton International (formerly, Outagamie County Regional Airport) is a 'Commercial Service' airport located in the Town of Greenville. Commercial Service Airports are publicly owned, have at least 2,500 passenger boardings each calendar year, and receive scheduled passenger service.<sup>39</sup> The airport has two runways, the longest of which is 8,002 feet in length.<sup>40</sup> In 2018, Appleton International (360,107 enplanements) surpassed Austin-Straubel International (324,840) to become the third largest airport in Wisconsin, after Mitchell International (3,548,817) and Dane County Regional (1,082,529).<sup>41</sup> American Airlines, Delta, and United fly out of Appleton along with a number of smaller and subsidiary airlines including SkyWest, Air Wisconsin, Allegiant, and Endeavor. Cargo carriers include FedEx Express, Freight Runners Express, and Pro Aire Cargo.

As of 2016, Appleton International Airport hosted three major airlines providing thirteen departures daily to hubs connecting to destinations worldwide. It supported 3,267 jobs contributing \$149.7 million in personal income to the regional and state economies. The airport generated \$8.1 million in direct airport and state revenue and \$21.1 million of visitor spending that supported 315 jobs in Outagamie County.<sup>42</sup>



Courtesy ATW Tenants

### Shiocton Airport<sup>43</sup>

The Shiocton Airport is one of a very few privately owned public use airports in Wisconsin. It is funded via membership dues and abides by all Federal Aviation Administration regulations. Shiocton Airport currently consists of two intersecting runways, each approximately 2,500 feet long by 150' wide, a north/south taxi area, and nine hangars enclosing sixteen based aircraft.

---

<sup>39</sup> Source: Federal Aviation Administration, 49 US Code Section 47102.

<sup>40</sup> Source: Airport Owners and Pilots Association, 2019.

<sup>41</sup> Source: Federal Aviation Administration, 2019.

<sup>42</sup> Source: Wisconsin Department of Transportation Bureau of Aeronautics, 2016.

<sup>43</sup> Source: Shiocton Airport website, 2019.

#### Private Airports & Landing Fields

- ▲ Black Otter Airport, Village of Hortonville
- ▲ Dalonia Airport, Village of Hortonville
- ▲ Rocket City Airport, Village of Hortonville
- ▲ Wolf River Landing Strip, Town of Black Creek
- ▲ Wolfgram Airport, Town of Hortonville

#### Transit & Specialized Transportation

Transit within Outagamie County is provided by a blend of fixed route, paratransit, and demand response services primarily within the urban area of the county. Seniors and disabled residents in rural parts of the county received specialized transportation through county-contracted service providers.

#### Valley Transit<sup>44</sup>

Valley Transit provides fixed-route service, paratransit, and demand response services to the Cities of Appleton, Kaukauna, Menasha, and Neenah; the Villages of Fox Crossing, Harrison, Kimberly, and Little Chute; and, the Towns of Buchanan and Grand Chute. Bus route service is provided Monday through Friday (6:15 AM – 10:30 PM) and Saturday (8:15 AM – 10:30 PM). The service area is roughly 117 square miles in size with a population of 216,154.

The Connector service provides employment based transportation to residents of the Fox Cities, via contracted van services, for areas not served by Valley Transit Fixed Route bus lines or for periods outside of normal operating hours.

Seniors age 60 and older living in the Fox Cities portions of Outagamie County are able to use Valley Transit II. Valley Transit II ADA Paratransit is provided under the requirements of the Americans with Disabilities Act for individuals with physical or cognitive disabilities that prevent them from using the Valley Transit system. This program is provided, in part, with state and county section 85.21 funding.

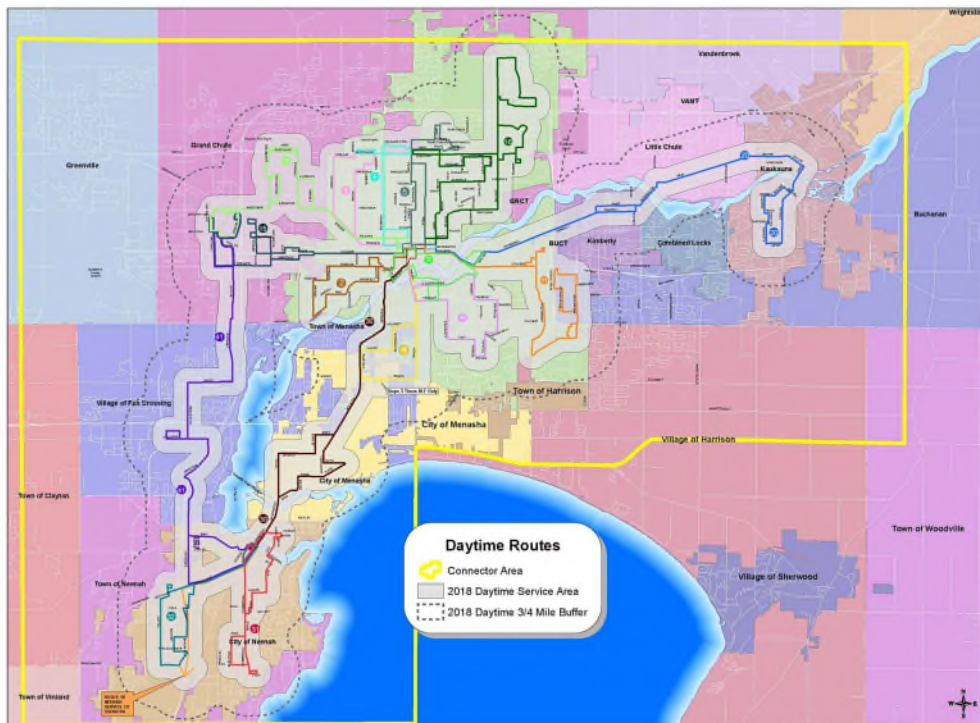


Courtesy WLUK

---

<sup>44</sup> Excerpted from Valley Transit website, 2019.

## Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward



Valley Transit Fixed Routes, Connector Service & ADA 3/4 Mile Buffer. Courtesy: Valley Transit

### Rural Specialized Transportation<sup>45</sup>

Outagamie County contracts with Kobussen to provide pre-scheduled transportation services to those with disabilities and/or persons 60 years or older. Rides for medical purposes are prioritized within this program.

### I41 Bus Transportation<sup>46</sup>

In partnership with Wisconsin DOT, Amtrak, via a contract with Wisconsin Coach Lines/Coach USA, provides accessible Thruway Bus Service connecting Green Bay, Appleton, Oshkosh and Fond du Lac to the Milwaukee intermodal transit hub. This provides seamless connection to the Amtrak Hiawatha service to Chicago.



Courtesy Amtrak 2019

<sup>45</sup> Outagamie County ADRC, 2019.

<sup>46</sup> Amtrak Media Center, 2019.



## Rail Service

### Freight Rail<sup>47</sup>

Canadian National (CN) is a freight railway headquartered in Montreal, Quebec. It serves Canada and the Midwestern and southern United States via a network of 20,000 route miles of track with direct access to ports on the east, west, and gulf coasts. CN provides freight rail transportation throughout Wisconsin and is the parent company of Wisconsin Central Limited and the Sault St. Marie railroad and celebrated its 100<sup>th</sup> anniversary in June 2019.



Courtesy Canadian National

### Passenger Rail<sup>48</sup>

The Midwest Regional Rail Initiative is a cooperative, multi-agency effort that began in 1996 and involves nine Midwest states (Indiana, Illinois, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin) as well as the Federal Railroad Administration. The goal of the initiative is to develop a passenger rail system that offers business and leisure travelers shorter travel times, additional train frequencies, and connections between urban centers and smaller communities. Conceptual plans call for a link between existing passenger routes in southern Wisconsin to and potentially through the Fox Cities.

Until such time the above initiative comes to fruition, Outagamie County residents can access Amtrak Hiawatha service via the I41 Thruway Bus Services or at the Amtrak Station in Columbus, WI.

## Water Transportation

### Port of Green Bay

The closest port to Outagamie County is the Port of Green Bay, operated by Brown County. The port moves more than 200 ships each year, carrying over two million tons. The port handles “dry bulk commodities such as coal, limestone and salt, bulk liquids like petroleum products, liquid asphalt and tallow, and break-bulk commodities including wood pulp and forest products in addition to over-sized cargo like machinery and wind components”.<sup>49</sup> Brown County is in the process of planning for an intermodal facility adjacent to the port, in an effort provide better logistics for connecting rail, water and highway freight movement and better serve the NE Wisconsin economy. The Outagamie County Board of Supervisors has expressed support for this effort.

<sup>47</sup> Source: Canadian National website, 2019; Outagamie County Comprehensive Plan 2008.

<sup>48</sup> Source: Midwest Regional Initiative website, 2019.

<sup>49</sup> Excerpted from Port of Green Bay website, 2019.

## Outagamie County, Wisconsin *Comprehensive Plan 2040: The Shared Path Forward*

### FRNSA Lock System<sup>50</sup>

The Fox River Navigational System Authority (FRNSA) manages the 17 locks on the Fox River, the only fully restored, hand-operated lock system in the U.S. Of the 17 locks, 16 have been restored to full working order and are a recreational, historic, and economic asset to northeast Wisconsin. The lock at Rapide Croche near Wrightstown will remain closed as a barrier to invasive aquatic species until alternate measures, including an electric barrier, are installed to prevent the incursion into upstream waters. The lock system was



Courtesy Fox Locks

transferred from the Army Corps of Engineers to the State of Wisconsin in 2004. This transfer was completed by a state statute that established the FRNSA and specified operational duties. As specified in Chapter 237 Wis. Stats., the FRNSA's primary mission is to repair, rehabilitate, operate and maintain the locks system. The location of each lock is depicted on the Map 1: *Transportation Map*.

---

<sup>50</sup> Excerpted from Fox Locks website, 2019.

## Bicycle & Pedestrian Facilities

### County Bicycle Facilities

The *CE Trail*, one of the longest trails in the Fox Valley region of Wisconsin, links Appleton and Kaukauna along busy County Highway CE. The trail offers access to a number of amenities in those two cities (as well as Kimberly and Combined Locks), including Kimberly High School, Kaukauna High School,



*Wiouwash State Trail, courtesy Wisconsin Department of Natural Resources.*

restaurants, retail, and the local YMCA. The CE Trail connects directly to the Newberry Trail which travels northwest to Appleton's riverfront. Parking for the CE Trail is available in a dedicated lot on Green Way Drive, located just west of DeBruin Road in Kaukauna.

The *Wiouwash State Trail* is named for Winnebago, Outagamie, Waupaca and Shawano counties. Built on a former rail corridor, the trail is maintained and operated by the four counties the trail traverses. Several gaps remain along the rail corridor before the two segments are connected by a continuous trail.

The *Newton Blackmour State Trail* is named by combining the names of New London, Shiocton, Black Creek and Seymour. Outagamie County constructed this using an old rail bed, and connects to the Duck Creek Trail in Oneida, which provides access to the Green Bay metropolitan areas train network. A gap exists to connect to the City of New London; ongoing efforts are underway by the City of New London to make final connection into their downtown.

### Municipal Trails.

Municipalities within the county, in particular those found within the Fox Cities metro area, have embraced the notion of multi-modal transportation facilities. Many have planned and made progress towards implementing bicycle and pedestrian facilities via trails, on-street bike lanes, sharrows, and signage.

See Map 3: *Bicycle and Pedestrian Facilities* for a depiction of the current bicycle and pedestrian network with in Outagamie County.

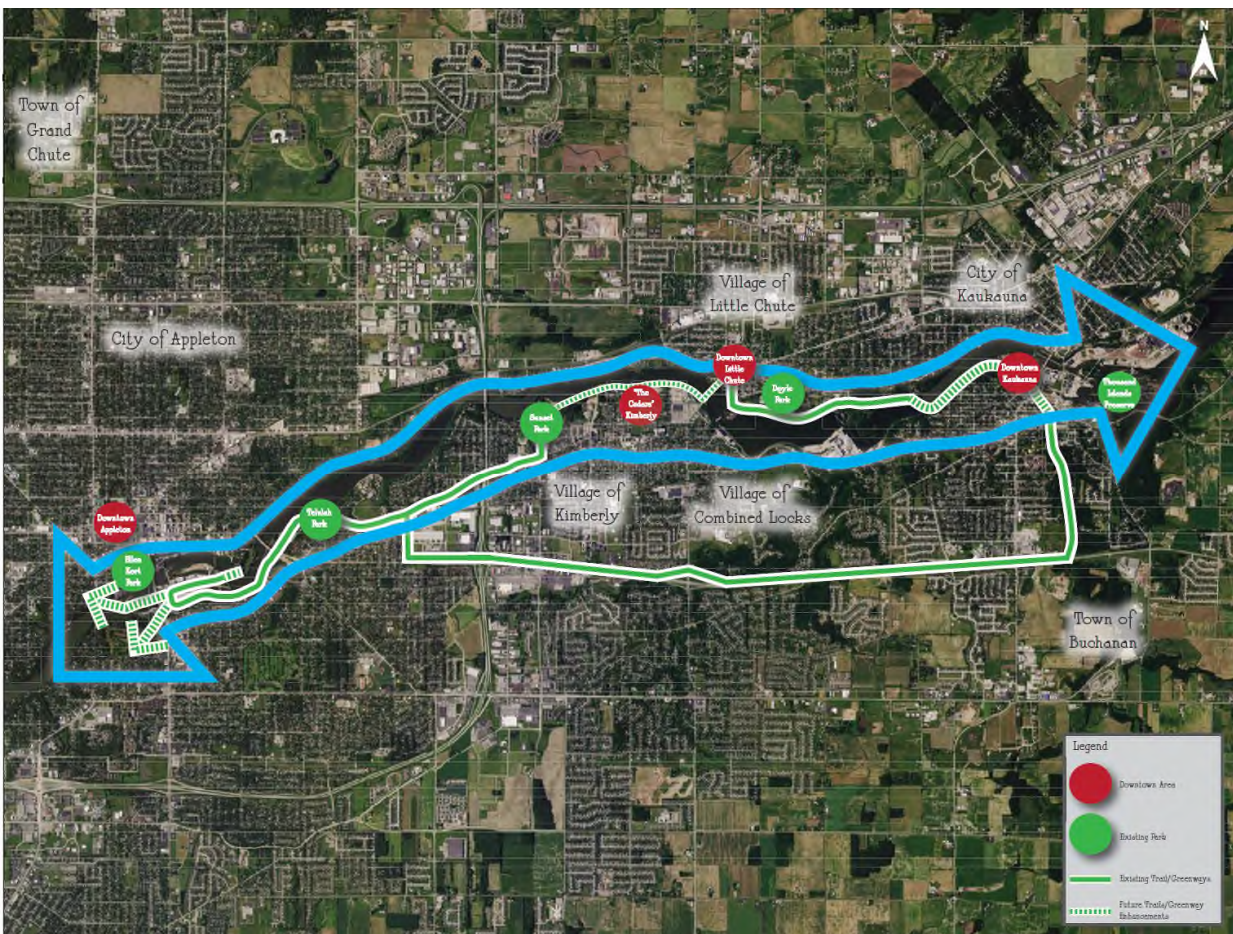


## Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward

### “Loop the Locks” Fox River Greenway Initiative.

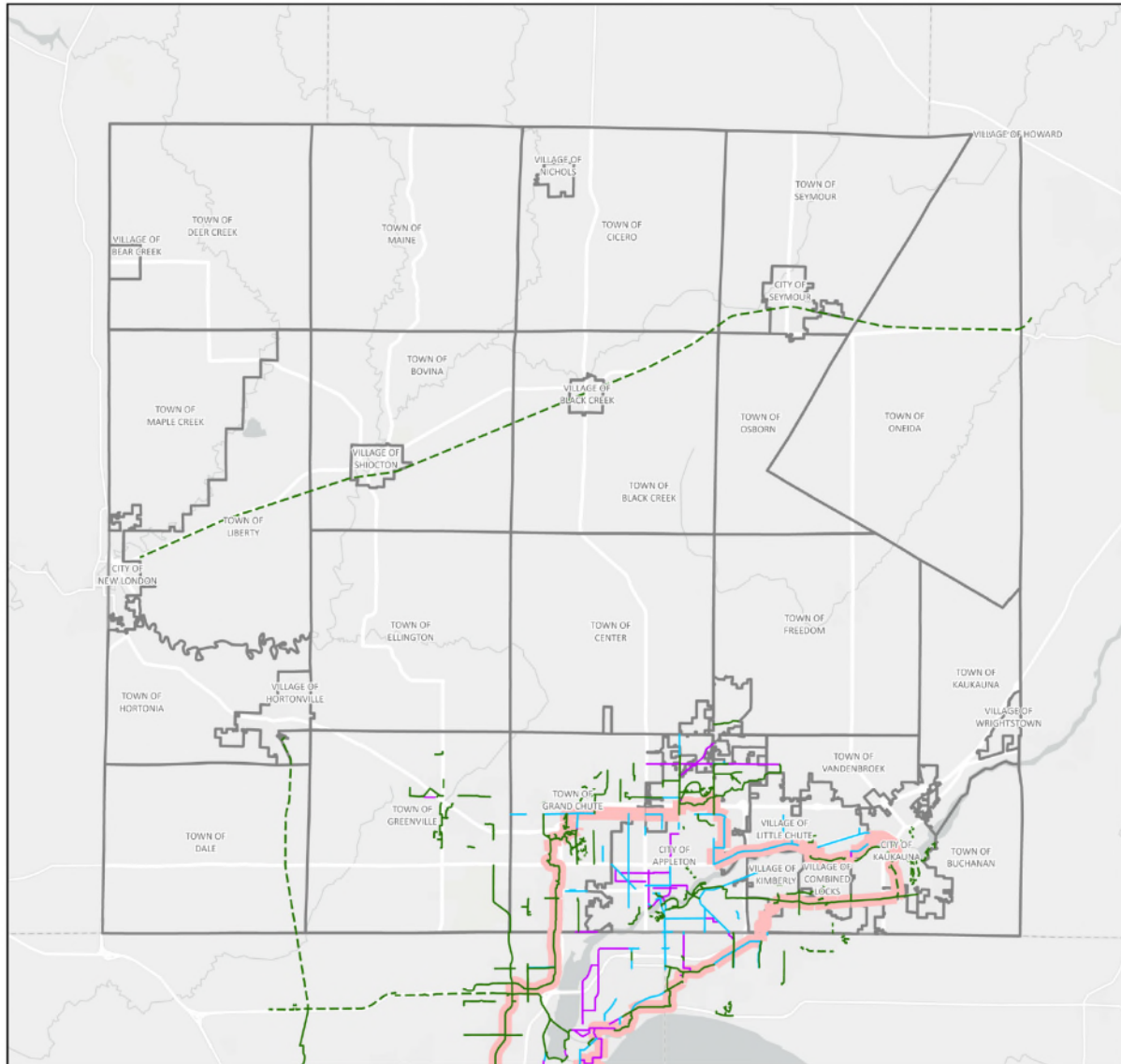
In 2017, Outagamie County approved using \$1.5 million in funding from an American Transmission Company conservation payment to provide up to 25% funding for key segments of a Fox River Greenway network that would connect parks and downtown/commercial districts from Appleton to Kimberly, Kaukauna, Buchanan and Combined locks (depicted below). When completed, a 15+ mile loop of trails and bike lanes will unite neighborhoods and communities straddling the Fox River in the county’s “Heart of the Valley” region. To date, the county has committed funding to the follow projects:

- ▲ *City of Appleton:* Lawe Street Trestle Trail; Trolley Trestle Trail & Ellen Kort Peace Park River Trail
- ▲ *City of Kaukauna:* Downtown Trail Network
- ▲ *Village of Little Chute/City of Kaukauna:* Fox River Boardwalk Trail
- ▲ *Village of Kimberly:* Cedars of Kimberly Trail Network



“Loop the Locks” Fox River Greenway Initiative. Courtesy of OC DLS, 2017.

**MAP #: 3** Bicycle & Pedestrian Facilities



**Legend**

- Bike Route/Accommodation
- Bike Lane
- Off Road Paved Trail
- - - Off Road Unpaved Trail
- Paper Trail



Data Source: City of Appleton GIS (Trails of the Fox Cities)

## Transportation Data

- ▲ 48% of Outagamie County households own two personal vehicles; 34% own three or more; less than 2% do not own a vehicle<sup>51</sup>
- ▲ Outagamie County's workers have a shorter commute time (19.1 minutes) than the normal US worker (25.1 minutes); 1.51% of workers have 'super commutes' in excess of 90 minutes<sup>52</sup>
- ▲ 85% of commuters drove alone to work; 7% carpooled; 4% work from home<sup>53</sup>
- ▲ In 2016, Appleton International Airport recorded 34,000 aircraft operations (take-offs and landings)<sup>54</sup>
- ▲ Public transportation in the Fox Cities originated with the street car system in 1886; buses replaced street cars in 1930<sup>55</sup>
- ▲ Ridership across the Valley Transit system totaled 1.2 million in 2018, 984,000 of which were associated with the fixed route<sup>56</sup>
- ▲ The busiest Valley Transit route is #15 (West College, including the Fox River Mall)<sup>57</sup>
- ▲ Canadian National owns approximately eighty percent of all rail lines in Wisconsin,<sup>58</sup> and plans to invest \$120 million in the state in 2019<sup>59</sup>
- ▲ The goal of the Midwest Regional Rail Initiative is to utilize modern, high-speed passenger trains operating at speeds up to 110 mph<sup>60</sup>

---

<sup>51</sup> Source: US Census Bureau, 2019.

<sup>52</sup> Source: US Census Bureau, 2019.

<sup>53</sup> Source: US Census Bureau, 2019.

<sup>54</sup> Source: Wisconsin Department of Transportation Bureau of Aeronautics, 2016.

<sup>55</sup> Excerpted from Valley Transit website, 2019.

<sup>56</sup> Source: WHBY, 2019.

<sup>57</sup> Source: WHBY, 2019.

<sup>58</sup> Outagamie County Comprehensive Plan, 2008.

<sup>59</sup> Source: Milwaukee Business Journal, April 2019.

<sup>60</sup> Source: Midwest Regional Initiative website, 2019.

## X. Agricultural Resources Profile

### Introduction

The 1860 agricultural census reported that 1,131 farms had been established within Outagamie County. This number increased continually until 1935, when an all-time high of 3,903 was reached. Since then, the number of farms and farm acreage has steadily declined. The reduction in total farms is the result of both consolidation and the conversion of land to urban uses. As of 1950, there were approximately 3,400 operating farms in the County encompassing 370,600 acres. Between 1950 and 2000 the amount of agricultural land fell to 269,027 acres, an average loss of 20,000 acres per decade.<sup>61</sup>

Table 17: Number of Farms in Outagamie County by Size and Value of Sales, 2017					
Size (in acres)					
1 to 9	10 to 49	50 to 179	180 to 499	500 to 999	1,000 or more
125	381	301	215	67	41
Value of Sales					
Less than \$2,500	\$2,500 to \$9,999	\$10,000 to \$24,999	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 or more
333	130	112	117	91	347

Source: USDA Census of Agriculture for Outagamie County, 2017.

### ATCP 51 - Livestock Siting Rule<sup>62</sup>

Under Wisconsin's livestock siting law, local governments do not have to require permits for new or expanding livestock operations. If they choose to require permits for such operations, ATCP 51 sets standards and procedures that they must use. The law limits exclusion of livestock facilities from agricultural zones. The Livestock Siting Review Board hears appeals of local decisions from applicants or neighboring landowners. The standards address:

- ▲ Property line and road setbacks
- ▲ Management and training plans
- ▲ Odor management
- ▲ Nutrient management
- ▲ Manure storage facilities
- ▲ Runoff management

Local governments requiring permits must use application worksheets provided here to determine if proposed facilities meet these standards. The Livestock Siting Review Board hears appeals concerning permit decisions.

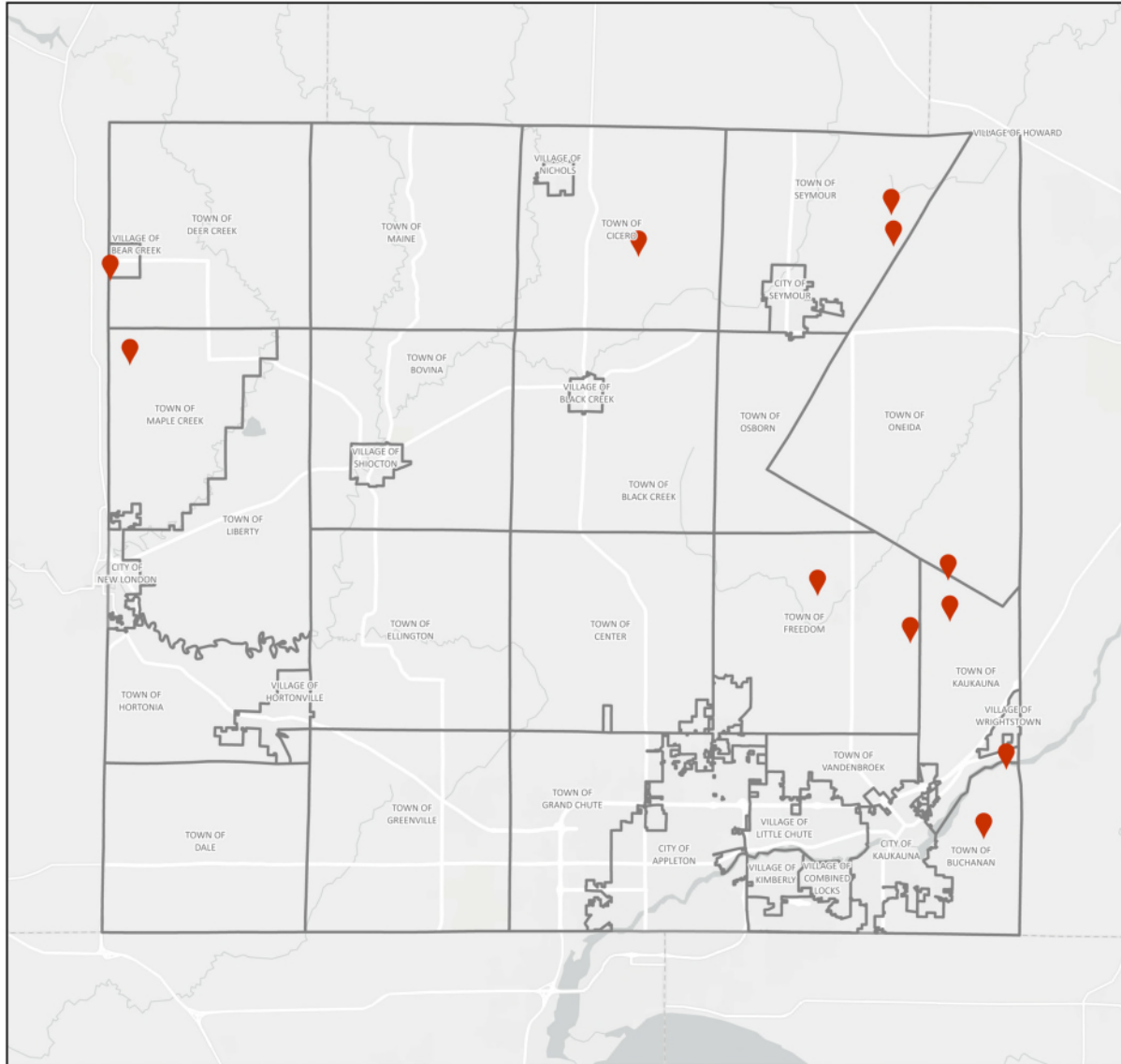
See Map 4: *Concentrated Animal feeding Operations* map appearing on the following page.

<sup>61</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

<sup>62</sup> Source: State of Wisconsin Department of Agriculture, Trade, and Consumer Protection website, 2019.



**MAP #: 4** Concentrated Animal Feeding Operations



**Legend**

 Concentrated Animal Feeding Operations (CAFO)



 Miles  
0 1 2 3 4

Data Source: Outagamie County Land Conservation

---

## General Trends<sup>63</sup>

- ▲ As of 2017, there are 1,130 farms on 236,963 acres of land in Outagamie County<sup>64</sup>
- ▲ Agricultural land is decreasing as more and more acres are rezoned out of Agricultural zones or annexed and rezoned by cities and villages<sup>65</sup>
- ▲ The average size of a farm is 210 acres with a median of 72<sup>66</sup>
- ▲ The average size has increased 18% since 2007 while the number of farms decreased by 14%
- ▲ The average value of land and buildings on all farms is \$1,075,764<sup>67</sup>
- ▲ Eighty-seven percent of the remaining agricultural land is harvested cropland<sup>68</sup>
- ▲ Total cattle numbers increased by 15% since 2007, with total dairy cows increasing by a more modest 1%<sup>69</sup>

Economic, political and social factors will continue to impact farmland and related rural areas. It is expected that the number of farms in the County will steadily decline, while the size of the remaining farms will increase. These changes pose a challenge to all the stakeholders in terms of the planning for and sustaining of agricultural economic stability, diversifying farming operations, and protecting the natural resources.<sup>70</sup>

---

<sup>63</sup> Source: USDA Census of Agriculture for Outagamie County, 2017.

<sup>64</sup> Source: USDA Census of Agriculture for Outagamie County, 2017.

<sup>65</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

<sup>66</sup> Source: USDA Census of Agriculture for Outagamie County, 2017.

<sup>67</sup> Source: USDA Census of Agriculture for Outagamie County, 2017.

<sup>68</sup> Source: USDA Census of Agriculture for Outagamie County, 2017.

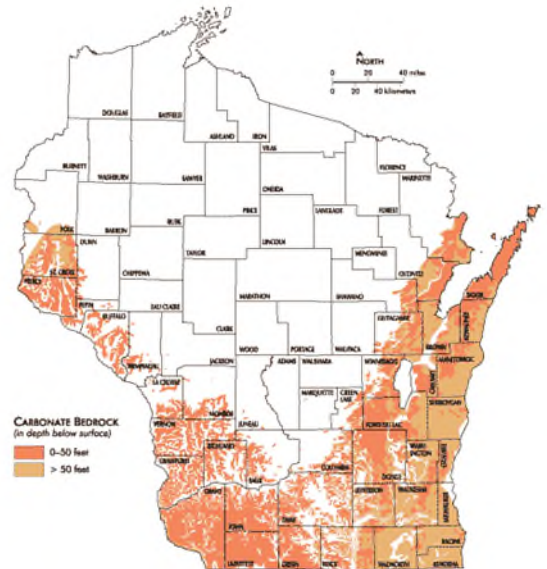
<sup>69</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

<sup>70</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

## XI. Natural Resources Profile

### Geography & Geology<sup>71</sup>

Outagamie County is located in the Eastern Ridges geographic province of Wisconsin. The topography is characterized as flat to gently rolling with several northeasterly trending escarpments as the dominant landscape feature. The Wolf River and its tributaries, including the Embarrass and Shioc rivers along with several feeder streams, are the major water features and drain the northern and western two-thirds of the county. These waterways are characterized by low stream gradients and frequent flooding. The Duck, Apple, and Ashwaubenon Creeks and the Lower Fox River drain the easterly and southerly segments of the county and have much steeper gradients, though the dams on the Lower Fox temper stream flows. The topography of Outagamie County was largely created by deposition of glacial drift from continental ice sheets, with the last glacial stage occurring some 11,000 years ago. The band of rolling landscape trending from the southwest to northeast of the county reflects the deposition of glacial till in ground and terminal moraines while the flatter areas reflect lacustrine deposits of glacial lake basins. The land surface is underlain by sedimentary rocks, with the Cambrian Period sandstones in the northwest of the county representing the oldest rock unit. Moving southeasterly, progressively younger rocks of the Ordovician Period, consisting of dolomitic limestone and sandstone, appear as the uppermost layers.

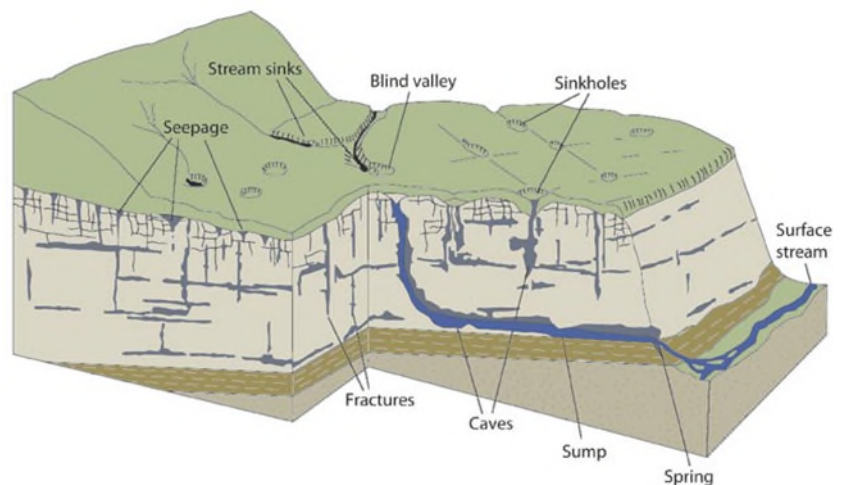


*Karst Potential in Wisconsin (source –footnote 72)*

#### Karst Landscape

“Karst” is a landscape created when water dissolves rocks.<sup>72</sup> The south and eastern parts of Outagamie County have underlying geology that create the potential for karst features.

Karst landscapes may have deep bedrock fractures, caves, disappearing streams, springs, or sinkholes. These features can be isolated or occur in clusters, and may be open, covered, buried, or partially filled with soil, field stones, vegetation, water or other miscellaneous debris. The cracks and crevasses in karst act as direct conduits for



*Source: Runkel and others, 2003 (via footnote 72)*

<sup>71</sup> Excerpted from: 2010-2015 Outagamie County Land & Water Resources Management Plan.

pollutants to enter groundwater, wells, springs, and streams.<sup>72</sup>

## Metallic and Nonmetallic Mineral Resources<sup>73</sup>

There are no known metallic mineral resources in Outagamie County. However, there are nonmetallic resources, which are extracted at various locations across the County. The extraction of mineral aggregates or nonmetallic minerals for sale or use by the operator is defined as nonmetallic mining under Chapter NR 135 of the Wisconsin Administrative Code. These operations provide material for construction, landscaping, and road building/maintenance. East Central Wisconsin Regional Planning Commission (ECWRPC) administers a state mandated multi-county nonmetallic mining reclamation program under NR 135, on behalf of Outagamie County. As of 2017, ECWRPC lists 55 known nonmetallic mining sites in Outagamie County.

See Map 5: *Non-Metallic Mine Sites* map appearing on the following page.

## Topography<sup>74</sup>

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

## Soils<sup>75</sup>

Soil is formed by the interaction of outside processes on deposited geologic materials. The characteristics of a soil are determined by the physical and mineralogical composition of the parent material, the climate in the area, the plant and animal life in and on the soil, the relief, and the length of time the processes of soil development have acted on the soil material. The parent material in Outagamie County consists mostly of soils derived either from material deposited by glaciers or from material deposited as lacustrine sediment. The lacustrine sediment is mainly silt and fine sand found mostly along major river systems of the Wolf, Embarrass, Shioc, Black, Bear, and Rat Rivers. An area about 10 miles wide covered with reddish loam to clay loam glacial drift extends from the northeast corner of the county to the southwest corner. Soils in this area are gently sloping to moderately steep. The southeastern part of the county is covered with reddish clayey lacustrine sediment that was deposited in Glacial Lake Oshkosh. This area is nearly level.

<sup>72</sup> Excerpted from WI Geologic and Natural Historic Survey, 2020. <https://wgnhs.wisc.edu/water-environment/karst-sinkholes/>

<sup>73</sup> Excerpted from Outagamie County Comprehensive Plan, 2008 and East central Wisconsin Planning Commission website, 2019.

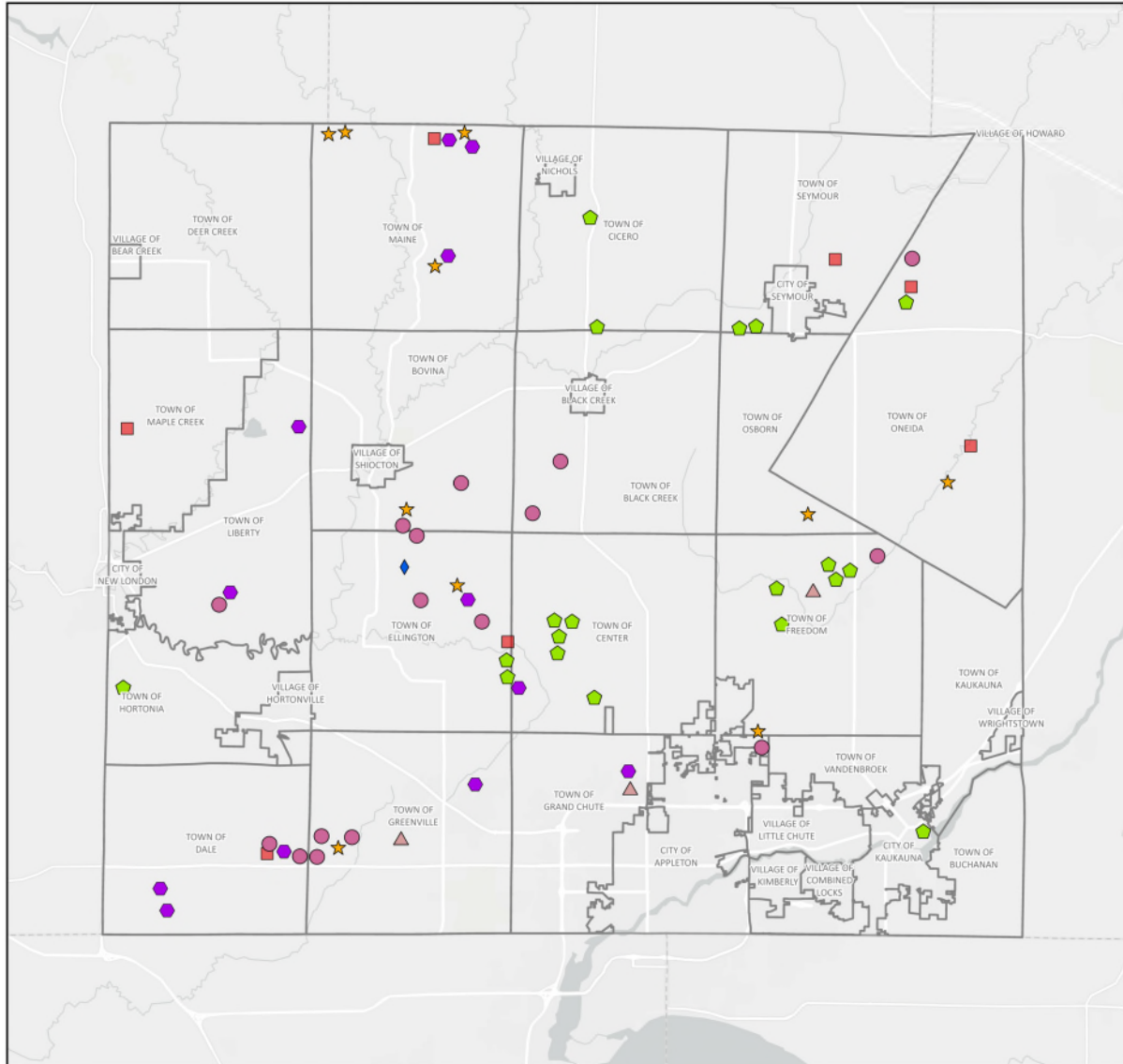
<sup>74</sup> Excerpted from Outagamie County Comprehensive Plan, 2008.

<sup>75</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.



# Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward

**MAP #: 5** Non-Metallic Mine Sites



**Legend**

- ▲ Clay
- Exempt
- ◆ Gravel
- ⬠ Limestone
- Reclaimed
- ★ Sand
- Sand & Gravel



Data Source: East Central Wisconsin Regional Planning Commission

There are 85 different soil types found throughout Outagamie County. These are grouped into seven major soil associations that have distinctive soil patterns, relief, and drainage factors. The Outagamie County Soil Survey, made available by the USDA Natural Resources Conservation Services (NRCS), contains detailed descriptions of each soil type, including information on suitability and limitations for various types of land use and land management.

## Water Resources<sup>76</sup>

Outagamie County has about 1,250 mile of streams and rivers and 237 acres of lakes and impoundments. The western half of Outagamie County is in the southeastern section of the Wolf River Basin. All or portions of six watersheds drain this county: Arrowhead River and Daggets Creek Watershed, Lower Wolf River Watershed, North Branch and Main Stem Embarrass River Watershed, Wolf River/New London and Bear Creek Watershed, Shioc River Watershed, and Middle Wolf River Watershed. There are 33 Outagamie County lakes in the basin, most unnamed and small. Only Black Otter Lake and one unnamed lake are larger than 25 acres.

The Wolf River drains the flat, mostly poorly drained northwestern quarter of Outagamie County. From the northern boundary near Leeman, the river flows parallel to an escarpment formed by the Prairie du Chien Group, then southward through Shiocton to a point about three miles northeast of Hortonville, where it turns abruptly west through Waupaca County and into Winnebago County where it joins the Lake Winnebago System. The Lower Fox River empties a drainage basin of 6,641 square miles in its 39 stream miles, flowing northeast from the outlet of Lake Winnebago to Green Bay. The river is impounded by 12 dams and is navigable through 17 locks. The river has the appearance and characteristics of a large flowing stream rather than a series of impoundments.

In general, the shallow waters of Outagamie County do not provide a great deal of recreation potential; however, the Wolf and Embarrass Rivers are heavily used. Black Otter Lake is a 75-acre impoundment of Black Otter Creek located in the village of Hortonville and the town of Hortonville in the southwestern portion of Outagamie County. In winter/spring 1989-90, Black Otter Lake was drawn down for mechanical dredging and repairs were made on the dam, and the lake was again drawn down over the winter of 2009 to address a Eurasian Milfoil problem.

See Map 6: *Watersheds, Streams and Lakes* for a depiction of the county's water resources.

---

<sup>76</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

### Basins & Watersheds<sup>77</sup>

Outagamie County lies primarily within the Wolf River Basin (55%) and Lower Fox River Basin (43%), with a small area within the Upper Green Bay Basin.

Table 16: Outagamie County Basins and Watersheds

Watershed	General Characteristics	Water Resource Assessment
	Wolf River Basin	
WR01: Arrowhead River, Rat River, Daggets Creek	The Arrowhead River, Rat River, and Daggets Creek Watershed covers 135 square miles or 86,400 acres. Approximately 70% lies within Winnebago County, 29% in Outagamie County, and 1% in Waupaca County. The watershed is nearly level or gently sloping with land use being primarily agricultural. Cash grain farming is currently the predominant agricultural land use in the watershed.	Common water resource problems in the watershed include sedimentation of the tributaries and sediment loading to the lakes, channelization, excessive filamentous algae and periphyton growth from nutrient loading, limited habitat, low dissolved oxygen levels, high bacteriological levels, low stream flows during dry weather, and streambank and shoreline erosion. In this watershed the most serious pollutants are nutrients (phosphorus), sediment, manure in surface water, and nitrates in groundwater.
WR04: Lower Wolf River	The Lower Wolf River watershed covers parts of Outagamie, Waupaca, and Winnebago Counties and includes a portion of the Mainstem Wolf River from the junction with the Embarrass River to the mouth of the Waupaca River, including the lower portion to the Weyauwega Millpond. The Mainstem Wolf River flows within the watershed for about 19 miles and contains a diverse warm water sport fishery. Wetlands adjacent to the river provide excellent spawning grounds.	There is only a very small portion of the Lower Wolf River Watershed located in Outagamie County. The only creek in the Outagamie County portion of the watershed is Potters Creek, located in the Southwest quarter of the township of Hortonville, and drains into the Waupaca portion of the watershed. Potters Creek is a brown stained, hard-water stream discharging to the Wolf River. Streambank erosion is a common problem along this stream. Stream habitat evaluations ranged from fair to good. Polluted runoff problems are evident.
WR09: North Branch and Mainstem Branch Embarrass River Watershed	The North Branch and Mainstem Embarrass River Watershed lies in Outagamie, Waupaca, and Shawano counties and covers 292 square miles. There is one municipal point source discharger in the Outagamie County portion of the watershed: Bear Creek Wastewater Treatment Facility.	The data search for the Wolf River Basin plan indicates severe polluted runoff problems exist, with heavy soil losses, impaired fisheries, excess vegetation, and dissolved oxygen violations.
WR12: Wolf River, New London, Bear Creek Watershed	Located in west central Outagamie County, the watershed covers an area of 145 square miles. It includes the mainstem Wolf River from the confluence with the Shioc River to the City of New London. There are five point source dischargers located in Outagamie County: the Village of Hortonville, City of New London, Village of Shiocton, Stephensville Sanitary District No. 1, and the Larsen Company.	The watershed ranked medium priority for streams and lakes, and low priority for groundwater under the NPS Priority Watershed selection process. The Bear Creek subwatershed was ranked high priority. A data search indicates high-priority problems, but insufficient information exists for the Wolf River segment and two other streams to elevate the entire watershed to high priority.

<sup>77</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

WR13: Shioc River Watershed	The Shioc River is a tributary to the Wolf River, having its headwaters in Shawano County and flowing south and west to meet the Wolf River in Outagamie County, north of the city of Shiocton. There are 11 point-source dischargers in the Shioc River Watershed. Of the 11 dischargers, 8 are located in Outagamie County: Village of Black Creek, Village of Nichols, City of Seymour, Seymour Canning, Alto Dairy, Beatrice Cheese, Fremont Company, and the Twelve Corners Cheese Factory.	This watershed is ranked high priority area.
WR14: Middle Wolf River Watershed	The 128 square mile watershed lies in Shawano, Waupaca, and Outagamie Counties. The watershed extends from the confluence of the Red River, north of Shawano, to the point where the Shioc River meets the Wolf River north of Shiocton. There are seven point source dischargers to the Middle Wolf River Watershed, all located in Shawano County.	The Middle Wolf River Watershed ranked high priority for streams and medium priority for groundwater under the NPS Priority Watershed selection process.
<u>Lower Fox River Basin</u>		
LF02 Apple & Ashwaubenon Creeks Watershed	The Apple & Ashwaubenon Creeks Watershed is 113 square miles in size. Approximately 60 percent lies within Outagamie County and 40 percent is located in Brown County. There are 171 miles of named and unnamed streams in the watershed, all of which empty into the Fox River. Land use in the watershed is primarily agriculture and residential, though industrial areas do exist in the urban areas of Green Bay and the north side of Appleton.	All or portions of the creeks in the Apple & Ashwaubenon Creeks Watersheds are impaired due to phosphorus and sediment. The waters are currently under the Lower Fox Basin TMDL that was approved in 2012.
LF03 Plum & Kankapot Creeks Watershed	The Plum and Kankapot Creeks Watershed is 84 square miles in size. The watershed occupies the following counties; Calumet, Outagamie, Brown, and Winnebago County. There are 92 miles of named and unnamed streams in the watershed, all of which empty into the Fox River. Land use in the watershed is primarily agriculture.	Both Plum and Kankapot Creeks are listed as impaired due to sediment and phosphorus. The waters are currently under the Lower Fox Basin TMDL that was approved in 2012. In 2014, Plum and Kankapot Creeks subwatersheds were inventoried for the development of a 9 Key Element subwatershed plan by Outagamie County Land Conservation in cooperation with Brown and Calumet County Land Conservation Departments. Based on inventory results cropland erosion and runoff along with extensive stream bank erosion on both Plum and Kankapot Creeks were identified as contributing to the majority of the sediment and phosphorus loading in the watersheds.
LF04 Fox River/Appleton	The Fox River/Appleton Watershed includes a 39 square mile area of land in Winnebago County and south-central Outagamie County. This includes the city of Appleton. There are two municipal point source dischargers and four industrial point source dischargers in the Outagamie County portion of the watershed: City of Appleton, Heart of the Valley Metropolitan Sewerage District, Anchor Food Products, Foremost Farms USA Coop Appleton (2	In 1992 a watershed assessment was conducted by WDNR to determine the impacts of nonpoint source pollution on water quality. The Fox River/Appleton Watershed was ranked high priority for streams. The main tributary to the Fox River is Mud Creek and many unnamed tributaries. The headwaters were mainly agricultural and are rapidly becoming developed by industrial parks. This, of course, results in large increases of stormwater velocities to these streams.

## Outagamie County, Wisconsin

### Comprehensive Plan 2040: The Shared Path Forward

	facilities) and Thilmany Division International Paper.	Construction of these new businesses also creates large erosion problems and heavy doses of sediment to the streams. Both Mud Creek and the Lower Fox River are listed as impaired due to sediment and phosphorus. The waters are currently under the Lower Fox Basin TMDL that was approved in 2012.
LF05 Duck Creek Watershed	The Duck Creek Watershed, approximately 152 square miles in surface areas, lies within Outagamie County (67%) and Brown County (33%). Land use in upstream portions of the watershed is predominately agricultural while downstream areas are dominated by residential and urban uses in and near metropolitan Green Bay. Duck Creek originates in Burma Swamp, a large wetland (approximately 2,000 acres) located in central Outagamie County. A total of 71 miles of named and unnamed streams are located in the watershed and all enter Green Bay at or near the mouth of Duck Creek.	Duck Creek is classified as a continuous, warm water sport fishery for most of its length. The upper reaches are classified as continuous warm water forage fish waters that only partially meet their resource potential because of degraded water quality and habitat. If water quality improves due to nonpoint source pollution management, the fishery of the lower reaches would improve, and the downstream water quality of lower Green Bay would benefit. Trout Creek supports a warm water forage fishery, including a threatened species, Redside Dace. The Trout Creek mainstem is well buffered by woodlands with few nonpoint source problems. The headwaters, however, originate in agricultural areas and water quality would improve with corrective action taken. Trout Creek is also impaired for total phosphorus and total suspended sediment and currently has a TMDL that was approved in 2012.
<u>Upper Green Bay Basin</u>		
GB01 Suamico & Little Suamico Rivers Watershed	The Suamico and Little Suamico Rivers Watershed includes a 172 square mile area of land in the counties of Brown, Oconto, Shawano, and Outagamie. Only a small portion (approximately 14 square miles) of the watershed lies within the Northeast corner of Outagamie County. The Suamico and Little Suamico Rivers drain directly to the Bay of Green Bay.	Land use in the Outagamie County portion of watershed is primarily agriculture. The Suamico and Little Suamico Watershed is ranked high priority for streams. The DNR has determined that nonpoint source pollution has had a negative impact on the water quality within this basin.
Source: Outagamie County Land & Water Resources Management Plan 2018 and Outagamie County Land & Water Resources Management Plan 2015.		

Table 17: Outagamie County Lakes

Lake	Location	Type	Acres	Max. Depth	Fish Species
Allerton	Town of Bovina	Pothole	3	17'	Panfish
Black Otter	Village of Hortonville, Town of Hortonia	Impoundment	78	9'	Largemouth bass, northern pike, panfish
Blueberry	Town of Bovina	Bayou	1	21'	Undetermined
Mosquito Hill	Town of Liberty	Bayou	3.8	Undetermined	Undetermined
Oneida	Oneida Indian Reservation	Impoundment	12	Undetermined	Undetermined
Shaky	Town of Dale	Pothole	11	Undetermined	Undetermined
Squaw	Town of Dale	Pothole	7	Undetermined	Undetermined
Source: Wisconsin Lake Link, 2019					



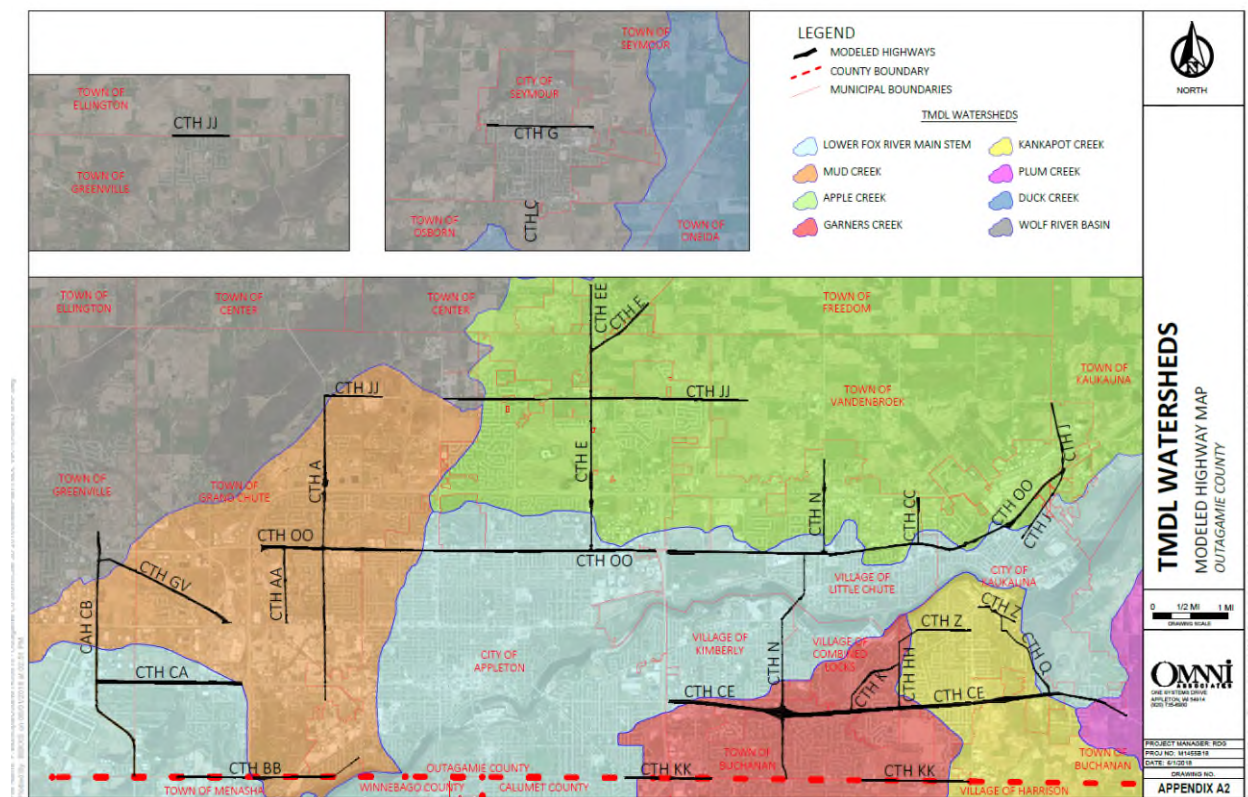
## MS4/TMDL Requirements

Municipal MS4s (municipal separate storm sewer systems) in Outagamie county are required to do stormwater planning and implement stormwater practices that improve the water quality and manage the quantity of stormwater runoff resulting from impervious surface (e.g. parking lots, roofs, streets, etc.). Outagamie County maintains an MS4 permit that covers county highway right-of-way within primarily the urbanized area. Reconstructions or improvements made within an MS4 must meet water quantity and quality standards when addressing stormwater runoff. Quality standards are driven by TMDL requirements for particular watersheds. The following map depicts the county's MS4 highway right-of-way as well as corresponding TMDL watersheds.

### TMDL

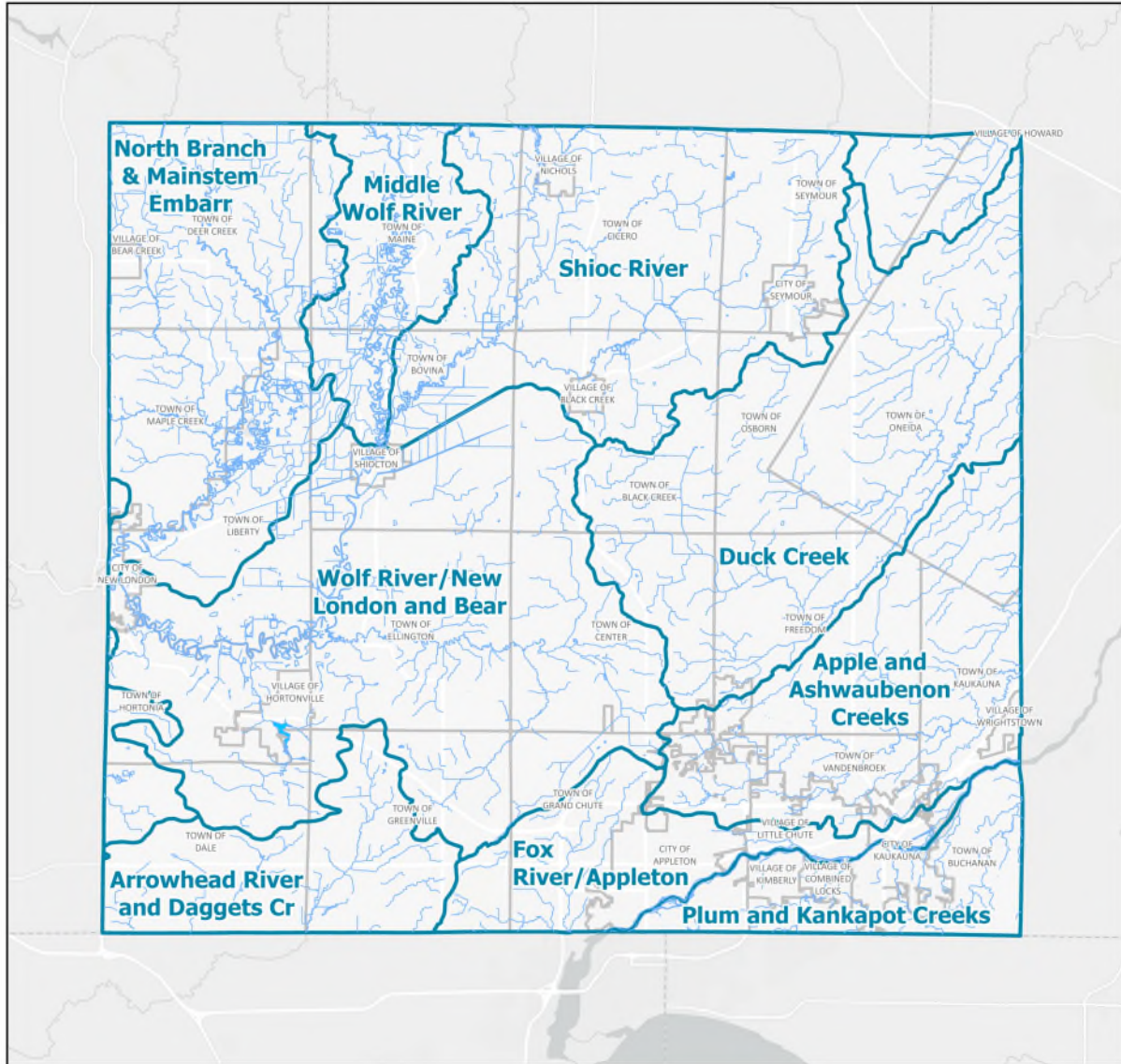
Section 303(d) of the Clean Water Act requires all states to develop Total Maximum Daily Loads (TMDL) for waters on the Impaired Waters List. A TMDL is the amount of pollutant a waterbody can receive and still meet water quality standards. Computer models are used to calculate pollutants loads for a watershed based on water quality monitoring, topography, land use, climate, soil types, and current management practices. A TMDL considers both waste load allocation (point sources) and load allocation (nonpoint sources) along with a margin of safety.

Source: OC LCD. Land & Water Management Plan, 2018.



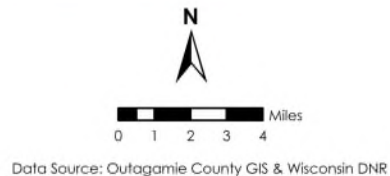
Outagamie County MS4 Map for County Highway ROW & Corresponding TMDL Watersheds. 2018 MS4 Report.

**MAP #: 6** Watersheds, Streams and Lakes



**Legend**

- Navigable Streams
- Black Otter Lake
- DNR Watershed Boundaries





## Groundwater Resources<sup>78</sup>

The major sources of groundwater aquifers in Outagamie County are the St. Peter Sandstone of Ordovician age and the Sandstones of the Upper Cambrian Series. Where they are sufficiently thick, glacial sand and gravel are an important source of groundwater. Groundwater in the county is under water table and artesian conditions. The source of the groundwater is precipitation that falls on the surface and infiltrates downward into the underlying materials. Regional movement of the groundwater in the eastern third of the county is controlled by the bedrock structure, and the discharge is toward the east and south. Throughout the rest of the county, the movement of water is controlled mainly by bedrock and surface topography, and the water moves toward streams and bedrock valleys. The groundwater level is usually not far below the surface, generally less than 100 feet. In the northwestern quarter of the county, groundwater is mostly within 20 feet of the surface. A depiction of areas with high groundwater can be found in Map 14: *High Groundwater & Bedrock*, found within the Land Use profile.

Arsenic is known to naturally occur in groundwater throughout Outagamie and Winnebago Counties due to their unique bedrock geology. Beginning in 2004, Wisconsin DNR requires that all new wells must be constructed with well casing required to certain depths. The goals for the “Special Well Casing Depth area” are to:

- Allow for the construction of wells that will withdraw groundwater from aquifers that contain water with low concentrations of arsenic.
- Specify the use of well construction methods that eliminate the introduction of oxidants in the aquifer systems.
- Specify grouting methods that provide a dense, competent and impermeable annular space seal for the casing pipe.<sup>79</sup>

### Arsenic

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

WDNR publishes minimum casing requirements maps on a town by town basis, and Outagamie County integrates these depths into the county GIS system.

## Wetland Resources<sup>80</sup>

Wetlands occupy about 19 percent of the land area of the County. This acreage includes those areas that are very sparsely wooded, inland shallow fresh marshes, inland deep fresh marshes, shrub swamps, and bogs. It does not include those areas considered wet soils, which have been drained for agricultural use or used without drainage as pasture. These wet soils may produce such crops as agricultural row crops, mint, lawn sod and vegetables.

<sup>78</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

<sup>79</sup> Excerpted from WDNR Website, 2019. <https://dnr.wi.gov/topic/Groundwater/arsenic/casingRequirements.html>

<sup>80</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

In addition to providing habitat for fish, waterfowl, and other wildlife species, the remaining wetlands are important for the recharge of aquifers and the protection of groundwater quality. They are extremely efficient at trapping and filtering out nutrients and sediments contained in runoff and they provide highly effective flood storage areas. A depiction of state-mapped wetlands can be found in Map 15: *Sensitive Areas*, found within the Land Use profile.

## Woodland Resources<sup>81</sup>

Outagamie County was entirely forested before settlement took place. The northern part was mainly mixed conifer-northern hardwood forest and the southern part, as well as areas extending north in the center of the county, was a central hardwood forest. Scattered low areas were covered with various sedges, grasses, willows, and tag alder. At present the forests of Outagamie County occupy about 112,541 acres or approximately 26 percent of the total land acres. Of the timber types present, swamp hardwoods are the predominate type. This type, along with northern hardwoods and oak/hickory comprise the majority of commercial forests in the County. Although the woodland acreage of the County is relatively small, it provides a considerable source of timber and related products for private use. The woodlands are also very important in terms of providing habitat for a variety of wildlife species. More importantly, from an agricultural perspective, are the soil conservation benefits from wind and water erosion reduction.

## Wildlife Resources<sup>82</sup>

Although many types of native wildlife populations suffered as European settlers continued to change the landscape of Wisconsin, others actually increased. They thrived in the habitats, which farming and logging provided. White-tailed deer populations in the thick northern forests remained low during the logging heyday because of intense exploitation. As the forests re-generated with lush, young growth and as early farming provided a good mix of field and forest, the deer numbers swelled. When central Wisconsin farms grew perennial crops of bluegrass as a seed source, prairie chickens thrived. But it wasn't long before these habitats were altered and the prairie chicken populations dropped. Still other wildlife, such as crows, blackbirds, and alien house sparrows, starlings, and rodents prospered all too well by their association with people. Hunters and early conservationists began noticing the exploitation of Wisconsin's natural resources around the 1870's. They slowly worked toward regulating the use of natural resources as they enacted laws to protect wildlife populations and woodlands. Wildlife management was considered increasingly necessary since people had greatly altered natural landscapes, but the needs of wildlife frequently conflicted with many human land uses. Efforts to restore some populations of extirpated wildlife were undertaken throughout the 1900's by reintroducing them into their former haunts. Some successful attempts at restocking include the wild turkey, trumpeter swan, American (pine) marten and fisher.

---

<sup>81</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

<sup>82</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

---

### Threatened and Endangered Species<sup>83</sup>

In 1985, Wisconsin's Natural Heritage Inventory (NHI) program was established by Wisconsin legislature in part of an international network of inventory programs. The program is responsible for maintaining data on locations and status of rare species, natural communities, and natural features throughout the state. The WDNR Bureau of Endangered Species maintains a list of the rare species, natural communities, and natural features at the town-range level that can be found on the organization's website. According to this list there are two species, the Karner Blue Butterfly and Snuffbox, on the federally endangered species list that have been documented in Outagamie County. The Henslow's Sparrow, Black Tern, and Salamander Mussel also documented in the county are on the federal list of species of concern. Outagamie County is also home to several other rare species of birds, plants, reptiles, fish, mammals, and insects.

In addition to the plant and animal species listed in the NHI, Outagamie County contains several important natural community types that may provide critical habitat for rare, threatened, and endangered species. These natural communities include: Northern Dry Forest, Northern Mesic Forest, Northern Sedge Meadow, Northern Tamarack Swamp, Northern Wet Forest, Northern Wet-mesic Forest, Open Bog, Southern Dry-mesic Forest, Southern Hardwood Swamp, Southern Mesic Forest, Wild Rice Marsh, Alder Thicket, Emergent Marsh, Floodplain Forest, Hardwood Swamp, and Black Spruce Swamp.

### Invasive and Exotic Species<sup>84</sup>

An invasive species is a non-native species that can become capable of establishing a native population and whose introduction causes or is likely to cause economic or environmental harm. This includes any viable life stages or parts of the plants that could aid in dispersal of these species of plants, animals, and pathogens, none of which are native to the state of Wisconsin. They are capable of causing extreme environmental problems. Without the checks and balances of the predators and diseases left behind in their native ecosystems, they out compete our native species for food, water and light. This can cause an imbalance in the ecosystem and permanently alter the function of the ecosystem that is under attack. Invasive species known to exist in Outagamie County include Emerald Ash Borer, Garlic Mustard, Zebra Mussel, Rusty Crayfish, Round Goby, Reed Canary Grass, and Buckthorn, among others.

---

<sup>83</sup> Excerpted from: Outagamie County Land & Water Resources Management Plan 2018.

<sup>84</sup> Source: Calumet County website, 2019.

## XII. Cultural Resources Profile

### Introduction

There is a strong and growing awareness in Outagamie County of the need to ensure that places of significance are preserved for the enjoyment of future generations. Historic, archeologically, or architecturally important sites help foster a feeling of pride and identity in one's community. These places enhance quality of life and provide cultural continuity between the past, present, and future. Outagamie County's inventory of cultural resources is varied. It includes structures and places with historic significance as well as cultural contributions from a diverse resident population. It grows with each new discovery from the past and the addition of new residents and the cultural practices they bring. The resources described in this chapter provide economic benefits to County and its residents through tourism and increases in property value.

### Archaeological Resources

Outagamie County has hundreds of known archeological sites, with many more remaining to be discovered. These sites are important historical and educational resources that lead to a better understanding of this area's past.

An archaeological site is a place in which the evidence of past activity is preserved. They include prehistoric, historic, contemporary resources that have been, or may be, investigated and included as part of the archaeological record. They may range from those with few or no remains visible above ground, to buildings and other structures still in use.

The State Archaeology and Maritime Preservation Program (SAMPP) is part of the Wisconsin Historical Society. SAMPP maintains a database of the location and nature of archaeological sites and areas that have been systematically investigated for archaeological sites. The State Historic Preservation Office is the official state repository for collecting, managing and preserving information about historic buildings, archaeological sites, burial sites, and archaeological surveys in Wisconsin. It is estimated that nearly 80% of the archaeological sites that once existed in the state have been destroyed or severely damaged, by farming, land development, and looting. To protect sites and landowner rights, the locations of known and suspected places of archaeological significance are exempt from public disclosure. A license is required to access available data via the Wisconsin Historic Preservation Database.<sup>85</sup>

Table 18: Geological Resources of Outagamie County

Name	Location	Geological Significance
Duck Creek Esker	Parallel to County Highway "E" in the Towns of Freedom and Oneida	Lurid Esker
Mosquito Hill	Two miles southeast of New London in Town of Liberty	Bedrock Outlier & Oxbow Lakes
Duck Creek Bedrock	Six miles northeast of Appleton in the Town of Freedom	Bedrock exposure in stream bed

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

<sup>85</sup> Excerpted from General Services Administration National Register of Historic Places website, 2019.

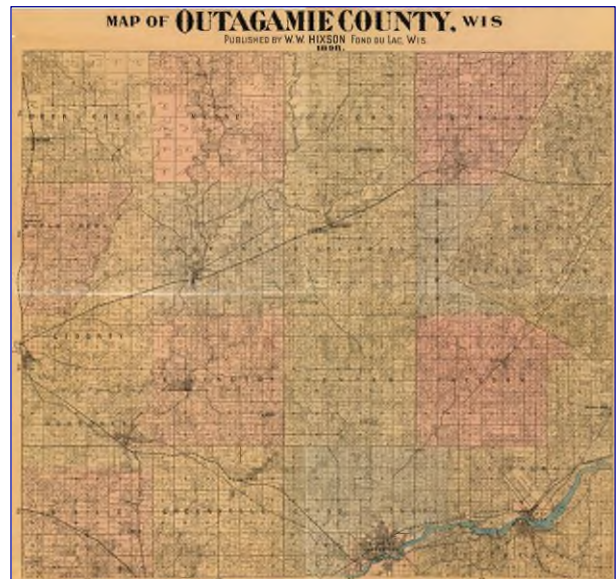
Table 19: Ecological Resources of Outagamie County

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

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

## Cultural & Historic Resources

- As of 2019, 235 properties in Outagamie County are listed in the Wisconsin Historical Society Architectural History Inventory
- Official Historical Markers in the County include: First Electric Street Railway (City of Appleton), World's First Hydroelectric Central Station (Appleton), South Greenville Grange #225 (Town of Greenville) Revolutionary War Veterans (City of Kaukauna), Treaty of the Cedars (Village of Little Chute), and Birthplace of the American Water Spaniel (City of New London)
- Aside from English, the most common languages spoken in Outagamie County are Spanish or Spanish Creole (5,489 speakers), Hmong (3,192), and German (414)<sup>86</sup>



1898 Map of Outagamie County, Courtesy Wisconsin Historical Society

### National Register of Historic Places<sup>87</sup>

The National Register of Historic Places is the official list of our country's historic buildings, districts, sites, structures, and objects worthy of preservation. It was established as part of the National Historic

<sup>86</sup> Source: US Census Bureau, 2017.

<sup>87</sup> Excerpted from General Services Administration National Register of Historic Places website, 2019.











## Outagamie County, Wisconsin






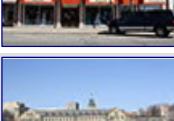





### Comprehensive Plan 2040: The Shared Path Forward

Preservation Act of 1966 and is overseen by the National Park Service. The National Register recognizes more than 90,000 properties for their significance in American history, architecture, art, archeology, engineering, and culture.

As of 2018, there are 49 places in Outagamie County listed on the National Register, including an osprey site listed in 1998. One former listing, the Volksfreund Building located on College Avenue in Appleton, was demolished following a 1981 fire.

Table 20: Outagamie County Listings on National Register of Historic Places

Name	Location	Description	Image
Appleton City Park Historic District	C. Appleton	A mostly residential historic district in Appleton containing 141 contributing properties built from 1867 to 1949. It was added to the National Register in 2002 for its architectural significance.	
Appleton Locks 1–3 Historic District	C. Appleton	A historic district located partly in Appleton added to the National Register in 1993 for its significance in transport and engineering. The district includes three locks on the Lower Fox River: Lock 1 in the Lower Fox River Valley, west of Oneida Street in the City of Appleton, at the river's 31.7 mile marker; Lock 2 at the 31.5 mile marker in Appleton; and, Lock 3 at the 31.3 mile marker in Appleton.	
Appleton Lock 4 Historic District	C. Appleton	A historic district containing a 1907-built waterway lock added to the National Register in 1993 for its significance in engineering and transport.	
Appleton Wire Works	C. Appleton	Was the largest wire-weaving company in the United States before it was sold in 1968. It was added to the National Register in 2008 for its industrial significance. The building now houses an apartment complex.	
Appleton Woolen Mills	C. Appleton	A Mill complex on the Fox River, begun in 1881 as a yarn factory, and expanded to produce mackinaws and flannels in 1888. Expanded to make papermakers' felt in 1890 and continued that until 1969. Added to the National register in 2016.	
Barteau Bridge	T. Bovina	The bridge, also known as Shioc Road Bridge, is a four-arch limestone arch bridge in built during 1905-06. It was added to the National Register in 2002 for its engineering significance.	
Merritt Black House	C. Kaukauna	A two-story Queen Anne built in 1898 along the Fox River, Merritt Black House was added to the National Register in 1984.	
Norman Brokaw House	C. Kaukauna	The 2-1/2 story house was built around 1886. Brokaw built and operated paper mills in Kaukauna and helped found a Methodist congregation there. The house was added to the National Register in 1984 for its industrial significance.	

Cedar Lock Dam and Historic District	V. Little Chute	The lock took its named from the Treaty of the Cedars. In 1993 the district was added to the National Register in 1993 for its significance in engineering and transport.	
Center Valley Grade School	T. Center	A museum and former one-room school added to the National Register in 2011.	
College Avenue Historic District	C. Appleton	The 7-acre historic district was listed on the National Register in 1982. It includes 27 buildings and one object (Soldiers Square Civil War Monument) deemed to contribute to the historic character of the area.	
J. B. Courtney Woolen Mills	C. Appleton	Textile manufacturing mills on the Fox River originally owned by the Kelley family and was purchased by the Courtney family in 1904. Afterwards, the company changed its name from Kelley Knitting Company to J. B. Courtney Woolen Mills. The mills were added to the National Register in 1993 for their industrial and architectural significance.	
Fargo's Furniture Store	C. Kaukauna	A specialty store It was added to the National Register for its architectural significance in 1984.	
Fox River Paper Company Historic District	C. Appleton	Now known as the Historic Fox River Mills, a complex of paper mill buildings built between 1883 and 1915. The district includes the Romanesque-styled Ravine/Rag Mills, the Italianate-styled Lincoln Mill, and the Italianate-styled Fox River Mill. The site was listed in the National register in 1990 and is now used as apartments.	
Free Public Library of Kaukauna	C. Kaukauna	Affiliated with the Outagamie Waupaca Library System, it was added to the National Register in 1984 for its significance in education and community planning and development.	
William and Susanna Geenen House	V. Kimberly	An American foursquare house designed by noted German-born architect Henry Wildhagen, the house was added to the National Register in 1993 for its architectural significance.	
Greenville State Bank	T. Greenville	The small brick commercial bank built in 1919 and added to the National Register in 1982.	
Charles A. Grignon House	C. Kaukauna	Added to the National Register in 1972, this 2.5 story Federal-style house was built in 1836. It served as an inn, church, trading post, and Indian meeting place. Now a museum.	
Hearthstone Historic House Museum	C. Appleton	Now a museum, on September 30, 1882, it became the first residence in the US powered by a centrally located hydroelectric station using the Edison system. At that time, the house was the residence of Henry James Rogers, a paper company executive and entrepreneur. It was listed on the National Register on December 2, 1974.	



## Outagamie County, Wisconsin







### Comprehensive Plan 2040: The Shared Path Forward

Holy Cross Church	C. Kaukauna	A Neogothic/Romanesque church built in 1916, it was listed on the National Register in 1984.	
Hortonville Community Hall	V. Hortonville	Designed by Robert Messmer in the Spanish Colonial style and built in 1912, the structure has been used a meeting hall, dance hall, and opera house. It was listed on the National Register in 1981 and on the State Register of Historic Places in 1989.	
Kaukauna Locks Historic District	C. Kaukauna	A lock and dam system that carried boat traffic around a rapids of the Fox River starting in the 1850s as part of the Fox-Wisconsin Waterway. It was added to the National Register in 1993 for its significance in engineering and transport.	
Klein Dairy Farmhouse	C. Kaukauna	A historic house located at 1018 Sullivan Avenue, it is locally significant as one of the best local examples of the popular Queen Anne style and as the surviving farmhouse of the first dairy in Kaukauna. Listed on the National register in 1988.	
Joseph Kronser Hotel and Saloon	T. Greenville.	The 1897 hotel was built with 5 bedrooms to serve travelers on the railroad. It also housed a railroad ticket office, barber shop, bus stop, and funeral parlor, and served as a community meeting place. It was added to the National Register in 1984.	
Kuehn Blacksmith Shop-Hardware Store	C. Kaukauna	The Brick Romanesque Revival structure was built in 1891. It was added to the National Register in 1984 for its architectural significance.	
Lindauer and Rupert Block	C. Kaukauna	The 3-story Romanesque Revival commercial building was constructed in 1895, during the railroad boom. It was added to the National Register in 1984 for its significance in commerce and architecture.	
Little Chute Locks and Canal District	V. Little Chute	Navigation canal with locks, fed by a 561-foot concrete dam, and supported by other miscellaneous structures, was initially built around 1850 and upgraded at various times since. The district was listed on the National Register in 1993.	
Main Hall – Lawrence University	C. Appleton	The large 4-story Georgian-styled limestone-clad building was constructed in 1853. It housed men's dormitory, classrooms, offices, library and chapel. The structure was listed on the National Register in 1974.	
Julius J. Martens Company Building	C. Kaukauna	An Italianate-styled store built in 1901 with retail space on first floor and elegant apartments on the second, it was added to the National Register in 1984 for its significance in commerce and agriculture.	
History Museum at the Castle	C. Appleton	Built by the local Masonic Blue Lodge in 1923, in Neo-Norman style, it is now known as the History Museum at the Castle / Harry Houdini museum. In 2018 the museum was a recipient of the 2018 National Medal for Museum and Library Service, the highest honor given to a museum or library in the United States. It was listed in the National Register in 1985.	

Capt. Matthew J. Meade House	C. Kaukauna	The 1884 Italianate villa with a 3-story square tower was added to the National Register for its industrial significance in 1984.	
Nicolet Public School	C. Kaukauna	Designed by local architect Phillip Deane in the Romanesque Revival style and built in 1891, the school was named for Jean Nicolet, the French missionary who visited the area in 1634. It was added to the National Register in 1984 for its architectural significance.	
George Peters House	V. Black Creek	The 1.5 story brick home combines Bungalow and Colonial Revival styles. It was constructed in 1909 and was added to the National Register in 1987	
Rapid Croche Lock and Dam Historic District	V. Wrightstown	A one hand-operated lock, 461-foot concrete dam, and 1907 Colonial Revival lock keeper's house initially built in the 1850s. The district was listed in the National Register in 1993.	
Henry Schuetter House	C. Appleton	The 2.5-story Queen Anne house built in 1890 and added to the National Register in 1996.	
Frank St. Andrews House	C. Kaukauna	A 1911 stucco-clad bungalow with leaded stained glass windows largely intact oak-trimmed interior, it was added to the National Register for its architectural significance in 1984.	
St. Mary's Catholic Church	C. Kaukauna	The Neogothic Revival church with cruciform floor plan was designed by Adolphus Druiding and built in 1898. It was added to the National Register in 1984 for its significance in architecture and community planning and development.	
St. Paul Evangelical Lutheran Church	C. Appleton	The large Neogothic style church was constructed in 1907. It was added to the National Register in 2008 for its architectural significance.	
South Greenville Grange No. 225	T. Greenville	Meeting hall of the local chapter of the Grange, a national farmers' organization. The 2-story brick building also served as a general community center and was listed on the National Register in 2018.	
Charles W. Stribley House	C. Kaukauna	The elegant 3-story Tudor Revival house facing the Fox River was designed by Van Ryn & DeGelleke and built in 1910. It has a red tile roof, stained glass windows, marble thresholds, and a 175-year-old hand-carved fireplace, yet also an early central vacuum system and telephone intercom. It was added to the National Register for its architectural significance in 1984.	
Temple Zion and School	C. Appleton	A Stick-style synagogue built by the local Jewish community in 1883, one of the earliest in Wisconsin. Harry Houdini's father, Rabbi Mayer Samuel Weiss, helped plan the temple. In 1978, the temple and school were added to the National Register.	

## Outagamie County, Wisconsin

### Comprehensive Plan 2040: The Shared Path Forward

James Tompkins House	C. Appleton	The Italianate home with grout block exterior was constructed in 1868 by James Tompkins, a pioneer farmer from who founded the Empire Soap Company. The house was listed on the National Register in 1986.	
Former United States Post Office	C. Kaukauna	The brick post office built in the Neoclassical style around 1936 was designed by Louis A. Simon. It was added to the National Register in 1992 for its significance in politics, government and architecture.	
Washington School	C. Appleton	The large red-brick hip roof school built in 1895 in Richardsonian Romanesque style was listed on the National Register in 1984.	
West Prospect Avenue Historic District	C. Appleton	Residential district with 8 homes including the 1873 Mediterranean Revival Goff house, the 1902 Shingle style Bertchy house, the 1903 Colonial Revival Wolf house, the 1910 Prairie style Plank house, and the 1927 Tudor Revival Schommer house. The district was added to the National Register in 2001.	
John Hart Whorton House	C. Appleton	Victorian brick house with 3-story corner tower designed in the Italianate style and built in 1870. Listed on the National Register in 1974.	
Zion Lutheran Church	C. Appleton	A large Gothic-Revival-style church built by Lutherans in 1902. It was added to the National Register in 1986 for its architectural significance.	

Source: National Register of Historic Places, 2019.

---

## XIII. Utilities & Community Facilities Profile

### Introduction

The long-term well-being of Outagamie County is dependent, in part, upon the adequacy of public utilities, community facilities, and municipal services. They provide a necessary foundation providing the means by which municipalities serve the needs of their constituents. As the population grows so too will the demand for services, facilities, and utilities.

### County Parks & Recreation Areas<sup>88</sup>

- ✦ *Plamann Park* has 257 acres of scenic hills and trails. The park is located north of Appleton, WI between N Meade St and N Ballard Rd. The park provides many recreational opportunities such as sledding, cross country ski trails, hiking trails, disc golf course, children's farm, swim lake, event shelters, baseball diamonds and more.
- ✦ *Barker Park* is a 29-acre facility located along the west side of the Wolf River, a short distance south of the Village of Shiocton. The park contains a boat launch and parking for up to 75 vehicles, picnic tables and grills, and a well with a pump. Barker Park is one of four county-owned facilities with access to the Wolf River. The vast majority of this site is maintained as woodland, which provides for excellent wildlife habitat.
- ✦ *Mosquito Hill Nature Center* is located on nearly 440 acres east of the City of New London and is the largest recreational facility owned by Outagamie County. The main building houses a small gift shop and wildlife exhibits. It also hosts regular seminars and demonstrations on wildlife, travel, and the environment. An extensive system of trails provides visitors with access to a large portion of this facility. Parking is available for approximately 60 vehicles. A pre-glacial remnant exists on this land making it a resource for geological study.
- ✦ *View Ridge Park* is located on 36 acres east of the City of New London just northeast of Mosquito Hill. Once a downhill ski facility, it has been inactive for a number of years. The site is available for overnight camping for non-profit groups and organizations, such as the Boy Scouts or Girl Scouts and groups associated with Mosquito Hill. The park lacks restrooms, water and electricity.
- ✦ The *Wolf River Nature Area* encompasses 24 acres of land within the Village of Shiocton along the Wolf River. It is intended to remain a passive learning and recreation area. Local schools use the site for outdoor education and nature study.
- ✦ The *Pet Exercise Area* encompasses approximately ten acres of land at the northeast corner of CTH OO and French Road. This unique facility offers a fenced area for the purpose of providing room for household pets to run. Situated on excess landfill property, the park is very popular

---

<sup>88</sup> Source: Outagamie County Land & Water Resources Management Plan 2018 and Outagamie County Comprehensive Plan, 2008

## Outagamie County, Wisconsin

### Comprehensive Plan 2040: The Shared Path Forward

---

and is being used by both resident and non-resident pet owners. Strategic Planning is underway to identify an alternative location for the Dog Park.

- ▲ *Buchman Access* is a six-acre parcel along the Wolf River, just north of Hortonville along County Highway M. It offers a public boat launch and a picnic area with parking for 25 vehicles and a small picnic area. This park is a popular destination for shore fishing.
- ▲ *Stephensville Access* is located approximately one mile west of the unincorporated community of Stephensville along the Wolf River adjacent to Highway S. It provides a boat launch, picnic area, shore fishing, parking for 10 vehicles with trailers.
- ▲ *Koepke Access* is located three miles north of Shiocton along the Wolf River abutting the Outagamie State Wildlife Area. This 5.5-acre site contains a boat launch, parking for 60 vehicles, and a small picnic area. Shore fishing opportunities are available.
- ▲ The *WIOUWASH Trail*, *NEWTON BLACKMOOR Trail*, and *County CE Trail* are further described in the Transportation Profile – Bicycle and Pedestrian facilities section.

#### Snowmobile Trails

Outagamie County has 295.3 miles of groomed snowmobile trails funded by snowmobiler registration fees. These trails are opened and closed when the Outagamie County Snowmobile Alliance determines that there is enough snow cover to provide a safe trail and to protect the property of the landowners that the trail crosses.

### State Recreational Resources<sup>89</sup>

The State of Wisconsin manages nearly 9,000 acres of outdoor recreational lands available for public use within Outagamie County. These wildlife and habitat areas include:

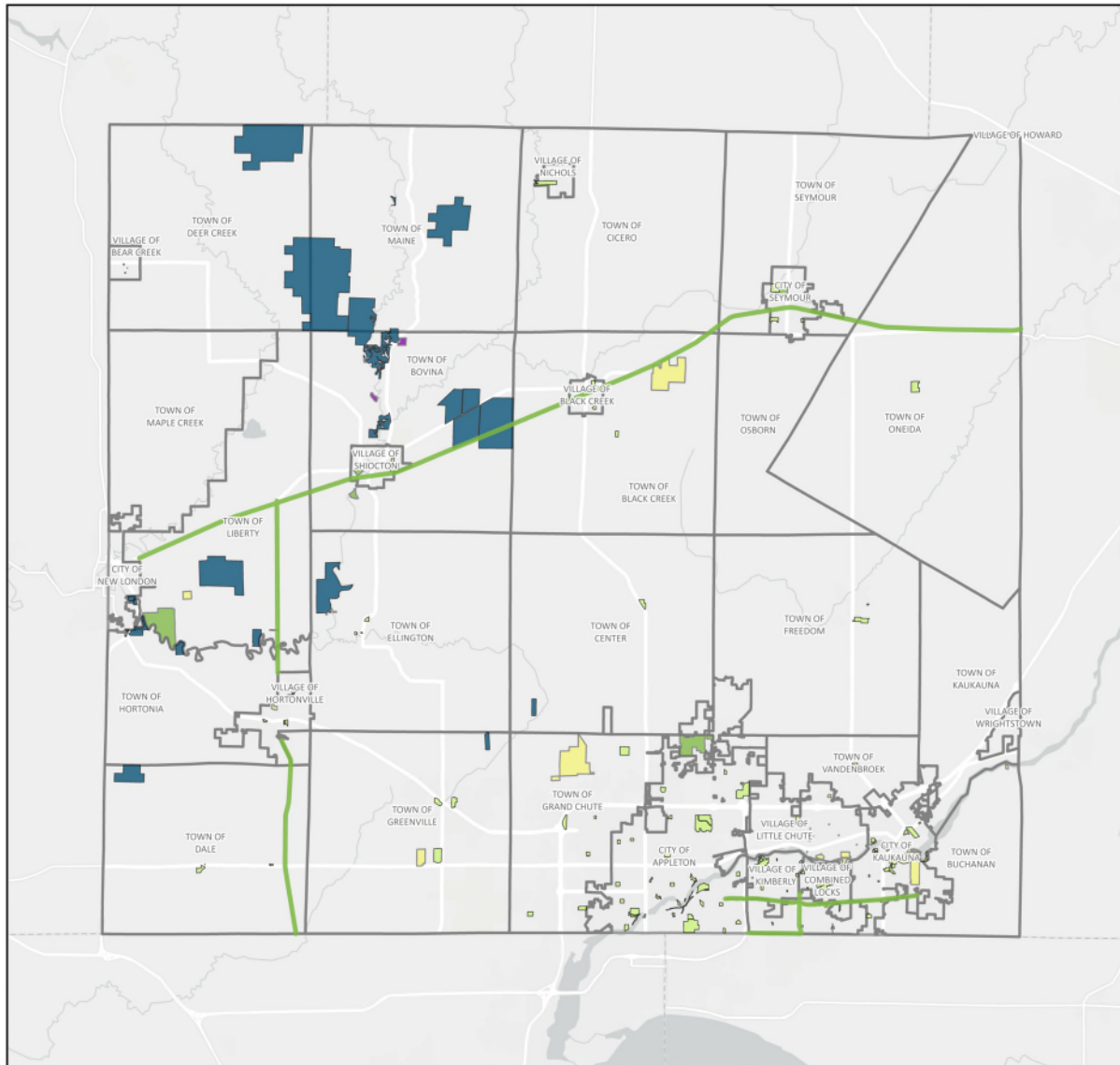
- ▲ *Deer Creek Wildlife Area*. Encompasses 1,295 acres in Outagamie County with an additional 200 acres in Waupaca County. Located in the northwest portion of the County, this area supports a large wildlife population, including deer and a variety of waterfowl.
- ▲ *Liberty Wildlife Area*. Located in west central Outagamie County, approximately two miles east of the City of New London, this 640-acre site is composed primarily of wooded wetland and tributaries of the Embarrass River.
- ▲ *Mack Wildlife Area*. Consists of 1,337 acres located along the south side of Highway 54 half way between the Villages of Black Creek and Shiocton. It offers excellent opportunities for wildlife viewing and is a popular spot to watch the swan migration during the spring of the year.
- ▲ *Maine Wildlife Area*. Also located in northwest Outagamie County, the Maine Wildlife Area consists of 720 acres of mostly wooded wetlands. This site includes tributaries to the Wolf River and a number of small ponds.

---

<sup>89</sup> Source: Outagamie County Comprehensive Plan, 2008.



**MAP #: 7** Parks and Recreation Areas



**Legend**

- Federal
- State Park & Rec Land
- County Parkland & Trails
- Municipal Park & Rec Land
- Other



0 1 2 3 4 Miles

Data Source: Outagamie County GIS

## Outagamie County, Wisconsin

### *Comprehensive Plan 2040: The Shared Path Forward*

---

- ▲ *Shaky Lake Wildlife Area* is located in the southwestern portion of the county in the Town of Dale. It encompasses 220 acres and includes Shaky Lake, a small (less than 2 acres in size) natural wilderness lake.
- ▲ *Spoehrs Marsh*. Located along the Wolf River, Spoehrs Marsh encompasses approximately 350 acres located two miles north of Shiocton in the Town of Bovina.
- ▲ *Wolf River Wildlife Area*. The Wolf River Wildlife Area is located in the Town of Hortonville along the south side of the Wolf River and, at 47 acres in size, is the smallest state recreational resource in the County.
- ▲ *The Wolf River Bottoms Wildlife Area*. One of newest additions to State's resources in Outagamie County is also the largest. This 2,495-acre site is located in the Towns of Deer Creek and Maine just north of the Village of Shiocton
- ▲ A Watchable Wildlife Area was created by the Wisconsin Department of Transportation in the Town of Bovina. This site is approximately 490 acres in size and is located immediately north of the Mack Wildlife Area, between Shiocton and Black Creek.

See Map 7: *Parks and Recreation Areas* appearing on the previous page, including the location of municipal and non-profit recreational lands.

### Water & Wastewater Treatment Facilities<sup>90</sup>

Municipal water supplies and wastewater treatment services are available within each of the County's incorporated municipalities and portions of the Towns of Buchanan, Dale, Freedom, Grand Chute, Greenville, and Ellington (wastewater only). The Oneida Nation provides municipal water to a number of areas within the Town of Oneida. The City of Appleton utilizes Lake Winnebago as its potable water source. All other municipalities draw from groundwater supplies via municipal or private wells. Private Onsite Wastewater Treatment Systems (POWTS) are required outside of municipal sewer service districts. The County issues sanitary permits for all POWTS.

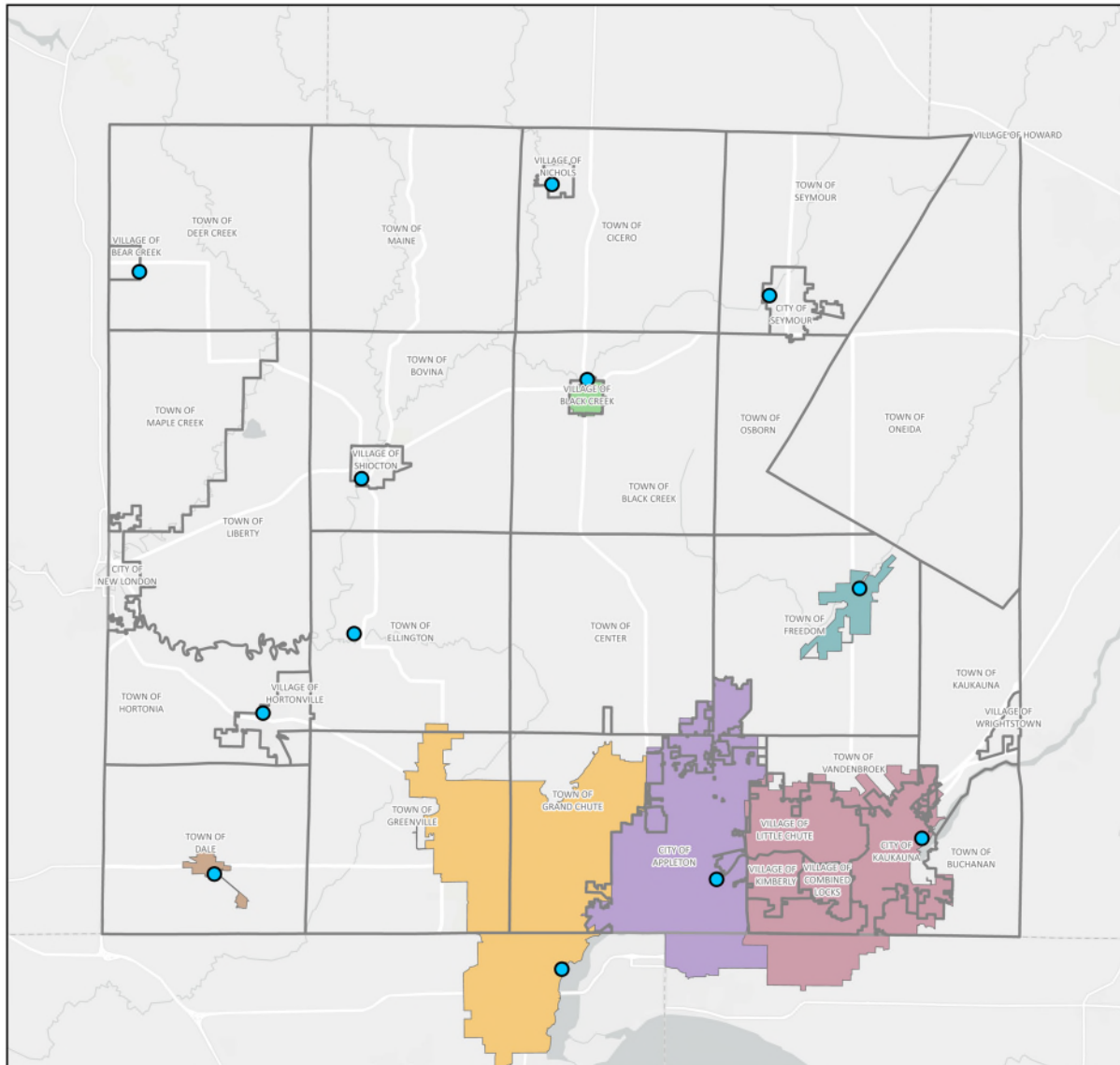
See Map 8: *Community Utilities* for a depiction of Sewer Service Areas and wastewater treatment plant locations.

---

<sup>90</sup> Source: Outagamie County Comprehensive Plan, 2008.



## MAP #: 8 Community Utilities



### Legend

Wastewater Treatment Plant



Sewer Service Area

- Appleton
- Black Creek
- Dale
- Freedom
- Grand Chute-Menasha West
- Heart of the Valley



Data Source: Outagamie County GIS & ECWRPC

## Solid Waste & Recycling<sup>91</sup>

Outagamie County Recycling & Solid Waste provides local residents and businesses with recycling and landfill disposal services, along with education, waste reduction and material reuse ideas, through the Tri-County Partnership. In 2007, Brown, Outagamie and Winnebago Counties signed an agreement to develop a single-stream recycling facility. The state-of-the-art Tri-County Recycling Facility, operated by Outagamie County Recycling & Solid Waste, was completed in 2009 and is one of the largest publicly owned and operated, single-stream recycling facilities in the United States. It is capable of processing up to 100,000 tons of material each year, leaving excess capacity for future expansion. The facility serves nearly 16% of the state's population.

The Outagamie County Landfill is located off I-41, between French and Holland Roads. The site encompasses 450 acres of existing and future landfill development potential. Brown, Outagamie and Winnebago Counties regionalized landfill operations in 2001. In 2012, Outagamie County became the host regional landfill with the creation of the Northeast Landfill. The facility services the needs of over 200,000 households and manages more than 500,000 tons of municipal solid waste. Additional long-term planning is underway to evaluate expansion of the landfill at the existing location. This could create an additional 15-30 years of capacity to serve the tri-county region.

Opened in March 2005, the Outagamie County Recycling & Solid Waste's transfer station was built to handle 600 to 700 tons per day of residential, commercial, industrial and construction solid waste. The 19,600 square foot facility is located on the same 450-acre site as the Tri-County Recycling Facility.

In 1984, Outagamie County was the first landfill in Wisconsin to re-use landfill gas (methane) by pumping it to a furnace that heated a service building. In 1991, Outagamie County built and operated a full-scale cogeneration system, pumping landfill gas to engines that produce electricity. The heat created from the engines is then used to heat the county highway building. In 2007, Outagamie County sold the co-gen facility to a private business. The electricity generated from the landfill gas is sold to WPPI (Wisconsin Public Power Inc.) and distributed through Kaukauna Utilities to nearby homes and businesses. Approximately 3,500 households can be serviced daily from the amount of electricity that is generated from our landfill sites.

## Utilities<sup>92</sup>

The primary supplier of gas and electric services in Outagamie County is WE Energies. WE Energies serves 2,262,000 customers in northeast Wisconsin and Michigan's Upper Peninsula. As of 2018, the company produced 6,127 megawatts of electricity from sources including coal (39.4%), natural gas (34.1%), purchased-nuclear (16.6%), purchased-natural gas (4.1%), renewables (2.9%), and oil (2.9%). Kaukauna Utilities, a publicly owned utility provides Electric Services to the City of Kaukauna, and portions of the Village of Little Chute, Combined Locks and other surrounding areas. The Fox Energy Center, located in the Town of Kaukauna, is a natural gas fueled electric generating unit that makes electricity for Wisconsin Public Service (WPS) customers. The plant is a combined-cycle generating facility capable of producing 620 megawatts.

---

<sup>91</sup> Excerpted from Outagamie County Recycling & Solid Waste website, 2019.

<sup>92</sup> Excerpted from WE Energies and FEC websites, 2019.

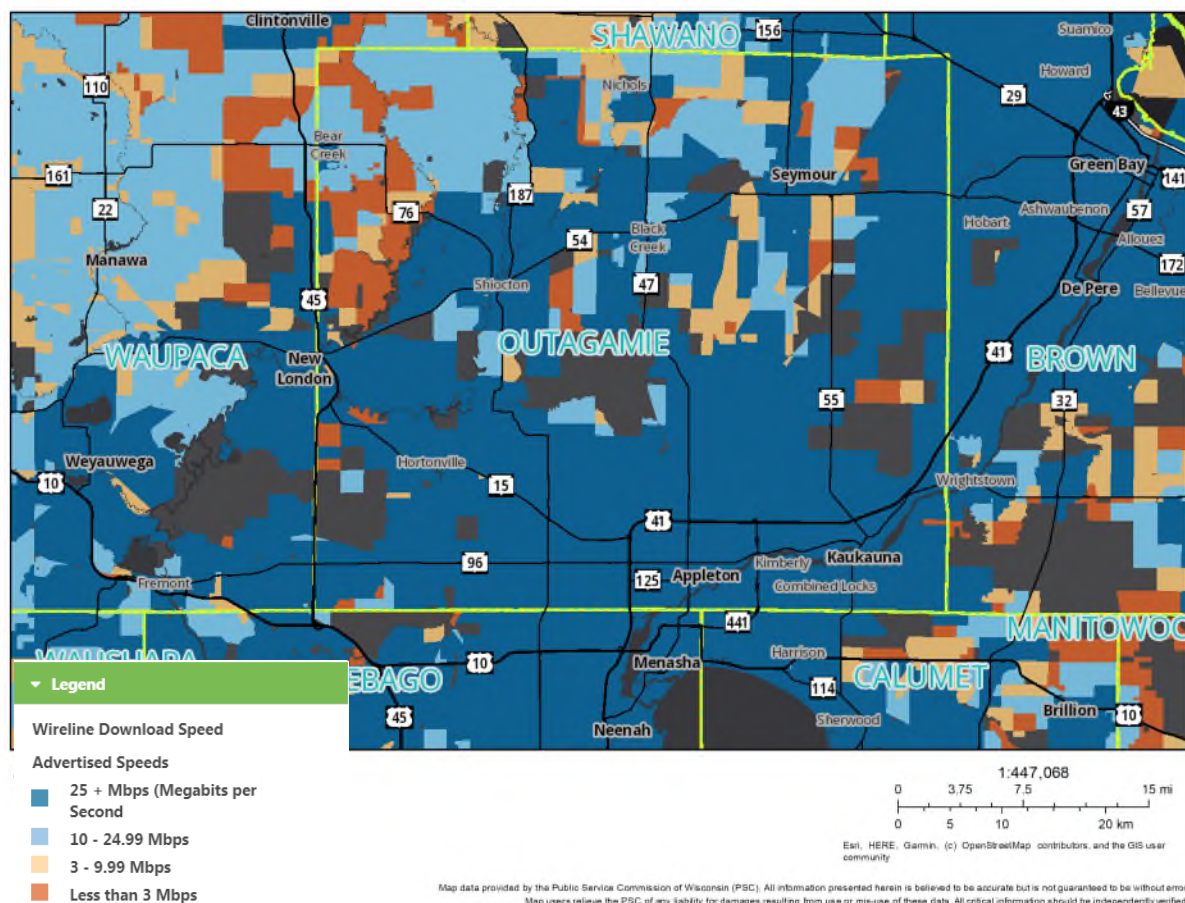
## Telecommunications<sup>93</sup>

Several private companies offer local and long distance telephone service to Outagamie County residents. AT&T provides telephone service to largest portion of the County, followed by CenturyTel Central, Frontier Communications, Northeast, and Century L-C. Mobile telephone services are available via a number of carriers.

### Broadband

Broadband internet service is generally believed to be sufficient in the southern, more urbanized area of the County. The central and northern portions of the County have limited to no high speed internet service. It is generally believed that Wisconsin Public Service Commission maps showing broadband service areas overestimate the rural areas that are actually served by broadband providers. Efforts are underway by the Wisconsin Counties Association and National Association of Counties to create better data to illustrate true gaps in coverage.

Outagamie Co. Broadband Map



<sup>93</sup> Source: Outagamie County Comprehensive Plan, 2008.

## Healthcare & Social Infrastructure

### Hospitals & Health Systems

Ascension Health and ThedaCare are among the many providers of healthcare services in Outagamie County. In addition to their many clinics, Ascension operates St Elizabeth Hospital, and ThedaCare operates ThedaCare Regional Medical Center-Appleton (formerly Appleton Medical Center) and ThedaCare Medical Center-New London (a critical access hospital), within Outagamie County.

Outagamie County operates Brewster Village, the only publicly-owned skilled nursing facility in the County. Brewster Village maintains 204 beds and provides both short term rehabilitation and long term nursing home services. Private and non-profit nursing home facilities also exist, primarily in the Fox Cities urban area, as depicted in Map 9: *Healthcare & Social Facilities* found on the next page.

### *Quickfacts on Healthcare*<sup>94</sup>

- ▲ As of 2012, 94.8% of Outagamie County's population had health coverage with 62.3% on employee plans, 10.1% on Medicaid, 10.6% on Medicare, 10.9% on non-group plans, and 0.923% on military or VA plans
- ▲ Between 2016 and 2017, the percent of uninsured citizens declined by 7.51%
- ▲ Per capita personal health care spending was \$8,702 in 2014, a 6.26% increase from the previous year
- ▲ Primary care physicians in Outagamie County, WI see an average of 1175 patients per year

### Childcare

Childcare is widely available within the Fox Cities and incorporated municipalities but less so in the unincorporated areas of the County. Map 9: *Healthcare & Social Facilities* illustrates the location of childcare facilities within the County.

## Public Health & Social Services<sup>95</sup>

The Outagamie County Department of Health & Human Services (OC-HHS) administers a variety of programs to aid residents including: the Aging & Disability Resource Center; Aging and Long Term Support; Child Support; Children, Youth, and Families; Mental Health; Public Health; and Youth and Family Services; among others. Outagamie County maintains [The Guide](#), which compiles all resources offered by OC-HHS.

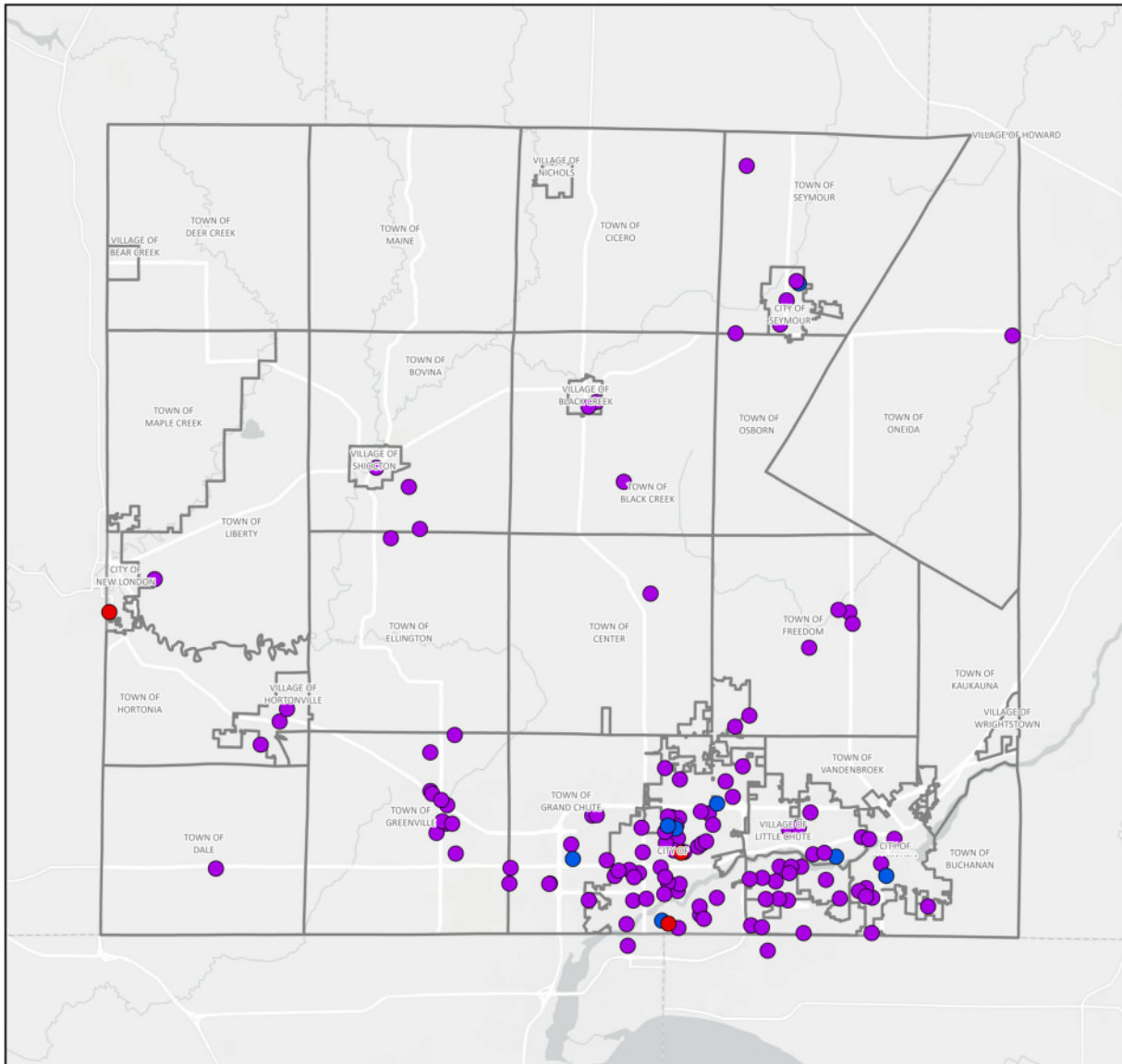
In addition, the City of Appleton provides public health services within their municipal boundaries.

---

<sup>94</sup> Source: US Census Bureau, 2017.

<sup>95</sup> Source: Outagamie County Health & Human Services website, 2019.

**MAP #: 9** Healthcare & Social Facilities



**Legend**

**Facility Type**

- Child Care
- Nursing Home
- Hospital



Data Source: Outagamie County Public Health



# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

### Cemeteries

There are more than sixty public and private cemeteries located in the County. It is generally assumed that capacity is sufficient to meet anticipated future needs.

### Educational Resources

#### K-12 Schools

Outagamie County is served by twelve public school districts, as well as private schools. Overall, public school district enrollment has been growing; however, between 2001 and 2017 declines in enrollment have been seen in the private school system and several rural districts.

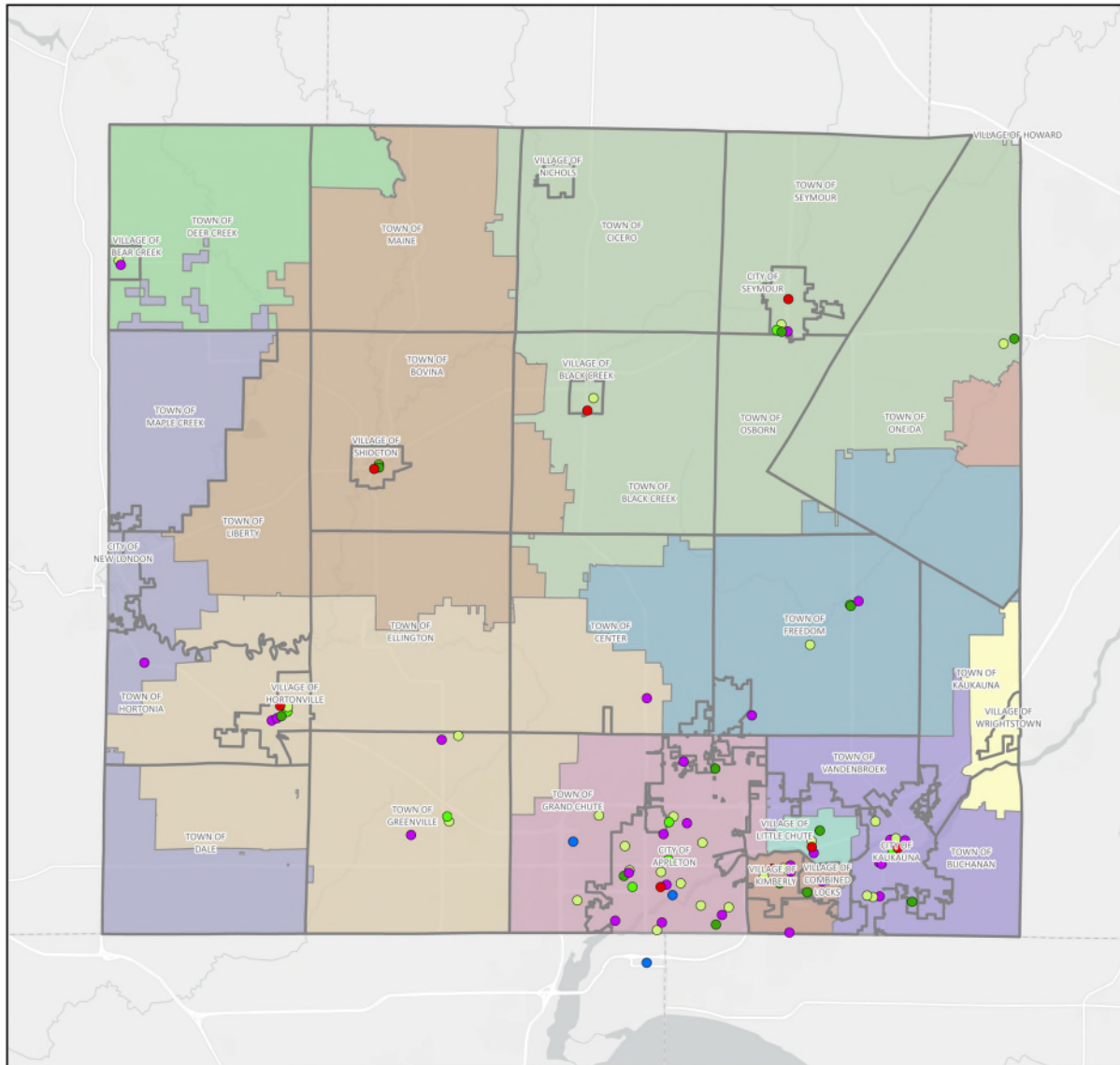
#### Higher Education

Institutions of higher education in or directly serving Outagamie County include: Fox Valley Technical College; Lawrence University; Marian University; Rasmussen University; and UW Oshkosh – Fox Cities (in Winnebago County but co-owned by Winnebago and Outagamie Counties) among others.

Table 21: School Enrollment, 2001 and 2017				
School District	2001	2017	Change 2001-2017	
			Number	Percent
<u>School Districts Located in Outagamie County</u>				
Appleton Area School District	14,793	15,863	1,070	7.2%
Freedom Area School District	1,525	1,603	78	5.1%
Hortonville Area School District	2,636	3,830	1,194	45.3%
Kaukauna Area School District	3,615	3,947	332	9.2%
Kimberly Area School District	3,117	5,169	2,052	65.8%
Little Chute Area School District	1,465	1,572	107	7.3%
Seymour Community School District	2,467	2,282	-185	-7.5%
School District of Shiocton	834	708	-126	-15.1%
Subtotal	30,452	34,974	4,522	14.9%
<u>School Districts Located Partially in Outagamie County</u>				
Clintonville Public School District	1,469	1,346	-123	-8.4%
School District of New London	2,512	2,338	-174	-6.9%
School District of West De Pere	1,881	3,340	1,459	77.6%
Wrightstown Community School District	946	1,336	390	41.3%
Subtotal	6,808	8,360	1,552	22.8%
Private Schools	7,727	4,942	-2,785	-36.0%
Total Enrollment (Public and Private Schools)	44,987	48,276	3,289	7.3%
Source: Outagamie County 2017 Growth Report and Wisconsin Department of Public Instruction, 2019				



**MAP #: 10** Educational Resources



**Legend**

**School Districts**

- Appleton Area School District
- Clintonville Public School District
- Freedom Area School District
- Hortonville Area School District
- Kaukauna Area School District
- Kimberly Area School District
- Little Chute Area School District
- School District of New London
- School District of Shiocton
- School District of West De Pere
- Seymour Community School District
- Wrightstown Community School District

**School Locations**

- Higher Education
- Public High School
- Public Middle School
- Public Elementary School
- Parochial School
- Libraries



Data Source: Outagamie County GIS

# Outagamie County, Wisconsin

## Comprehensive Plan 2040: The Shared Path Forward

---

### Libraries

Public libraries in the County include: Appleton, Black Creek, Hortonville, Kaukauna, Kimberly/Little Chute, Menasha, Neenah, New London, Seymour-Muehl, and Shiocton. Most are members of the Outagamie Waupaca Library System (OWLS). Each member library is completely autonomous, funded and governed locally, but contracts with OWLS for the purpose of coordinating and strengthening services. Outagamie County provides annual funding to the OWLS system. Member libraries borrow materials directly from each other and from the libraries in Nicolet Federated Library System that belong to OWLSnet. Materials may also be borrowed directly from most members of the Fox Valley Library Council.<sup>96</sup>

See Map 9: *Educational Resources* for a depiction of where schools and libraries are located.

### Public Safety<sup>97</sup>

The Outagamie County Sheriff's Department Outagamie County provides public safety services including a County jail, Law Enforcement Facility, Huber facility, 911 emergency dispatch, and boat and snow patrols. The Department provides full law enforcement services to those portions of the County that do not have their own enforcement officials. The communities of Appleton, Black Creek, Grand Chute, Hortonville, New London, Shiocton, Seymour, Wrightstown, and the Oneida Nation provide their own police services. The Fox Valley Metro Police serve the communities of Kaukauna, Little Chute, and Kimberly. Buchanan, Bear Creek, Combined Locks, Freedom and Greenville provide enhanced police services through contracts for staff through the County Sheriff. Fire and rescue operations are generally handled at the municipal level.

There are 26 local fire departments located in the County, many providing first-responder services. Seven of these departments cover areas in multiple jurisdictions. Most communities are involved in mutual aid agreements to provide backup and assistance when needed.

Locations of police and fire stations are depicted on Map 10: *Community Facilities*.

### Emergency Management<sup>98</sup>

Outagamie County Emergency Management (OCEM) coordinates effective response and recovery efforts relating to natural and technological disasters and supporting the local communities and their citizens within Outagamie County. OCEM:

- Maintains the Emergency Operations Center (EOC) for Outagamie County
- Provides assistance for emergency response to emergencies and disasters
- Develops and updates emergency plans for all hazards impacting our community
- Provides liaison with local, state and federal authorities during emergencies and disasters
- Develops, coordinates, and conducts emergency management training/exercise programs

---

<sup>96</sup> Outagamie Waupaca Library System website, 2019.

<sup>97</sup> Source: Outagamie County Comprehensive Plan, 2008.

<sup>98</sup> Excerpted from Outagamie County Emergency Management website, 2019.

- 
- ▲ Develops and distributes emergency management presentations, brochures, pamphlets, public service announcements and other relevant information for civic organizations, businesses, and the public.

## Outagamie County & Municipal Facilities

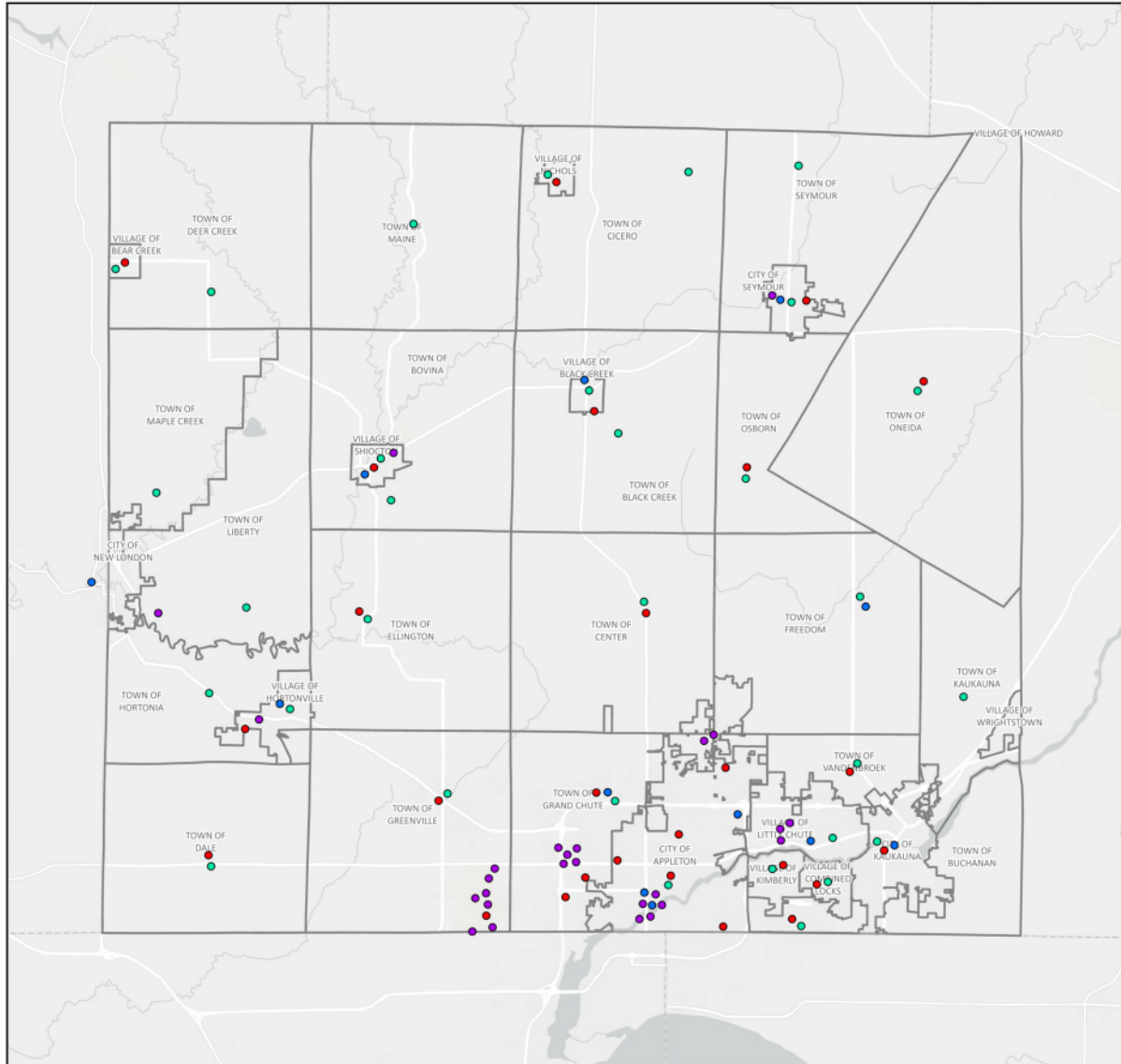
Outagamie County maintains numerous properties and facilities as a means to deliver the services highlighted throughout this plan. Outagamie County conducts an annual inventory of county-owned properties; the 2019 Inventory can be found in Appendix V in Vol. 3.

After undergoing significant facility upgrades, most recently with the relocation of the Sheriff's Law Enforcement unit to 3030 Goodland Drive (Appleton), the addition of security measures and additional space for Health and Human Services, and Justice-related departments to the Outagamie County Government Center (the downtown Appleton campus), the renovation of the terminal and construction of a new Vehicle Rental Facility at ATW, Outagamie County has successfully addressed the most pressing facility needs for the foreseeable future. Currently planning is underway for the Parks System, including the potential for a new Park Pavilion and Parks Office/Maintenance Facility. Ongoing evaluation and planning will be needed to determine future county facility needs.

In addition, Cities, Villages and Towns also maintain community facilities, such as Community Halls, Police and Fire Stations. The location of county and municipally owned facilities is depicted on Map 11: *Public Facilities*, found on the following page.

# Outagamie County, Wisconsin Comprehensive Plan 2040: The Shared Path Forward

**MAP #: 11** Public Facilities



**Legend**

- County Property & Facilities
- Fire Department
- Police Department
- City/Village/Town Hall



0 1 2 3 4 Miles

Data Source: Outagamie County GIS

---

## XIV. Intergovernmental Profile

### Introduction

Intergovernmental cooperation may be defined as any arrangement through which two or more governments communicate visions and coordinate plans, policies, and programs to address and resolve issues of mutual interest. It can include the sharing of information, facilities, and equipment, or involve entering into formal intergovernmental agreements.<sup>99</sup> Cooperation between and among cities, villages, towns, and counties can produce less expensive and more efficient governmental services. The development of a comprehensive plan can provide a means for collaboration between Outagamie County, its municipalities, and adjoining counties. Efforts to increase coordination and collaboration must deal with existing organizational missions and structures that support the uniqueness of each community. The challenges associated with intergovernmental cooperation include:

- ▲ Desire for community autonomy
- ▲ Questions regarding the allocation of costs
- ▲ Fear of loss of service quality
- ▲ Creating trust and an effective implementation mechanism

Outagamie County has 20 towns, 4 cities, 11 villages and 1 sovereign nation (Oneida) either all or partially in Outagamie County. Outagamie County is surrounded by 5 counties – Brown to the east; Shawano to the north, Waupaca to the west, and Winnebago and Calumet to the south. There are also numerous special purpose units of governments, such as sanitary districts, school districts, drainage districts, housing and redevelopment authorities, and many others. Map 12 provides an overview of all general purpose units of government within the county.

### County Intergovernmental Agreements

As a means to provide efficient and cooperative government services, Outagamie County, through its various departments, pursues and enters into intergovernmental agreements to deliver essential services, and share resources when it proves mutually beneficial. Below as a summary of such agreements the county maintains.

---

<sup>99</sup> Excerpted from Guide to Preparing the Intergovernmental Element of a Comprehensive Plan, Wisconsin Department of Administration, 2002.

Outagamie County, Wisconsin  
*Comprehensive Plan 2040: The Shared Path Forward*

<b>Table 22. Outagamie County Intergovernmental Agreements</b>		
Outagamie County/ Department	Partnering Entity	Type / Summary of Agreement
Outagamie Co	Winnebago County & UW System Board of Regents	Cooperative Agreement - UW Oshkosh - Fox Cities Campus (Formerly UW-Fox Valley)
Outagamie Co	Oneida Nation	Cooperative Agreement
Outagamie Co	US Government (USDA-NRCS) & State of WI (DNR & DATCP)	Agriculture Services Lease, Ag/Extension Campus
OC CJTS	CJTS, DA, State of Wisconsin Public Defender, WI Department of Corrections, Sheriff, and Veterans Affairs	Veterans Court - MOU
OC CJTS	MOU between CJTS, DA, State of Wisconsin Public Defender and Circuit Courts	Pretrial Risk Assessment (PSA)
OC CJTS	OC and Wisconsin Department of Corrections	COMPAS – MOU
OC CJTS	OC, WI DoJ	TAD Grant - MOU
OC Circuit Courts	Department of Revenue	Tax Refund Intercept and State Debt Collection
OC Clerk	6 municipalities	Relier services for Wisvote (election database)
OC Clerk	All municipalities	Maintenance and use of county backup election equipment
OC Clerk	Village of Harrison	Separate agreement regarding election equipment
OC DHHS	Appleton School District	Project Pre-Action
OC DHHS	Calumet County	ADRC Consortium
OC DHHS	Calumet County	Crisis/Youth
OC DHHS	Calumet County	Dietician
OC DHHS	City of Appleton	Transportation
OC DHHS	Fond Du Lac County	DCP
OC DHHS	Fond Du Lac County	Juvenile Detention Center
OC DHHS	Freedom School District	Project Pre-Action
OC DHHS	Kaukauna School District	Project Pre-Action
OC DHHS	Kimberly School District	Project Pre-Action
OC DHHS	Little Chute School District	Project Pre-Action
OC DHHS	Marquette County	IM Consortium
OC DHHS	New London School District	Project Pre-Action
OC DHHS	Portage County	Juvenile Detention Center
OC DHHS	Seymour School District	Project Pre-Action
OC DHHS	Sheboygan County	Juvenile Detention Center
OC DHHS	Shiocton School District	Project Pre-Action



Outagamie County/ Department	Partnering Entity	Type / Summary of Agreement
OC DHHS	Trempealeau County	IMD - Residential
OC DHHS	Washington County	Juvenile Detention Center
OC DHHS	Waupaca County	DHHS - Meals
OC DHHS	Winnebago County	CCS Consortium
OC DLS - Zoning	East Central WI RPC	Non-Metallic Mining Program
OC Emergency Management	Brown County	Mutual assistance
OC Emergency Management	Calumet County	Mutual assistance
OC Emergency Management	City of Appleton	Digital Vehicle Repeaters Systems
OC Emergency Management	OC CART	Mutual aid
OC Emergency Management	Oneida County	Mutual assistance
OC Emergency Management	Shawano County	Mutual assistance
OC Emergency Management	Waupaca County	Mutual assistance
OC Emergency Management	WI Emergency Management and East Central Regional	Mutual assistance
OC Emergency Management	Winnebago County	Mutual assistance
OC Family Court Services	Calumet County	Custody Evaluations
OC Land Conservation	Brown County	Joint work on Large Scale Targeted Runoff Grants as well as Great Lakes Restoration Initiative Grants
OC Land Conservation	Calumet County	Joint work on Large Scale Targeted Runoff Grants as well as Great Lakes Restoration Initiative Grants
OC Land Conservation	Fox/Wolf Watershed Alliance	Joint work in the Fox and Wolf Basins
OC Land Conservation	US Department of Agriculture, Natural Resources Conservation Service (NRCS)	Joint use of Federal equipment
OC Land Conservation	NEW Water (formerly Green Bay Metropolitan Sewerage District)	Silver Creek Project and Adaptive Management Project in the Dutchman and Ashwaubenon Creeks area

Outagamie County, Wisconsin  
*Comprehensive Plan 2040: The Shared Path Forward*

Outagamie County/ Department	Partnering Entity	Type / Summary of Agreement
OC Land Conservation	Oneida Nation	Technical assistance provided on Tribal Lands
OC Land Conservation	Winnebago/Fond du Lac/Waupaca Counties	Mutual Aid Agreement
OC Parks	Appleton School District	Use of the Montessori School
OC Parks	Friends of the Dog Park	relationship agreement
OC Parks	Grand Chute Baseball	Responsibilities agreement
OC Parks	Pop Warner	use of facilities and football fields
OC Parks	Town of Buchanan	snow removal on the CE Trail
OC Parks	Village of Black Creek	for the Veterans Memorial Parking Lot
OC Regional Airport	FAA	"Several"
OC Regional Airport	GSAT SA	Terminal Lease
OC Regional Airport	OC	MABAS
OC Regional Airport	Town of Greenville	Sewer, water, stormwater
OC Regional Airport	TS/LEO	– LEO reimbursement agreement
OC Regional Airport	WI DOT	BOA
OC Sheriff's Dept	All law enforcement agencies in OC	Law Enforcement Inter-Agency Pursuit Agreement
OC Sheriff's Dept	All law enforcement agencies in OC	Time System Access Agency
OC Sheriff's Dept	All police and fire agencies in OC	E9-1-1
OC Sheriff's Dept	Appleton Fire Dept	Equipment Transfer Agreement; 14 self-contained breathing apparatus used in the jail
OC Sheriff's Dept	Appleton Police	Community Resource Unit Agreement
OC Sheriff's Dept	Appleton Police	Memo of Understanding; Caimon Multi-Theater Vehicle (MTV)
OC Sheriff's Dept	Brown & Outagamie Counties	Bomb Squad Agreement
OC Sheriff's Dept	Brown County	Agreement to Provide Housing of Offenders
OC Sheriff's Dept	Calumet County	Agreement to Provide Housing of Offenders
OC Sheriff's Dept	City of Appleton	Arrest of subjects in City of Appleton, Calumet County
OC Sheriff's Dept	City of Menasha	Agreement to Provide Housing of Offenders
OC Sheriff's Dept	Dept. of Corrections	Agreement to Provide Housing of Offenders
OC Sheriff's Dept	DoJ	Management Control Agreement
OC Sheriff's Dept	Fox Crossings Police	Agreement to Provide Housing of Offenders
OC Sheriff's Dept	Fox Valley Humane Association	Agreement for services
OC Sheriff's Dept	Fox Valley Metro Police, Grand Chute Police	Memo of Understanding Response to Extraordinary Law Enforcement Situations

Outagamie County/ Department	Partnering Entity	Type / Summary of Agreement
OC Sheriffs Dept	FVTC	Memo of Understanding (2010)
OC Sheriffs Dept	Marathon County	Agreement to Provide Housing for Inmates
OC Sheriffs Dept	NAMI & OC Jail	to provide education and support group services
OC Sheriffs Dept	OC Child Support	2019 Cooperative Agreement
OC Sheriffs Dept	OC Counties	Multi Jurisdictional Drug Enforcement Agreement.
OC Sheriffs Dept	OC IT	Oversight by Sheriffs Dept over OC IT ; OC IT supports criminal justice functions
OC Sheriffs Dept	OC Jail & OC H&HS	Coordinating Mental Health Services
OC Sheriffs Dept	OC Jail & OC H&HS	HIPPA Business Associate Agreement
OC Sheriffs Dept	OC Law Enforcement agencies	Memo of agreement OC CART
OC Sheriffs Dept	OC Veterans Treatment Court	Agreement for Placement of Participants on Alcohol Monitoring Devices
OC Sheriffs Dept	Oconto County	Agreement to Provide Housing of Offenders
OC Sheriffs Dept	Oneida Nation	Deputization Agreement
OC Sheriffs Dept	School Liaison Officer Agreement	Shiocton School District
OC Sheriffs Dept	TIME System	Computer Interface Agreement
OC Sheriffs Dept	Town of Greenville	Law Enforcement Services
OC Sheriffs Dept	Town of Freedom	Law Enforcement Services
OC Sheriffs Dept	Town of Buchanan	Law Enforcement Services
OC Sheriffs Dept	United States Marshals Service for Fugitive Task Force	Memo of Understanding
OC Sheriffs Dept	Village of Black Creek	Rental space (North Office)
OC Sheriffs Dept	WI Department of Corrections	Memo of Agreement; VINE service
OC Sheriffs Dept	WI DOJ	Memo of agreement regarding ICAC
OC Sheriffs Dept	WI DOT	Tracs Sub-user License Agreement
OC Sheriffs Dept	Winnebago and Brown Counties	Memo of agreement; enhanced 911 service
OC Sheriffs Dept	Winnebago County	Housing of inmates if evacuation is necessary
OC Sheriffs Dept	Winnebago County	Memo of agreement; electric monitoring of offenders
OC Sheriffs Dept	Winnebago County Sheriff's Office	Memo of agreement; use of Armored Rescue Vehicle
OC Sheriffs Dept	Village of Combined Locks	Law Enforcement Services

Source: Outagamie County Departments, 2019

## Oneida Nation<sup>100</sup>

The Oneida Nation is a sovereign nation, established by treaty in 1838, with original roots in upstate New York. The 65,400 acre reservation is situated along Duck Creek, straddling the Outagamie and Brown County line. Outagamie County has continued to maintain a cooperative working relationship with the Oneida Nation, with several intergovernmental agreements in place to establish a means to do so.

The Oneida Nation maintains land within the boundaries in several forms. “Trust Land” is land that is held for the Nation in trust by the Federal Government, under US Federal Law and per the terms of their treaty. “Fee Simple” is land owned by Oneida Nation, as the deed holder. All other land within the reservation boundaries are held by private individuals, either non-tribal or tribal members. Outagamie County has differing levels of jurisdiction with regards to planning, zoning and permit authority depending on what type of ownership exists. Outagamie County has historically had a cooperative, working relationship with various departments within Oneida Nation with a goal of ensuring proper permitting and good environmental outcomes for development-related and other projects.

See Map 12: *Intergovernmental Cooperation* for an illustration of the Oneida Nation and varying land ownership types.

## Drainage Districts

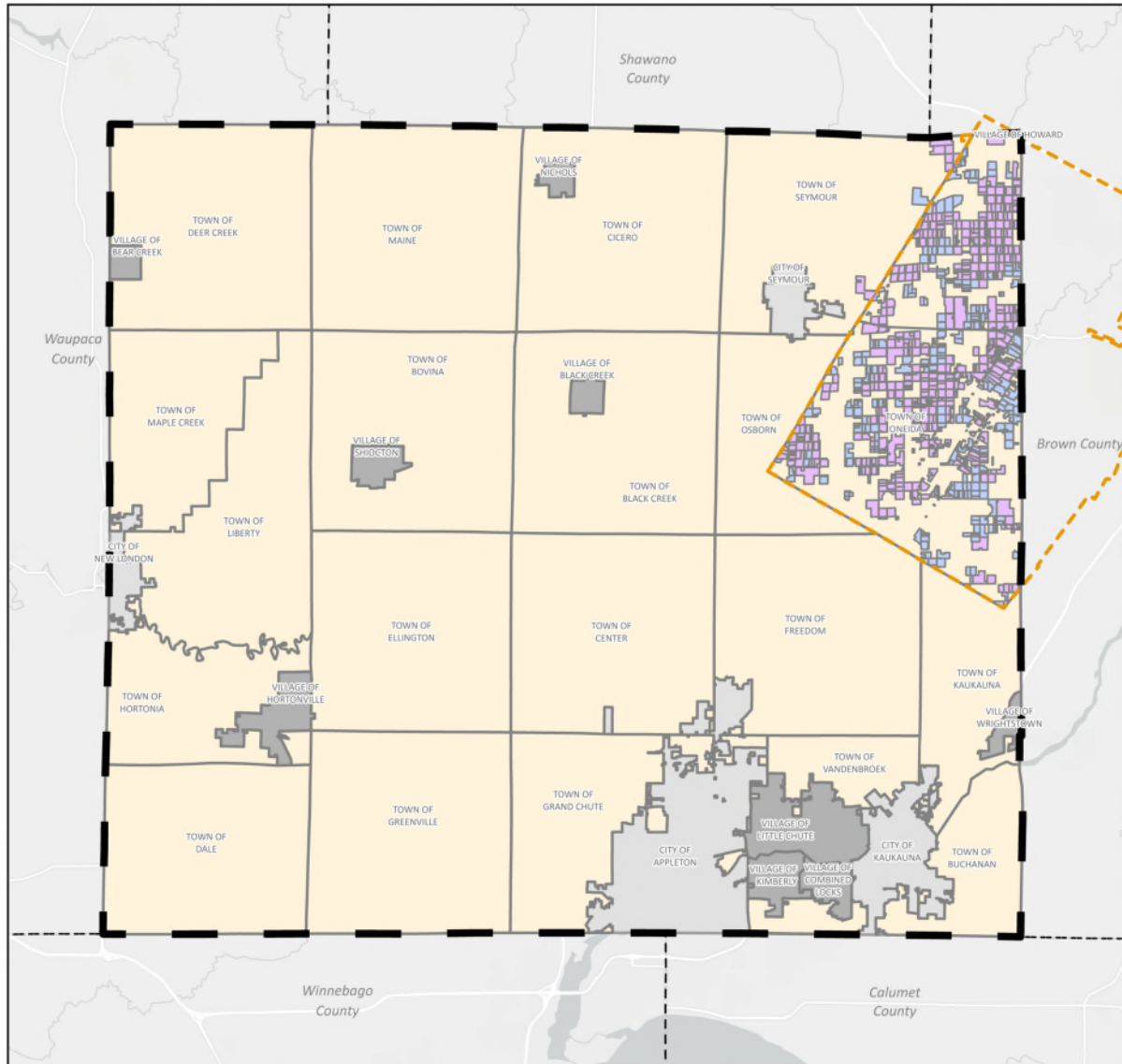
The Outagamie County Drainage Board is a special purpose unit of government charged with draining agricultural lands in various districts throughout Outagamie County. The board oversees nine drainage districts found all or partially within Outagamie County, as depicted on Map 13: *Drainage Districts*. The Board is comprised of members appointed by Outagamie County, with technical and administrative support provided by the Outagamie County Land Conservation Department. To accomplish their work, the district can assess special charges to properties within each district.

Outagamie Development & Land Services staff coordinates with the Drainage Board, in accordance with Wisconsin Act 121, 2007, to ensure they are kept fully abreast on development proposals occurring within their drainage district, and have the ability to review and comment on activities that may impact their drainage districts.

---

<sup>100</sup> Excerpted from Oneida Nation website, 2019.

## MAP #: 12 Intergovernmental Cooperation



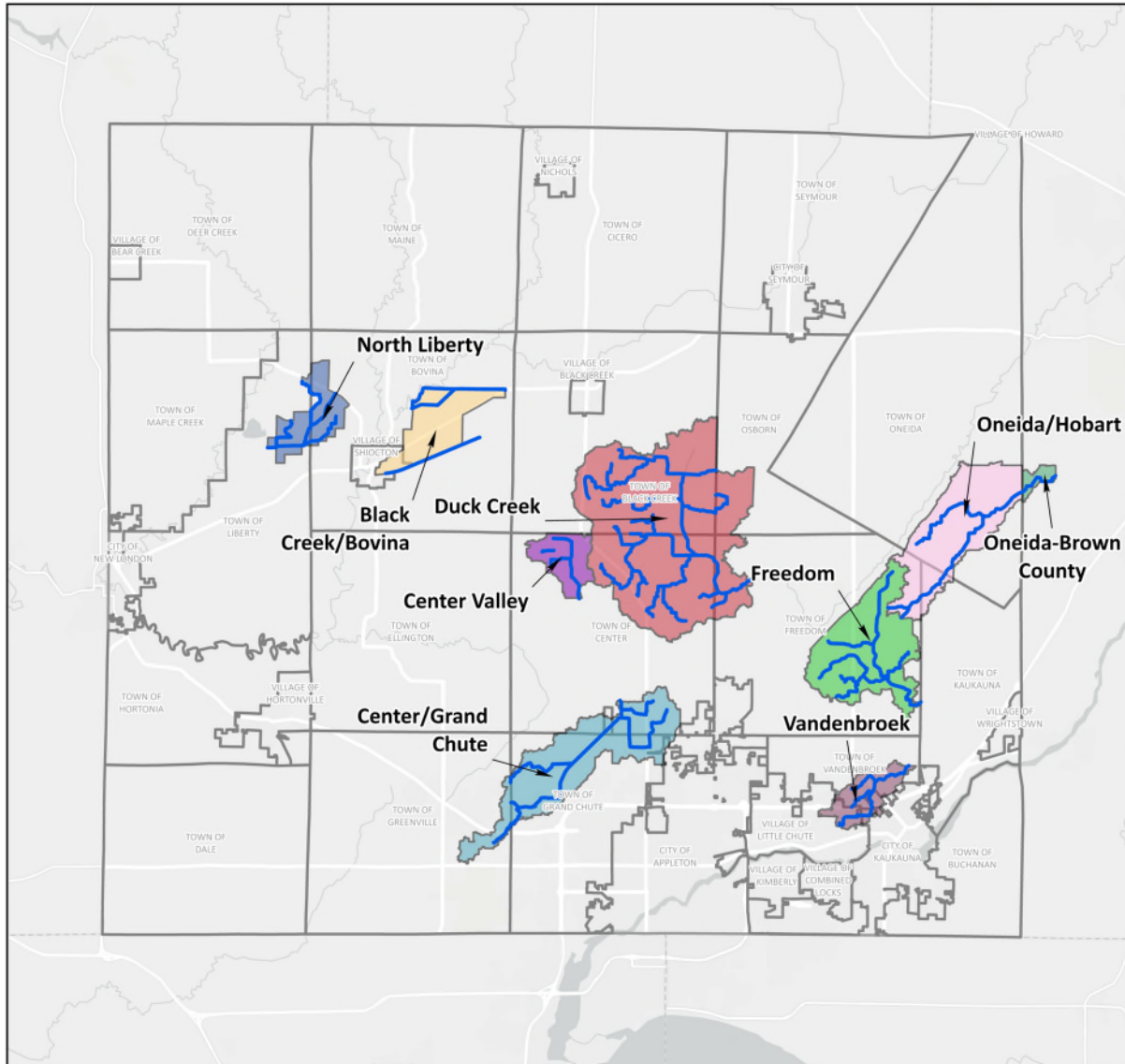
### Legend

- County Boundary
- Oneida Tribal Boundary
- Tribal Land
- Trust Land
- City
- Town
- Village
- Surrounding County Boundaries



Data Source: Outagamie County GIS, Tax Parcel Data

**MAP #: 13** Drainage Districts



**Legend**

**Drainage District Boundaries**

- Black Creek/Bovina
- Center Valley
- Center/Grand Chute
- Duck Creek
- Freedom
- North Liberty
- Oneida-Brown County
- Oneida/Hobart
- Vandenbroek

**Legal Drains**

- Centerline



Data Source: Outagamie County GIS





## Boundary Agreements<sup>101</sup>

The Wisconsin Department of Administration (WDOA) Intergovernmental Services Division administers a program that oversees and inventories boundary agreements. According to WDOA, boundary agreements are a valuable tool available to local communities to avoid potentially lengthy and costly litigation conflicts over annexation, incorporation, consolidation, land use, revenue, services, environmental resources and issues, new development, and other intergovernmental issues. Instead of dueling against one another in an adversarial and usually reactive manner, boundary agreements enable communities to proactively develop solutions to benefit the area as a whole and move both communities toward their desired future vision and goals.

There are three types of Boundary Agreements allowed by Wisconsin law:

- ▲ *Cooperative Boundary Plans* (s. 66.0307 Wis. Stats.) – long-term or permanent agreements between two or more communities. Requires review and approval by the Department of Administration.
- ▲ *General Agreements* (s. 66.0301 Wis. Stats.) – short-term agreements no longer than 10 years between two or more communities. In addition to resolving boundary issues, communities also frequently use General Agreements to share municipal equipment, buildings, staff, vehicles, and other service-related items.
- ▲ *Stipulations & Orders* (s. 66.0225 Wis. Stats.) – agreements that are used to settle annexation disputes being litigated in court between two communities.

There are currently 5 registered boundary agreements within Outagamie County, as depicted below.

Table 23: Municipal Boundary Agreements in Outagamie County		
Date	Purpose	Parties
1992	Orderly Land Development and Sanitary Sewer Service; Boundary Planning	City of Appleton, Town of Grand Chute, The Town of Grand Chute Sanitary District #1, and the Town of Grand Chute Sanitary District #2
2000	Boundary Planning, orderly development	Village of Combined Locks, Town of Buchanan, Darboy Joint Sanitary District
2009	Municipal boundary limits, orderly land development, and cost effective and efficient delivery of municipal services	City of Appleton, Village of Little Chute
2012	Boundary Planning, Dispute Resolution Process	Town/Village of Harrison; Town of Buchanan
2014	Boundary Planning/Growth Areas, Annexation of Power Plant	Village of Wrightstown, Town of Kaukauna

Source: WDOA Municipal Data System, 2019.

<sup>101</sup> Excerpted from WDOA – Municipal Boundary Review Website, 2019.

## IX. Land Use Profile

### Introduction

The Land Use element is the central element of a comprehensive plan. Its primary function is to provide a framework for decision makers to guide growth and development. The purpose of the Land Use Profile is to provide a description of the way in which land in Outagamie County is currently used in order to provide a foundation for the Future Land Use element and map presented in Vol. 2: Action Plan.

### Land Use Trends

Map 14: *Existing Land Use*, depicts land uses within Outagamie County as of 2015. For the most part, intense development patterns occur within the southeastern portion of the County, as part of the Fox Cities metropolitan area. Additional concentrations of intense land use existing in the outlying cities and villages throughout the County. Scattered, unsewered, residential subdivision development is present throughout Towns that are within proximity to the Fox Cities. Much of the scattered residential subdivision development occurred in the 1990s and into the 2000s. This trend waned after the great recession in 2008.

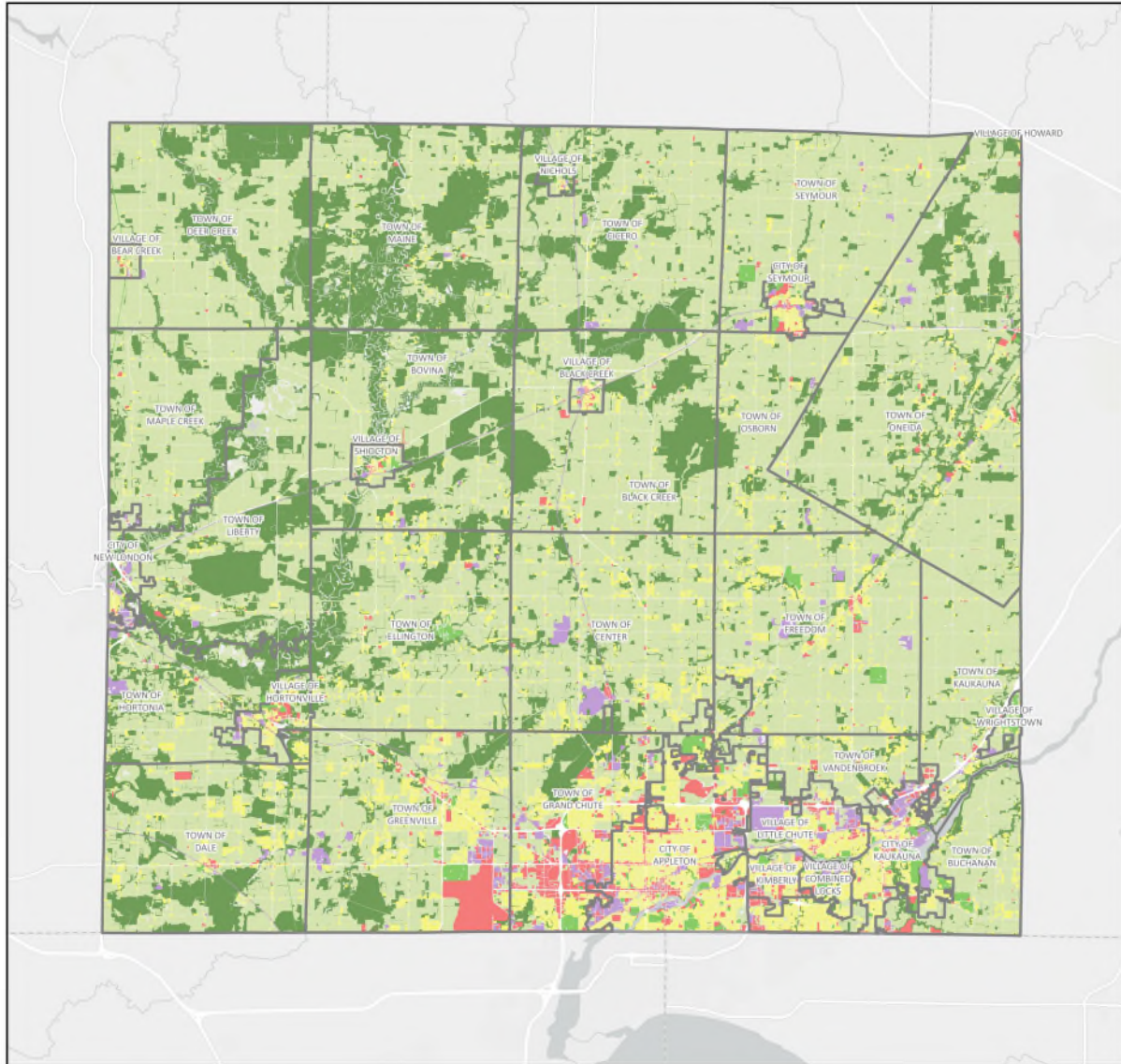
Much of the northwestern part of the County is covered by woodlands that are adjacent to major wetlands and meandering river corridors. The remainder of the County is primarily agriculture, with low intensity residential, commercial and other miscellaneous uses scattered throughout, and in some cases within unincorporated “hamlets” or “town centers” in a manner that serves local demand for housing and services.

**Table 24: Total Acreage by Outagamie County Land Use Category, 2003 and 2015**

Category	2003	2015	Change, 2003-2015	
			Number	Percent
Residential	28,237	34,075	5,838	20.7%
Commercial / Institutional	8,334	11,282	2,948	35.4%
Industrial	4,885	6,270	1,385	28.4%
Parks & Open Space	3,318	2,297	-1,021	-30.8%
Woodland	88,649	90,288	1,639	1.9%
Agricultural & Vacant	252,900	240,490	-12,410	-4.9%
Water	8,099	8,751	652	8.1%
Right-of-way	17,975	19,038	1,063	5.9%
Other	403	309	-94	-23.3%
Total	412,800	412,800	--	100.0%

Source: Outagamie County GIS; ECWRPC Land Use Data, 2003 & 2015

**MAP #: 14** Existing Land Use



**Legend**

**2015 Land Use**

- RESIDENTIAL
- COMMERCIAL/INSTITUTIONAL
- INDUSTRIAL
- PARKS AND REC
- AGRICULTURE
- WOODLAND



Data Source: East Central Wisconsin Regional Planning Commission



### Key Land Use Findings:

- As of 2015, residential development comprised 8.3% of the land in Outagamie County
- Agricultural and vacant land represented 61% of the County's total land base in 2003; fifteen years later it had fallen to 58%
- The combined acreage of all developed land uses (residential, commercial, institutional, and industrial) in 2015 was 51,627 acres, or 13% of the total
- Between 2003 and 2015 the County lost an average of 1,034 acres of agricultural and vacant land per year, while gaining an average of 848 acres of developed land uses.

### Unincorporated Land Consumption Projections

Unincorporated land consumption projections for the planning period were calculated with the assumption that land will be consumed at a rate no greater than what occurred over the past decade. Table 25 illustrates maximum estimated land use projections through 2040, and includes data sources and assumptions. While the number of new households created will continue to grow (due to a combination of a growing population and decreasing average household size), we anticipate that a greater share of the County's new housing units will occur in a denser format than the traditional single-family home, which has historically dominated the County's housing unit growth. These alternative housing types (such as multifamily, duplex, townhomes and condominiums) are expected to increase in number due to demographic shifts, changing consumer demand, and the need for additional affordable housing options. Denser development patterns tend to be developed in areas served by municipal sewer and water. With the exception of the towns of Buchanan, Grand Chute, Greenville, and Freedom, these types of development will be occurring in the incorporated parts of the County (e.g. cities and villages). Should the Town of Greenville incorporate, as is currently under consideration, a significant portion of the projected "unincorporated" land use would instead occur in incorporated lands within the County.

	EXIST. ACRES 2015	PROJECTED ACRES					TOTAL CHANGE	% CHANGE
		2020	2025	2030	2035	2040		
<b>Agricultural/Vacant</b>	232,690	231,440	230,190	228,940	227,690	226,440	(6,250)	-3%
5 year change		(1,250)	(1,250)	(1,250)	(1,250)	(1,250)		
<b>Residential</b>	24,545	25,585	26,625	27,665	28,705	29,745	5,200	21%
5 year change		1,040	1,040	1,040	1,040	1,040		
<b>Commercial/Institutional</b>	6,963	7,108	7,253	7,398	7,543	7,688	725	10%
5 year change		145	145	145	145	145		
<b>Industrial</b>	3,522	3,587	3,652	3,717	3,782	3,847	325	9%
5 year change		65	65	65	65	65		

Total Non Ag Land Consumption over Planning Period = **6,250**

\*Note - Projections are based on historic data that included Greenville being unincorporated.

Base Assumptions: Unincorporate platted residential development will consume, on ave., 97 acres/yr; Unplatted residential development will consume, on ave., 111 acres/yr at a rate of 2.25 acres/lot

Unincorporated Commercial Development will consume 29 acres/year; Industrial 13 acres/year

Sources: 2015 LU Data, ECWRPC; Based Data for Assumptions derived from OC DLS, 2012-18 Building Permit Data; 2012-18 Rezoning Data & CSM Data.

## Property Value Trends

Between 2017 and 2018, the total equalized value for Outagamie County increased by over \$870 million, or 5.0 percent. Real estate values increased nearly \$1 billion, while personal property values decreased by \$124 million.

In terms of historic trends, property values countywide, in total, declined during the 2010 and 2011 assessment cycles, as a result of the great recession. Since then, property values have begun to appreciate at a much more moderated pace than had been occurring leading up to the great recession. When assessment values increase, community planners typically assume that real estate market prices are appreciating on a similar trend line because of the close relationship between assessed value and property sales. Figure 18 and Table 26 illustrate the change in property values from 2000 to 2018.

### Equalized Value

"The Equalized Value is the estimated value of all taxable real and personal property in each taxation district, by class of property, as of January 1, and certified by DOR on August 15 of each year. General property is divided into two broad categories, real property and personal property. Real property is land, any improvements that have been attached to the land, and all fixtures, rights, and privileges pertaining thereto. Personal property includes all goods, wares, merchandise, chattels, and effects, of any nature or description having any real or marketable value, and not included in real property."

Source: DOA 2009

**Figure 18: 2000-2018 Equalized Value  
% Change From Previous Year**

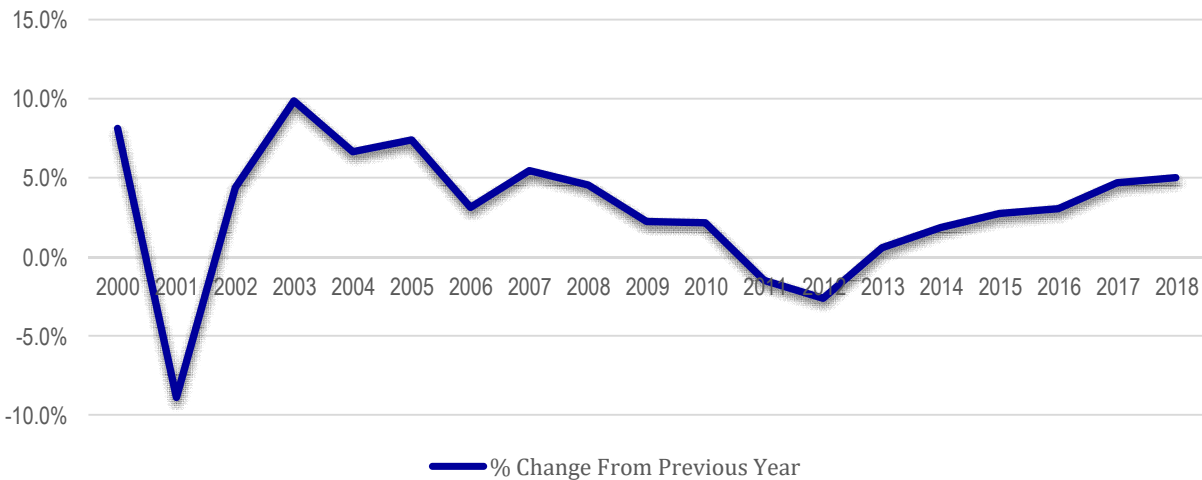
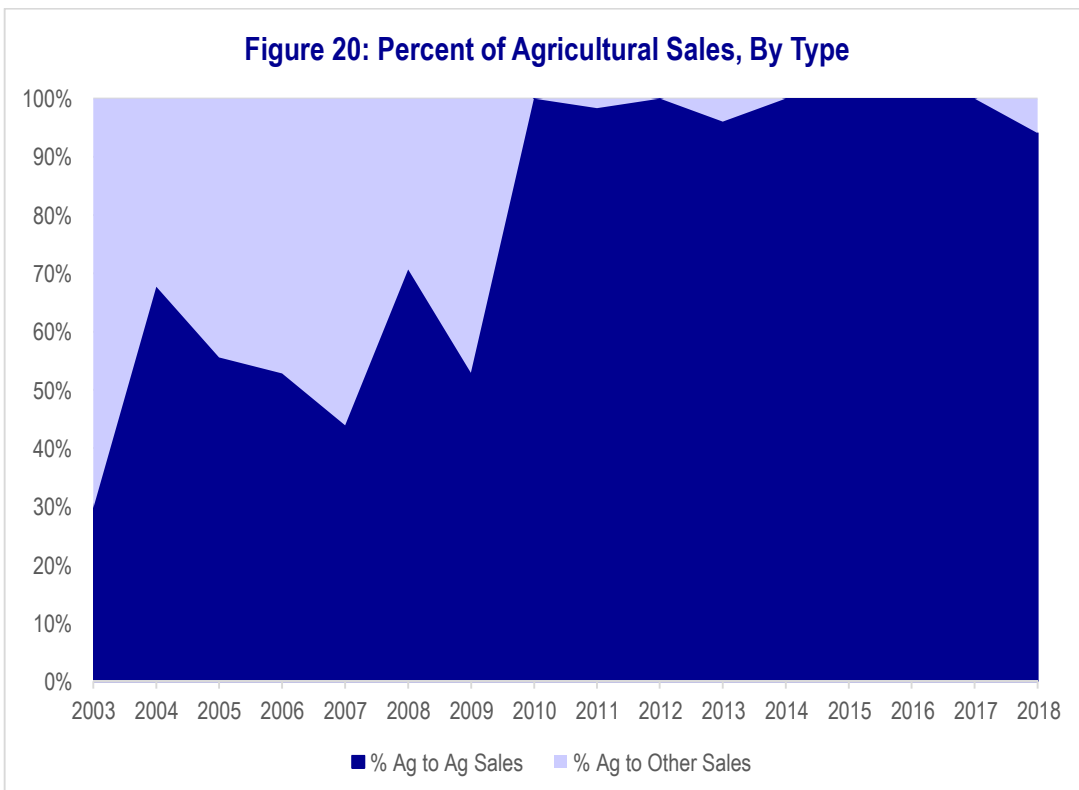
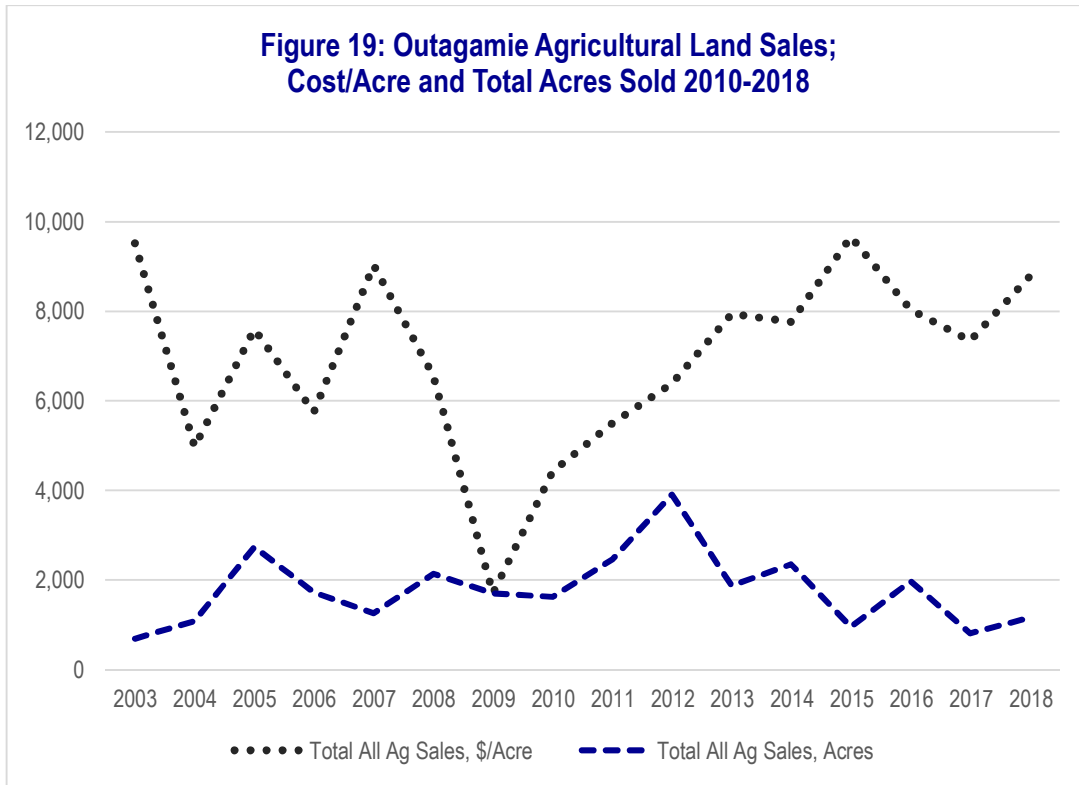




Table 26: County Equalized Value Trends				
Year	Real Estate Value	Personal Property Value	Total Equalized Valuation	% Change From Previous Year
2000	\$7,576,343,000	\$364,003,900	\$7,940,346,900	
2001	\$8,081,895,700	\$331,603,800	\$8,413,499,500	6.7%
2002	\$8,700,191,700	\$346,092,700	\$9,046,284,400	7.7%
2003	\$9,582,366,500	\$354,979,800	\$9,937,346,300	10.1%
2004	\$10,266,993,900	\$370,637,100	\$10,597,631,000	7.1%
2005	\$10,996,374,000	\$385,619,200	\$11,381,993,200	7.1%
2006	\$11,358,933,400	\$377,902,200	\$11,736,835,600	3.3%
2007	\$11,990,028,200	\$388,348,800	\$12,378,377,000	5.6%
2008	\$12,494,163,200	\$445,978,400	\$12,940,141,600	4.2%
2009	\$12,808,206,600	\$421,143,000	\$13,229,349,600	2.5%
2010	\$13,086,060,500	\$428,289,600	\$13,514,350,100	2.2%
2011	\$12,647,746,600	\$666,343,800	\$13,314,090,400	-3.3%
2012	\$12,577,386,500	\$389,258,300	\$12,966,644,800	-0.6%
2013	\$12,637,022,600	\$405,209,000	\$13,042,231,600	0.5%
2014	\$12,887,591,000	\$397,847,500	\$13,285,438,500	2.0%
2015	\$13,264,332,400	\$386,412,600	\$13,650,745,000	2.9%
2016	\$13,674,899,100	\$392,190,400	\$14,067,089,500	3.1%
2017	\$14,459,359,700	\$423,550,300	\$14,882,910,000	5.7%
2018	\$15,302,446,300	\$298,666,900	\$15,601,113,200	5.8%

Another way to assess land value trends, in particular raw land, is to look at the value of agricultural land. Since the great recession (2008-2010), Outagamie County's values for agricultural land have increased steadily, with few exceptions; while at the same time, the annual total amount of farmland sold has decreased, as seen in Figure 19: *Outagamie Agricultural Land Sales*. Figure 19 depicts the composition of agricultural sales over time. Prior to the great recession, approximately half of all agricultural sales were for other uses (likely for development). Since then, very few sales (those tracked by USDA) have been for non-agriculture purposes (see Figure 20: *Percent of Agricultural Sales, By Type*). This may be caused by a few factors: 1) there was a glut of land either developed or purchased for development on speculation that has taken years to work through lot inventories; 2) farmland preservation efforts within the County, and statewide, have taken hold; 3) consumer housing trends have moved more of the housing market towards multi-family development and housing within proximity to urban services; and 4) consolidation of farms, and growth of CAFOs has increased demand for purchase of smaller tracts of land by larger farms, either for expansion, growing of feed, or spreading of manure.



## Land Suitability

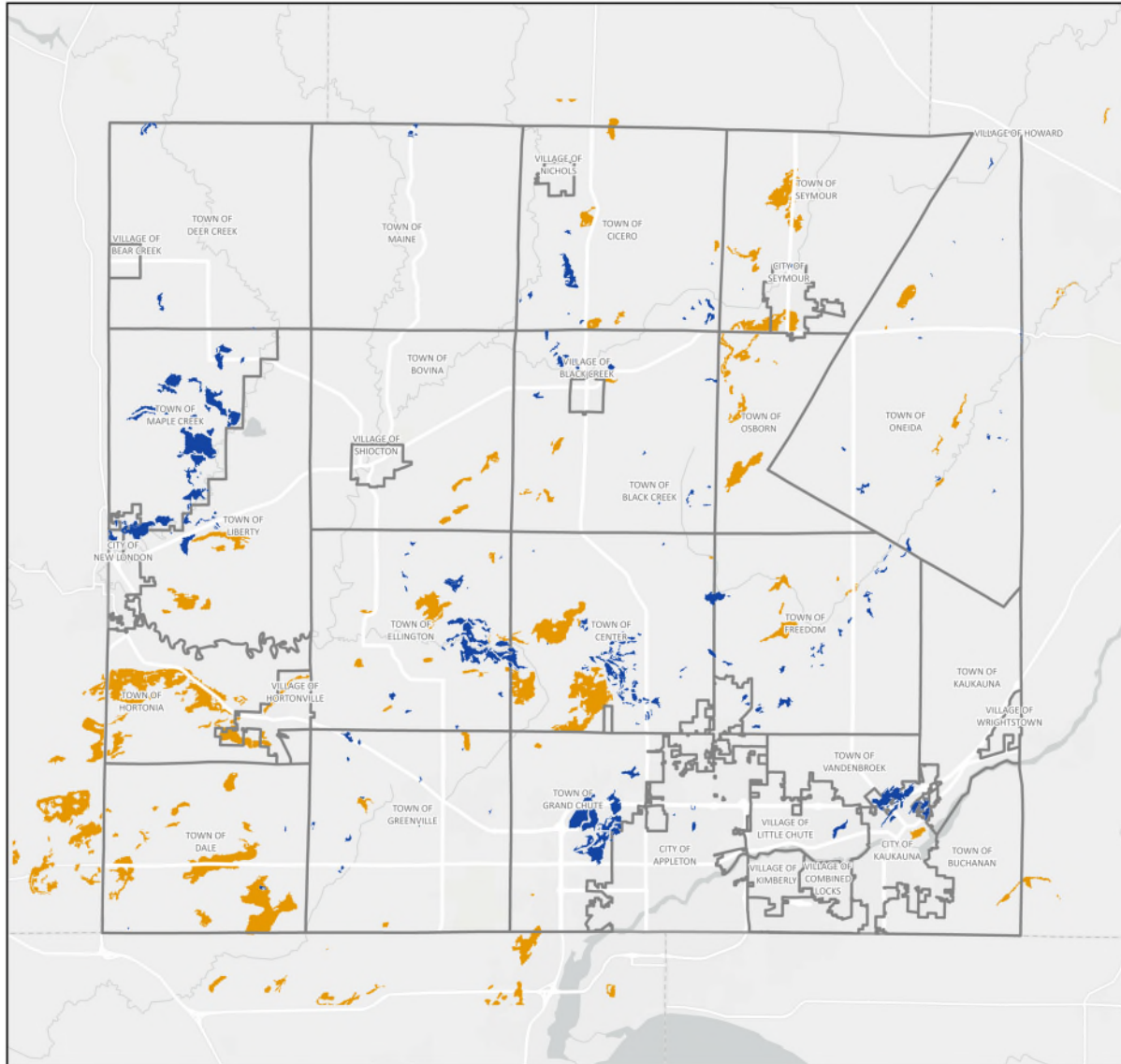
Natural characteristics of the landscape make certain land more suitable for development activity, while others present challenges and limitations for development. When evaluating development proposals or planning for a community, developers and community planners typically evaluate and consider the following land characteristics:

- ▲ Floodplains
- ▲ Wetlands
- ▲ Shorelands (streams & lakes)
- ▲ Steep Slopes
- ▲ High Bedrock
- ▲ High Water Tables

Map 15: *High Groundwater*, and Map 16: *Sensitive Areas* illustrate the general location of the above mentioned environmental conditions that are typically avoided and/or mitigated as part of the community planning and development review process. Many of the above sensitive features are protected via land use control tools outlined in the following section, “Land Use Tools.”

In addition, land suitability for farming is often evaluated when considering rezonings for development outside of sewerred areas, or rezonings out of the Exclusive Agricultural district. Map 17: *Prime Farmland* illustrates soil suitability for farming. Appendix #: Farmland Preservation plan, contains more details on the County’s farmland preservation planning efforts.

**MAP #: 15** High Groundwater & Bedrock



Legend

Water Table Depth from Surface

< 5 ft

Depth of Bedrock

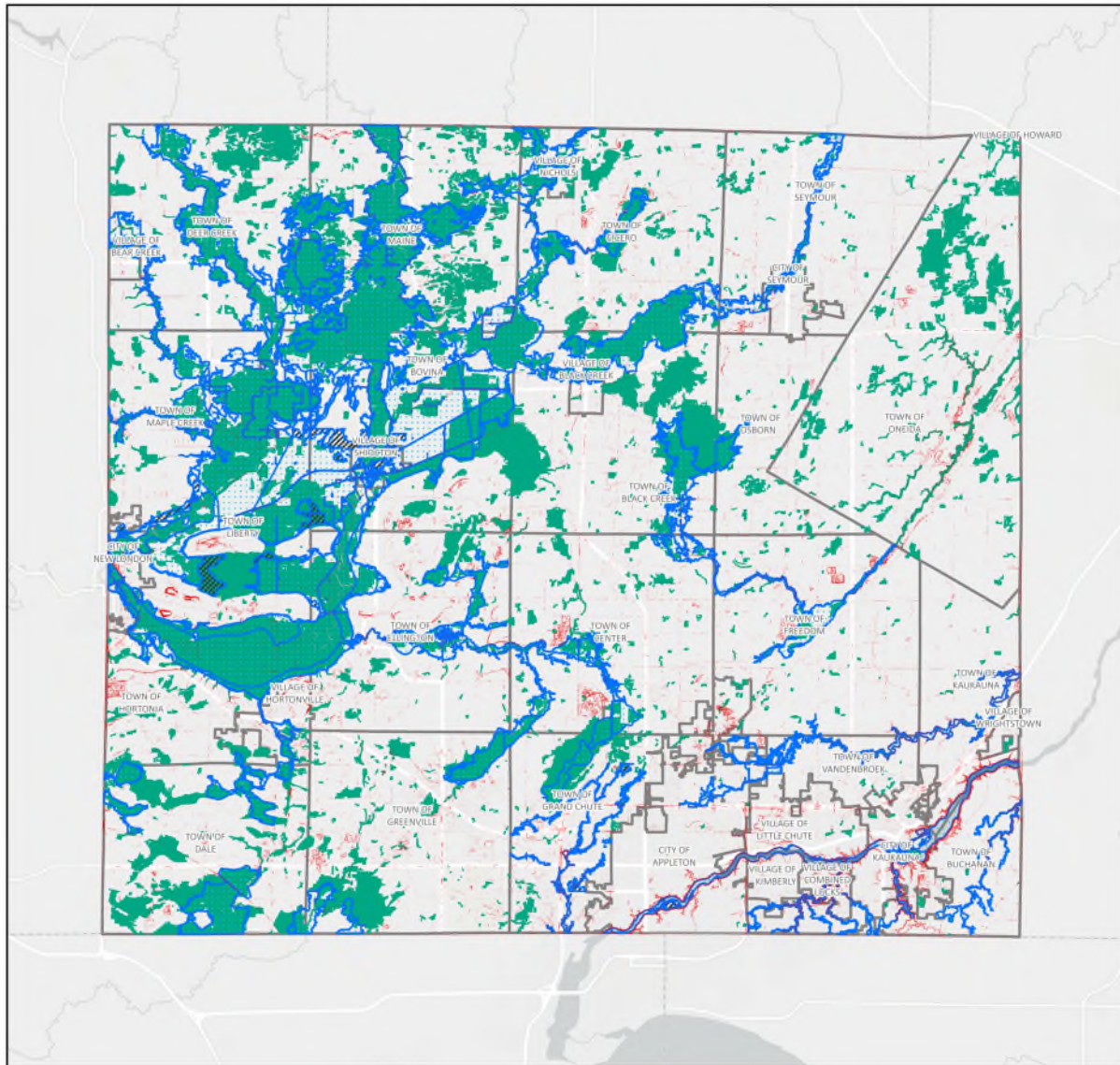
<50 inches



0 1 2 3 4 Miles

Data Source: Outagamie County GIS & USDA/NRCS Soil Survey

**MAP #: 16** Sensitive Areas



**Legend**

Steep Slopes

>20%

FEMA Floodplain

100 Year

500 Year

DNR Wetlands

DNR Wetlands



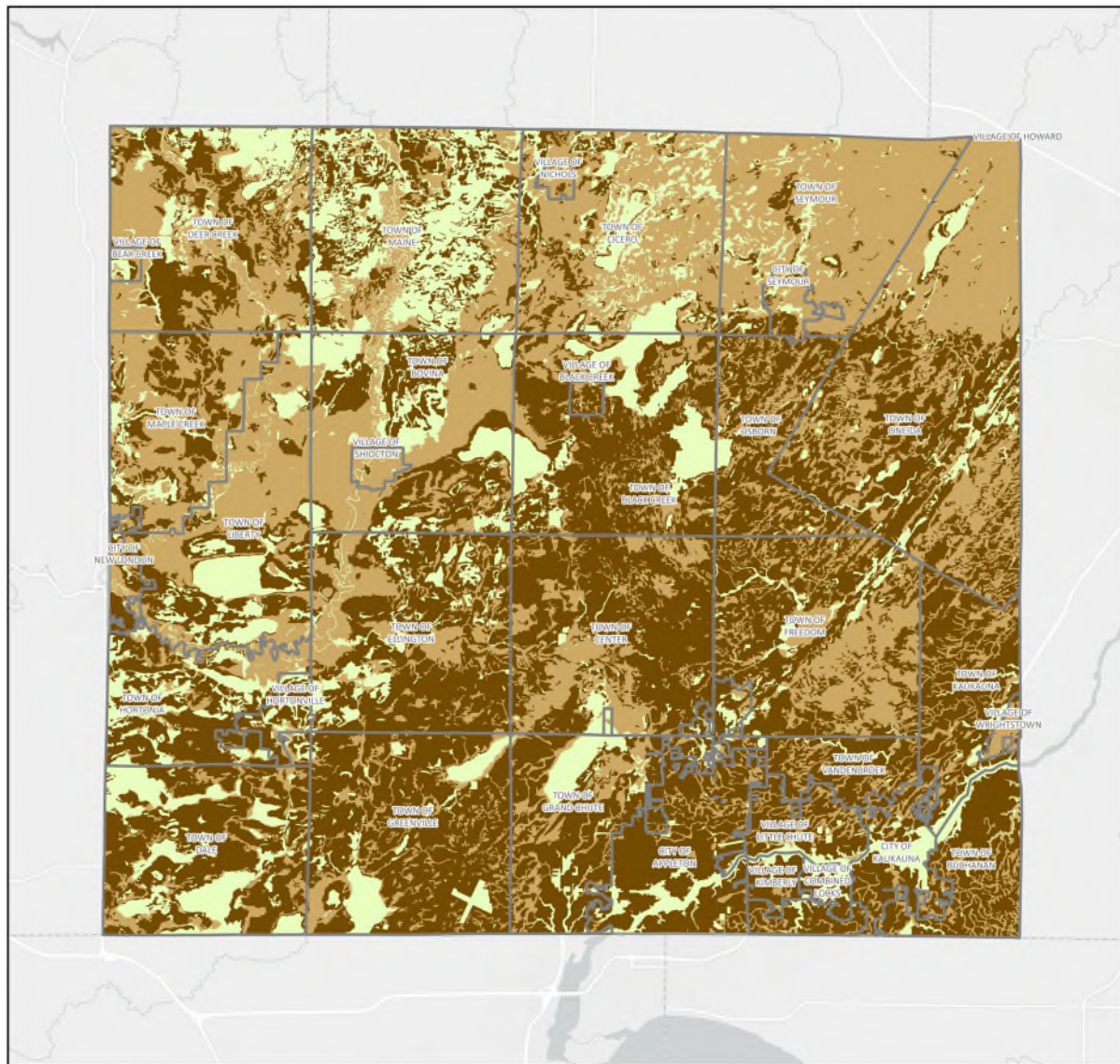
0 1 2 3 4 Miles

Data Source: Wisconsin DNR, FEMA  
& Outagamie Land Conservation & GIS



Outagamie County, Wisconsin  
Comprehensive Plan 2040: The Shared Path Forward

**MAP #: 17** Prime Farmland



Legend

### Prime Farmland Classification

- Prime Farmland  
 Prime Farmland (If Drained, If Protected)  
 Not Prime Farmland



Data Source: NRCS Soil Survey



## Existing Land Use Tools

Outagamie County uses regulatory instruments to shape land use in the unincorporated parts of the County. The two most important tools regulating land use at the County and local level are the zoning ordinance and land division (subdivision) ordinance. Wisconsin's Comprehensive Planning Law requires that land use decisions reached via a zoning ordinance, subdivision ordinance, or official map be consistent with the comprehensive plan (Chapter 66.1001(3), Wis. Stats.).

### Zoning Ordinance

The purpose of a zoning ordinance is to identify the permitted and conditional uses allowed on parcel of land within designated zoning districts. Zoning ordinances may also regulate lot size, road frontage, density, and the location, height, and size of structures, among others. Outagamie County administers zoning regulations under Chapter 54: Zoning. The County's zoning ordinance applies to the following Towns: Bovina, Center, Cicero, Dale, Deer Creek, Ellington, Freedom, Maple Creek, Liberty, Osborn, Oneida, Seymour, and Vandenbroek. Rezoning that occur within these townships must be consistent with this comprehensive plan to meet the requirements of 66.1001(3), Wis. Stats.

### Land Division Ordinance

Unlike zoning, which regulates the use of land, land division regulations govern the manner in which land transitions from one use to another (typically from agricultural or open space to residential). A land division ordinance provides the procedures and standards for dividing a large parcel into smaller parcels for sale or development. Land division regulations require that developers meet certain conditions in order to record a certified survey map or plat. Outagamie County administers land division regulations under Chapter 52: Subdivisions and Platting, for all unincorporated parts of the County.

### Shoreland Zoning

In 1966, the legislature required that counties zone shorelands in accordance with minimum standards established by WDNR. By 1971, all Wisconsin counties had adopted shoreland zoning. Shorelands were defined to include designated areas above the ordinary high water mark (OHWM). The OHWM is the point on the bank or shore where the water, by its presence, wave action, or flow, leaves a distinct mark on the shore or bank. The shoreland zone includes land within 1,000 feet of the OHWM of a navigable lake, pond, or flowage and land within 300 feet of the OHWM of a navigable river or stream, or to the landward side of the floodplain, whichever distance is greater. Outagamie County administers shoreland zoning regulations under Chapter 44: Shoreland Protection Ordinance, in all unincorporated parts of the County.

## Outagamie County, Wisconsin

### *Comprehensive Plan 2040: The Shared Path Forward*

---

#### Floodplain Zoning

Outagamie County maintains a National Flood Insurance Program (NFIP) compliant floodplain zoning program. This applies to all unincorporated parts of the county. Outagamie County, under Chapter 24, Floods, County Code of Ordinances, regulates and limits development within the 100-year floodplain. Under the NFIP, any federally insured mortgage for property within the 100-year floodplain requires the purchase of federally subsidized flood insurance. Map X: *Sensitive Areas*, provides a graphic depiction of the County's floodplains.

#### Airport Zoning

Outagamie County, under Chapter 10: Aviation, County Code of Ordinances, maintains an airport Zoning Districts. This tool is used to meet the Appleton International Airports federal grant assurances, and ensures land uses occurring within proximity to the airport are compatible with airport operations.

#### Stormwater & Erosion Control

Outagamie County administers Chapter 20 – Construction Site Erosion and Chapter 48 – Post Construction Stormwater Management, as a means to protect streams and neighboring properties from the negative effects of unmitigated stormwater runoff during and after construction. Provisions within these ordinances ensure that development is not occurring where wetlands are present (state or unmapped wetlands), unless already permitted by the Wisconsin DNR or US Army Corps of Engineers. Outagamie County's jurisdiction applies to the unincorporated areas of Outagamie County, with the exception of any Townships that administer their own equivalent ordinances (e.g. Grand Chute, Greenville, Buchanan, and Freedom (in part)).

#### Access Control Ordinance

Outagamie County, under Chapter 50, Article III Streets, Highways, and Right of Way, County Code of Ordinances, regulates the spacing and location of public road and private driveway access locations for designated Controlled Access Highways. The requirements are designed to preserve the county highway system by limiting access to high priority highways, and encouraging better land use patterns that don't overly rely on the county highway system for access (e.g. interior road networks that rely more on Local Roads; cross access easement/shared drives and parking lots for commercial development, etc.).

## Brownfields<sup>102</sup>

The Wisconsin DNR maintains a database of sites, the Bureau for Remediation and Redevelopment Tracking System (BRRTS), where known contamination has occurred, and tracks occurrences throughout the cleanup process. Types of properties within their database include chemical spills, leaking underground storage tanks (LUSTS), and investigations and cleanups of contaminated soil and/or groundwater within the Environmental Repair Program (ERP). There are currently 83 sites within Outagamie County with cases that are still “open” with the State of Wisconsin, meaning that cleanup is still underway and final closure has not been granted. Below is a breakdown of the number of sites, by case type, currently open within Outagamie County, along with a description of each category.

### Brownfield

A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. It is estimated that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment.

Source: US EPA Website, 2019.

▲ *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.

**54 open cases.**

▲ *Environmental Repair Program (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.

**19 open cases.**

▲ *Voluntary Property Liability Exemption (VPLE):*

The VPLE is a process by which a person – including a local government – can voluntarily conduct an environmental investigation and cleanup of a property and then receive limits on their liability for historical contamination on a property. **1 open case.**

▲ *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. **9 open cases.**

Many of these sites continue to be used during cleanup. Others may be vacant sites that, in order to be re-used and or redeveloped, require additional work. These types of sites are known as brownfields. While brownfields create unique challenges for redevelopment, they also provide opportunities to revitalize what are often blighted areas of communities. Resources exist at the state and federal level to aid in the cleanup and safe reuse for such sites.

<sup>102</sup> Source and Excerpts from WDNR Website, 2019. BRRTS database, 2019.