Summary—A Vision of Shawano County’s Future

What is the Shawano County Comprehensive Plan?

Located in northeastern Wisconsin on the edge of the state’s “Northwoods” region, Shawano County is characterized by a rural atmosphere punctuated by charming villages and cities. The future of Shawano County will be influenced by numerous factors from both within and outside of the County, including regional and global economic trends; the impact of rapidly changing technology of the 21st century; and the cumulative effect of local land use, transportation, and economic development decisions. The Shawano County Comprehensive Plan responds to and helps shape the factors that the County and its partners—including towns, villages, and cities—can affect. More directly, the Plan is framework around which Shawano County will help guide growth and development over the next 20 years, identify unique areas and resources for preservation, cooperatively work with local governments and private parties and groups, and continue and commence various initiatives to achieve the County’s dynamic future vision.

The Shawano County Comprehensive Plan has been years in the making, spurred both by a State requirement and grant for planning and by a local desire to come together to envision a bright future for the County. The Plan was prepared in partnership with 26 other communities within Shawano County, informed by extensive public and expert involvement at the local and County levels over a three year period, and guided by a County steering committee. These efforts have resulted in a Plan that advances cooperative and widely supported approaches for future growth and change.

These few pages are merely a summary of the Shawano County Comprehensive Plan. The entire Plan features pages of background information, maps including a desired future land use map prepared in collaboration with local governments, and policies and recommendations in several different chapters. The chapters of the Comprehensive Plan cover all aspects of future County growth and change, ranging from land use, to economic development, to natural and agricultural resources, to transportation and others. This document serves as both the County’s comprehensive plan under Section 66.1001 of Wisconsin Statutes and its farmland preservation plan under Subchapter II of Chapter 91 of Wisconsin Statutes. That subchapter II requires that County farmland preservation plans be components of County farmland preservation plans.

Shawano County’s Vision for the Future

Just like the footsteps that create a path in nature, Shawano County’s chosen path is created by key themes that form a cohesive vision for the County. These themes are echoed and advanced through numerous recommendations throughout the Plan, and include:

**Health**… an economy that provides family-supporting jobs; sustainable farms and forests that remain economic drivers; communities and transportation systems that are vital and laid out to promote healthy residents, land, and water; community facilities and recreational opportunities that encourage physical health and well-being.

**Flexibility**… a diverse economy agile enough to weather downturns and shifts; ability to nimbly respond to future economic opportunities; a range of good paying jobs and career opportunities within the County; educational and training choices; a range of housing opportunities; options for future land use that enable land-owner choice in accord with a community vision;
Prosperity… economy built on County’s inherent assets and competitive advantages; staking ground in a bio-based economy; linking businesses to build local supply chains for production; efficient use of infrastructure and tax-payer dollars through sound planning; cost-sharing through collaboration and shared services.

Individuality… individual communities each with a well-defined local character; economic strategy based on inherent, place-based assets; preservation of unique natural resources; nurturing home-grown businesses; alternative energy pioneer; facilitating an environment for local residents to succeed.

Advancement of these four themes and the success of the Comprehensive Plan depend on capitalizing on the County’s unique assets and opportunities. Shawano County’s assets include its position among productive farm and forest lands agriculture, its abundant and unspoiled natural resources for recreation and relaxation, and its transportation accessibility and proximity to growing urban areas. The County’s opportunities include greater marketability of nature, heritage, and agriculture-based tourist destinations; growth in traditional job and retail developments serving local and regional residents; preservation of agricultural and forest lands for sustenance and energy; and the celebration of small-town living environments.

Key Plan Directions and Recommendations

Realizing the County’s vision and capturing its opportunities requires action on multiple levels. The bulk of the Comprehensive Plan provides a how-to guide on achieving the vision. The following is a summary of the key recommendations of each chapter; the full Comprehensive Plan document contains more detail.

Agricultural Resources

- Prepare and maintain a Farmland Preservation Plan map and Future Land Use map and policies that limit non-agricultural development in planned agricultural areas. Maps 4a through 4i of this Plan are the Farmland Preservation Plan map and Maps 7a through 7c of the Plan are the Future Land Use map.
- Use a Land Evaluation and Site Assessment (LESA) system as a decision-making tool to evaluate proposed changes to farmland. Appendix II of the Comprehensive Plan contains the County’s LESA system.
- Promote strategies to grow the farm economy and increase farm family income without having to develop land.
- Capitalize on State initiatives and trends in farming, such as the Working Lands Initiative and the continued movement towards a bio-based economy.

Natural Resources

- Protect environmental corridors and wildlife habitat.
- Protect key natural resources through acquisition of land or development rights as funding allows.
- Protect surface and ground water quality and quantity.
- Implement natural resource identification and non-metallic mineral extraction operational standards.
- Support long-term woodland management and increase the viability of forest products industries.
- Limit housing on forested lands to minimize conflicts.
- Ensure adequate availability of natural lands for recreation and tourism.
### Cultural Resources
- Protect known archeological and historic sites.
- Conduct a comprehensive survey of archeological and historical resources.
- Preserve and celebrate the scenic landscape and park, open space, and recreational resources.
- Work to network and jointly market local festivals.
- Protect historic resources focused on agricultural and forestry heritage and tourism.

### Land Use
- Work with towns, cities, and villages to maintain the County’s rural character by managing the pace, size, and location of new development. The Future Land Use maps show recommended locations for different types of future development.
- Plan for a sufficient supply, mix, and location for new development to meet both County and local community objectives and the projected demand for housing and economic development.
- Minimize the conversion of agricultural and forested lands by directing new growth, including intensive housing development, to already developed locations and to cities and villages.
- Encourage and help facilitate cooperation between towns and adjacent cities and villages on land use issues near community edges.
- Assure that new developments are sustainable and positive for the County from fiscal, transportation, economic, building quality, and environmental perspectives.

### Conservation Development Option
1 House per 10 Acres (with Smaller Lots)
8 Houses
Transportation
- Maintain County Highways and improve them where warranted.
- Work with communities and WisDOT to provide a safe and efficient transportation system for the County.
- Support and assist local community efforts to establish road and driveway standards.
- Promote interconnected road patterns for new development areas.
- Work with Shawano Pathways Organization for Kids, Environment & Safety, Inc. (SPOKES) on the implementation of the bike route and trail plan for Shawano County. Promote the protection of the rural character along scenic roadways.
- Support transportation alternatives for an aging and changing population.

Utilities and Community Facilities
- Provide the appropriate level of community services and facilities, while striving for a low tax levy.
- Direct intensive development to areas where an array of utilities, community facilities, and services are already available.
- Safeguard public and environmental health through proper and responsible waste disposal.
- Provide quality and accessible education, parks, and recreational facilities to enhance the County residents’ quality of life.
- Accommodate long-term County needs to maintain administrative and departmental functioning.
- Promote access to modern telecommunications technology, such as high-speed internet service.
- Promote energy efficiency in government operations, and explore new technologies for local power.

Housing and Neighborhood Development
- Provide a wide range of housing choices.
- Encourage high standards for housing construction and maintenance.
- Site new housing in a way to maximize efficiency in delivering infrastructure and services.
- Promote conservation neighborhood design techniques to blend new housing with the landscape.
**Economic Development**

- Promote the retention and expansion of existing businesses to secure good jobs and tax base.
- Foster entrepreneurship and innovation.
- Explore and adopt new and expanded uses for plentiful agricultural, timber, and other renewable resources.
- Enhance the character and vitality of downtowns and hamlets.
- Reserve future highway interchange areas for high-value economic growth.
- Help fill and expand industrial parks with businesses poised for growth and career-oriented jobs.
- Market County assets with support and cooperation from regional agencies, municipal governments, educational institutions, and business groups.
- Ensure the County’s ordinances provide for high-quality economic development.

**Plan Implementation**

Several follow-up actions will be required for the Comprehensive Plan to become reality. Many of these actions will require substantial cooperation with local governments and property owners before implementation. The County intends to coordinate with other units of government on service delivery, farmland and natural resources protection, transportation planning, economic development, resolution of land use conflict, and ordinance modernization. A major implementation initiative, featuring local government and public involvement, was the 2011 update of the County’s zoning ordinance to help implement the vision of the Comprehensive Plan.
Acknowledgements

County Board of Supervisors (2013)

Jerry Erdmann, Chair
Arlyn Tober, Vice Chair
John Ainsworth
Ken Capelle
Kevin Conradt
Ray Faehling
Richard Ferfecki
Richard Giese
Steven Gueths
Gene Hoppe
Bert A. Huntington
Thomas Kautza
Marvin Klosterman
Dennis Knaak
Robert Krause
Ron Kupper
Kathy Luebke
Milton Marquardt
Michael McClelland
Deb Noffke
Marlin Noffke
Bonnie Olson
Sandra Steinke
Rosetta Stern
William Switalla
Marion Wnek
Randy Young

1 Also on Planning, Development, and Zoning Committee in 2013
2 Also on Land Conservation Committee in 2013

Planning and Design Assistance

For 2009 Comprehensive Plan:
VANDEWALLE & ASSOCIATES
(608) 255-3988
www.vandewalle.com

For 2013 Farmland Preservation Plan Update:
MDRoffers Consulting
(608) 770-0338
www.mdroffers.com

Farmland Preservation Plan Steering Committee (2013)

Keith Ebert
Richard Ferfecki
Dale Klitz
Robert Krause
Kathy Luebke
Michael Moore
Marlin Noffke
Darrel Olson
John Resch
Tom Taufner
Richard Pahlow

Shawano County Staff

Tim Reed, Planning and Development Director
Melinda Osterberg, County Planner/LTE
Steven Kunst, County Planner
David Poffinbarger, GIS Coordinator
Robert Jacobson, Zoning Administrator
Scott Frank, County Conservationist
Jay Moynihan, UW Extension Community Resource Development Educator

Comprehensive Plan Steering Committee (2009)

Kathy Luebke
Ken Capelle
Dennis Hartlben
Jon Zwirschitz
James Martin
Marlin Noffke
Raymond Heinritz
Charles Dallas
Robert Krause
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Located in northeastern Wisconsin on the edge of the state’s “Northwoods” region, Shawano County is characterized by a rural atmosphere punctuated by charming villages and cities. Productive agricultural areas, concentrated in the eastern portion of the County, are contrasted with dense, low-lying forested lands in the west. These and other natural resources, including first class trout streams and critical wildlife habitat, provide a scenic backdrop for area residents.

Development is focused on the City of Shawano, also the County seat, with small villages and unincorporated hamlets scattered throughout the County. While rural, the County has increasingly easy access to local and regional urban areas as a result of recent upgrades to State Trunk Highway 29.

While the County has not experienced rapid growth over the past decade, it is important for the County to consider the forces that might shape it over the next 20 years. In this context, planning for development in an orderly and predictable manner is essential to preserve the County’s farmland and farmers, protect its woodlands and other natural features, avoid land use conflicts, provide housing and employment opportunities, and protect and improve its rural heritage.

**Purpose of this Plan**

This *Shawano County Comprehensive Plan* is intended to:

- Identify areas appropriate for development and preservation over the next 20 years;
- Recommend types of land use for specific areas in the County based on local government input;
- Preserve agricultural lands, farming, and forestry in the County;
- Identify needed transportation and community facilities to serve future land uses;
- Direct private housing and economic development in the County in a coordinated way; and
- Provide detailed strategies to implement plan recommendations.

This *Comprehensive Plan* was prepared and adopted under the State of Wisconsin’s comprehensive planning legislation, adopted in 1999 and contained in §66.1001, Wisconsin Statutes. This Plan meets all of the statutory elements and requirements of the law. All amendments to zoning and land division regulations, including rezoning of land, must be consistent with a comprehensive plan. This *Comprehensive Plan* also serves as the County’s farmland preservation plan under Chapter 91 of Wisconsin Statutes, under the State’s “Working Lands” initiative adopted into law in 2009.

This *Comprehensive Plan* is organized in twelve chapters containing all of the required elements for a plan. Each chapter begins with background information on the element (e.g., land use, transportation, economic development), followed by an outline of the County’s policy desires related to that element, and ends with detailed recommendations. The final chapter (Implementation) provides recommendations, strategies, and timelines to ensure the implementation of this Plan. There are also four appendices. These include a description of County-wide participation activities; the County’s Land Evaluation and Site Assessment (LESA) system; the signed and approved resolutions and ordinances representing County adoption of this Plan and the farmland...
preservation amendments to it; and background data supporting the County’s 2013 farmland preservation amendments to this Plan. The appendices may not be distributed with every copy of the Comprehensive Plan. Readers may obtain a copy of the appendices by contacting the Shawano County Planning and Development Department.

**General Regional Context**
The Jurisdictional Boundaries map (Map 1) shows the relationship of the County to the surrounding region. Shawano is bordered by Brown and Oconto Counties to the east, Outagamie and Waupaca Counties to the south, Marathon County to the west, and Langlade and Menominee Counties to the north. Shawano Lake, near the City of Shawano, is the largest water body in the County. Other significant water resources include the Wolf, Oconto, Embarrass, and Red Rivers. At its eastern most point, Shawano County is roughly 18 miles from Green Bay. The County is roughly 30 miles from Wausau at its western most point. Shawano is one of ten counties that are under the service area of the East Central Wisconsin Regional Planning Commission (ECWRPC).

**County-wide Planning Efforts**
In the late 2000s, this Comprehensive Plan was prepared concurrently with those from 26 other communities in Shawano County, depicted on the Jurisdictional Boundaries map, as part of a State-funded multi-jurisdictional planning process. Participating communities were organized into three clusters for planning purposes. The three clusters were organized as follows:

**Eastern Cluster:** Towns of Angelica, Belle Plaine, Maple Grove, Navarino, Washington, Wauckehon, the Village of Cecil, and the City of Shawano.

**Central Cluster:** Towns of Grant, Herman, Pella, Red Springs, and Seneca; Stockbridge-Munsee Community.

**Western Cluster:** Towns of Almon, Aniwa, Birnamwood, Germania, Hutchins, Morris, Wittenberg; Villages of Aniwa, Bowler, Eland, Tigerton, and Wittenberg.

Much of the data collection for this project was completed at the county level, with supplemental information prepared for each of the local participating communities. An opportunity analysis was also conducted to identify “big picture” influences in the region, from which the County and each local community could advance specific goals or strategies to take advantage of these unique opportunities. Each local community had a chance to review and adjust background data, opportunity analysis, inventory maps, future land use maps, and detailed recommendations for their community. Adoption of the Shawano County Comprehensive Plan occurred on January 29, 2009, following adoption of each of the 26 local plans, and was informed by these local efforts.

The 2013 effort to integrate farmland preservation amendments into this Comprehensive Plan was more focused and condensed, and included:

- Two sets of cluster meetings focused on town and county officials
- Guidance from a town/county farmland preservation steering committee;
- Policy direction from the County’s Planning, Development and Zoning Committee and Land Conservation Committee;
• Public informational meetings with and detailed investigation by towns that considered mapping Farmland and Forest Preservation areas;

• Further meetings with and mapping direction from towns that were considering and/or decided to map Farmland and Forest Preservation areas;

• A public open house to review the draft farmland preservation plan amendments before they were forwarded to the State Department of Agriculture, Trade and Consumer Protection (DATCP) for certification;

• The formal public hearing required under Section 66.1001 of Wisconsin Statutes.
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Map 1: Jurisdictional Boundaries
**Comprehensive Plan Framework**

It is important to base a plan on an overall vision and set of principles or framework. Then, individual strategies and recommendations can be prepared and judged against how well they build upon that framework. The Comprehensive Plan framework is put forth in this section to:

- Describe the context within which this planning effort is taking place – including local, regional and global trends.
- Articulate the importance of this planning effort, communicating what its success might mean for the average resident in the County.
- Present preliminary opportunities and issues the County Comprehensive Plan (and plans from participating local communities) will set out to solve.
- Demonstrate that the decisions the County makes over the next 20 years are connected to one another (and so should be the different Comprehensive Plan elements).

**Time and Place**

As society moves into the 21st century, technology, innovation and a rapidly accelerating global economy are issues we are confronted with most every day. These modern realities reflect the world in which we are currently living and bring with them a host of new opportunities and challenges for the future. However, now as much as ever, the people, land, and community are the foundations of our lives – and will continue to drive our future success and happiness.

Located in northeastern Wisconsin, Shawano County is a place where rich heritage, productive agricultural land, dense forests, and communities retain vitality and potential. The County’s unique landscape and settlement patterns define this place.

The character of the landscape in the County is diverse – from the agricultural east to the forested west and including the picturesque Wolf River corridor and lakefront areas near the center. The villages, cities, towns, and rural crossroad hamlets have a historic flavor, particularly in their centers. Still, these places continue to be shaped by highway changes, new “edge” development, and the pursuit of new economic opportunities. The Landscape Character Map illustrates the natural and human-made places that make up the County.

Over the next several decades, the County has the responsibility to position itself to succeed and prosper in this dynamic, 21st century world. With that responsibility comes the challenge of retaining the “foundations” of the County – the landscape, heritage, and communities – while embracing new opportunities.

**Shawano County’s Regional Role**

Understanding the forces that shape the County’s physical, economic and social environment and future opportunities requires considering its broader regional context. The County’s proximity to growing metropolitan areas, commuting patterns, transportation access and improvements, recreational resources, and the physical landscape are key regional influences. This context is illustrated on the Regional Influences and Opportunities Map that follows, and described below.

**Access to Growing Metro Areas**

Activity and growth in the nearby metropolitan areas of the Fox Valley and Wausau have a direct impact on Shawano County. Proximity to these growing metro areas offers residents of the region a broader range of
choices for work, shopping, and entertainment. Many residents prefer to live in the rural environment that Shawano County offers, while still having access to the jobs, shopping, and amenities offered by larger metro areas. From western Shawano County, the City of Wausau is less than a 45 minute drive. From the City of Shawano and other locations in the eastern half of the County, the cities of Green Bay and Appleton are within 45 minutes, with the upgraded Highway 29 providing relatively easy access.

As population and congestion continue to grow in nearby metro areas, the attraction of rural places like Shawano County will continue to expand. The lakefront seasonal recreational homes, retirement homes, and weekend tourism from these areas demonstrate this force already at work in Shawano County.

**Commuting and Fuel Costs**
The influence of nearby cities on Shawano County is readily apparent in commuting patterns. Of Shawano County’s 19,667 member workforce, over 40% commuted outside of the County for work. Of those Shawano County residents commuting outside of the County for work, more than 36% commuted to Brown County (Green Bay), 15% worked in Waupaca County (Waupaca), 13% worked in Marathon County (Wausau) and 10% worked in Outagamie County (Appleton).

Highway improvements have been one factor facilitating the ease of commuting for residents. Rising fuel prices will most certainly increase the costs of commuting, perhaps to the point where the costs of commuting outweigh the benefits for most people. This trend may prompt the need for more focused economic development efforts in Shawano County to build a stronger local employment base—with shorter commutes. Also, as communication infrastructure expands and fuel prices continue to be high, telecommuting will become a more prevalent influence.

**Transportation Connections**
The County’s position along major transportation corridors means that numerous travelers move through Shawano County. Highway 29 is the link between Green Bay and the Twin Cities. Highway 29 is also the link between many western Wisconsin locations and the Great Lakes. Recent and possible future improvements to Highway 29 may create an even more efficient travel route.

Highway 45 is a pathway to the Northwood’s from the Milwaukee and Chicago areas – particularly to northeastern Wisconsin and Michigan’s Upper Peninsula. Positioned at the southern edge of the great northern forest, Shawano County is a gateway that provides access to nature-based tourism opportunities – including paddling and rafting on the Wolf River, cycling, and exploring National Forest land. Communities along Highway 45 are well-positioned to serve as outposts along this path.

Overall, the County can develop economic strategies that will help capture transportation-centered commercial activity. Transportation planning is critical, as access control and interchanges will determine whether communities and the County will have the ability to capitalize on opportunities presented by travelers.

**Gateway to Major State and National Recreational Resources**
Not only a stop on the pathway to the Northwoods, Shawano County offers abundant recreational amenities on its own – from the high-quality cold water trout streams in the western part of the County, the Wolf River, the Navarino Wildlife Area, numerous parks and natural areas, and several recreational trails. Beyond the County boundaries are the National Scenic Waterway portion of the Wolf River, the Nicolet National Forest, and the Northern Highland American Legion State Forest. Overall, the area is already popular for hiking, fishing, boating, canoeing and kayaking, whitewater rafting, bird-watching, ATV riding, snowmobiling, cross-country skiing – attracting a clientele attracted to a less developed tourism area. The Mohican North Star Ca-
sino and Menomonee Casino are also substantial tourist draws to the County. Building on these recreational amenities is a key to the County’s economic success and the quality of life of its residents.

**Productive Transition Landscape**

Shawano County is positioned at the ecological transition between the agricultural landscape of southern and central Wisconsin and the forested landscape of northern Wisconsin. Its position at this transition zone creates an attractive rural landscape mosaic of farm fields and open spaces interspersed with dense forest stands. This transition landscape influences the aesthetics and recreational opportunities within the County—not to mention providing diverse choices in living environments for current and future residents.

The transition landscape also shapes the economic opportunities of the County and region, with both agriculture and forestry related economies remaining of great importance, even as some uses of their products may shift. Agriculture provides jobs for over 3,600 residents of the County. Dairy is the largest component of the County’s agricultural economy; milk is the top commodity. Other agriculture-related businesses, particularly cash cropping and bio-technology related businesses, are increasingly important to the County. Primary and secondary forest products are also of critical importance to the County. Maple syrup is also an important forest-product commodity in the County. Like agriculture, the new “bio-economy” presents new and exciting opportunities for forestry as well—the State and University system are national leaders in this initiative.

Shawano County’s landscape continues to evolve. Lands that have historically been most productive for agriculture are also under some of the greatest pressure for development. Also, over time forests and natural resources, as well as ownership patterns are increasingly fragmented. This results in a patchwork that can be more challenging to actively manage as “working lands.” Furthermore, removal of land from forest and other land management programs (e.g., Managed Forest Land) results in a reduction in the land available for recreational uses.

**Shawano County is Part of a Global Economy**

In the 21st Century, we are moving from an era of communities competing with their neighbors, to regions competing with other regions across the globe. Shawano County has developed relationships to more tightly hinge its advancement with that of a larger region. This includes the County’s involvement in Northeastern Wisconsin Regional Economic Partners (NEWREP) and the New North Initiative.

Through this Comprehensive Plan, the County acknowledges and attempts to capitalize on the important global trends that will influence Shawano County over the next 20 years, including:

- Enhanced communications capabilities opening up global markets for workforce and products, yet widening gaps between “connected” and “unconnected” regions.
- The emerging “bio-economy,” including advancements in energy, food, and medical products from plants and animals.
- A shift in traditional manufacturing jobs to international locations.
• An aging “baby boomer” population, resulting in workforce shortages, a need for broader range of age-in-place housing options, enhanced healthcare, and different community amenities.
• A trend of people choosing to live or own property in a place because of the amenities or “quality of life” that particular place offers, rather than making decisions based only on where the highest paying job may be.
• Recognition of signs of global climate change and their impact on the natural landscape and land use and transportation decisions.
• As population continues to concentrate in the largest cities and regions, the demand will grow for “retreats” that offer a slower pace distinct from urban-living for weekends, seasonal living, or retirement.

Paths to the Future
The trends described above – global, regional, and in-County – pose important challenges for Shawano County. Advances in communication technology, transportation efficiency, demographic shifts, and the desire for the type of quality of life that Shawano County offers will amount to pressure for growth and change over the next 20 years. These challenges are exactly what this Comprehensive Plan is intended to address.

It is often the fate of rural communities that the qualities that best define them and are most highly valued – a more manageable pace of life, an open and natural landscape, active agriculture and forestry operations, high-quality streams and lakes, clean air, and small-community flavor – are most quickly diminished through haphazard growth and development. Therefore, in order to maintain its quality of life in the face of growth pressure, and reflect the desires of most of its current residents, the County will have to effectively balance the accelerating growth pressures with protecting and maintaining “rural-ness.” It will do this in cooperation with local communities and other partners.

A wide range of future responses (or non-responses) are available to the County in addressing these growth pressures and opportunities. Overall, the County chooses to be proactive, rather than reactive or non-responsive. The County’s path to the future is charted through this Comprehensive Plan, in areas that range from land use; agricultural, natural and cultural resources; housing; transportation; utilities and community facilities; and intergovernmental cooperation. Through this Plan, the County is setting a path into the future that recognizes and capitalizes on global trends, the County’s regional position, and the local landscape. The selected path:

• Is proactive, not reactive or “after the fact.”
• Considers the cumulative impacts of large and small decisions, rather than viewing individual decisions in a disconnected manner.
• Maintains and enhances quality of life, rather than allowing it to diminish through poor planning or lack of action.
• Presents and moves towards achieving an optimistic and progressive future vision for the County.
• Recognizes the need to build and enhance partnerships with local communities, economic development interests, educational institutions, and the private sector.
Just like the footsteps that create a path in nature, the County’s chosen path is created by key themes that form a cohesive vision for Shawano County. The reader will see these themes echoed and advanced throughout the Plan. These themes include:

**Health**… farms and forests that are sustained and remain economic drivers; communities and transportation systems that are vital and laid out to promote the well-being of residents, land, and water; community facilities and opportunities that encourage physical health and well-being; an economy that provides family-supporting jobs.

**Flexibility**… a diverse economy agile enough to weather downturns and shifts; a range of good paying jobs and career opportunities within the County; educational and training choices; a range of housing opportunities; options for future land use that enable land-owner choice in accord with a broader community vision; the ability to nimbly respond to currently unforeseen future economic opportunities.

**Prosperity**… an economy built on inherent assets and competitive advantages of the County; staking ground in a bio-based economy; linking businesses to build local supply chains for production and processing; efficient use of infrastructure and tax-payer dollars through sound land use planning; cost-sharing through collaboration and shared service provision.

**Individuality**… individual communities with a well-defined local character; economic strategy based on inherent, place-based assets; preservation of unique natural resources; nurturer of home-grown businesses; alternative energy pioneer; environment for local residents to succeed.

Ultimately, the County’s opportunities—and the success of this Comprehensive Plan—will be driven by its ability to build off of these themes to capitalize on its key opportunities and overcome its challenges.
Map 2: Regional Influences and Opportunities
Map 3: Landscape Character
Chapter One: Introduction and Framework
Chapter Two: Issues and Opportunities

This chapter provides the baseline data and information necessary to develop a comprehensive understanding of the changes and opportunities in Shawano County. This chapter includes population, household and employment trends and forecasts, education levels, and employment and income characteristics. These general trends provide an important starting point for understanding the County’s key issues and priorities for the plan. This chapter also includes a summary of the planning process, and in particular the public participation opportunities provided at the County, cluster, and local levels. Finally, this chapter includes overall goals to help guide future growth in Shawano County over the 20-year planning period.

This chapter of the Shawano County Comprehensive Plan:

- Provides critical benchmarks on the health and prosperity of the County, including basic population, housing, employment, education, and income trends.
- Describes the individuality of the County in terms of how it is distinguished from the region and other neighboring counties.
- Highlights the participation efforts of the planning process that were intended to help understand the individual issues of each participating community and cluster.
- Establishes overall goals that set a clear path for prosperity in the County, while allowing flexibility in terms of the means through which they are accomplished.

### SUMMARY OF KEY ISSUES AND OPPORTUNITIES

- Most of the County’s growth, particularly in recent decades, is due to migration into the County.
- Shawano County has seen significant housing growth since the year 2000 - nearly quadrupling that which occurred in the 1990s.
- Two thirds of Shawano County’s population resides in towns, with new growth tipping slightly toward cities and villages.
- County residents are more likely to be employed in production, transportation, or material moving, and in farming, fishing, or forestry occupations, than the average regional or State resident.
- The planning process revealed consensus on planning issues and priorities like the preservation of the rural landscape and prioritizing County jobs and economic development.
Population Trends and Forecasts

Over the past fifty years, Shawano County has experienced less than average population growth when compared to the State and region. Given Shawano County’s distance from the Fox River Valley, the East Central Region’s population center, Shawano County’s population has consistently grown at a slower rate than the Region. Figure 2.1 reflects these trends. Figure 2.2 shows the County’s U.S. Census population counts divided by residents of incorporated areas (cities and villages) from 1960 to 2010. During this time period the proportion of residents living in incorporated areas and those living in towns has remained relatively constant.

**Figure 2.1: Population Change (%), 1960 – 2010**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>2.00%</td>
<td>10.00%</td>
<td>3.40%</td>
<td>9.40%</td>
<td>24.80%</td>
<td>24.50%</td>
<td>3.10%</td>
</tr>
<tr>
<td>East Central Region*</td>
<td>14.90%</td>
<td>7.60%</td>
<td>6.20%</td>
<td>12.30%</td>
<td>66.10%</td>
<td>28.30%</td>
<td>6.50%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>11.80%</td>
<td>6.50%</td>
<td>4.00%</td>
<td>9.60%</td>
<td>56.20%</td>
<td>21.40%</td>
<td>5.70%</td>
</tr>
</tbody>
</table>

* East Central Region includes Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara, and Winnebago Counties

Source: Wisconsin Department of Administration

**Figure 2.2: Population by Towns, Cities, Villages, 1960 – 2010**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In Shawano County</td>
<td>32,006</td>
<td>32,650</td>
<td>35,928</td>
<td>37,157</td>
<td>40,664</td>
<td>41,949</td>
</tr>
<tr>
<td>In Towns</td>
<td>20,805</td>
<td>20,970</td>
<td>23,002</td>
<td>23,608</td>
<td>25,805</td>
<td>25,941</td>
</tr>
<tr>
<td>In Cities and Villages</td>
<td>(65%)</td>
<td>(64%)</td>
<td>(64%)</td>
<td>(64%)</td>
<td>(63%)</td>
<td>(62%)</td>
</tr>
<tr>
<td>In Villages</td>
<td>11,204</td>
<td>11,680</td>
<td>12,926</td>
<td>13,549</td>
<td>14,859</td>
<td>16,008</td>
</tr>
<tr>
<td>In Villages</td>
<td>(35%)</td>
<td>(36%)</td>
<td>(36%)</td>
<td>(36%)</td>
<td>(37%)</td>
<td>(38%)</td>
</tr>
</tbody>
</table>

Source: U.S. Census of Population and Housing, 1950 – 2010
The two components of population change are natural increase (births minus deaths) and net migration (the number of people leaving an area subtracted from the number of people moving into an area). Net migration was a significant factor affecting population change in the County during the 1970s, 1990s, and 2000s as shown in Figure 2.3. The County’s rate of net migration from 1970 to 1980 was about 7 percent. This reflects the “rural renaissance,” a trend of high-amenity rural areas experiencing higher rates of growth when compared to the State. From 1980 to 1990 almost no net migration occurred, from 1990 to 2000 it increased again to about 8.5 percent and from 2000 to 2010 it grew at a slightly lower rate of 4.4% reflecting the “great recession”.

The natural increase rate in Shawano County remained steady at about 3 percent from 1970 to 1990, decreasing to less than 1 percent since the 1990s. This means that almost 70 percent of the population growth since the 1970s has been due to net migration into the County, and nearly 90 percent since 1990. A large majority of this was due to an influx of elderly retirees and those seeking recreational amenities.

**Figure 2.3: Source of Population Change, 1970 – 2010**

<table>
<thead>
<tr>
<th></th>
<th>Natural Increase</th>
<th>Net Migration</th>
<th>Total Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shawano County, 1970-1980</strong></td>
<td>1,016 (3.1%)</td>
<td>2,262 (6.9%)</td>
<td>3,278 (10.0%)</td>
</tr>
<tr>
<td><strong>Wisconsin, 1970-1980</strong></td>
<td>277,693 (6.3%)</td>
<td>10,128 (0.2%)</td>
<td>287,821 (6.5%)</td>
</tr>
<tr>
<td><strong>Shawano County, 1980-1990</strong></td>
<td>1,165 (3.2%)</td>
<td>64 (0.2%)</td>
<td>1,229 (3.4%)</td>
</tr>
<tr>
<td><strong>Wisconsin, 1980-1990</strong></td>
<td>313,123 (6.7%)</td>
<td>-126,996 (-2.7%)</td>
<td>186,127 (4.0%)</td>
</tr>
<tr>
<td><strong>Shawano County, 1990-2000</strong></td>
<td>329 (0.9%)</td>
<td>3178 (8.6%)</td>
<td>3,507 (9.4%)</td>
</tr>
<tr>
<td><strong>Wisconsin, 1990-2000</strong></td>
<td>243,687 (5.0%)</td>
<td>126,996 (-2.7%)</td>
<td>471,906 (9.7%)</td>
</tr>
<tr>
<td><strong>Shawano County, 2000-2010</strong></td>
<td>312 (0.8%)</td>
<td>1,776 (4.4%)</td>
<td>2,088 (5.1%)</td>
</tr>
<tr>
<td><strong>Wisconsin, 2000-2010</strong></td>
<td>237,966 (4.4%)</td>
<td>94,319 (1.8%)</td>
<td>332,285 (6.2%)</td>
</tr>
</tbody>
</table>

*Source: Wisconsin Department of Administration*

Figure 2.4 compares Shawano County’s population over the past 30 years to that of neighboring counties and the State. The County’s growth rate of 3.2 percent from 2000 to 2010 is considerably less than the majority of adjoining counties and the State. The prevalence of high-growth counties within the East Central region situated Shawano’s moderate rate of growth below that of the regional average.

**Figure 2.4: Population Trends, 1970 - 2010**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shawano County</strong></td>
<td>32,650</td>
<td>35,928</td>
<td>37,157</td>
<td>40,664</td>
<td>41,949</td>
<td>1,285</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>Brown County</strong></td>
<td>158,244</td>
<td>175,280</td>
<td>194,594</td>
<td>226,778</td>
<td>248,007</td>
<td>21,229</td>
<td>9.4%</td>
</tr>
<tr>
<td><strong>Langlade County</strong></td>
<td>19,220</td>
<td>19,978</td>
<td>19,505</td>
<td>20,740</td>
<td>19,977</td>
<td>763</td>
<td>-3.7%</td>
</tr>
<tr>
<td><strong>Marathon County</strong></td>
<td>97,457</td>
<td>111,270</td>
<td>115,400</td>
<td>125,834</td>
<td>134,063</td>
<td>8,229</td>
<td>6.5%</td>
</tr>
<tr>
<td><strong>Menominee County</strong></td>
<td>2,607</td>
<td>3,373</td>
<td>3,890</td>
<td>4,562</td>
<td>4,232</td>
<td>-330</td>
<td>-7.2%</td>
</tr>
<tr>
<td><strong>Oconto County</strong></td>
<td>25,553</td>
<td>28,947</td>
<td>30,226</td>
<td>35,634</td>
<td>37,660</td>
<td>2,026</td>
<td>5.7%</td>
</tr>
<tr>
<td><strong>Outagamie County</strong></td>
<td>119,398</td>
<td>128,730</td>
<td>140,510</td>
<td>160,971</td>
<td>176,695</td>
<td>15,724</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>Portage County</strong></td>
<td>47,541</td>
<td>57,420</td>
<td>61,405</td>
<td>67,182</td>
<td>70,019</td>
<td>2,837</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>Waupaca County</strong></td>
<td>37,780</td>
<td>42,831</td>
<td>46,104</td>
<td>51,825</td>
<td>52,410</td>
<td>585</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>East Central Region</strong></td>
<td>475,090</td>
<td>511,033</td>
<td>542,712</td>
<td>609,438</td>
<td>651,835</td>
<td>42,397</td>
<td>7.0%</td>
</tr>
<tr>
<td><strong>Wisconsin</strong></td>
<td>4,417,731</td>
<td>4,705,767</td>
<td>4,891,769</td>
<td>5,363,675</td>
<td>5,686,986</td>
<td>323,311</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

*2000 to 2010 population change

*Source: U.S. Census of Population and Housing 1970-2010*
Figure 2.5 shows the County’s projected population in five-year increments, from 2005 to 2030. Estimates for 2005 are based on Wisconsin Department of Administration. All other numbers reflect 2004 projection data. State and regional forecasts for neighboring counties, the East Central region, and the State are also shown for comparison. Shawano County’s population is projected to grow from 42,029 residents in 2005 to 46,621 residents in 2030. This 2030 projection represents a 14.6 percent increase from the year 2000 (40,664).

Although these forecasts are useful for long-term County land use, housing, and community facility planning, one must recognize that these projections have limitations. The State and the East Central Wisconsin Regional Planning Commission base these projections on historical growth patterns and the composition of the current population base. The reliability of these projections depends on the continuation of the County’s past growth trends. Since minor changes in birth, death, or migration rates can significantly impact relatively small populations, Shawano County’s projections could be easily skewed, especially given the influence of immigration on current population trends. These projections are particularly vulnerable to external “push” and “pull” factors that determine migration flow. Actual future populations will depend on market conditions, attitudes about growth, and development regulations. Local policies and plans can certainly affect these rates of growth.

### Figure 2.5: Population Forecasts, 2005-2030

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>42,029*</td>
<td>42,987</td>
<td>44,077</td>
<td>45,058</td>
<td>45,998</td>
<td>46,621</td>
</tr>
<tr>
<td>Brown County</td>
<td>240,404*</td>
<td>248,529</td>
<td>259,192</td>
<td>269,812</td>
<td>281,348</td>
<td>291,862</td>
</tr>
<tr>
<td>Langlade County</td>
<td>21,389*</td>
<td>21,616</td>
<td>21,986</td>
<td>22,244</td>
<td>22,277</td>
<td>22,144</td>
</tr>
<tr>
<td>Marathon County</td>
<td>131,377*</td>
<td>134,504</td>
<td>138,836</td>
<td>143,308</td>
<td>147,112</td>
<td>150,225</td>
</tr>
<tr>
<td>Menominee County</td>
<td>4,616*</td>
<td>4,978</td>
<td>5,221</td>
<td>5,382</td>
<td>5,426</td>
<td>5,378</td>
</tr>
<tr>
<td>Oconto County</td>
<td>38,243*</td>
<td>39,670</td>
<td>41,385</td>
<td>43,018</td>
<td>44,351</td>
<td>45,261</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>170,680*</td>
<td>180,260</td>
<td>189,556</td>
<td>198,948</td>
<td>207,577</td>
<td>215,720</td>
</tr>
<tr>
<td>Portage County</td>
<td>69,365*</td>
<td>72,259</td>
<td>73,911</td>
<td>76,170</td>
<td>78,952</td>
<td>81,177</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>53,351*</td>
<td>54,263</td>
<td>55,297</td>
<td>56,180</td>
<td>56,961</td>
<td>57,174</td>
</tr>
<tr>
<td>East Central Region</td>
<td>638,699**</td>
<td>667,636**</td>
<td>691,308**</td>
<td>714,939**</td>
<td>737,521**</td>
<td>756,877**</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>5,580,757*</td>
<td>5,751,470</td>
<td>5,931,386</td>
<td>6,110,878</td>
<td>6,274,867</td>
<td>6,415,923</td>
</tr>
</tbody>
</table>

* Estimates are from the Wisconsin Department of Administration, 2005
** Estimates are from the East Central Wisconsin Regional Planning Commission, 2003
Sources: Wisconsin Department of Administration, 2004; East Central Wisconsin Regional Planning Commission, 2004
**Demographic Trends**

Shawano County’s changing age structure has important implications for education, services, housing, and transportation needs. The County’s population is aging, along with the rest of the region and State. In general, the number of preschool and school-age children in the County declined over the past thirty years, while the number of working age and elderly residents increased. Figure 2.6 compares the County’s age and sex distribution in 2010 with surrounding counties and the State. In 2010, the County’s median age of 43 was higher than the State’s and the majority of the surrounding counties, with the exception of Waupaca, Langlade and Oconto. With prolonged life expectancy, a trend toward declining birth rates and continued in-migration of retirees, the County’s median age will likely continue to get older.

**Figure 2.6: County Age and Gender Estimates, 2010**

<table>
<thead>
<tr>
<th></th>
<th>Median Age</th>
<th>Under 18 (%)</th>
<th>65 and over (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>43.0</td>
<td>22.8%</td>
<td>18.3%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Brown County</td>
<td>36.2</td>
<td>11.6%</td>
<td>24.9%</td>
<td>50.5%</td>
</tr>
<tr>
<td>Langlade County</td>
<td>45.7</td>
<td>21.1%</td>
<td>20.9%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Marathon County</td>
<td>39.4</td>
<td>24.5%</td>
<td>14.2%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Menominee County</td>
<td>31.4</td>
<td>32.6%</td>
<td>11.4%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Oconto County</td>
<td>43.7</td>
<td>22.4%</td>
<td>16.0%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>37.1</td>
<td>25.1%</td>
<td>11.8%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Portage County</td>
<td>35.8</td>
<td>20.8%</td>
<td>12.8%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>43.5</td>
<td>22.6%</td>
<td>18.1%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>38.5</td>
<td>23.6%</td>
<td>13.7%</td>
<td>50.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2010

As a proportion of the total population, Shawano County has a comparable percentage of young people (age 18 and younger) to surrounding counties and the State, and a higher than average proportion of seniors (age 65 and older). Figure 2.7 shows projections for the County’s age groups through 2030. According to State projections, the County’s elderly cohort will continue to increase over the planning period, as will the middle-age cohort until 2020. The “under 5” age group is projected to remain relatively stable, and the “5 to 19” age group is projected to decrease considerably until approximately 2020, after which a slight increase may occur. By 2030, nearly 25 percent of the County’s population is projected to be age 65 or older. This projected change in age groups in Shawano County will have important planning implications for the future, from school facility planning to elderly housing and transportation. For example, maintaining the viability of local school districts in the face of declining enrollment is one challenge. More information on this trend and some strategies to address it are provided in the Utilities and Community Facilities chapter of this Plan.

With respect to aging populations, which is a nationwide trend influenced by the baby boomer group, the County may consider strategies related to the range of housing options provided, transportation needs, potential demand for other types of services catering to seniors, and leisure and recreational opportunities. These are discussed in greater detail in the Housing and Neighborhood Development, Utilities and Community Facilities, and Transportation chapters of this Plan.
The vast majority of Shawano County residents reported “White” as their race, followed by “Native American, Eskimo, or Aleut”, “African American,” “Asian or Pacific Islander,” “Other,” or multi-racial designations made up the remaining percentage of the population. The proportion of Native Americans, relative to their specific population size, grew the fastest from 2000 to 2010, increasing from 2,545 to 3,162 persons.

**Household Trends and Forecasts**

Figure 2.8 compares selected household characteristics for Shawano County with surrounding counties and the State. Shawano County’s average household size was on par with the State and most surrounding counties, with the exception of Menominee. The County’s average household size has steadily dropped over the past twenty years, from 2.86 persons per household in 1980 to 2.39 in 2010. This trend of declining household size is common throughout the nation. The percent of households occupied by a single resident in the County was lower than the State and adjacent more populous counties. The percentage of single resident households has risen slightly over the past twenty years, from 20.6 percent in 1980 and 25.4 percent in 2010 – probably another indicator of an aging population.

**Figure 2.8: Household Characteristic Comparisons, 2010**

<table>
<thead>
<tr>
<th></th>
<th>Total Housing Units</th>
<th>Total Households</th>
<th>Average Household Size</th>
<th>% Single-person Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>20,641</td>
<td>17,203</td>
<td>2.39</td>
<td>25.4</td>
</tr>
<tr>
<td>Brown County</td>
<td>103,930</td>
<td>97,485</td>
<td>2.45</td>
<td>28.2</td>
</tr>
<tr>
<td>Langlade County</td>
<td>12,314</td>
<td>8,850</td>
<td>2.24</td>
<td>28.3</td>
</tr>
<tr>
<td>Marathon County</td>
<td>57,392</td>
<td>52,865</td>
<td>2.49</td>
<td>25.4</td>
</tr>
<tr>
<td>Menominee County</td>
<td>2,381</td>
<td>1,441</td>
<td>2.92</td>
<td>19.7</td>
</tr>
<tr>
<td>Oconto County</td>
<td>23,406</td>
<td>16,322</td>
<td>2.29</td>
<td>24.6</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>72,822</td>
<td>69,070</td>
<td>2.50</td>
<td>27.0</td>
</tr>
<tr>
<td>Portage County</td>
<td>29,861</td>
<td>27,840</td>
<td>2.38</td>
<td>26.0</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>25,244</td>
<td>21,603</td>
<td>2.35</td>
<td>28.4</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>2,609,819</td>
<td>2,279,738</td>
<td>2.42</td>
<td>28.3</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2007-2011 5-year Estimates
According to forecasts prepared by the Wisconsin Department of Administration, Shawano County's average household size is expected to continue to decrease, from 2.45 in 2010 to 2.30 per household by 2035. This trend in projected household sizes was used to calculate future housing unit demand in the County over the next 20 years. More information on the County's housing and household characteristics can also be found in the Housing and Neighborhood Development chapter.

**Employment Trends**

The County’s primary economic activities are manufacturing, education, health, and social services employment. According to 2000-2011 U.S. Census Bureau American Community Survey, the largest proportion of the 21,592 employed persons living in Shawano County were employed in the education, health, or social services sector (20.9 percent), followed by the manufacturing sector (19.1 percent).

In general, Shawano County residents have more jobs in production, transportation, or material moving and farming, fishing, or forestry occupations than the region and State, and fewer jobs in the sales and office occupations. Like the rest of the region, Shawano also has fewer jobs in management, professional, or related occupations than the State. Major employers in the County include:

- Arrowcast, Inc.
- Owens Forest Products Co.
- Shawano School District
- Wittenberg-Birnamwood School District
- County of Shawano
- Stockbridge-Munsee Community Band of Mohicans Tribal Government
- Mohican North Star Casino
- Thedacare Group
- Tigerton Lumber Company
- Wal-Mart Associates, Inc.
- Krueger International, Inc

Jobs related to tourism, which include arts, entertainment, recreation, accommodation and food services, and retail trade made up a combined total of 20.1 percent of the County’s labor force. Approximately forty percent of the employed residents within these sectors travel outside of Shawano County for work.

**Figure 2.9: Shawano County Labor Force Characteristics, 2010**

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>% of Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>19.1</td>
</tr>
<tr>
<td>Education, Health, Social Services</td>
<td>20.9</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>10.0</td>
</tr>
<tr>
<td>Arts, Entertainment, Recreation, Accommodation, Food Services</td>
<td>10.1</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, Hunting, Mining</td>
<td>8.1</td>
</tr>
<tr>
<td>Construction</td>
<td>6.0</td>
</tr>
<tr>
<td>Transportation, Warehousing, Utilities</td>
<td>4.8</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate, Rental, Leasing</td>
<td>4.1</td>
</tr>
<tr>
<td>Public Administration</td>
<td>4.6</td>
</tr>
<tr>
<td>Professional, Scientific, Management, Administrative, Waste Management</td>
<td>3.8</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>2.7</td>
</tr>
<tr>
<td>Information</td>
<td>1.9</td>
</tr>
</tbody>
</table>

*Source: American Community Survey, 2007-2011 5-year Estimates*
Figure 2.10 shows the number of jobs in Shawano County between 2001 and 2011. Overall, the total number of jobs provided in the County remained fairly steady over this 10 year period, with the Education, Health Services sector showing a substantial increase in jobs (30%) and the manufacturing sector experiencing a sizable decrease in jobs (19%).

**Figure 2.10: Jobs in Shawano County, 2001 - 2011**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resources and Mining</td>
<td>448</td>
<td>464</td>
<td>480</td>
<td>462</td>
<td>495</td>
<td>530</td>
<td>565</td>
<td>577</td>
<td>599</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Construction</td>
<td>516</td>
<td>522</td>
<td>523</td>
<td>508</td>
<td>515</td>
<td>516</td>
<td>495</td>
<td>459</td>
<td>406</td>
<td>375</td>
<td>335</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2,275</td>
<td>2,190</td>
<td>2,201</td>
<td>2,329</td>
<td>2,365</td>
<td>2,380</td>
<td>1,999</td>
<td>2,098</td>
<td>1,807</td>
<td>1,661</td>
<td>1,831</td>
</tr>
<tr>
<td>Trade, Transportation, Utilities</td>
<td>2,347</td>
<td>2,268</td>
<td>2,300</td>
<td>2,482</td>
<td>2,521</td>
<td>2,501</td>
<td>2,500</td>
<td>2,511</td>
<td>2,354</td>
<td>2,277</td>
<td>2,266</td>
</tr>
<tr>
<td>Information</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>262</td>
<td>265</td>
<td>*</td>
<td>256</td>
<td>240</td>
<td>235</td>
<td>227</td>
<td>*</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>291</td>
<td>357</td>
<td>420</td>
<td>416</td>
<td>401</td>
<td>401</td>
<td>389</td>
<td>379</td>
<td>384</td>
<td>371</td>
<td>357</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>667</td>
<td>476</td>
<td>494</td>
<td>491</td>
<td>514</td>
<td>519</td>
<td>541</td>
<td>569</td>
<td>522</td>
<td>581</td>
<td>568</td>
</tr>
<tr>
<td>Education, Health Services</td>
<td>1,243</td>
<td>1,304</td>
<td>1,324</td>
<td>1,264</td>
<td>1,354</td>
<td>1,372</td>
<td>1,428</td>
<td>1,444</td>
<td>1,494</td>
<td>1,544</td>
<td>1,618</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>1,326</td>
<td>1,367</td>
<td>1,351</td>
<td>1,324</td>
<td>1,284</td>
<td>1,305</td>
<td>1,297</td>
<td>1,272</td>
<td>1,238</td>
<td>1,250</td>
<td>1,212</td>
</tr>
<tr>
<td>Other Services</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>450</td>
<td>445</td>
<td>440</td>
<td>444</td>
<td>469</td>
<td>440</td>
</tr>
<tr>
<td>Public Administration</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unclassified</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Jobs</strong></td>
<td>12,606</td>
<td>12,438</td>
<td>12,487</td>
<td>12,791</td>
<td>13,077</td>
<td>13,244</td>
<td>12,869</td>
<td>12,940</td>
<td>12,389</td>
<td>12,243</td>
<td>12,323</td>
</tr>
</tbody>
</table>

*Incomplete or unavailable data

Source: Wisconsin Department of Workforce Development Annual Census of Employment and Wages, Table A202

**Employment Projections**

Woods & Poole Economics, Inc. – a regional economic and demographic analysis firm – predicts the County’s total employment to grow at a rate of 1.25 percent annually through the year 2030. The most significant expected increase in employment during this period is in government jobs, in particular related to education and gaming. Figure 2.11 shows that during the same timeframe jobs in manufacturing, services, and farming are each expected to provide 3 to 4 percent fewer jobs to workers in the County.
Figure 2.11: Projected Employment in Shawano County, 2000 – 2030

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>13.98%</td>
<td>11.15%</td>
<td>9.73%</td>
</tr>
<tr>
<td>Services</td>
<td>27.86%</td>
<td>22.13%</td>
<td>24.08%</td>
</tr>
<tr>
<td>Farming</td>
<td>9.32%</td>
<td>7.30%</td>
<td>5.53%</td>
</tr>
<tr>
<td>Government</td>
<td>12.48%</td>
<td>26.83%</td>
<td>29.23%</td>
</tr>
</tbody>
</table>

Source: Woods and Poole Economics, Inc., 2004 State Profile

The Wisconsin Department of Workforce 2008 Regional Industry Employment Projection predicts education and health services will be the fastest growing industries in Bay Area Workforce Development Area (Brown, Door, Florence, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano and Sheboygan Counties) between 2008 and 2018, increasing by 13.6 percent. Employment in hospitals is expected to grow by 12.6 percent; information, professional and other services is expected to grow by 8 percent and leisure and hospitality employment is expected to grow by almost 6 percent. The manufacturing industries are expected to see the most significant decreases in jobs, with manufacturing decreasing by 10.9%, fabricated metal product manufacturing decreasing by 10% and machinery manufacturing decreasing by 4%. Additional information on the County’s employment characteristics is provided in the Economic Development chapter.

Education and Income Levels

Educational attainment is the highest degree or level of school completed and is one component used to assess a community’s labor force potential. Educational attainment often differs by ethnicity, access to higher education, employer expectations, and socioeconomic status. Figure 2.12 compares the educational attainment levels and median household income of Shawano County with surrounding counties and the State. According to the 2010 Census data, 88.1 percent of the County population age 25 and older had attained a high school level education or higher and 14.5 percent of this same population had attained a college level education.

Figure 2.12: Educational Attainment and Median Income Comparisons

<table>
<thead>
<tr>
<th></th>
<th>High School Graduate or Higher (%)</th>
<th>Bachelor's Degree or Higher (%)</th>
<th>1999 Median Household Income ($)</th>
<th>2007-2011, 5 Yr Estimate Household Income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>88.1</td>
<td>14.5</td>
<td>38,069</td>
<td>45,587</td>
</tr>
<tr>
<td>Brown County</td>
<td>90.0</td>
<td>25.9</td>
<td>46,447</td>
<td>53,353</td>
</tr>
<tr>
<td>Langlade County</td>
<td>87.5</td>
<td>12.2</td>
<td>33,168</td>
<td>42,045</td>
</tr>
<tr>
<td>Marathon County</td>
<td>88.8</td>
<td>21.2</td>
<td>45,164</td>
<td>54,316</td>
</tr>
<tr>
<td>Menominee County</td>
<td>86.3</td>
<td>14.1</td>
<td>29,440</td>
<td>32,017</td>
</tr>
<tr>
<td>Oconto County</td>
<td>88.0</td>
<td>13.3</td>
<td>41,201</td>
<td>49,396</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>92.5</td>
<td>25.8</td>
<td>49,613</td>
<td>57,190</td>
</tr>
<tr>
<td>Portage County</td>
<td>90.6</td>
<td>26.8</td>
<td>43,487</td>
<td>51,887</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>88.6</td>
<td>16.3</td>
<td>40,910</td>
<td>48,604</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>89.4</td>
<td>25.8</td>
<td>43,791</td>
<td>52,374</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2000 & 2010, 2007-2011 American Community Survey 5-year estimates
Another measure of a community’s economic well-being is the average annual income. The County’s median household income was estimated at $45,587 between 2007-2011. This is low in comparison to the median household income reported Statewide during this timeframe and slightly lower than the majority of surrounding counties.

As shown in Figure 2.13, approximately 22 percent of households reported an income between $50,000 and $74,999, and another 17.5 percent of households reported an income between $35,000 and $49,999. Additional information on County income characteristics can be found in Chapter Ten: Economic Development.

Figure 2.13: Shawano County Household Income and Benefits, 2007-2011, 5 Year Estimates

Summary of Public Participation
The County’s planning process that led to the 2009 Plan was guided by several participation events and tools in addition to regular meetings of the Comprehensive Plan Steering Committee. The 2013 farmland preservation amendments to this Plan were guided by the Farmland Preservation Steering Committee, two sets of town cluster meetings, an open house, and interactions with individual towns interested in participating in the State/County farmland preservation program. The following is a summary focused on the late 2000s activities. More complete information on public participation activities is provided in Appendix I.

Public Participation Plan
At the outset of the planning process that led to the 2009 Plan, the County Board of Supervisors adopted a Public Participation Plan to assure that citizens had a variety of opportunities and methods for receiving information about, and to contribute input to, the comprehensive planning process. The Public Participation Plan established the triple track process (county, cluster, and local) that led to the development of this Comprehensive Plan. At the outset of the process to prepare the 2013 farmland preservation amendments, the County Board adopted a new Public Participation Plan focused on that process.
**Countywide Survey**

A County-wide survey was conducted as part of the Shawano Area Communities Comprehensive Planning Project. In the fall of 2006, 9,993 surveys were sent out to a representative sampling of the 16,312 total households in the County. A total of 1,014 surveys were returned. This response rate, coupled with the large percentage of County households who received the survey, provides a significant result. Statistically speaking, the response rate yields a 95% certainty that if every household in the County had responded to a given question, the responses would have varied by less than 3% from the results that were obtained through this survey.

The following is a brief list of key survey results:

- 68 percent of respondents considered the 1980 to 2005 County growth rate to be “just right.”
- Top responses for important “key future directions” included: maintaining rural character, promotion of business and industrial development, use of sign and other appearance regulations to preserve scenery, and the continuance of farming.
- 84 percent of respondents thought that new development should be planned by the community with property owner input.
- Nearly half of respondents would like new recreational natural areas (trails, wildlife viewing, nature centers) in their community.
- When asked why they chose to live in Shawano County, over one-quarter of respondents selected “near family or friends.”

The survey results were also analyzed by cluster (Eastern, Central, and Western). The outcome of this analysis showed a remarkable consistency in responses no matter where in the County the respondent resided. One small difference noted was a difference in importance placed on preservation of farmland and forestland. Respondents in the Eastern and Central clusters tended to place more value on farmland, while preservation of forestland was emphasized in the Western cluster.

**Focus Groups**

During the course of the planning process, several issues were identified as key issues for the County. Focus Groups were developed and held around these issues. Three Focus Groups were held in December 2006 – dealing with Transportation, Natural Resources and Recreation, and Agriculture. Follow-up Natural Resources and Recreation and Agriculture Focus Groups were held in October of 2007. The information shared at these Focus Groups helped formulate the recommendations presented in the applicable sections of this Plan.

**Planning for Community Character Event**

This awareness and education event, held January 30, 2007, was intended to help the County and local communities begin to consider the types of strategies related to land use and community character that they might like to include in their comprehensive plans. The presentation described proven strategies to help protect and
retain community character in a rural setting. This event provided ideas in advance of the local community Land Use Workshops that were scheduled for February and March 2007; some summary ideas from this event are also included in the Land Use Chapter.

**County Agriculture Meeting**
In the fall of 2007, a County-wide meeting was held to discuss the future of agriculture in Shawano County. The meeting featured a representative from Dakota County, Minnesota, where positive and innovative long term agricultural preservation has been advanced through establishing a County-wide purchase of development rights (PDR) program.

**County Culture Meeting**
A county-wide Culture Meeting, facilitated by University of Wisconsin – Extension staff in fall 2007, focused on the different cultural opportunities present throughout the County. Topics of discussion included the diversity of cultures in the County (native/non-native), cultural history, and art and entertainment resources.

**Cluster Meetings – Local Public Participation Process**
Each participating local community formed a Plan Commission to guide its own local planning process. Each Commission participated in a number of efforts to involve and educate the public, both at the individual community and cluster levels. A similar approach extended to the 2013 process to prepare the farmland preservation plan component, within which County staff met with interested town boards and plan commissions to discuss and prepare farmland preservation plan maps.

Building off the local Comprehensive Plans’ land use element and the results of the agriculture, natural resources, and recreation focus group meetings, Shawano County Economic Progress, Inc. (SCEPI) and Shawano County facilitated meetings in late 2007 in each Cluster regarding economic development. Topics of discussion ranged from agriculture and related industries, development within cities and villages, economic development opportunities in unincorporated rural communities, gaming, tourism, and forestry and the timber industry.

**Community Plan Direction Workshop (March 2006).** This cluster workshop held on March 4, 2006 was intended to help provide initial direction for the planning process. Participants were asked to summarize what they value most about their community, as well as crucial trends affecting their community. Finally, participants established key local plan directions based on individuals’ “Hopes and Dreams.”

**Cluster Visioning (September and October 2006).** A workshop to develop a vision for each cluster was held in early fall of 2006. The outcome of those meetings was developing vision statements for each cluster area. The statements are presented below:
VISIONS FOR SHAWANO COUNTY

Eastern Cluster Vision
- This area has a good mix of city and rural, industry and agriculture, infrastructure and natural resources. While progress is natural, progress in one area should not cause problems in other areas. Expansion of industry and residential areas are carefully planned, coordinated, and executed in a slow, well thought-out manner. Expansion and development is not made just for the sake of progress. Education, technology, and innovative ideas are embraced. Careful consideration of the consequences to woodland, wildlife areas, land and water resources, and productive agricultural land are given. Enhancing recreational activities that promote tourism and economic growth is encouraged.
- In the year 2030 Shawano County will continue to offer a quality of life unmatched in Wisconsin. A vision for an appreciation of what is here today, with protection of what is to be. Preserving our natural environment (lakes, streams, woodlands, and open spaces). Planning for future development with insight for progress in a manner which protects jobs, schools, agriculture, and other resources.
- The County will remain a family-oriented, rural community; striving to preserve its historical aspects, agricultural heritage, pastoral setting, and natural resources, including ground and surface water, woodlands, and wildlife. The County will manage growth to appropriate areas to meet various housing needs, and allow for potential commerce and industrial development. The County will strive to provide quality community services such as schools, utilities, medical facilities, road infrastructure, police and fire protection.

Central Cluster Vision
- The central part of Shawano County has maintained a rural community setting. By controlling common sense development we have preserved and protected natural resources, air, water, and farmland, strong inter-governmental communication provided quality infrastructure; including good schools, roads, police, fire protection, emergency medical services, and health services.

Western Cluster Vision
- Western Shawano County is a rural area of natural beauty. It contains vibrant towns and villages. They have maintained their natural resources, agricultural lands, and trails. Regular communication and coordinated planning between towns, villages, and the County have encouraged planned, managed growth, and quality essential services, including education, healthcare, and viable businesses.

Building Community Goals Workshop (December 2006). Participants from each participating community developed goal statements for each element of its Plan as well as ideas for accomplishing the goals as a group. These ideas were incorporated into the programs and recommendations of each local Plan.

Sharing Future Land Use Vision Workshop (October 2007). These cluster workshops were an opportunity for communities to see the preliminary composite Future Land Use Map for the County and for their cluster area. Commonalities and themes among Future Land Use maps were identified. In addition, potential challenges pertaining to achieving future land use visions were also identified and discussed – including land use “difference areas” between communities. Break-out sessions allowed for more detailed discussion of implementation and next steps – including resolving intergovernmental plan difference areas, zoning and subdivisions ordinance amendments, and next steps.

Intergovernmental Meetings (January 2008). Several intergovernmental meetings were held in winter 2008. These meetings were intended to allow more in-depth discussion of future land use “difference areas” between communities, to facilitate discussion of how the Shawano County Comprehensive Plan will include com-
munities that did not participate in this comprehensive planning process, and to engage cities and villages in discussion of Plan implementation. More detail on these meetings is provided in the Intergovernmental Cooperation chapter of this Plan.

**Plan Adoption and Implementation Meetings (Spring 2008).** A final set of cluster meetings was held to describe the required process to adopt and implement local comprehensive plans. The local planning processes were nearing completion at the time.

**Special Places Photo Exercise (Fall 2006).** Members of each local Plan Commission and County Advisory Committee completed a “special places” photo survey to capture the County’s defining character as seen from the eyes of residents. Participants photographed the "special places" that capture this character. These photographs suggested places that they wished to preserve or see more of in the future. Participants also photographed places that they felt hurt the character and appearance of the community, or types of places elsewhere that they did not wish to see in the community. This work helped form community character and land use recommendations in local plans, and helped to illustrate them.

**Land Use Workshops (Winter 2007).** Meetings were held in February to April 2007 to provide local input and insight into the development of each participating community’s Future Land Use map. This meeting included a discussion of the differences between zoning and land use planning as well as an overview of the trends that are influencing land use. The workshop results were used as a basis for each community’s Future Land Use map, and ultimately in creating the County’s Future Land Use map presented in this Plan.

**Commission Working Sessions (2006 - 2008).** Each participating community formed a Plan Commission to guide the local planning process. Ongoing work sessions to review materials, develop and refine ideas, and finalize the various elements of the local comprehensive plans were held throughout this process.

**Public Open Houses and Hearings (Spring and Summer 2008).** To provide an opportunity for the public to review the local comprehensive plans, communities sponsored opportunities to present the plans to the public, take comments, and answer questions with County staff and the consultants.

**Shawano County Overall Goals**

The following were identified as overall goals for the Shawano County Comprehensive Plan through this process. These goals are expanded on through objectives, policies, programs, and recommendations included in each of the respective chapters of this Plan that follow.

1. Conserve productive agricultural land, and farming and forestry as a central component of Shawano County’s economy.

2. Preserve and enhance the County’s natural features, including lakes, rivers, forests, woodlands, wetlands, wildlife habitats, open spaces, and groundwater resources.

3. Preserve the County’s cultural, historic, and archeological sites; scenic character; and cultural assets.

4. Promote a sustainable land use pattern that promotes the rural character of the County; provides new economic or housing opportunities; and allows the continuation of agriculture, forestry, and open lands uses.

5. Provide a safe and complete transportation system that functions efficiently and meets the needs of all residents.

6. Ensure that utilities, community facilities, and services meet the expectations of County residents and function effectively and efficiently.

7. Coordinate utilities and community facilities decision-making with land use, transportation, intergovernmental, and natural resource planning.
8. Encourage a wide range of housing choices to accommodate the variety of needs and desires of County residents.

9. Apply conservation neighborhood design principles to new neighborhoods throughout the County.

10. Strengthen the County’s economy to maximize sustainable use of the County’s assets and provide a robust source of employment and tax revenues.

11. Cooperate with other jurisdictions – including communities within the County, neighboring units of government, and overlapping jurisdictions – on issues related to all elements of this Comprehensive Plan.
Agricultural resources are important components of the history, landscape, and economy of Shawano County. In reference to the four major themes of this Plan, agricultural resources contribute to the County’s:

**Health** – through providing food and fiber for residents, export economies, and the production of value-added products within the County; through retaining large undeveloped areas for environmental health; and through recognition that the health of farms and urban areas in the County go hand in hand.

**Flexibility** – through providing options for locally sourced food and fiber; and through allowing limited non-farm development options that have less impact on farming than large lot zoning.

**Prosperity** – through building an economy based on the competitive advantages of the County (dairy heritage, rich soils, agricultural infrastructure, knowledge), and through contributing raw inputs and agricultural knowledge to emerging economies, like bio-energy and bio-products.

**Individuality** – through shaping the rural, natural character of the landscape; and bridging the past, present, and future of the County.

The background data, goals, objectives, policies, and recommended programs for agricultural preservation in this chapter and in Appendix IV advance these themes. This chapter—along with Appendix II and Appendix IV and certain components of the Land Use, Economic Development, and other chapters—fulfill the County’s farmland preservation planning requirements under Chapter 91 of Wisconsin Statutes.

### AGRICULTURAL RESOURCES RECOMMENDATIONS SUMMARY

- Prepare and maintain farmland preservation and future land use maps and policies that limit non-agricultural development in agricultural areas
- Work in cooperation with interested towns to focus preservation within designated “Farmland and Forest Preservation areas,” within which incentives like tax credits are focused.
- Use a Land Evaluation and Site Assessment system as a decision making tool to evaluate proposed changes to agricultural land
- Maintain the County’s farmland preservation plan as a component of this Comprehensive Plan and update farmland preservation components in coordination with future Comprehensive Plan updates
- Promote strategies to increase the agricultural economy and farm family income without having to develop land
- Capitalize on State initiatives and trends in farming, such as the Working Lands Initiative, acquisition of agricultural conservation easements, and continued movement towards a bio-based economy
Agricultural Resource Inventory

Agriculture is a prominent activity in Shawano County. Farmland covers somewhere between 1/3 and ½ of the County’s total land area, depending on what source is used. The eastern half of the County is dominated by a mixture of dairy and cash crop farms. The western third of the County has significant areas of woodlots and forest, interspersed with agricultural fields. The center of the County has a higher population concentration, non-farm development, and State owned land.

Farming is an important component of Shawano County’s economy. It is also a way of life for many County residents, particularly in the eastern towns. According to the UW-Madison/UW Extension, the industry contributes over 4,267 jobs in the County, accounts for over $487 million of business sales in the County, contributes $175 million to County income, and pays $16 million in property taxes. Dairy is the largest part of agriculture in the County, generating one half of agricultural business sales.

Farming is also an important component of Shawano County’s heritage and character. The agricultural landscape enhances Shawano’s aesthetic appeal, and the seasonal changes of growing crops, the colors and textures of farm fields, and the architecturally significant farm buildings all contribute to Shawano’s rural character. The character, location, viability, and future expectations for farming in the County are described in greater detail in Appendix IV, including a map that shows areas used for different types of farming.

Assessment of Farmland Viability

The Natural Resources Conservation Service groups soils based on their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. These capability classifications are based on numerous criteria that include, but are not limited to, the soil’s salinity; capacity to hold moisture; potential for erosion; depth, texture, and structure; as well as local climatic limitations (e.g., temperature and rainfall). Under this system of classification, soils are separated into eight classes.

Generally, Class I and Class II soils are the best suited for the cultivation of crops. Class I soils have few limitations that restrict their use for cropland. These soils can sustain a wide variety of plants and are well suited for cultivated crops, pasture plants, range lands, and woodlands. Class II soils have moderate limitations that restrict the types of plants that can be grown or that require simple conservation practices or soil management techniques to prevent deterioration over time. However, these practices are generally easy to apply, and, therefore, these soils are still able to sustain cultivated crops, pasture plants, range lands, and woodlands.

Soils in Class III have limitations that, under natural circumstances, restrict the types of plants that can be grown, and/or that alter the timing of planting, tillage, and harvesting. However, with the application and careful management of special conservation practices, these soils may still be used for cultivated crops, pasture plants, woodlands, and range lands. Soils in capability classes IV through VIII present increasingly severe limitations to the cultivation of crops. Soils in Class VIII have limitations that entirely preclude their use for commercial plant production.

The Soil Suitability for Agriculture map depicts the locations of Class I, II, and III soils in the County, which are considered “prime farmland” for purposes of this Plan. Generally, Class I and II soils are located in highest concentration in the eastern portion of the County. Some Class I and II soil types are also found within the central and western parts of the County. Countywide, 0.1 percent of the lands are Class I soils, 50.5 percent are Class II soils, and 14.1 percent are Class III soils.
Map 4: Soil Suitability for Agriculture
Federal Farmland Preservation Programs
Shawano County farmers can participate in several federal programs and initiatives intended to preserve long-term farming activities including:

The Conservation Reserve Program (CRP) is a voluntary program administered by the USDA-Farm Service Agency (FSA). The CRP program provides technical and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. As of 2012, about 27 million acres across the U.S. were enrolled in CRP. Producers that are accepted into the program can receive cost-share assistance to plant long-term, resource-conserving covers and receive an annual rental payment for the length of the contract (10-15 years). To be eligible for placement in CRP, land must be cropland that is planted or considered planted to an agricultural commodity for four of the previous six crop years, and that is physically and legally capable of being planted (no planting restrictions due to an easement or other legally binding instrument) in a normal manner to an agricultural commodity. In return for establishing long-term, resource-conserving covers, FSA provides annual rental payments to participants. FSA bases rental rates on the relative productivity of the soils within each county and the average dryland cash rent using data provided by the National Agricultural Statistical Service or cash-rent equivalent as guidelines. The maximum CRP rental rate for each offer is calculated in advance of enrollment. Producers may offer land at that rate or offer a lower rental rate to increase the likelihood that their offer will be accepted.

The Conservation Stewardship Program (CSP) is a voluntary program administered by USDA Natural Resource Conservation Service (NRCS) that encourages agricultural and forestry producers to address resource concerns by (a) undertaking additional conservation activities and (b) improving and maintaining existing conservation systems. CSP provides financial and technical assistance to help producers, regardless of operation size or crops produced, conserve and enhance soil, water, air, and related natural resources on their land. To be eligible for the program, applicants must comply with various standards and include all eligible land in their entire agricultural or forestry operation. In return, CSP pays for conservation performance – the higher the performance the higher the payment. Payments include an annual payment for installing and maintaining conservation activities, and a supplemental payment for participants adopting a resource crop rotation. Five year contracts are typically offered.

The Wetland Reserve Program (WRP) is a voluntary enrollment program administered by USDA NRCS which provides technical and financial support to help landowners with their wetland restoration efforts. The following types of lands are eligible for WRP: wetlands farmed under natural conditions, farmed wetlands, prior converted cropland, farmed wetland pasture, certain lands that have the potential to become a wetland as a result of flooding, rangeland, pasture, or forest production lands where the hydrology has been significantly degraded and can be restored, riparian areas that link protected wetlands, lands adjacent to protected wetlands that contribute significantly to wetland functions and values, wetlands previously restored under a local, State, or Federal Program that need long-term protection.

Enrollment options include a permanent easement (at 100% funding of easement value and restoration costs) or a 30-year easement (at 75% funding). Other arrangements includes restoration cost-share (wherein the agreement restores or enhances wetland functions without placing an easement on enrolled acres), and a 30 year contract on tribal lands.
The **Wildlife Habitat Incentives Program** (WHIP) is a voluntary program administered by NRCS that provides both technical assistance and up to 75 percent cost-share assistance to landowners to establish and improve fish and wildlife habitat on agricultural land, nonindustrial private forest land, and Indian land. WHIP provides both technical assistance and up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat. WHIP cost-share agreements between NRCS and the participant generally last from one year after the last conservation practice is implemented but not more than 10 years from the date the agreement is signed. NRCS has established the following national priorities: promote the restoration of declining or important fish and wildlife habitats, benefit at-risk species, reduce impacts of invasive species, protect and enhance habitat, migration and wildlife movement corridors.

The **Grazing Lands Conservation Initiative** is a collaborative initiative involving NRCS as well as individuals and organizations focused on providing technical assistance to help new grazers begin using rotational grazing methods. Trained grazing specialists work one-on-one with farmers to develop grazing plans, including seeding recommendations, fencing, and watering plans. This process has formed coalitions that represent the grass root concerns that impact private grazing land. The coalitions actively seek sources to increase technical assistance and public awareness activities that maintain or enhance grazing land resources.

The **Environmental Quality Incentives Program** (EQIP) provides a voluntary conservation program for farmers and ranchers that promote agricultural production and environmental quality as compatible national goals. EQIP offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land to owners of land in forest or agricultural production up to a maximum term of ten years in length. These contracts provide financial assistance to help plan and implement conservation practices that address natural resource concerns and for opportunities to improve soil, water, plant, animal, air and related resources on agricultural land and non-industrial private forest land. In addition, a purpose of EQIP is to help producers meet Federal, State, Tribal and local environmental regulations. Historically underserved producers (limited resource farmers/ranchers, beginning farmers/ranchers, socially disadvantaged producers, Tribes) may be eligible for a higher practice payment rate for the implementation of conservation practices and conservation plans. Producers may use a certified Technical Service Provider (TSP) for technical assistance needed for certain eligible activities, services and the development of conservation plans. Historically underserved producers may also be eligible for advance payments up to 30 percent of the cost needed to purchase materials or contracting services to begin installation of approved conservation practices.
Congress recently extended, through 2013, a Federal tax incentive for conservation easement donations that has helped thousands of landowners conserve their land. The incentive raises the deduction a donor can take for donating a conservation easement from 30 percent of his or her adjusted gross income in any year to 50 percent; allows qualifying farmers and ranchers to deduct up to 100 percent of their income; and extends the carry-forward period for a donor to take tax deductions for a voluntary conservation agreement from 6 to 16 years.

Wisconsin Working Lands Initiative
In 2009, the Wisconsin State Legislature passed the Working Lands legislation, which contained significant alterations to the State farmland preservation program. These include a wider array of choices for State-certified farmland preservation zoning districts, a new system of calculating State income tax credits for eligible landowners, and adjustments to conservation requirements for land owners interested in obtaining tax credits. Also noteworthy is the fact that forest management is considered an agricultural use under the legislation. Therefore, owners of managed forest lands are eligible for similar benefits as owners of crop or pasture land.

A new farmland preservation plan, certified by the State, is an essential first step to enable farmers in designated “farmland preservation areas” to obtain farmland preservation credits on their State income taxes. The standard tax credit rate is $7.50 per acre. To be eligible for this level of tax credit, farmers owning lands in planned “farmland preservation areas” must also be zoned in a State-certified farmland preservation zoning district (such as the County’s FP-1 Farmland Preservation district), meet minimum farm income requirements, and have been issued a Certificate of Compliance by the Shawano County Land Conservation Division that certifies they are in compliance with the NR 151 Agricultural Performance Standards and Prohibitions incorporated into ATCP 50.

Once current agreements between individual farmers and the State expire, farmers that are not zoned in a State-certified farmland preservation zoning district may only obtain tax credits (at a lower $5 per acre rate) if they own land within a State-approved “Agricultural Enterprise Area.” Farmers that are zoned in a farmland preservation zoning district and in an “Agricultural Enterprise Area” are eligible for tax benefits as owners of crop or pasture land.

Wisconsin’s Working Lands Initiative
The Wisconsin Working Lands Initiative, passed as part of the State’s 2009—2011 budget bill, focused on a rewrite of Chapter 91 of Wisconsin Statutes. Main components, and how they are being carried out in Shawano County, include:

- Modernization of land use planning and zoning program for farmland preservation. For Shawano County, the results are articulated in detail in this Plan and in the Shawano County Zoning Ordinance.
- Requirement that all counties update their farmland preservation plans as components of their comprehensive plans. This Comprehensive Plan includes Shawano County’s updated farmland preservation plan as a component, replacing the 1982 Shawano County Farmland Preservation Plan.
- Establishment of the Agricultural Enterprise Area (AEA) program, within which the State designates areas that have the greatest opportunity for and commitment to farmland preservation, on a limited and competitive basis. Local communities can pursue designation of an AEA by submitting a detailed plan, maps, and petition to the State, supported by area property owners. AEA designation allows the community to encourage increased agricultural investment and land use and farmers to be eligible for higher tax credit rates. The Town of Maple Grove contains one of the first AEAs in the State. The Maple Grove AEA application effort was supported by nearly 150 hours of County staff time and maps.
- Increased State income tax credit opportunities for farmers in areas with State-certified farmland preservation zoning and/or AEAs.
- Development of a Purchase of Agricultural Conservation Easement (PACE) program to provide matching grants for conservation easement purchases by a county government, local government, or non-profit organization. The State PACE program is currently unfunded, but restoration of funding is under investigation.
credits at the highest $10 per acre rate. However, these “Agricultural Enterprise Area” rates are possible only if the farmer enters into a new contract with the State restricting land from development for 15 years.

In the 2011 tax year, 296 farmers claimed $311,172 in farmland preservation tax credits on 44,816 acres. This equates to an average credit of $1,051 per claimant and $6.94 per acre.

There had $27 million available annually to provide farmland preservation tax credits to eligible State landowners. The 2013-2014 State budget removed this $27 million cap and ensures the State will pay tax credits in full to all eligible landowners who apply for the credit.

Provided that they meet all farmland preservation program eligibility requirements, landowners who are enrolled in the Managed Forest Law (MFL) program are able to obtain farmland preservation income tax credits. Further, forestland does not need to be enrolled in the MFL program for the owner to be eligible for farmland preservation income tax credits.

The Working Lands initiative includes other paired grant and loan programs to expand the farm economy and assist individual businesses engaged in or related to farming and forestry. Appendix IV contains a list of these grant and loan programs that was current at time of writing.

### Agricultural Resource Goal, Objectives and Policies

**Goal:**
Preserve large tracts of contiguous productive crop, pasture, and forest land, and farming and forestry as a central component of Shawano County’s economy and way of life.

**Objectives:**
1. Explore creative approaches to preserve farmland using objective tools to evaluate development proposals, voluntary programs, and incentives, where possible.
2. Work collaboratively with interested towns and property owners to identify Farmland and Forest Preservation areas as places to focus the promotion of agricultural, forestry and related uses and to limit non-agricultural development.
3. Help manage the impacts of farm operations on surrounding uses, family farming, communities, water quality, and the natural environment.
4. Help add production, processing, markets, uses, and value for farm and forestry products in the County, working in collaboration with producers, manufacturers, sellers, and other organizations.

**Policies:**
1. Use a Land Evaluation and Site Assessment (LESA) system to evaluate proposed land use changes that may result in the conversion of agricultural land (e.g., rezoning, subdivision requests) to inform and advise decision making.
2. Promote the continuation of the “family” farm and working lands by supporting the introduction, maintenance, and growth of agriculture-support businesses, and providing families with opportunities for small non-farm businesses to supplement farm income.
3. When the owner of a residence existing before the establishment of County farmland preservation zoning over the land desires to divide the land occupied by such residence and/or accessory buildings from the

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**WHAT IS VALUE ADDED AGRICULTURE?**

Value-added agricultural opportunities increase the economic value and consumer appeal of a farm product by “adding value” to a raw commodity through processing, marketing, and otherwise enhancing the product. For example, manure is a necessary byproduct of the livestock industry. However, processed manure becomes a value-added organic residual that can be marketed for horticulture, silviculture, and land reclamation purposes. See additional information and ideas towards the end of this chapter.
farm, in conjunction with a farm consolidation, require that such residential lots be as small as practical, considering the desire to keep accessory buildings with the residence and the future probability that farm animals will be kept on the lot.

4. Continue to implement the County Livestock Waste Management (LWM) ordinance, which regulates livestock operations and mitigates their impacts so they do not degrade community and environmental sustainability.

5. Consider amendments to the County subdivision ordinance to work cooperatively with the County zoning ordinance to preserve agricultural land, including referencing the County’s LESA system to inform decisions and requiring “right-to-farm” notices with certified survey maps in planned agricultural areas. Pursue other actions and implement the recommendations of Maps 7a, 7b, and 7c (the Future Land Use map) to minimize conflicts between agricultural operations and non-agricultural development.

6. Maintain the County’s farmland preservation plan as a component of this Shawano County Comprehensive Plan.

7. Work with towns to amend Town comprehensive plans and zoning ordinances in a manner that reflects the County farmland preservation plan components to this Comprehensive Plan, including associated farmland preservation plan maps.

8. Work with towns which do not, as of December 31, 2013, have mapped “Farmland and Forest Preservation area” within them, but in the future desire to have such areas included in the County’s farmland preservation plan.

9. Work with farmers in the Farmland and Forest Preservation area to meet soil and water conservation eligibility requirements and obtain State income tax credits.

10. Direct intensive housing development, such as subdivision plats and multiple family housing, to areas of the County planned for such development, instead of in the Farmland and Forest Preservation area. More appropriate locations for intensive housing development include areas planned in one of the residential future land use categories on Maps 7a, 7b, and 7c (the Future Land Use map), and other areas with limited agricultural activities and/or with public utilities and services.

11. See also the below policies specific to the Farmland and Forest Preservation area that is delineated on Maps 4a through 4i.

Agricultural Resource Recommendations and Programs

Shawano County’s working lands define not only the economy of the area, but the heritage and lifestyle of many parts of the County. Preserving agricultural land uses and a rural way of life are important components of the future vision for the County. The changing national market for agricultural products, including the demand for organic products, value-added agriculture, niche and specialty crops, and the role for agriculture in biotechnology all create a significant opportunity for agriculture-based economic growth.

Building on each of the objectives as listed above, this Plan includes the following specific recommendations to preserve and enhance agriculture.
Agricultural and forestry operations are easiest to pursue where there is not a large amount of residential development nearby. There are numerous conflicts between such uses, including, noise, odors, use of roads, and hours of operation. Further, the intrusion of nonagricultural uses in farming areas brings a sense of impermanence, which discourages further investment by remaining farmers. Therefore, the County intends to:

1. Working in collaboration with the towns, prepare and revise the Future Land Use map (Maps 7a, 7b, and 7c) so residential development in agricultural areas is limited, and intensive residential developments like subdivision plats and multiple family housing is directed to other locations.

2. Applying land use policies that are consistent with the future land use categories on the Future Land Use map, such as when land is proposed for rezoning and land division.

3. Using creative approaches to evaluate development and preservation proposals based on specific characteristics of the site and impact on agriculture, such as LESA.

4. Encouraging and considering acquisition of agricultural conservation easements from willing property owners for the permanent protection of priority agricultural areas.

Each of these strategies is described below.
Maintain a Future Land Use Map that Protects Agricultural Activities in Planned Agricultural Areas

Shawano County’s Future Land use Map illustrates a countywide vision for future development and preservation. The County’s Future Land Use map – included in the Land Use Chapter – is a composite of local government future land use maps. Most of the towns participating in County planning processes have identified preservation of farmland and forestland as a priority. Several communities have established a strong position of limiting residential development in agricultural areas. Limiting housing in agricultural areas minimizes the inherent conflicts between many houses in a given area and the long-term ability to farm in the same area. Commercial and industrial development in agricultural areas should be focused on those uses that support farming activities, such as home occupations, implement dealerships, feed operations, greenhouses, garden centers, and the sale or display of farming products. It is therefore the County’s policy to direct intensive housing, commercial, and industrial development to cities and villages; and to already-developed and planned development areas in the towns. The County intends to implement this policy through zoning and land division decisions, land and easement acquisition to the extent practical, and continuous education of the benefits of maintaining large blocks of continuous farmland to the health of the County’s economy.

As described more fully in Chapter Six: Land Use, the Agriculture and Resource Preservation future land use category has been mapped in many areas in the County that individual towns desire to reserve for long-term farming and other resource preservation. In these areas, a maximum density of 2 homes per every 40 acres of land would be allowed, subject to maximum new lot sizes.

Other towns have mapped the Open Lands, Agriculture, and Residential (10-20) future land use category over areas where agricultural soils might be less productive, where farming has been somewhat more marginal, or where the town has elected not to limit housing to the level that the Agriculture and Resource Preservation category suggests. These Open Lands, Agriculture, and Residential (10-20) areas remain suitable for farming use, but additional housing options are allowed (up to one home per 10 acres). Areas developed at a density of 1 home per every 10 acres, absent any further land use restrictions, may allow too much housing to reasonably be considered viable areas for farmland preservation in the long-term.

RETIREMENT NEST EGG VS. AGRICULTURAL PRESERVATION?

Farming is important for the current economy, but perhaps even more important is keeping the land open for production to allow farmers to capitalize on future agricultural opportunities. At the same time, farmers are concerned that plans and zoning that are too restrictive may compromise their ability to sell their property. More than just land to farm, they also see sale of all or part of their property as a potential source of income for funding business expenditures, or on a long-term basis, their retirement nest egg. They wonder about the long-term viability of farming, if there will be a market for their land for agricultural use in the future.

If the land must be used for farming and there is little demand for farmland, what will their land be worth when they decide to go out of farming? Should farmers be able to sell pieces of their land for homesites to compensate for potentially lower prices for farmland? On the other hand, will the value of the farm operation, as well as the neighboring operations, be compromised when scattered development occurs? Are non-farm development limits essential to preserve a farm-based economy? If productive agricultural land is an important resource, what level of risk that scattered development will diminish its collective value is acceptable, particularly when long-term demand for this type of housing can be met elsewhere?
Use the County’s Land Evaluation and Site Assessment (LESA) System as a Decision-Making Tool

A Land Evaluation and Site Assessment (LESA) system is a numeric rating system for scoring sites to help in formulating policy or making land-use decisions regarding farmland protection and conversion. LESA can be used to help make decisions on rezone petitions, land division applications, or focusing land protection initiatives like Purchase of Agricultural Conservation Easements (PACE). LESA is designed to take into account several factors affecting a site’s importance for agriculture, for instance, soil suitability for agriculture, proximity to existing development, and other factors. The County adopted a LESA system in 2011, as part of the County Zoning Ordinance update. That system is described in Appendix II of this Comprehensive Plan.

LESA is an analytical tool, not a farmland protection program. Its role is to provide a community with systematic and objective procedures to rate and rank sites for agricultural importance in order to help local officials make land use decisions.

Consider an Agricultural Conservation Easement Program

Acquisition of agricultural conservation easements is a method to preserve lands for farming and other open land uses while allowing the landowner to voluntarily receive some monetary benefit beyond that of the farming use. Agricultural conservation easements can function to provide financial resources to the landowner that can be used to invest in the farm operation, protect property from incompatible uses, and create large tracts of preserved land that are less susceptible to challenges affecting the right to use the property in a manner consistent with currently accepted agricultural and forestry practices. Some of these monetary benefits are in the form of federal income tax deductions.

In such a program, a landowner voluntarily sells or donates all or most of his or her rights to develop a parcel of land to a public agency or qualified public or private conservation organization, such as a land trust. An appraisal would determine both the total market value of the land and that portion of market value associated with the land’s future development potential. As a key component of the transaction, a conservation easement would be recorded against the property, preventing or limiting any future non-farm/non-forestry development (like non-farm houses) but allowing current agricultural and forestry uses to continue.

Shawano County supports the efforts of organizations like the Northeast Wisconsin Land Trust in the efforts to acquire agricultural conservation easements from willing land owners, especially over lands that are mapped as Farmland and Forest Preservation area on Maps 4a through 4i. As of early 2013, the Northeast Wisconsin Land Trust held and maintained easements over 4,600 acres in northeast Wisconsin.

The County will also consider a program to allow it to acquire and hold agricultural conservation easements from willing land owners on its own or in partnership with an organization like the Northeast Wisconsin Land Trust. Any such County program would likely focus on donated conservation easements. At this time, non-local financial resources for conservation easement purchases are generally limited to a U.S. Department
of Agriculture program, and land trust membership and other private contributions. The State of Wisconsin currently has a purchase of conservation easements matching grant program, but it is unfunded.

There is a successful model of this approach in the area. The Waupaca County Working Farm and Forest Lands Conservation Easement Program, adopted in 2009, empowers Waupaca County to accept voluntarily conveyed conservation easements that protect viable farm and forest lands in perpetuity. A County-appointed Commission considers applications from interested property owners to donate conservation easements, which are compared against program criteria. The program criteria are aimed towards achievement of land preservation goals in the Waupaca County Comprehensive Plan. Since 2009, Waupaca County has preserved 746 acres of land under its conservation easement donation program.

Work collaboratively with interested towns and property owners to identify “Farmland and Forest Preservation areas” as places to promote agricultural, forestry and related uses and limit non-agricultural development.

Under Chapter 91 of Wisconsin Statutes, Shawano County is required to clearly identify, map, and suggest policies for areas that the County plans to preserve for agricultural and agricultural-related uses, named the Farmland and Forest Preservation area. The Farmland and Forest Preservation area may include undeveloped natural resource and open space areas but may not include any area that is planned for nonagricultural development within 15 years. Being in a mapped Farmland and Forest Preservation area is an essential (but not only) step for a property owner to be eligible for tax credits. In addition, a property must either be zoned in a State-certified farmland preservation zoning district or be within a locally-proposed and State-approved Agricultural Enterprise Area. Compliance with soil and water conservation standards are also required to obtain state tax credits. Being in a Farmland and Forest Preservation area doesn’t require a farmer to meet associated soil and water conservation requirements any more so than being outside of a Farmland and Forest Preservation area, if the farmer doesn’t wish to apply for tax credits.

DIFFERENT PRESERVATION PLANNING TERMS

This Comprehensive Plan uses the terms “Farmland and Forest Preservation” and “Agriculture and Resource Preservation” to describe areas envisioned for future agricultural, forest, and open preservation. They are maintained as different terms because of the nuances of different sections of Wisconsin Statutes.

Section 91.10(1) of Wisconsin Statutes requires that the farmland preservation plan component of this Comprehensive Plan “clearly identifies areas that the county plans to preserve for agricultural use, which may include undeveloped natural resource and open space areas but may not include any area that is planned for nonagricultural development within 15 years...” For Shawano County, this requirement translates into the “Farmland and Forest Preservation” area shown on Maps 4a through 4i.

Section 66.1001(2)(h) of Wisconsin Statutes requires that this Comprehensive Plan include “maps that show...future land uses that indicate productive agricultural soils, natural limitations for building site development, floodplains, wetlands and other environmentally sensitive lands...and the general locations of future land uses.” This statute contains no definition of “future.” Many of Shawano County’s town, city, and village comprehensive plans contain future land use maps that accommodate upwards of 50 years of non-agricultural land development demand. Maps 7a, 7b, and 7c in Chapter Six: Land Use—which make up the County’s Future Land Use map—reflect these town, city, and village future land use maps. The Agriculture and Resource Preservation future land use category shown on those maps is intended to preserve productive agricultural and forestry lands. Relatedly, many lands that are instead designated for future non-agricultural development on Maps 7a, 7b, and 7c may develop well beyond 15 years in the future.

The “Farmland and Forest Preservation” area on Maps 4a-4i often but not always align with the “Agricultural and Resource Preservation” area on Maps 7a-7c. “Farmland and Forest Preservation” areas that are not also “Agricultural and Resource Preservation” areas are planned for non-agricultural development beyond the next 15 years based on land demand forecasts. This occurs in the Towns of Fairbanks, Grant, and Navarino. See Figure 3.2 for an example.
Further, being outside of a Farmland and Forest Preservation area does not suggest that existing and future agricultural operations will be discouraged in such areas.

**Figure 3.1: Example of Farmland Preservation and Future Land Use Map Difference**

- Future Land Use map for portion of Town of Fairbanks, north of Village of Tigerton, to left
- Lands planned for future “Industrial” and “Agricultural Transition” use in Highway 45 corridor just north of Village
- Land demand forecasts in both Tigerton and Fairbanks Comprehensive Plans do not suggest need for non-agricultural development in these areas in the ensuing 15 years

- Farmland Preservation Plan map for same portion of Fairbanks to left
- Future “Industrial” and “Agricultural Transition” areas from Future Land Use map indicated within the “Farmland and Forest Preservation” area on Farmland Preservation Plan map
- Such lands, envisioned for possible non-agricultural development beyond 15 years, may be indicated for “Farmland and Forest Preservation” on the Farmland Preservation Plan map
Purpose of Farmland and Forest Preservation Area

The purpose of the Farmland and Forest Preservation area, as mapped on the farmland preservation plan maps in this chapter (Maps 4a through 4i), is to:

- Preserve productive agricultural and forest lands for at least the next 15 years.
- Promote further, long-term financial investments in farming.
- Encourage food, fiber, building material, bioenergy, and other resource related production as a key component of Shawano County’s economy.
- Allow non-farm uses and densities that are compatible with agricultural and forestry operations.
- Maintain farmer eligibility for farmland preservation incentive programs, such as tax credits, in towns that are interested in providing or maintaining such eligibility.

The Farmland and Forest Preservation area is mapped primarily to accommodate agricultural uses, forest management, and agricultural-related and forestry-related uses (e.g., implement dealerships, forest product production) in areas with suitability for farming for the next 15+ years. This category also includes and is intended to accommodate farmsteads, limited non-farm housing in accordance with the policies described below, home occupations and family businesses, and other uses identified as permitted and conditional uses in implementing zoning districts.
Map 4a: Farmland Preservation Plan Map for Shawano County
Map 4b: Farmland Preservation Plan Map for Town of Aniwa
Map 4c: Farmland Preservation Plan Map for Town of Fairbanks
Map 4d: Farmland Preservation Plan Map for Town of Grant
Map 4e: Farmland Preservation Plan Map for Town of Belle Plaine
Map 4f: Farmland Preservation Plan Map for Town of Navarino
Map 4g: Farmland Preservation Plan Map for Town of Washington
Map 4h: Farmland Preservation Plan Map for Town of Maple Grove
Map 4i: Farmland Preservation Plan Map for Town of Hartland
Mapping Criteria for Farmland and Forest Preservation Area

The following factors were used to map the Farmland and Forest Preservation area on Maps 4a through 4i. These factors are focused particularly on requirements and guidance supplied under the State’s Working Lands law. Certain of these factors were weighted more heavily than others by representatives of the affected town.

- Areas designated for future “Agriculture & Resource Preservation” use on the future land use map (Maps 7a, 7b, and 7c) within the 2009 version of the Shawano County Comprehensive Plan and local government comprehensive plans generally prepared during the same late-2000s planning process.
- Areas designated as “Agriculture Preservation Area” on maps within the 1982 Shawano County Farmland Preservation Plan.
- Areas with concentrations of prime farmland or productive forestland.
- Lands that are being actively farmed or forested, used by agricultural infrastructure and support businesses, or occupied by other land uses and activities that are commonly located within agricultural or forestry areas (such as mineral extraction sites).
- Areas with concentrations of lands with a high Land Evaluation and Site Assessment (LESA) system score (e.g., Tier I per LESA system in Appendix II), with LESA intended to objectively judge the quality of the land for agricultural use versus development. More information on the County’s LESA system can be found in the Appendix II.
- Generally open lands in which current residential development generally does not exceed a density of one home per 35 acres; or with scattered, small-scale, pre-existing commercial uses. The purpose of this factor is to allow, within the Farmland and Forest Preservation area, open lands plus a limited amount of pre-existing zoning and use conditions that do not technically meet Farmland and Forest Preservation area policies, while at the same time assuring that a vast majority of lands in the planned Farmland and Forest Preservation area are undeveloped.
- Large, contiguous blocks of land—generally at least one square mile each—as opposed to patchworks of scattered farm parcels, in order to create a critical mass of viable farming areas.
- Lands outside of current city, village, and tribal limits, and lands that are not expected in the next 15 years to be annexed to a city or village for non-agricultural development. (There have been no certified Farmland and Forest Preservation area or farmland preservation zoning districts within any city, village, or tribal area in the County, and no interest among these entities to include certified Farmland and Forest Preservation area.)
- The willingness of the elected board of each town to have planned Farmland and Forest Preservation area lands mapped within its boundaries. County staff invited each town in the County to participate in its 2013 farmland preservation planning process and map Farmland and Forest Preservation area lands within its boundaries. Some chose to participate while others, sometimes after careful consideration, did not at this time. This respect for town choice is based both on a County desire for intergovernmental cooperation and on the legal right of towns to approve or disapprove the subsequent zoning of lands in a certified farmland preservation zoning district within their borders. Approval of such implementing zoning is strongly advised for towns that chose to map Farmland and Forest Preservation area via this planning process.
- The needs, intentions, and preferences of farm operators and non-farmers in the associated town, provided that the mapped Farmland and Forest Preservation area was not based primarily on landowner preferences.

The County intends to use and promote these same factors when working with other towns that may be interested in mapping Farmland and Forest Preservation areas in the future.
Policies and Programs Applicable within Farmland and Forest Preservation Area

1. **Primary Implementing Zoning Districts:** Utilize the County’s FP Farmland Preservation zoning district(s), or Town zoning equivalents, as the primary zoning districts to implement Farmland and Forest Preservation area policies. Such County FP district(s) have been developed to be DATCP-certified farmland preservation zoning districts, which makes farmers within such zoning district(s) eligible for State income tax credits if minimum farm income and conservation requirements are also met.

2. **Additional Compatible Zoning Options:** No County zoning districts aside from the FP district(s) are intended to be DATCP-certified farmland preservation zoning districts. Still, lands that are zoned RPOS Recreation and Public Open Space District and OAR Open Lands and Residential within the County Zoning Ordinance are also consistent with Farmland and Forest Preservation area policies, and therefore may be mapped over lands planned in Farmland and Forest Preservation area, under the following circumstances:

   a. Some combination of County and local ordinances restricts the development of new subdivision plats (5+ lot developments) in such RPOS or OAR zoned areas, AND

   b. Some combination of County and local ordinances results in an amount of future non-agricultural development in the RPOS or OAR zoned area that is equal to or less than the amount described in the “New Non-Farm Residential Lot Sizes and Density” policy that follows, in the determination of the County Planning, Development, and Zoning Committee. This may include, for example, ordinances that require all new residences to be located within 200 to 300 feet of existing public roads and/or large minimum frontage requirements (e.g., minimum of 290 feet of frontage on existing public road). These types of restrictions tend to make “back 40s” unavailable for residential development.

There are two reasons that the County wishes to include the RPOS and OAR districts among those zoning districts that are consistent with Farmland and Forest Preservation area policies under these limited circumstances. First, when supplemented by these additional restrictions, RPOS and OAR zoned areas accurately reflect the County’s and associated town’s desire to preserve farmland in the area. Second, the ability to map such RPOS and OAR zoned areas within the planned Farmland and Forest Preservation area maintains eligibility for such lands to be designated within an Agricultural Enterprise Area in the future. Such designation would require subsequent State approval following another local planning, mapping, and petition process.

The OAR, RPOS, and other non-certified zoning districts focused on non-agricultural development may also be utilized on an occasional basis over lands planned in the Farmland and Forest Preservation area, to reflect pre-existing land use and zoning patterns or per the non-farm development policies that follow.

3. **Agricultural-Related and Forestry-Related Businesses:** Enable a wide range of agricultural-related and forestry-related uses that support farming and forestry within the Farmland and Forest Preservation area, along with home occupations and other uses that are compatible with the purpose of the Farmland and Forest Preservation area and Wisconsin Statutes. For additional detail, refer to permitted and conditional use lists and performance standards in the County zoning ordinance, in towns where such ordinance is applicable.

4. **Conversion of Farmland:** Minimize the conversion of prime farmland for residences, residential driveways, and non-farm development. Per Section 91.01(25)a of Wisconsin Statutes and this Plan, prime farmland include areas of Class I, II, and III soils, as represented on Map 4. Site new non-farm development in a manner that facilitates crop or forestry production on the remaining lands.

5. **Residential Lots Resulting from Farm Consolidation:** When the owner of a residence existing before the establishment of County FP zoning over the land desires to divide the land occupied by such
residence and accessory buildings from the farm, in conjunction with a farm consolidation, the resulting residential lot should be as small as practical, considering the desire to keep accessory buildings with the residence and the future probability that farm animals will be kept on the lot.

6. **Preexisting Residences:** Support the implementation of State administrative rules (such as ATCP 49) to allow as legal conforming uses all preexisting residences in the Farmland and Forest Preservation area and associated certified farmland preservation zoning districts. If necessary in the meantime, implement rules in the County Zoning Ordinance that both anticipate such changes and minimize restrictions on expansions and structural changes to such residences. Allow for replacement of preexisting farm residences.

7. **New and Replacement Farm Residences:** Enable new and replacement farm residences by right within the Farmland and Forest Preservation area to facilitate new investments in farming, replacement of aging farm residences, and intergenerational transfers. The County Zoning Ordinance provides additional detail on what constitutes a “farm residence.” The resulting farm residence lot or home site should be as small as practical, considering the desire to keep accessory buildings with the residence and the future probability that farm animals will be kept on the lot.

8. **New Non-Farm Residential Lot Sizes and Density:** Within parts of the Farmland and Forest Preservation area that are also under the County’s zoning jurisdiction:
   a. Enable minimum new lot sizes in accordance with applicable zoning ordinance standards.
   b. Do not permit subdivision plats (5+ lot developments) in the Farmland and Forest Preservation area, instead directing them to areas planned for more intensive residential development.
   c. Enable the clustering of two to four residential lots, except where clustering near a farm residence and associated farm activities would create potential use incompatibilities. Clusters may be sited within each ¼ ¼ section owned, focused in one ¼ ¼ section if multiple ¼ ¼ sections are owned, or some combinations (see example in Figure 3.4).
   d. Except where the town has adopted a stricter policy, allow the following alternative maximum residential density options. The density option utilized will depend on the land owner’s preferred residential lot sizes, which may vary on a ¼ ¼ section by ¼ ¼ section basis.
      i. Two residences per every ¼ ¼ section of land (“40” acres), including both farm residences and non-farm residences, provided that lots for new non-farm residences are no greater than two acres each.
      ii. One residence per every ¼ ¼ section of land (“40” acres), including both farm residences and non-farm residences, where lots for new non-farm residences are greater than two acres each.
   e. In order to achieve and track such densities over time, rezone lands if advised under Section 9 below and restrict associated lands to agricultural or open space uses via an overlay zoning district. The overlay zoning district will be applied on top of the base/underlying zoning of the property when new housing is proposed.
   f. Notwithstanding the density limitations under subsections (d) or (e), permit the development of one non-farm single family residence on each legal lot of record established under zoning and subdivision regulations that existed at the time of the lot’s recording. Where there are adjoining lands under common ownership, attempt to maintain the density limitations under subsections (d) or (e) for all such adjoining lands.
   g. See Figures 3.2 through 3.4 for further information and examples of how these lot size and density policies can be executed, except where the affected town has adopted a stricter policy. (For example, at the time of writing, Maple Grove restricted non-farm residences to only those intended for the parent or child of the operator of farm, up to a maximum of two such residences per farm, where
such parent or child either does or did at one time earn more than 50 percent of his or her gross income from the farm.)

9. **New Non-Farm Residences Require Rezoning:** For lands in the Farmland and Forest Preservation area under County zoning jurisdiction, require the rezoning of land for non-farm residences away from an FP zoning district, in accordance with the maximum residential density policy under policy 8. See Figures 3.2 through 3.4 for examples of how rezoning will be used to execute the residential density policy within the Farmland and Forest Preservation area and under the County’s zoning jurisdiction, except where the affected town has adopted a stricter policy. The following are the preferred County zoning districts for when non-farm residences are proposed:

   a. Where the subdivider does not wish to allow farm animals on the new residential lots, the R-R Residential-Rural zoning district is preferred.

   b. Where the subdivider wishes to enable the keeping of farm animals on the new residential lots, or does not subdivide a lot from the original parcel, the A-R Agriculture-Residential zoning district is preferred.
Figure 3.2
Residential Development Options Within “Farmland and Forest Preservation Area” (No Pre-Existing Residence)

- Mapped as “farmland and forest preservation area” in plan
- Zoned in certified farmland preservation district (FP-1)
- No pre-existing development on “40”
- May be same owner as adjacent lands, or only “40” owned
- Does not need to be 40+ acres; instead, gov’t 1/4 ¼ section

Original Condition of “40”
- FP-1 Land zoned Farmland Preservation 1.
- R-R/A-R Lot rezoned to Residential-Rural or Agricultural-Residential, depending on preferences for farm animals
- A-R Land rezoned to Agricultural-Residential district.

Two Residences Per “40” Option
- Maximum new lot size of 2 acres to preserve farmland
- Lots may be created at same time or different times
- Minimize prime farmland used; score in lower LESA tiers
- Retain FP-1 zoning on balance of lands for tax credits
- Zone lands to preservation overlay to track density
- Variation not shown above: If land owner has at least two “40s” (80+ acres), may cluster up to four <2 acre lots

One Residence Per “40” Option
- Homestead may occupy entire “40” with residential rezone
- Minimize prime farmland used; score in lower LESA tiers
- May retain FP zoning on balance of “40” if elect to divide lot
- Zone lands in preservation overlay to track density over time
- Variation not shown above: If land owner has at least four “40s” (160+ acres), may cluster sets of up to four >2 acre lots

Shawano County Farmland Preservation Plan

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Figure 3.3
Residential Development Options Within “Farmland and Forest Preservation Area” (w/ Pre-Existing Farm Residence)

Original Condition of “40”

- Mapped as “farmland and forest preservation area” in plan
- Zoned in certified farmland preservation district (FP-1)
- One pre-existing farm residence and outbuildings on “40”
- May be same owner as adjacent lands, or only “40” owned
- Does not need to be 40+ acres; instead, gov’t ¼ ¼ section

Farm Consolidation Scenario

- If remains as “farm residence”, may divide without rezoning
- Keep lot size small as practical to encompass home/outbuildings
- Retain FP-1 zoning for tax credits
- Similar to past approach in A-G-1 and A-G-2 districts

Two Residences Per “40” Layout Options

- Rezoning of former farm house lot to R-R or A-R if occupancy changes
- One new home site allowed if new lot size 2 acres or less
- Minimize prime farmland used; score in lower LESA tiers
- Retain FP-1 zoning on balance of “40” for tax credits
- Zone lands in preservation overlay to track density over time
- Variation not shown above: If land owner has at least two “40s” (80± acres), may cluster up to three ±2± acre lots with farm consolidation lot

Shawano County
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Figure 3.4: Residential Development Clustering Option Within Farmland and Forest Preservation area (80 acre clustering example)

- Begins with two undeveloped ¼ ¼ sections that are owned by same entity
- All lands planned as “Farmland and Forest Preservation” area and zoned FP-1 before development
- Eligible for two non-farm residences per ¼ ¼ section, if new lots are less than 2 acres each and other standards met (see Figure 3.2)
- Example shows the clustering all four lots on one of the ¼ ¼ sections, with overlay zoning district limitations placed on both ¼ ¼ sections
- All four lots may be divided at the same time, or over a period of years via separate certified survey maps
10. **Rezoning Criteria:** Whenever land is proposed for rezoning from a DATCP-certified County FP zoning district (or from a certified farmland preservation zoning district in a town zoning ordinance) to a non-DATCP-certified zoning district, require that the following criteria are met:

   a. The land is better suited for a use not allowed in the FP district, or certified town farmland preservation zoning district.
   
   b. The rezoning is consistent with this *Shawano County Comprehensive Plan* including its farmland preservation plan component, and the applicable town comprehensive plan.
   
   c. The rezoning will not substantially impair or limit current or future agricultural use of surrounding parcels of land that are zoned for or legally restricted to agricultural use.
   
   d. If the land is under the County Zoning Ordinance, the rezoning is consistent with the additional rezoning criteria in Section X.8.079(4) of that ordinance and scores in Tier II or Tier III against the County’s LESA system (included in Appendix II). The County Planning, Development and Zoning Committee and Land Conservation Committee may amend the County’s LESA system without requiring an amendment to this *Comprehensive Plan*, provided all such amendments remain consistent with Wisconsin Statutes.

11. **Right-to-Farm Notice on Residential CSMs:** Protect the rights of farmers by requiring that the following language be included on all new certified survey maps (CSMs) that enable new residential development in the Farmland and Forest Preservation area: “Through Section 823.08 of Wisconsin Statutes, the Wisconsin Legislature has adopted a right to farm law. This statute limits the remedies of owners of later established residential property to seek changes to pre-existing agricultural practices in the vicinity of residential property. Active agricultural operations are now taking place and may continue on lands in the vicinity of this plat/CSM. These active agricultural operations may produce noises, odors, dust, machinery traffic, or other conditions during daytime and evening hours.”

12. **Support for Complementary Town Policies:** Where associated policies within the adopted town comprehensive plan are stricter than County policies for lands within a particular designated Farmland and Forest Preservation area, support the town in its actions on zoning and land division requests, so that the stricter policy based on the town’s comprehensive plan may be applied.

13. **Potential Agricultural Enterprise Areas (AEAs):** Support town/property owner initiated petitions to DATCP to establish new AEAs in Shawano County, provided that County Planning and Development staff determines that the proposed AEA is entirely within a Farmland and Forest Preservation area and is otherwise consistent with this *Plan* and DATCP criteria. AEAs enable farmland preservation tax credits at higher levels than otherwise possible within the planned Farmland and Forest Preservation area, including tax credits at a $5 per acre rate where (a) there is no certified farmland preservation district and (b) the property owner enters a new 15 year preservation agreement with the State. Each AEA petition must include a unique plan for how the town and property owners expect to preserve and advance agricultural enterprises, which requires participation, analysis, writing, and mapping components. AEA designation is likely to become increasingly competitive the statutory maximum number of acres in AEAs state-wide gets closer.

14. **Land Conservation:** As budget resources allow, work through the Land Conservation Division to assist farmers in the Farmland and Forest Preservation area and FP zoning districts achieve soil and water conservation compliance to maintain tax credit eligibility.

**Approach to Working with Towns to Add Lands to the Farmland and Forest Preservation Area**

At the time the County’s farmland preservation plan component of this *Shawano County Comprehensive Plan* was adopted in 2013, eight Shawano County towns elected to place at least some lands in the DATCP-certified
Farmland and Forest Preservation area. These towns, and their part of the County’s planned Farmland and Forest Preservation area, are represented on Maps 4a through 4i. A few other towns considered the mapping of lands in the Farmland and Forest Preservation area during the 2013 process, but their boards decided not to participate at this time. Based on the Farmland and Forest Preservation mapping criteria earlier in this section, parts of many towns in the County would be eligible for mapping within the Farmland and Forestry Preservation Area, were such towns to elect to map Farmland and Forest Preservation area.

The County encourages future participation from additional towns in the County/State farmland preservation program. Expanding the Farmland and Forest Preservation area to incorporate more lands in additional towns requires an amendment to the County Comprehensive Plan, per the amendment procedures in Chapter Twelve: Implementation. DATCP certification is also required for Comprehensive Plan amendments that affect farmland preservation plan components.

The recommended approach for integrating additional planned Farmland and Forest Preservation area lands into the County Comprehensive Plan (and specifically its farmland preservation plan component) is as follows:

1. The applicable town board, perhaps upon the recommendation of the town plan commission, indicates to the County Planner an interest in mapping lands within the planned Farmland and Forest Preservation area.

2. The County Planner meets with the town board and/or plan commission to explain the farmland preservation program as may be necessary, understand the extent of town interest, and help evaluate lands within the town against Farmland and Forest Preservation area mapping criteria contained in this Agricultural Resources chapter.

3. The County Planner works with the town board, plan commission, area farmers, and other members of the interested public on the preparation of a draft Farmland Preservation Plan map, along with associated adjustments to Future Land Use maps within this County Comprehensive Plans and the town’s comprehensive plan.

4. Town board adopts a revised Farmland Preservation Plan map by motion. In almost no case would an entire town be included within a Farmland and Forest Preservation area, based on the mapping criteria.

5. The County Planning, Development, and Zoning Committee and Land Conservation Committee forward the town-approved Farmland Preservation Plan map to DATCP for certification as part of the County’s Plan, along with any text amendments to this Plan that are recommended by the County Planner and supported by these committees.

6. DATCP certifies the forwarded Farmland Preservation Plan map and plan text amendments (if any) as new components of the County’s Plan.

7. The County Board and associated town board officially adopt the new map and any text as components of their respective comprehensive plans, following the comprehensive plan amendment processes described under Chapter Twelve: Implementation and in Section 66.1001 of Wisconsin Statutes.

8. County staff assists the town with zoning map amendments to reflect and implement the new Farmland and Forest Preservation area. DATCP certification will be required for all zoning map amendments that extend a certified farmland preservation zoning district (such as the County’s FP-1 district) into a town that formally had no such district. Formal County and/or town adoption under applicable zoning statutes would also be required.
Declining farm numbers and active agricultural land is a phenomenon that is being observed statewide. One trend is a marked decline in the number of mid-sized farms (generally those farms with annual sales between $5,000 and $1,000,000), whereas very small farms and much larger farms have been increasing. The loss of mid-sized farms is significant, as these represent the highest proportion of land holdings, not to mention these are the bulk of the farm operations that support families and local economies.

Strategies to support farming as a land use, economic base, and way of life in the County include providing incentives to keep farm operations viable and friendly to the natural environment, exploring strategies to increase sales and profit margins, and minimizing the adverse impacts of large-scale farms.

Support Efforts to Regulate Large-Scale Livestock Operations

A growing number of dairy operations across the State have begun expanding their herd size and modernizing their facilities to increase productivity and competitiveness. These “mega farms” raise concern among neighboring farmers, landowners, and residents because of the intensity of the operation and their impact on local roads, adjacent land uses, and the environment.

The Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) has rules for the siting of new or the expansion of existing livestock operations with 1,000 or more animal units. The rules are listed in §93.90, Wisconsin Statutes, ATCP 51.

The County supports State efforts to ensure that the impacts of large-scale livestock operations do not degrade the environment or disturb neighboring uses, and to manage animal units, odor, waste and nutrients, waste storage facilities, runoff, and animal mortality. The County intends to cooperate with the towns, the State, and surrounding communities to remain informed and provide input to the DATCP decisions for new operation expansion and siting. In the late 2000s, the County updated its Animal Waste Management Ordinance to include DATCP siting standards, NR 151 Performance Standards from the Wisconsin Natural Resources Code, and local standards that are consistent with these State rules, outlining compliance practices for farming activities. The updated ordinance does:

- Further the appropriate use and conservation of lands and water resources;
- Regulate the location, construction, installation, alteration, design, and use of animal feedlots and animal waste storage facilities;
- Establish a procedure for the permitting of animal feedlots and waste storage facilities;
- Minimize conflicts between municipalities, rural non-farm dwellings, and agricultural operations; and
- Protect agriculture’s ability to grow and change.

Shawano County’s Zoning Ordinance and Animal Waste Management Ordinance in combination require animal feedlots and/or animal waste storage facilities to obtain the appropriate type of permit depending on the size of the existing/proposed operation and the zoning district in which the operation is located. The types of County permits required include the following:

- Land Use Permit: required for animal feedlots with between 1 and 249 animal units. An animal unit is not the same as the number of animals on a farm. A conversion factor of one animal unit per 1,000
pounds of live weight is used to determine animal units. For instance, a mature dairy cow (1,400 pounds) is equal to 1.4 animal units.

- Animal Waste Management Permit: required for animal waste storage facilities for between 1 and 249 animal units when constructing new or modifying existing waste storage facilities; and for animal feedlots and animal waste storage facilities for all operations between 250 and 499 animal units.

- Conditional Use Permit: required for new or existing animal feedlots or animal waste storage facilities with greater than 499 animal units. Operations with more than 1,000 animal units also require a Wisconsin Pollution Discharge Elimination System (WPDES) permit from the Wisconsin Department of Natural Resources.

As referenced above, the State of Wisconsin has rules in place for the siting of new or the expansion of existing livestock operations with 1,000 or more animal units. The State has established the following performance standards for these operations, in addition to those ATCP 50 standards that are applicable to landowners claiming farmland preservation income tax credits:
### Figure 3.5: Standards for Large-Scale Livestock Operations and Participants in Farmland Preservation Program

<table>
<thead>
<tr>
<th>Performance standard (Type of standard covered)</th>
<th>Conservation Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control soil erosion to meet tolerable soil loss (T).</td>
<td>Use appropriate best management practices such as contour farming, cover and green manure crop, crop rotation, diversions, field windbreaks, residue management, strip-cropping, and terrace systems to keep soil loss at or below tolerable limits. Related runoff controls: critical area stabilization, grade stabilization structures, sinkhole treatment, water, and sediment control basins, waterway systems.</td>
</tr>
<tr>
<td>Construct, maintain and close manure storage facilities to prevent manure overflows and leaks. (Livestock operations and facilities)</td>
<td>Meet Natural Resource Conservation Service (NRCS) standards for construction, maintenance, and closure using technical standards: 313 (waste storage facility), 360 (closure of waste impoundments), 634 (manure transfer standard).</td>
</tr>
<tr>
<td>Divert clean water from feedlots. (Livestock operations and facilities within Water Quality Management Areas)</td>
<td>Install diversions, roof runoff systems, subsurface drains, and underground outlets.</td>
</tr>
</tbody>
</table>

### Manure Management Prohibitions

- a. No overflow from manure storage facilities.
- b. No unconfined manure stacks within the Water Quality Management Area.
- c. No direct runoff from feedlots and manure storage facilities.
- d. No unlimited access of livestock to shoreland that prevents maintenance of adequate sod cover. (Livestock operations and facilities)

### Control nutrient runoff into water of the state. (Cropland)

- a. Design and construct facilities to technical standards, maintain facilities including adequate freeboard, repair or replace facilities, as needed.
- b. Relocate manure piles, construct manure storage facilities.
- c. Install barnyard runoff control systems, including diversions, milking center waste control systems, relocating or abandoning animal feeding operations, roof runoff systems, sediment basins, subsurface drains, underground outlets, water and sediment control basin, wastewater treatment strips, well decommissioning.
- d. Install access roads and cattle crossings, animal trails and walkways, critical area stabilization, livestock fencing, livestock watering facilities, prescribed grazing, riparian buffers, stream bank and shoreline protection.

Develop and follow an annual nutrient management plan to NRCS Standard 5% for applying fertilizer or manure. Base plans on soil tests conducted by DATCP certified laboratory. Become qualified to prepare plan or use qualified planners. Apply nutrients according to University of Wisconsin Agricultural Extension recommendations for crops. Install additional conservation or management practices to reduce nutrient loading.
Participate in Processes to Site 1,000+ Animal Unit Agricultural Operations
The County will work to assure that local communities are properly notified when any landowner wants to start or raise their operation to include over 1,000 animal units. The WisDNR requires concentrated animal feeding operations (CAFOs) with 1,000 or more animal units to obtain a permit. This permit is called a Wisconsin Pollutant Discharge Elimination System (WPDES) Concentrated Animal Feeding Operation (CAFO) permit—or a WPDES CAFO permit. These permits are designed to ensure that farm operations choosing to expand to 1,000 animal units or more use proper planning, construction, and manure management practices to protect water quality from adverse impacts. There are currently six livestock operations in the County with WPDES CAFO permits. These are Matsche Farms Incorporated; Schmidts Ponderosa, LLC; Tauchen Harmony Valley; Green Valley Dairy, LLC; Strassburg Creek Dairy; and Betley Farms, LLC.

A proposed CAFO requires a public hearing. County Zoning and Town review of the proposed project’s site plan and subsequent discussions with the landowner will serve as the basis for submittal of a formal letter to WisDNR during the public comment period of the WPDES CAFO permitting process. This letter will indicate whether or not the site plan was submitted for County and Town review, and will include any findings or concerns related to the proposed operation. The County has contacted the Agricultural Runoff Management Specialist in the WisDNR Northeast Regional Office to formally request, in writing, that both the County and Town be notified of all public comment periods related to a CAFO permit in the County.

Promote Continuation of the “Family” Farm through Strategies to Increase Family Incomes
In Wisconsin, 99% of dairy farms are family-owned. The late 2000s County and town comprehensive planning processes showed support for the “family farm,” and some reluctance to promote large “factory” farm operations in Shawano County. Farmers, local governments, and the County have little control over the price for agricultural products, which are set by federal policy and price subsidies. However, interested parties can work locally on a variety of efforts to improve farm family income. These may include:

- Incorporating provisions in the Zoning Ordinance to encourage small farms and hobby farms, which had been accomplished through the 2011 ordinance update.
- Allowing a broad range of agricultural uses, agricultural-related uses, and non-farm home businesses which have little to no impact on surrounding farm properties. Appropriate provisions were written into the 2011 update.
- Working with UW-Extension/County staff to increase efficiency in farm operations, provide technical assistance with exploring alternative farming techniques (e.g., grazing, grass-based dairy), promote agricultural cooperatives, and provide advice on other financial and technical opportunities.
- Work with UW-Extension to link young or emerging farmers to local, regional, and state “beginning farmer” programs and to retiring farmers to ensure and help facilitate access to land, and adequate guidance, and business support.

Help add production, processing, markets, uses, and value for farm and forestry products, in collaboration with producers, manufacturers, sellers, and other organizations.

The Farmland Preservation Steering Committee identified a goal of increasing agricultural production, processing, and new uses for farm and forestry products in Shawano County. However, the Committee advised that developing a precise economic strategy around farming and forestry was beyond the scope of the 2013
farmland preservation plan amendments to this Comprehensive Plan. Instead, the Committee advised that the County create or support a task force to advance initiatives to grow the farm and forestry economy. That task force should include farmers, industry, and other partners and experts, such as Shawano County Economic Progress (SCEPI), the UW-Extension, and the East Central Wisconsin Regional Planning Commission. The task force may consider the following broad initiatives and ideas:

- Expand local food production/processing (e.g., farm to school lunch program)
- Grow farm/forest product industries (e.g., furniture, building materials)
- Build on niche agricultural successes (e.g., meat, specialty cheese, alcoholic beverages)
- Link biomass to energy production (e.g., manure digester/bio-digester)
- Market agriculture (e.g., Century farms, signage, agritourism)

Appendix IV describes State and federal grant programs that may be available to assist with these efforts. County staff may be available to staff the task force and prepare grant application as needed.

The following strategies, adapted from the 2009 version of this Comprehensive Plan, provide some additional detail and ideas. See also the Economic Development chapter.

**Promote Value Added Agricultural Production**

Advances in technology are opening up new markets for traditional agricultural and timber products. The new “bio-economy” is focused on finding new ways to use and process corn and other organic matter into new, marketable plastics, fuels such as ethanol, and even pharmaceuticals. Products currently being produced in “cornbelt” states tend to be bio-plastics, which are high-value products that are best “manufactured” at moderately-scaled production facilities. Other promising products include fuels such as ethanol and biodiesel, and those derived from cellulosic material. While the cost to produce these materials is declining, the environmental costs of petroleum are increasing. Soybeans, timber, and other biomass offer even more potential for a sustainable and economically viable petroleum substitute. Wisconsin is in a strong position to supply raw materials for the new “bio-economy.”

Shawano County has the potential to not only produce the raw materials, but process biomass for these fuels and synthetics materials. Shawano County is fortunate to be located close to a major research and development center at the University of Wisconsin-Madison. Shawano County has a wealth of agricultural and forestry land and a dedicated base who want to keep farming and sustainable forestry alive. Shawano County also has great manufacturing capabilities in the agricultural and timber processing industries. This location could lend itself to production of new bio-based products, with raw materials coming in from surrounding farms and forests. A strategy for positioning and marketing Shawano County as a location for industries that produce bio-based materials would capitalize on these factors and advance steps towards diversifying agricultural and timber production in the County.

**WHAT IS THE BIO-ECONOMY?**

The bio-economy, generally stated, is a term used to refer to the production of products, chemicals, and energy from renewable biomass (crops, crop waste, wood) that are currently produced primarily from non-renewable fossil fuels, such as petroleum. Ethanol from corn and bio-diesel from crop waste are well known examples of fuels created from biomass. Research is underway to unlock the potentially much higher energy yields from other sources such as grasses, legumes, and timber, all of which are readily grown in Wisconsin. The potential for biomass is not limited to fuels. Many products that can be made from petroleum, such as plastics and lubricants, can also be made from biomass.

Growing concerns over rising energy costs, dependency on foreign sources of petroleum, global climate change, and environmental degradation, has been matched by growing interest in the emerging bio-economy. By virtue of its natural resources, strong agricultural and forestry economies, and research facilities, the State of Wisconsin is in a strong position to develop and expand its bio-economy and bio-based industries.
The use of bio-mass for energy to meet the power needs of the farms on which they are produced and other local industry offers the possibility of lowering operational production costs, thereby making these farms more competitive with low cost producers from other regions and countries. Waste materials such as corn stalks and manure could be used for on-site production of methane and help to reduce the amount of waste that would otherwise have to be disposed or dispersed.

Expand Links between Local Agriculture and Consumers

“Food security” – knowing where your food comes from and that it is safe and healthy – is an ever increasing concern. Shawano County is well-positioned to take advantage of the movement toward local marketing and consumption of agricultural products. These initiatives can serve farmland preservation, economic, and community health ends. Strategies to advance links between local agriculture and consumers include the following:

1. County farmers should explore organic farming and other alternative methods of producing traditional products as means of reducing production costs, adding value, and reducing environmental impacts. The rise of the organic food market, in particular, has sparked renewed vigor and interest in agriculture. Such farms produce higher-value products and can sometimes be viable on smaller pieces of land than more traditional forms of agriculture.

2. County farmers should explore the potential of niche specialty crops, including those in dairy, meat, cheese, maple syrup, beer, and other products already produced in large quantities. (A Wisconsin Idea!)

3. Small-scale organic and conventional farms, and producers and restaurateurs who subscribe to the “Slow Food” way of preparing food (using local ingredients, making dishes from scratch, and focusing on providing nourishing, healthy food) are finding receptive outlets for their products. Farmers in Shawano County could further develop a number of these outlets, such as:

- Farmers markets, which provide an outlet for locally-produced food, contribute to the local economy, and enhance a community’s sense of place and downtown activity. New farmers markets could be created to serve County residents and coupled with events to attract additional customers from within and outside of the County.

- Community-supported agriculture (CSA) programs, in which farmers sell shares of their products to consumers in advance of the growing season. This cooperation can provide healthful food choices that support local farms while relieving some of the burdens and uncertainties of conventional marketing. There are numerous CSA’s throughout Wisconsin, and waiting lists to join CSA’s are becoming commonplace. With its wealth of agricultural land, CSA’s are a great option for Shawano County farmers looking to expand or change their product and market focus.

- Restaurants that are finding new marketing opportunities by promoting locally grown produce and meats on their menu. Local Shawano restaurants could be encouraged to buy local food products and
use it as a marketing strategy to attract local residents and visitors. Some restaurants already buy local meat and offer fresh, homemade food. People who live in areas that are teeming with fast food restaurants crave places where food is still prepared by people who believe in time-honored traditions, where pies are still made by hand and are only sold on the day they were made. New and existing restaurants could better market this “Slow Food” idea to a wider audience. A “harvest” restaurant built and marketed around local foods is an exciting possibility. Sustaining such a restaurant would require a unique marketing concept (such as local food made from scratch), ensuring a dependable quality of food and service, and creating an enticing atmosphere in which to experience the food. New restaurants of this type could attract diners from outlying areas, particularly the Green Bay area, which would be a boon for all types of commercial ventures.

- Schools, hospitals, and other institutions, which purchase large quantities of food. Institutions could purchase directly from local producers or grower cooperatives for seasonally-available meat and produce items. Eating fresh, in-season produce could be promoted more widely for the health of students and the elderly. The Appleton School District has taken this approach and found it to be affordable. It has also created healthful choices for and local consciousness within its students.

- Grocery stores, which can take advantage of larger farms and grower cooperatives that produce reliable quantities of consistently high quality food. Forward-thinking market buyers can provide the freshest food products to their customers, support local farms, and ensure an increasingly wary public of the quality of its food products. Supermarkets in Shawano County could capitalize on the abundance of seasonally-available meats and produce items.

- Food processors that use local products. There are already local meat and cheese processors in Shawano County. These uses could be cultivated and expanded, such as by promoting the processing of high-quality and/or organic meat products.

Shawano County is well-suited to base a large part of its economic marketing strategy on the local food movement, including attracting new processors and tourists. This idea has taken hold and has been a successful component of many Wisconsin communities. Shawano County residents are familiar with the high quality food items available in the area (such as Nueske’s Hillcrest Farm meats, cheese, and maple syrup), but a cohesive “image” of Shawano County as a place to eat has not been marketed in wider circles. Taking advantage of this opportunity will require retention of and support for existing area farmers and small-scale processors.
Chapter Four: Natural Resources

Natural resources define Shawano County – from its vast network of clear, flowing rivers and streams, concentration of large and small lakes, mosaic of forestland, large and small natural areas, and diversity of wildlife species. The preservation of these resources is critical to the County.

In reference to the four major themes of this Plan, the County’s natural resources provide immeasurable benefits:

- Safe, clean drinking water that sustains life.
- Rivers, streams, lakes, woods, and other natural areas in which to walk, ski, boat, canoe, and hunt.
- Habitat for the wildlife that County residents and visitors enjoy through various activities – hunting, fishing, wildlife watching, bird watching, hiking, and nature study.
- Create and drive the nature-based tourism industry.

The background data, goals, objectives, policies, and recommended programs for natural resource preservation in this chapter support the above themes.

### Natural Resources Recommendations

**Summary**

- Protect environmental corridors and wildlife habitat
- Explore a conservation easement acquisition program to protect key natural resources
- Protect and enhance surface and ground water quality and quantity
- Implement natural resource identification and non-metallic mineral extraction standards
- Support long-term woodland management and increase the viability of forest products industries
- Limit housing on forested lands to minimize conflict
- Ensure adequate availability of natural lands for recreation
- Capitalize on natural resources for tourism
Natural Resources Inventory

Shawano County’s landscape is defined by a rich mosaic of farm fields and farmsteads, lakes, streams, woodlots, wetlands, hills, and other natural features. Residents value the County’s natural resources and believe they are critical to ensuring the area’s quality of life, recreational opportunities, and economic health. Public input opportunities throughout the planning process have reinforced this attitude.

Understanding the extent and location of the County’s natural features suggests possible advantages for particular land uses. It is also essential to understand the location of environmentally sensitive areas where development is not appropriate. This will prevent severe developmental or environmental problems that may be difficult or costly to correct in the future.

The County’s natural features also play a strong role in the recreational infrastructure of the County—boating, fishing, the use of recreational trails, and birding are examples. The County’s economy is also driven by natural resources—recreation and forest products are economic drivers.

In summary, maintenance of the County’s natural features is important for community appearance, the ecological functions, recreation, quality of life, and the County economy. The Natural Features map depicts the County’s environmentally sensitive areas, also known as environmental corridors, and key natural resource areas, which are described in more detail below.

Topography
The topography in Shawano County was shaped over 10,000 years ago by Wisconsin’s most recent period of glacial activity. The landscape is characterized by gently rolling moraines and drumlins that were formed by material deposited along the edges of the ice sheet during the glacier’s retreat. These landscape features are most prominent in the western third of the County. Much of the eastern part of the County lies within a broad, level glacial lake basin. The Jurisdictional Boundaries Map represents the County’s landscape character.

Elevations in Shawano County range from less than 800 feet above sea level around the Wolf and Oconto rivers in the eastern portion to 1,500 feet above sea level in the western portion of the County.

Metallic and Non-Metallic Minerals
Glacial deposits consist of soil, subsoil, sediment, sand, gravel, and/or stone, and are characterized by a variety of depths and patterns throughout the County. Furthermore, the County’s bedrock and glacial deposits provide many valuable non-metallic minerals such as granite, limestone, sandstone, sand, and gravel that are used for road construction, housing, and commercial developments. Active non-metallic mining operations are located in almost every town in the County. The aggregate material is used in construction throughout the entire County and region. High quality limestone is found in the eastern third of the County, which is part of Sinnipee Group and the Prairie du Chien Group, which are separated by a small band of the St. Peter Formation.

Non-metallic mining or quarrying operations are allowed as a conditional use within the following County zoning districts: FP Farmland Preservation; OAR Open Lands, Agriculture, and Residential; C-G Commercial-General; and M.
The County adopted a Non-Metallic Mine Reclamation Ordinance in 2001 to assure that lands opened to mining are reclaimed to near pre-mine conditions, or to a more environmentally responsible use. Any new mineral extraction sites are subject to the reclamation standards under this ordinance, except as exempted within the ordinance. The ordinance includes requirements for applications, reclamation plans, multi-agency review, public hearings, and enforcement.

The East Central Wisconsin Regional Planning Commission (ECWRPC) administers the Wisconsin Statutes, Chapter NR-135 non-metallic mining reclamation program for Winnebago, Outagamie, Shawano, Waupaca, and Calumet Counties. The overall goal of NR-135 is to provide a framework for statewide regulation of non-metallic mining reclamation. The rule does this by establishing uniform reclamation standards and setting up a locally-administered reclamation permit program. The rules require virtually all non-metallic mines operating on or after September 1, 2001 to obtain a nonmetallic mine operation and reclamation permit. The program will be funded through permit and inspection fees on operators.

The ECWRPC maintains a list of active and inactive non-metallic mine sites. As of 2012, 54 sites were listed under NR-135 permits in Shawano County. There were 641 active acres in the program with 19 sites encompassing one acre or less exempted from NR-135. Most of these sites mined sand, gravel, or both. The State standards address the reclamation of mineral extraction sites after extraction operations are complete.

Currently, there are no active metallic mining activities in Shawano County because metallic minerals are not present in high quantities. However, there are some limited deposits of copper and other base metals in the northwestern portion of Shawano County.

**Soils**

There are 90 different soil types found throughout Shawano County. The Shawano County Soil Survey contains detailed descriptions for each soil type, including information on suitability and limitations for various types of land use and management. These are grouped into eight major soil associations that have distinctive soil patterns, relief, and drainage features.

**Groundwater**

Groundwater is comprised of the portion of rainfall that does not run off to streams or rivers and that does not evaporate or transpire from plants. This water percolates down through the soil until it reaches the saturated zone of an aquifer. Groundwater supplies all of the water for domestic, commercial and industrial uses in Shawano County. The majority of the County’s residents living outside of urbanized areas rely on relatively shallow private wells for their water supply.

The quality of groundwater in Shawano County is generally good. However, groundwater contamination is of concern in many parts of the County as a result of the varied characteristics of the bedrock and surface geology. Areas with sandy soils, thin soils, or fractured bedrock are the most susceptible to contamination from specific urban and rural land uses.

In rural areas, the most common groundwater contaminant is nitrate-nitrogen, which can come from improperly functioning on-site wastewater systems, animal feedlots, livestock waste facilities, sludge and septage application, lawn and agricultural fertilizers, and decaying plant debris. A 2002 report by the Central Wisconsin Groundwater Center found that 8.9 percent of private wells tested in Shawano County have levels of nitrate-nitrogen over the acceptable health standard (10 mg/liter). Nitrate-nitrogen is a potential human health threat, particularly for infants. This contaminant has been known to cause the condition methemoglobinemia, which interferes with the blood’s ability to carry oxygen. This same report indicated that 15.3 percent of private wells sampled in Shawano County tested positive for fecal coliform bacteria, which indicates that fecal wastes may be contaminating the water and that pathogenic organisms could be present. Arsenic has been reported as an issue in groundwater in some layers in the eastern part of the County, and testing of groundwater samples is critical to preventing harmful impacts.
In general, groundwater use has increased in the County and throughout the region. Urban area growth requires quantities of water for residential, commercial, and industrial uses. The increase in rural houses, each with their own private well, also places demands on the existing aquifer system. The Shawano County Land and Water Resources Management Plan (2004) identified deficient quantities at both the southeast and northwest corners of the County due to increased pumping in the Fox Valley and Wausau areas for industrial and residential uses.

**Watersheds and Surface Waters**

Shawano County has 135 lakes and ponds and 595 miles of rivers and streams, including 400 miles of trout streams. Combined, surface water comprises 18 square miles, or roughly 2 percent, of the County’s land.

Shawano County is located almost entirely within the Wolf River Basin, with a small portion of eastern Shawano County located within the Upper Green Bay Basin. The Wolf River Basin drains over 3,600 square miles and portions of eleven counties in northeastern Wisconsin. Nine of the Basin’s 20 watersheds are located at least partially in Shawano County. The Wolf River, which traverses the eastern half of the County, is the Basin’s most significant water resource. Currently, this Basin faces many challenges to its overall ecological health, including non-point source water pollution, the loss of shoreland habitats, and the presence of various exotic invasive species.

The Upper Green Bay Basin extends into the Towns of Angelica, Green Valley, Hartland, Maple Grove, and Washington on the far eastern portion of the County. The Oconto River, which crosses through the northeastern corner of the County, is one of the Basin’s top three most significant water resources.

Besides the Wolf and Oconto rivers, the Embarrass River and the Red River are the other two most significant surface water resources in the County. Both provide exceptional natural and fishing habitats.

Natural lakes account for about 85 percent of the lake surface area in the County, while the other 15 percent are impounded waters. All of the natural lakes are relatively shallow, warm water fisheries in the mesotrophic to eutrophic class supporting various game and pan fish populations. Shawano Lake is the most significant in both size (over 6,000 acres) and recreational use. The Center for Watershed Science and Education at UW-Stevens Point prepared an assessment of Shawano Lake. The assessment observed that Shawano Lake has relatively good water quality for a shallow drainage lake, though increased vegetative growth and introduction of invasive species, particularly aquatic plants, were identified as issues.

**Wolf River – A Special Place**

The Wolf River is a natural asset that helps shape the County and the region. Originating from an outlet of Pine Lake in Forest County, the Wolf flows more than 203 miles south to reach Lake Poygan, to the Winnebago Lakes circuit, and ultimately into Green Bay.

Human settlement in Shawano grew up around the River. In addition, the Lower Wolf River and many of its tributaries in Shawano County have been identified as a critical ecological system – supporting numerous plant communities, and serving as an important migratory bird stopping point.

Critical species identified in the Lower Wolf include Lake Sturgeon, Snuffbox, Round pigtoe, pygmy snaketail, salamander mussel, and snail darter. Priorities that have been identified for the Wolf River Basin include pollution, loss of shoreline habitat, preservation and protection of wetlands, limiting the spread of exotic species, and promoting sound land use planning.

The River is a popular regional destination for fishing (spring walleye and white bass), canoeing, kayaking, boating, rafting and other water-based activities.

The County has many significant waterways that have immeasurable natural, recreational, and economic benefits.
The Shawano County zoning ordinance limits development in areas located 1,000 feet from the normal high water elevation of a lake, pond, or flowage; and 300 feet from the normal high water mark of a river or stream. This ordinance is applicable within all incorporated areas, and within lands annexed to cities and villages after 1982, if the city or village does not have its own ordinance.

The Wisconsin Department of Natural Resources has mapped 57 dams on waterways throughout the County. Major dams, or dams of particular interest or concern, include the Balsam Road dam, Red River dam, and Shawano dam.

**Floodplains**

The Federal Emergency Management Agency (FEMA) designates floodplains. These are areas predicted to be inundated with flood waters in the 100-year storm event (i.e., a storm that has a 1 percent chance of happening in any given year). Development within floodplains is strongly discouraged so as to avoid property damage.

The Natural Features Map (Map 5) shows the 49,637 acres of land in the County that are classified as floodplain. This comprises approximately 8.5 percent of the total County land area. Furthermore, floodplain areas in the County correspond closely with the surface waters shown on Map 5.

The Shawano County Floodplain Ordinance regulates land uses and development within designated floodplain areas within unincorporated parts (towns) of the County. Cities and villages are responsible for administering their own floodplain ordinances. The National Flood Insurance Program maps produced by the FEMA should be referenced for official delineation and elevations of floodplain boundaries.

**Wetlands**

Wetland habitats comprise approximately 22 percent of the County’s total land area. These ecosystems play significant roles in maintaining the quality of groundwater and surface water and provide valuable habitats for fish, birds, and other wildlife. These habitats are well distributed throughout the County. A particularly large tract of wetland habitat is located in the Navarino State Wildlife Area in the southeastern portion of the County.

Currently, there are 282.4 acres of wetland in Shawano County enrolled in the Wetland Reserve Program (WRP). This is a voluntary program that provides technical and financial assistance to eligible landowners to address wetland, wildlife habitat, soil, water, and related natural resource concerns on private lands. The program provides an opportunity for landowners to receive financial incentives to enhance wetlands in exchange for retiring marginal land from farming.

All wetlands of 5 or more acres in the County have been identified and mapped by WisDNR through its Wisconsin Wetlands Inventory. The County’s shoreland-wetland zoning ordinance generally regulates uses and prevents development in wetlands of 5 acres of greater, when located within a shoreland area.

**Woodlands**

Prior to settlement, the landscape of Shawano County was mostly forested. Forests were mostly cleared between the 1850’s and 1880’s. Much of this land was later converted to agricultural use.

Shawano County is located within Wisconsin’s northern forest zone, characterized by a mixture of coniferous and deciduous forest types. Currently, woodlands comprise approximately half of Shawano County’s total land area. In 2004, 248,844 acres or nearly 43 percent of Shawano County’s land base were classified as forest by the Wisconsin Department of Natural Resources. All but 11,397 acres are privately owned. Typical tree species include Hemlock, Beech, Sugar Maple, Yellow Birch, Aspen, and White and Red Pine. The western portion of the County falls more specifically within the Forest Transition ecological landscape; dense hardwood forests and timber stands are more characteristic of the western portion of the County. The eastern 2/3 of the County is located primarily within the Northern Lake Michigan Coastal ecological landscape. Eastern Shawano County is dominated by areas of lowland hardwoods, lowland conifers, Aspen, and Birch.
Shawano County’s woodlands are very important to its economy – to both primary producers (sawmills) and secondary wood industries. Woodlands are also critical to providing habitat to wildlife species in the County and reducing soil erosion.

**Steep Slopes**

Shawano County is characterized by gently rolling moraines, drumlins, marshes, and lowlands. As shown on Map 5, steep slopes exceeding a 12 percent grade are found mostly in the western portion of the County. Generally, slopes of 12 percent grade or greater present some challenges for building site development. Development on slopes that exceed a 12 percent grade presents major challenges and can result in environmental and property damage due to water run-off, soil erosion, and unstable slopes.

**Ecological Landscapes**

An ecological landscape is defined as a region of Wisconsin characterized by a unique combination of physical and biological attributes, such as climate, geology, soils, water, or vegetation. Different ecological landscapes offer distinct management opportunities based upon their levels of biological productivity, habitat suitability for wildlife, and presence of rare species and natural communities. Shawano County falls within four separate ecological landscapes. The western third of Shawano County is located within the Forest Transition Landscape. Most of the eastern two thirds of the County is characterized by the Northern Lake Michigan Coastal Landscape. However, small segments of the north-central portion of the County are within the Northeast Sands Landscape, and the Town of Navarino and portions of the Towns of Lessor and Belle Plaine are within the Central Lake Michigan Coastal Landscape. Appreciating the distinct attributes of each of these landscapes will be important when identifying future land management and land use goals. The ecological character of the landscape is also illustrated in a simplified format on the Landscape Character map.

**Natural Communities and Rare Species**

Shawano County has an abundant and diverse wildlife population. Prevalent wildlife species include:

- White-tailed deer, eastern wild turkey, ruffed grouse, woodcock, black bear, squirrels, snowshoe hare, fisher, and many other non-game species in the western ¾ of the County.
- Fox, coyote, cottontail rabbits, white-tailed deer, and other edge dependant species in the eastern agricultural areas.
- Sandhill cranes, Canada geese, mallards, wood ducks, muskrat, reptiles, and amphibians, especially in the Navarino Wildlife Area.
- Migratory waterfowl and shorebirds, especially in Shawano Lake seasonally.

WisDNR’s Natural Heritage Inventory program maintains data on the general location and status of threatened or endangered plant and animal species and natural communities and species and communities of special concern. According to this inventory, Shawano County has at least 82 animal species (aquatic and terrestrial), 13 plant species, and 23 natural communities that have been documented into one of these categories. Animal species include, but are not limited to, the Bald Eagle, Henslow’s Sparrow, and the Blanding’s Turtle.
Plant species include, but are not limited to, the Glade Fern, American Shore-grass, and Wild Licorice. More specific information on location and type of species is available from the State's Bureau of Endangered Resources.

State Natural Areas/Wildlife Habitat Areas/Natural Resource Areas

**Jung Hemlock-Beech Forest.** This 80 acre State Natural Area is comprised a remnant of the once extensive northern mesic forest that covered northern Wisconsin. The forest contains old-growth hemlock trees, American Beech, Sugar Maple, Yellow Birch, and White Pine. The forest is between 150 and 200 years old. Within this area, there are also several sedge-sphagnum bogs with tamarack and black spruce tree species. This land is owned by the WisDNR and was designated as a State Natural Area in 1976. This forest is located within Shawano County and can be accessed from the intersection of County Highways A and G in Gresham.

**Navarino State Wildlife Area.** The Navarino Wildlife Area is over 14,000 acres of State-owned land in southeastern Shawano County and northeastern Waupaca County. The majority of this land is located in the Town of Navarino, with portions extending into the Towns of Waukechon, Hartland, and Lessor in Shawano County, and the Town of Matteson in Waupaca County. About 55 percent of this area is forested and 35 percent is wetland. The land supports a diversity of plant and animal species, including various sedge species, blackberries, blueberries, deer, grouse, squirrels, waterfowl, woodcock, rabbits, sandhill cranes, and bald eagles. The area is used for many recreational purposes, such as hunting, trapping, hiking, cross-country skiing, and canoeing.

**Lower Wolf River Bottomlands Natural Resources Area.** Spanning Outagamie, Waupaca, Winnebago, and Shawano Counties, the Lower Wolf River Bottomlands Natural Resources Area is comprised of 214,000 acres and includes 14 WisDNR projects. WisDNR properties include Deer Creek, Mack, Maine, Mukwa, Navarino, Outagamie, Rate River, Wolf River, Wolf River Bottom – Herb Behnke and LaSage Units Wildlife Areas, Hortonville Bog and Shaky Lake State Natural Areas; and the Wolf River Fishery Area and fishery remnant uses. These areas collectively contain some of Wisconsin’s largest tracts of contiguous bottomland hardwood forests and numerous wetlands. The area also supports numerous important plant and animal species, including rare and endangered species like the wood turtle, bald eagle, red-shouldered hawk, and lake sturgeon.

This area was established in 2002 with the objective to collectively protect and manage these regionally significant natural communities. Hunting, fishing, wildlife watching, nature study, cross country skiing, snowmobiling, and canoeing are popular activities in this area.

**Land Legacy Places**

In the Wisconsin Land Legacy Report, the WisDNR identified those key places around the State that are critical to meeting Wisconsin’s conservation and outdoor recreation needs over the next 50 years. Land Legacy Places that have been identified in Shawano County are as follows:

**Comet Creek and Woodlands.** This area is located in the southwestern corner of Shawano County. Comet Creek is a high quality trout stream that is a tributary to the Little Wolf River. The surrounding woodlands provide...
important habitat for many species of animals. Rock outcrops and various streams make this area a significant recreational resource in the County.

**North Branch of the Embarrass River.** This spring-fed trout stream is located in the west-central portion of Shawano County. The river flows through a mix of coniferous and deciduous swamps, pasturelands, and shrub wetlands. The surrounding land uses are predominately dairy farming and forestry.

**The Oconto River.** This river corridor, which passes through the northeastern corner of Shawano County, connects several areas of significant natural resources. It flows through large blocks of high quality forest and wetlands, and provides an excellent habitat for various species of fish. It is also a popular river for canoeists and kayakers.

**Red River.** Located in the central portion of Shawano County, the Red River supports various fish species and is a popular whitewater canoeing destination.

**Related Plans**
Shawano County has several existing plans that inform the Natural Resources element of this Comprehensive Plan. These include:

- Shawano County Land and Water Resource Management Plan – Revised 2004
- Shawano County Invasive Species Strategic Management Plan - 2013
- Shawano County Outdoor Recreation Plan
- Pensaukee River Watershed Project
- Watershed Assessment of Shawano Lake by University of Wisconsin – Stevens Point

**Natural Resource Goals, Objectives and Policies**

**Goal:**
1. Conserve and enhance the County’s natural features, including lakes, rivers, woodlands, wetlands, wildlife habitats, open spaces and groundwater resources.

**Objectives:**
1. Protect environmental corridors from adverse impacts of development.
2. Identify, conserve, and enhance the County’s natural resources, such as rivers, lakes, floodplains, wetlands, steep slopes, open spaces, groundwater resources, ridgetops, and woodlands.
3. Protect and enhance the County’s water quality – including surface water, ground water, and shoreline quality.
4. Promote the sustainable management of woodlands as an environmental and economic asset.
5. Pursue strategies that support the protection of “working lands” – farms and forests – in the County.
6. Explore opportunities for natural resource-based recreation and tourism in the County.

**Policies:**
1. Map and protect “environmental corridors” to preserve the County’s most sensitive natural areas and limit private property damage, by:
   a. Protecting areas classified as wetlands from development to conserve the significant natural functions that wetlands provide.
b. Limiting development within the 100-year floodplain to avoid damage to private and public property and the health, safety, and welfare of the County.

c. Discouraging building or driveway development on slopes in excess of 12 percent.

2. Protect surface water quality (e.g., waterways, drainage channels, lakes, ponds, impoundments, and wetlands) by supporting streambank management, natural shoreline restoration, erosion control, proper agricultural practices, stormwater management, and buffer areas as appropriate practices to protect the County’s water quality, depending in part on the quality and sensitivity of the associated water and the relative presence or absence of development.

3. Support and cooperate with affected communities on the protection of the Shawano Lake watershed (Shawano Lake and its tributaries), potentially through implementation of the recommendations of the Shawano Lake Watershed Assessment (released in 2008) and as updated.

4. Protect groundwater quality through proper placement of new on-site wastewater treatment systems, appropriate maintenance and replacement of older systems, managing the types of development allowed near municipal wellheads, and preventing excessive irrigation practices.

5. Require the use of soil conservation practices for construction sites and farmland.

6. Work to protect rare species and wildlife habitat areas. When development is proposed within a section of land where a rare or endangered species has been identified, require that specific data from the Bureau of Endangered Resources on the location and type of species be obtained and considered.

7. Promote nature-based recreation and tourism to enhance the quality of life for residents and provide economic incentives to maintain natural areas in their current state.

8. Support long-term forest land management efforts and encourage forest landowners to enroll in the State’s Managed Forest Law Program (MFL), and support efforts to keep as much of that MFL land open as possible.

9. Promote sustainable timber harvesting to enhance the value of forest land and provide continued support for the County’s primary and secondary timber related industry.

10. Enforce policies and procedures for non-metallic extraction operations.

11. Cooperate with other units of government and non-profit land conservation organizations on natural resource preservation which are under shared authority or cross government boundaries.

12. Continue to support efforts to educate citizens on the tools, programs, and incentives that protect the natural environment and to promote environmental stewardship among the County’s youth.

13. Implement the County’s All Hazard Mitigation Plan as a means to protect against natural hazards and minimize their impacts on the population and property.

**Natural Resource Recommendations and Programs**

Expanding on the planning policies listed above, this section of the Plan provides specific recommendations for conserving the County’s environmental corridors, woodlands, surface and ground water quality, and natural habitat areas, organized around the objectives put forth in this Chapter.
Minimize Development and Disturbance in Environmental Corridors

Environmental corridors are a composite of important individual elements of the natural resource base. They have immeasurable environmental benefits, including ecological, passive recreational, stormwater management, groundwater protection and recharge, erosion control, wildlife, timber, and scenic value. Environmental corridors also have severe limitations for development; therefore, minimizing development in these areas also protects private property. Environmental corridors generally occur in a linear (corridor) pattern on the landscape (see Maps 7a, 7b, and 7c, Future Land Use Map, for general corridor delineations). As mapped within Shawano County, the Environmental Corridor future land use overlay category includes the following areas:

- Wisconsin WisDNR-identified wetlands as mapped in the Wisconsin Wetlands Inventory. Wetlands of five acres or greater are included. This layer may not include all wetlands that are subject to state and/or federal disturbance rules.
- Federal Emergency Management Association (FEMA) designated floodplains subject to existing County zoning. These general floodplain delineations represent the areas potentially subject to the 100-year flood. All areas of the County subject to flooding are not necessarily reflected in mapped floodplains (or within the environmental corridor delineation).
- Lands with steep slopes of 12 percent or greater. Due to the instability of these soils and erosion concerns, development on these steep slopes is not advisable.

New development should generally be discouraged in environmental corridors, and is often very limited by existing State-mandated County zoning. Development types should be limited to those which will not impair the resource, and which are compatible to existing and proposed uses on surrounding lands. Generally appropriate uses include open space, agriculture, and forestry activities using Best Management Practices. New homes and other buildings should not be placed in these areas if other, more appropriate, building sites are available outside the environmental corridor. Sensitivity to surrounding natural resources should be the guiding principle when reviewing the appropriateness of development in mapped environmental corridors. More specific policies related to the protection of areas designated Environmental Corridor on the future land use map is provided in the Land Use chapter.

SUGGESTED NATURAL RESOURCE PRESERVATION TOOLS

- Standard zoning
- Floodplain, shoreland and wetland zoning
- Conservation development design
- Land Evaluation and Site Assessment
- Acquisition of conservation easements

Environmental Corridor areas, like the one pictured above, provide diverse wildlife habitat and help handle and filter stormwater.
The Environmental Corridor category depicted in Maps 7a, 7b, and 7c is necessarily general and should be used to identify general areas where development may not be appropriate. Specific lands within that designation may be removed under one or more of the following circumstances:

- More detailed study reveals that the characteristic(s) which resulted in its designation as an environmental corridor no longer exists, or never existed;
- Approvals from appropriate agencies are granted to alter a property so that the characteristic which resulted in its classification as an environmental corridor will no longer exist; or
- A mapping error has been identified.

**Consider a Program Enabling County Acquisition of Conservation Easements**

This type of effort is described in the Agricultural Resources chapter of this Plan. While conservation easement acquisition programs often focus on agricultural lands, they can be extended to prioritize the preservation of lands with significant natural features. As the County considers such a program, it should evaluate what land features and characteristics to prioritize, including forested areas, areas of significant water resources, areas with sensitive natural features, and important recreational areas. These characteristics should be reflected in the criteria used to prioritize sites for preservation.

Land trusts are a rapidly growing conservation movement throughout the nation and within the State. Within Wisconsin alone, land trusts protect and manage almost 80,000 acres with significant ecological, scenic, recreational, agricultural, cultural, or historic value. Land trusts are non-profit organizations set up by local people to acquire—through purchase or donation—environmentally significant lands. Acquisitions may be for fee simple title, conservation easements (development rights), or other means. The County intends to work with regional land trusts (such as the Northeast Wisconsin Land Trust) on land conservation initiatives, and as a potential partner in a conservation easement acquisition program.

**Link Local Land Owners to Carbon Credit Programs**

As concerns for global climate change—and the impact of human activities on it—increase, there is increasing interest and now market activity associated with reducing carbon (“greenhouse gas”) emissions. Systems are being set up to encourage and even require large emitters of greenhouse gasses to purchase “carbon credits.” Sellers of carbon credits may be industries that have taken action to reduce their carbon emissions below specified levels. More importantly to Shawano County, though, is that farmers, forest owners, and other land owners interested in vegetation preservation or restoration are also able to sell carbon credits. There is actually a financial market in Chicago that now deals in Carbon Credit Offsets—the Chicago Climate Exchange—which has rules and requirements related to this.

**What are Carbon Credits?**

The purpose of carbon credits is to create economic value from the reduction of greenhouse gas emissions (GHG), like carbon dioxide. The increased concentration of greenhouse gasses due to the burning of fossil fuels and other pollutants is, based on prevailing scientific thought, contributing to the warming of the earth’s surface.

One method address this issue is a market-based “cap and trade” system. Essentially, large emitters of carbon may be given a cap on their emission allowance. They must reduce emissions to a level equal to or below the cap. If they come in under their emission reduction target they are issued carbon credits. Those who cannot meet their reduction goals must purchase credits in the carbon market and thus bring their emissions into compliance with the cap. This system is now being used on the Chicago Climate Exchange (CCX).

How does it work?

- Entities and individuals in the agricultural, forestry, waste management, and renewable energy sectors can participate in CCX by registering “offsets” (e.g., emissions credits earned by sequestering, destroying, or displacing greenhouse gas emissions).
- These “offsets” are sold directly on the Chicago Climate Exchange.
- All projects undergo a standardized registration, verification and crediting procedure. Before offsets are issued they must be approved by the CCX Offsets Committee.
Participating in such emerging initiatives can infuse much needed capital into the County’s farms and forests; bring more dollars into the local economy; and help the County and local communities achieve farmland, forestland, and rural character preservation goals. Such participation could conceivably also raise funds for the capitalization of conservation easement acquisition program. The County, therefore, actively supports further exploration and participation in carbon credit programs for area land owners and potential units of government.

**Objective:**

Identify, preserve, and enhance the County’s natural resources, such as rivers, lakes, floodplains, wetlands, steep slopes, open spaces, groundwater resources, ridgetops, and woodlands.

### Protect and Enhance Surface Water Quality

Water is one of the defining features of the County; not only its lakes, rivers, and streams, but also the groundwater that lies beneath the surface of the land. One of the earth’s most precious and vital commodities, water is also one of the most threatened resources. Contamination, overuse, and mismanagement are some of the factors leading to concerns about water scarcity globally. Shawano Lake, in particular, has been studied. Its quality, clarity and productivity are affected by a number of internal and external factors. Sediment and phosphorus load have been identified as particular challenges to Shawano Lakes, with the sources of these varied – from its contributing tributaries, to invasive aquatic vegetation.

Most of the land adjacent to the County’s water resources, including Shawano Lake, is private land. The future of these resources will therefore be dependent upon effective land use planning, education, and management techniques. General recommendations designed to support the objectives of protecting the quality of the waters in the County are offered below.

#### Construction Site Erosion Control and Stormwater Management

Construction site erosion control is an increasingly important issue in Shawano County. Unmanaged construction sites are one of the greatest contributors to off-site sediment runoff. Under State law, construction site erosion control plans are required for all sites over 1 acre in area. Techniques to manage stormwater include natural drainage swales, retention and detention basins, and rain gardens on individual lots. The County will work to promote construction site erosion control and ongoing stormwater management for subdivisions and other larger projects. Shawano County adopted a stormwater management and erosion control standards as part of its Zoning Ordinance update in 2011.

#### Vegetative Buffers

Another strategy is the incorporation of vegetative buffers adjacent to water bodies and other sensitive resources (see Figure 4.1 on the next page). These techniques control the quantity and improve the quality of water run-off during storms. Again, these techniques are critical in shoreland and groundwater recharge areas.
Funding Acquisition
The County intends to continue to seek funds from State programs designed to assist in efforts to protect and enhance surface water quality in key areas, including:

- The WisDNR Targeted Runoff Management Program, which provides financial assistance to communities to either construct best management practices themselves or contract with individual landowners to install such practices.
- The WisDNR River Protection Grant Program, which aims to prevent the deterioration of water quality, fisheries habitat, and natural beauty as the number of homes, recreational activities, and other uses increases along rivers. Grant dollars may be used for river organization development; information and education; assessments of water quality, fish, and aquatic life; non-point source evaluations; purchase of land or easements; development of local ordinances; and habitat restoration.

Implement Land and Water Resource Management Plan
The County also seeks to protect its natural resources including surface waters through the Shawano County Land and Water Resource Management Plan (Last Revised in 2004). This plan:

- Provided an overview of County land, surface water, and ground water resources, including conditions and sources of pollution for each watershed.
- Set Specific Goals for the reduction of sediment loading from point and non-point sources.
- Identified performance standards and prohibitions for “water quality management areas” which correspond to the State mandated Shoreland Areas described above. These standards primarily address issues associated with livestock and manure management.
• Recommended implementation of Best Management Practices to achieve water quality goals, including practices addressing management of animal waste, shoreland buffers, habitat protection, and erosion control.

• Noted State rules and laws regarding livestock facilities and indicates programs available to farmers to help offset the costs of implementing controls.

• Outlined a strategy that emphasizes Information and Education efforts to educate individual land owners and provided technical and sometimes financial assistance in managing water quality.

The County, particularly the Land Conservation Division, will continue to update and follow the recommendations of that plan. The County will consider incorporating some of the specific recommendations from the Shawano Lake Watershed Assessment advocating for a watershed-based approach to protecting water quality of the lake and its tributaries, into the County Land and Water Management Plan.

Regulation Enhancements
Prior to the adoption of this Plan, Shawano County developed a lakes classification system. Lakes classification is a management tool that helps protect an area’s lakes by suggesting protection strategies based on certain characteristics. By tailoring strategies for lake management and protection by lake class, a community can achieve standards of management sensitive to the unique characteristics of each individual lake. Shawano County’s system is a three class system, similar to that described in the text box on the following page.

The lakes classification system is being used as a component of a Land Evaluation and Site Assessment system, wherein the County could evaluate proposals for development and/or preservation, in part, on the quality of nearby water bodies.

Based on the lakes classification system, the County also prepared, but did not adopt, an updated shoreland zoning ordinance a few years prior to adoption of this Comprehensive Plan. As a long-term priority, a minimum of one year after the State has amended NR 115 (the State rule related to shoreland protection), the County may investigate and discuss an updated shoreland zoning ordinance focusing on performance standards for the protection of surface water resources. The development of a comprehensive stormwater management ordinance would complement this shoreland zoning ordinance.

Protect Groundwater Quality and Quantity
Groundwater is the source of the County’s drinking water supply. If groundwater is removed from an aquifer more quickly than it is recharged, the amount of water available in the aquifer is reduced. This may be of particular concern where water tables are dropping rapidly from growth-induced groundwater use. In addition, there are several locations in the County that are susceptible to groundwater contamination. Through this Plan, the County supports several efforts to protect groundwater quality and quantity, including the following:
Limit Development Around Current or Former Landfill Sites

The County will work with WisDNR in efforts to identify all open and closed landfill sites, and avoid planning for new development within about ¼ mile of these areas. To protect drinking water quality, the WisDNR requires a separation of 1,200 feet (a little less than ¼ mile) between open or closed landfills and nearby private water supply wells. This separation is measured from the edge of the nearest excavation area or, if unknown because it is a filled site, from the site’s property line. Shawano County may work with WisDNR staff to further identify locations of closed landfills and research the landfills in terms of what impact they will have on the environment in the long term.

Establish Wellhead Protection Areas

The County will encourage identification and preservation of wellhead protection areas for municipal wells. Private well supplies are typically more susceptible to contaminants because these wells are shallow. Deeper municipal wells can also be affected by contaminants. These concerns have prompted many communities in the East Central Region to prepare “wellhead protection plans” to assist in identifying and regulating contaminant sources resulting from land use activities. Wellhead protection planning is advised for all municipal wells. There are currently two Shawano communities with wellhead protection programs. The Village of Mattoon and the Town of Hutchins both recently adopted a wellhead protection ordinance.

Promote On-Site Waste Treatment System Maintenance

The County will work with landowners to help ensure the proper placement and maintenance of on-site waste treatment (septic) systems. Improper placement and maintenance, particularly of both old systems and chemical and biological treatment systems allowed under the “COMM 83” law can result in groundwater contamination. On-site system recommendations are addressed more completely in the Utilities and Community Facilities chapter.

Promote Contaminated Site Remediation

The County intends to partner with local governments and property owners in the identification, assessment, remediation, and reuse of “brownfield” sites. These sites have the potential to contaminate groundwater.

A LAKE CLASSIFICATION SYSTEM MODEL

Lake classification systems generally consider the type, size, shape, and location of a water body and the intensity of surrounding development or land use activities. Lakes can be grouped based on hydrology, average depth, surface area, shoreline configuration, susceptibility to pollution, and sensitivity to recreational use. Typically, there are three classes of lakes identified:

- Natural Environment/Wild Lakes: These lakes may need special care in order to protect diverse or unique wildlife, pristine vegetation, and exceptional water quality. Appreciating and maintaining the natural state of the lake, and preserving habitat for species like loons and fish would be high priority. Development standards applied to these lakes may include large or clustered lots, deep setbacks, and use restrictions.

- Intermediate Lakes: These lakes, in spite of significant shore and surface use, are relatively intact as natural systems. A plan for these lakes may be to maintain existing development levels but minimize trends toward higher building densities. Future development plans may allow more homes if they have gentler impact on lake health. Homes may be set back farther or clustered away from the water. Certain types of low-density development lakes may be best suited for fishing and wildlife watching.

- General Development Lakes: These lakes tend to be the least sensitive to shoreland disturbance due to size, shape, or other factors, or are already highly developed. Generally the least restrictive set of standards are placed on development of these lakes and management strategies are focused on restoration rather than prevention.
State and federal dollars are available for brownfield assessment, planning, and clean-up in advance of redevelopment. The Economic Development chapter contains an inventory of these sites in the County.

**Remain Informed and Involved in Decisions Pertaining to High-Capacity Wells**
Permits for high capacity wells (those withdrawing more than 100,000 gallons per day) must be registered with and permitted by WisDNR. The WisDNR will not approve wells that impair public water supplies. Wells drawing more than 2 million gallons per day are evaluated in terms of whether they impair public water rights, future water use plans, cause adverse groundwater effects, or otherwise contribute to environmental degradation. Should potential new sites be proposed in Shawano County over the planning period, the County and its local units of government desire to remain informed and involved in any WisDNR decisions regarding high-capacity well decisions through regular communication and providing public comment during Environmental Impact Statement review periods.

The County could consider participating in cooperative groundwater management plans with municipalities, industries, local and regional planning agencies, and state agencies where appropriate, should Groundwater Protection Areas or Groundwater Management Areas be formed in the future. The County currently regulates high-capacity well-siting in areas within 1,000 feet of lakes and 300 feet of rivers and streams through its shoreland zoning ordinance. In addition, the County might also explore a general zoning review process to regulate high-capacity well-siting in areas outside of the jurisdiction of the shoreland zoning ordinance.

**Implement Natural Resource Identification Standards**
The identification and mapping of natural resources on a site should be the first step in planning any site development, and a prerequisite for receiving development approval. This includes detailed mapping of productive farmland, woodlots, environmental corridors, and their component features (e.g., wetlands, floodplains, surface waters).

In 2011, the County amended its Zoning Ordinance to require a site assessment checklist be completed and evaluated for rezonings, conditional use permits, and site plan approval requests. The site assessment checklist includes a description of the natural resource characteristics of the land, and/or mapping of those characteristics. Completed site assessments also identify which natural resource features are proposed to be disturbed, and any mitigation which is planned for the disturbed areas. The County may amend its subdivision regulations to require completion of a similar checklist in conjunction with preliminary subdivision plats.

The County could also work toward creating a natural resource database that is available for public use via the internet or at the County office. In particular, towns making recommendations on a development proposal could be trained and have access to computer equipment that displays these natural resource layers. This would help facilitate more efficient decision-making.
**Figure 4.2: Portion of County Site Assessment Checklist**

<table>
<thead>
<tr>
<th>DEVELOPMENT SITE FEATURES</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Resources. Does the proposed development site include and/or is it adjacent to:</td>
<td></td>
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<tr>
<td>(1) Slopes of 12% or greater? (Based on on-site survey.)</td>
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<tr>
<td>(2) A floodplain, as designated by FEMA? (See Map 5 of the Shawano County Comprehensive Plan. If “yes,” attach map of the 100-year floodplain limits at a scale that relates to the site.)</td>
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<tr>
<td>(3) Wetlands or hydric soils? (See Map 5 of the Shawano County Comprehensive Plan. Based on WisDNR and NRCS data and/or on-site survey.)</td>
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<td></td>
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<tr>
<td>(4) Bedrock within 10 ft. of surface? (Based on NRCS soil survey or site soil borings.)</td>
<td></td>
<td></td>
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<tr>
<td>(5) Soils having severe or very severe limitations for private on-site waste treatment (septic) systems? (Based on Map 9 of the Shawano County Comprehensive Plan, NRCS soil survey, or on-site soil borings.)</td>
<td></td>
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<tr>
<td>(6) A “brownfield”/contaminated site? (Based on WisDNR Contaminated Lands Web Database or complete site assessment.)</td>
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<tr>
<td>(7) Mineral rights owned by someone aside from the owner of the lot(s)? (If “yes”, provide more info.)</td>
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<tr>
<td>(8) A mineral extraction operation, whether approved, in operation, or both? (See Map 6 of the Shawano County Comprehensive Plan.)</td>
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<tr>
<td>(9) Class I or II soils? (Based on Map 4 of the Shawano County Comprehensive Plan and NRCS data.)</td>
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<tr>
<td>(10) A State Park, Natural Area, or Wildlife Area? (Based on WisDNR park maps.)</td>
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<tr>
<td>(11) Environmental corridors? (See Maps 7a, 7b, and 7c of the Shawano County Comprehensive Plan.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12) Woodlands? (See Map 5 of Comprehensive Plan.)</td>
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</tr>
<tr>
<td>(13) A section of land that the WisDNR Wisconsin Natural Heritage Inventory identifies as containing endangered or rare plant or animal species? (If “yes,” submit a WisDNR Endangered Species (NHI) Review Request Form” (Form 1700-047).)</td>
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</tbody>
</table>

**Monitor Impoundment Drawdowns and Dam Maintenance and Repair Proposals**

A portion of the surface water of the County is found in impoundments. A change in water surface level or water flow due to drawdowns and dam removals can have significant impacts not only for the water resource, but also for the enjoyment and use of the resource by local residents and visitors. The County and local communities request notification and involvement in any decisions involving significant river impoundment drawdowns and dam removals:

**Impoundment Drawdowns**

Impoundment drawdown is used for many purposes at a dam site: conducting repairs on an unsafe dam structure, controlling invasive species, or enhancing the habitat for certain species of aquatic plants, fisheries, and wildlife. Drawdowns fall into two categories—emergency and non-emergency. Emergency drawdowns typically occur when a dam is in need of immediate repair for safety reasons. In non-emergency cases, the drawdown should follow a certain process. The drawdown is typically initiated by the dam owner, the WisDNR, Federal Energy Regulatory Commission (FERC), or a lake district or association. A detailed assessment
should follow the initial request, including an aquatic plant survey. In certain cases (where there are formally established water levels), the WisDNR is required to conduct an Environmental Assessment prior to the drawdown. The Environmental Assessment includes a consideration of fisheries, wildlife, endangered resources, vegetation, and a broad range of other potential impacts, as well as management alternatives. The Environmental Assessment process is also required to incorporate public comments and include at least one public meeting or hearing on the proposed drawdown activity. Based on the Environmental Assessment and the results of the public meeting, the drawdown activity may be approved or denied. The drawdown permit may also be approved with a range of conditions specified by the WisDNR.

Shawano County and its local communities have several opportunities to get involved in the impoundment drawdown process:

- Landowners, lake associations, or lake districts may initiate a drawdown for dam repair, habitat enhancement, or lake management purposes.
- Individuals and organizations can review and comment on the WisDNR's Environmental Assessment. In cases where an Environmental Assessment is not required, comments from local groups, communities, and individuals are encouraged via WisDNR regional or central office staff.
- Attendees can provide feedback at required public informational meeting and/or hearing.
- A local organization (such as a lake district or association) can be formed to work directly with the WisDNR on drawdown and lake management issues. This organization can insure regular updates, engage in monitoring, provide regular input, and help guide lake management in their community.

Dams in Shawano County where drawdown and water levels may be of particular concern include the Balsam Road dam, Red River dam, and Shawano dam.

**Dam Repair and Removal Process**

Dams are an important feature in many Shawano County communities. Over the 20-year planning period, communities may be faced with issues related to the repair or removal of an aging dam. Local units of government and the County should work closely with the WisDNR to consider dam management options. Aging dams or those in need of repair may be community safety hazards and cause environmental degradation. Owners of dams in a high hazard condition have the option of repairing the dam to meet standards or abandoning the permit for the dam and removing it from the waterway. When repair is deemed less desirable from a financial, safety or ecological standpoint, dam removal may be an option. Decisions to remove or repair deteriorating dams in Shawano County should be based on a careful analysis of economic, social, and environmental factors.

Dam repair is often much more costly than removing a deteriorating dam structure. The WisDNR is required to review and approve all applications for dam abandonment and removal. The WisDNR's role is to help the public understand the various management options and the benefits of dam removal, and assisting with funding to buyout an owner’s interest in the dam. The decision to remove an unsafe or abandoned dam can be made only after an established protocol is followed. This process generally consists of:

- Inspection of dam by a certified engineer.
• Contact and notification to dam owner of any problems or hazards that exist.
• Official order to repair the dam to meet standards, or dam removal.
• Public information session to inform and gain public input.
• Notification and/or opportunity for public hearing prior to WisDNR action.
• Environmental Assessment may be required if dam removal is pursued.

Communities have several options for becoming involved in this process, but ultimately it may hinge on regular communications and updates from the WisDNR. Some communities have chosen to be involved in decisions to repair or remove unsafe dams within their jurisdiction by:

• Pursuing assistance from the WisDNR to develop a removal plan. In addition to removing the structure, this type of plan may develop parkland within former impoundment areas. The WisDNR can work with the community to establish a re-vegetation plan and reconstruct channels. Some communities have created extensive park areas with trails, canoe launches, athletic fields, and other public amenities.
• Engaging in community visioning and public involvement to create a public forum for discussion of the dam removal and a cooperative, future-oriented approach to planning for the site.
• Using dam removal to spur revitalization efforts including river-related development such as wayside parks, an area dedicated to the history of the dams and the river, a river walkway, and the revitalization of their riverside historic district.
• Extending benefits to the local economy by encouraging activities and local businesses associated with river recreation such as canoeing, kayaking, and fishing.

State and federal resources for dam removal and associated local improvements that communities can pursue include:

• Dam Maintenance, Repair, Modification, and Removal Grant Program, which funds a maximum of 50% of eligible project costs that include dam repair, reconstruction, modification or abandonment, or removal. Funding priority is determined by the size of the dam, downstream hazard rating, downstream zoning, dam repair costs, and the financial need of the community.
• Small and Abandoned Dam Grant Removal Program, which assists communities, public inland lake protection and rehabilitation districts, and private dam owners to remove small or abandoned dams. Small dams are those with a hydraulic height of less than 15 feet and an impoundment of 100 surface acres or less at normal pool. The WisDNR will fund 50 percent of eligible project costs, with a maximum grant award of $50,000. Eligible project costs include labor, materials, and equipment directly related to planning the actual removal, the dam removal itself, and the restoration of the impoundment.
• Wisconsin Stewardship Program, which may provide for public improvements associated with dam removal.

Help Protect Rare Species and Wildlife Habitat Areas
Shawano County has a variety of wildlife communities that are dependent upon a specific type of landscape. Preservation of wildlife habitat and rare plant and animal species allows that species to thrive, enhances the quality of residents’ lives, preserves rural character, increases pride and stewardship in private land ownership, and enhances recreation and tourism.

Preserving habitat and protecting rare species at the local level may also minimize the potential that a species will officially become “threatened” or “endangered,” thereby requiring federal intervention under the Endangered Species Act. The WisDNR—Bureau of Endangered Resources maintains a database entitled the Wisconsin Natural Heritage Inventory (NHI). The Natural Features Map (Map 5) shows all sections in Shawano County where rare plant or animal species and natural communities have been documented in that database.
NHI data is collected in the field on a continuous basis by biologists. However, it is important to note that not all sections of Shawano County have been inventoried for the presence of rare species. Because rare species are vulnerable to collection and intentional destruction, the exact locations and type of rare species is not made readily accessible. However, this data is available through submittal of a “Wisconsin Natural Heritage Inventory Request Form.” It will be important to protect wildlife habitat areas throughout the entire County over the 20-year planning period. Figure 4.3 lists seven biological principles for wildlife habitat protection in normal type, and the efforts and recommendations of the Comprehensive Plan to address each principle in italics.

**Figure 4.3: Seven Biological Principles for Habitat Protection**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principle 1</strong></td>
<td>Maintain large, intact patches of native vegetation by preventing fragmentation of those patches by development. This Plan recommends the preservation of environmental corridors, very low density rural residential development through the “Open Lands, Agriculture, and Residential (10-35)” and “Agriculture and Resource Preservation” future land use categories, preservation and restoration of natural shoreline buffers, and maintenance of large contiguous areas of public and private forestland. The County also intends to explore a Land Evaluation and Site Assessment system, wherein areas would be prioritized for preservation based on specific site characteristics. Large, intact areas would be one strong criterion.</td>
</tr>
<tr>
<td><strong>Principle 2</strong></td>
<td>Establish priorities for species protection and protect habitats that promote the distribution and abundance of those species. This Plan advises efforts to (a) prioritize species that may be particularly rare or important to County residents and (b) identify their habitats. Then, specific “extra” efforts could be considered to protect those habitats.</td>
</tr>
<tr>
<td><strong>Principle 3</strong></td>
<td>Protect rare landscape elements. Guide development toward areas containing more common landscape elements. Areas of known rare plant and animal species are depicted in Map 5. The County or applicable town should submit a “Wisconsin Natural Heritage Inventory Request Form” to the Bureau of Endangered Resources when a specific development proposal is offered on land in a section where a known rare plant or animal species has been located. The County may also work with the State WisDNR on a more complete inventory of rare species.</td>
</tr>
<tr>
<td><strong>Principle 4</strong></td>
<td>Maintain connections among wildlife habitats by identifying and protecting corridors for movement. This Plan recommends the preservation of environmental corridors. However, more needs to be learned about specific corridors of wildlife movement in the County, so these corridors are not inadvertently cut-off by development that may occur outside of mapped environmental corridors. Maintaining movement corridors should also be a consideration when the County and private property owners execute logging contracts. The Wolf River and Navarino Wildlife Area are of particular regional importance. The County encourages consideration of applying acquisition or Purchase of Development Rights funding in order to provide “buffers” around those areas.</td>
</tr>
<tr>
<td><strong>Principle 5</strong></td>
<td>Maintain significant ecological processes in protected areas, such as fires and floods. The first step would be to identify which specific habitat areas are most in need of protection, and then develop specific management strategies based on the particular characteristics of these areas.</td>
</tr>
<tr>
<td><strong>Principle 6</strong></td>
<td>Contribute to the regional persistence of rare species by contributing to their habitat locally. While the NHI database is an excellent source in identifying rare species locations, it is not yet complete. The County may work with the WisDNR to enhance that database.</td>
</tr>
<tr>
<td><strong>Principle 7</strong></td>
<td>Balance the opportunity for resources and recreational needs by the public with the habitat needs of wildlife. The first step in implementing this principle is to identify the “core” habitats of highly prioritized species (e.g., nesting or calving areas), and keep recreational and other uses out of that core at the appropriate times. Non-motorized recreational uses are more appropriate in a habitat “buffer” area, with more intensive recreational uses directed away from the initial buffer zone.</td>
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</table>

*Source: Habitat Protection Planning: Where the Wild Things Are, APA, 1997*
The County’s forested lands are a quality of life, economic, and recreational asset to the County. Forested areas define the unique landscape character of the County. Woodlands historically and currently are an important economic driver in the County, with several primary and secondary forest products industries as top County employers. Finally, forested areas are key recreational areas for the County. Both public and private forest lands provide opportunities for hunting, hiking, birding, and other activities. These activities also contribute to the County’s economy and quality of life. The County will work to protect its working forest lands – forested lands that are open and available for production and recreation.

**Support Long-Term Woodland Management Efforts**

The County’s woodlands are a critical component of the County’s recreational base and rural economy. These woodlands provide timber revenues to private landowners, raw materials for County industries and abundant sports and recreational opportunities for both residents and visitors. Development located near and within the County’s vast woodlands should not negatively affect the resource on which these activities depend.

**Encourage Enrollment in the Managed Forest Land Program / “Open” Lands**

In order to promote forest preservation for timber harvesting, habitat preservation, and recreational uses, the State of Wisconsin encourages private landowners to participate in the State’s Managed Forest Land (MFL) Program. Enrollment is open to all private landowners owning ten or more acres of contiguous forestland. The owner may choose to enroll the land for either 25 or 50 years. The emphasis of the program is production and harvesting of timber in a responsible manner, but the program also provides an incentive to open lands for public uses such as hunting, fishing, cross-country skiing, hiking, and sightseeing. The program thereby is intended to promote a variety of potentially compatible forest uses. Preparing and adhering to a forest management plan is a requirement of each property enrolled in the program. In exchange, the property owner pays lower property tax and receives a tax deferral on harvested timber. Property owners must allow public access to all but 160 acres of MFL-enrolled lands in a single town for hunting, fishing, cross-country skiing, hiking, and sightseeing. Land “open” for these public recreation purposes is taxed at a lower rate than land designated as “closed” to the public. Buildings used or “developed for human (year-round) residence” are not allowed on MFL-enrolled lands. Eight criteria are used to evaluate whether a structure is considered a human year-round residence. Landowners wishing to build residences on land entered into the MFL program must withdraw the land from the program first and pay early withdrawal penalties.
In 2004, only 9,791 acres of the County’s 248,844 acres of forest land were enrolled in this program, down from 11,074 acres in 1998. Approximately 33,000 additional forest acres were protected under older programs that the MFL was designed to replace, such as the Forest Crop Law and the Woodland Tax Law programs. The number of acres enrolled in these forest protection programs has decreased as these older programs expire. Landowners may opt to enroll lands protected under these older programs or other qualified lands in the MFL program.

The County encourages expanded enrollment in the MFL program. Recent enrollment trends have resulted in lands previously open to the public for recreation to be closed. This has had adverse impacts on hunting and recreation. The County therefore also encourages maintenance of MFL lands as open for public recreation. The County intends to work with the State to create more incentives to leave MFL lands open, closing loopholes in the policy that allow more land to be closed.

**Promote Best Management Practices**

Nearly all of Shawano County forest land is in private ownership. A countywide survey administered as part of this planning process demonstrated strong support among respondents for the proper management of timber harvests to protect the quality of land, water, and wildlife habitat. The County therefore recommends the use of forestry “Best Management Practices” as a countywide standard on private and public lands. These standards are particularly important within designated environmental corridors (see Maps 7a, 7b, and 7c), in shoreland zones, and in areas of significant recreational and scenic value. When harvesting on private lands, private property owners should obtain the advice of a professional forester. The forester can advise on harvesting methods that follow “best management practices” and promote habitat preservation.

Other programs and organizations that exist to assist land owners that provide information and assistance in developing forestry management plans include the Wisconsin Forest Landowner Grant Program and organizations like the Wisconsin Woodland Owner’s Association (WWOA) and Wisconsin Family Forests (WFF).

Wisconsin’s Conservation Reserve Program contains specific initiatives that promote and provide assistance with tree planting.

**Manage Risk Associate with Wildfire**

Another aspect of forest management relates to managing the risks associated with wildfires. The most obvious way of managing these risks is to direct development away from forested areas. For those forested areas where residential development has already occurred or will be allowed to occur, the WisDNR provides information for private homeowners and local communities on preventative measures and strategies to mitigate wildfire damage in residential areas within or adjacent to forestland. This Plan includes several strategies that the County, local communities, and private landowners should pursue to prevent or minimize any major wild-
fire damage in the future. The Transportation chapter addresses issues related to access, road, and property fire number identification, and overall road circulation to properly respond to a wildfire; The Utilities and Community Facilities chapter provides recommendations on the types of facilities and services that could improve local emergency preparedness for wildfires; and the Housing and Neighborhood Development chapter presents specific recommendations on preventative measures that could be used around a private lot and home to mitigate wildfire damage and spreading.

**Promote Strategies to Increase the Viability of the Forest Products Industry**

**Encourage Forest Landowner Cooperatives**

Encouraging land owners to form and participate in forest landowner cooperatives is another way Shawano County can promote the preservation of its woodland resources. The objective of forest cooperatives is to help small landowners benefit from their woodlands, while encouraging ecologically sound management principles. Forest cooperatives can facilitate information sharing, cooperative management planning, joint marketing, and promote value-added processing and marketing of forest products. Forest cooperatives are set up as a member-controlled business, carrying out its activities in a manner that returns a net profit to landowners based on their share of the wood harvested and processed. To minimize upfront costs and promote sustainable forest management, these cooperatives can provide the following services to its members: education, identification of forestry professionals to assist with management plans and other forestry services, processing and marketing wood, sawing contracts, and drying and milling information. There are several resources available to help interested landowners form forestry cooperatives including WisDNR, Cooperative Development Services, and the Wisconsin Center for Cooperatives.

**Promote Exploration of New Forest Product Markets**

The State’s forested lands can play a contributing role in developing the Bio-Economy – described as economic activity derived from renewable resources coming from farms and forests. Some applications for forest products in the bio-economy include:

**Biomass Energy:** Biomass energy and heat systems are fueled by waste wood from logging operations, forest thinning, low-grade wood, and sawmill residues. They can be applied to Direct Heating Systems (firewood, wood pellets, wood chips); Community Heat and Power Systems (which brings biomass energy to several buildings through a central wood energy plant and network of hot water or steam heat distribution piping); or Industrial Combined Heat and Power Systems (use biomass wastes from industrial processes to produce heat and/or electricity). Hayward, Wisconsin recently approved a $6 million wood pellet processing facility that is likely to create over 20 new jobs in the community.

**Biofuels:** Biofuels are a renewable, non-toxic, biodegradable, clean-burning alternative to fossil fuels. New technologies allow the production of biodiesel from cellulosic materials, like wood fiber. An integrated forest products biorefinery could use extraction and conversion, and gasification processes to refine biofuels from wood.

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**Steps to Help Ensure the Viability of Forest Products in Shawano County**

- Maintain roads and other transportation facilities to help facilitate the movement of forestry products – from producer, to processor, to market
- When development is proposed in areas with heavy forestry activity that are designated within appropriate areas in the Comprehensive Plan, take steps to ensure that the public is aware of the realities associated with forestry operations – noise, vehicle traffic, etc.
As these new technologies emerge, given its forest resources and existing forest production infrastructure, Shawano County has the opportunity to play a leadership role on the production side of advancing these technologies. With the University of Wisconsin-Madison as a collaborator on a Midwest Alternative Energy Research Center to be located in Madison, the Shawano County UW Extension should recommend Shawano as a potential production center.

**Limit Development in Forest Areas to Minimize Conflicts**

After promoting “Best Management Practices,” limiting housing in forested areas received the strongest support from respondents to the countywide survey conducted for the Comprehensive Plan as a means of protecting the County’s forest lands. Dividing forest land into many smaller lots, particularly for houses and other forms of development, leads to fragmentation of ownership and of the forests themselves. Potential negative consequences of fragmentation include increased barriers to timber harvesting, loss of native wildlife habitats, loss of access to private hunting lands, and conflicts between home owners and hunters. The resulting loss of contiguous areas available to hunters in turn has contributed to overpopulation of deer, which in turn leads to over browsing of young trees, increased risks of deer related traffic accidents, and a loss of a valued cultural and recreational pursuit.

Increased residential development in the County’s wooded areas could also increase the chances for more wildfire damage to private property. The most obvious measure to limit the risks associated with wildfires is to limit the number of homes in heavily forested areas. Large areas of contiguous forest without development allow for the possibility of allowing naturally occurring, low intensity forest fires to burn and remove the accumulation of flammable debris that can lead to more devastating and difficult to manage wildfires later.

For these reasons, this Plan recommends maintaining low residential densities and avoiding scattered development in forest areas. Where new residential is allowed in forested areas, the negative impacts of housing on agricultural and forested land can be minimized by limiting residential density and encouraging clusters of smaller (1-2 acres) lots that still preserve large blocks of forest land for other uses. These objectives can be accomplished through a combination of local land use regulations (see Land Use chapter) and economic incentives.

Expand opportunities for natural resource-based recreation and tourism in the County.
Ensure an Adequate Supply of Lands Open for Recreation

While the County has a rich array of natural resources and lands, most of this land is in private ownership. Availability of land for recreation is a challenge and a priority, particularly in areas formerly with high concentrations of “open” lands that have recently been closed through changes to the Managed Forest Land program. Recreation is an important part of Shawano County’s quality of life and economy, and therefore providing areas for recreation is critical.

Strategies to encourage availability of lands for recreation include:

- Minimizing conflicts between open lands available for recreation and those designated for development, as achieved through the Future Land Use Map.
- Encouraging landowner participation in the Managed Forest Land Program and designation of MFL landholdings as “open” rather than closed.
- Directing any County acquisition of conservation easements program to prioritize purchase of recreational lands.
- Requiring and/or providing incentives for approved development (rezonings, CSMs and subdivision plats) to mark public lake and river access areas on their preliminary and adopted development plans, and hold to a plan to mark and maintain markers for public access so that the public knows where public access points are located. Further, the County intends to work toward mapping those public access points that have already been designated.
- Implement local comprehensive plan recommendations through an update to the County’s Comprehensive Outdoor Recreation Plan (CORP).

Capitalize on the County’s Natural Resources to Promote Tourism

The possibility for expanding Shawano County as a center for nature-based tourism provides the opportunity for residents to enjoy financial benefits of increased economic development while simultaneously preserving the area’s unspoiled environment. Shawano County is well positioned to take advantage of these opportunities, given its proximity to growing urban area and numerous relatively unspoiled natural areas for recreation and relaxation.

Shawano County’s abundant natural areas are particularly well-suited to attract the growth in wildlife watching. In 2001, the National Survey of Fishing, Hunting and Wildlife-Associated Recreation, which gathers information on the number of anglers, hunters and wildlife watchers in the United States, found that Wisconsin’s participation rate in wildlife watching was the third highest of all states, with 53 percent of all residents age 16 and older. In Wisconsin, the direct spending impact of wildlife observers amounted to $251 million in 2001, of which $152 million was spent on food and lodging, $78 million on transportation costs, and $22 million on other trip-related costs. A well-known Wisconsin example of this tourism-related activity is Sauk Prairie’s eagle watching bus tours.

As evidenced by the National Survey, birding has become big business and there is currently a movement to establish The Great Wisconsin Birding Trail, a proposed statewide auto trail that would lead people to parks, historic sites, rivers, lakes, and biking trails in Wisconsin. This trail system and accompanying trail map is envi...
sioned to serve all types of visitors from the die-hard birding enthusiast to the curious visitor who is looking for something different. Currently, this statewide trail consists of five loops - The Great River Birding Trail, Oak Leaf Birding Trail, Horicon Marsh, Lake Superior/Northwoods Birding and Nature Trail, and Ozaukee County Interurban Trail. Nominations for additional sites to be included on the trail system are being solicited.

In Shawano County, the Navarino State Wildlife Area is rated as one of the top “birding” locations in the state by Wisonline.com. Although a noteworthy birdwatching destination in its own right, the drawing power and local benefits of this tourist resource could be enhanced if included in a larger network of destinations. The County, working with the local communities, chambers of commerce, and private organizations, may work to identify other potential sites for a countywide or regional “Trail Loop” system for nomination on The Great Wisconsin Birding Trail. Sites along this loop system could include state wildlife and natural areas, as well as the Land Legacy Places identified by WisDNR. More information on this statewide trail system is available through the Wisconsin Bird Conservation Initiative.

Other forms of nature-based tourism and the economic benefits associated with Shawano County’s natural resources are discussed in greater detail in the Economic Development chapter.

**Promote Environmental Education Activities**

Environmental education helps to raise awareness of the value of natural resources to individuals and communities, and create a sense of attachment to and stewardship toward natural resources. Environmental education helps establish the critical connection between natural resources and humans – prompting discovery that our food, water, and livelihoods depend on these resources that are all around us.

In Shawano County, there are several locations that offer environmental education programs: Navarino Wildlife Area nature center, school forests throughout the County, and a school nature center in the Wittenberg area.

**Nature-Based Education Options**

In recent years, books such as “Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder” document the observation that children are spending less and less time experiencing nature and the environment first-hand, which is a fundamental first step in ensuring that a strong environmental ethic will be passed on to the next generation.

Shawano’s wealth of public and privately owned natural areas and resources offer significant opportunities for outdoor learning experiences for all ages. Local schools, local community organizations, and environmental groups have opportunities to enhance awareness of regional ecosystems by developing educational programs that integrate hands-on learning experiences within these natural areas. The County, local communities, and the local school districts have access to a variety of resources for enhancing and developing educational programs. Such local resource groups may include Shawano County UW-Extension, outdoor groups like Ducks Unlimited and Trout Unlimited, friends of parks groups, and other groups. The County could be involved in such an effort by supporting and sponsoring events, in partnership with the above groups that engage adults and children in the management and preservation of natural areas. In Shawano County, introducing environmental and nature-based education into summer-school curriculum may be a good initial step to more deeply integrating these ideas into school curriculum.
Green and Healthy Schools
Schools also play an important role in promoting environmentally responsible practices and helping to foster a socially and environmentally healthy community. Further integration of environmental education into the school curriculum is supported by the Wisconsin Green and Healthy Schools program, sponsored by a partnership between WisDNR and the Wisconsin Department of Public Instruction. The mission of this program is to “…increase the students’ knowledge and awareness of Wisconsin’s natural resources and the environmental, health, and safety concerns and challenges that face our schools, our communities, and our Earth. The Green and Healthy Schools program will help students develop the necessary skills and expertise to address these challenges, and to foster life-long attitudes, behaviors, and commitments in order to make informed decisions and to encourage students to become active participants in their communities…”

This program is designed so that students and staff work together to discover how to utilize existing resources to improve the school environment, modify and enhance the school curriculum, and contribute more actively to the surrounding community. At the time this Plan was written, eleven Wisconsin schools have completed all three steps and have been recognized as official Green and Healthy Schools, and roughly 40 other schools around the State have initiated the process of becoming a Green and Healthy School.

Schools that have engaged in this program have seen a variety of benefits, including a healthier and safer learning environment; increased sense of ownership by staff, faculty, and students; economic savings associated with reduced consumption and operating costs; increased protection of local natural resources; increased connections between the community and the school; use of the school site and facilities as a teaching tool; and increases in academic achievement.

Although the Green and Healthy School program would be implemented by the School District(s) and not by the County, staff and elected officials can contribute to this effort by supporting and promoting the program wherever possible, and continuing to facilitate open communication between staff, elected officials, School District staff, and school board members.
Map 5: Natural Features
Chapter Five: Cultural Resources

Cultural resources are the invaluable cultural and historical assets that offer a tangible connection to the history and cultural heritage of a place. Cultural resources include historic buildings and structures, archeological sites, landscapes, and the cultural components of a place, such as public art and festivals. Cultural resources are often overlooked in planning efforts, but are critical components of not only how a community views itself, but also the perception of the County to the outside world.

In reference to the four major themes of this Plan, Shawano County’s numerous cultural resources provide important benefits to the County.

- Enriching the present day through an understanding of history, and helping to apply those lessons to today.
- Preserving natural or man-made features that make the County and its local communities unique, interesting, and attractive.
- Providing focal points or traditions for residents to come together and celebrate, creating a stronger sense of community.
- Attracting visitors and helping boost the tourism economy.

Cultural Resources Recommendations Summary

- Protect known archeological and historic sites
- Conduct a comprehensive survey of archeological and historical resources
- Preserve and celebrate the scenic landscape and park, open space, and recreational resources
- Work with others to network and jointly market local festivals
- Protect historic resources focused on agriculture and forestry heritage and tourism
Cultural Resource Inventory

Cultural History of Shawano County
Shawano County and the entire region was once home to the Menominee and Chippewa Native American tribes. They hunted and fished the rivers and lakes of this region for hundreds of years prior to the arrival of the Europeans. In 1673 French Jesuit priest Jacques Marquette and Jean Nicolet journeyed through the County, but did not settle. Samuel Farnsworth came to the region in 1843 via the Wolf River and realized the potential for lumbering. A year later Charles Wescott established a sawmill at the junction of the Wolf River and Shawano Lake. On the November 10, 1845, the first steam-powered boat, The Manchester, arrived at what is now the City of Shawano on the Wolf River.

By 1851 logging had spread out from the Shawano area to other rivers that flowed into the Wolf. In 1853 the population of the region had grown to 254 inhabitants and “Shawanaw” County was established as a separate County from sections of Oconto and Outagamie Counties. The name Shawanaw comes from the Native American Sha-wa-Nah-Pay-Sa which meant “lake to the south” in Menominee and Chippewa; the current spelling was adopted in 1864. As the community grew and the land became logged off, Germans came in large numbers to clear the land of stumps, drain the swamps, and establish farms that remain to this day. Joining these European pioneers were also Bohemians, Norwegians, Irish, Polish, and, to a lesser degree, English and French immigrants. While lumbering still played a small part in the economy after 1900, the primary economy was dairy farming and associated industries.

Historic Resources
The Wisconsin Historical Society’s Architecture and History Inventory (AHI) contains data on a wide range of historic properties throughout the State – such as round barns, cast iron bridges, commercial buildings, school houses, and turn-of-the-century homes – that create Wisconsin’s distinct cultural landscape. The AHI includes 819 documented structures in Shawano County. While there are several unique properties like cheese factories and the Alexian Brothers Novitiate, this list is mainly comprised of farm buildings and residences. There are three properties in the County listed on the National or State Historic Registers including the Lutheran Indian Mission in the Town of Red Springs, the City of Shawano Main Street Historic District, and the Shawano Post Office.

The Shawano County Historical Society Heritage Park Museum, located in the City of Shawano, seeks to preserve and promote these types of historic resources. The nine-building museum compound and its exhibits bring to life the history of immigrants, lumberjacks and early farmers who settled this area of Wisconsin. Pulaski, Marion, Eland, Tigerton, Wittenberg, Bonduel, and the Stockbridge-Munsee Community also have historical societies.

Documentation is an invaluable part of history. Shawano County at the Dawn of the Twenty-First Century by Curt Knoke documents through photography all that is Shawano County – business and industry, farms, people, places, events, and the many activities of a rural Wisconsin county. Paid for by the contributions of individuals and local businesses, the proceeds from this insightful book return to charities through the Shawano Area Community Foundation.

Archaeological Resources
There are 185 archaeological sites within Shawano County designated by the Wisconsin State Historical Society. These sites include cemeteries/burial sites, effigy mounds, and campsites/villages. All human burial sites,
including cemeteries and Indian mounds, are protected under State law. The National Historic Preservation Act of 1966 requires federal agencies to insure that their actions do not adversely affect archeological sites on or eligible for listing on the National Register of Historic Places. Archeological sites can be protected during the course of State agency activities if the sites have been recorded with the Office of the State Archeologist.

**County’s Present Day Cultural Assets**

Each generation of residents has added to the cultural, religious, and architectural flavor of the region. Preservation of these historic and cultural resources fosters a sense of pride, improves quality of life, and provides an important feeling of social and cultural continuity between the past, present, and future. The County’s culture is much more than its history; it is the people, places and events that define what the County is today.

From descendants of early European settlers, to Native Americans, to relative newcomers – the County has a rich diversity in population. The County’s diversity of places ranges from pastoral agricultural land, dense woodlands, wetlands and open spaces, small town hamlets, lakefront communities, and urban villages and the City. Recreation is an important part of the County’s culture – hunting, fishing, canoeing, hiking, birding, snowmobiling and riding all terrain vehicles are examples of the range of recreational pursuits that are part of the fabric of Shawano County.

Shawano County’s culture is also observed in the array of festivals and events held throughout the year – examples include farm brunches and heritage days, Flea Markets at the County Fair Grounds, County Fair, Leopolis Triathlon, Navarino Days, Mohican Pow Wow, Tigerton Lumberjack Days, Caroline Color-rama, Shawano Ski Sharks. These events and celebrations provide an opportunity for residents to come together as a community and for visitors to see what makes the County unique and special.

Arts, culture, and history venues are also a part of the County’s cultural assets – for example the Shawano Historical Society and Mielke Theater in the City of Shawano.
Cultural Resource Goals, Objectives and Policies

Goal:
1. Preserve the County’s cultural, historic and archeological sites, scenic character, and cultural assets.

Objectives:
1. Identify and promote the preservation of the County’s cultural, historic, and archeological resources.
2. Acknowledge and promote the natural landscape and recreation as an important component of Shawano County’s cultural offerings.
3. Promote, expand and network the offerings of festivals, gatherings, and events across the County as a benefit to residents, but also to attract visitors.

Policies:
1. Encourage private landowners to protect and rehabilitate known historic and archeological sites by balancing preservation with viable economic uses.
2. Cooperate with the State Historic Society, East Central Wisconsin Regional Planning Commission, and local communities on a comprehensive survey of historic and archeological resources in the County.
3. Protect the narrow, winding, lightly-traveled roadways that contribute to the County’s scenic quality and, for some, outdoor recreation opportunities.
4. Conserve large blocks of woodlands, hunting land, wetlands, and open space that contribute to Shawano County’s rural character and way of life.
5. Work with local communities and the Shawano Area Chamber of Commerce to market, promote, expand and network local festivals and events.
6. Promote “heritage tourism” (e.g., local festivals, fairs, farm tours, and markets) that celebrates the County’s heritage and rural setting.

Cultural Resource Recommendations and Programs

Like other rural places in Wisconsin, the rural landscape in Shawano County is constantly evolving, as it reflects changes in the economy and lifestyle, as well as individual landowner needs, aspirations, and traditions.

Expanding on the policies listed above, the County intends to preserve and celebrate its treasured cultural resources through the following programs, organized by the objectives put forth in this Chapter.

Objective: Identify and promote the preservation of the County’s cultural, historic, and archeological resources.

Protect and Rehabilitate Known Historic and Archeological Sites
The County intends to make a specific request to the State Historical Society for more detailed information when a specific development proposal is offered on land in an area where a known historic or archeological
site has been mapped, if its location is not readily apparent. Mapped archaeological sites are predominantly burial sites.

Further techniques for preservation of historic or archaeological resources may include renovation design guidelines, historic preservation ordinances, demolition controls, amendments to subdivision regulations, and/or registration on the State and/or National Register of Historic Places. Such registration makes properties eligible for restoration funding and tax credits.

**Conduct a Comprehensive Survey of Historic and Archeological Resources**

Very little of the County’s total land area has been surveyed for the presence of archaeological sites and cemeteries, and there has never been a comprehensive survey of historic resources in Shawano County. At least as many historic or archeological sites are lost to ignorance of their significance than to intentional acts.

Shawano County intends to cooperate with local governments on a comprehensive, countywide survey of historic and archeological resources. This survey would involve two separate but related processes—research and field work. Research involves collecting and organizing historic data, including documents, photographs, and information from every conceivable source. Field work could be conducted by volunteers, local officials, students, interns, and others. However, as a general rule, only trained archeologists or students under professional supervision should conduct archeological surveys. Before completing a survey, Shawano County consultation with the State Historical Society on the proper procedures and grant funding opportunities is advised. The State Historical Society provides survey funding on an annual basis, with applications due in November. There is presently no local match requirement.

**Promote Rehabilitation and Reuse of Historic Buildings for Economic Purposes**

Historic preservation can be used as an economic development tool that can lead to urban revitalization, job creation, small business incubation, new housing opportunities, and tourism possibilities. A city or village Redevelopment Authority, for example, can identify historic structures that warrant rehabilitation and develop strategies for adaptive reuse. Rehabilitation of historic buildings increases the value of existing real estate. Restoring economic value to historic properties should not be underestimated as a preservation technique.

**Preserve and Celebrate the Scenic Landscape**

Scenic beauty is a very important cultural resource in Shawano County. The County offers a very diverse landscape of lakes, rivers, and agricultural areas. There are numerous local areas that offer stunning views of the landscape, key landmarks (e.g., hills), and bodies of water. Many local plans identified specific areas as having high scenic value during local planning processes. These include:

- Shawano Lake;
- The Wolf River corridor and also other smaller rivers and streams such as the Embarrass River and Red River, and trout streams throughout the western part of the County;
- Scenic town and County roads which may qualify for “rustic road” status;
- Wildlife areas, such as Mud Lake Wildlife Area and the Navarino Wildlife Area; and
- Mountain Bay, Wiowash and other State Trails.
More generally, throughout the County, lakes, rivers, wildlife areas, marshes, wetlands, hilltops, and small woodlands have great scenic value. Within and near these areas, the County and towns may require viewshed analyses before approving new developments. New development should be designed, located, and landscaped in a manner that does not detract from these scenic views. The Housing and Neighborhood Development chapter provides additional guidance on minimizing the visual impact of development.

State and federal “rustic road” and “scenic byway” programs are also techniques to preserve and celebrate particularly scenic road corridors. The Transportation chapter provides additional guidance on these programs.

**Promote Park, Open Space, and Recreational Resources**

Recreation is an important component of the County’s cultural offerings. Retaining public and private lands within the County for recreational purposes, and protecting the quality of natural resources that are the basis for recreational pursuits are important recommendations of this Plan. This is discussed in greater detail in the Natural Resources chapter.

The County also intends to explore the development of a bicycle and pedestrian trail “loop” system that connects many attractions in the east-central part of the County via a marked on and off-road trail system, using existing trails in part. Such a loop could be designed to connect the major population centers – Shawano, Cecil, Bonduel, as well as natural areas like Shawano Lake, and the Navarino State Wildlife Area. This trail system would not only augment transportation systems within Shawano County, but would also enhance recreational opportunities in the area. This concept is discussed in greater detail in the Transportation chapter.

The County will also consider including interpretive displays in parks as they are renovated to provide greater interest and educational information on the natural and cultural history in park locations. More information on parks will be provided in the Utilities and Community Facilities chapter.

The following chapters of this Plan include additional goals, objectives, policies, programs, and recommendations related to park, open space, and recreational resources: Land Use (including illustrating existing and future park locations on the Future Land Use Map), Transportation, and Utilities and Community Facilities (recommendations and maps showing locations of existing and future park, open space, trails, and recreational resources). Goals, objectives, policies, maps, and programs related to community design are presented in the Land Use chapter.
Market Local Festivals, Gatherings, and Events
Many of the communities throughout Shawano have regular or annual local events or celebrations that help to define what makes that community special. The Shawano Area Chamber of Commerce has many of these events listed on its website. Recognizing that many of these communities and events are small, pairing events is a strategic way to draw larger numbers of visitors to the County. For example, scheduling two events over a weekend so that visitors could enjoy one event on a Saturday, and the next on a Sunday would be one idea to pair events. Cooperative marketing is another strategy. Communities could jointly fund the production of marketing brochures or web materials advertising compatible events to take place over the course of a season.

The County and communities should work together with the Chamber of Commerce on maximizing the benefits of local events, gatherings, and celebrations through networking, pairing where appropriate, promotion, and marketing.

Partner with Arts Groups For Economic Growth
The arts and culture industry is a valuable contributor to a region’s economy. The County will collaborate with arts groups and cultural organizations (e.g., Shawano County Arts Council, SCEPI) to grow the economic development sector of the County. Through this collaborative effort, the County will work to raise awareness and market cultural events and attractions. Investing in the arts can create job opportunities, promote cultural tourism, enhance quality of life, and stimulates economic growth. Studies also show that visitors attending cultural events typically spend twice as much as local attendees. This revenue is generated by local merchants such as restaurants, hotels, and retail and circulated throughout the local economy.

Promote Heritage Tourism
The County will promote tourism opportunities that celebrate and take economic advantage of the County’s historic, archeological and scenic resources. This type of tourism—often called “Heritage Tourism”—will become increasingly popular as the baby boom generation eases into retirement.

Heritage tourism may focus on museums and cultural centers, vibrant rural communities, historic architecture, historic settlement patterns and the County’s considerable and diverse natural amenities and views. Agricultural tourism may include seasonal farm events with pumpkin patches, sleigh rides, corn mazes, or farm breakfasts or tours. The County or Shawano County Economic Progress Incorporated may explore state grant opportunities to study, establish, and fund a heritage tourism program. Heritage Tourism linked to local food production is one emphasis of the emerging “Buy Local, Buy Wisconsin” program.

Protect Historic Resources Focused on Agricultural and Forestry Heritage
As a component of heritage tourism, it will be important for the County to retain its unique identify. One strategy to achieve this is for County and local governments to work with the Shawano County Historic Society and other local historic societies to inventory local historic structures and encourage property owners to preserve the historic character of significant buildings and structures associated with the agricultural and forestry industry heritage of the County – such as historic farmsteads and outbuildings, mills and other features that contribute to the heritage and aesthetic beauty of the County. To encourage preservation of historic structures, economic incentives may be offered to private landowners. Federal and State Investment Tax Credits (ITC) are available to rehabilitate historic commercial, industrial, and rental residential properties. Lo-
local communities, in partnership with the County and Shawano Area Chamber of Commerce, should also continue to promote their farming and forestry heritage by supporting local festivals, fairs, markets, farm tours, farm breakfasts, logging days, etc.

The Shawano County Barn Quilt Project is an excellent example of promoting heritage tourism and promoting the agricultural heritage of Shawano County. These “quilts” celebrate the agricultural history and structures within the County while providing a draw for tourists. Shawano County is one of two counties in the State of Wisconsin to have over 100 barn quilts and has received regional press regarding this project.
Chapter Six: Land Use

Land use decisions and policy will be critical to Shawano County over the next 20 years and beyond.

With reference to the four major themes of this Plan, the land use decisions the County makes will influence its ability to:

- Sustain farmland, forest land, natural features, and the rural landscape;
- Ensure that urban and rural areas remain distinct and serve appropriate roles;
- Accommodate new and existing residents;
- Provide opportunities for high-quality economic development; and
- Achieve a fiscally responsible land use pattern that minimizes utility and service costs.

This chapter contains a compilation of background information, goals, objectives, policies and recommended programs to guide the future preservation and development of lands in Shawano County. It features a map showing recommended future land uses to guide future zoning and other land use decision making.

**LAND USE RECOMMENDATIONS**

**SUMMARY**

- Work with towns, cities and villages to maintain the County’s rural character by managing the pace, size and location of new development
- Plan for a sufficient supply, mix, and location for new development to meet both County and local community objectives and the projected demand for housing and economic development
- Minimize the conversion of agricultural and forested lands by directing new growth to already developed locations
- Encourage and help facilitate cooperation between towns and adjacent cities and villages on land use issues near community edges
- Assure that new developments are sustainable and positive for the County from fiscal, transportation, economic, building quality, and environmental perspectives
Existing Land Use Conditions

Existing Land Use Map Categories
The Existing Land Use map (Map 6) divides existing land uses in the County into several categories. These categories are representative of existing (2006) land use categories and do not necessarily reflect the current zoning district designation, or the desired future land use pattern.

Public Open Space and Recreation: Publicly-owned land designated as State parks, scenic areas, or conservation areas; County parks or recreation areas; town, city, or village parks; or other recreational facilities open to the public and owned by public entities, non-profit agencies, or private owners (e.g., golf courses, campgrounds).

Agriculture: Includes crop production and animal farming, hobby farming, small farm family businesses which do not interfere with nearby land owners, stand-alone agricultural-related businesses like implement dealerships and feed mills, and existing housing at low densities (usually 1 house per 35 acres or less) and usually intended for farm families and workers.

Open Space and Forestry: Includes a range of open and forested lands, usually not engaged in the production of annual crops; swamps and marshlands; small farm or forestry family businesses which do not interfere with nearby land owners, stand-alone forestry-related businesses like milling or maple syrup production, and existing housing at low densities (usually 1 house per 35 acres or less).

Residential (Unsewered): Mainly single-family housing, served by individual on-site waste treatment (septic) systems.

Residential (Sewered): Mainly single-family housing, potentially with groupings of two or more duplexes, generally at a density greater than 1 residence per acre, and served by a public sanitary sewer system.

Mixed Residential: Variety of residential units, including single-family, duplex and multiple-family housing (3+ unit buildings), manufactured home parks, and mobile home parks, typically served by a public sanitary sewer system or group on-site waste treatment system.

Commercial: Indoor commercial, retail, service, tourism-oriented, office, and institutional, uses, excluding manufacturing, warehousing, and distribution.

Industrial: Indoor manufacturing, warehousing, distribution, and office uses, sometimes with outdoor storage areas.

Mineral Extraction: Current use as a quarry, gravel pit, clay extraction, peat extraction, and related land uses.

Community Facilities: Large-scale public buildings, hospitals, airports, power substations, and special-care facilities.

Existing Land Use Pattern
An accurate depiction of the County’s existing land use pattern is the first step in planning for a desired future land use pattern. The existing (2006) land use pattern is shown in the Existing Land Use map (Map 6).

Shawano County’s existing land use pattern is primarily rural, with a rich mixture of farmland, forests and open space, and wetlands defining the County’s landscape. Agriculture land uses are found throughout the County, but most prominently in the eastern portion. The western half of the County contains large tracks of Open Space and Forestry use areas. Public Open Space and Recreation uses are limited in the County and mostly found around the City of Shawano and the Navarino Wildlife Area. Small sites of Mineral Extraction are found in almost every town in the County.

Population is focused in city, villages, historic rural settlements, and waterfront areas. There are pockets of Residential (Unsewered) development located in most towns, usually along roads or in unincorporated hamlets. The city and eleven villages contain the most intensive land uses in the County, with a mixture of Residential (Sewered), Mixed Residential, Commercial, and Industrial land uses.
Between 1980 and 2000, residential densities increased throughout the County, region, and state. In Shawano County, the residential density in 2000 was 20 homes per square mile, up from almost 15 homes per square mile in 1980. The East Central Region’s average residential density in 2000 was 46 homes per square mile and the state’s was 43 homes per square mile. Shawano’s average residential density is therefore well lower than the region and state.

Each local community’s existing land use map, included in local community comprehensive plans, should be referenced for a more detailed review of these land use patterns. Figure 6.1 provides the amount, type, and percentage of the acreage within each existing land use category in Shawano County as of 2006. These acreage totals include lands within the city and villages within the County.

**Figure 6.1: Existing Land Use Totals, Shawano County, 2006**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>208,418</td>
<td>35.8%</td>
</tr>
<tr>
<td>Open Space and Forestry</td>
<td>320,741</td>
<td>55.1%</td>
</tr>
<tr>
<td>Public Open Space and Recreation</td>
<td>5,986</td>
<td>1%</td>
</tr>
<tr>
<td>Residential (Unsewered)</td>
<td>10,399</td>
<td>1.8%</td>
</tr>
<tr>
<td>Residential (Sewered)</td>
<td>1,179</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Mixed Residential</td>
<td>591</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Commercial</td>
<td>754</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,171</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Mineral Extraction</td>
<td>912</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>4</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Right of Way</td>
<td>16,885</td>
<td>2.9%</td>
</tr>
<tr>
<td>Surface Water</td>
<td>14,125</td>
<td>2.4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>582,405</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: GIS Inventory, Vandewalle & Associates, 2006*
Land Development Trends
According to the Shawano County Department of Planning and Development, between 2002 and 2012, there were 2,705 new lots created within all of Shawano County through subdivision plats, certified survey maps, deeds, or condominium plats. This means, on average, 270 new lots were created annually. Figure 6.2 summarizes this information.

Table 6.2: Lots Created, Shawano County, 2002-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Lots Created by Subdivision</th>
<th>Lots Created by CSM</th>
<th>Lots Created by Deed*</th>
<th>Lots Created by Condominium Plat</th>
<th>Total Number of Lots Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>46</td>
<td>300</td>
<td>60</td>
<td>0</td>
<td>406</td>
</tr>
<tr>
<td>2003</td>
<td>42</td>
<td>330</td>
<td>60</td>
<td>0</td>
<td>432</td>
</tr>
<tr>
<td>2004</td>
<td>51</td>
<td>310</td>
<td>60</td>
<td>0</td>
<td>421</td>
</tr>
<tr>
<td>2005</td>
<td>82</td>
<td>269</td>
<td>60</td>
<td>0</td>
<td>411</td>
</tr>
<tr>
<td>2006</td>
<td>87</td>
<td>123</td>
<td>60</td>
<td>12</td>
<td>282</td>
</tr>
<tr>
<td>2007</td>
<td>18</td>
<td>132</td>
<td>60</td>
<td>10</td>
<td>220</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>100</td>
<td>60</td>
<td>10</td>
<td>170</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>54</td>
<td>60</td>
<td>0</td>
<td>114</td>
</tr>
<tr>
<td>2010</td>
<td>0</td>
<td>61</td>
<td>20</td>
<td>0</td>
<td>81</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
<td>52</td>
<td>0</td>
<td>11</td>
<td>63</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>105</td>
<td>0</td>
<td>0</td>
<td>105</td>
</tr>
<tr>
<td>Total</td>
<td>326</td>
<td>1836</td>
<td>500</td>
<td>43</td>
<td>2705</td>
</tr>
</tbody>
</table>

*Lots created by Deed (Metes and Bounds) is an estimate, after adoption of the revised Shawano County Land Division Ordinance in May 2010, lots could no longer be created by deed

Source: Shawano County Department of Planning and Development

Shawano County issued 1,147 Land Use Permits between the years of 2002 and 2012 for new residences in all of the County’s towns. Reflecting greater national trends in the real estate market, the number of Land Use Permits issued for new homes was highest in 2003, with 199 permits issued. In 2009, 2011, and 2012, less than forty permits for new single family residences were issued countywide. The number of Land Use Permits issued varied greatly from town to town across the County.
Land Market Trends
According to the United States Department of Agriculture’s National Agricultural Statistics Service, 11,437 acres of agricultural land were sold in Shawano County from 2006 to 2011. On average, the price of land sold during this six-year period was $3,595 per acre. Of all agricultural land sold during this period, approximately 10 percent, or 1,125 acres, were converted to non-agricultural uses. The sales price of agricultural land remaining in agricultural use increased dramatically compared to residential sales during this period. Measured in dollars per acre, the average sale price has increased almost 25 percent between the years of 2006 ($3,232) and 2011 ($4,382).

State of Wisconsin housing statistics provided by the Wisconsin Realtors Association’s Multiple Listing Service show 2,017 home sales in Shawano County between the years of 2007 and 2012, with an average of 336 sales per year. Figure 6.3 shows the median sale price of a home in the County declined from $114,000 in 2007 to $84,950 in 2012. These figures show almost a 25 percent decrease in the median sale price of homes in Shawano County from 2007 through 2012. This reflects a national decline in the real estate market; however, it appears that the median sale price may have hit a low in 2011 and is currently on the increase, the mid 2013 median sales price is $88,444, an increase over 2011 and 2012.

Figure 6.3: County Home Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Home Sales</th>
<th>Median Sale Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>380</td>
<td>$114,000</td>
</tr>
<tr>
<td>2008</td>
<td>320</td>
<td>$95,200</td>
</tr>
<tr>
<td>2009</td>
<td>297</td>
<td>$90,000</td>
</tr>
<tr>
<td>2010</td>
<td>327</td>
<td>$90,000</td>
</tr>
<tr>
<td>2011</td>
<td>329</td>
<td>$79,000</td>
</tr>
<tr>
<td>2012</td>
<td>364</td>
<td>$84,950</td>
</tr>
</tbody>
</table>

Source Wisconsin Realtors Association Consumer Resources

Figure 6.4 shows the equalized value of all property in Shawano County and the State of Wisconsin from 2002 to 2012. Since 2006, Shawano County and State land values have followed a similar growth trend, with land values in Shawano County remaining more stable than those at the State level. Total equalized land value has increased by 39 percent for Shawano County and 41 percent for the State of Wisconsin during this time period.
### Existing and Potential Land Use Conflicts

As growth occurs in Shawano County and as developed areas expand, there will likely be increasing land use conflicts. Urban and rural residential, commercial and industrial land development will require the conversion and possible fragmentation of more farmland, woodlands, and open space in the County.

Conflicts between non-farm residential development and surrounding farms and forestry activities could become increasingly common in the rural parts of Shawano County. Other potential rural land uses that could conflict with neighboring uses include large-scale farm operations, non-metallic mining operations, high-intensity commercial uses, and rural manufacturing plants. Through this Plan, the County seeks to avoid potential future land use conflicts through thoughtful and comprehensive land use planning at the local and County level.

The County’s multi-jurisdictional planning process was useful for minimizing potential land use conflicts along community borders through intergovernmental discussions and sharing of draft and final plan maps before plans were adopted at the local and county levels. Despite these efforts, there are some locations throughout the County where neighboring jurisdictions plans show “difference areas” that may result in current or future conflict. Difference areas are locations where the Future Land Use Maps of two adjacent communities recommend different future land uses for the same area. These are generally described below. The process for resolving these conflicts is provided in the Intergovernmental Cooperation element of this Plan.

“Difference areas” between participating communities generally exist in the following areas in the County:

- **Adjacent to and near the borders between the City of Shawano and the neighboring Towns of Belle Plain, Washington, and Waukechon within the City’s 1½ mile extraterritorial jurisdiction.** Town desired future land uses in these areas may conflict with the City’s desire to retain some of these same areas for future City growth and development or for agriculture.

- **Adjacent to and near the borders between the Village of Cecil and the neighboring Town of Washington.** Town development adjacent to the Village, or in areas where the Village anticipates future growth and development, may conflict with the Village’s desire for those areas to be reserved for future Village growth.

---

**Figure 6.4: Shawano County Equalized Land Values**

<table>
<thead>
<tr>
<th>Year</th>
<th>County Equalized Land Value</th>
<th>Percent Increase</th>
<th>State Equalized Land Value</th>
<th>Percent Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2,108,200,300</td>
<td>5.70%</td>
<td>$335,326,478,700</td>
<td>7.31%</td>
</tr>
<tr>
<td>2003</td>
<td>2,257,868,900</td>
<td>7.10%</td>
<td>$360,710,211,300</td>
<td>7.57%</td>
</tr>
<tr>
<td>2004</td>
<td>2,423,871,800</td>
<td>7.40%</td>
<td>$391,187,814,700</td>
<td>8.45%</td>
</tr>
<tr>
<td>2005</td>
<td>2,503,110,800</td>
<td>3.17%</td>
<td>$427,933,562,000</td>
<td>8.59%</td>
</tr>
<tr>
<td>2006</td>
<td>2,707,919,400</td>
<td>7.56%</td>
<td>$468,983,199,800</td>
<td>8.75%</td>
</tr>
<tr>
<td>2007</td>
<td>2,899,081,900</td>
<td>6.59%</td>
<td>$497,920,348,700</td>
<td>5.81%</td>
</tr>
<tr>
<td>2008</td>
<td>3,052,456,600</td>
<td>5.02%</td>
<td>$514,393,963,700</td>
<td>3.20%</td>
</tr>
<tr>
<td>2009</td>
<td>3,048,719,800</td>
<td>-0.12%</td>
<td>$511,911,983,100</td>
<td>-0.48%</td>
</tr>
<tr>
<td>2010</td>
<td>2,988,078,800</td>
<td>-2.03%</td>
<td>$495,904,192,300</td>
<td>-3.23%</td>
</tr>
<tr>
<td>2011</td>
<td>3,013,221,300</td>
<td>0.83%</td>
<td>$486,864,232,800</td>
<td>-1.86%</td>
</tr>
<tr>
<td>2012</td>
<td>2,943,816,900</td>
<td>-2.36%</td>
<td>$471,092,529,200</td>
<td>-3.35%</td>
</tr>
</tbody>
</table>

*Source: Wisconsin Department of Revenue*
Possibly near the border of the Village and Town of Wittenberg. Here the Town and Village had actively worked to resolve differences between their plans during the course of their local planning processes, and may work towards an intergovernmental agreement.

The local comprehensive plans prepared as part of this process document more specific localized existing and potential land use conflicts, and processes to resolve them.

Projected Land Use Supply and Demand

This Plan includes projections of land use demand over the 20-year planning period in five-year increments, for residential, commercial, industrial, and agricultural uses. Projected demand, presented in Figures 6.5 and 6.6, is then compared to the potential supply of land to meet that demand.

For the purposes of the Shawano County Comprehensive Plan, projected land use supply and demand calculations are focused on the towns; this is because the County and town’s share land use decision-making jurisdiction in these unincorporated areas. Still, data on participating city, village, and tribal land use trends is also discussed since these areas are important to the overall dynamics of land use in the County.

The projections are based on these data and assumptions:

New dwelling units per year

Residential land use projections in the County are based primarily on the number of new homes that are expected to be built within the towns in the County over the next 20 years. The number of new homes expected was derived by using the average of building permits issued in recent years. Based on development trends from the year 1995 through 2005, an average of 182 building permits were issued each year for new housing in the towns throughout the County.

For comparison, the number of annual permits for new homes in cities and villages across the County, as well as in the Stockbridge-Munsee community, varied widely. Over a 12-year period the City of Shawano averaged 62 permits annually, while smaller Villages such as Aniwa and Tigerton averaged less than one permit annually. Over a 5-year period, the Stockbridge-Munsee Tribe averaged 12 new homes annually. Given this variation, it can be safe to assume that countywide, 125 residential building permits annually is a reasonable expectation for all cities and villages.

Although development may shift from one location to another, the overall rate of development in the County is expected to remain similar throughout the 20-year planning period to the rate over the previous 20 years.

Residential lot size scenarios

The amount of land required to accommodate new homes will vary depending on the location and lot size of new development. Location and lot size are interrelated. New homes developed (usually within a city or village) served by public sanitary sewer and water can develop on smaller lots than in rural locations, where public utilities (particularly sewer and water) are not provided. Therefore, new homes in cities and villages will generally consume much less land than those occurring in rural areas without public utilities.

It is important to see the impact that different lot size scenarios will have on how much land is necessary for development, with larger lot sizes consuming more open land. Two different residential lot sizes averages were used to calculate the projected amount of additional land for development in the unincorporated por-

MAXIMUM DENSITY IS NOT THE SAME AS MINIMUM LOT SIZE

To fully understand this Land Use chapter, it is critical to understand the difference between maximum density and minimum lot size. Minimum lot size requirements establish how big individual homesites or lots have to be. The assumptions used in the projections of future land use demand rely on minimum lot size.

Maximum density requirements set how many homesites or lots can be divided from a larger parcel, regardless of how big each individual homesite or lot has to be.

Recommendations presented later in this Chapter and in the Agricultural Resources chapter suggest the establishment of “density-based zoning.” Regulating future land use based on maximum densities instead of minimum lot sizes may be a more effective way for the County to achieve its future land use vision. Figures 3.2-3.4 and 6.11 show examples of development options that a density-based zoning approach may yield.
tions of the County. The first scenario assumes an average lot size of 10 acres while the second assumes an average lot size of 2 acres. Ten acres reflects a typical lot size created at the time this Plan was adopted. Two acres reflects a minimum lot size recommended by many communities in their local comprehensive plans. For the City and villages, lots sizes were generally approximated to either remain consistent with current lot sizes, or decrease slightly.

**Non-residential development ratio**
In the unincorporated (town) areas throughout the County, non-residential (commercial and industrial) development in the County is projected to approximate 182 acres per each 5-year period through 2030. This amount reflects a proportion of demand for non-residential development as 10 percent of the demand for residential development. The assumption also reflects commercial potential created from possible new Highway 29 interchange development, continuing to promote some commercial development/expansion in unincorporated village areas, and commercial expansion adjacent to incorporated areas. At the same time, these assumptions are sufficiently modest to reflect that the County’s interest in maintaining its rural character.

In the city and villages, residential to non-residential ratios are more variable based on the character and size of the community. For larger communities like Shawano, ratios of non-residential to residential development are usually more balanced and approximate 50 percent each. For smaller communities, non-residential uses typically range from 25 – 40% of the total developed land area. For the purposes of the assumptions reflected in this County Comprehensive Plan, non-residential land uses in the City and villages are assumed to approximate the current residential to non-residential balance in that community.

**Flexibility factor**
Because the market for land is not only driven by demand, but is also dictated by the motivations and desires of land owners and developers, it is important to factor in an allowance for uncertainty. In other words, a given parcel of land may not be available for development when the market is ripe for development. Therefore, incorporating a flexibility factor into the projection ensures that the supply of areas designated as appropriate for development will accommodate future demand. These projections utilized a 100% flexibility factor (i.e., total projected land use needs were doubled).

### Figure 6.5: Projected Land Use Demand in All Shawano County Towns

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Additional Housing Units in Unincorporated Areas (Towns)</td>
<td>909</td>
<td>909</td>
<td>909</td>
<td>909</td>
<td>909</td>
<td>4,545</td>
</tr>
<tr>
<td><strong>Projection Scenario One: Average New Residential Lot Size of 10 Acres</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Residential Land Use Acreage Demand</td>
<td>9,086</td>
<td>9,086</td>
<td>9,086</td>
<td>9,086</td>
<td>9,086</td>
<td>45,430</td>
</tr>
<tr>
<td>Projected Non-Residential (Commercial and Industrial) Land Use Demand</td>
<td>182</td>
<td>182</td>
<td>182</td>
<td>182</td>
<td>182</td>
<td>910</td>
</tr>
<tr>
<td>Total Land Use Acreage Demand</td>
<td>9,268</td>
<td>9,268</td>
<td>9,268</td>
<td>9,268</td>
<td>9,268</td>
<td>46,340</td>
</tr>
<tr>
<td>Total Land Use Acreage Demand w/ Flexibility Factor</td>
<td>18,536</td>
<td>18,536</td>
<td>18,536</td>
<td>18,536</td>
<td>18,536</td>
<td>92,681</td>
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<tr>
<td><strong>Projection Scenario Two: Average New Residential Lot Size of 2 Acres</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Residential Land Use Acreage Demand</td>
<td>1,817</td>
<td>1,817</td>
<td>1,817</td>
<td>1,817</td>
<td>1,817</td>
<td>9,085</td>
</tr>
<tr>
<td>Projected Non-Residential Land Use Demand</td>
<td>182</td>
<td>182</td>
<td>182</td>
<td>182</td>
<td>182</td>
<td>910</td>
</tr>
<tr>
<td>Total Land Use Acreage Demand</td>
<td>1,999</td>
<td>1,999</td>
<td>1,999</td>
<td>1,999</td>
<td>1,999</td>
<td>9,995</td>
</tr>
<tr>
<td>Total Land Use Acreage Demand w/ Flexibility Factor</td>
<td>3,998</td>
<td>3,998</td>
<td>3,998</td>
<td>3,998</td>
<td>3,998</td>
<td>19,900</td>
</tr>
</tbody>
</table>

*Source: Shawano County Building Permits, Local Building Permits, Vandewalle & Associates*
Figure 6.6: Projected Land Use Demand for Participating City, Villages, and Stockbridge-Munsee Tribal Land (2005 – 2030)

<table>
<thead>
<tr>
<th></th>
<th>Total Residential (acres)</th>
<th>Total Non-Residential (Commercial and Industrial) (acres)</th>
<th>Total Demand (2005 – 2030) (acres)</th>
<th>Total Demand with Flexibility Factor (2005 – 2030) (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockbridge-Munsee Community</td>
<td>300</td>
<td>75</td>
<td>375</td>
<td>750</td>
</tr>
<tr>
<td>City of Shawano</td>
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<tr>
<td>Total Participating Community Expected Land Use Demand</td>
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<td>1,279</td>
<td>2,558</td>
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</table>

Source: Local Community Building and Land Use Permits, Vandewalle & Associates

These projections suggest that the County could anticipate between 9,000 and 46,000 additional acres of land will develop over the period between 2005 and 2030 in unincorporated areas, depending on residential lot size. Further, the flexibility factor suggests that double that acreage (19,900 to 92,680 acres) will need to be made available to accommodate possible development under the County’s Future Land Use map.

Further, these numbers estimate that the participating city, villages, and the Stockbridge-Munsee Tribe can collectively anticipate between 1,300 acres of new development, and should map around 2,600 acres on their Future Land Use Maps to accommodate that development. These numbers do not reflect future land use demand anticipated in the Villages of Mattoon, Birnamwood, Bonduel, and Pulaski, which did not participate in this process. Based on previous growth trends, it could be assumed that Bonduel and Pulaski may have the most significant land demand of all these other communities.

The following graphics illustrate how the demand for potential future development in Shawano County relates to the currently development patterns.

At the time this Comprehensive Plan was developed, about 32,222 acres of land in Shawano County were developed. These areas are highlighted in bright pink on Figure 6.7.

The scenario in Figure 6.8 suggests that for the 25 year period from 2005 through 2030, the County and the Tribe, villages, and City within the County may need around 100,000 acres to accommodate new development. This projection is based on current trends in lot sizes in the towns, cities, villages, and Tribe. The box that is overlaid on Figure 6.8’s map shows how much additional developed area these assumptions would result in, under scenario one.

The alternative scenario in Figure 6.9 suggests that if a different path regarding future lot sizes were taken, the towns, villages, the City, and the Tribe could significantly reduce the amount of land required to accommodate future development. By promoting smaller minimum lot sizes in the towns, assuming even the same lot sizes in the City, villages, and Stockbridge-Munsee community, the amount of land area required for new development could be decreased by greater than 75 percent, compared to the “status quo” scenario in Figure 6.8.
This is a significantly wide range of acreage required for future growth. It emphasizes the importance of establishing land use policies to minimize land consumption in the County to preserve contiguous blocks of functional agricultural lands, forests, open areas, and natural resources; as well as the rural character of the landscape that County resident’s value – given the public priorities expressed through this planning process.
Figure 6.7: Present Day Land Cover of Shawano County
Figure 6.8: Future Land Cover of Shawano County Based on Current Trends
Figure 6.9: Future Land Cover of Shawano County Based on Compact Development.
Agriculture, Forestry, and Open Lands Projections

The County had large tracts of agriculture, forestry, and open space uses at the time this Plan was written. These uses are designated as Agriculture and Open Space and Forestry on the Existing Land Use Map (Map 6), and comprised over 90% of the County’s land area. Generally, as a result of new development, the acreage of land within agriculture, forestry and open land uses will diminish.

The percentage of all “open lands” categorized as Agriculture was 40 percent, whereas those classified as Open Space and Forestry were 60 percent. Given the ratio of open/forest land to agricultural land in the County is approximately 3:2, it is reasonable to project that similar ratios of land used for development will be taken out of these two different “open lands” use areas during each 5-year period. The numbers shown below represent a range of acreage consumed based on lot size scenarios for new development.

![Figure 6.10: Potential Loss of Agriculture, Open Space and Forested Land 2005 – 2030](image)

Depending on the projection scenario that is used, the amount of agricultural land would decrease by between 800 and 3,851 acres per 5-year period, or 4,000 to 19,255 acres total over the planning period. At the same time, 1,200 to 5,777 acres would be taken out of forested and other open lands during each 5 year period – between 6,000 and 28,885 acres total. These projected consumption levels take into consideration only the loss that would occur based on land use demand projections in the unincorporated areas (towns) of the County. These numbers do not take into consideration land consumption due to growth of villages or cities. Again, these numbers reiterate the importance of considerations of lot sizes within the County. In towns, the most effective way to minimize the consumption of land is to establish low maximum densities of development (e.g., 2 new homes per every 40 acres of land owned) in tandem with minimum and maximum lot sizes (e.g., 2 acres minimum, 4 acres maximum). This recommended “density-based zoning” approach is described in greater detail later in this chapter and in other parts of this Comprehensive Plan.

Non-residential (Commercial and Industrial) Development Projections

The balance between commercial and industrial land uses in the towns at the time this Plan was prepared approximated 50 – 50, tipping slightly toward more industrial development. Given the potential for future highway-oriented interchange development, non-residential development in the towns is projected to include more opportunities for commercial rather than industrial development. It is anticipated that industrial development will account for approximately 50 percent of all non-residential land uses, and commercial development will account for 50 percent of all non-residential land uses. Therefore, approximately 91 acres of commercial development and 91 acres of industrial development are projected for each 5-year period – resulting in a projected total of 455 acres of commercial development and about 455 acres of industrial development in the towns. Actual non-residential development will depend on a variety of factors, including the County’s success in business recruitment.
Summary of How the Future Land Use Map Accommodates Future Land Use Demand
Future development illustrated on Maps 7a, 7b, and 7c and allowed under the policies of this Plan will provide sufficient capacity to accommodate the expected demand for residential and non-residential development under either of the two projection scenarios.

Much of the County is mapped in the Agriculture and Resource Preservation and Open Lands, Agriculture, and Residential (10 – 20) future land use categories. These categories promote both low maximum densities and smaller lot sizes. More detail on the specific policies will be provided in the following section of the Plan. These future land use categories allow the flexibility to accommodate homes at different densities. The future land use policies also aim to minimize the amount of land that is required for development as well as development, service, and maintenance costs (e.g., fewer roads to maintain, shorter school bus routes).

Land Use Goals, Objectives and Policies

Goal:
Promote a sustainable land use pattern that promotes the rural character of the County; provides new economic or housing opportunities; and allows the continuation of agriculture, forestry, and open lands uses.

Objectives:
1. Provide options for development and preservation through the use of appropriate Future Land Use categories in the right locations.
2. Minimize the consumption of agriculture, forested, and open lands throughout the County for new development, and support the preservation of these areas in large, contiguous blocks. See also the Chapter Three: Agricultural Resources for Farmland and Forest Preservation area development policies.
3. Direct new development to appropriate locations in order to minimize negative impacts on natural resources, transportation and circulation, service provision, and the rural character of the County.
4. Maintain the County’s rural character by controlling the pace, size, and location of new development and minimize the visual impact of new development on the landscape.
5. Direct intensive new housing development (e.g., subdivisions) away from agricultural and sensitive natural areas and into planned housing areas (see Maps 7a, 7b, and 7c).
6. Avoid future land use conflicts.
7. Identify areas most suitable for commercial and industrial development.
8. Plan for a sufficient supply, mix, and location for new development to meet County objectives and projected demand for residential and non-residential development.
9. Encourage and help facilitate cooperation between towns and adjacent cities and villages when development near communities is proposed.
10. Assure that new developments are sustainable and positive for the County from fiscal, transportation, economic, building quality, and environmental perspectives.

**General Policies:**

1. Follow the land use recommendations mapped and described in this Plan when reviewing new rezoning and land division requests and making other detailed land use decisions.

2. Work with local communities and the State on programs to preserve forested and farmland over the long term, such as the State farmland preservation program as described more fully in Chapter Three: Agricultural Resources.

3. As an option to preserve farmland, forestland, and open space; protect natural resources; and reduce development visibility; allow and encourage grouping or clustering of allowable home sites at low overall densities, and direct new development to be near existing public roadways. See detailed policies within Agriculture and Resource Preservation category below, and for the Farmland and Forest Preservation area in Chapter Three: Agricultural Resources. These approaches minimize the amount of land that is required for development; minimize development, service, and maintenance costs; and also reflect the County’s desire to preserve agriculture and natural lands.

4. Guide intensive new development requiring higher levels of municipal utilities and services, such as intensive residential subdivision development and larger commercial and industrial uses, to the villages and cities where sewer, water, and public utilities can be more cost-effectively provided.

5. Encourage cooperation between towns, villages, and the city through ongoing discussions to plan for mutually agreeable future land uses in city and village extraterritorial jurisdiction.

6. Assure that incompatible land uses are not located close to one another or are buffered through screening, where nearby locations are unavoidable.

7. Work with the towns to enforce existing regulations designed to discourage incompatible uses (e.g., junk vehicle storage), particularly in and around residential areas.

8. Apply appropriate standards for development in areas along Highway 29 to minimize continuous strip/corridor development and achieve high quality development character.

9. Actively engage towns in the County zoning review processes (e.g., rezonings, conditional use permits, and ordinance text amendments).

10. Rezone lands as necessary to reflect existing land uses where changes to the existing land use pattern are not desired, and to reflect future land use recommendations where changes are desired.

11. Implement adopted zoning standards that support family farms and accommodate home-based businesses to ensure that businesses that are allowed in primarily agricultural or residential areas meet certain standards.

12. Permit safe and efficient means for lot access and on-site waste water treatment.

13. Avoid the use of holding tanks for new residential development and promote best practices for treatment of sanitary waste, particularly where new development is concerned.

14. Do not plan for any new residential development within ¼ mile (1,200 feet) radius around a closed landfill unless a DNR waiver is granted.

15. Coordinate land use decision making with transportation accessibility and improvements, which may involve assuring that rural development proposals are accessible via public roads, driveway access is limited along county and state highways, and new commercial development is planned in areas where future highway access will be maintained (such as along Highway 29).
Land Use Recommendations, Specific Policies, and Programs

Maps 7a, 7b, and 7c, together make the Future Land Use map, present recommended future land uses over the 20-year planning period for Shawano County, although it may be amended over that period. Maps 7a, 7b, 7c are a composite of the locally-adopted future land use maps prepared by the participating communities as part of the Shawano area multi-jurisdictional planning process. Maps 7a, 7b, and 7c also include land use recommendations for the Towns of Green Valley and Fairbanks, which did not participate in the late 2000s County comprehensive planning process, but did prepare future land use recommendations under separate planning processes and worked with the County to translate their future land use vision to the system used by the County.

Some communities such as the Town of Hartland, Town of Lessor, Town of Richmond, Town of Wescott, Village of Bonduel, Village of Mattoon, and Village of Pulaski have plans that are not yet reflected on the County’s Future Land Use map. Other communities, including the Towns of Bartleme and the Village of Gresham, had not yet adopted a comprehensive plan or a future land use map by 2013. The process for inclusion of the plans of non-participating communities, and the County’s decision-making process related to these communities, is discussed in detail in the Intergovernmental Cooperation chapter.

Plans for incorporated communities reflect future land use recommendations for areas within their extraterritorial jurisdiction – for instance, the City of Shawano’s recommendations for areas in Richmond and Wescott, which did not participate in this planning process, are reflected on the County’s Future Land Use map.

The Future Land Use map shows more than enough developable acreage to accommodate projected population and land use demands, presented earlier in this chapter. Changes from the existing land use pattern to realize this future land use pattern may occur if and when private property owners make requests for rezoning, subdivisions or land divisions, conditional use permits, or other development approvals in accordance with appropriate phasing and availability of public services as determined by the County, in conjunction with the appropriate local community. As such, not all land identified for development on Maps 7a, 7b, and 7c will be immediately appropriate for rezoning or development approval following adoption of this Plan.

Maps 7a, 7b, 7c, along with the recommended policies and programs listed in this chapter, should be used to guide County decision-making on future land use changes. Maps 7a, 7b, and 7c use numerous Future Land Use categories to describe the desired type and future location of different land uses in the County. These future land use categories were prepared in a joint effort with the towns, villages, cities, and Stockbridge-Munsee Tribe and reflect a full range of economic opportunities and input from the public.

The following describes programs and policies for each mapped future land use category shown on the Future Land Use map.
Rural/Environmental Land Use Categories

Public Open Space and Recreation
Description: This future land use category generally includes all publicly-owned land designated as state parks, scenic areas, or conservation areas; county parks or recreation areas; town, city, or village parks; and other recreational facilities owned by public, private, or non-profit agencies (golf courses, campgrounds). Some Public Open Space and Recreation areas may also be accommodated within other land use categories, such as in Residential (Severed) areas and Planned Neighborhoods.

Policies and Programs:
The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. Cooperate and maintain communication with communities regarding the long term management of the Public Open Space and Recreation designated land in their area.

2. Ensure that all land use decisions related to the Public Open Space and Recreation category are in coordination with the Utility and Community Facility recommendations of this Plan.

3. Consider working with communities to provide new Public Open Space and Recreation areas in conjunction with larger new neighborhood development proposals.

Agriculture and Resource Preservation
Description: The Agriculture and Resource Preservation future land use category is established and mapped to preserve productive agricultural and forest lands in the long-term, protect existing large and small farm operations from encroachment by incompatible uses, and promote further investments in farming.

This category focuses on lands actively used for farming, with productive agricultural soils, with topographic conditions suitable for farming, and with long-term suitability for farming. In certain towns in the central and western parts of the County, this category is also mapped as a tool to help preserve forestry as well as agricultural lands. This category also includes scattered open lands and woodlots; farmsteads; small-acreage farms/hobby farms; agricultural-related uses, such as implement dealerships, associated home occupations, and small family businesses which do not interfere with the interests of nearby property owners; small-scale forest product production and processing; and limited single-family residential development.

The future land use map (Maps 7a, 7b, and 7c) identifies lands planned for Agriculture and Resource Preservation in areas that typically overlap with the Farmland and Forest Preservation area on Maps 4a through 4i in Chapter Three: Agricultural Resources. However, in certain locations, Maps 4a through 4i show more Farmland and Forest Preservation area land than Agriculture and Resource Preservation land on the future land use map. These are areas that are planned for development in the long-term, but not within the next 15 years based on
land demand forecasts included in this *Comprehensive Plan* and applicable local comprehensive plans. This is not an inconsistency, but rather an acknowledgement of different planning timeframes and land demand forecasts (see also Figure 3.1). Further, there is planned *Agriculture and Resource Preservation* over land within the Stockbridge-Munsee Reservation that is not mapped as Farmland and Forest Preservation area.

**Policies and Programs:**
The same set of policies and programs made applicable to the Farmland and Forest Preservation area under Chapter Three: Agricultural Resources are applicable to the *Agriculture and Resource Preservation* future land use category, in areas on Maps 7a, 7b, 7c where the category is shown.
Open Lands, Agriculture, and Residential (10-20)

Description: This future land use category includes farmland, privately owned undeveloped lots, small woodlots, grasslands, forestland and open lands in agriculture, small farm operations, aquaculture, commercial forestry use, small-acreage farms/hobby farms, and housing at a maximum density of 1 residence per 10 acres.

In addition to the above uses, small-scale forest production and processing, seasonal and permanent single family homes, and associated home occupations and small family businesses which do not interfere with the interests of nearby property owners will generally be allowed.

Policies and Programs:
The following policies and programs are recommended for this future land use category in areas on Maps 7a, 7b, and 7c where the category is shown:

1. When considering possible rezone requests in the future, the Shawano County zoning district most compatible with the Open Lands, Agriculture, and Residential (10-20) category is the OAR Open Lands, Agriculture, and Residential district.

2. Permit a maximum density of development of one new housing unit per every 10 acres of land, with some examples of flexibility in achieving this density based on approaches depicted in Figure 6.11, including conservation development (clustering) approaches. These approaches are described in greater detail in the Housing and Neighborhood Development chapter of this Plan.

3. Encourage small minimum lot sizes and maximum lot sizes in the range of 3 – 5 acres for residential development to provide flexibility in lot sizes and to minimize fragmentation and loss of open space.

4. Encourage permissible new non-farm development to be located in a manner that does not detract from Shawano County’s rural character, and which may be easily served by County and local services.

5. Consider certain types of small-scale non-residential uses as generally appropriate within Open Lands, Agriculture, and Residential (10-20) areas, as allowed in the County Zoning Ordinance. Mineral extraction operations may also be allowed.

6. Allow and support home occupations and home-based businesses within mapped Open Lands, Agriculture, and Residential (10-20) areas that do not impact neighboring properties.
Figure 6.11: Example of Conventional and Conservation Development at "1 per 10 acre" Density
Residential Future Land Use Categories

Residential (2.5 - 10)
Description: This future land use category is mapped over lands intended for mainly single family detached residential development, generally at densities between 1 new dwelling unit per 2.5 acres to 1 new dwelling unit per 10 acres, and served by individual on-site waste treatment (septic) systems. This future land use category also allows the continuation of pre-existing farm and forestry operations. Maps 7a, 7b, and 7c show scattered planned Residential (2.5-10) in certain areas throughout the County.

Policies and Programs:
The following policies and programs are recommended for this future land use category, in areas on Map 7a, 7b, 7c where the category is shown:

1. When considering possible rezone requests in the future, the Shawano County zoning districts most compatible with the Residential (2.5-10) category are the R-R Residential-Rural district or A-R Agricultural-Residential district.

2. In an effort to direct as much future housing development as possible away from larger contiguous forested and farming areas, allow well-planned residential development in the planned Residential (2.5-10) areas.

3. Do not “pre-zone” lands for development within the Residential (2.5-10) areas in advance of development proposals. Instead, require the submittal and detailed understanding of specific development proposals before approving the rezoning of lands to the appropriate development-based zoning districts. This may include a “sketch plan” and site assessment checklist (see Natural Resources chapter).

4. Consider certain types of small-scale non-residential uses as generally appropriate within Residential (2.5-10) areas, as allowed under the appropriate County zoning district.

5. Require sensitivity towards natural resources and water quality with new development projects, including assurances that concentrations of on-site waste treatment systems will not negatively affect groundwater quality and that stormwater will be properly managed according to best practices.

6. Encourage creation of vegetated buffers between new housing structures and water bodies, particularly streams and river corridors. Require these buffer areas to be illustrated on a “sketch plan” for a rezone, subdivision plat, or Certified Survey Map.

7. Assure that individual neighborhoods provide for appropriate land use transitions and road, open space, and trail connections to adjacent existing and future developments, and recreational facilities and public roads that meet engineering standards.

8. Allow the grouping or clustering of allowable home sites at low overall densities as an option to preserve farmland and open space, protect natural resources, and reduce development visibility. More information is provided in the Housing and Neighborhood Development Chapter and the County Zoning Ordinance.
9. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Residential (2.5-10) use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the Farmland Preservation Plan maps is amended.

**Residential (1 - 2.5)**

**Description:** This future land use category includes mainly single family detached residential development, generally at densities between 1 dwelling unit per acre and 1 dwelling unit per 2.5 acres, and served by individual on-site waste treatment (septic) systems. This future land use category also allows the continuation of pre-existing farm and forestry operations. Maps 7a, 7b, and 7c show future Residential (1-2.5) areas that generally build off of existing development in the unincorporated village areas.

**Policies and Programs:**

The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is mapped:

1. When considering possible rezone requests in the future, the Shawano County zoning districts most compatible with the Residential (1-2.5) category are the R-R Residential-Rural district or A-R Agricultural-Residential district.

2. In an effort to direct as much future housing development as possible away from larger contiguous forested and farming areas, encourage well-planned subdivision development in the future Residential (1-2.5) areas.

3. Do not “pre-zone” lands for development within the Residential (1-2.5) area in advance of development proposals. Instead, require the submittal and detailed understanding of specific development proposals before approving the rezoning of lands to the appropriate development-based zoning districts. This may include a “sketch plan” and environmental assessment (see Natural Resources chapter) as required for subdivisions.

4. Require sensitivity towards natural resources and water quality with new development projects, including assurances that concentrations of on-site waste treatment (septic) systems will not negatively affect groundwater quality and that stormwater will be properly managed according to best practices.

5. Encourage creation of vegetated buffers between new housing structures and water bodies, particularly streams and river corridors. Require these buffers to be illustrated on a “sketch plan” for a rezone, subdivision plat, or Certified Survey Map.

6. Assure that individual neighborhoods provide for appropriate land use transitions and road, open space, and trail connections to adjacent existing and future developments, and recreational facilities and public roads that meet engineering standards.
7. Allow the grouping or clustering of allowable home sites at low overall densities as an option to preserve farmland and open space, protect natural resources, and reduce development visibility. See more detailed guidelines in the Housing and Neighborhood Development chapter.

8. Consider certain types of small-scale non-residential uses as generally appropriate within Residential (1-2.5) areas, as allowed in the applicable County zoning district.

9. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Residential (1-2.5) use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the Farmland Preservation Plan maps is amended.

**Residential (Sewered)**

**Description:** This category includes single family detached and duplex residential development, generally at densities greater than 1 new residence per acre, and served by a public sanitary sewer system or a group on-site waste disposal system. This future land use category also allows the continuation of pre-existing farm and forestry operations. Maps 7a, 7b, and 7c show future Residential (Sewered) areas in cities, villages, and other areas that provide public utility services.

**Policies and Programs:**

The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. When considering possible rezone requests in the future, the Shawano County zoning district most compatible with the Residential (Sewered) category is the R-S Residential-Sewered district.

2. Do not “pre-zone” lands for development within Residential (Sewered) areas in advance of development proposals. Instead, require the submittal and detailed understanding of specific development proposals before approving the rezoning of lands to the appropriate development-based zoning districts. This may include a “sketch plan” and environmental assessment as required for major subdivisions.

3. Consider uses allowed within the R-S district as generally appropriate within the Residential (Sewered) area.

4. Assure that individual neighborhoods provide for appropriate land use transitions and road, open space, and trail connections to adjacent existing and future developments.

5. Minimize the potential for incompatible land uses (e.g., high traffic generators, noisy uses, etc.) within or next to Residential (Sewered) areas. Where such uses do occur in close proximity, the County should encourage the creation of landscaped buffers.
6. Assure that individual neighborhoods provide for appropriate land use transitions and road, open space, and trail connections to adjacent existing and future developments, and recreational facilities and public roads that meet engineering standards.

7. Work with the cities and villages to coordinate future Residential (Sewered) development adjacent to cities and villages, and help facilitate discussions the possibility of municipal extensions to areas in the towns where appropriate.

8. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Residential (Sewered) use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the Farmland Preservation Plan maps is amended.

**Mixed Residential**

**Description:** The Mixed Residential future land use category is intended to allow a variety of residential units, including single-family detached homes, single-family attached dwellings (e.g., town homes), duplexes, and multiple-family housing (3+ unit buildings), including condominiums, apartments, and senior housing developments; and manufactured home parks or mobile home parks, generally served by a municipal sanitary sewer system. This future land use category also allows the continuation of pre-existing farm and forestry operations. Mixed Residential development areas are mapped on Maps 7a, 7b, and 7c mostly in cities and villages in areas where these types of development existed at the time this Plan was prepared.

**Policies and Programs:**

The following policies and programs are recommended for this future land use category in areas on Maps 7a, 7b, and 7c where this category is shown:

1. Mixed Residential development is typically mapped in cities and villages with their own zoning ordinances, and therefore their zoning districts will apply. When considering future rezoning requests in areas under County zoning jurisdiction, the zoning district most compatible with the Mixed Residential category is the R-M Residential-Mixed district.

2. Encourage dispersion of small areas of future Mixed Residential development throughout communities, rather than creating large concentrations of this type of development in a just a few areas.

3. Generally encourage connections to sanitary sewer for all new development in Mixed Residential areas.

4. Multi-family residential projects appropriate for the Mixed Residential category should meet the minimum design standards presented in the Housing and Neighborhood Development chapter of this Plan.

5. Require that all proposed new housing developments submit a detailed site plan, building elevations, landscape plan, lighting plan, grading/stormwater management plan, and signage plan prior to development approval.

The Mixed Residential future land use category includes several types of housing, including multiple family options. For new Mixed Residential development, attention to good design is recommended.
6. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Mixed Residential use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the Farmland Preservation Plan maps is amended.

**Planned Neighborhoods**

**Description:** This future land use category is intended for a carefully planned mix of primarily single-family residential development, combined with Mixed Residential, Neighborhood Commercial, small-scale Community Facilities, and Public Open Space and Recreation land uses consistent with the residential character of the area and generally retaining the area’s existing balance of residential types. This category also includes unique neighborhood design using the principles of conservation neighborhood design. This future land use category also allows the continuation of pre-existing farm and forestry operations.

Planned Neighborhoods should be more than merely an assemblage of subdivisions. To accomplish this, they should not only include a variety of housing options, but that they should also offer a mix of non-residential uses such as parks, community facilities, and small-scale shopping and service areas.

Maps 7a, 7b, and 7c illustrate many of the areas around the periphery of cities and villages, and in the Stockbridge-Munsee community, as Planned Neighborhood areas. These are indicated by the yellow and orange cross-hatching on the maps. It is recommended that new housing development in these areas mirror the historic mix of residential uses within the applicable community. This planning strategy will help to disperse different types of development and different housing types throughout the community and will limit the concentration of any one type of development in any one area.

**Policies and Programs:**

The following policies and programs are recommended for this future land use category in areas on Maps 7a, 7b, and 7c where this category is shown:

1. When considering possible rezoning requests in the future, a combination of zoning districts or PUD Planned Unit Development zoning may be used. Most Planned Neighborhood areas will occur in cities, towns, and the Stockbridge-Munsee Community, which should apply their own zoning to these areas.

2. Maintain a balance of housing types, including predominantly single-family residences, but also including two-family or duplex units, and multi-family units in the following general ranges: a minimum of 65% single-family residences and a maximum of 35% two-family and multi-family units in each future Planned Neighborhood growth area.

3. In areas with public sanitary sewer and water, densities should range from 4 to 6 dwelling units per acre.

4. Utilize natural features to act as buffers between different land uses, when necessary.
5. For duplex, townhouse, and multiple-family residential development in these areas, also follow the policies listed for Mixed Residential areas in this chapter.

6. For commercial and office developments in these areas, also follow the policies for Neighborhood Commercial areas in this chapter.

7. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Planned Neighborhood use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the Farmland Preservation Plan maps is amended.
Non-Residential Future Land Use Categories

Neighborhood Commercial
Description: This future land use category is designed to accommodate smaller-scale neighborhood supporting retail, service, and office uses that preserve residential character. As depicted on Maps 7a, 7b, and 7c, Neighborhood Commercial uses are generally planned for small areas adjacent to existing and future residential neighborhoods.

Policies and Programs:
The following policies and programs are recommended for this future land use category in areas on Maps 7a, 7b, and 7c where this category is shown:

1. Encourage neighborhood-oriented retail and service businesses and recreational uses in areas that will conveniently serve existing and new residential areas.

2. When considering possible rezone requests in the future, the Shawano County zoning districts most compatible with the Neighborhood Commercial category are the H Hamlet and C-C Commercial-Community districts. Many of the Neighborhood Commercial areas are in the city and villages, and therefore applicable city and village zoning will be applied.

3. Require that all proposed commercial projects submit a detailed site plan, per the County Zoning Ordinance. Recommended design standards for commercial development projects are provided in the Economic Development chapter.

4. Development in Neighborhood Commercial areas should be compatible in scale, appearance, and design with surrounding land uses, which are often residential.

Community Commercial
Description: This category is intended for areas appropriate for indoor commercial, retail, service, tourism-oriented, office, and community facility uses, excluding manufacturing, warehousing, and distribution uses. New development should include generous landscaping, screened storage areas, modest lighting and signage, and

Development in planned Neighborhood Commercial areas should fit in with the size, scale, and character of the surrounding neighborhood. These areas are usually close to housing.

Community Commercial areas are intended to provide space for retail and service businesses that serve the entire community. It is important that attention be paid to design, landscaping, signage and lighting.
should comply with detailed design standards.

In general, these uses are recommended along major roadways and interchange areas. They are also recommended in areas where communities are interested in higher standards of development than may have been the norm or prior expectation.

**Policies and Programs:**
The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. When considering possible rezone requests in the future, the Shawano County zoning districts most compatible with the Community Commercial category are the C-C Commercial-Community and C-G Commercial-General districts. Many of the Community Commercial areas are in the city and villages, and therefore applicable city and village zoning will be applied.

2. Development in Community Commercial areas should be compatible in scale, appearance, and design with surrounding land uses. Require buffers between new commercial development and nearby existing or future residential uses to reduce conflicts such as traffic noise and light pollution.

3. Continue to require that all proposed commercial projects submit a detailed site plan, per applicable Zoning Ordinance requirements. Require the use of high-quality building materials, attractive lighting, and signage that is compatible with the setting. The Economic Development chapter includes suggested standards for site plan review.

4. Require the use of high-quality building materials, attractive lighting, and signage that is compatible with surrounding areas. See guidelines in the Economic Development chapter.

5. Control access off of major arterials by limiting the number of and ensuring adequate spacing between access points. Promote cross-access between individual developments, and access to side streets that already connect to major arterials. This will help avoid future congestion and traffic safety problems.

6. Avoid extensive, uninterrupted areas of strip commercial development.

7. For proposed development in this future land use category along Highway 29, enforce Highway 29 Corridor design guidelines advised in the Economic Development chapter.

**Downtown/Unincorporated Village**

**Description:** This future land use category includes pedestrian-oriented commercial, office, institutional, and residential uses in a traditional city or village “downtown” or “rural hamlet” historic centers of rural communities. New development should incorporate adequate landscaping, screened storage areas, modest lighting and signage, and should comply with detailed design standards. Downtown/Unincorporated Village areas are an appropriate location for a range of commercial, institutional, and recreational development serving communities.

Existing development in the County’s unincorporated Villages, as well as downtowns of the City of Shawano and village represents what should be expected in the Downtown/Unincorporated Village future land use category for new development too.
**Policies and Programs:**
The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. When considering future rezoning requests, the Shawano County zoning district that is most compatible with the *Downtown/Unincorporated Village* category is the H Hamlet district.

2. Preserve and enhance the character of the *Downtown/Unincorporated Village* areas by encouraging compatible new development, infill development, and redevelopment.

3. Require that all proposed commercial projects submit a detailed site plan per applicable Zoning Ordinance requirements. The Economic Development chapter includes suggested standards for site plan review.

4. Require the use of high-quality building materials, attractive lighting, and signage that is compatible with other development and the character of the area where new development is proposed. See guidelines in the Economic Development chapter.

5. Spearhead a countywide effort to expand uses that provide goods and services to area residents as well as to tourists that may be attracted to the area’s rural charm and recreational opportunities. Encourage businesses that build on local assets. Such businesses might include a restaurant, cheese shop, nature stores (e.g., bird and wildlife related items), gift shops, art galleries, antique stores and home and garden stores.

6. Work with communities, downtown property owners, businesses, and the Main Street Program to preserve and renovate historically significant buildings for modern commercial use.

7. Promote the downtown as a commercial, civic, and social center. Specific strategies are discussed in detail in the Economic Development chapter.

8. Use marketing, investment, and incentive strategies to promote and retain specialty retail, dining, and entertainment business and services in the downtown.

9. Promote the use of second story space for housing.

**General Commercial**

**Description:** This category includes a range of commercial, office, institutional, light industrial, warehousing, distribution, telecommunication, and outdoor display land uses. New development should adhere to high-quality building design, modest levels of landscaping and lighting, screened storage areas, and limited and attractive signage. The *General Commercial* land use category is mapped along major roadways, at existing and proposed interchange areas, and over areas of existing commercial and/or light industrial development that is expected to remain in a mix of uses for the long-term.

New non-residential development should be reviewed to ensure that it is consistent with the area’s character, population, needs, and public service capabilities. The types of uses envisioned at interchange locations and along major roadways may include those services related to traveling – including a hotel, restaurant, retail, cheese outlet, gift shop, etc. Those properties most visible from major roadways will be the most marketable.
**Policies and Programs:**
The following policies and programs are recommended for this future land use category:

1. When considering future rezoning requests, the Shawano County zoning district that is most compatible with the *General Commercial* category is the C-G Commercial-General district.

2. Development, rehabilitation, and expansion of uses in *General Commercial* areas should be compatible in scale, appearance, and design with surrounding land uses. Require buffers between new commercial and industrial development and nearby existing or future residential uses to reduce conflicts such as traffic noise and light pollution.

3. Require that all proposed commercial projects submit a detailed site plan per applicable Zoning Ordinance requirements. The Economic Development chapter includes suggested standards for site plan review.

4. Require the use of high-quality building materials, attractive lighting, landscaping and signage. However, these design standards may not be as high as advised for the Community Commercial areas. See guidelines in the Economic Development chapter.

5. Avoid extensive, uninterrupted areas of strip commercial development.

6. Keep unattractive commercial or industrial uses out of high-visibility areas, such as major intersections and community entryways.

7. Control access off of major arterial streets by limiting the number of and ensuring adequate spacing between access points. Promote cross-access between individual developments, and access to side streets that already connect to major arterials. This will help avoid future congestion and traffic safety problems.

8. For proposed development in this future land use category along Highway 29, enforce Highway 29 Corridor design guidelines advised in the Economic Development chapter.

**Light Industrial**

**Description:** This future land use category is intended for high-quality indoor manufacturing, warehousing, distribution, and office uses with generous landscaping, screened storage areas, modest lighting and signage, and compliance with design standards. *Light Industrial* land uses are generally found in cities and villages, or other areas served by public utilities.

**Policies and Programs:**
The following policies and programs are recommended for this future land use category in areas on Maps 7a, 7b, and 7c where this category is shown:

1. When considering future rezoning requests, the Shawano County zoning district that is most compatible with the *Light Industrial* category is the M Manufacturing district.

2. Areas designated for *Light Industrial* development should generally be served public sanitary sewer and water service if available.
3. Avoid rezoning any area designated for Light Industrial development until a specific development proposal is offered, appropriate utilities and services can be provided, or the County approves a business/industrial park layout and covenants.

4. Require that all proposed industrial projects submit a detailed site plan per applicable zoning ordinance requirements. Recommended design standards for industrial development projects are included in the Economic Development chapter.

5. Encourage the creation of landscaped (or tree preservation buffers) where existing and future industrial use areas abut existing or future residential areas.

6. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Light Industrial use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the farmland preservation plan maps is amended.

**General Industrial**

**Description:** The General Industrial future land use category is intended for indoor manufacturing, warehousing, distribution, and office uses, often with outdoor storage areas.

**Policies and Programs:**

The following policies and programs are recommended for this future land use category in areas on Maps 7a, 7b, and 7c where this category is shown:

1. When considering future rezoning requests, the Shawano County zoning district that is most compatible with the General Industrial category is the M Manufacturing district.

2. Areas designated for General Industrial development should generally be served public sanitary sewer and water service if available.

3. Avoid rezoning any area designated for General Industrial development until a specific development proposal is offered, appropriate utilities and services can be provided, or the County approves a business/industrial park layout and covenants.

4. Require that all proposed industrial projects submit a detailed site plan per applicable Zoning Ordinance requirements. Recommended design standards for industrial development projects are included in the Economic Development chapter. General Industrial areas may not be subject to as rigorous standards as Light Industrial.
Community Facilities
Description: This future land use category is designed to facilitate public buildings, hospitals, airports, non-profit campgrounds, power substations, and special-care facilities. Smaller community facilities may be accommodated in other future land use categories.

Policies and Programs:
The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. Should additional Community Facilities uses be necessary, the County will work with affected communities to thoughtfully locate them (and promote their location) in areas accessible to residents, and amend this Plan in accordance with the approved locations.

Overlay Categories

Environmental Corridor
Description: This overlay category includes generally continuous open space systems based on lands including sensitive natural resources characteristics that severely limit development potential. This category includes Wisconsin DNR-identified wetlands subject to existing State-mandated zoning, FEMA designated floodplains, shoreland setback areas, and slopes of 12 percent or greater, which if disturbed can result in erosion and unstable building sites. Environmental corridors are shown on Maps 7a, 7b, and 7c throughout the County as an overlay over the top of one of the “base” future land use categories described above.

Policies and Programs:
The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. This is an overlay future land use category, which means that both the guidelines associated with the Environmental Corridors category and the underlying future land use category on Maps 7a, 7b, and 7c should guide land use decisions.

2. New development should be avoided within mapped Environmental Corridors, wherever possible.

3. If development is proposed on parcels where this category is mapped, the property owner or developer should be responsible for determining the exact boundaries of the Environmental Corridor based on the
wetland, floodplain, or steep slope feature that defines the corridor. Refer to the Natural Resources chapter for more information on mapping, protecting, and possibly amending Environmental Corridors.

4. Allow continued cropping, grazing, and other pre-existing agricultural activities in mapped Environmental Corridors.

5. Development occurring within 300 feet of an environmentally sensitive area should have an Erosion Control and Storm Water Management Plan prepared.

**Agricultural Transition**

**Description:** This overlay future land use category identifies areas that may be appropriate for long-term non-agricultural development beyond the present 20-year planning period or following an intergovernmental agreement between adjacent communities. This category is designed to identify lands in proximity to developed areas that should be preserved in mainly agricultural and open space uses until such time as more intensive development may be appropriate. Premature development and utility extensions should not be promoted in these areas.

The Agricultural Transition category includes existing lands used for farming and forestry, but also includes scattered open lands and woodlots, farmsteads, agricultural-related uses, and limited existing single-family residential development at low densities. Development beyond these uses and densities should be deferred based on the policies described below.

**Policies and Programs:**

The following policies and programs are recommended for this future land use category, in areas on Maps 7a, 7b, and 7c where the category is shown:

1. Limit new development in accordance with all policies applicable to the underlying future land use category until such time when the Incorporated Area identifies that particular mapped area as appropriate for more intensive development.

2. Design and layout all non-farm development projects approved within the Agricultural Transition category in such a manner to not impede the orderly future development of the surrounding area, at such time when the Incorporated Area identifies that area as appropriate for more intensive development.

3. Encourage cooperation between cities/villages and adjacent towns to determine the timing of development and connection to public utilities.

4. Focus intergovernmental discussions and possible intergovernmental agreements between communities on the timing, services, jurisdiction, and type of future development in this area. The Intergovernmental Cooperation chapter provides additional detail.

5. Require the design of all new non-farm development projects approved within mapped Agricultural Transition areas in such a manner to not impede the orderly future development of the general area.
6. Consider amending this Plan when timely and appropriate development proposals are offered within these areas.

7. During the process to prepare the 2013 farmland preservation amendments to this Comprehensive Plan, the County analyzed areas planned for Agricultural Transition use on the future land use map against 15 year land demand forecasts. Certain areas where such development was not required within the next 15 years are designated within the Farmland and Forest Preservation area in Maps 4a through 4i in Chapter Three: Agricultural Resources. The County will use the policies normally applicable to the Farmland and Forest Preservation area to evaluate development proposals in such locations, until and unless the designation in the farmland preservation plan maps is amended.

**Opportunities for Redevelopment**

This Comprehensive Plan identifies several opportunities for redevelopment, as guided more specifically by locally adopted comprehensive plans. Since the majority of the land in the unincorporated portions of the County is undeveloped, redevelopment is not a major factor in those areas. Some redevelopment and rehabilitation opportunities exist for individual properties in hamlets, and along highways. The County will work with the towns to encourage efforts to improve sites in the community through redevelopment and rehabilitation, and help link property owners interested in such projects with potential grant or funding sources when available.

Opportunities for redevelopment include deteriorating buildings or underutilized sites, or brownfield sites. Through this Plan the County supports a range of strategies to redevelop or revitalize these areas. Specific strategies are provided in the Economic Development chapter.

**“Smart Growth Areas”**

Wisconsin’s comprehensive planning law requires comprehensive plans to identify “Smart Growth Areas,” defined as “areas that will enable the development and redevelopment of lands with existing infrastructure and municipal, state, and utility services, where practical, or that will encourage efficient development patterns that are both contiguous to existing development and at densities which will have relatively low municipal, state governmental, and utility costs.”

This Comprehensive Plan identifies several opportunities for “Smart Growth Areas” as guided by locally adopted comprehensive plans. In the context of rural areas of the County, “smart growth” is defined as that which limits non-agricultural, non-forestry development and is planned to minimize the consumption and fragmentation of agricultural, forest, and recreation land, the number of driveways on existing arterial roads, and the length and number of new roads. Therefore, this Plan reflects an effort to apply “Smart Growth” principles to the entire County, particularly the unincorporated areas. This Plan also designates certain areas that are developed or intended for development as “Smart Growth Areas.” These include the following types of areas:

- Redevelopment areas discussed in the section above.
- Infill housing and non-residential development within existing mostly-developed areas.
- Areas within existing city or village limits that are presently undeveloped, within existing utility or sanitary district boundaries, or logical extension of these areas.
- Existing and future development areas around hamlets (unincorporated villages/town centers).
- New intensive industrial, commercial, and residential projects in or adjacent to villages or the city where more extensive utility and community services are available or can be efficiently extended.
- Access to sanitary sewer service and water areas, as well as the existing development, commercial establishments, and road infrastructure make infill and contiguous development in these areas more efficient and cost-effective.
Map 6: Existing Land Use
Map 7A: Eastern Cluster Future Land Use
Map 7B: Central Cluster Future Land Use
Map 7C: Western Cluster Future Land Use
Transportation Recommendations

**SUMMARY**

- Maintain County Highways and improve them where warranted
- Work with communities and WisDOT to provide a safe and efficient transportation system for the County
- Support and assist local community efforts to establish road and driveway standards
- Promote interconnected road patterns for new development areas
- Develop a Countywide plan for trail enhancements, expansions, and connections including a central loop trail system and “safe routes to school”
- Promote the protection of the rural character along scenic roadways
- Support transportation alternatives for an aging and changing population
**Existing Transportation Network**

The County is relatively well connected to the region through the existing roadway network. This section describes the County’s existing transportation facilities.

**Roadways**

Shawano County is served by one United States Highway (USH) and several State Trunk Highways (STHs), all of which link the County with the region’s major cities. These links channel commuter flows and provide excellent access for residents. They are also important to visitors and the recreation-oriented tourism which is prevalent in the County.

USH 45 runs from the City of Clintonville in Waupaca County northwest through Shawano County to the Village of Aniwa and continues to Langlade County. 

STH 29 serves as the County’s primary east-west traffic artery. This four-lane limited access highway is designed to keep traffic flowing smoothly across the entire State. The highway was upgraded from 1998 to 1999 as part of a corridor project that ran from Green Bay to Chippewa Falls. According to the Wisconsin Department of Transportation (WisDOT), which records average daily traffic volumes (number of vehicles) for major State roadways, traffic on STH 29 in the middle of the County increased 30 percent from 1996 to 2002. WisDOT is in the process of developing a plan to preserve right of way along 61 miles of STH 29 to address future expansion needs.

Other state trunk highways include 156, 187, 47, 22, and 55 in the Eastern Cluster. Outside of urban areas, all of these roads experienced increased traffic volumes from 1996 to 2002. For example, volume on STH 47 in the Eastern Cluster increased by 21 percent from 1996 to 2002.

The County’s rural areas are served by a 253-mile network of County Trunk Highways (CTHs). The County highways are usually collector roads that serve rural land uses and distribute traffic to the regional arterial system. They serve an important role in linking the area’s farm and natural resources to the County’s urban centers and major highways. The major north-south CTHs include HH, HHH, and U north of STH 29. The major east-west CTHs include MMM (Old STH 29), B, and A. Traffic increases along the county highway network are likely the result of increased development in the more rural parts of Shawano County.

The segment of CTH M between STH 29 and USH 45 is enrolled in the Rustic Roads program. This program was created by the State legislature in 1973 to help citizens and local units of government preserve scenic, lightly-traveled roads for the leisurely enjoyment of bikers, hikers, and motorists. Featuring open agricultural vistas against a backdrop of wooded hills, CTH M provides the traveler with a canopy of maples over the road, along with historic buildings including a round barn, red granite town hall, and a stone filling station. The road crosses two streams and passes conifer glens, wetland vegetation, and rolling fields. CTH M also passes by the Tigerton Historical Museum and the Wittenberg Historical Museum.

Local roads (town, village and city) are important components of the transportation system. They serve local development, farming, and forest areas.
Bridges
There are 49 state-maintained bridges in Shawano County, located along State and County highways. In addition, there are 106 bridges along County highways and town roads that are maintained by either Shawano County or local governments. The State and County maintain condition reports for these bridges.

Airports
There is one airport in Shawano County in the City of Shawano. The Shawano Municipal Airport is open to the public and mainly serves local aviation needs. Located southeast of Shawano Lake, the airport also acts as a seaplane base. The airport has two paved runways in good condition; the main runway is 3,900 feet long and the smaller runway is 2,225 feet long. In July 2008, the County Airport Commission purchased a 40-acre property just east of the airport for future expansion. As part of the airport’s long range plans, the addition of a 1,000 foot navigation easement will be provided for the extension of the existing 3,900 foot runway.

Austin Straubel International in Green Bay, Wittman Regional Airport in Oshkosh, Outagamie County Regional Airport in Appleton, Central Wisconsin Airport in Mosinee, and General Mitchell International Airport in Milwaukee also serve the region.

Water and Truck Transportation
There is no waterborne freight movement in the County and none is anticipated. Most freight shipments in Shawano County occur by truck. Semi-truck shipments are most prevalent along STH 29. The City of Shawano has designated truck routes to guide truck traffic around the City.

Rail
Shawano County has one active rail line running from the Fox River Valley north to the City of Shawano. This line is owned by Canadian National. Canadian National is the parent company of Duluth, Missabe & Iron Range, Wisconsin Central Limited and the Sault St. Marie Railroad. This line transfers pulp and paper, and bulk cargo. An abandoned portion of this rail line continues from the City of Shawano northwest through the Towns of Wescott, Richmond, Herman and Red Springs. This line is owned by Canadian National.

Recreational Trails
Acquisition of abandoned railroad rights-of-way by the Wisconsin Department of Natural Resources (WisDNR) and conversion to regionally significant multi-use recreational trails has provided new opportunities for linear recreation in Shawano County. Although ownership of the right-of-way is retained by WisDNR, under a Letter of Agreement Shawano County maintains the two State-designated recreational trails which pass through the County. Permitted users on the Shawano County trail segments include hikers, bicyclists, motorized wheel chairs, equestrians, horse drawn vehicles and, during the winter, snowmobiles and ATV’s.
The Wiouwash Trail, which is planned to ultimately extend from Oshkosh northward through Langlade County, enters Shawano County near Split Rock and passes through the villages of Tigerton, Wittenberg, Eland, and Birnamwood near the County’s western border. Convenient restrooms and other support facilities are available in local parks in each of these communities. This County-operated trail was named for Winnebago, Outagamie, Waupaca, and Shawano counties. Although several gaps remain before a continuous trail is in place (including the segment from Birnamwood north through Aniwa to the Langlade County line), ongoing efforts are being made to acquire right-of-way or obtain the necessary easements to complete the trail. Once completed, the Shawano County portion of the Wiouwash Trail will be approximately 30 miles in length.

The Mountain Bay Trail, stretching 83 miles to connect the Green Bay and Wausau areas, passes through Shawano County in an east-west direction. Named for two geological features it connects - Rib Mountain in Marathon County and Green Bay in Brown County - the trail is built on the former Chicago and Northwestern right-of-way. Restrooms and other support facilities are generally available in local parks along the trail in the communities of Pulaski, Bonduel, Shawano, Bowler, and Eland.

The Mountain Bay Trail was developed by WisDNR and the parks departments of Marathon, Shawano, and Brown Counties. It is currently maintained through the generous contributions and volunteer efforts of the Friends of the Mountain Bay Trail of the three counties through which the trail passes: Marathon, Shawano and Brown. In addition, the Village of Pulaski has recently requested that Shawano County extend its trail maintenance obligations into Brown County. Since horses are not permitted on the Brown County portion of the trail, this extension would provide access to a logical eastern terminus or trail head for horsemen.

The Nicolet Trail extends north through the Towns of Angelica and Green Valley from the Village of Pulaski. Owned by WisDNR and operated by Shawano County, this trail on a former rail corridor runs through forests and farms of northeast Wisconsin.

The Embarrass River ATV Park is a multiuse recreational facility for camping, hiking, and ATV riding. The park features 20 miles of ATV trails which wind through the 504 acre park. The park is located about one half mile east of Tigerton just off County Road M.

In addition to these public recreational trails, snowmobile trails are maintained by the Shawano County Snowmobile Association through agreements with individual landowners. Routes are a combination of those that are funded and non-funded.

Paratransit
Paratransit is specialized transit service to specific segments of the population that require more accessible vehicles and flexible routing. Shawano County has several paratransit providers who serve the elderly and disabled including Workshop Transportation run by Shawano County Department of Community Programs. Some counties provide flexible fixed route services with buses or minibuses, to give elderly and disabled persons in rural areas an opportunity to travel to larger communities for shopping, nutrition, or other appointments. One example of this type of flexible fixed route service is provided in Shawano County, picking up persons in a different area of the County one day each week, into the City of Shawano, and occasionally to larger shopping areas in Appleton or Green Bay.

WisDOT has created a statewide map of existing transportation systems throughout the State that includes the following categories: commuter rail, large bus systems, rural networks, shared ride taxi service, small bus systems, and intercity bus service. The private company Lamers offers intercity bus service that runs along USH 45 with stops in the Villages of Tigerton and Wittenberg. The City of Shawano offers municipal shared ride taxi service.

Review of County, State and Regional Transportation Plans
The following are existing County, State, and regional transportation plans and studies relevant to this Plan. There are no conflicts between these State and regional plans and this County Comprehensive Plan.
Shawano County Transportation Improvement Plan. The Shawano County Highway Department maintains an ongoing list of transportation improvements, both short term (5 years or less) and longer term (up to 15 years).

County Highways slated for improvement over the planning period include the following:

- In the Eastern Cluster: Portions of CTHs E, H, and T,
- In the Central Cluster: Portions of CTHs G, A, and M
- In the Western Cluster: Portions of CTHs J and M

This list is regularly updated as needs and priorities are identified based on access, safety, desires of communities, and other factors. Segments of these County highways that were slated for improvement are illustrated on the Transportation and Community Facilities map.

Shawano County Bicycle and Pedestrian Master Plan. In June 2013, after a three year long planning process the Shawano County Board of Supervisors adopted the Shawano County Bicycle and Pedestrian Master Plan. The Bicycle and Pedestrian Master Plan guides the development of a network of bicycle routes linking activity centers both within and adjacent to the County. The Plan identifies short term and long term infrastructure and non-infrastructure projects to facilitate non-motorized transportation within the County.

WIS 29 Preservation Plan. The Wisconsin Department of Transportation (WisDOT) engaged in a process that ran concurrent with the preparation of this Plan to preserve the STH 29 right–of–way and functionality. As part of the preservation effort in Shawano County, WisDOT’s project team examined existing conditions and identified future needs along STH 29. WisDOT’s intent through the process was to work with communities to identify the locations of future interchanges, overpasses and local road modifications to maintain a safe and efficient STH 29 well into the future.

North Central Region Six Year Highway Improvement Plan. The Six Year Highway Improvement Plan spans from 2014-2019. Improvements to the State highway system within Shawano County are projected to include the following:
### Figure 7.1: Highway Improvements Plan for Shawano County

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Year</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastern Cluster</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STH 22 &amp; CTH BE Intersection</td>
<td>2014</td>
<td>Upgrade intersection to improve safety</td>
</tr>
<tr>
<td>STH 160 WB Ramps to EB Ramp</td>
<td>2014</td>
<td>Mill and resurface 3.44 miles of STH 160 from STH 29 to Highview Rd.</td>
</tr>
<tr>
<td>STH 29 Robley Rd – Lessor Navarino Rd</td>
<td>2014</td>
<td>Reconstruct roadway, conversion to urban section; replace storm sewer and sidewalk</td>
</tr>
<tr>
<td>Shawano Lake Tributary Bridge</td>
<td>2015</td>
<td>Replace structure at Shawano Lake Tributary to meet current design standards and update signs and pavement markings. Sidewalk will be constructed on both sides of bridge.</td>
</tr>
<tr>
<td>STH 29 &amp; STH 156 Intersection</td>
<td>2016</td>
<td>Improve intersection by constructing J turns to eliminate crashes.</td>
</tr>
<tr>
<td>STH 55 to STH 29</td>
<td>2016</td>
<td>Mill and overlay roadway following Preventive Maintenance Guidelines/ replace culvert</td>
</tr>
<tr>
<td>Green Bay Street to CTH HHH</td>
<td>2017-2019</td>
<td>Resurface the roadway from CTH B to Zingler St. and from CTH HHH to CTH BE.</td>
</tr>
<tr>
<td>Airport Dr CTH B to STH 22</td>
<td>2017-2019</td>
<td>Mill and overlay roadway within the City of Shawano on STH 47 and replace signing, pavement marking and update rail crossing</td>
</tr>
<tr>
<td>Shawano Creek to Menominee Co Line</td>
<td>2017-2019</td>
<td>Resurface roadway on STH 47 from Shawano Creek to the Menominee County Line</td>
</tr>
<tr>
<td>Navarino Rd to Nichols Rd</td>
<td>2017-2019</td>
<td>Resurface the roadway from Navarino Rd to Nichols Rd to widen lanes and pave shoulders</td>
</tr>
<tr>
<td>South County Line to STH 156</td>
<td>2017-2019</td>
<td>Resurface the existing roadway</td>
</tr>
<tr>
<td><strong>Central Cluster</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTH G &amp; STH 47 Intersection</td>
<td>2015</td>
<td>Relocate the intersection of CTH G and STH 47 in order to improve safety by providing better sight distance</td>
</tr>
<tr>
<td>STH 29 – STH 47 from Ball Park Rd to Leopolis Rd</td>
<td>2015</td>
<td>Reconstruct roadway</td>
</tr>
<tr>
<td><strong>Western Cluster</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embarrass River Bridge (Town of Morris)</td>
<td>2016</td>
<td>Replace structure B-58-0700 on STH 29</td>
</tr>
<tr>
<td>Marathon County Line to USH 45</td>
<td>2017-2019</td>
<td>Mill and overlay following Preventive Maintenance Guidelines</td>
</tr>
</tbody>
</table>
Wisconsin State Highway Plan 2020. This plan focuses on the 11,800 miles of state trunk highway routes in Wisconsin. The plan does not identify specific projects, but broad strategies and policies to improve the State highway system over the next 20 years. Given its focus, the plan does not identify improvement needs on roads under local jurisdiction. The plan includes three main areas of emphasis: pavement and bridge preservation, traffic movement, and safety. The plan identifies STH 29 as a “backbone” and USH 45 as a “connector.”

Translinks 21: A Multimodal Transportation Plan for Wisconsin's 21st Century. This plan provides a broad planning “umbrella” including an overall vision and goals for transportation systems in the State for the next 25 years. This 1995 plan recommends complete construction of the Corridors 2020 “backbone” network by 2005, the creation of a new State grant program to help local governments prepare transportation corridor management plans to deal effectively with growth, the provision of State funding to assist small communities in providing transportation services to elderly and disabled persons, and the development of a detailed assessment of local road investment needs. At the time of writing this Comprehensive Plan, WisDOT was in the process of updating the Translinks Plan in Connections 2030.

Wisconsin Bicycle Transportation Plan 2020. This plan presents a blueprint for improving conditions for bicycling, clarifies the Wisconsin Department of Transportation’s role in bicycle transportation, and establishes policies for further integrating bicycling into the current transportation system. The plan reports that, according to a University of Wisconsin survey conducted in August of 1998, more than one-third of all Wisconsin households included someone who took at least one bike trip in the previous week. The plan identifies the Wiowash Trail in Shawano County as one of the seven key intercity trail segments based on location and service corridors.

Wisconsin Pedestrian Plan 2020. This plan outlines Statewide and local measures to increase walking and to promote pedestrian comfort and safety. The plan provides a policy framework addressing pedestrian issues and clarifies WisDOT’s role in meeting pedestrian needs. Pedestrian facilities include sidewalks, walkways, streetscapes, crosswalks, traffic controls signals, overpasses and underpasses, bridges, multi-use paths, curb cuts and ramps, transit stops, and paved shoulders. Few of these types of facilities are found in Shawano County’s municipalities.

Wisconsin State Airport System Plan 2020. This plan includes a general inventory of existing airport facilities in the State and provides a framework for the preservation and enhancement of a system of public-use airports to meet the current and future aviation needs of the State. It includes recommendations to upgrade existing facilities through runway extensions and replacements and facility improvements, but does not identify any new locations for airports to meet future needs. There are no recommendations related to the Shawano Municipal Airport.

Wisconsin Rail Issues and Opportunities Report. This report summarizes critical rail transportation issues identified during a public outreach effort. The report serves as a point of departure for the rail component of the upcoming Connections 2030, WisDOT’s next multimodal transportation plan set for completion prior to 2010. The report identifies the existing rail line in Shawano County as “light density” carrying less than 3 million gross tons annually. These “light density” lines could require financial assistance in order to preserve rail service and avoid abandonment of track.
Transportation Goals, Objectives and Policies

Goal:
1. Provide a safe and complete transportation system that functions efficiently and meets needs of all residents.

Objectives:
1. Coordinate transportation system improvement and investment with land use planning and development.
2. Maintain the viability of the County Highway network.
3. Provide for adequate roadway capacities and safe conditions in cooperation with the State and local communities, at the level of function required in different communities.
4. Support biking, walking, public transit, and other alternative modes of transportation to facilitate recreation, as well as for those in need of transportation alternatives.
5. Preserve the scenic value and character along certain roadways to protect the County’s rural atmosphere.

Policies:
1. Support maintenance and appropriate improvements to existing US, State, and County highways, intersections, interchanges, and bridges. Coordinate with WisDOT and local communities on transportation improvements depicted on Map 8, in order to protect roadway capacity.
2. Work with the towns to help understand road conditions, programs, and maintain and upgrade town roads.
3. Encourage towns, villages, and the City to update design and layout standards for new local roads, and promote an interconnected system of roads in planned development areas shown on Maps 7a, 7b, and 7c.
4. Consider promoting a Town Road Specification Manual or amending the County’s subdivision ordinance to contain standards for new local roads serving development to reflect the recommendations in this Plan. The manual or subdivision ordinance should include standards to ensure street interconnectivity and proper design and placement of new roads, sidewalks, and paths in association with future residential and commercial development.
5. Continue to encourage local communities to maintain an inventory of the conditions of local (town, village, city) roads so that timely improvements can be undertaken.
6. Continue to work with WisDOT and the local communities on right-of-way, access control, and local road crossing issues near and on STH 29.
7. Consider developing a model driveway ordinance that can be adapted and adopted by interested towns.
8. Support local community efforts to create and adopt Official Maps, particularly for larger villages and the City of Shawano, or consider preparation and adoption of a countywide Official Map. The purpose of an Official Map is described later in this chapter.
9. Prior to recommending approval of any certified survey map, preliminary plat, or final plat; ensure that the proposed subdivision is consistent with all applicable subdivision ordinance standards, zoning ordinance standards, and this Comprehensive Plan.
10. Work with local communities and private providers to continue and expand transportation options to those who require them, such as the elderly, disabled, and children.
11. Secure additional funding for roads and transportation projects through working with the county to explore State and Federal funding sources.
12. Continue to expand bicycling and walking opportunities in the County, through implementation of the Shawano County Bicycle and Pedestrian Plan.

13. Continue support of the “Safe Routes to School” program to encourage safe bicycling and walking in area communities, particularly for school children.

14. Encourage the development of trailheads to access existing and proposed trail segments.

15. Work with the State to develop Park and Ride facilities at key intersections of STH 29 to facilitate carpooling.

16. Coordinate both regionally and with local units of government to support other forms of transportation, such as rail, air, trucks, and water available to County residents or businesses in the region.

17. Monitor and participate in pending statewide long-range plans (Connections 2030) for highways, local roads, air, water, rail, bicycle, pedestrian, and transit systems that impact the County.

18. Consider developing or promoting a County ATV and recreational trail system and parks to accommodate ATV use.
Transportation Recommendations and Programs

Expanding on the planning policies listed above, this section of the Plan provides specific recommendations for providing a safe, functional and flexible transportation system for the County, organized around the objectives put forth in this Chapter.

Develop Unified Road Improvement and Acceptance Standards

The County will promote unified road improvement standards in conjunction with the towns. The resulting product may be a Town Road Specifications Manual, which would be in effect for newly platted roads in towns that endorsed or accepted it.

The recommended Town Road Specifications Manual could help ensure that roads are built to function properly, to facilitate maintenance and emergency service provision, and to last as long as possible. Pending further discussions following adoption of the Comprehensive Plan, the manual may also address issues such as road right-of-way width, base course and pavement width and thickness, roadside drainage, intersection design, maximum slopes and curves, logical addressing, and/or non-duplicative road naming.

The County will also include basic standards for new roads in its subdivision ordinance to the extent legal and practical, and recommend that towns that elect to continue to have a separate subdivision ordinance incorporate such standards into their individual ordinances. The subdivision ordinance should continue to include standards to ensure proper design and placement of new roads, sidewalks, and paths, and require roads be stubbed to allow for future development, in association with future subdivision plats.

Promote and Support Adoption of Town Driveway Ordinances

A driveway ordinance ensures suitable dimensions and design for emergency vehicles, guides driveway placement, promotes access control to adjacent roads, and protects rural character. The County will promote and support town driveway ordinances to include the following provisions:

<table>
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<tr>
<th>Land and Use</th>
<th>Acres</th>
<th>Percent</th>
<th>Units</th>
<th>Percent</th>
<th>Population</th>
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<tr>
<td>Single Family</td>
<td>975.7</td>
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<td>2,927.1</td>
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<td>Two Family</td>
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<tr>
<td>Mixed Residential</td>
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<tr>
<td>Neighborhood Office</td>
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<tr>
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<tr>
<td>Extraction</td>
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<tr>
<td>Institutional</td>
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<tr>
<td>Active Recreation</td>
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<td>1.8%</td>
<td>70.5</td>
<td>1.8%</td>
<td>70.5</td>
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<tr>
<td>Passive Recreation</td>
<td>131.6</td>
<td>3.3%</td>
<td>131.6</td>
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<td>131.6</td>
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<td>TOTAL</td>
<td>3,933.4</td>
<td>100.0%</td>
<td>22,530.8</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Excludes Rural land uses, Environmental Corridors, Surface Water, & Transportation

*Traditional Neighborhood Assumptions: 25% of area non-residential; 75% of area residential; 82% Single Family (65% of population); 10% Two-family (15% of population); 8% Mixed Residential (20% of population).

Other Assumptions: Single Family = 3 du/ acre; Two-family = 6 du/ acre; Mixed Residential = 10 du/ acre.
- Length, width, design, clearance, address signage, and slope standards to ensure access by emergency vehicles. To effectively provide safe access for emergency equipment, the maximum length of driveways should generally be three hundred feet. Driveways lined with dense vegetation and longer driveways should provide for a turn-out to accommodate two-way traffic and a turnaround near the home.
- Driving surface requirements, alignment, and marking.
- Culvert and other drainage specifications.
- The maximum number of driveway accesses to the road allowed for each property, including requirements for “no vehicular access” areas on subdivision plats or certified survey maps where driveways connecting to the public road would not be safe.
- Visual clearance, guiding the placement of driveways relative to each other and road intersections and to protect sight distances for vehicles leaving the property.
- The encouragement of shared driveways between adjacent developments. If two or more landowners wish to construct a shared driveway, they should be required to enter into a private road agreement and the agreement should be recorded against both parcels with the County Register of Deeds. A private road agreement stipulates important details including maintenance responsibilities, which reduces the potential for future conflict between the current and future driveway users.
- Possibly limits on placement of driveways that interfere with forestry and agricultural practices.

Model town driveway ordinances are available from the Wisconsin Towns Association. The County will consider preparing a model driveway ordinance that addresses the above issues and is more specific to the issues and conditions in Shawano County.

County Highways are the most prominent component of Shawano County’s transportation system. Shawano County maintains a short-term plan (5 to 7 years) for road improvements within the County, as well as projecting longer term needs.

The County will work to maintain the viability of the County Highway network through the following strategies:

- Aiming to complete all road improvements illustrated on Map 8.
- Regularly updating the County’s Transportation Improvement Program (TIP) to reflect short and long term County transportation needs by monitoring the condition of County and local roads. Road improvements included in the TIP at the time this Plan was adopted are shown on Map 8.
- Reviewing the function of CTH M. Given CTH M’s significant function as a connector route, its designation as a rustic road may challenge that function. (e.g., speed limit of 45 mph).
- Ensuring maintenance of roads to meet acceptable standards for safe cycling, such as by removing obstacles and encouraging paved shoulders where appropriate. (e.g., on County highways when improvement projects are implemented).
- Identifying and addressing problem intersections where necessary through techniques like signage, vegetation clearance, or reconstruction. Input from the County and the local communities on known
problem areas (at the time this Plan was prepared) is reflected on the Transportation and Community Facilities Map (Map 8).

**Provide for adequate roadway capacities and safe conditions in cooperation with the State and local communities, at the level of function required in different parts of the County.**

**Work with the State and Local Communities to Maintain Roads and Highways**

In addition to maintaining the County Highway system, the County also maintains Town roads and has historically included planned improvement to such roads in its Transportation Improvement Plan. The County will seek information from local communities pertaining to road condition ratings and maintenance and improvement desires on an annual basis.

In addition, the County will also work to maintain, upgrade, and ensure safety on roadways by:

- Ensuring maintenance of roads to meet acceptable standards for safe cycling, such as by removing obstacles and encouraging paved shoulders where appropriate.
- Identifying and addressing problem intersections where necessary through techniques like signage, vegetation clearance, or reconstruction. Input from the County and the local communities on known problem areas (at the time this Plan was prepared) is reflected on Map 8.
- Working with local communities to identify roads where through and truck traffic should be minimized, and working to designate weight limits where appropriate.
- Supporting applications to federal and state programs and funding sources available to the County and the Town for transportation projects. Additional information on these programs is available from the WisDOT North Central Region office in Wisconsin Rapids, and from the University of Wisconsin Transportation Information Center.
- Working with the State to develop Park and Ride facilities, potentially at STH 29 and 45, CTH K, and 47 (as suggested on Map 8).

**Work With WisDOT and Local Communities Regarding Highway 29 Corridor Planning**

The County intends to closely communicate with the State on conditions and needs related to State highways serving the County. The County endeavors to continue to participate and provide meaningful input on the STH 29, advocating for the interests of the County and local communities as appropriate.

Regarding Highway 29, locally supported (or at least accepted) facilities proposed by WisDOT are shown in Map 8, Transportation and Community Facilities. These include existing and proposed bridges, public road access proposed for closure, proposed interchanges, and proposed new roads. At the time this Comprehensive Plan was prepared, there were some instances where local communities did not agree with recommendations that were set forth by WisDOT, or there were otherwise outstanding issues to be addressed. For example, the following areas may require further discussion:

- The recommendation for an interchange at Leopolis Road in the Central Cluster. The State recommended an interchange at Leopolis Road in the Town of Herman at the time this Plan was prepared. The Town of Herman was generally not supportive of this proposed interchange, whereas the Stockbridge-Munsee Community was in favor of it as a means to provide more direct access to the Casino.
The locations of overpasses or underpasses in the Wittenberg and Morris area in the Western Cluster. For example, the Town of Wittenberg desired an interchange at Killdeer Road, although WisDOT did not recommend this overpass, instead recommending an overpass at Meadowlark Road.

The County will work to understand and, where appropriate, help resolve remaining, typically minor differences between WisDOT proposals and local desires. Also, once WisDOT completes its corridor preservation planning project, the County will adopt appropriate amendments to Map 8 and encourage town adoption of similar amendments in local plans.

Support the Creation and Adoption of Official Maps at the Local or County Level

As determined through local comprehensive planning processes, many communities are considering the preparation and adoption of an Official Map for their community. In most cases, communities are interested in mapping the recommended improvements associated with the STH 29. WisDOT is in favor of communities taking this proactive step. The County intends to help provide technical and planning support to communities undertaking this task, and help coordinate between local communities and WisDOT. As an alternative, the County may choose to undertake the process to prepare a countywide Official Map, with input from local communities.

An Official Map is a plan implementation tool authorized under Wisconsin Statutes (Section 62.23(7)) for adoption by cities, villages, and towns. An Official Map is not the same as a “chamber of commerce”-type road map. It is an ordinance that may be used to show alignments of future roads, expanded rights-of-way for existing roads, and other planned public facilities like trails and parks. When land development is proposed in an area of a facility shown on the adopted Official Map, the community may obtain or reserve land for that future facility through public dedication, public purchase, or reservation for future purchase.

Cities, villages, and towns generally use Official Maps to show future highways and bypasses, other future arterial and collector streets, and suggested wider rights-of-way for some existing major streets. Official Maps generally show desired right-of-way widths for all future new and expanded roads, but do not show road improvement standards like pavement width or sidewalks. Official Maps rarely show planned minor streets, as their locations are usually difficult to determine in advance of development.

Wisconsin Statutes attach some unique authority to Official Maps. For example, a city, village or town may require that no building permits be issued within land shown for a future public facility on its Official Map. Additionally, a community may require that no subdivision or land division may be recorded unless its arrangement conforms to the Official Map.

Coordinate with the State and Local Communities to Provide Recreational Routes

With three State Recreational Trails serving much of the County (the Mountain Bay, Wiowash and Nicolet), the County’s recreational routes are clearly an asset to the County and region.

The County will coordinate with the State and local communities to establish connections and pursue new recreational (hiking, biking, snowmobile) routes, enhance existing routes, and improve the marking of existing recreational routes. The County has established priorities and an implementation strategy through the County Bicycle and Pedestrian Master Plan.

Support biking, walking, public transit, and other alternative modes of transportation for to accommodate both recreation as well as those in need of transportation alternatives.
Continue to Support Other Transportation Options

Transportation options include commuter facilities, para-transit for the growing elderly and disabled populations and transportation services for lower income workers. Available programs include:

- **Specialized Transportation Assistance Program for Counties** program, which provides funding for transportation services, purchasing services from any public or private organization, subsidizing elderly and disabled passengers for their use of services or use of their own personal vehicles, performing or funding management studies on transportation, training and the purchase of equipment. This program requires a 20% local match in funding.

- **Elderly and Disabled Transportation Capital Assistance** program. Eligible applicants include private and non-profit organizations, local public bodies that do not have private or public transportation providers available, and local public bodies that are approved providers of transportation services for the elderly and disabled. The program covers 80% of the cost of eligible equipment.

- **Wisconsin Employment Transportation Assistance Program (WETAP)**. This program supports transportation services to link low-income workers with jobs, training centers and childcare facilities. Applicants must prepare a Regional Job Access Plan that identifies the needs for assistance. Eligible applicants include local governments and non-profit agencies.

The County also intends to work with the State to explore potential park and ride facilities to promote carpooling and ride-sharing. Locations identified on Map 8 include STHs 29 and 47, STH 29 and CTH K in the Shawano area, and STHs 29 and 45 in the Wittenberg area.

The County’s population will certainly continue to age and need these and other programs. The County intends to continue to provide, and expand on these programs where possible and where support exists.
Protect the Rural Character Along Scenic Roadways

Rural character defines the character of the County. To many residents and visitors, the character along County and local roadways is a critical component of this character.

In order to ensure that development along its roadways does not detract from its rural flavor, the County will:

- Work with the local communities and the State to revisit standards for design of and quantity of signs, billboards, and telecommunications towers along major roadways.
- Work with local communities to enforce zoning ordinance provisions discouraging the accumulation of junk on properties. The County zoning ordinance defines “junkyards” and prohibits them in certain zoning districts. The County will encourage Town officials to consult with the County Planning, Development and Zoning Department if it believes that certain properties are in violation of the County zoning ordinance.
- Promote locally acceptable options to ensure that properties are kept to certain basic standards of repair and maintenance, encouraging communities to adopt local property maintenance code.
- Work with the local communities to designate and market scenic driving loops that showcase the area’s unique natural and cultural resources. These may correspond with some of the potential bike routes.
- Where housing is planned, promote the placement of new houses in locations that address distance, minimize visibility from the road except for rural address signs and preserve vegetation and topographic features.
- Encourage a vegetated buffer along rural roadways to perpetuate the rural, wooded feel of the area.
- Encourage nomination to and participation in the State Rustic Roads Program – based on recommendations of local communities.
Map 8: Transportation and Community Facilities
Chapter Eight: Utilities and Community Facilities

This chapter contains a compilation of background information, goals, objectives, policies, and recommended programs to guide the future maintenance and development of utilities and community facilities in Shawano County.

Shawano County’s policies related to utilities and community facilities are intended to:

- Promote the overall public and environmental health of the County and its residents by ensuring safe, clean sources of drinking water and responsible treatment of waste.
- Allow for local community flexibility and recognizing individual approaches in the provision of utilities and community facilities to residents, while providing for County support in key areas.
- Encourage prosperity through cost-effective provision of utilities and services via joint service agreements, collaboration, and energy efficient approaches; and through the provision of 21st century infrastructure to attract technology-based employers and employees.

Utilities and Community Facilities Recommendations

Summary

- Provide the appropriate level of community services and facilities, while striving for a low tax levy
- Direct intensive development to areas where a full array of utilities, community facilities, and public services are already available
- Safeguard public and environmental health through proper and responsible waste disposal
- Provide quality and accessible education, parks, and recreational facilities to enhance County residents’ quality of life
- Accommodate long-term County needs to maintain administrative and departmental functioning
- Promote access to modern telecommunications technology for residents and businesses, such as high-speed internet service
- Promote energy efficiency in government operations and utilities, and explore new technologies for local power
Existing Utilities and Community Facilities

County Facilities
Shawano County’s government offices operate out of several buildings in the City of Shawano, most are located in the County’s Courthouse building on North Main Street. The County Fairgrounds occupies a 60-acre site in the City of Shawano. This property is leased and managed by the Shawano Area Agricultural Society. The County Fair is held every year during Labor Day Weekend.

Additional County land is located along STH 22 south of the City, in the Town of Belle Plaine.

Water Supply
The majority of Shawano County’s unincorporated towns obtain their water supply from private wells. The City of Shawano and most of the County’s incorporated villages, with the exception of Aniwa and Eland are served by municipal water systems. The Stockbridge-Munsee Community also maintains a public water system. These public systems draw groundwater from 20 active wells around the County. Approximately 2.4 million gallons of water are pumped everyday within the County.

On-site Wastewater Treatment Systems
The majority of Shawano County’s unincorporated towns handle the treatment of domestic and commercial wastewater through the use of individual private on-site wastewater treatment systems, often referred to as septic systems, which generally discharge the wastewater to underground drainage fields. There are currently six types of on-site treatment system designs authorized for use today: conventional (underground), mound, pressure distribution, at-grade, holding tank, and sand filter systems.

The Wisconsin Department of Safety and Professional Services (SPS) regulates the siting, design, installation, and inspection of most private on-site sewage treatment systems in the State. In 2000, the State adopted a revised private sewage system code called COMM 83. The Chapter has since been renumbered to SPS 383. This revised code allows conventional on-site systems and alternative systems, such as those that employ biological or chemical treatment. In some cases, alternative waste treatment systems can be used in areas where conventional systems are not feasible due to unsuitable soil conditions.

The Shawano County Sanitarian regulates the placement of on-site wastewater treatment systems throughout Shawano County, under the Shawano County Sanitary Code.

Sanitary Sewer Utilities
The City of Shawano and the majority of the County’s incorporated villages, with the exception of Aniwa and Eland, are served by municipal wastewater treatment facilities.

In the City of Shawano area, public sanitary sewer service is available to all households within the City of Shawano’s current municipal limits and is mostly managed by the Shawano Sanitary Sewer District, with a small portion of the City managed by the Shawano Lake Sanitary Sewer District, which also serves a small portion of the Town of Washington and Village of Cecil.

The Belle Plaine-Waukechon Utility District, part of the Shawano Lake/BondUEL Sewer Service Area serves the STH 22/29 interchange area and limited areas in the northwestern portion of the Town of Waukechon. The Future Land Use map (Map 7a) shows a cluster of planned sewered residential development in the central area of the Town of Waukechon. Extension of the sanitary sewer to serve this planned development area...
would require an amendment to the Shawano Lake Sewer Service Area Plan, which is scheduled to be updated in 2009.

Wastewater in the Shawano Area is treated at the Wolf River Treatment Plant, which is located adjacent to the Wolf River in the Town of Belle Plaine. Treated waste is discharged into the Wolf River. The plant was constructed in 1972 and uses an activated sludge treatment system combined with a wet air oxidation treatment process. Sludge is land spread on nearby agricultural land. The plant has a design capacity of 3.0 million gallons per day (mgd). Roughly 1.7 mgd is allocated to the City of Shawano.

In addition, the following sanitary districts are in operation in other unincorporated portions of the County:

- The Cloverleaf Sanitary District, part of the Embarrass/Cloverleaf Sewer Service Area, serves the southern portion of the Town of Belle Plaine. The Embarrass/Cloverleaf Sewer Service Area Plan is administered by ECWRPC and is scheduled for update in 2009. Two-thirds of the Town’s housing units are located within this area and are served by sanitary sewer. This district has been in place for over 30 years and is serviced by a treatment facility that is shared with the Village of Embarrass. The facility was constructed in 1982 and consists of a two-cell stabilization lagoon system.
- The northeastern portion of the Town of Angelica is located within the Krakow Sanitary District, which provides the unincorporated community of Krakow with public sanitary sewer services. Wastewater is treated at the Krakow wastewater treatment facility located on Hoff Street in Krakow. This facility was built in 1972 and uses an activated sludge treatment system, combined with a specialized filtration process to treat dairy farm wastes. The plant was updated with a design capacity of 100,000 gallons per day at the time this Plan was written.
- The central portion of the Town of Grant – primarily the Town’s unincorporated community of Caroline - is located within the Caroline Sanitary District and provided with sanitary sewer services. Sewage is treated at the Caroline wastewater treatment facility, which is located off of Romberg Road on the east side of Town. This facility uses a stabilization pond treatment system and has a design capacity of 18,000 gallons per day. At the time this Plan was written, the system had limited remaining capacity.
- The Stockbridge-Munsee Community provides public sanitary sewer to the community. The Community wastewater treatment facility is located on CTH A.
- The Town of Green Valley’s sanitary district connects to the Krakow wastewater treatment facility.
- The Town of Richmond also has its own sanitary district.

**Solid Waste Disposal Sites/Recycling Facilities**

Local communities have their own systems in place for refuse collection – generally with options to either drop off their garbage at a designated site in the community or arrange for home pick-up through a private hauler. Recyclables are also collected. Shawano County is party to a tri-County agreement with Portage and Marathon counties wherein a portion of Shawano County waste is hauled to the City of Shawano (where the landfill is soon to reach its design capacity) and then transferred to Marathon County.

Recycling materials reaching the City of Shawano Landfill are handled through a contract with Outagamie County. Hazardous waste is handled through agreements with Brown County Port and Solid Waste and the Marathon County Landfill. Shawano County residents can deposit their hazardous waste at the Brown County Household Hazardous Waste Site located in Green Bay or the Marathon County Landfill in Ringle.

The County has an existing County Solid Waste Management Plan; however, this plan was drafted in 1981 and is need of updating. At the time of the 2013 Comprehensive Plan Amendment, the Shawano County Solid Waste Management Board was in the process of updating the Solid Waste Management Plan. The Board anticipates completion of the Plan by 2014.
Stormwater Management
Stormwater management has become a significant aspect of comprehensive planning in recent years due to concerns about flooding, property damage, and surface and groundwater quality issues. Many communities around the State are adopting stormwater management rules to control run-off from both urban and rural land uses. Shawano County has a Land and Water Resource Management Plan, a Pensaukee River Watershed Plan, and an Animal Waste Management Ordinance, all of which contribute to the management of stormwater throughout the County.

Nearly one-third of Wisconsin’s 79,000 farms use drains to remove excess water from their land. These drains are regulated by drainage districts. Shawano County currently has two operating drainage districts, which are overseen by commissions of appointed individuals. These districts plan, operate, and maintain district-wide drainage and dam facilities, levy assessments against landowners who benefit from drainage, award damages to landowners negatively affected by the construction of drainage facilities, make or recommend modifications to drainage district boundaries, and resolve drainage disputes. (Refer to the Natural Resources chapter for more information).

Law Enforcement and Protection
The Shawano County Sheriff’s Department serves as the primary law enforcement in the County. The patrol division currently has six patrol sergeants and twenty patrol deputies. The Shawano County Sheriff’s Department also operates the sole dispatch center for the County. The Department dispatches for the City of Shawano; Shawano County; Stockbridge-Munsee deputies and the Villages of Bonduel, Wittenberg, Tigerton, Mattoon, Birnamwood, Aniwa, Gresham, and Cecil.

Fire Protection
Shawano County is served by 15 fire districts. See Figure 8.1 for district boundaries. The largest department is the Shawano Area Fire Department, which serves the City of Shawano and the Towns of Belle Plaine, Richmond, Waukechon, and Wescott. The Department has three stations and 52 paid-per-call firefighters.

Emergency Medical Services
Shawano County has ten emergency medical service districts. See Figure 8.2 for district boundaries. The largest district encompasses the City of Shawano, the villages of Cecil and Bonduel, and the Towns of Richmond, Wescott, Washington, Hartland, Waukechon, Belle Plaine, and Pella.

The Wittenberg Fire Department building.
Figure 8.1: Fire District Map

Figure 8.2: Shawano County Ambulance Districts
Libraries
There are six libraries in the County. Libraries are located in the City of Shawano and the Villages of Birnamwood, Mattoon, Wittenberg, Bonduel, and Tigerton. These libraries have a combined circulation of over 128,550 volumes. Shawano County participates in the federated library system, which is designed to provide expanded library service to more people without producing additional large expenditures. The County is part of the Nicolet Library System which also includes Brown, Door, Florence, Kewaunee, Marinette, Menominee, and Oconto Counties. The County is also part of the online Outagamie-Waupaca System. The Friends of Shawano County Libraries formed in 1991 with the purpose of supporting and promoting the Shawano County Libraries.

Telecommunication and Power Facilities
Telephone services are provided to the County by six companies, including Frontier Communications, Wisconsin Public Service Corp., Verizon, Bonduel Telephone Company, Northeast Telephone Company, and Wittenberg Telephone Company.

Electric and gas power are provided to the County by six companies, including WE Energies, Shawano Municipal Utilities, Alliant-Wisconsin Power and Light, Gresham Municipal Light and Power Utility, Central Wisconsin Electric Cooperative, and Wisconsin Public Service Corp. Five hydroelectric power facilities are located in Shawano County.

High voltage electric transmission lines are provided by the American Transmission Company. At the time this Plan was prepared, several new lines were at various stages of installation throughout the County. Existing lines and in-progress extensions are shown on the Transportation and Community Facilities Map (Map 8).

Public Elementary and Secondary Schools
Shawano County school-aged children are served by twelve public school districts. The four largest are the Pulaski Community, Shawano, Antigo, and the Seymour Community districts. Eight other districts serve parts of the County: the Bonduel, Bowler, Clintonville, Gillett, Gresham, Marion, Tigerton, and Wittenberg-Birnamwood School Districts. The boundaries of these twelve school districts are shown on Map 1.

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<th>Figure 8.3: School District Enrollment, 2007-2012</th>
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<tr>
<td>Pulaski Community School District 3,669</td>
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<td>Shawano School District 2,592</td>
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<td>Gresham School District 318</td>
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<td>Antigo School District 2,626</td>
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<td>Seymour Community School District 2,464</td>
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<td>Clintonville School District 1,574</td>
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<td>Wittenberg-Birnamwood District 1,329</td>
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<td>Marion School District 566</td>
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<td>Bowler School District 397</td>
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<td>Tigerton School District 324</td>
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The Pulaski Community School District had a total K-12 enrollment of 3,716 during the 2012/13 school year. Enrollment has been increasing at a fairly constant rate since 2001. This district serves the Village of Pulaski and the Towns of Maple Grove, Angelica, Lessor, and Green Valley. The Village of Pulaski is home to a high school, middle school, and elementary school. Elementary schools are also located in Green Bay, Sobieski, Krakow, and Oneida.

The Shawano School District had a total K-12 enrollment of 2,575 during the 2012/13 school year. Enrollment has remained relatively steady over the past six years. The district includes a high school, middle school, and two elementary schools.

The Antigo School District had a total K-12 enrollment of 2,542 during the 2012/13 school year. Enrollment has been declining slightly since the 2001/02 school year, when about 3,030 students were enrolled. In Shawano County, this district serves the Villages of Mattoon and Aniwa and the Towns of Hutchins and Aniwa. The district's only high school and middle school are located in the City of Antigo.

The Seymour Community School District had a total K-12 enrollment of 2,494 during the 2012/13 school year. Total enrollment has remained relatively steady over the past six years, ranging from 2,569 to 2,496 students. The district serves students living in the Towns of Maple Grove and Lessor. All district schools are located outside Shawano County.

Several of the smaller school districts serving Shawano County have faced declining enrollment over the past decade. These districts will continue to address issues of continued viability over the coming years.

Private Schools
In addition to the County’s public schools, numerous private schools add to the community fabric and education of Shawano school-aged children. Private schools are located in the following districts: Antigo School District, Bonduel School District, Clintonville School District, Pulaski Community School District, Shawano School District, and the Wittenberg-Birnamwood School District

Technical Education
Shawano County is served by three vocational technical districts. The Northcentral District has a campus in the Wittenberg Business Park and offers programs mainly in healthcare and business fields. The closest campus to Shawano County in the Fox Valley District is the Clintonville campus which emphasizes providing credit courses that may be applied to associate degree or technical diploma programs or certificates. The Green Bay campus in the Northeast Wisconsin District provides the broadest range of programs including public safety, agricultural, and mechanical and electrical.

Parks and Recreation Facilities
Shawano County owns 1,400 acres of land presently or potentially available for outdoor recreation comprised of the following facilities, which are also shown on Map 8:

- Six named park sites (207 acres).
- Five sites dedicated primarily to wildlife habitat, hunting, and fishing (481 acres).
- The Shawano County Farm Property is currently used for passive recreation. The property is located south of Shawano on STH 22 in the Town of Belle Plaine. Although a small portion of the site is developed as the Maple Lane Health Care Center, over 600 acres are potentially available for outdoor recreational activities. With its diverse landscape features, the undeveloped land is considered by many to provide an exceptional opportunity for expanded recreation in the south central portion of the County. Present facilities consist of over three miles of groomed cross-country ski trail and a small sledding hill, with parking areas at both locations (646 acres).

A complete description of the County’s park and recreation facilities is provided in the County’s 1993 Outdoor Recreation Plan, and the 2007 update of this plan.
The Navarino State Wildlife Area is about 15,000 acres of State-owned land, the majority of which is located in the Town of Navarino. The land supports a diversity of plant and animal species, including various sedge species, blackberries, blueberries, deer, grouse, squirrels, waterfowl, woodcock, rabbits, sandhill cranes, and bald eagles. The area is used for many recreational purposes, such as hunting, trapping, hiking, cross-country skiing, and canoeing.

There are three trails in Shawano County: the Wiouwash Trail, the Mountain Bay Trail, and the Nicolet Trail. The Wisconsin Department of Natural Resources retains ownership of these converted railroad rights-of-ways. Under a Letter of Agreement, Shawano County maintains the Wiouwash and Mountain Bay trails.

The Embarrass River ATV Park is located in the eastern part of the Village of Tigerton. The park is 504 acres and has over 20 miles of ATV trails and a 37-site campground.

**Health and Child Care Facilities**

The Shawano Medical Center, located in the City of Shawano, is the only general hospital in the County. The hospital has a total of 46 beds. There are other medical clinics located in the City and many of the County’s incorporated villages.

Shawano County contains 32 County or State licensed child care facilities. The majority of these facilities are located in the County’s cities and villages.

**Cemeteries**

Approximately 104 cemeteries are located in Shawano County. The locations of most of these sites are available in County plat books. Town, village, and city plans prepared concurrently with this Plan also provide more detailed documentation of local cemeteries.

**Utilities and Community Facilities Goals, Objectives and Policies**

**Goals:**

1. Ensure that utilities, community facilities, and services meet the expectations of County residents, and function effectively and efficiently.

2. Coordinate utilities and community facilities decision-making with land use, transportation, intergovernmental, and natural resource planning.

**Objectives:**

1. Provide the appropriate level of community services and administrative facilities and practices, while striving for a low tax levy.

2. Direct intensive development to areas where a full array of utilities, community facilities, and public services are available.

3. Safeguard public and environmental health through proper and responsible waste disposal.

4. Provide quality and accessible parks and recreational facilities, areas, and services (including trails) to meet the needs of all residents.

5. Protect public health and safety through emergency and fire services and law enforcement.

6. Ensure that all residents have access to high quality educational opportunities, and maximize the ability to maintain these opportunities.

7. Ensure the County’s ability to maintain administrative and departmental functioning.

8. Promote access to modern telecommunications technology for residents and businesses.
9. Promote energy efficiency in the provision of utilities and in local community operations.

**Policies:**

1. Work with towns, villages, and cities to promote compact and well-planned urban and rural development areas to maximize efficiency and effectiveness of community facilities and services.

2. Promote and continue joint service agreements as a means to consolidate and coordinate services among the County, town, cities, villages, and tribes to achieve better services and/or cost savings.

3. Promote long-range sanitary sewer system planning with cities, villages, and the appropriate towns to accommodate projected countywide growth and development.

4. Encourage and help facilitate local community cooperation on the efficient and logical provision of public sanitary sewer and water services, potentially through intergovernmental agreement.

5. Explore updates to the County sanitary code, as necessary to address safe installation and proper maintenance of on-site wastewater treatment systems according to modern standards.

6. Encourage community/group wastewater treatment options where there are concentrations of existing or planned development located some distance from public services and/or where there are particular problems with the siting or maintenance of individual on-site systems.

7. Discourage use of holding tanks for new, permanent residential development.

8. Work with local communities to monitor and avoid over-concentration of private on-site wastewater treatment (septic) systems to minimize groundwater and soil contamination potential, particularly in areas where challenges for on-site wastewater treatment systems exist (as depicted on Map 9: Soil Suitability for On-Site Wastewater Treatment Systems).

9. Cooperate with local communities to assure a high-quality supply of groundwater, such as by minimizing potential sources of pollutants near wells and recharge areas, and maximizing permeable area for infiltration. See also the Natural Resources chapter.

10. Encourage local communities with municipal water wells to enact wellhead protection areas.

11. Require construction site erosion control and ongoing stormwater management for subdivisions and commercial projects to protect surface water quality and prevent flooding. Stormwater management techniques include natural drainage swales and retention and detention basins. See the Natural Resources chapter.

12. Update the County’s Parks and Outdoor Recreation Plan (CORP) regularly, ideally every 5 years to ensure eligibility for State and Federal funding for acquisition and development. Ideally, the CORP should include master plans for all major County park facilities (Hyman Falls, County Farm, Volez Memorial Park, Waukechon, Oconto River, and Mielke Park). Additionally, the CORP planning process should include increased public participation to identify community recreational needs.

13. Make park acquisition and development decisions that correspond with directions consistent with this *Comprehensive Plan*, and expanded on by the Parks and Outdoor Recreation Plan.


15. Partner with local groups and the State on planning efforts for motorized recreational trail development and maintenance (e.g., snowmobile, ATVs).

16. Promote greater public access to natural resource areas – including lakes, streams, and forest lands, by maintaining, marking, and improving existing access points and securing new public access points as land is subdivided in or adjacent to such areas.
17. Encourage and partner in efforts to retain and improve small community schools and educational services dedicated to educating the County’s youth and providing continuing education and training to adults.

18. Help coordinate and support local emergency services and facilities (e.g., police, fire, rescue/EMS) through adequate funding, training, facilities, and equipment.

19. Work with local communities to coordinate rural addressing, road naming, and driveway construction to ensure safe and adequate emergency response services.

20. Continue to study long term needs for County administrative and departmental functions (e.g., jail and administrative offices), develop recommendations, and address facilities needs based on further discussions – consistent with other objectives provided by this Comprehensive Plan.

21. Support strategies for enhancing telecommunication capabilities, including the siting and co-location of cellular communication facilities and broadband/fiber optics accessibility.

22. Implement the recommendations found in the 2014 update to the Shawano County Solid Waste Management Plan.

23. Continue to work with the American Transmission Company (ATC) related to the location of power lines and/or substations in the County, such as the new line shown on Map 8. Explore opportunities for corridor sharing or the use of existing transmission line right-of-way for other facilities. Corridor sharing reduces impacts by locating linear land uses together, and minimizes the amount of land affected by new easements. It also reduces the proliferation of corridors and easements required by the assortment of roads, pipelines, power lines, and other linear features.

24. Encourage the provision of new and improved services and facilities geared to the County’s aging population.

25. The County expects that local communities or private entities will provide additional cemetery facilities. Therefore, it will not be necessary for the County to provide additional cemetery facilities.

26. Continue to cooperate with local communities to ensure that County residents have all the necessary services, including health and child care, police, fire and rescue, recycling and refuse disposal, libraries, and other facilities.

27. Explore options to become more efficient with the use of energy, and creative strategies for energy provision.

28. Generally follow the timetable shown in Figure 8.4 to create, expand, or rehabilitate County facilities.
Utilities and Community Facilities Recommendations and Programs

Expanding on the planning policies listed above, this section of the Plan provides specific recommendations related to the provision of utilities, facilities, and services in Shawano County.

This Plan supports local planning efforts that direct growth to planned areas that are easily provided with community services and utilities. Where development is planned in the County’s rural areas, this Plan encourages clustering homes on smaller lots and in portions of the town and development site designated as most appropriate for development. In this manner, community services such as school bus transportation, snow removal, and emergency services can be provided in a cost effective and efficient manner. Clustered rural development also facilitates the possible use of group wastewater treatment facility options, rather than multiple individual septic systems.

Where development is planned in the County’s urban areas (mostly villages and the City), the County encourages compact development with higher densities than found in rural areas. Most commercial, industrial, and multiple-family residential development, in particular, should be directed to communities with public utility services. All new development in communities with public sewer and/or water services should be required to connect to these systems. The County also encourages the City and villages to fill in or redevelop vacant or underutilized properties where existing utilities and community services are already available. New urban development on public utilities should be contiguous to existing development.

The County’s towns, villages, and cities designated as “Smart Growth Areas” in their local comprehensive plans are areas where the community supports land development or redevelopment. Development will occur with existing infrastructure and utility services, or where efficient development patterns will be both contiguous to existing development. Development will occur at densities that will have relatively low municipal, state, governmental, and utility costs. Some local plans provided detailed strategies for developing and redeveloping these Smart Growth Areas. This Shawano County Comprehensive Plan supports these planning efforts for locally-designated Smart Growth Areas.

Promote Joint Service Agreements
Throughout the County’s rural areas, some of the key services available to residents and property owners are provided through intergovernmental cooperation and/or joint service agreements, including public education and school busing, police and fire protection, emergency medical service, road maintenance, recycling, and snow removal. There are distinct advantages that communities can realize through these service agreements.
and other examples of cooperation, namely efficiency and cost-savings. The County encourages local governments to explore or extend joint service agreements with neighboring communities and the County where consolidating and coordinating services can result in cost savings. These types of agreements are particularly important in the current era of diminishing government financial resources. The County will play an active role in promoting these agreements, and provide assistance and templates where possible.

**Objective:**

*Safeguard public and environmental health through proper and responsible waste disposal.*

**Encourage Proper Siting and Maintenance of On-site Wastewater Treatment Systems**

Most development in the County outside of incorporated areas utilizes private on-site sewage systems. Wisconsin’s Safety and Professional Services (SPS) regulates the siting, design, installation, and inspection of most private on-site waste treatment systems under SPS 383, which allows both conventional systems and advanced pre-treatment systems for residential development. Properties with soil depths or types unsuitable for conventional systems can now be developed and serviced by advanced pre-treatment sewage systems. The Department of Safety and Professional Services approves plans for pressurized systems, public systems, and acts as a technical advisor for complex sites. Other than these activities, the County administers SPS 383, including issuing permits, conducting inspections, and addressing violations.

Wisconsin counties can further regulate private on-site waste treatment systems through a county sanitary code and permitting process. A county sanitary code must conform to the State Plumbing Code with respect to siting, design, installation and inspection. The County has a sanitary code which it maintains and enforces. The County will consider revisiting and possibly updating its code during the planning period.

The County will work with local communities to promote best practices for new wastewater treatment system placement, and monitor groundwater quality in areas where substantial concentrations of systems are being added. There is a low probability of groundwater pollution associated with on-site waste treatment systems where overall housing densities in an area are less than one house per two acres. There is a higher probability of groundwater pollution at overall densities greater than one house per one acre.

The County will continue to promote the State’s grant program, called the Wisconsin Fund, to help repair or replace failing septic systems. This can be particularly important for concentrations of older systems, such as those along Shawano Lake, which can be problematic. Expansion of public sewer or community/group waste treatment systems in areas of more intensive development are other options, which would require cooperation with the Sanitary/Utility District and/or among property owners. Proper assurances for joint, ongoing maintenance of group facilities is critical, such as through a business owners or homeowners association.

**Explore Public Sanitary Sewer and Water Service in Appropriate Areas of the County**

Certain existing and future development areas in the County may benefit from provision or extension of public utilities in the future. Some areas within the County may benefit from new or expanded systems. These include:

- Interchange areas of Highways 45 and 29 in the Wittenberg area. The eastern interchange area has a hotel and other development on private systems, with more commercial development planned. The western interchange area – including the Highway 45 Corridor headed north – is experiencing pressure for new commercial and residential development that would benefit from sanitary sewer and municipal water services. As described more fully in Town and Village plans for this area, the County
encourages intergovernmental discussions and possibly an intergovernmental agreement to address service and related land uses, boundary, and tax revenue issues in the Wittenberg area.

- Upgraded sewer lines in the portion of the Shawano Lake Sanitary District in the Town of Washington and as needed. Work with the District to explore extension of sewer lines in planned Residential (Sewered) areas on the Town’s Future Land Use map when new development is proposed there, at the cost of the developer. This is generally along the Highway 22 Corridor. Sewered development there would maximize value for both the Town and developer, and provide for the most efficient use of land.

- Upgraded sewer lines in the portion of the Shawano Lake Sanitary District in the Village of Cecil as needed. Work with the District to explore extension of sewer lines in planned Residential (Sewered) areas on the Village’s Future Land Use map when new development is proposed there, at the cost of the developer.

- Potential capacity improvements to the Krakow Sanitary District in the Town of Angelica, the adjacent Green Valley system, and the Caroline Sanitary District in the Town of Grant, and potential expansion of the sanitary districts to accommodate future development in the area – particularly those areas indicated as Residential (Sewered) on the communities’ Future Land Use maps.

- Increased communications with local communities and sanitary sewer systems to require that all new development proposed within the boundaries of the sanitary or utility district connects to such systems. There has recently been unsewered residential development in villages like Cecil, which has led to relatively inefficient use of land, leap-frog development, and strained intergovernmental relations.

In cases where towns are located near or adjacent to a sanitary or utility district serving a city or village, conflict can result when it is city or village policy to not extend these services without also requiring annexation. Intergovernmental negotiations and agreements may be required to secure the extension of municipal utilities to areas intended to remain within a town. This is addressed further in the Intergovernmental Cooperation chapter that follows, and in certain local community comprehensive plans prepared during this process.

Update the County’s Comprehensive Outdoor Recreation Plan
The County adopted a Comprehensive Outdoor Recreation Plan (CORP) in 2007 in order to ensure that it is able to properly maintain and improve County Park and recreational facilities. A State-approved CORP also assures that the County maintains eligibility for State funding for additional park land acquisition, or for park improvements through the State’s Stewardship Grant program or the State-administered Federal Land and Water Conservation (LAWCON) program.

Through this Comprehensive Plan the County supports the recommendations of the recently adopted County CORP. The County intends to regularly update the CORP, required every five years, to maintain eligibility for State funding assistance. The CORP update process should actively engage the public. As of the 2013 Comprehensive Plan update, Shawano County is working with the East Central Wisconsin Regional Planning Commission on an update to the CORP. Potential priorities for a new CORP include the following:

- Provide detailed master plans for as many of the named County parks as possible.
- Take more active steps toward marketing the County’s historic and cultural resources and sites, such as the historic hamlets.
• Enhance facilities at Lake Park (along Shawano Lake in the Town of Wescott) to encourage greater use.
• Improve Hayman Falls County Park in the Town of Pella.
• Identify, improve, and possibly expand local access points (for boats and swimming) to area rivers and lakes.
• Work closely with WisDNR and other public landholders to provide multiple use facilities such as hiking, nature study, bird watching, cross-country skiing, snowshoeing, hunting, and fishing on County and state-owned lands where multiple uses are appropriate and environmentally sound.
• Review and provide guidance on recommendations for Voelz Memorial Park in Wittenberg.

Partner on Planning for Recreational Trails
Trails are an important component of the County’s recreational system. Trails range from the three State trails running through the County, other local off-road trails, on-street bicycle routes, to seasonal snowmobile routes – and serve both motorized and non-motorized users.

Bicycle and Pedestrian Trails
The County has prepared a Bicycle and Pedestrian Master Plan to consider the various needs and opportunities related to bicycle and pedestrian trail facilities.

Snowmobile Trails
Snowmobiling is an important winter recreational and economic activity in Shawano County. The County will continue to work with local snowmobile clubs to maintain these facilities. The County will continue to request Snowmobile Trail Aid from WisDNR. These funds are available to provide a statewide system of well-signed and well-groomed snowmobile trails in Wisconsin. Eligible projects include trail maintenance such as signing, brushing, and grooming; purchase of liability insurance and acquisition of short-term easements; and trail development. Counties are the only unit of government eligible to apply for these aids. The County intends to continue to apply for funds available for snowmobile enforcement patrols. Towns are eligible to apply for WisDNR’s Snowmobile Route Signs program. This program provides funds for initial signing of snowmobile routes and trail crossing warning signs. No local match is required.

All-Terrain Vehicle (ATV) Trails
The increasing popularity of ATV use in recent years has resulted in a growing network of ATV facilities, including the ATV Park in Tigerton. The development of new and expanded ATV facilities and trails for recreational use presents a significant opportunity for local communities. If properly managed, the trails could

PLANNING FOR ATV TRAILS AND PARKS
There are a number of steps to consider when planning for an ATV trail or park, ranging from early planning to the long term maintenance of facilities:
• Plan the route: The new trail should include a variety of landscapes, environments, and views and should have several destinations or points of interest along the way.
• Avoid potential conflicts: The route should avoid sensitive environmental areas and residential development.
• Acquire land or landowner consent: The land needed for trail development should be purchased, if possible. Long-term leases or easements from landowners may also be used to assemble trail routes.
• Map the route: A map is necessary when applying for WisDNR funds to develop the trail and is essential for local trail designers.
• Plan for trail amenities: Locate trailheads, parking lots, and sanitary facilities. Additional amenities might include parks, playgrounds, or campgrounds.
• Consider the development of trail infrastructure: Determine the engineering requirements of the proposed trail, including the number of bridges and trail preparation activities.
• Determine signage needs: Confirm acceptable signage and locate signs along route. Guidelines for signing trails are available on the WisDNR website.
• Purchase insurance: Liability insurance is necessary to protect the community in case of an accident on the trail.
provide an attractive and alternative way for local residents and area visitors to enjoy area woodlands and scenic landscapes. A successful trail network could spark additional economic development supported by the ATV trail users. Some businesses will want to capture the spending dollars from trail users, such as restaurants, hotels, motels, resorts, and campgrounds.

During the local comprehensive planning processes, several communities identified a desire to establish a countywide ATV trail system. Examples of ATV trails on both public and private lands are plentiful in Wisconsin. Trails may travel through private lands with the landowner’s permission and across public lands in coordination with the managing government agency. ATV trails could be open all year or seasonally, depending on the environmental sensitivity of the trail. Some trails close when the temperature is above 28 degrees to prevent rutting and other trail damage. Some trail systems are mixed-use, providing recreational opportunities for snowmobiles, skiers, cyclists, hikers, and other activities. However, mixing those uses can be controversial, and should be considered only in close collaboration with user groups.

In addition, through the local planning process in the Village of Tigerton, the Village recommended the expansion of the Embarrass River ATV Park as demand increases. The Village’s plan also recommended working with Shawano County and surrounding communities to develop an ATV trail which would connect the Embarrass River ATV Park with other recreational facilities.

There are certain steps that need to be taken when planning and developing ATV trails and parks (see sidebar above). Once developed, long-term maintenance involves a variety of activities. Maintenance projects might include: replacement or repair of damaged signs; grading and trail-bed maintenance; brush/tree clearing; and bridge rehabilitation or replacement. WisDNR offers an All Terrain Vehicles Trails Grant program to assist communities with developing their trail system. Counties, towns, cities, and villages can apply for funds to acquire, insure, develop, and maintain ATV trails, areas, and routes. Levels of reimbursement vary according to project and trail type.

Important factors to consider when developing ATV trails are the potential environmental impacts and the cost of ongoing maintenance. Mud and seeds attached to ATV wheels have the potential to spread seeds of invasive weeds into the trails and damage pristine environments. Erosion and loss of wildlife habitat are other issues of concern. It is important to preserve these natural environments. Protecting the pristine landscapes in the County will preserve the scenic beauty of the trails for years to come and continue to draw new visitors to the area, thereby providing stable economic development.

Promote Greater Public Access to Lakes and Streams
Ensuring clean and ample access to natural resources under public ownership was one priority that was identified through the public input component of this process.

The County intends to work with local communities and lake organizations to identify, upgrade, and improve lake and stream access points for both local residents and visitors – including boats and swimmers. Some general improvements that may be undertaken for County-owned boat access areas include expanding park-
Cooperate on Strategies to Maintain the Viability of the School Districts

In the face of declining enrollment, the County will encourage efforts to retain the viability of the school districts serving the area, and educational services directed to educating the area’s youth and providing continuing education and training to adults. To make sure they have a voice in school district decision-making, the County intends to participate, and encourage local government participation, in long-range planning and decision-making district-wide.

Strategies that involve bolstering declining attendance at schools may be useful. This may be accomplished through ideas like:

- Amending district boundaries to add students currently in other school districts.
- Promoting the elementary schools as venues for county-wide and district-wide events.
- Promoting the benefits of small schools (see sidebar on following page). Cost effectiveness is one of the key challenges in preserving small schools. State funded programs like the Student Achievement Guarantee in Education (SAGE) promote lower class size (15:1 ratio) in primary grades.
- Marketing the unique attributes of the school and the greater area to increase the area’s student population. The school’s assets include small class size, quality education, etc. School districts’ curriculum could also be tailored to the unique aspects of the region, enhancing the technological capacities and providing special educational opportunities.
- Working with communities to expand the range of housing and employment options available to potential residents in the area. One innovative approach to this was explored in an Iowa community.

Benefits of Local Small Schools

Small schools, like those in Tigerton, provide numerous benefits, including the following:

- Improve education by creating small, intimate learning communities where students are well-known and can be encouraged by adults who care for them and about them;
- Reduce isolation that adversely affects many students;
- Better for children with special needs;
- Reduce discrepancies in the achievement gap that plagues poor children;
- Encourage teachers to use their intelligence and skills;
- A safe place for students;
- A more positive, challenging environment;
- Higher achievement and graduation rates;
- Fewer discipline problems, and
- Greater satisfaction for families, students, and teachers.

Source: National Clearinghouse for Educational Facilities and Dollars & Sense: The Cost Effectiveness of Small Schools

Ensure that all residents have access to high quality educational opportunities, and maximize the ability to maintain these opportunities.
where a homesteading program makes land available to families at an affordable price, thus creating opportunities and increasing the local student population.

Based on success stories in other communities, other unique strategies that may help ensure the viability of smaller districts include:

- Sharing administrative staff or teachers between schools.
- Offering joint classes within the district via distance education for specialized students. Technology such as the internet, two-way videoconferences, and teleclassrooms enable distance education programs by allowing students and teachers to be in separate locations. Distance learning can also enable students in more than one school to take advantage of advanced courses, which often have lower enrollment, while providing cost savings through avoiding duplication of classes.
- Integrating social and community activities into schools to serve a variety of groups in a community. Adding services often provides added funding opportunities from different sources. These “community learning centers” integrate themselves into the fabric of the civic/social life of the village by performing a variety of functions. These schools provide a central space for a community to meet. Services these schools might provide include educating children during the day; providing meeting space for civic/social groups; serving as polling places; expanding the range of offerings to include a preschool, head start, and extended after-school supervision; offering additional joint uses such as child care and health care services; sponsoring programs for recent immigrants, such as English as a Second Language classes, and providing adult and senior citizen learning and physical fitness activities after normal school hours.

At the time the 2009 version of this Plan was prepared, the County was in the process of preparing a detailed facilities needs study to take a comprehensive look at County facilities needs generally over a 10 year period. The purpose of the study was to:

- Assess all existing County buildings and adjacent facilities and infrastructure for current physical condition.
- Determine suitability of existing County buildings for supporting the mission of the County in providing the necessary services to its residents.
- Consider longevity, condition, and needs in determining how the County should provide services in the most cost effective and efficient manner possible.
- Consider the financial and other impacts of the next ten years for providing safe, secure, and sustainable facilities for all County residents.

The County will consider the recommendations of the study against the recommendations of this Comprehensive Plan to assure consistency.
Access to modern telecommunications technology is an important factor for communities to be able to attract and retain employers and employees – particularly those that are technology based – as well as sustain the quality of life that residents demand. At the time this Comprehensive Plan was prepared, much of the County had access to high speed data transmissions through private providers of these services. The technology of providing the most state-of-the-art telecommunications is rapidly evolving. In addition to fiber optics that can be installed alongside existing electric, water, or sewer utility lines, many communities and residents can gain access to these services through towers that can serve broad areas.

The County supports strategies to enhance telecommunication capabilities for all parts of the County. The County can pair with local communities, Shawano County Economic Progress, Inc. (SCEPI), and regional technical colleges to enhance telecommunication facilities by doing or supporting the following:

- Revisions to the County or local land division ordinances to include provision for installation of high-technology communications infrastructure, such as fiber optic lines, in new subdivisions.
- When roadway improvements are conducted, work with the State and County to ensure fiber optic cables are laid.
- Work with local utility providers which maintain easements and right-of-ways, telecommunications infrastructure, and an existing customer base.
- Conduct a feasibility study exploring various broadband services, determination of the scope of work to install, return on investment, and projected timelines.
- Focus on larger customers in rural areas to determine their need for broadband data transmission.
- Explore funding for this type of community utility investment available through the U.S. Department of Agriculture’s Rural Utility Services division.

**Objective:**

**Promote access to modern telecommunications technology for residents and businesses**

**Wireless Communications for Rural Areas**

Residents in Shawano County are keenly aware of the role telecommunications and the internet play in future economic development and community quality of life. Quality cell phone service, broad band internet, and wireless internet connections continue to grow in importance for the region’s economy. Broadband access, which is needed to connect internet telephone, can be provided over fiber optic cables, satellite, or radio waves.

Not all parts of the County have access to high-speed internet service. Certain locations in the County are not served by cellular communications and high-speed internet (broadband) access.

The remoteness and sparse population of rural communities often becomes a barrier when seeking private investment in infrastructure such as wireless communication networks. However, a number of creative solutions are being successfully implemented to bridge this technology gap. These include:

- Joining with other counties to promote the installation of towers, fiber optic cables and create regional broadband service capacity.
- The USDA’s Rural Utility Service offers grants and loans for high-speed internet/broadband development, and the Federal Communications Commission’s Wireless Outreach Initiative encourages the installation of high-speed internet networks in rural areas.
Energy is a critical consideration for the growth, development, and continued functioning of communities. Rising energy costs and unstable supplies and foreign sources, coupled with global recognition of the financial, social, and environmental impacts of the wasteful use of energy is spurring a movement toward energy-efficiency. Energy-efficiency has many aspects. Through this Comprehensive Plan, the County supports both increased energy-efficiency in government practices and programs and exploring alternative sources of energy to expand local options for production.

**Promote Alternative Strategies to Provide Local Energy Needs**

The use of bio-mass for energy production is a practice that is growing. In a local context, the use of bio-mass for energy to meet the power needs of the farms on which they are produced and other local industry offers the possibility of lowering operational production costs, thereby making these firms more competitive with low cost producers from other regions and countries. Waste materials such as corn stalks and even manure could be used for on-site production of methane and help to reduce the amount of waste that would otherwise have to be disposed or dispersed. There is an opportunity for future businesses within the Shawano Business Park, Wittenberg Business Park, and potentially other areas to benefit from energy reliability increases or byproducts such as steam for production processes.

Other promising products include fuels such as ethanol and bio-diesel, and those derived from cellulosic material. Opportunities related to local energy production for broader distribution are discussed in more detail in the Agriculture and Economic Development chapters.

Another renewable resource, wind energy, also poses interesting possibilities for Shawano County. Smaller wind generators and solar devices could be installed at select sites to help serve more localized needs such as providing power to public institutions or local businesses. Renewable wind energy could provide an environmentally sound and cost-effective source of energy and serve to educate students about renewable energy to prepare them for careers in this growing industry. Shawano County could encourage renewable energy start-up companies to locate in the area, providing a source of jobs for Shawano County’s young people who may have developed an interest in the concept in school, and developed an expertise in it during college.

**Promote Energy Efficient Government Practices**

The County intends to explore options for improving energy-efficiency and sustainability of County government operations. An example of such practices may extend to altering the County’s purchasing process to promote “green” purchases (e.g., not always low bid). Components of such a practice could be similar to those currently being implemented in other communities, such as:

- Conducting energy audits of County buildings.
- Purchasing green energy from utilities.
- Providing alternative commuting and carpooling options for employees.
- Using alternative energy such as photovoltaic and solar hot water systems in service buildings.
- Improving fleet efficiency through use of biodiesel and hybrid vehicles.
- Using “green” and recycled products.
- Encouraging energy-efficient standards for all new and expanded government buildings, such as those advanced by Leadership in Energy and Environmental Design (LEED).
• Integrating “green” building practices into the design and construction of new public buildings or when expanding/upgrading existing buildings.
• Promoting “green” practices in businesses.

See the Economic Development chapter for more information on energy efficiency in government and business practices.

**Stay Informed on Plans for the Location of Power Lines and/or a Substation in the County**

Because new transmission lines are costly to build and difficult to site, energy providers are increasingly looking to increase capacity along existing routes. The County promotes “corridor sharing” or the use of the transmission line’s existing rights-of-way for other facilities. Corridor sharing reduces the impacts by locating linear land uses together, and minimizes the amount of land affected by new easements. It also reduces the proliferation of corridors and easements such roads, pipelines, power lines, and other linear features.

ATC had recently installed, or was in the process of installing several new transmission lines through the County at the time this Plan was prepared as part of its Gardner Park – Central Wisconsin Project. Wisconsin Public Service Corporation is building a 500-megawatt addition to its Weston Power Plant south of Wausau. The transmission system that carries electricity from the existing power plant was built in the 1950s and is inadequate to deliver the increased output from the new generator.

To facilitate transmission of the power generated from this addition, ATC was in the process of constructing a new 345-kilovolt transmission line from a new substation, Gardner Park, located just south of the existing Weston Power Plant, to a new substation, called Central Wisconsin, in central Shawano County. Map 8 shows the locations of American Transmission Company power lines.
### Figure 8.4: Timetable to Expand, Rehabilitate, or Create New Community Utilities or Facilities

<table>
<thead>
<tr>
<th>Utilities &amp; Community Facilities</th>
<th>Timeframe</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Supply</td>
<td>Ongoing</td>
<td>Encourage communities to adopt wellhead protection programs for municipal wells. Implement strategies to ensure a high-quality groundwater.</td>
</tr>
<tr>
<td>Sanitary Wastewater Treatment</td>
<td>Ongoing</td>
<td>Assist communities with intergovernmental discussions and agreements related to extending municipal sanitary sewer lines. Encourage places with sanitary sewer service to require connections to those facilities to areas that can be served.</td>
</tr>
<tr>
<td>On-Site Wastewater Treatment (Septic) Systems</td>
<td>Ongoing</td>
<td>Promote the State’s Wisconsin Fund to help repair or replace failing septic systems; promote the use of public sewer and water or community/group waste treatment systems in areas of intensive development where sanitary sewer not available. Explore update to County Sanitary Code.</td>
</tr>
<tr>
<td>Stormwater Management</td>
<td>Ongoing</td>
<td>Work with the State and local communities to establish and enforce erosion control and stormwater management standards for new development.</td>
</tr>
<tr>
<td>County Facilities</td>
<td>2009</td>
<td>Complete Phase 2 of the County Facilities Space Needs Study.</td>
</tr>
<tr>
<td></td>
<td>2009 +</td>
<td>Implement the recommendations of the County Facilities Space Needs Study, as recommended by the County Board.</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>Ongoing</td>
<td>Update the Comprehensive Outdoor Recreation Plan. Implement the Bicycle and Pedestrian Master Plan. Update the Comprehensive Outdoor Recreation Plan. Support local efforts to provide access to natural areas.</td>
</tr>
<tr>
<td>Telecommunication Facilities</td>
<td>Ongoing</td>
<td>Support strategies for enhancing telecommunication capabilities. Participate in efforts to make employers and residents aware of telecommunications services that are available.</td>
</tr>
<tr>
<td>Energy/Transmission/Power Plants</td>
<td>Ongoing</td>
<td>Promote efforts to provide alternative sources of energy. Explore more energy efficient County government practices. Continue to stay informed on plans by ATC for improvements to and location of power lines/transmission stations.</td>
</tr>
<tr>
<td>Child Care Facilities</td>
<td>N/A</td>
<td>Future needs will be met by private parties.</td>
</tr>
<tr>
<td>Health Care Facilities</td>
<td>N/A</td>
<td>Existing and proposed medical facilities in the area expected to meet needs.</td>
</tr>
<tr>
<td>Senior Center/Care Facilities</td>
<td>N/A</td>
<td>Facilities in the County appear to meet needs.</td>
</tr>
<tr>
<td>Schools</td>
<td>Ongoing</td>
<td>As requested, work with the School Districts on long-range</td>
</tr>
<tr>
<td>Utilities &amp; Community Facilities</td>
<td>Timeframe</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>-----------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Library</td>
<td>N/A</td>
<td>Libraries in the County are expected to meet current and forecasted needs.</td>
</tr>
<tr>
<td>Police/Protective Services</td>
<td>N/A</td>
<td>Provided by the Shawano County Sheriff's Department; service meets current and forecasted needs.</td>
</tr>
<tr>
<td></td>
<td>2009 +</td>
<td>Explore space needs for jail as part of Phase 2, County Space Needs study.</td>
</tr>
<tr>
<td>Fire and EMS</td>
<td>Ongoing</td>
<td>Encourage continuation of joint service arrangements.</td>
</tr>
<tr>
<td>Cemeteries</td>
<td>N/A</td>
<td>Existing and proposed cemeteries in the area expected to meet needs, mostly provided by private parties.</td>
</tr>
</tbody>
</table>
Map 9: Soil Suitability for On-Site Wastewater Treatment Systems
Chapter Nine: Housing & Neighborhood Development

Housing is a necessity for the health and well-being of all Shawano County residents. Having a county-wide plan and policy for housing and neighborhood development is important in order to:

- Provide housing options to flexibly accommodate the variety of needs in Shawano County – including first-time homebuyers, renters, the elderly, retirees, families, workers, executives, and those with lower income, disabilities, or other special needs.
- Ensure high appearance and maintenance standards for housing helps residents feel that they live in a high-quality community. Housing is such a dominant feature of the landscape that poorly maintained or arranged housing can have a major impact.
- Demonstrate the individuality of individual communities. For example, housing options in the County’s cities and village may be different and more diverse in type, density, character, and appearance than in more rural places.

This chapter contains a compilation of background information, goals, objectives, policies, and recommended programs aimed at providing an adequate housing supply that meets existing and forecasted housing demand in Shawano County. It also provides standards for neighborhood and subdivision development, in areas where more intensive housing is proposed, where appropriate.

**Housing & Neighborhood Development Recommendations Summary**

- Provide a wide range of housing choices
- Encourage high standards of housing construction and maintenance
- Site new housing development in a way to maximize efficiency in delivering infrastructure and services
- Promote conservation neighborhood design techniques to harmonize new housing with the landscape
- Avoid conflicts between housing and nearby development
Existing Housing and Neighborhood Framework

This section describes Shawano County’s housing stock characteristics including type, value, occupancy status, age, and structural condition. This section also provides projected housing demand information in the County and describes available housing development and rehabilitation programs.

According to the 2007-2011 American Community Survey, 20,641 housing units exist in Shawano County. As shown in Figure 9.1, the majority of the County’s housing stock is single-family homes. This proportion is consistent with adjacent rural counties, and greater than the Statewide figure (70.8 percent). Shawano has a substantially higher percentage of mobile homes than all adjacent counties, except Oconto.

The pace of housing development in the County increased in the early 2000s. According to US Census, Shawano County added 1,580 housing units between 1990 and 2000. The American Community Survey estimates between 2000 and 2011, an additional 2,324 housing units were developed.

Figure 9.1: Housing Types, Shawano County, 1990-2011

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>13,076</td>
<td>78.10%</td>
<td>14,591</td>
<td>79.70%</td>
<td>16,283</td>
<td>78.90%</td>
</tr>
<tr>
<td>Two Family (Duplex)</td>
<td>730</td>
<td>4.40%</td>
<td>779</td>
<td>4.30%</td>
<td>993</td>
<td>4.80%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>966</td>
<td>5.80%</td>
<td>1,305</td>
<td>7.10%</td>
<td>1826</td>
<td>8.80%</td>
</tr>
<tr>
<td>Mobile Home or Other</td>
<td>1,965</td>
<td>11.70%</td>
<td>1,642</td>
<td>9.00%</td>
<td>1539</td>
<td>7.50%</td>
</tr>
</tbody>
</table>

*Source: 2007-2011 American Community Survey 5-year Estimates
Figure 9.2 compares the County’s other 2010 housing stock characteristics with surrounding counties, the region and the State. In 2010, the County had an average homeowner vacancy rate of about 2.6 percent, and about 76 percent of the County’s housing units were owner-occupied. Over 12 percent of the County’s housing stock is considered “Seasonal, Recreational, or Occasional Use.” This is a relatively large portion compared to surrounding counties, and is possibly a result of the influx of visitors during hunting season, along with seasonal waterfront residences. The 2007-2011 American Community Survey median housing value estimate in Shawano County was $124,800, an increase of $40,800 from 20000 (48.6 percent). About 52 percent of the County’s 2010 housing stock was valued in the $50,000 to $149,999 price range.

**Figure 9.2: Housing Stock Characteristics, 2010 & 2007-2011 ACS 5-Year Estimates**

<table>
<thead>
<tr>
<th></th>
<th>Total Housing Units</th>
<th>Seasonal, Recreational, or Occasional Use Housing Units</th>
<th>% Vacant (Homeowner)</th>
<th>% Vacant (Rental)</th>
<th>% Owner Occupied</th>
<th>Median Housing Value Value ($) Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shawano County</strong></td>
<td>20,720</td>
<td>2,581</td>
<td>2.6</td>
<td>8.1</td>
<td>76.4</td>
<td>124,800</td>
</tr>
<tr>
<td>Brown County</td>
<td>104,371</td>
<td>670</td>
<td>1.8</td>
<td>7.2</td>
<td>65.6</td>
<td>159,900</td>
</tr>
<tr>
<td>Langlade County</td>
<td>12,360</td>
<td>3,100</td>
<td>2.4</td>
<td>8.5</td>
<td>76.4</td>
<td>107,100</td>
</tr>
<tr>
<td>Marathon County</td>
<td>57,734</td>
<td>840</td>
<td>2.2</td>
<td>11.1</td>
<td>73.5</td>
<td>141,700</td>
</tr>
<tr>
<td>Menominee County</td>
<td>2,253</td>
<td>881</td>
<td>0.8</td>
<td>1.3</td>
<td>71.1</td>
<td>96,000</td>
</tr>
<tr>
<td>Oconto County</td>
<td>23,537</td>
<td>7,025</td>
<td>2.5</td>
<td>8.4</td>
<td>83</td>
<td>147,300</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>73,149</td>
<td>352</td>
<td>1.8</td>
<td>6.1</td>
<td>71.4</td>
<td>155,300</td>
</tr>
<tr>
<td>Portage County</td>
<td>30,054</td>
<td>893</td>
<td>1.3</td>
<td>5.9</td>
<td>69.2</td>
<td>144,400</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>25,396</td>
<td>2,387</td>
<td>2.7</td>
<td>10.8</td>
<td>75.6</td>
<td>138,300</td>
</tr>
<tr>
<td>East Central Region *</td>
<td>293,807</td>
<td>17,686</td>
<td>2.4</td>
<td>7.8</td>
<td>75.3</td>
<td>138,320</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>2,624,358</td>
<td>193,046</td>
<td>2.2</td>
<td>8</td>
<td>68.1</td>
<td>169,700</td>
</tr>
</tbody>
</table>

* East Central Region includes Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara, and Winnebago Counties

Source: U.S. Census of Population and Housing, 2010
Figure 9.3 illustrates the age of Shawano’s housing stock based on 2007-2011 American Community Survey Census data. The age of a community’s housing stock can be used as a measure of the general condition of the community’s housing supply. Shawano County has a relatively old housing stock. The County experienced periods of increased construction interspersed with periods of less housing construction. About 25 percent of the County’s homes were built before 1940. The several years have shown a moderate rate of construction, with an estimated 15 percent of housing added between 2000 and 2011. Over the planning period, owners of these older homes may be interested in rehabilitation efforts. The pace of housing development occurring since 2000 also suggests a growing percentage of housing in the County is newer stock.

**Figure 9.3: Age of Housing as a Percent of the Total 2000 Housing Stock, 2007-2011 ACS, 5-Year Estimates**

Source: American Community Survey, 2007-2011 5-year estimates

**Housing Affordability**

The American Community Survey 2007-2011 estimates the percentage of homeowners in Shawano County paying 30 percent or more of their income for housing is 26 percent, comparable to the State’s 28 percent. The percentage of Shawano County renters paying 30 percent or more of their income for housing was 41 percent, compared to the State’s 47 percent.

The East Central Wisconsin Regional Planning Commission compiled ten Census variables (including age of occupied units, homeowner and rental vacancy rates, owner-occupied housing values, renter and owner-occupied housing affordability and housing conditions) to measure housing stress within the region. The ECWRPC produced a composite map of the region indicating the level of “housing stress” in each jurisdiction. The levels range from “adequate” to “moderate” to “substantial” to “severe.” It is

**Housing Affordability**

Housing affordability may be measured by the proportion of household income spent for rent or home ownership costs. The national standard for determining whether rent or home ownership costs comprise a disproportionate share of income is set at 30 percent of gross household income. Households spending more than 30 percent of their income for housing may be at risk of losing their housing should they be confronted with unemployment, unexpected bills, or other unexpected events.
important to note that this compilation did not include household incomes or household wealth, which could alleviate individual “housing stress” conditions through the region. According to this composite map (ECWRPC 2003 State of the Region Report, page 27), no communities within Shawano County face “severe” housing stress, but approximately half of the 25 towns within Shawano County were identified as having a “substantial” level of housing stress. Of the 25 towns, 9 were identified as having a “moderate” level of housing stress.

**Neighborhood Development Trends**

A variety of housing options are provided in the County. Options include housing in older neighborhoods in the City, villages, and hamlets; newer single-family, duplex and multi-family housing; rural subdivisions in the towns; and scattered rural housing on farmettes or farmsteads. Residents and newcomers have a wide range of choices.

Despite the range of existing choices, there has been uneven new housing and neighborhood development across the County – both in terms of location and pace. By far, the most rapid pace of housing growth in the County occurred in the City of Shawano – where an annual average of 62 new permits for homes was issued between 1995 and 2006. About 2/3 of this total was comprised of new multi-family units. The villages in the County grew at a much slower pace. The Village of Cecil, for instance, has averaged 9 units per year in recent years.

New housing and neighborhood development in the towns has also been highly variable. Generally, towns in the eastern part of the County, particularly those adjacent the City of Shawano, have experienced the most rapid pace of growth over the last decade. The Town of Wescott averaged nearly 35 new homes per year and the Town of Washington averaged over 20 during the 10 year period between 1995 and 2005. The housing development in these towns outstripped that occurring in most of the villages throughout the County. Areas of the County with lakefront housing opportunities also tended to experience faster rates of growth. Some of the towns in the Western part of the County tended to have the slowest rates of growth – many of them averaging less than 5 new units of housing per year.

**Housing and Neighborhood Development Goals, Objectives and Policies**

**Goal:**
1. Encourage a wide range of housing and neighborhood choices to accommodate the variety of needs and desires of County residents.

**Objectives:**
1. Support a range of housing choices, including affordable housing, to meet the needs of persons of all income levels, age groups, and special needs.
2. Encourage high quality construction and maintenance standards for housing.

3. Encourage home siting that efficiently makes use of existing community facilities, emergency and other services, utility, and transportation infrastructure; and will not result in property or environmental damage or impair rural character or agricultural operations.

4. Encourage neighborhood designs and locations that protect residential areas from conflicts with incompatible land uses, promote connectivity of road and environmental systems, and preserve the integrity of agriculture, forests, and community character.

5. Apply conservation neighborhood design principles to new neighborhoods throughout the County.

**Policies:**

1. Plan for a sufficient supply of developable land for a range of different housing types in areas consistent with County land use goals, and of densities, types, and locations consistent with community service and utility availability. The recommended Future Land Use map for Shawano County (combination of Maps 7a, 7b, and 7c) will more than accommodate expected housing demand over the 20 year planning period within a variety of residential and rural land use designations.

2. Support the private market in developing affordable housing for low and moderate income people and housing for the elderly. Several State and federal programs and funding sources are available to assist private developers, Shawano County, local governments, and residents meet affordable housing objectives. Examples of these are described in the following section.

3. Support efforts to rehabilitate housing in areas where current housing stock is deteriorating.

4. Encourage high quality construction and maintenance standards for housing by:
   - Enforcing regulations designed to discourage incompatible uses (e.g., junk vehicle storage) in residential areas.
   - Considering the expansion of the County Nuisance Ordinance to address issues of basic house and lot maintenance.
   - Considering the use of programs and funds (e.g., Community Development Block Grant) to provide, maintain and rehabilitate housing for all income and age levels. Using CDBG funds, communities may establish rehabilitation loans or grants to assist owner-occupants with repairs.
   - Enforcing regulation of temporary dwelling units by more carefully monitoring the amount of time a temporary dwelling unit (trailer) can be in place. Through local planning processes, several towns identified concerns with long-term placement of “temporary” housing.

5. When reviewing new housing development proposals, encourage strategies to protect water quality and natural resources, particularly around the environmental corridor areas. Such standards may include stormwater basins and natural conveyance routes, rain gardens, landscape buffyards, and other similar innovative techniques.

6. Direct new residential development to areas easily served by existing infrastructure, including highways, streets, electric and gas distribution, and easy driveway access.

7. When reviewing new housing development proposals, encourage strategies to protect contiguous blocks of agricultural and forested land. Potential strategies are discussed in the following section.

8. Amend the County subdivision ordinance to promote quality neighborhood design and layout in new residential areas, adhering to appropriate standards for roads, stormwater management and infiltration, lot placement in new subdivisions, and conservation neighborhood design (discussed in more detail later in this chapter).
9. Support efforts to protect private homes from natural hazards, including wildfire hazard through thoughtful home siting and grounds maintenance, including:

- Educating residents on the risk of wildfires and taking measures to ensure that emergency responders can safely and adequately fight fires and access homes.
- Providing local fire agencies the opportunity to review and comment on major subdivisions or large-scale non-residential development projects. The location of individual homesites, parks, open recreational lands, roads, trees, and landscaping should also be reviewed with fire protection in mind.
- Encouraging driveway ordinances that provide for safe access to homesites. WisDNR has additional information to help educate both newcomers and long-term residents on the hazards wildfires pose on lives and private property.

**Housing and Neighborhood Development Recommendations and Programs**

**Allow Establishment of High Quality Manufactured Home Parks**
Manufactured housing and mobiles homes are a practicable source of affordable housing in Shawano County. The term “manufactured housing” describes housing that was constructed in a factory after 1976 and delivered to the site as a finished product. Since 1976, construction of these factory-built units has been regulated by the U.S. Department of Housing and Urban Development (HUD) building codes. These regulations have ensured higher quality and safety standards in the construction of manufactured housing.

Manufactured housing is a practical alternative to traditional housing for individuals seeking an affordable housing option. The County has established standards for individual manufactured homes to ensure they meet both health and safety requirements. In addition, the County’s zoning ordinance includes modern standards for manufactured home and mobile home parks.

**Plan for a Sufficient Supply of Developable Land for Housing**
Through this multi-jurisdictional planning effort, Shawano County, in conjunction with the participating towns, villages and city, has planned for sufficient areas for residential development to accommodate at least 20 years of anticipated housing demand. The Land Use chapter projects demand for development. The County will certainly be able to accommodate that development. The question of how much land will be needed to do so will be driven by choices that are made during the planning period about density of development, lot size, and other development factors. The policies contained in each chapter of this Plan help to inform those decisions to ensure that housing needs will be provided in the County while continuing to maintain the rural character of the County, punctuated by cities, villages, and other areas of concentrated development. In general, intensive areas of new housing development are proposed to be located in or near the City and villages, or in areas with substantial amounts of existing development, such as sanitary districts.

The recommended Future Land Use map for Shawano County (combination of Maps 7a, 7b, and 7c) will accommodate significant housing development over the 20 year planning period and beyond, within a variety of residential and rural land use designations. Figure 9.4 illustrates the continuum of housing densities recommended in the various future land use categories depicted on Maps 7a, 7b, and 7c.
Figure 9.4: Continuum of Housing Densities in Different Future Land Use Categories

<table>
<thead>
<tr>
<th>LANDSCAPE CHARACTER</th>
<th>DENSITY OF RESIDENTIAL DEVELOPMENT</th>
<th>FUTURE LAND USE CATEGORY NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undeveloped</td>
<td>No Homes</td>
<td>Public Open Space</td>
</tr>
<tr>
<td></td>
<td>1 Home per 10 Acres</td>
<td>Agriculture &amp; Natural Resource</td>
</tr>
<tr>
<td></td>
<td>1 Home per 2.5 Acres</td>
<td>Residential (2-5)</td>
</tr>
<tr>
<td></td>
<td>1 Home per 1 Acre</td>
<td>Mixed Residential or Planned Neighborhood</td>
</tr>
<tr>
<td></td>
<td>1 Home per 0.5 Acre</td>
<td>Residential (0.5-2.5)</td>
</tr>
<tr>
<td></td>
<td>1 Home per 0 Acre</td>
<td>Residential (0-0.5)</td>
</tr>
<tr>
<td></td>
<td>1 Home per 0 Acre</td>
<td>Residential (0-0.5)</td>
</tr>
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</tr>
<tr>
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<td></td>
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<tr>
<td></td>
<td>1 Home per 0 Acre</td>
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<tr>
<td>Medium Density</td>
<td>1 Home per 10 Acres</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
<td>1 Home per 0 Acre</td>
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<tr>
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<tr>
<td></td>
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<tr>
<td></td>
<td>1 Home per 0 Acre</td>
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</tr>
</tbody>
</table>

NOTE: The listed “Future Land Use Category Names” are from a wide variety of different designations available for future land use plans and may vary by town, village, and city plans.
Support Efforts to Provide for Affordable Housing
Throughout Shawano County, several governmental, private, and nonprofit agencies provide some form of assistance to meet the needs of individuals who lack adequate housing due to financial difficulties, disabilities, age, domestic violence situations, or drug abuse problems. According to the Wisconsin Housing and Economic Development Authority (WHEDA), there were 567 federally assisted rental units in the County in 1999. Of these, 356 were elderly units, 198 were family units, and 13 were units for disabled individuals.

The following housing providers and programs are available to Shawano County, its communities and/or its residents:

- The U.S. Veterans Administration provides low-cost loans and other housing assistance to veterans in the County.
- WHEDA is the most active housing agency in Shawano County and has constructed most of the affordable housing for low-income families and seniors. WHEDA administers a variety of programs designed to assist moderate and low-income homeowners and renters. WHEDA programs also encourage the development of affordable and low-income multiple-family housing by providing private investors with income tax credits when they invest in these types of housing developments. Tax credits are allocated to housing projects on a competitive basis. Local government support is an important factor in the award of tax credits. The WHEDA web site contains information on the most up-to-date programs available.
- The Wisconsin Department of Administration (DOA) provides loans to low and moderate income homebuyers in the County.
- The Housing Cost Reduction Initiative (HCRI) provides funding to local public and non-profit agencies throughout Wisconsin to reduce housing costs for low- and moderate-income households. Funds are administered through an application process, which is competitive. Eligible activities can include emergency rental aid, down payment assistance, homeless prevention efforts and related housing initiatives.
- Local Housing Organization Grants (LoHOG) are available through State-funded and administered program provides grants to local housing organizations to help support staff salaries, administrative costs, and operating expenses associated with the provision of affordable housing and housing counseling for low-income households. Funds are administered through an application process. Applications are typically due in November.
- The Section 8 Program is a federal program that provides rent assistance to eligible low-income families based on family size, income, and fair market rents. Typically, the tenant’s share of the total rent payment does not exceed 30 percent of annual income under this program.
- The Multi-family Mortgage Program is a State-administered program that provides construction and/or permanent financing in the form of below-market interest loans to private non-profit groups and for-profit entities for the development of multi-family rental units.
- The Shawano County Community Development Block Grant (CDBG) Housing Rehabilitation Program provides no-interest loans and down payment assistance to homeowners and landlords for housing rehabilitation projects.
- Rural Development is a nonprofit agency active in central Wisconsin that provides housing assistance in the form of low-interest loans to low-income homebuyers.
- Habitat for Humanity offers homeownership opportunities to people of moderate or low incomes in Shawano County. Habitat for Humanity asks able-bodied purchasers to help build their new home and, in return, receive low interest loans.
- The Shawano County Housing Authority provides housing of various types to low-income individuals and families based on income and need.
Other agencies providing housing services in the County include religious institutions and social service agencies that provide housing services to persons with disabilities, persons with HIV/AIDS, and seniors.

In cooperation with local governments, the County also intends to facilitate the provision of affordable housing by promoting subdivisions with home sites clustered on smaller, more affordable lots. The price of land is often a substantial barrier to home ownership. These types of neighborhood design principles are discussed later in this chapter.

In addition, the ECWRPC completed an in-depth study of affordable housing needs and challenges. This report, “Overcoming Barriers to Affordable Housing in the East Central Region” is a reference for those planning affordable housing projects. The report is available on the ECWRPC web site.

**Objective:**

Encourage high quality construction and maintenance of housing and residential areas.

**Connect Lower Income Residents with Housing Maintenance Programs**

Maintenance of housing and residential areas has been identified as a concern in some areas of Shawano County, and a long-term priority of communities to ensure that they maintain the value and aesthetics of their area. Several State and federal programs and funding sources are available to assist Shawano County, local governments, and residents meet housing and maintenance objectives. The County and UW-Extension Office should work with State, federal, and non-profit agencies to access these programs. The following is a brief description of the four most likely programs that will be considered to help County residents maintain housing.

- **Community Development Block Grant (CDBG):** The CDBG program provides grants to county and local governments for housing rehabilitation programs that primarily benefit low- and moderate-income households. Using CDBG funds, communities may establish rehabilitation loans or grants to assist owner occupants with repairs. In Wisconsin, the Department of Administration’s Bureau of Housing administers the CDBG program. Any Wisconsin rural county, city, village, or town with a population less than 50,000 residents is eligible to apply for grant funding. The application deadline is typically in September.

- **Home Investment Partnership Program (HOME):** The HOME program is intended to expand the supply of affordable housing, especially rental housing, to very low income and low-income families. In Wisconsin, the Department of Administration’s Bureau of Housing administers the HOME program. Grant awards typically fund down payment assistance for home buyers, weatherization related repairs, rental rehabilitation, accessibility improvements and rental housing development. The application deadline is typically in May.

- **Low Income Energy Assistance Program (LIEAP):** This State-administered program provides payments to utility companies or individuals upon billing to help pay for home heating costs. This program is funded by both the State and federal governments, and is only available to individuals below 150 percent of the federal poverty level. Funds are administered through an application process.

- **Property Tax Deferral Loan Program (PTDL):** This State-administered program provides loans to low- and moderate-income elderly homeowners to help pay local property taxes, so that the elderly can afford to stay in their homes. To be eligible, individuals must be at least 65 years old with a spouse that is at least 60 years old, unless one is disabled.
Update and Enforce Standards for Housing Maintenance and Placement

In addition to housing rehabilitation, Shawano County and its local governments should review and continue to enforce their nuisance ordinance and property maintenance codes in an effort to improve residential areas and the overall health and safety of the community. Several towns have identified property maintenance as a key planning issue (e.g., control of junk vehicles and parts storage, placement of hunting shacks). The County may address standards to ensure proper maintenance for existing homes and that new homes – permanent and temporary – fit within their surrounding context.

For several communities, ensuring that “hunting shacks,” campers, and trailers are thoughtfully sited and appropriately maintained throughout the year is a way for the community to protect the image, health, and safety of its residents. A secondary effect of the increase in private woodland ownership is the infusion of “hunting shacks,” campers, and trailers throughout some areas of the County. These structures can be permanently placed upon parcels but only occupied for a very limited amount of time.

Factory-built homes constructed prior to 1976 are commonly referred to as “trailer homes.” These factory-built units were constructed prior to regulation by the U.S. Department of Housing and Urban Development (HUD) building codes. Many of the factory-built homes placed on sites in rural Shawano County are of this variety and are only occupied seasonally or have abandoned. The temporary nature of these structures invites maintenance issues that can become health and safety hazards. Proper maintenance of trailers, campers, and hunting shacks is important in preserving the health and safety of County residents.

Working with towns with particular concerns, the County has revised standards pertaining to the placement and maintenance of “hunting shacks,” campers, and trailers in its 2011 Zoning Ordinance update.

Promote Design of New Neighborhoods that Protect the County’s Landscape Character

Through this Plan, the County endorses high-quality design and layout in all newly planned residential areas in both urban and rural locations. This includes protecting “environmental corridors” during the land division and construction phase and providing safe and adequate road access. In all areas where Maps 7a, 7b, and 7c anticipates new residential development, the County encourages the use of “conservation neighborhood de-
sign” techniques in the planning and developing of subdivisions. (The County Future Land Use Map is the assemblage of each Shawano community’s future land use recommendations.) Conservation neighborhood design is an overall approach to designing new residential developments in a manner that achieves many of the goals of this Plan. Design principles for conservation neighborhoods are included in the County Zoning Ordinance.

This house was sited with consideration to the surrounding natural features and is effectively “hiding” behind the tree line – therefore reducing impact on the natural character of the landscape.
Figure 9.5: Example of Conservation Neighborhood Development Compared to Conventional Development
Support Efforts to Protect Private Homes from Wildfire and other Natural Hazards

Protecting homes against natural hazards, like flooding and wildfires, is a key result of good land use planning. Changes in the global climate over the next 20 to 50 years may also exacerbate these hazards. One area of importance is wildfire hazard prevention. Given the coverage of forestland across Shawano County, and the increasing incidence of wildfire at the wildland-housing interface, it is important to minimize the hazards to areas within the County posed by potential wildfire.

Effective fire protection for homes in rural areas takes more than just investment in equipment, personnel, and training. County and local governments can work with private developers and homeowners to educate them on the risk of wildfires and take measures to ensure that emergency responders can safely and adequately fight fires in residential areas. Local fire agencies in Shawano County should be provided the opportunity to review and comment on major subdivisions or large-scale non-residential development projects in the County. The location of individual home sites, parks, open recreational lands, roads, trees, and landscaping should be reviewed with fire protection in mind. A driveway ordinance could also be used to secure emergency vehicle access to private homes in the wildland-housing interface.

The County acknowledges that the “clustering” of homes in wooded areas to preserve farmland makes these homes more vulnerable to wildfire. As such, homeowners are encouraged to create a “defensible” space around their home. This is the area around the home where steps should be taken to reduce or eliminate the threat of wildfire spreading and where firefighters can safely work to protect the structure. WisDNR recommends a 30-foot defensible space where the grass is kept short; flammable debris is removed; trees and bushes are pruned, well-spaced, and preferably restricted to deciduous species. Woodpiles, outdoor burning pits, and storage of other flammable materials should be kept out of this 30-foot zone. WisDNR has a recommended list of fire-resistant plants and groundcover that could be planted in this zone. Care should also be given to the building materials (particularly roof materials) used in the construction of new homes. Keeping tree branches away from the roof is another important method to reduce wildfire spreading. The County intends to utilize WisDNR resources to help educate both newcomers and long-term residents on the hazards that wildfires pose on lives and private property. Sharing the WisDNR publication “Living with Fire: A Guide for Homeowners Living in the Wildland-Urban Interface” with residential developers or any person seeking a residential building permit may be an appropriate first step in this effort.
Chapter Ten: Economic Development

Economic health is absolutely essential to maintain and enhance quality of life in the County. Indeed, few of the recommendations of this Comprehensive Plan would be possible to achieve without a strong economy, and many of the recommendations in other chapters contribute indirectly to a strong economy. Having a county-wide plan and policy for economic development is important in order to:

- Ensure the health and prosperity of County residents and communities, through strong tax base, entrepreneurial opportunities, and good paying and rewarding jobs.
- Provide flexibility in developing a diverse economy that is responsive to future trends and helps weather downturns in certain sectors.
- Provides income and wealth to help increase the range of individual choices for residents.

This chapter contains a compilation of background information, goals, objectives, policies and recommended programs to promote the retention and expansion of the economic base in Shawano County. This chapter includes an assessment of new businesses and industries that are desired in the County and an assessment of the County’s strengths and weaknesses with respect to attracting and retaining these businesses and industries.

**ECONOMIC DEVELOPMENT RECOMMENDATIONS SUMMARY**

- Promote the retention and expansion of existing businesses to secure good jobs and tax base
- Foster entrepreneurship and innovation
- Explore and adopt new and expanded uses for agricultural, timber, and other renewable resources, which are plentiful in the County
- Enhance the character and vitality of downtowns and hamlets
- Reserve future highway interchange areas for high-value economic growth
- Help fill and expand the County’s industrial parks with businesses poised for growth and career-oriented job opportunities
- Market County assets with support and cooperation from regional agencies, municipal governments, educational institutions, and business groups
- Ensure the County’s ordinances provide for high-quality economic development
Existing Economic Development Framework

This section details labor force trends, educational attainment, employment forecasts, income data, and other economic development characteristics of the County. The economic base of lands within the County consists of industrial and business parks in the City and several of the villages; commercial development corridors; small downtowns/unincorporated villages; highway-commercial development at some Highway 29 interchanges and farming with few small non-farm businesses in scattered locations.

Labor Force Trends
The County’s labor force represents the portion of the population currently employed or available for work. The labor force includes people who are in the armed forces, employed, unemployed, or actively seeking employment. According to 2013 Department of Workforce Development data, 22,289 County residents age 16 or older are in the labor force. This is a 4.5 percent decrease since 2003. Of those in the labor force, 20,622 are employed. As of June 2013, the County’s civilian unemployment rate stood at 7.5 percent. For comparison, in June 2013 the unemployment rate for the State was around 7.0 percent.

According to the State’s Department of Workforce Development (WisDWD), Shawano County’s labor force grew by nearly 18 percent between 1992 and 2012. The County’s labor force had its largest increase of workers between 1993 and 1994 when it increased by 1,690 workers. This occurred about two years after the 1991 recession while the nation was beginning a relatively long economic growth period. Another large increase in the County’s labor force occurred in 2000, just before a more recent recession. Since 2001, Shawano County’s labor force has remained relatively constant. The unemployment rate for Shawano County in 2012 was 7.7 percent.

Educational Attainment
Educational attainment is another component of a community’s labor force. According to the 2010 Census, more than 88 percent of the County’s population age 25 and older had attained a high school level education or higher. Approximately 14.5 percent of this same population had attained a college level education (bachelor’s degree or higher).

Income Data
According to the 2007-2011 American Community Survey, the estimated median household income from 2007-2011 in Shawano County was $45,587. Twenty-two percent of households reported an income between $50,000 and $74,999, with the next highest percentage of residents (17.5 percent) earning from $35,000 and $49,999. Figure 10.1 compares the County’s median household income and per capita income with neighboring counties.
Figure 10.1: Median Household Incomes

<table>
<thead>
<tr>
<th></th>
<th>Median Household Income ($)</th>
<th>Per capita Income ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>45,587</td>
<td>22,828</td>
</tr>
<tr>
<td>Brown County</td>
<td>53,353</td>
<td>37,344</td>
</tr>
<tr>
<td>Langlade County</td>
<td>42,045</td>
<td>22,295</td>
</tr>
<tr>
<td>Marathon County</td>
<td>54,316</td>
<td>26,763</td>
</tr>
<tr>
<td>Menominee County</td>
<td>32,017</td>
<td>15,346</td>
</tr>
<tr>
<td>Oconto County</td>
<td>49,396</td>
<td>25,852</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>57,190</td>
<td>27,573</td>
</tr>
<tr>
<td>Portage County</td>
<td>51,887</td>
<td>25,207</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2007-2011 American Community Survey

Commuting Patterns

Approximately half of Shawano County’s workforce is employed outside the County; according to the American Community Survey 2006-2010. Of the 7,931 workers commuting to places outside the County, 34 percent (2,713 workers) commuted to Brown County. Marathon County and Waupaca County were the second and third most common workplace destinations, drawing almost 14 percent of the commuting workforce respectively (1,096 and 1,086 workers). The fourth most common workplace destination was Outagamie County, with approximately 11 percent of commuters or 903 workers. Approximately 9 percent or 723 workers commuted to Menominee County. Roughly 960 Shawano County workers commuted to one of the other nearby counties: Langlade, Oconto, Winnebago and Portage. In contrast, about 2,932 workers commuted into Shawano County for employment. Substantial numbers drove in from Waupaca (609 workers), Oconto (575 workers), Brown (488 workers), and Marathon (467 workers) counties. The 2007-2011 American Community Survey estimated the average time a County resident traveled to work increased from 19 minutes in 1990 to over 23 minutes, suggesting many residents are taking jobs even further away.

Employment Trends

Shawano County has a fairly diverse economy for a rural area. The County’s primary economic activities are manufacturing, education, health, and social services employment. According to American Community Survey, 2007-2011 Estimate, the largest proportion of the 22,289 employed persons living in Shawano County were employed in the education, health, or social services sectors (20.9 percent), followed by the manu-

Commuter Challenges and Opportunities

Many rural counties lose a large percentage of their workforce to neighboring metro areas. The communities of Shawano County face commuter related opportunities and challenges due to the County’s geographic position. Located between Green Bay, the Fox Valley, and Wausau, nearly half of all Shawano County workers commute to locations outside Shawano County. Common concerns for heavy commuter counties include increased fuel consumption, increased fuel costs, the loss of a valuable labor source, and a disproportionate share of the tax base dedicated to maintaining local roadways. Communities facing these challenges need to find innovative ways to promote local assets. New businesses can benefit from superior existing infrastructure or natural assets that are common in Shawano County but in shorter supply nearby. Significant advances in technology also make telecommuting a viable option. If the County employs strategies to enhance its quality of life (including building its educational, cultural, and entertainment base), it will be a more attractive location for employees and their families to live and work. Strategies to boost the County’s quality of life are emphasized throughout the Plan. Losing workers via inter-county commuting is an important issue that will need to be addressed.
facturing sector (19.1 percent).

In general, Shawano County residents have a higher percentage of the workforce employed in production, transportation, or material moving and farming, fishing, or forestry occupations than the region and State, and relatively fewer in sales and office occupations. Like the rest of the region, Shawano also has fewer jobs in management, professional, or related occupations than the State. A combined total of 20.1 percent of the County’s labor force held jobs related to tourism, which include arts, entertainment, recreation, accommodation and food services, and retail trade.

**Figure 10.2: Shawano County Labor Force Characteristics, 2007-2011, Estimate**

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>% of Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>19.1</td>
</tr>
<tr>
<td>Education, Health, Social Services</td>
<td>20.9</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>10</td>
</tr>
<tr>
<td>Arts, Entertainment, Recreation, Accommodation, Food Services</td>
<td>10.1</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, Hunting, Mining</td>
<td>8.1</td>
</tr>
<tr>
<td>Construction</td>
<td>6</td>
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<tr>
<td>Transportation, Warehousing, Utilities</td>
<td>4.8</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate, Rental, Leasing</td>
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</tr>
<tr>
<td>Public Administration</td>
<td>4.6</td>
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<td>Professional, Scientific, Management, Administrative, Waste Management</td>
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</tr>
<tr>
<td>Wholesale Trade</td>
<td>2.7</td>
</tr>
<tr>
<td>Information</td>
<td>1.9</td>
</tr>
</tbody>
</table>

*Source: American Community Survey, 2007-2011 5-year Estimates*

Figure 10.3 shows the number of jobs in Shawano County between 2003 and 2011, by sector. Overall, the total number of jobs provided in the County has remained fairly steady, although lack of consistent reporting makes analysis uncertain. Manufacturing jobs decreased while education, health, and social services jobs increased.
Figure 10.3: Jobs in Shawano County, 2003-2011

<table>
<thead>
<tr>
<th>Natural Resources and Mining</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<tr>
<td>Construction</td>
<td>523</td>
<td>508</td>
<td>515</td>
<td>516</td>
<td>495</td>
<td>459</td>
<td>406</td>
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<td>2,329</td>
<td>2,365</td>
<td>2,380</td>
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<td>2,098</td>
<td>1,807</td>
<td>1,661</td>
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<td>2,482</td>
<td>2,521</td>
<td>2,501</td>
<td>2,500</td>
<td>2,511</td>
<td>2,354</td>
<td>2,277</td>
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<td>256</td>
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<td>235</td>
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<td>401</td>
<td>389</td>
<td>379</td>
<td>384</td>
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<td>569</td>
<td>522</td>
<td>581</td>
<td>568</td>
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<td>Education, Health Services</td>
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<td>1,264</td>
<td>1,354</td>
<td>1,372</td>
<td>1,428</td>
<td>1,444</td>
<td>1,494</td>
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<td>Leisure and Hospitality</td>
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<td>1,305</td>
<td>1,297</td>
<td>1,272</td>
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<td>Other Services</td>
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<td>445</td>
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<td>Total Jobs</td>
<td>12,487</td>
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<td>13,077</td>
<td>13,244</td>
<td>12,869</td>
<td>12,940</td>
<td>12,389</td>
<td>12,243</td>
<td>12,323</td>
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</tbody>
</table>

* Incomplete or unavailable data

Source: Wisconsin Department of Workforce Development Annual Census of Employment and Wages, Table A202

Local Employers

Figure 10.4 below lists the top 25 employers in Shawano County. Collectively, the largest employers roughly reflect the County’s overall pattern of employment by sector in Figure 10.3 above. Of the top 25 employers, manufacturing accounts for 9 of the top employers: five are primarily wood or paper products manufacturers, three process agricultural products, and one manufactures high quality metal castings. Of the non-manufacturing employers, two are large scale retailers, one is a food distributor, two are healthcare organizations, one is non-governmental housing and social services provider, and two are entertainment related to the gaming industries. Six of the largest employers are school districts and other government entities. In addition, the list includes one employment services company and one newspaper.

A STRONG EXISTING EMPLOYMENT CLUSTER – FOREST PRODUCTS AND PROCESSING

The continued importance of forestry based industry to the County and economy is evident through examining its output, employment, and compensation. The industrial output (retain sales spent in the community) is $232 million. Much of this output is in the form of traditional primary products (cut lumber and other wood products for construction and manufacturing) and secondary products (furniture, cabinetry, and other value added manufactures). The Forest Products and Processing sector has 1,231 employees, with overall compensation of $45 million annually.

Both primary and secondary processing should remain important and vital parts of the Shawano County economy, and can benefit from continued innovation in products, production methods, and marketing. These activities also obviously benefit from access to local timber, and demonstrate the importance of preserving forests and promoting the productive harvesting of timber as a vital part of the County’s future economy.

Source:
uwsp.edu/cnr/landcenter/forestplanning/Countypage/Shawano.htm
### Figure 10.4: Largest Employers in Shawano County, 2012

<table>
<thead>
<tr>
<th>Rank</th>
<th>Employer</th>
<th>Industry</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thedacare Group</td>
<td>General Medical and Surgical Hospital</td>
<td>250-499</td>
</tr>
<tr>
<td>2</td>
<td>Arrowcast, Inc</td>
<td>Iron Foundry</td>
<td>250-499</td>
</tr>
<tr>
<td>3</td>
<td>Mohican North Star Casino</td>
<td>Casinos, except casino hotels</td>
<td>250-499</td>
</tr>
<tr>
<td>4</td>
<td>County of Shawano</td>
<td>Executive and Legislative Offices, Combined</td>
<td>250-499</td>
</tr>
<tr>
<td>5</td>
<td>Shawano County School District</td>
<td>Elementary and Secondary Schools</td>
<td>250-499</td>
</tr>
<tr>
<td>6</td>
<td>Wal-Mart</td>
<td>Warehouse Clubs and Supercenters</td>
<td>250-499</td>
</tr>
<tr>
<td>7</td>
<td>Stockbridge - Munsee Community</td>
<td>American Indian and Alaska Native Tribal Governments</td>
<td>250-499</td>
</tr>
<tr>
<td>8</td>
<td>Wittenberg-Birnamwood School District</td>
<td>Elementary and Secondary Schools</td>
<td>100-249</td>
</tr>
<tr>
<td>9</td>
<td>Krueger Intl Inc</td>
<td>Institutional Furniture Manufacturing</td>
<td>100-249</td>
</tr>
<tr>
<td>10</td>
<td>County Market (Reinhart Foodservice LLC)</td>
<td>General Line Grocery Merchants Wholesalers</td>
<td>100-249</td>
</tr>
<tr>
<td>11</td>
<td>Genex Coop, Inc</td>
<td>Support Activities for Animal Production</td>
<td>100-249</td>
</tr>
<tr>
<td>12</td>
<td>Homme Inc</td>
<td>Nursing Care Facilities</td>
<td>100-249</td>
</tr>
<tr>
<td>13</td>
<td>School District of Bonduel</td>
<td>Elementary and Secondary Schools</td>
<td>100-249</td>
</tr>
<tr>
<td>14</td>
<td>City of Shawano</td>
<td>Local Government</td>
<td>100-249</td>
</tr>
<tr>
<td>15</td>
<td>Wisconsin Film and Bag, Inc</td>
<td>Plastics Bag Manufacturing</td>
<td>100-249</td>
</tr>
<tr>
<td>16</td>
<td>Nueske Hillerest Farm Meats</td>
<td>Meat Processing</td>
<td>100-249</td>
</tr>
<tr>
<td>17</td>
<td>Coop Resources Intl, Inc</td>
<td>Managing Offices</td>
<td>100-249</td>
</tr>
<tr>
<td>18</td>
<td>Charlie's County Market</td>
<td>Supermarkets and Other Grocery Stores</td>
<td>100-249</td>
</tr>
<tr>
<td>19</td>
<td>Wisconsin Veneer and Plywood Inc</td>
<td>Hardwood Veneer and Plywood Manufacturing</td>
<td>100-249</td>
</tr>
<tr>
<td>20</td>
<td>Tigerton Lumber Company</td>
<td>Sawmills</td>
<td>50-99</td>
</tr>
<tr>
<td>21</td>
<td>Lutheran Social Services</td>
<td>Other Individual and Family Services</td>
<td>50-99</td>
</tr>
<tr>
<td>22</td>
<td>Aspirus Clinics Inc</td>
<td>Offices of Physicians</td>
<td>50-99</td>
</tr>
<tr>
<td>23</td>
<td>Wolf River Media LLC</td>
<td>Newspaper Publishers</td>
<td>50-99</td>
</tr>
<tr>
<td>24</td>
<td>US Postal Service</td>
<td>Postal Service</td>
<td>50-99</td>
</tr>
<tr>
<td>25</td>
<td>Tischler Plastics</td>
<td>Sign Manufacturing</td>
<td>50-99</td>
</tr>
</tbody>
</table>

*Source: Wisconsin’s WORKnet*
Location of Economic Development Activity

The Existing Land Use Map shows the location of current economic development activity in Shawano County. These areas are labeled under General Commercial, Downtown, and General Industrial land use categories on the map. Most of these land uses are located within the County’s Villages and City, but there are a few areas in the towns. There are seven industrial parks in the following Shawano County communities: Birnamwood, Bonduel, Gresham, Marion, Shawano (Raasch Industrial Park, Bay Lakes Industrial Park, and Shawano Municipal Utilities Industrial Lands), Tigerton, and Wittenberg. Combined, these parks provide 730 acres of Industrial land use. Still as of 2013, the vast majority of these industrial parks were vacant and available for development.

Figure 10.5 highlights the economic engines of the area economy. A combined total of 53% of the County’s income was generated in manufacturing and retail trade. This trend reflects the County’s labor force characteristics with the greatest strength in manufacturing, education, and retail trade.

**Figure 10.5 Shawano County’s Economic Engines**

<table>
<thead>
<tr>
<th>Business Sector</th>
<th>Sales/Receipts*</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>$380,446,000</td>
<td>30%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>$297,584,000</td>
<td>23%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>$230,218,000</td>
<td>18%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>$146,570,000</td>
<td>12%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>$130,115,000</td>
<td>10%</td>
</tr>
<tr>
<td>Tourism</td>
<td>$84,000,000</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,268,933,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Sales include the total sales, shipments, receipts, revenue, or business done by domestic establishments within the scope of the economic census.

**Environmentally Contaminated Sites**

The Wisconsin DNR’s Environmental Remediation and Redevelopment Program maintains a list of contaminated sites, or “brownfields,” in the State. The DNR defines brownfields as “abandoned or under-utilized commercial or industrial properties where expansion or redevelopment is hindered by real or perceived contamination.” Examples of brownfields might include a large abandoned industrial site or a small corner gas station. Properties listed in the DNR database are self-reported, and do not necessarily represent a comprehensive listing of possible brownfields in a community.

As of September 2013, the DNR’s database showed 368 sites within the County. This recognizes three types of sites: Spills, Leaking Underground Storage Tanks, and Environmental Repair Sites. These sites are defined below:

The DNR lists 340 spills within the County, 119 of which are classified as historic. A historic classification indicates the spill may have occurred prior to 1996 and the DNR does not have a clean-up end date on file. A spill is defined as a discharge of hazardous substances that may adversely impact, or threaten to adversely impact, public health, welfare, or the environment. However, spills are usually cleaned up quickly.

A total of 11 Leaking Underground Storage Tanks (LUST) sites appear on DNR’s database within Shawano County, classified as either open (clean-up pending or underway) or conditionally closed (awaiting final documentation). These include sites where a leaking underground storage tank has contaminated soil and/or groundwater with petroleum. Some LUST cleanups are reviewed by the DNR while others are reviewed by
the Department of Agriculture, Trade and Consumer Protection. Below is a list of the LUST sites located in communities participating in the County’s comprehensive planning process:

**Figure 10.6: WisDNR Identified LUST Sites in Participating Communities, 2013**

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Site Description &amp; Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town of Belle Plaine</td>
<td>Y Go By, CTH Y</td>
</tr>
<tr>
<td>Village of Bowler</td>
<td>A to Z Sales &amp; Service, W. Main Street</td>
</tr>
<tr>
<td>Village of Bowler</td>
<td>Mary's Place</td>
</tr>
<tr>
<td>Village of Cecil</td>
<td>Wegner Property, Zachow Street</td>
</tr>
<tr>
<td>Village of Eland</td>
<td>Former Eland Garage</td>
</tr>
<tr>
<td>Town of Hartland</td>
<td>Hansen Property (former Marinan), Hwy 29</td>
</tr>
<tr>
<td>Town of Maple Grove</td>
<td>Johnson Property, Rt 3</td>
</tr>
<tr>
<td>Town of Maple Grove</td>
<td>Former Luci’s Bar (DA swamp), Hofa Park Drive</td>
</tr>
<tr>
<td>City of Shawano</td>
<td>76 Truck Stop, E. Green Bay Road</td>
</tr>
<tr>
<td>Town of Waukechon</td>
<td>Giese Cheese Factory (former Lunds Cheese)</td>
</tr>
</tbody>
</table>

*Source: 2013 Wisconsin Department of Natural Resources*

The DNR lists 17 Environmental Repair (ERP) sites within Shawano County, classified as either open (clean-up pending or underway) or conditionally closed (awaiting final documentation). ERP properties are sites other than LUST sites having contaminated soil and/or groundwater. Examples include industrial spills (or dumping) needing long-term investigation, buried containers or hazardous substances, and closed landfills resulting in contamination. Contamination from above-ground petroleum sources are also considered in ERP reviews. Below is a list of the ERP sites located in communities that participated in the comprehensive planning process.
### Figure 10.7: WisDNR Identified ERP Sites in Participating Communities, 2013

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Site Description &amp; Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town of Almon</td>
<td>Pranke Bros. Auto Wrecking, Old CTH D</td>
</tr>
<tr>
<td>Town of Aniwa</td>
<td>Marsh Road</td>
</tr>
<tr>
<td>Village of Birnamwood</td>
<td>Former Remington Bulk Plan, W. State Road</td>
</tr>
<tr>
<td>Town of Green Valley</td>
<td>RT Sanitation, Mosling Rd</td>
</tr>
<tr>
<td>Town of Maple Grove</td>
<td>Pro-Con, Tile Dr. (STH 29 &amp; CTH C)</td>
</tr>
<tr>
<td>Town of Maple Grove</td>
<td>We Energies Roselawn Substation</td>
</tr>
<tr>
<td>Town of Morris</td>
<td>Knaack Property, Balsam Road</td>
</tr>
<tr>
<td>Town of Navarino</td>
<td>Nichols Cooperative Assn, State Road 156</td>
</tr>
<tr>
<td>City of Shawano</td>
<td>Shawano LF #665, Douglas Winter Road</td>
</tr>
<tr>
<td>City of Shawano</td>
<td>Martins One Hr Drycleaners, E. Green Bay Road</td>
</tr>
<tr>
<td>City of Shawano</td>
<td>Mid-County Coop, E. Seward Street</td>
</tr>
<tr>
<td>City of Shawano</td>
<td>Big Lug Trailers</td>
</tr>
<tr>
<td>City of Shawano</td>
<td>Former County Highway Shop, Lafayette &amp; First St.</td>
</tr>
<tr>
<td>Town of Washington</td>
<td>6912 Springbrook Road</td>
</tr>
<tr>
<td>Town of Wittenberg</td>
<td>Wittenberg Truck Mall, Hwy 153</td>
</tr>
<tr>
<td>Village of Wittenberg</td>
<td>Wittenberg Village Bulk Plant, Park &amp; Howard</td>
</tr>
</tbody>
</table>

Source: 2013 Wisconsin Department of Natural Resources

Brownfield redevelopment programs seek to return abandoned or underused industrial and/or commercial sites to active use through cleaning up environmental contamination and encouraging redevelopment of the sites. The DNR and other agencies work together to administer the Remediation and Redevelopment (RR) program. This program helps fund investigation and cleanup of environmental contamination and the redevelopment of contaminated properties. This program provides DNR staff time to streamline the process of consolidating state and federal cleanups into one program. Examples include hazardous waste cleanup, underground storage tank investigation and cleanup, spill response, and state-funded cleanups and brownfields. Additional information is available through the DNR website.
Economic Development Programs and Agencies

The following list provides information on programs and agencies designed to stimulate economic development in developed areas in the County.

The East Central Wisconsin Regional Planning Commission (ECWRPC) is a designated Economic Development District (EDD) through the U.S. Department of Commerce–Economic Development Administration. As such, ECWRPC is charged with the preparation and continuous update of a Comprehensive Economic Development Strategy (CEDS). Through the CEDS, the EWCRC sets a regional economic agenda, ensures that EDD status is maintained, and makes counties and communities within the district eligible for EDA funding programs.

Shawano County Economic Progress, Inc. (SCEPI) is a non-profit corporation dedicated to the mission of promoting economic vitality throughout Shawano County by acting as a technical resource and facilitator for communities and business partners. SCEPI is dedicated to assisting its business partners by providing services that address their top priorities: business start-ups, business expansions, new business development, relocation, technical and financial assistance, planning, research and application preparation, government liaison, and technology zone tax credits.

Shawano Area Chamber of Commerce is a non-profit organization representing businesses throughout the County. The Chamber takes an active role in comprehensively promoting County businesses, including advertising through its “Shawano Country” Website. The Chamber also operates a Visitor’s Center in the City of Shawano along Highway 22, just north of Highway 29.

APPROACHES TO BROWNFIELD CLEAN-UP AND REUSE

Where brownfields are identified in a planning process, the following list of special steps is advised for successful brownfield remediation and reuse:

- Resource Procurement. In order to ensure the successful redevelopment of these sites, considerable capital must also be raised for remediation and redevelopment. Funding assistance from state, federal, and other public agencies, as well as from non-profit and foundation sources should be sought.

- Environmental Assessment. Successful redevelopment of brownfields is not possible without a thorough understanding of the environmental conditions present on the site. The first step is to conduct a Phase I Environmental Site Assessment (ESA), which entails an analysis of potential environmental concerns at the site. Following a Phase I ESA is a Phase II ESA which includes soil and groundwater sampling to determine the existence and extent of the perceived potential contamination.

- Site Control. Successful brownfield assessment, cleanup, and redevelopment hinges on access to the site. This can be achieved either through a cooperative relationship with the property owner, or through purchase of the property by the municipality. Consequently, working with property owners to negotiate property access or acquisition and to determine a relocation strategy, when necessary, is critical.

- Developer Recruitment and Enrollment in the State’s Voluntary Cleanup Program. It is important to seek out developers whose skills and portfolios best meet the end use and site specific requirements of each brownfield redevelopment project. A determination of a developer’s desire of a No Further Action (NFA) letter from Wisconsin DNR Voluntary Cleanup Program should be made early in the discussions, and enrollment in the program should occur early to facilitate WisDNR buy-in to the project, if an NFA letter is required by the developer.

- Environmental Remediation and Construction. Once issues of site control have been adequately dealt with, environmental remediation, if necessary, should occur. Remedial actions are often developed most efficiently when a developer has been secured for the site, so that new construction can be used as a remedial method.
Shawano County’s **Revolving Fund Loan Program** provides assistance to business and industry seeking to relocate in the City of Shawano and the Villages of Wittenberg and Tigerton.

Other organizations that assist businesses seeking to relocate to the Shawano area include: the City of Shawano Industrial and Economic Development Commission, the Wittenberg Area Development Corp., the Tigerton Advancement Association, and Shawano Improvement, Inc.

The **Northeast Wisconsin Regional Economic Partnership (NEWREP)** was one of eight multi-county zones created in 2002 to administer the Wisconsin Technology Zone Tax Credit Program. In addition to this core function, NEWREP is a network of economic development professionals drawn from and working with the sixteen counties (including Shawano County) and the Menomonee tribe that comprise its membership to provide “hands on support of existing and prospective ‘New North, Inc.’ businesses.”

**New North, Incorporated** is a consortium working within an 18 county region of northeast Wisconsin, including Shawano County, which pursues multiple strategies for improving the region’s economy. The primary emphasis is promotion of the region’s products, economic assets, and quality of life. Promotional efforts are aimed at encouraging local businesses and consumers to buy locally in addition to promoting the regions products to outside customers. The consortium also encourages networking between businesses, institutions, employers and employees to maximize retention and growth of existing businesses and foster the creation of new ones. This is done by providing links to sources of financial assistance such as grants, loans, bonds and tax credits for labor training, start ups, research, and capital improvements. The consortium attempts to match businesses with suitable, available property and facilities within the region. The consortium also attempts to assess and address work force training needs by encouraging educational institutions to train people with suitable skills matching industry demand.

The **Wisconsin Department of Commerce** administers several financial assistance programs to communities to promote economic development by linking them to applicable programs within the Department of Commerce or other agencies.

The **State Infrastructure Bank Program** is administered through the Wisconsin Department of Transportation to provide revolving loans used by communities for transportation infrastructure improvements to preserve, promote, and encourage economic development and transportation efficiency, safety, and mobility.

The State’s **Community Based Economic Development Program** (CBED) provides funding assistance to local governments and community-based organizations to undertake planning, development, and technical assistance projects that support business development. Any Wisconsin municipality or community-based organization is eligible to apply for funding. Funds are available on an annual basis through a competitive application process. Application materials are available from the Wisconsin Department of Commerce.

The **U.S. Small Business Administration’s Certified Development Company (504) Loan Program** provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land and buildings. 504 loans can be used to fund land purchases and improvements, grading, street improvements, utilities, parking lots and landscaping, construction of new facilities, or modernizing, renovating or converting existing facilities.

The continued cooperation and regional joint effort on economic development with the **NiiJii Enterprise Community** and its reservation based partners, the NiiJii Community Development Financial Institution (CDFI), the NiiJii Small Business Development Loan Fund.

Additional economic development resources available to the County include: Northeast Wisconsin Technical College in Shawano; Small Business Development Center at NWTC in Green Bay; Center for Entrepreneurship & Business Development Center at NWTC in Green Bay; Wisconsin Entrepreneurs Network (WEN); Bay Area Workforce Development Board in Green Bay; Shawano County Job Center; Wisconsin Housing and Economic Development Association (WHEDA); University of Wisconsin Extension in Shawano County; Menominee Business Center; Menominee Tribal College; and the City of Shawano Business Improvement District Board.
Economic Opportunities Assessment

A comprehensive approach to economic development is one that promotes the long term stability and vitality of the County’s economy as a whole rather than focusing on a narrow set of programs. Stability and vitality are complementary aims. A stable economy is one that emphasizes a community’s strengths yet provides a diverse array of employment, services, and products that increase the likelihood that a downturn in one sector or firm is offset by strong activity elsewhere. A stable economy does not mean a stagnant economy. A stable economy is one in which both existing and new businesses and firms continue to grow, innovate, and change in ways that benefit not only the individual or firm, but the community as a whole.

Three broad components of economic development include: retention and expansion of existing businesses, fostering of entrepreneurship locally to create new businesses, and attraction of businesses and investment from outside of the community. This three part or “three legged” approach represents a tested and successful approach to economic health.

“Retain”

Activities or programs in this component focus on meeting the needs of existing businesses and industries, particularly those that provide much of the current employment and wealth generation for the County and which have an interest in remaining and expanding in the County. Policies that help to promote business retention and expansion include accurate identification of successful existing businesses, identifying barriers to their expansion, and devoting resources to meeting those needs. The decision to remain in a location often relates to access to raw materials and suppliers; access to markets; existence of adequate public infrastructure; availability and price of appropriate sites with necessary improvements and on-site expansion room; and the recruiting, training and retention of the workforce. Other strategies include providing local
firms with information about potential new products and markets that a given firm may be well positioned to develop.

In addition to retaining area businesses, the County must also seek strategies to retain local talent. Workforce development programs are a critical component to retaining local talent. This includes strategizing to entice the youth population to return to Shawano County after college and avoid a local “brain drain.” Brain drain is the out-migration of young, college educated individuals due to lack of opportunity. However, research has shown that some rural areas across the U.S. are gaining college educated workers. This trend is largely driven by “amenity rich” localities, a quality that has proven to be attractive to an educated workforce. One strategy to retain local talent could be enhancing local amenities and providing greater cultural opportunities.

“Grow”
Helping existing businesses grow is a key part of ultimately retaining them and growing the local economy. Strategies associated with this “Grow” component also include cultivating entrepreneurship and fostering new businesses started by area residents – a “growing from within” approach. Entrepreneurs create new products, services or methods of production. Entrepreneurship can take many forms, ranging from the part-time home occupation to the start up business that grows into a firm that requires full time facilities and employees. Collectively, successful entrepreneurs greatly enhance the overall economic health of the community. Techniques that focus on fostering entrepreneurship include creating reasonable standards for home occupations, and creating networks of individuals and agencies that can provide assistance for training, funding, and trends.

“Attract”
This component of economic development focuses on attracting firms, whole new industries, or economic sectors to a community. Attracting outside firms to a community can reinvigorate existing sectors or add new sectors that help to diversify the local economy and reduce over concentration in any one industry.

Strategies to attract new businesses include marketing the strengths of the County as a great place for executives and workers to live and work; helping ensure the availability of a trained workforce; fostering supply chains and markets for products; and addressing any real or perceived weaknesses, such as inadequate utility capacity or governing procedures. Other strategies involve attracting new businesses by leveraging strategic relationships with existing businesses wherein the County promotes the return on investment and value of existing businesses having local branches of key suppliers. This would also involve promoting to suppliers the opportunities to gain new local area customers as part of the return on investment equation.

The County may pursue strategies that will improve the employability of the area workforce and create more highly skilled future employees for businesses. This approach would include working with businesses, educators, and career counselors to expand the number of employers that offer job shadowing, mentoring, and internships.
Another way to attract business is to ensure the adequate provision of improved sites that are adequately served by utilities and other infrastructure and located away from incompatible land uses. This is most commonly done through creating business or industrial parks, and providing businesses with financial incentives for locating within them. Improvements can extend to construction of a general purpose “spec” building that a business can buy or lease. These provide companies with limited resources and that wish to do business in the host community an opportunity to act more quickly and with fewer approvals than constructing their own building. “Spec” buildings are usually sold or leased at or near market rates, without limitations on the conditions or duration of their tenancy.

Assessment of Desired Economic Development Focus

The Wisconsin comprehensive planning statute requires that this Plan “assess categories or particular types of new businesses and industries that are desired by the local government unit.” Figure 10.8 considers strengths and weaknesses for economic development in Shawano County. Based on these strengths and weaknesses, the County’s desired economic focus seeks to take advantage of its opportunities reflected in the goals, objectives, policies, and recommendations that follow.
Strengths, Weaknesses, Opportunities, and Threats
Figure 10.8 summarizes strengths and weaknesses for economic development in Shawano County as indicated from the preceding analysis and input from County employers, economic development agencies and other citizens.

**Figure 10.8: Shawano County Strengths and Weaknesses for Economic Development**

<table>
<thead>
<tr>
<th>Strengths / Opportunities</th>
<th>Weaknesses / Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Natural areas/open space suitable for hunting, fishing, and nature-based recreation that enhance attraction potential and also build a nature-based economy</td>
<td>• Distance from larger metro areas</td>
</tr>
<tr>
<td>• Mature agriculture and timber based industries and infrastructure that benefit from local climate, soils, and tree cover</td>
<td>• High fuel and delivery costs</td>
</tr>
<tr>
<td>• Central location relative to surrounding metro areas</td>
<td>• Global competition in agriculture, timber, and manufacturing</td>
</tr>
<tr>
<td>• Improving transportation network including recent expansion of Highway 29</td>
<td>• Regional disinvestment in agriculture and timber industries</td>
</tr>
<tr>
<td>• Historic and “small town” character</td>
<td>• High entry costs for traditional agriculture or timber harvesting</td>
</tr>
<tr>
<td>• Local community festivals and markets</td>
<td>• Fragmentation in the ownership of agricultural and forest lands</td>
</tr>
<tr>
<td>• Investment in urban infrastructure in the City of Shawano and several villages</td>
<td>• Modest population base and growth</td>
</tr>
<tr>
<td>• Pro-Business atmosphere</td>
<td>• Workforce attraction and retention (&quot;brain drain&quot;)</td>
</tr>
<tr>
<td>• Established manufacturing sectors such as natural products processing, tool &amp; die, fire fighting equipment and other high value products</td>
<td>• Workforce training/education; shortage of technical college sites in the County</td>
</tr>
<tr>
<td>• Economic development programs (e.g., TIF)</td>
<td>• Distance from regional research and development centers</td>
</tr>
<tr>
<td>• Gaming industry</td>
<td>• Perceived lack of cultural and commercial amenities</td>
</tr>
<tr>
<td>• Relatively low cost of living</td>
<td>• Outsourcing of manufacturing</td>
</tr>
<tr>
<td>• Active economic development organizations</td>
<td>• Potential loss of rail service</td>
</tr>
<tr>
<td>• Active and diverse arts culture</td>
<td>• Quality, affordable labor force</td>
</tr>
</tbody>
</table>

An assessment of Shawano County’s existing economic strengths and weaknesses suggest various promising opportunities for Shawano County over the next twenty years. Some of these opportunities look even more promising in light of regional, State, and National trends such as increased interest in nature-based recreation and tourism like bird-watching and trail use; desire for locally produced and marketed agricultural products; growing interest and demand for fuel, chemicals and other innovative products produced from crops and timber; and development of specialized, high value manufacturing products and processes that are not as vulnerable to low cost, low tech competitors; and a growing national trend in cultural tourism as an economic engine (see Cultural Resources chapter for more information).
Economic Development Goals, Objectives and Policies

Goal:
1. Strengthen the County’s economy to maximize sustainable use of the County’s assets and provide a robust source of employment and tax revenues.

Objectives:
1. Retain and expand existing Shawano County businesses and job opportunities.
2. Foster entrepreneurship and innovation.
3. Attract new businesses and industries capitalizing on the County’s strengths, quality of life, and proximity to population and recreation centers.
4. Explore and adopt new uses for agricultural, timber, and other renewable resources.
5. Expand links between local agriculture and consumers through promoting opportunities for value added agriculture and direct sales.
6. Enhance the character and vitality of existing downtowns and rural hamlets through encouraging re-use and redevelopment of aging, vacant, or contaminated locations.
7. Position the County to enhance recreation and tourism opportunities based on recreational resources in and around the County.
8. Market County assets with support and cooperation from regional agencies, municipal governments, educational institutions, and business groups.
9. Implement the County’s zoning and subdivision ordinances and design guidelines to ensure high-quality economic development.

Policies:
1. Plan for an adequate supply of developable, improved land for commercial and industrial uses in logical areas consistent with local government wishes as shown on Maps 7a, 7b, and 7c (together the County Future Land Use map).
2. Accommodate high quality employment opportunities, directing industrial and business parks and more intensive commercial development to the City and villages, where a full range of utilities, services, road and other infrastructure are available.
3. Promote the revitalization of the County’s downtowns, rural hamlets, and aging commercial strips through proactive action and public-private partnerships.
4. Recognize the market value of existing and proposed highway interchange areas for high-quality economic development, and reserve these areas for future non-residential use.
5. Primarily through SCEPI, work cooperatively with local businesses to understand and meet needs of business and local communities.

SHAWANO COUNTY ECONOMIC OPPORTUNITIES
- Grow new industry from within by fostering entrepreneurship and building on strengths
- Attract new businesses and industries based on County’s unique assets and existing industry clusters
- Pursue new economic directions based on new uses for agricultural and timber products (e.g., bio-based energy and products, local foods)
- Market County assets and local business/individual development opportunities through collaboration
- Create niche economies in local downtowns and at other key “crossroads” such as interchanges
6. Provide prospective entrepreneurs, employers, and employees with easily accessible information and assistance with local, County, Regional, State, and Federal programs designed to assist small businesses through agencies such as SCEPI.

7. Promote greater marketing of traditional, locally produced agricultural and timber products, particularly to local buyers.

8. Explore opportunities to work cooperatively to advance new “bio-based” agriculture and timber product directions, such as cellulosic energy and bio-plastics.

9. Encourage local businesses and builders to use more energy efficient techniques and building designs to reduce energy expenditures and to retain more wealth in the community.

10. Consider undertaking an initiative to map the carbon footprint of businesses and government and develop strategies and initiatives to minimize.

11. Work cooperatively with educational institutions, employers, and related support organizations and agencies to develop a comprehensive Workforce Development Plan with the goal of assisting prospective employees to get better matched with employers’ training and recruitment needs.

12. Coordinate housing, community services, and land use polices to provide a range of housing types and enhance the quality of life necessary to attract and retain a skilled workforce and new businesses.

13. Coordinate land use planning with economic development policy to protect the productive natural resource base on which the nature products, farming, forestry, hunting, fishing, and tourism industries depend.

14. Enhance opportunities for tourism and outdoor recreation by encouraging protection of historic sites and buildings; design standards for County hamlets that respect the historic context of their surroundings; and greater public access to open spaces, trails, and waterways.

15. Support efforts to procure State and federal funding to clean up and reuse environmentally contaminated sites in the County’s urban and rural areas.

16. Work with public and private communications technology providers to improve telecommunications infrastructure to facilitate economic development, and with energy provisions to ensure high-quality, reliable power, and explore potential local sources (e.g., wind).

17. Encourage new retail development to occur on existing infrastructure, and/or clustering larger retailers to achieve more efficient use of infrastructure and utilities.
Economic Development Recommendations and Programs

Expanding on the policies listed above, the following are more detailed economic development recommendations for Shawano County. The County will work with SCEPI, the Bay Area Workforce Development Board, the East Central Wisconsin Regional Planning Commission, New North Inc., NEWREP, local governments, K-12 educators, and the technical colleges to further consider, refine, and implement the recommendations outlined below. Many of these recommendations should be incorporated into strategic planning efforts for the County, SCEPI, or other organizations.

The most important components of any economic development strategy are the people invested in it. Locally grown and owned businesses are some of Shawano County’s greatest assets. Many local businesses have become identified with Shawano County and impart local flavor, often in the form of unique goods and services. Since many owners also live in the community, most profits (not just payrolls) will be spent locally as well.

Local business retention and growth are key aspects of the County’s economic development program. Numerous studies have shown that it is more productive and efficient to create a favorable environment for existing businesses to grow than to lure new businesses to a community. As such, County, SCEPI, and local community leaders will want to consider how to help expand existing businesses or industries and ensure businesses stay in the community.

Develop Workforce Training Programs

A trained workforce is essential to any business development program. Shawano County is situated to further promote additional workforce development programs among all residents, including new immigrants. The County intends to introduce a program that will provide targeted job training to those wanting to improve their employability and income earning capacity. The County will collaborate with SCEPI, NEWREP, and others to work with County employers to identify key skills and shortages, provide information on various government programs to facilitate workforce development. This collaborative effort will also work with regional high schools, technical colleges, and universities to match school curricula with needs and develop a program to cover the cost of education in return for employment upon completion of training or graduation. As part of this effort, the partnership will work to maintain agriculture and technology based curricula to promote these occupations as rewarding and essential to Shawano’s unique economy.

Promote Shawano County’s Quality of Life

Promoting Shawano County’s high quality of life is essential to attracting and retaining businesses, employees, and entrepreneurs. As one of the most affordable places in the State to live, Shawano County already has a competitive advantage over regional neighbors. Shawano County also has good schools, access to excellent medical facilities, safe and attractive communities and neighborhoods, and a wealth of recreational opportunities. Still, additional efforts could build on Shawano County’s qualities to attract and maintain a strong workforce, entrepreneurs, and businesses. Shawano County may work with SCEPI on several initiatives to ensure the ability to retain and expand businesses, including:
• **Ensure availability of housing.** Facilitating the provision of more numerous and varied housing opportunities—from rental apartments to executive housing.

• **Promote a wider variety of job choices.** People who leave to attend universities should be able to come back home to Shawano County and find rewarding and good paying jobs. Although jobs are currently available in different sectors (e.g., industry, retail, tourism, education, and professional services), there is unmet potential for different kinds of jobs within a wider variety of businesses in each sector. A college scholarship program could be established that stipulates the recipient will strongly consider moving back to Shawano County when finished with college.

• **Encourage a range of retail and service industries to meet increasingly varied demands.**

• **Ensure adequate provision of public infrastructure and utilities, including power, transportation, water, sewer treatment, and communications (e.g., “wi-fi” and broadband communications).**

• **Provide appropriate sites for building expansion or, in cases where a move is necessary, suitable sites within the same community or County.** Suitable sites are those that minimize potential conflicts with neighbors, are served with necessary infrastructure, and provide efficient access. Establishment of business, office, and/or industrial parks is one strategy successfully pursued by the City of Shawano and other County communities. The creation of Tax Incremental Financing (TIF) districts, often in conjunction with these parks, is another.

Often, underutilized, blighted or contaminated sites are ignored as possible locations to expand or relocate a business. The County can address a number of goals by working with private entities and local governments to rehabilitate these sites and actively encourage the use of these sites in advance of new “greenfield” developments, often with additional assistance from State and Federal programs. Despite obvious drawbacks, these properties often are in highly prized locations and have other attributes that meet the needs of both firms and the County, in addition to addressing sites that negatively affect community health and prosperity.

**Foster Entrepreneurship and Innovation**

Innovation and an entrepreneurial mindset can keep existing firms vital and competitive in addition to creating wholly new services, products, employment, firms, and local business leaders. Challenges facing would-be entrepreneurs include access to start up capital, availability of affordable sites and equipment, access to information on starting and running small businesses, and aversion to investing in high-risk research and development.

The County will work in partnership with Shawano County Economic Progress, Inc. (SCEPI) and local governments to promote the growth of innovation and entrepreneurs through efforts like the following:

• **Encourage the Establishment of Business Incubator Programs.** Business incubator programs accelerate the development of new companies by providing guidance, technical assistance, and tailored counseling services for new entrepreneurs. The main goal of the business incubator program is to produce new firms...
that are financially viable and that will strengthen the local economy by creating jobs. Successful completion of the business incubation program increases the likelihood that the start-up business will stay in business long-term. Locally-owned businesses that provide unique goods and services, and contribute strongly to the community’s urban identity. Since the owners of such businesses usually live within the community, there is a strong likelihood that the profits from such enterprises will be spent locally, and recycle through the local economy.

- **Match Potential Entrepreneurs with Resources.** Directing would-be entrepreneurs to the numerous County, State, regional, and federal programs, agencies, and private organizations that exist to provide information and financial assistance on training, grants, and product and service research. SCEPI and NEWREP are examples of organizations that provide staff capable of matching interested individuals with links to these numerous and varied resources.

- **Develop a partnership with the School Districts.** Partner with the school districts to provide entrepreneurship training and economic development programs. This program would instill in the youth population that starting a business is a legitimate career choice if it is researched, planned, and executed intelligently.

**Objective:**

Attract New Businesses and Industries Capitalizing on the County’s Strengths, Quality of Life, and Proximity to Population and Recreation Centers

Attraction of existing business from outside the County is another way of expanding the breadth and depth of the County’s economy. Advantages of this strategy include the ability to capitalize on a pre-existing firm’s expertise, access to capital, and lower risks associated with a known entity. The strategies for attracting new businesses often rely on similar strategies as those for retaining existing businesses. However, efforts attracting businesses from outside the County and Region also benefit from some supplementary strategies, including:

- **Market Shawano County’s Assets.** Comprehensively marketing Shawano County as a good place to live, work, and do business, in order to overcome lack of knowledge or inaccurate perceptions. Unlike local businesses, outside firms are often unaware of local assets and potential. New North, Incorporated is an example of an entity that markets Shawano County and member communities on a regional scale. Some of Shawano’s assets include rail infrastructure, nearby access to water (Bay of Green Bay), being part of the Manitowoc and Green Bay area Free Trade Zones. The County will explore opportunities to augment and improve efforts in marketing Shawano.

- **Provide Sites and Incentives.** Provide improved sites and other financial incentives through tax increment financing and other tools. Construction of speculative commercial, office, and industrial space also can give a community a competitive advantage in attracting new businesses by being able to respond quickly to opportunities as they arise. Spec buildings are typically sold or leased at market rates with no additional strings attached.

- **Plan for and Market Industrial Parks and Sites.** A large percentage of land within industrial parks within the County is vacant and available for development. Over the 20-year planning period, the County should work with the City of Shawano and Villages to market these available sites, build-out these existing parks, and pursue reasonable expansions as appropriate. Adequate space for their expansion has been included in local and County Future Land Use maps (see Maps 7a, 7b, and 7c).

- **Use Networking Tools.** Numerous networking tools are available to the County, such as the Wisconsin Entrepreneurs Network (WEN), The Business Pulse survey tool and database, and the Location One
Information System (LOIS). LOIS is a searchable economic development database where the County can obtain detailed information about buildings, sites, and locations for businesses to expand.

- **Develop a Stronger Understanding of Existing Sectors and Clusters.** Understanding the trends and churn in the County’s sectors and clusters can help to prioritize future growth/decline and focus local and regional economic development efforts.

The County Transportation and Community Facilities map (Map 8) identifies a number of existing and planned future interchanges. At these interchange areas, many communities have identified locations for potential commercial and industrial development, which are reflected on Maps 7a, 7b, and 7c, Future Land Use. Highway interchange areas – existing and future – hold great value and marketability. To ensure that these assets are maximized, the County intends to work with local communities on the following:

- Plan for the extension of public utilities to interchange areas, whenever feasible.
- Plan for the network of local roads and appropriate access to cross streets to serve interchange commercial and industrial areas.
- Work to resolve future jurisdiction issues between communities to the extent possible.
- Apply and enforce uniform zoning standards across jurisdictional boundaries, such as those pertaining to design of commercial and industrial development along the STH 29 and 45 corridors.
- Practice patience, rather than approving whatever development proposal “comes first.” Instead, wait for high-value opportunities and adequate markets for commercial, industrial, and office development.
- Direct residential development away from interchange areas, except for instances where the area is mapped in the Planned Mixed Use future land use category and careful development review is exercised.

Advances in technology are opening up new markets for traditional agricultural and timber products. The new “bio-economy” is focused on finding new ways to use and process corn and other organic matter into new, marketable plastics, fuels such as ethanol, and pharmaceuticals. Soybeans, timber, and other biomass offer even more potential for a sustainable and economically viable petroleum substitute than corn. At the same time that production costs are declining to process these materials, environmental regulations, “green” economic incentives, and the rising economic, national security, and environmental costs of petroleum are increasing. Wisconsin is in a strong position to supply raw materials for the new “bio-economy.” To compete with regional and State efforts elsewhere, Wisconsin has launched a State-wide initiative to position the state
to take advantage of these opportunities. Shawano County has an opportunity to tap into this market due to its natural assets. Examples of Shawano County’s (the place, not necessarily the government) role could include:

- **Promote Raw Material Production in the County.** Production of raw materials to supply “bio-economy” enterprises – finding new ways to use and process organic matter into new, marketable products. Raw materials that supply the bio-economy include soybeans, corn, timber, manure to methane, and other biomass that can be grown and harvested on local farms and forest land.

- **Promote the Wisconsin Farmers Union Carbon Credit Program.** This program allows farmers to earn income by storing carbon in their soil through no-till crop production, conversion of cropland to grass, and tree plantings on degraded land. Carbon credits can also be earned via the capture of methane from anaerobic manure digester systems.

- **Promote Processing Activities in the County.** Processing of raw materials into fuel (bio-diesel, ethanol), plastics, pharmaceuticals, or other materials locally – sometimes via or through partnerships with manufacturing companies already in Shawano County.

- **Work to Ensure that any Wastes and By-products that may have Adverse Impacts can be Effectively dealt with, as new processing industries are developed and expanded.**

- **Encourage Start-Ups, Spin-Offs and Attraction Related to Bio-Based Products.** Creation of business start-ups or attraction of companies from outside the region to process raw materials (grown in Shawano County) into new bio-based products.

- **Utilize State Incentive Programs.** Establishment of Agricultural Enterprise Zones as designated locations for the production of raw inputs, or processing of bio-based products.

- **Promote Participation of National Carbon Credit Program in the County.** Participation can infuse capital into the County’s farms and forests and will decrease overall greenhouse gas emissions.

See the Agricultural Resources, Natural Resources, and Utilities and Community Facilities chapters for more information.

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**The Future of BioBased Industry**

The bio-economy, generally stated, is a term used to refer to the production of products, chemicals, and energy from crops, crop waste, and wood (biomass) that are currently produced primarily from non-renewable fossil fuels, such as petroleum. Ethanol from corn and biodiesel from crop waste are well known examples of fuels created from biomass. Research is underway to unlock the potentially much higher energy yields from other sources such as grasses, legumes, and timber, all of which are readily grown in Wisconsin. The potential for biomass is not limited to fuels. Many products that can be made from petroleum, such as plastics and lubricants, can also be made from biomass.

Growing concerns over rising energy costs, dependency on foreign sources of petroleum, global climate change and environmental degradation, has been matched by growing interest in the emerging bio-economy. By virtue of its natural resources and strong agricultural and forestry economies and research facilities, the State of Wisconsin is in a strong position to develop and expand its bio-economy and bio-based industries.

In recognition of these assets and trends, Governor Doyle issued Executive Order #101 in 2005 establishing the Wisconsin Consortium on Bio-based Industry. The Consortium consists of six working groups (economics, education & outreach, regulatory issues, organizations & institutions, technology & science, and environment) to focus on improving each of these necessary aspects of biomass economy. The members were chosen from both the private and public spheres for their expertise in the relevant areas. The stated purposes of the consortium include making recommendations on how best to coordinate state, federal, and private initiatives to foster growth of the bio industry in an environmentally sound manner. More information is available on-line at http://bioneconomy.wi.gov.
Shawano County is well-positioned to take advantage of the movement toward local marketing and consumption of agricultural products. Farmers can sell their products directly to the public via community supported agriculture programs, farmer’s markets, food cooperatives, u-picks, and farm stands. Farm-to-Cafeteria programs can link institutions such as school and hospital cafeterias to local farmers. These programs allow farmers to sell larger quantities of products to single buyers and to diversify their overall crops. Another strategy that can address the issues of scale is encouraging co-ops among producers that boost local volumes and may justify local processing. The County encourages collaboration between UW-Extension, DATCP, and local producers and processors to explore these opportunities. This cooperation and/or joint ventures can effectively scale-up production and processing in the County.

In addition, a recent survey conducted at the Governor’s Conference on Tourism discovered wide-spread support for regional food-based tourism. Wisconsin food-based tourism goes beyond cheese to blueberries, buffalo, wild rice, and locally bottled soda, to name a few. These initiatives can serve environmental, farmland preservation, economic, and community health and identity ends. (See the Agricultural Resources chapter for more details).

Some of the most intriguing and in some cases underutilized economic assets in Shawano County are its historic downtowns and hamlets. Throughout the County, downtowns and rural hamlets remain the central focus of civic activity, shopping, dining, tourism, government, and recreation for many county communities. Opportunities exist to generate additional activity and excitement in Shawano County’s downtowns and hamlets, and capture more local trade dollars, such as through the following suggested initiatives:

- **Retain Local Businesses and Related Uses in Downtowns.** Keeping local businesses and government facilities downtown and attracting additional related uses. Co-locating businesses within one building, such as
a coffee shop and bookstore, helps to retain viable businesses in downtown. Also, upper story building renovation could provide much-needed supplies of affordable housing, bring in additional local trade dollars for downtown businesses, and increase downtown activity levels during off-hours.

- **Encourage Design Standards for Infill and Redevelopment.** Finding new and existing uses for potential infill and redevelopment sites and underutilized buildings in and near downtowns and hamlets. To ensure that this enhances rather than detracts from valued historical areas, it is important to require good, pedestrian-oriented design for new and infill development, based on the historic flavor and form of the surrounding area. For example, building setbacks should be very modest, parking should be located on-street and/or to the side or behind buildings, and building bulk (height, width) should resemble surrounding buildings, even if architectural style is more modern. Standards for landscaping and façade would ensure the quality of the built environment.

- **Encourage Support of Local Businesses.** Initiate a strong “buy local” campaign. These efforts are most effective when coupled with improved business communication; coordinated advertising, promotion, and business hours; and hosting of special events and festivals.

- **Market Downtowns as Tourist Destinations.** Enhancing the role of Shawano County downtowns and hamlets as tourist destinations. In addition to serving the needs of local residents, charming downtowns serve as the perfect venue for shopping, entertainment, and lodging. Local markets and festivals that are mainly thought to serve local residents can also be marketed to a wider range of customers and bring more activity to central areas. One notable example is Zurko’s Flea Market, which has been a Shawano summer time tradition for 34 years. Held at the Shawano County Fairgrounds every Sunday throughout the summer, the market is claimed to be the largest such flea market in the world.

Downtown revitalization and redevelopment initiatives are best pursued through a broad, concerted, and multi-pronged strategy. Utilizing community development expertise available at the UW Extension or private consultants, the following programs may be considered to advance redevelopment of downtowns, brownfields, and other underdeveloped areas:

- **Revolving Loan Funds.** Low interest business development loans for new start ups and existing businesses are available via the City of Shawano, Shawano County, The Village of Tigerton, and the Village of Wittenberg Revolving Loan Fund Programs.

- **Wisconsin Main Street Program.** This Department of Commerce administered program provides financial assistance in the form of technical support and training to help communities reinvigorate their downtowns as community and business centers. The program has a successful track record in creating new jobs and attracting businesses to downtowns. It should be noted that the City of Shawano participated in this program for a short time period. Shawano County will explore reasons why the City discontinued participation and determine if the program is appropriate for the County in today’s business environment.

- **Redevelopment Tax Increment Financing (TIF) districts.** TIF provides up-front public expenditures for land, infrastructure, and other incentives for development. The resulting development pays for such initial expenditures over time through dedicated property tax revenue. Some communities in Shawano County have used TIF financing to create incentives for industrial development. TIF has also been used successfully in other communities to spearhead redevelopment initiatives, particularly in downtowns where redevelopment may be more likely with incentives. However, communities should be careful and conservative in downtown TIFs, generally not spending too much money until private redevelopment projects are secured.

- **Brownfield Clean-up Initiatives.** The County and local governments should require proper environmental assessment and any required clean-up before offering final approval of a development proposal on any property identified as possibly having environmental contamination. In most cases, basic environmental assessments have yet to be performed on these sites to determine the type and extent of contamination. This is a critical first step in ultimately reusing brownfields. Several state and federal
grant programs are available to assist with environmental assessments, clean-up, and reuse. After the site assessment process, the County and private property owners should prepare a unique redevelopment strategy for the site based on its post-cleanup condition and position in the community.

- **Business Improvement District.** A BID is an option available to the County’s villages and the City. Typically, business owners and property owners included in a BID contribute to programs designed to promote, manage, maintain, and develop the district. Special assessments on businesses within the BID raise the funds to implement a variety of programs to improve the quality of the district’s business climate.

- **City of Shawano Redevelopment Authority (RDA).** In 2005, the City of Shawano created the Redevelopment Authority of the City of Shawano in an area of the City that is covered by Tax Increment District #4. The RDA provides resources to enhance the economic environment in the downtown district and surrounding area.

### AN APPROACH TO REDEVELOPMENT PLANNING AND IMPLEMENTATION

Careful planning, site assessment, public-private partnerships, redevelopment incentives, and persistence over a number of years are required to successfully redevelop downtowns. Typically, a comprehensive and successful redevelopment planning and implementation process includes:

- Evaluating the area’s condition including size, visibility, viewsheds, access, building quality, existing use viability, adjacent land uses, topographic or environmental constraints, brownfields, and existing infrastructure and amenities.

- Conducting a regional and local economic opportunities analysis to focus on the area’s location, amenities, and business mix, as well as the assessment of the regional factors such as economics, transportation patterns and intergovernmental relationships.

- Identifying goals and objectives for the area through cooperative efforts with the private property owners and other key stakeholders. This step also typically identifies and prioritizes redevelopment sites within the planning area.

- Conducting a market assessment to determine the role of the area within the marketplace, provide demographic trade area information to assist in the solicitation of potential developers or site users, and identify the range of specific issues and challenges to site redevelopment.

- Preparing a redevelopment strategy and district concept plan map that identifies the highest and best land uses, site characteristics, design approaches, and implementation strategies for the area, with particular attention to priority redevelopment sites.

- Aggressively pursuing implementation through techniques such as adoption of a statutory redevelopment plan; establishment of a redevelopment TIF district; possible brownfield remediation; possible site acquisition, consolidation, and demolition; and developer recruitment.
The most successful economic development programs are often driven by the unique, place-based assets of a community or region. For much of Shawano County, the most important place-based assets include its natural resources – forests, water resources, and in some areas rich agricultural soils. The County’s resources provide opportunities for production, tourism, and other nature-based economic development activities.

Tourism in Wisconsin generates billions of dollars in expenditures per year. According to the University of Wisconsin Extensions’ Center for Land Use Education, forest-based recreation and tourism in the State (hunting, fishing, hiking, wildlife watching, etc.) alone accounts for $13.7 billion in revenues and over 400,000 jobs annually statewide. Expanding and diversifying tourism is an important opportunity for Shawano County. Given Shawano County’s position, tourism opportunities related to nature based recreation, wildlife watching, casino gaming, and local heritage appear to be the most promising. Shawano County intends to enhance tourism through initiatives such as the following:

- **Continue to Promote and Provide Opportunities for Outdoor Sports.** Continue efforts to encourage protection and public access to public and private lands. Shawano hunting and fishing remain popular and lucrative outdoor sports. According to Department of Natural Resources, Shawano County and the area to its north and west continue to produce some of the highest deer counts and dear harvests in the State. In fact, the abundance of deer threatens to become a detriment to the health of the County’s forests and safety of its roadways. The County also boasts one of the State’s top fishing lakes, and many of its rivers and streams are, or were, home to many popular fish species such as trout. Efforts to protect or restore fish populations in these waters, protect water quality, and improve public access would complement efforts to promote this component of the County’s economy.

- **Enhance and Capitalize on Recreational Trails.** Expand trails or create new trails and networks. Recreational trail use is increasingly popular in Shawano County. The Wiouwash, Nicolet, and Mountain Bay State Trails are primarily bicycle trails, but some can support multiple uses such as horseback riding, hiking, and snowmobiling. Shawano County also boasts over 300 miles of groomed snow mobile trails. Businesses that cater to trail users for needs such as equipment rental, sales, service, lodging, and dining can benefit from these trails. Trail use can further be promoted through special events, or
related activities such as bicycle tours. Trails and trail expansions may also provide opportunities for spin-off commercial development, such as outfitters, lodging, retailers, and entertainment.

- **Expand Opportunities for All Terrain Vehicle (ATV) Riding in Ways that Are Compatible with the Interests of Other Recreationalists and Natural Resources.** ATV Trails offer another potential source of recreation and revenue. Owing to the potential environmental and nuisance impacts of these vehicles, careful planning of ATV trails is required. ATV trails are not generally compatible with other trail uses, and may interfere with other desirable tourist draws such as hunting, fishing, and wildlife watching. Still, if properly managed, such trails offer yet another option for the resident and tourist alike. According to an article in the September 2003 issue of ATV Action, “Wisconsin is an undiscovered paradise” for ATV riding. The number of registered ATVs in the State more than doubled between 1996 and 2003, a typical ATV trip is an overnight experience, and the average expenditure is about $160 per rider per day. Therefore, new and expanded dedicated ATV parks and trails, and catering to ATV users, represent additional economic opportunities for Shawano County.

- **Promote and Provide Access for Water-Based Recreational Activities.** Support efforts to protect water quality and shorelines and to provide public landings for small water craft along navigable waters to enhance paddling opportunities. Power boating in Shawano County are limited primarily to Shawano Lake and a few other locations, but the Wolf River and other, smaller rivers and streams such as the Embarrass River provide many opportunities for canoeing, kayaking, and whitewater rafting. There are currently four whitewater rafting outfitters in the County that equip and lead trips on the Wolf River. Paddle sports are increasingly linked to other outdoor recreation activities, such as fishing and wildlife watching, that appeal to a wider demographic.

- **Support and Help Market Other “Silent Sports.”** Birding and other wildlife watching are increasingly popular pastimes. The National Survey on Recreation and the Environment names bird watching as the fastest growing outdoor recreation in the nation, with 70 million Americans participating. The State of Wisconsin is home to many native and migratory birds of interest and Shawano County is no exception. The Navarino State Wildlife Refuge – with its resident populations of Sandhill Cranes, black terns, wood ducks, mallards, and yellow-headed black birds – is listed as one of Wisconsin’s top birding “hotspots” by Wisconsininline.com. To better serve birding enthusiasts and to capture the economic benefit, some communities are beginning to tie the marketing of these and other natural areas to bed and breakfasts, restaurants, and other attractions.

- **Support the Health of Area Casinos.** Support area casinos’ cross-promotion with other lesser-known attractions and destinations. The Mohican Northstar Casino is located on the Stockbridge Munsee Reservation, and the Menominee Casino-Bingo-Hotel is located just north of Shawano County. The

Shawano County’s diverse mix of trails presents numerous opportunities for tourism and recreation.
Ho-Chunk Nation has recently opened a new ancillary casino just north of Wittenberg. In addition to the direct gaming revenues from the casinos, the tribes and other area communities benefit from related businesses such as hotels, restaurants, and from job opportunities. Casinos also offer diverse cultural offerings such as shows and attractions.

- **Focus Heritage Tourism Efforts on Building off Existing County Assets.** Heritage tourism opportunities celebrate and take economic advantage of the area’s historic, archeological, scenic, and natural resources. Heritage tourism may focus on museums and cultural centers, vibrant rural communities, historic architecture, historic settlement patterns, rustic roads, and the County’s natural amenities. Heritage tourism is likely to become increasingly popular as the baby boom generation eases into retirement.

- **Preserve the Character of Older Downtowns and Hamlets and Utilize these Locations as a Place to Host Festivals and Market Locally Produced Services and Products.** The city and village downtowns and cultural sites can be tourist draws, primarily for out-of-town shoppers looking for quaint shopping, lodging, and dining experiences. These downtowns – and similar traditional venues in rural areas and hamlets – make ideal locations to host the many local markets and festivals throughout the County. Historic preservation, context-based design standards, marketing, and entrepreneurship are all key ingredients in maximizing this tourism based opportunity.

- **Further Marketing of Shawano County, not only as a Tourist Destination, but also as a Smart Place to do Business and a Desirable Place to Live.** Shawano County and its communities promote area tourist attractions in a variety of seasonal publications. Promotional materials highlighting Shawano County as a tourist destination are readily available. The County also markets itself to businesses and the general public through various agencies including SCEPI at the county level, and New North, Incorporated. Still, there is untapped potential to expand information outside the County to include markets in the region, State, and beyond. The County intends to explore ways to simultaneously market specific attractions by targeting related audiences such as marketing Navarino Wildlife Area to organizations and media outlets dedicated to bird watching, and marketing the County as a whole as a place with multiple attractions and activities that will appeal to tourists and prospective business residents alike. The County also intends to work with local businesses by tapping into their customer and supplier relationships to market potential branch office opportunities within the County.

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**Objective:**

**Market the County’s Assets to Attract Residents and Businesses**

As the County's population continues to age, it is in the interest of communities to work together to attract, retain and bring back younger residents. Having a balanced age structure ensures the future vitality of the County, the health of the school districts, and stability of the economy. Many communities nationwide are realizing that it can be very challenging to continuously retain young residents, as many must leave for college, trade school, or other endeavors. Communities are finding that it is acceptable to encourage young people to leave to pursue a higher education. However, many of these same communities are trying to tap into a "boomerang" effect, wherein they encourage young people to come back after getting further career training or life experience elsewhere.

While there is no magic bullet to address these challenges, the best strategies to attract and retain young residents are those that are based on the particular attributes of the communities. It can be quite challenging for a small community to tackle this issue on its own. The greatest success may be realized by employing strategies at the County level. Some ideas that can be pursued in Shawano County include the following:
• **Promoting Affordable Living in Shawano County.** Most young individuals and families that are starting out are seeking affordable housing options. Promoting Shawano County as a place where young people can purchase and begin to build equity in real estate can be a big draw. Providing a quality housing stock with a variety of housing types (e.g., single-family detached homes, duplexes, condominiums, apartments) where potential residents can get “more for their money” can be a big draw. Some areas have also offered housing subsidies for particular target groups.

• **Promoting the Health and Viability of School Districts.** One of the most important factors for young families in deciding to settle in an area, or even a particular neighborhood, is the quality of the school district and facilities. Many of the school districts in the area are struggling with low enrollment. In cooperation with the school districts, the County could work to turn this image around by promoting the smaller class sizes and student to teacher ratios, as well as other unique attributes of the school district.

• **Promoting Opportunities for Young Farmers.** In rural areas throughout the State and country, fewer and fewer young people are going into farming. In places like Shawano County, this means the strong tradition of agriculture in the community is shifting, resulting in changes in the economy, as well as creating changes in the landscape as farmland is converted or lays fallow. Promoting opportunities for young people to get into farming starts with early education and continues into advanced training, not to mention hands-on experiences. Working with the school districts and area technical colleges to ensure the availability of training in agriculture, and in promoting agriculture as a viable occupation, is a first step. Engaging organizations like Future Farmers of America and other trade groups, like the Dairy Association, can also help illustrate for young people the opportunities associated with a career in farming. The rise of biotechnology, biofuels, organics, and other movements in agriculture businesses help to expand the range of options available to young people. The County will also advocate, through the Farm Bill and other programs, incentives for young people to get into farming – carrying forward a strong State and County tradition.

• **Providing Opportunities for Career Advancement.** Providing opportunities for young people to advance in a range of careers in Shawano County is critical to keeping young people in the area. Central to this is the promise of more rewarding and good paying careers. Also entrepreneurship suits many young people – the ability to advance new and innovative ideas while having some flexibility and autonomy is increasingly attractive. SCEPI and the County will continue to work to link potential entrepreneurs with training programs through the technical college. Encouraging young people to take part in these programs can help make them aware of the opportunities, and also set them up to succeed in business undertakings.

• **Broadcasting the Quality of Life in Shawano County.** Recent trends suggest that many people are attracted to a location for its quality of life and amenities, sometimes more so than the job opportunities available. Recognizing this, the Shawano County will work with SCEPI to spotlight the quality of life attributes of the County – the exceptional natural resources, recreational opportunities, arts and cultural events, safety, small town atmosphere, convenience, and sense of community.

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**Implement the County’s Zoning and Subdivision Ordinances and Design Guidelines to Ensure High-Quality Business Development**

Working in collaboration with the towns, the County updated the County’s Zoning Ordinance related to its commercial and industrial zoning districts and standards. Additionally, the following design standards should
be used in the development and review of new commercial and industrial uses, with some flexibility considered especially in more remote rural areas (e.g., away from Highway 29 interchanges):

- High-quality signage treatment that is based on the area of building frontage, road frontage and façade area. The use of monument signs should be encouraged instead of pole signs.
- Retention of existing trees where possible.
- High quality landscaping treatment of buffeyards, street frontages, paved areas and building foundations. Landscaping materials should be of adequate size to ensure both a high degree of survivability and immediate visual effectiveness. Native plantings that blend into Shawano County’s current mix of vegetation cover will be encouraged.
- Parking lots landscaped with perimeter landscaping and/or landscaped islands, along with screening (hedges, berms, trees, and decorative walls) to limit views from streets and adjacent residential uses.
- Intensive activity areas such as building entrances, service and loading areas, parking lots, and trash receptacle storage areas oriented away from less intensive land uses.
- Parking to the sides and rear of buildings wherever possible, rather than having all parking in the front.
- Interconnected parking lots and driveways to facilitate on-site movement.
- Location of loading docks, dumpsters, mechanical equipment, and outdoor storage areas behind buildings and complete screening through use of landscaping, walls, and architectural features.
- Illumination from lighting kept on site through use of cut-off, shoebox fixtures. Careful attention to on-site lighting that would include specifications for type, height, brightness, and placement of new exterior lights is advised.
- High-quality building materials and architectural details. In particular, new buildings with attractive facades should be encouraged to face the highway. Large-scale development should incorporate architectural design, building materials, and exterior color that enhance the overall image of the corridors.
- Various techniques to add visual interest to buildings, such as canopies, awnings, trellises, bays, and windows; and variations in building heights and roof lines.
- Consideration of “green” building and site design techniques, such as recycling of construction or demolition debris, swales and basins planted with native wet vegetation, rain gardens, pervious pavement, green (vegetative) building roofs, natural daylighting, building and orientation to capture passive solar benefits, and well-insulated buildings.

![Example of Development Design Standards for New Industrial Building](image-url)
Chapter Eleven: Intergovernmental Cooperation

Intergovernmental cooperation is central to Shawano County’s comprehensive planning process. The County’s towns, villages, and cities not only share common boundaries, but also school attendance areas, watersheds, recreational trails, fire protection services, emergency medical services, roads, lakes, rivers, and rural-based economies. Recognizing this interconnectedness, Shawano County and 25 of its local governments agreed to work together to develop individual comprehensive plans under the state’s Comprehensive Planning Grant program, along with this County Comprehensive Plan. The few remaining local governments that decided to do planning on their own were also consulted and considered in this county-wide planning process.

With respect to the organizing themes of this Comprehensive Plan, intergovernmental cooperation:

- Prioritizes the health of communities and the County by maximizing efficiencies, lowering government operating costs, and minimizing conflict;
- Ensures the flexibility of facilities and services to serve the broadest range of residents through shared services;
- Enhances overall prosperity by maximizing efficiency of delivery of service, minimizing duplication, and promoting regional cooperation and economic growth that benefits all; and
- Respects communities’ individuality by allowing differences among local plans, while recognizing them as part of a larger region and governance system.

To provide a regional framework for this multi-jurisdictional planning project, this chapter:

- Analyzes the relationship between Shawano County and adjacent and overlapping governmental jurisdictions, the region, and the State.
- Includes goals, objectives, policies, and recommendations for joint planning and decision making.
- Incorporates by reference plans and agreements to which Shawano County is a party under Sections 66.0301, 66.0307, or 66.0309 of Wisconsin Statutes.
- Identifies existing or potential conflicts between known plans of different governmental units, and describes processes to resolve these conflicts.

**INTERGOVERNMENTAL COOPERATION RECOMMENDATIONS SUMMARY**

- Coordinate with other units of government on service, delivery, farmland and natural resources protection, and plan and regulatory modernization
- Work with WisDOT and local communities on Countywide transportation planning, particularly Highway 29 access, County and local roads issues, and recreational trail planning
- Collaborate with local, county-wide, and regional economic development groups to move Shawano County in new and expanded economic development directions
- Support local communities in efforts to minimize future conflict pertaining to land use, jurisdictional issues, or provision of public utilities and services
**Existing Regional Framework**

The following describes the local governments in Shawano County, and other regional and state jurisdictions operating within or adjacent to the County. The Jurisdictional Boundaries map (Map 1) presented in the introductory chapter of this Plan, illustrates the boundaries of the various jurisdictions.

Of these municipalities, communities, and tribes, 18 of the towns, 6 of the villages, the City of Shawano, and the Stockbridge-Munsee Community participated in the Shawano Area Communities Comprehensive Planning Project.

**Shawano County**

Shawano County is located in the east-central part of the State of Wisconsin. A total of 38 separate municipalities operate within the County, comprised of 25 towns, 11 villages, and 2 cities. Additionally, the Stockbridge-Munsee Community is within the north central part of the County and lands of the Menominee Indian Tribe extend slightly into this same general area.

Over the past fifty years, Shawano County has experienced less than average population growth when compared to the State and East Central region. Little or no population growth occurred during the 1950s and 1960s. However, since the 1970s, Shawano County has grown at a rate slightly greater than the State average, and slightly below the regional rate. The County’s population in 2010 was 41,949, an increase of 3.1 percent from 2000. In 2010, 62 percent of the County’s population was located in towns and 38 percent in cities and villages, a rate that has remained almost constant since 1950. According to the State Department of Administration (DOA), the County’s estimated 2012 population was 41,919, and the projected 2030 population is 46,621.

In recognition of continued future growth and its projected impact on both natural and human systems, Shawano County applied for and received a grant to complete a Comprehensive Plan for the County and 23 of its municipalities. This grant facilitated the Shawano Area Communities Comprehensive Planning Project. Three additional communities (the Villages of Bowler and Eland, and Town of Aniwa) joined the multi-jurisdictional process mid-way through.

At the time this Plan was adopted, land uses in all towns in the County, with the exception of three (Pella, Belle Plaine, and Richmond), were regulated under the County’s general zoning ordinance and subdivision ordinance. Since adoption of the Comprehensive Plan in 2007, the Towns of Hartland, Wescott, and Lessor have adopted local zoning ordinances and the Towns of Almon and Hutchins have chosen to not participate in zoning regulation. Cities and villages in the County have their own general zoning and subdivision regulations. Shawano County also maintains shoreland, shoreland-wetland, and flood plain regulations, which apply throughout all towns and occasionally in parts of cities and villages.

**Shawano County Towns**

The Towns of Almon, Angelica, Aniwa, Belle Plaine, Birnamwood, Germania, Grant, Herman, Hutchins, Maple Grove, Morris, Navarino, Pella, Red Springs, Seneca, Washington, Waukechon, and Wittenberg participated in the Shawano Area Communities Comprehensive Planning Project. All but seven of these towns had prepared land use management plans with the assistance of the East Central Wisconsin Regional Planning Commission in the late 1990’s and early 2000’s. Almon, Aniwa, Birnamwood, Grant, Morris, Navarino, and Red Springs prepared their first land use or comprehensive plans as part of this new Shawano County Project. Of the towns participating in the planning process, only Pella and Belle Plaine were not subject to the County’s general zoning ordinance.

The towns not directly participating in the project are Bartelme, Bonduel, Fairbanks, Green Valley, Hartland, Lessor, Richmond, and Wescott. The Towns of Green Valley, Hartland, and Village of Bonduel had already adopted comprehensive plans prior to the commencement of the County comprehensive planning process. However, these towns were consulted during the process, and in certain cases their earlier planning recommendations have been incorporated into the County plan. All of these communities, with the exception of
Richmond, are subject to the County’s general zoning ordinance and subdivision ordinance. Given the requirements of Wisconsin law, it is important that this County plan provide some sort of land use advice for these towns.

**Shawano County Hamlets**

Within several of the towns in Shawano County there exist unincorporated places, often referred to as hamlets. A hamlet is a small settlement that usually includes a collection of single family houses along with services and institutions that serve the local population (e.g., church, tavern). Examples of such hamlets include Krakow, Caroline, and Pella. These areas are represented on the Landscape Character Map. When working with towns on their comprehensive plans, the future of any hamlets within them was carefully considered.

**Shawano County Villages**

The Villages of Aniwa, Bowler, Cecil, Eland, Tigerton, and Wittenberg participated in the Shawano Area Communities Comprehensive Planning Project. Of these, Aniwa, Bowler, and Eland had no previous land use or comprehensive plan in place. Non-participating villages that do not have their own plan in place include Mattoon and Gresham. The Village of Birnamwood is located in both Shawano and Marathon counties. Birnamwood recently worked with Marathon County to prepare a village comprehensive plan. Marion is located in Shawano and Waupaca counties, and Pulaski is located in Shawano, Oconto, and Brown counties. The Village of Marion worked with Waupaca County on a comprehensive plan, and the Village of Pulaski worked with Brown County on a comprehensive plan. Both Marion and Pulaski’s Plans have been adopted.

The Village of Bonduel worked in tandem with the Town of Hartland on a new comprehensive plan in the early 2000s. No known conflicts exist between the Village plan and this County Comprehensive Plan.

**Shawano County Cities**

The City of Shawano is located in the east central part of the County. The City of Shawano’s population increased by 40.8 percent between 1950 and 2000, growing from 5,894 residents to 8,298. Some City growth is a result of the annexation of lands from neighboring towns over this period. However, Wisconsin Department of Administration projections show the population of the City increasing over the 20-year planning period by about four percent, which is less than that projected for surrounding towns. The City prepared the City of Shawano Comprehensive Plan concurrent with neighboring communities as part of the Shawano Area Communities Comprehensive Planning Project. The process allowed several opportunities for interaction among the City and neighboring towns that also prepared plans. There remain some differences – most minor – between the City’s plan and those of neighboring towns.

**Native American Communities**

**Stockbridge-Munsee Community**

The Stockbridge-Munsee Community maintains tribal fee and trust land located within the boundaries of the Towns of Bartleme and Red Springs. Trust land is so designated by the U.S. Bureau of Indian Affairs; most non-tribal regulations are not applicable on trust land. Fee land is held by the tribe, but remains subject to most non-tribal regulations. The Community’s population was 1,527 in 2000, a 162.8 percent increase from 1990. The tribe, County, and neighboring communities collaborate on many services and initiatives, including Fire, EMS and police protection, and joint road projects. The Tribe has a land use code in place that is used to help direct and regulate new development in the community for lands held in trust. Lands held in fee title are subject to County zoning and subdivision regulation.

The Tribe participated in the Shawano Area Communities Comprehensive Planning Project. The Tribe’s comprehensive plan recommends preservation throughout most of its trust land, with new development focused along CTH A. The Tribe’s plan includes only minor differences in land use densities in a couple of locations compared to plans of overlapping towns. The plan also recommends conversion of fee land to trust land in several locations. The Town of Red Springs is generally not in favor of conversion of fee land to trust
land. Possible strategies to move toward resolution of these issues will be discussed in the following section of this chapter.

**Menominee Indian Tribe**

The Menominee Indian Tribe governs land that is held in trust for the Tribe throughout most of Menominee County, and also some land within the Town of Red Springs in Shawano County. The Tribe has a zoning code in place for lands under its jurisdiction, and was going through a process to develop a strategic plan at the time this Comprehensive Plan was prepared. The strategic plan was geared toward establishing a vision of the Tribe for land use planning, transportation, and other infrastructure. As an early implementation step of the strategic plan, the Menominee Tribe anticipates preparing a land use plan.

**Surrounding Counties**

The following reflects the status of planning in neighboring counties. Actual or potential future conflicts, and processes to resolve them, are reported in the following section of the Plan.

**Oconto County**

Oconto County is located northeast of Shawano County. The county covers approximately 1,000 square miles. The lumber and tourism industries are mainstays of the economy, with farming also an important industry. The County’s population was 37,660 according to the 2010 Census, an increase of 5.7% percent from 2000. The DOA population projections forecast 27 percent population increase between 2005 and 2030.

In recognition of projected continued future growth, Oconto County undertook a countywide comprehensive planning project; the final County Comprehensive Plan was adopted in June 2009. The Towns of Morgan, Chase, Underhill, and Gillett, border Shawano County in Oconto County.

**Menominee County**

Menominee County shares a portion of Shawano County’s northern border. Geographically, Menominee County has a total land area of 358 square miles and is dotted with 128 lakes. The County landscape is primarily rural and wooded, but also includes the Villages of Keshena (the County seat) and Neopit. The population of the County in 2010 was 4,978, an 8 percent increase since 2000. Projections prepared by the DOA and by ECWRPC show the population continuing to grow at a slightly increased rate.

With assistance from the East Central Wisconsin Regional Planning Commission, the County adopted a Comprehensive Plan in December 2009. Because most of the area of the County is held in trust, the land in the County is largely managed by the Menominee Indian Tribe, with the exception of a few areas.

**Marathon County**

Marathon County is located west of Shawano County. The County covers 1,576 square miles, with 21 incorporated municipalities and 41 towns. The population according to the 2010 Census was 134,504, a 6 percent increase since 2000. Marathon County is home to Wausau—North Central Wisconsin’s largest city. According to the Wisconsin Department of Administration, the County’s population is expected to increase at a relatively steady rate of about 3 percent every five years.

In 2002, Marathon the County received a State comprehensive planning grant. The County and 53 of its 62 municipalities went through the process of creating a County Development Plan and 53 individual municipal comprehensive plans through a massive cooperative effort. Most of the plans were adopted in 2006. The Towns of Franzen, Elderon, Norrie, and Plover border Shawano County in Marathon County.

**Waupaca County**

Waupaca County is located south and west of Shawano County. Geographically, Waupaca County has a total land area of 761 square miles and is host to 34 units of local government including six cities, six villages, and 22 towns. The County landscape is primarily rural, but also includes the urban centers of New London, Waupaca, and Clintonville.
Waupaca County is growing at a significantly slower rate higher than State of Wisconsin; 1.1 percent between 2000 and 2010. The DOA 2012 population estimate is 52,381. Population changes vary widely between communities, but in general the population of villages is remaining fairly constant, while the population of cities is falling and that of unincorporated towns is rising. Projections prepared by the DOA and by ECWRPC show the population continuing to change at similar rates in the future.

To help its communities address issues related to continuing population growth and land use, the County applied for and was granted a State comprehensive planning grant in 2003 to fund a comprehensive planning process for the County and 33 of its 34 cities, villages, and towns. All of the plans were adopted in 2007, including that for the adjacent towns of Matteson, Larrabee, Dupont, Wyoming, and Harrison.

Outagamie County
Outagamie County is located south of Shawano County. It covers approximately 640 square miles and is comprised of twenty towns and all or part of fourteen incorporated communities. The Fox River Valley is the focal point for much of the County’s population, commerce, and industry, including Appleton, the County Seat.

Outagamie County is growing at a rate higher than average for the State of Wisconsin: 9.8% between 2000 and 2010. The DOA population estimate for 2012 is 178,150. DOA projects continued growth of around 5% for each 5-year period until 2030.

Outagamie County adopted a Comprehensive Plan in 2008. The Outagamie towns of Seymour, Cicero, and Maine border Shawano County; each of these towns participated in Outagamie County’s comprehensive planning process.

Langlade County
Langlade County is located to the north of the far western portion of Shawano County. The County comprises 872 square miles, and has 871 lakes within its boundaries. The population of the County was 19,977 according to the 2010 Census, a 3.7 percent decrease since 2000. The Wisconsin Department of Administration forecasts continued population growth of about 2 percent every 5 years until 2030. The County completed and adopted a comprehensive plan in 2009. The Towns of Rolling and Norwood border Shawano County in Langlade County. The Town of Rolling has adopted a plan; Norwood has not.

Brown County
Brown County is located to the east of Shawano County. It covers approximately 535 square miles and is comprised of twenty-four local units of government, and the Oneida Nation. Green Bay is the focal point for much of the County’s population, commerce, and industry, and it is also the County Seat. The County has experienced very strong residential, commercial, and industrial growth, adding about 21,229 new residents between 2000 and 2010, a 9.4 percent increase.

The County received a grant to develop a new plan that would meet the requirements of the Wisconsin Comprehensive Planning Statues, take into account the changes in the County since 1996, and better reflect Brown County residents’ vision of how the County should develop over the next 20 years. Brown County adopted that Comprehensive Plan in 2004. The Town of Pittsfield is adjacent to Maple Grove, in Shawano County.

The Village of Pulaski is an interesting community, as it spans the boundaries of three counties: Brown, Shawano, and Oconto. The Village worked with Brown County to develop its comprehensive plan, adopted in 2007. That plan discussed issues and opportunities for intergovernmental cooperation which included the Towns of Angelica and Maple Grove in Shawano County. Of particular interest was the opportunity for the Village to annex land from either the Town of Angelica or the Town of Maple Grove. In the case of an annexation request, the Village should inform the Town(s) early in the process of any annexation petitions. The plan also recommended the development of comprehensive boundary agreements between the Village and the towns.
Regional Planning Jurisdictions
Shawano County is located within the jurisdiction of the East Central Wisconsin Regional Planning Commission (ECWRPC). The East Central Wisconsin Regional Planning Commission is the official comprehensive planning agency for the East Central Wisconsin Counties of Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara, and Winnebago. Services provided by the Commission include Comprehensive and Land Use Planning; Transportation Improvement and Corridor Planning; Open Space, Recreational and Environmental Planning; Economic Development; Demographic Information and Projections; Technical Assistance to Local Governments; Geographic Information Services and Aerial Photography Distribution.

The ECWRPC has recently prepared a Year 2030 Comprehensive Plan for the ten counties serving the region. This plan crafted thematic vision statements pertaining to each of the nine required elements of the State comprehensive planning law. Recurring themes were identified across all areas of the Year 2030 Comprehensive Plan, these include: provision of education and public awareness; importance of intergovernmental and public/private sector cooperation; recognition of local responsibility; efficient and cost effective service provision; alternative and creative funding options; integrated, proactive, and sustainable planning that takes account of future generations; and the absolute necessity for implementation and monitoring. The ECWRPC Year 2030 Comprehensive Plan includes a regional future land use map that is compatible with the County’s future land use map presented in Maps 7A-7C.

The ECWRPC prepared land use and development plans (land management plans) for many of the Shawano County communities in the mid-to late-1990’s.

In addition, within the State Administrative Code for Water Quality Management, ECWRPC is the responsible agency for sewer service area delineation and administration in Shawano County. ECWRPC has prepared water quality plans, delineation and amendment of urban service areas, and delineation and amendment of environmental corridors in coordination with WisDNR. ECWRPC also administers State Administrative Rule NR 135 for Shawano County and other counties in the region.

Important State Agency Jurisdictions
The Wisconsin Department of Transportation’s (WisDOT) North Central Region main office, located in Rhinelander, and its second office in Wisconsin Rapids, serves all of Shawano County. The Wisconsin Department of Natural Resources (WisDNR) Northeast Region provides service to Shawano County residents with offices in Green Bay, Oshkosh, and Peshtigo. The Department of Agriculture, Trade and Consumer Protection (DATCP) is the state agency which administers the state’s Farmland Preservation Program. There are no apparent conflicts between state plans and policies and this Plan.

School Districts
Shawano County is served by twelve public school districts. The four largest are the Pulaski Community, Shawano, Antigo, and the Seymour Community districts. Eight other districts serve parts of the County: the Bonduel, Bowler, Clintonville, Gresham, Gillett, Marion, Tigerton, and Wittenberg-Birnamwood School Districts. The boundaries of these eleven school districts are shown on Map 1.

The County is also served by 3 vocational technical districts. There are no apparent conflicts between any plans and policies of any of these school districts and the policies of this Plan.
**Intergovernmental Cooperation Activities Undertaken As Part of This Planning Process**

Intergovernmental coordination and cooperation was a cornerstone of the process to prepare Shawano County’s Comprehensive Plan, along with those plans of the 25 participating local communities. The following is a summary of particular activities and events that were specifically designed to facilitate cooperation. Some of these are described in greater detail in the Issues and Opportunities chapter:

- **General Cluster Level Meetings:** Cluster meetings were designed to help facilitate information sharing, shared issues and opportunities, and issue resolution between communities with common interests. The cluster meetings held throughout this process – including those to establish plan direction (March 2006), articulate community goals (December 2006), and particularly to share future land use maps (October 2007) – provided opportunities for sharing, exploring common interests, and discussing issues.

- **Specific Intergovernmental Meetings (2007/2008):** As part of the Shawano Area Communities Comprehensive Planning Project, the County and consultant organized focused intergovernmental meetings between some communities where special intergovernmental issues were identified. Those communities that participated in focused one-on-one intergovernmental discussions included the Village of Wittenberg and Town of Wittenberg, the City of Shawano and Town of Washington, the City of Shawano and Town of Waukechon, and the City of Shawano and Town of Belle Plaine.

- **Non-Participating Communities Meeting (January 2008):** This special meeting focused on the relationship between the Shawano County Comprehensive Plan and local communities who did not participate in the Shawano Area Communities Comprehensive Planning Project, these included those who prepared or were in the process of preparing their own plans through separate processes and those who were not preparing plans. At this time, the outcome of this meeting helped shape the process for resolving differences and inconsistencies between the County plan and local plans (discussed in the policies and programs section below), and the how the County might apply general zoning and subdivision regulations in communities without plans, or with plans prepared separately from this process.

- **Incorporated Areas Meeting (January 2008):** This special meeting was an opportunity to focus on the unique opportunities and challenges for plan implementation faced by smaller incorporated communities (cities and villages), although a wide variety of land use and economic development topics were discussed. One outcome of the meeting was a clearer understanding of how and when use of Extra-Territorial Jurisdiction powers is appropriate, particularly within the context of Shawano County.

**Intergovernmental Cooperation Goals, Objectives and Policies**

**Goal:**
1. Cooperate with other jurisdictions – including communities within the County, neighboring units of government, and overlapping jurisdictions – on issues related to implementation of this Comprehensive Plan.

**Objectives:**
1. Work cooperatively with local governments, state agencies, regional planning agencies, and school districts to address land use and community development issues of mutual concern.
2. Coordinate with local and neighboring jurisdictions to inform land use decision-making, coordinate growth management and preservation efforts, and provide for more efficient delivery of services.
3. Continue to promote and enter into new shared public service agreements where such agreements will provide improved or more efficient services at equal or lower costs for the County and its residents.
4. Minimize conflicts between local community plans, and support processes to resolve existing and future conflicts between the plans of governments with overlapping jurisdictions.

**Policies:**

1. Work with local communities and other government agencies to implement the objectives, policies, and recommendations included in other chapters of this Plan that depend on intergovernmental cooperation.

2. Cooperate with the School Districts serving residents of the County on ongoing district and planning activities in the County. Keep the School Districts informed on items relating to this Plan, including development activities and planned areas of future growth, to assist with enrollment projections and possibly new school siting. Participate in collaborative recreation planning efforts.

3. Work with WisDOT and the ECWRPC to ensure that Shawano County’s transportation system is coordinated with that of neighboring communities and the region, and that the County’s interests are well served when major transportation facilities or programs are proposed, such as the Highway 29 project.

4. Work with WisDNR and the ECWRPC on natural resource issues, opportunities, and regulations that apply to the County and its local communities. See detailed policies and recommendations in the section below.

5. Work to resolve actual and potential conflicts between County and local plans through informal discussions, cooperative initiatives, and amendments to this Comprehensive Plan where appropriate.

6. Work with communities that have prepared and adopted plans through separate (apart from the Shawano Area Communities Comprehensive Planning Project) planning processes on approaches to County-level decision making based on the recommendations of those plans. Please see the section below for more details on how the County will approach this situation.

7. Respect that communities who prepare plans separate from the Shawano Area Communities Comprehensive Planning Project may have prepared recommendations and developed land use regulations more detailed than those in the Shawano County Comprehensive Plan. When making land use decisions, refer to those more detailed policies whenever practical.

8. Encourage and support each town that has not yet prepared a Comprehensive Plan to do so in order to guide decision making in that community and assist the County in making better County decisions that affect that town.

9. Consider the recommendations of this Shawano County Comprehensive Plan and local comprehensive plans when amending and updating other, more detailed, County plans, such as the Farmland Preservation Plan, Comprehensive Outdoor Recreation Plan, and Transportation Improvement Programs.

10. Amend the Future Land Use map (Map 7a, 7b, or 7c) of the Shawano County Comprehensive Plan only at the recommendation of the affected local community, and amend other parts of the Comprehensive Plan only after providing local governments and others with the opportunity to provide comments on the proposed amendments.

11. Provide the towns with a meaningful role in ongoing zoning and subdivision decisions.

12. Continue to work with the UW-Extension on educational forums and ongoing intergovernmental communication designed to inform local officials of opportunities related to land use, growth management, and intergovernmental relationships.

13. Promote permanent town, village, and city plan commissions to assist community local elected officials on land use decision making, help implement the recommendations of local comprehensive plans, and serve on County-level committees designed to review County zoning and subdivision ordinances.

14. Encourage local communities and the tribes to enter into joint planning initiatives, including intergovernmental land use, service, and boundary agreements.
15. Enter into and encourage joint service agreements where consolidating, coordinating, or sharing services will result in better services or cost savings.

**Detailed Intergovernmental Cooperation Recommendations and Programs**

Intergovernmental initiatives are central to the overall direction of this Plan and ensure the most effective and cost-efficient way of operating the County and local communities. Policies, programs and recommendations requiring intergovernmental cooperation are at least touched upon in each chapter of this Comprehensive Plan. This section attempts to coordinate recommendations for adjacent and overlapping jurisdictions, avoid inefficient or conflicting development patterns, and promote intergovernmental cooperation.

**Promote Cooperative Agricultural and Natural Resource Programs**

Natural and agricultural resources define Shawano County. The preservation of agriculture and natural resources was identified as a high priority in comprehensive plans countywide. However, most successful agricultural preservation initiatives depend on the actions of more than one unit of government. Also, because natural resources and features—such as lakes, rivers, wetlands, soils, and wildlife—do not adhere to jurisdictional boundaries, taking a regional approach to their protection is critical. As such, the County intends to pursue the following general directions in cooperation with local communities and state and federal agencies and funding sources:

- Implement the County’s a Land Evaluation and Site Assessment Program, in coordination with local communities, to guide land use decision-making including zoning, land divisions, and land protection.
- Explore and consider implementing an acquisition of agricultural conservation easement program, focused particularly on accepting donated easements and/or on partnering with an existing non-profit land trust.
- Work cooperatively to update the County’s farmland preservation plan (which is a component of this Comprehensive Plan) on a similar 10-year cycle to future updates to the entire Comprehensive Plan.
- Help expand markets for local agricultural products through encouraging value-added products, promoting bio-based product manufacturing with local inputs, and linking local producers to broader and expanded markets.

**Pursue Cooperative Transportation Initiatives**

Roads are critical to rural communities, but such communities often do not have the resources and expertise to maintain the road network on their own. Furthermore, many of the major thoroughfares for local communities are County highways. Finally, State and Interstate highways form the backbone of the County’s transportation system, and provide connections well beyond the County boundaries. Therefore, this Comprehensive Plan includes several recommendations to coordinate transportation improvement efforts at the local, County, regional, and State levels. To advance intergovernmental transportation system planning and management, the County intends to pursue the following general directions in cooperation with local communities and State and federal agencies and funding sources:

- Work with WisDOT to ensure that the County’s interests are well served when major transportation facilities or programs are proposed, such as with respect to future Highway 29 access control projects.
- Represent County and local interests pertaining to State projects, including maintaining existing highways and addressing problem intersections, including the recommendations included in the Transportation chapter.
Coordinate annually with the towns to update and implement Town Road Improvement Programs (TRIPs) for road upgrades and funding, and offer assistance in the identification and maintenance of databases on the condition of town roads and bridges.

Consider preparing a model Town Road Specifications Manual to establish consistent minimum standards for new town roads built in the County. This manual would be forwarded to the towns for review and comment before application through amendments to the County’s subdivision ordinance. The standards could apply to new town roads in the event that towns do not have their own specifications.

Consider preparing a model driveway ordinance that specifies the placement, repair, construction, improvement, and reconstruction of private driveways and private roads. This model could be adopted and applied by interested town governments.

Continue to promote and explore alternative transportation options, such as transit, para-transit, and ride-sharing.

Promote Cooperative Utilities, Services and Community Facilities Efforts
Consolidating and coordinating services and facilities among communities often results in cost savings and better services. Cooperative service agreements are particularly important in the current era of diminishing government financial resources. To advance intergovernmental cooperation with respect to community facilities, services and utilities, the County intends to pursue the following general directions in cooperation with local communities and State and federal agencies and funding sources:

- Encourage the formation and extension of joint service agreements between communities and the County, and between communities within the County. Key services that are and may be subject to such agreements include, police protection, fire protection, emergency medical service, road maintenance, trash collection, recycling, and snow removal. For example, most towns have agreements with the County to provide a road maintenance and snow removal service, which makes sense into the future.
- Cooperate with school districts in long-range planning and decision-making. In instances where enrollment is declining, and/or upgraded facilities may be needed in the future, continued coordination is crucial to help maintain viability.
- Encourage cooperative utility system planning in areas that are already developed but may need a higher or more reliable level of sewage treatment over the 20-year planning period. Coordination between neighboring communities on this issue is of particular relevance where towns are close to villages and cities with public utilities.
- Help guide urban development into areas with public sanitary sewer and/or water systems, and assist as requested with intergovernmental agreements between towns and nearby cities or villages to extend public services.
- Work to identify and promote strategies to maximize energy efficiency and utilize alternative energy sources, such as wind power and fuel produced by biomass.

Advance Cooperative Housing, Neighborhood, and Economic Development Initiatives
Intergovernmental cooperation can play a role to advance innovative approaches to neighborhood development and adequate housing for all residents. Further, in an era where competition for economic development is global rather than local or regional, many areas are realizing that they can achieve more success working as part of a regional effort, rather than competing for growth and development with their neighbors. This Plan promotes partnerships and cooperative programs that encourage efficient sharing of resources to advance the County’s housing economic health. To advance intergovernmental cooperation with respect to housing, neighborhood development, and economic development, the County intends to pursue the following general directions in cooperation with local communities and State and federal agencies and funding sources:
- Work with state and federal agencies to access and direct housing programs, including WHEDA, the U.S. Department of Housing and Urban Development, and UW Extension.
- Work cooperatively with Shawano County Economic Progress, Inc. (SCEPI) to retain, grow and attract businesses and train residents.
- Work with regional economic initiatives, like NEWREP and NEW NORTH, to promote regional economic development and define Shawano County’s unique role in the region.
- Explore financial incentives through State programs (e.g., Buy Local, Buy Wisconsin) to market locally grown agricultural products.
- Participate in Statewide initiatives, like the Biobased Consortium, to explore and define the County’s role in the bio-based economy – for instance, by focusing on producing the raw inputs for bio-fuels and bio-based products.
- Support the villages, city, and town downtowns and hamlets in economic revitalization efforts.
- Promote the availability of high-speed telecommunication services throughout the County.
- Engage in partnerships between local businesses, governments, and educational institutions to retain younger workers and families in Shawano County.

**Advance Cooperative Land Use Planning**

The Future Land Use map (combination of Maps 7a, 7b, and 7c) included within this Comprehensive Plan is a “patchwork” of the recommendations of each locally adopted future land use map for communities that participated in the Shawano Area Communities Comprehensive Planning Project. Maps 7a, 7b, and 7c reflects plans for incorporated communities in their extraterritorial jurisdictions where the adjoining town did not participate in this planning process or have a plan that was translated onto the County’s Future Land Use map.

Several communities in Shawano County elected not to participate in the late 2000s multi-jurisdictional planning process for a variety of reasons – including having completed a Comprehensive Plan on their own, having an existing land use plan that they elected not to update, or choosing not to prepare a plan at all. For communities that are under County general zoning and subdivision ordinances, it is particularly important that the County provide guidance to determine that land use decisions made are consistent with the County’s Plan. The County established a procedure whereby communities who did not participate in the Shawano Area Communities Comprehensive Planning Project could have their future land use visions reflected on the County’s Future Land Use map (combination of Maps 7a, 7b, and 7c) as well, if they selected and undertook a set of pre-specified steps.

Nearly all of the future land use recommendations made by each town, village, and the city are consistent with each other, with exceptions identified in Figure 11.1 below. In cases where minor differences exist between local plans at border areas, the County encourages continued discussion between the affected city/village and town. Eventually reaching a mutually agreed-upon future land use pattern provides the most certainty to both communities and potential developers, minimizes costly land use disputes, and provides better direction for related County land use decisions. This Plan provides a framework for addressing existing and potential differences that may arise over time in the later section called “Process for Resolving Conflicts.”

Over time, different wishes for future land use could emerge in response to local community desires, new development proposals, or otherwise changing conditions. Steps for amending local comprehensive plans and this County Plan in the future are laid out in the Implementation chapter.
**Existing and Potential Intergovernmental Conflicts and Strategies to Address**

The State comprehensive planning law requires that this Comprehensive Plan identify existing and potential conflicts between the County and other governmental units, and describe processes to resolve such conflicts. The Shawano Area Communities Comprehensive Planning Project was designed to avoid and minimize potential conflicts, yet some still exist. The following subsections address remaining or potential conflicts areas and potential resolution processes.

In general, the County encourages towns, villages, cities and Native American communities to continue to coordinate with each other and the County on land use planning. This should include ongoing discussions and at times formal agreements between adjacent communities and overlapping units of government in regards to planning for future land use types; promoting the quality, character, and intensity of development; mitigating adverse impacts between neighboring uses; and deciding on the best jurisdiction and service arrangements for new development.

The following sections address remaining or potential conflict areas and potential resolution processes, with a particular focus on potential future land use conflicts.

**Actual or Potential Conflicts Between the County Plan and Local Plans**

The Shawano Area Communities Comprehensive Planning Project was a multi-jurisdictional effort emphasizing involvement at both the County and local levels. Because of the careful design of the process, there are few existing or anticipated conflicts between the County Plan and local comprehensive plans.

The Shawano Area Communities Comprehensive Planning Project was designed as a bottom-up process, driven by local communities – particularly the land use planning component. Each locally desired future land use pattern, as expressed in adopted local comprehensive plans, was incorporated without change into the Shawano County Comprehensive Plan. The County’s Future Land Use map (combination of Maps 7a, 7b, and 7c) is a compilation of all the locally-approved planned land use maps. This County Plan and the local plans share an emphasis on preservation of rural character; agriculture, and natural resources; cooperative transportation system improvement and planning; and intensive development generally directed to already-developed areas in and near villages, cities, and interchange areas.

In the few instances where there are conflicts between the plans of neighboring community Future Land Use maps, the County Plan identifies those areas as “Local Plan Difference Areas” on the Future Land Use map (Maps 7a, 7b, and 7c). These areas are discussed in more detail in the following section of this Plan.

Several communities did not prepare comprehensive plans as part of the Shawano Area Communities Comprehensive Planning Project. These “non-participating communities” were considered in this County Comprehensive Plan. The County considered whether the non-participating communities had adopted plans shaping their future land use, and also whether they are subject to Shawano County zoning and subdivision regulations. Shawano County has developed an approach to minimizing potential conflicts between local development objectives in these non-participating communities and County objectives and decision making in the future. This process is described below:

**For Towns NOT Participating in the Shawano Area Communities Comprehensive Planning Project, but Under General County Zoning and Subdivision Ordinances**

The towns that fall under this category include Fairbanks, Bartleme, Wescott, Green Valley, Hartland, and Lessor. Some of these towns have their own plans of varying levels of compliance with the State’s comprehensive planning legislation, while others had no adopted plan at the time of writing. The County considered three main options for addressing this category of towns within this County Comprehensive Plan, recognizing that some level of guidance for future County zoning and subdivision decision making in those places is important. The options considered included working directly with these towns to prepare a desired future land use map and policies conforming to the County’s future land use categorization system, using existing zoning
approach for this category of towns includes the following components:

1. For those “non-participating” towns under County zoning jurisdiction that are preparing their own comprehensive plans, the County intends to incorporate the future land use maps and key recommendations of those town plans into the County’s Comprehensive Plan. Such town plan materials will be reflected in the County’s Comprehensive Plan only after the town plan has been adopted by the town board, where the town board takes action to request inclusion in the County Comprehensive Plan, where the town plan includes a map showing desired future land uses, and where the town successfully works with the County to translate its future land use map to the County’s future land use categorization scheme. The County encourages communities to adopt plans that use similar future land use categories as those presented in Maps 7a, 7b, and 7c and described in the Land Use chapter of this County Plan. The County respects that communities who prepared plans separate from the Shawano Area Communities Comprehensive Planning Project may have prepared recommendations and developed land use regulations/future land use categories that are more detailed that those in the Shawano County Comprehensive Plan. The County will work with the affected communities to try to make decisions according to those more detailed policies, where they do not conflict with this County Plan.

2. For all other “non-participating” towns that are under County zoning and subdivision ordinance jurisdiction, the County intends to utilize the existing zoning district pattern within those towns plus the general development review standards included in the Land Use chapter and/or a Land Evaluation and Site Assessment system as a basis for making future decisions under its general zoning and subdivision ordinances within such towns. If a particular town is dissatisfied with this arrangement, that town may choose to prepare its own Comprehensive Plan or future land use map and get it incorporated in the County’s Comprehensive Plan under the criteria described above.

For Towns NOT Participating in the Shawano Area Communities Comprehensive Planning Project, and NOT Under General County Zoning and Subdivision Ordinances

County Plan policies related to land use in this second category of towns are generally limited to those applicable in shoreland zoning areas. These towns are currently limited to the Town of Richmond. The selected approach for this category of towns includes the following components:

1. For those “non-participating” towns not under County zoning but preparing their own comprehensive plans, the County may incorporate the future land use maps and key recommendations of those town plans into the County’s Comprehensive Plan. Such town plan materials may be reflected in the County’s Comprehensive Plan only after the town plan has been adopted by the town board, where the town board takes action to request inclusion in the County Comprehensive Plan, where the town plan includes a map showing desired future land uses, and where the town successfully works with the County to translate its future land use map to the County’s future land use categorization scheme. The County encourages communities to adopt plans that use similar future land use categories as those presented in Maps 7a, 7b, and 7c and described in the Land Use chapter of this County Plan.

2. For other “non-participating” towns that are not within the County’s zoning and subdivision ordinance and did not prepare their own local plans, the County has not and does not intend to include any land use recommendations on its Future Land Use map.

3. For those towns that have not participated in the Shawano Area Communities Comprehensive Planning Project and were not under general County zoning at the time this Plan was prepared, but wish to come under general County zoning in the future, the County will work with the town to first prepare a town Comprehensive Plan. County assistance may take the form of technical advice, mapping assistance, or discussion of policy options, but will have to be balanced with the County’s staffing and budget constraints. Following town board adoption of its plan, the County may then incorporate applicable portions of the
town plan into this County Comprehensive Plan, through the amendment process described in the Implementation chapter. Then, appropriate County zoning districts to implement the land use recommendations in the amended County Plan can be mapped for that town.

Actual or Potential Conflicts Between this Comprehensive Plan and Other Shawano County Plans and Policies

- Especially with recent updates to the County Zoning Ordinance and farmland preservation components of this Comprehensive Plan, there are no known conflicts between this Comprehensive Plan and other Shawano County plans and policies.

Actual or Potential Conflicts Between Communities in Shawano County

Through this planning process, neighboring communities undertook discussions to resolve potential differences between local comprehensive plans before their adoption. This approach generally succeeded, though it was not the intent to address all potential conflicts as part of this process, but rather to identify issues and establish a process in the future for resolving those issues. The philosophy underlying this multi-jurisdictional planning process suggested that locally adopted plans be incorporated without change into the Shawano County Comprehensive Plan. However, this became more complicated in the limited instances where there remained differences between the adopted Future Land Use maps of neighboring jurisdictions.

Figure 11.1 summarizes the relationships between neighboring community plans, in instances where differences or disagreements were identified. The figure identifies where differences between adopted plans occur, key border issues, and suggested steps to resolution of existing and potential future conflicts. Any conflicts in comprehensive plans between communities that did and those that did not participate in the County’s comprehensive planning process are not represented in Figure 11.1.
### Figure 11.1: Relationships between Local Comprehensive Plans Of Participating Communities

<table>
<thead>
<tr>
<th>Communities Affected</th>
<th>“Future Land Use Difference Areas” on Maps 7a, 7b, and 7c</th>
<th>Key Border Issues</th>
<th>Suggested Steps to Resolve Issues</th>
</tr>
</thead>
</table>
| City of Shawano / Town of Belle Plaine | • Location: Lands south and west of Highway 29, near Highway 22 interchange  
• City’s plan recommends that this land area be reserved for agricultural and open space uses in the short term, possibly serving as a future City growth area beyond the 20-year planning period  
• Town’s plan recommends that some of this area develop with commercial and limited residential uses, most likely within the Town | • Commercial and industrial development  
• Interchange development  
• Possible utility (sewer) extensions  
• Transportation access  
• Rural residential development  
• Future jurisdictional boundaries | • Ongoing intergovernmental discussions  
• Possible intergovernmental boundary agreement |
| City of Shawano / Town of Waukechon | • Location: Highway CC and K corridors, south of Highway 29  
• City’s plan identifies all lands between Highway 29 and the southern extent of the City’s extraterritorial jurisdiction for continued Agriculture and Resource Preservation land use, possibly serving as a future City growth area beyond the 20-year planning period  
• Town’s plan identifies certain lands along the Highways CC and K corridors for Residential (Sewered) and limited General Commercial development | • Future jurisdictional boundaries and utility extensions  
• Location and quality of residential and commercial development  
• Ability to have viable market for new single-family development in the City of Shawano | • Ongoing intergovernmental discussions  
• Possible intergovernmental boundary agreement |
| City of Shawano / Town of Washington | • Location: West edge of Town of Washington  
• City’s plan identifies all lands to the eastern extent of the City’s extraterritorial jurisdiction for continued Agriculture and Resource Preservation land use | • Location of larger-scale commercial and employment development  
• Ability to have market for new single-family development in the City of Shawano | • Continued, regular intergovernmental discussions  
• Possible intergovernmental boundary agreement in the longer-term |
<table>
<thead>
<tr>
<th>Communities Affected</th>
<th>“Future Land Use Difference Areas” on Maps 7a, 7b, and 7c</th>
<th>Key Border Issues</th>
<th>Suggested Steps to Resolve Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village of Cecil / Town of Washington</td>
<td>✗ Town’s plan identifies the same area for future residential subdivision development in the Residential (Sewered) and Residential (1-2.5) future land use categories</td>
<td>✗ Annexation</td>
<td>✗ Internal discussions within each community to achieve common, shared vision for area</td>
</tr>
<tr>
<td></td>
<td>✗ Location: Mainly beyond the east edge of the Village of Cecil</td>
<td>✗ Current agricultural zoning rules in County zoning</td>
<td>✗ Commence intergovernmental discussions following clear internal agreement</td>
</tr>
<tr>
<td></td>
<td>✗ Village’s plan identifies area for continued Agriculture and Resource Preservation land use</td>
<td>✗ Utility and service provision (concern with future Village development NOT served by public sanitary sewer)</td>
<td>✗ Special intergovernmental meetings when a development proposal is under consideration</td>
</tr>
<tr>
<td></td>
<td>✗ Town’s plan identifies area for future residential subdivision development in the Town within the Residential (1-2.5) future land use category</td>
<td>✗ Jurisdictional boundaries</td>
<td>✗ Ongoing intergovernmental discussions</td>
</tr>
<tr>
<td></td>
<td>✗ NOTE: Designated Future Land Use is not in question (no “difference area” shown on Map 7c)</td>
<td>✗ Utility and other public service provision to new development</td>
<td>✗ General intergovernmental agreement on land use, revenue sharing, and services</td>
</tr>
<tr>
<td>Village of Wittenberg / Town of Wittenberg</td>
<td>✗ Location: Area along Highway 45, north of Village of Wittenberg</td>
<td>✗ Use of extraterritorial authorities by Village</td>
<td>✗ Ongoing intergovernmental discussions</td>
</tr>
<tr>
<td></td>
<td>✗ NOTE: Designated Future Land Use is not in question (no “difference area” shown on Map 7c)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockbridge-Munsee Community / Town of Red Springs</td>
<td>✗ Locations: Two areas in the Town of Red Springs</td>
<td>✗ Density of residential development (although not major disagreement on desired future density)</td>
<td>✗ Ongoing intergovernmental discussions regarding the proposed density and timing of development, and the upgrading of roads to serve the proposed development area</td>
</tr>
<tr>
<td></td>
<td>✗ Tribe designates these areas for low-density residential development</td>
<td>✗ Conversion of fee land to tribal trust land, as it impacts on property taxes, fees, and regulations</td>
<td>✗ Continue discussions with the Town and County regarding the conversion of fee lands to trust land, and related service and infrastructure cost issues</td>
</tr>
<tr>
<td></td>
<td>✗ Town designates them in the Open Lands, Agriculture and Residential (10 – 35) category – which is intended to remain primarily open lands with some limited opportunity for residential development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Continued intergovernmental discussions are an effective approach for resolving the remaining differences between local plans, and to deal with future border issues. Formal intergovernmental boundary agreements are another, more long-term approach. Intergovernmental boundary agreements may cover future land uses in edge areas, set long term municipal boundaries, or set utility expansion limits. Such agreements help minimize potential for future conflicts as time passes, local officials change, and initial ideals and reasons for cooperation get murkier.

There are two main formats for intergovernmental boundary agreements under Wisconsin Statutes. The first is available under Section 66.0301, which allows any two or more communities to agree to cooperate for the purpose of furnishing services or the joint exercise of any power or duty authorized under State law. While this is the most commonly used approach, a “66.0301” agreement is limited by the restriction that the municipalities must be able to exercise co-equal powers. Another format for an intergovernmental agreement is a “cooperative plan” under Section 66.0307 of the Wisconsin Statutes. This approach is more labor intensive and ultimately requires State approval of the agreement, but does not have some of the limitations of the “66.0301” agreement format.

Areas where intergovernmental agreements are recommended are summarized in Figure 11.1, above. For most of the areas where intergovernmental agreements are recommended to be explored, the following are recommended as first steps to working toward such agreements:

- Hold one-on-one meetings among local decision-making bodies, or appoint a working committee from each community that does not constitute and quorum to allow for initially more open and honest discussion of issues.
- Employ a 3rd party, neutral facilitator.
- Establish general goals initially, followed by discussion of specific issues and opportunities for agreement at subsequent meetings.
- Bring in legal counsel when necessary to review language, assist with drafting, and facilitate adoption.

**Actual or Potential Conflicts Between the Shawano County Comprehensive Plan and Neighboring County Plans**

As part of the planning process, the consultant contacted representatives from adjacent and overlapping local, county, and regional governments. The purpose of these contacts was to learn about their land use and related plans, and identify any conflicts between them and the plans of adjoining communities in Shawano County. In cases where communities have not begun a planning process, Shawano County encourages these counties and towns to embark on planning efforts in consultation with adjacent Shawano County towns to share their plans with these adjacent communities.

There are few apparent incompatibilities between land use recommendations among adjoining towns in neighboring counties that have completed plans. Potential for future conflicts is heightened for portions of Shawano County that are adjacent towns that do not have a plan and/or do not have zoning. Potential future conflicts between adjoining towns are addressed in the local comprehensive plans for participating Shawano County communities, along with individualized approaches to address them.

This Plan is generally consistent with existing Oconto, Brown, Outagamie, Waupaca, Marathon, Langlade, and Menominee County plans and policies. The County intends to maintain contact with neighboring counties, particularly those that are going through comprehensive planning processes, to ensure good communication in the future.

Where existing or potential future incompatibilities between plans or policies exist, Shawano County intends to cooperate with neighboring counties and communities and other units of government to minimize and resolve any potential intergovernmental conflict and ensure that the policies and recommendations of this Plan are implemented. The process to resolve intergovernmental conflicts might include regular informal or formal intergovernmental discussions, reviewing and commenting on the plans of neighboring counties and
local communities, and sharing information (including a copy of draft plans) with neighboring communities and counties.

The County also encourages the ECWRPC to inventory differences among county and local plans in the region, and then to identify opportunities to resolve differences and pursue collaborative plan implementation.

**Among County, School District, Regional, and State Plans**

There are no known conflicts between the *Shawano County Comprehensive Plan* and the various adopted and known plans and policies of other listed jurisdictions. These plan documents were reviewed as part of this planning process. This *Shawano County Comprehensive Plan* advises future coordination in the planning of those various jurisdictions. Also, the County advises that the policies and plans of these other agencies may be updated and enhanced in the future to incorporate some of the recommendations in this *Comprehensive Plan*. The County intends to monitor the ECWRPC regional framework plan, and attempt to assure that the ECWRPC considers the *Shawano County Comprehensive Plan* as it completes its effort.
Chapter Twelve: Implementation

In order for the vision and directions of this Shawano County Comprehensive Plan to become reality, specific follow-up actions will be required. This final chapter is intended to provide a roadmap for these implementation actions by identifying priority programs and actions, as well as describing how this Plan is used, monitored and updated to maintain its usefulness to Shawano County.

**IMPLEMENTATION RECOMMENDATIONS SUMMARY**

- Adopt, update, and revise this Plan in compliance with State statutes
- Follow the included Implementation Strategies Timetable included in this Chapter

**Plan Adoption**

A first step in implementing the Shawano County Comprehensive Plan is to make sure that it is adopted in a manner which supports its future use for more detailed decision making. The County included all necessary elements for this Plan to be adopted under the State’s comprehensive planning statute. Section 66.1001(4), Wisconsin Statutes, establishes the procedures for the adoption of a comprehensive plan. The County followed this process in adopting this Plan, and in subsequently amending and updating it.

**Implementation Recommendations**

Figure 12.1 provides a detailed list and timeline of the priority actions that the County intends to complete to implement the Comprehensive Plan. Often, such actions will require substantial cooperation with others, including County government and local property owners. The table contains the following information:

- **Category**: The list of recommendations is divided into categories based on the different elements/chapters of this Plan. These are displayed in rows in boldface type.

- **Recommended Program or Action**: The second column lists the actual steps, strategies, and actions recommended to implement the key aspects of the Comprehensive Plan. In most cases, these represent priority actions from which further implementation actions will be addressed subsequently in the planning period.

- **Suggested Staff Implementation Team**: Most of the Recommended Programs or Actions will be implemented through the cooperation from many groups and individuals. This column provides recommendations on a staff team to lead and guide implementation of the listed items. In most cases, already established and/or new County committees will also play a role in guiding and executing programs and actions.

- **Timeframe**: This column responds to the state comprehensive planning statute, which requires implementation actions to be listed in a “stated sequence.” The suggested timeframe for the completion of each recommendation reflects the priority attached to the recommendation, and/or a logical sequence for completing various activities which may be interrelated. Suggested implementation timeframes span the next 10 years, because the Plan will have to be updated by 2019.
• **Chapter Reference:** The implementation recommendations included in Figure 12.1 are described in greater detail in other sections of the *Plan*. In order to learn more information about the items listed, the reader should refer to the chapter that is referenced.

The rows are numbered not to indicate level of priority, but for ease of reference and discussion.
**Figure 12.1: Implementation Strategies Timetable**

<table>
<thead>
<tr>
<th>#</th>
<th>Recommended Program or Action</th>
<th>Suggested Implementation Team</th>
<th>Timeframe</th>
<th>Chapter Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Explore an Agricultural Easement Acquisition Program, focused on donated easements</td>
<td>P&amp;D, Land Conservation</td>
<td>2014-2016</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Assist towns interested in mapping new State-certified “farmland and forest preservation” areas</td>
<td>P&amp;D, Land Conservation</td>
<td>2014-2022</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Create or support a task force to advance initiatives to grow the farm and forestry economy</td>
<td>P&amp;D, UW-Extension, Land Conservation, SCEPI, ECWRPC</td>
<td>2014-2016</td>
<td>3, 10</td>
</tr>
<tr>
<td>4</td>
<td>Conduct comprehensive survey of historic and archeological resources</td>
<td>P&amp;D, local governments, trained volunteers, State Historical Society</td>
<td>2017-2020</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Update or strategically amend County subdivision ordinance</td>
<td>P&amp;D, County Surveyor</td>
<td>2013-2014</td>
<td>3-9, 12</td>
</tr>
<tr>
<td>6</td>
<td>Coordinate with towns to implement Town Road Improvement Programs</td>
<td>County Highway Dept, Towns</td>
<td>2013-2022</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Implement Utilities &amp; Community Facilities recommendations in Figure 8.4</td>
<td>County Admin, P&amp;D, others</td>
<td>2013-2022</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Participate in regional economic development and tourism initiatives, like NEWREP and New North</td>
<td>UW-Extension, SCEPI, ECWRPC, local chambers</td>
<td>2013-2022</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>Continue to depend on the Shawano County Economic Progress Initiative to coordinate economic development and tourism initiatives</td>
<td>P&amp;D, UW-Extension, SCEPI, local chambers and ED orgs</td>
<td>2013-2022</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>Offer support for local amendments/update to comprehensive plans and the preparation of intergovernmental boundary/land use agreements</td>
<td>P&amp;D, ECWRPC</td>
<td>2013-2022</td>
<td>11</td>
</tr>
</tbody>
</table>
Potential Update or Strategic Amendments to County Subdivision Ordinance

An updated or amended Shawano County subdivision ordinance should work seamlessly with the updated zoning ordinance. Specifically, the following issues should be addressed, plus those identified in other chapters of this Comprehensive Plan:


Suggested revisions to these sections include adding reference to and consistency with this Comprehensive Plan as a stated purpose of the ordinance, adding and amending definitions as necessary, and updating provisions for the reservation and dedication of land for public open space and right-of-way purposes.

Section 4: Procedure

Specific recommendations made in this Comprehensive Plan that pertain to this section include strengthening the “Preliminary Consultation” procedure to ensure a thorough analysis of relevant site or property data prior to preparation of a preliminary plat. The preliminary consultation procedure may require a site assessment checklist and concept plan submittal. These provisions are intended to provide a property owner the opportunity to better assess the viability of a proposed land division prior to heavy investment in preparation of a formal plat.

Section 5: Preliminary Plats

In order to implement the density policies of this Comprehensive Plan, all land divisions will need to provide information on the original or “parent” parcel or parcels. In addition to providing property description and diagram of the parent parcels (as is currently required), details such as the date of parcel creation and the number of previously approved lots created from the parent parcels will need to be established under certain zoning districts.

Rules for combining and dividing parcels and for counting acreage when considering a parcel’s eligibility for lot creation may also be established.

Prior to approval of any preliminary plat or certified survey map, the applicant should be responsible for providing delineations of environmental features on the subject property, such as steep slopes, mature woodlands, endangered habitats, wetlands, floodplains, surface waters, and like features. If the purpose of the proposed lot will necessitate a private well and/or private on-site waste treatment (septic) system, data on soil suitability for those systems should also be included with the application. The ordinance should include a procedure for reconciling or correcting natural area boundaries, in cases where the applicant submits data that is different from established natural resource delineation.

The County’s LESA system should also be referenced in the subdivision ordinance for the review of new preliminary plats.

Recommended additional requirements include submission of a preliminary stormwater management plan during the preliminary plat stage.

Section 6: Final Plat

This section will require little modification if the recommendations for the preliminary consultation and preliminary plat are followed.

Section 7 – 9: Design Standards, Required Improvements, and Construction

Standards for conservation neighborhood design should be added, with graphics similar to those found in the Comprehensive Plan added to clarify intent. Parkland and Park Fee dedication requirements should be added in accordance with the County Comprehensive Outdoor Recreation Plan (CORP) and design criteria included as needed. Depending on the method used by the County to enact the fee, the County may need to complete a study justifying the fee amounts in conjunction with an ordinance update.
Section 10: Certified Survey Maps

Review standards and procedures should be generally similar to those described above for preliminary plats. In addition, with respect to holding tanks, SPS 383 recognizes them as permitted and therefore the County cannot prohibit them as a means of onsite waste disposal. However, local land division ordinances can prohibit the use of holding tanks. The County will encourage the prohibition of holding tanks through local land division ordinances. The County will also consider requiring “right-to-farm” notice requirements over certified survey maps within planned Farmland and Forest Preservation areas (see Chapter Three: Agricultural Preservation).

Plan Monitoring, Amendments, and Update

The County will regularly evaluate its progress towards achieving the recommendations of the Comprehensive Plan, and amend and update the Plan as appropriate. This section suggests recommended criteria and procedures for monitoring, amending, and updating the Plan.

Plan Monitoring

This Plan is intended to be used by government officials, County staff, developers, residents, and others interested in the future of the County to guide growth, development, redevelopment, and preservation. The County intends to constantly evaluate its decisions on private development proposals, public investments, regulations, incentives, and other actions against the recommendations of this Plan. In fact, on January 1, 2010, zoning, subdivision, and official map ordinances and decisions will have to be consistent with the Comprehensive Plan.

This Plan will only have value if it is used, understood, and supported by the community. It is critical that the County make concerted efforts to increase community awareness and education on this Plan. To this end, efforts may include:

- Prominently displaying Plan materials and summaries in County offices and gathering places.
- Ensuring that attractive and up to date materials are easily accessible on the County’s website.
- Speaking to community organizations and local communities about the Plan.
- Regularly presenting implementation progress reports to the County Board; and Planning, Development and Zoning Committee.
- Incorporating Plan implementation steps in the annual budget process.
- Encouraging County staff, officials and local decision-makers to become familiar with and use the Plan in their decision making.

Plan Amendments

Amendments to this Comprehensive Plan may be appropriate in the years following initial Plan adoption and in instances where the Plan becomes irrelevant or contradictory to emerging policy or trends, or no longer reflects local wishes. In particular, the County may wish to amend or complete an update to the Plan after year 2020 Census data becomes available in the early 2020s. “Amendments” are generally defined as minor changes to the Plan maps or text. Frequent and irregularly scheduled amendments this Comprehensive Plan should be avoided.

The County has outlined three types of amendments: Type A, Type B, and Type C amendments.

- Type A Amendments are minor in nature, are proposed to correct any obvious map errors, or minor map boundary relocations to reflect property lines which are consistent with all Comprehensive Plan policies. These amendments may be initiated at any time and are scheduled for review on a quarterly basis.
- **Type B Amendments** are similar to Type A amendments except that they are proposed by the County and can include text amendments for the purpose of clarification of the Comprehensive Plan.

- **Type C Amendments** are all other amendments. Applications for Type C amendments can be received at any time. Applications received prior to May 31 on any given year will be reviewed and acted upon by December of the year.

The State comprehensive planning law requires that the County use the same basic process to amend, add to, or update this Comprehensive Plan as it used to initially adopt the Plan. This does not mean that new vision forums need to be held, old committees need to be reformed, or recent relationships with nearby communities or counties need to be reestablished. It does mean that the procedures defined under Section 66.1001(4) and Chapter 91, Wisconsin Statutes, need to be followed. Specifically, the County should use the following procedure to amend, add to, or update the Shawano County Comprehensive Plan:

a. The County Board or Planning, Development & Zoning Committee initiates the proposed Comprehensive Plan amendment. This may occur as a result of a regular review of the Plan, or may be initiated at the request of a property owner, developer, or local government (see discussion that follows this list).

b. The County Board adopts a resolution outlining the procedures that will be undertaken to ensure public participation during the Plan amendment process (see Section 66.1001(4)a of Statutes and model resolution included in this Comprehensive Plan).

c. The Planning, Development & Zoning Committee prepares or directs the preparation of the specific text or map amendment to the Comprehensive Plan. Planning and Development Department staff should share the proposed draft Plan amendment with any directly affected local government at this time.

d. The Planning, Development & Zoning Committee makes a recommendation by resolution to the County Board by majority vote of the entire Committee (see Section 66.1001(4)b of Statutes and model resolution in this Plan). If they choose, the Planning, Development & Zoning Committee may hold a public hearing prior to making its recommendation.

e. The County Clerk sends a copy of the recommended Plan amendment (not the entire Comprehensive Plan) to all adjacent and surrounding government jurisdictions as required under Section 66.1001(4)b, Wisconsin Statutes. These governments should have at least 30 days to review and comment on the recommended Plan amendment. Nonmetallic mine operators, any person who has registered a marketable nonmetallic mineral deposit with the local government, and any other property owner or leaseholder who has requested notification in writing must be informed through this notice procedure. These governments and individuals should have at least 30 days to review and comment on the recommended Plan amendment before the public hearing.

f. With the assistance of the Planning and Development Staff, the County Clerk directs the publishing of a Class 1 notice, with such notice published at least 30 days before a County Board public hearing and containing information required under Section 66.1001(4)d, Wisconsin Statutes.

g. The County Board holds the formal public hearing on an ordinance that would incorporate the proposed Plan amendment into the Comprehensive Plan.

h. Following the public hearing, the County Board approves (or denies) the ordinance adopting the proposed Plan amendment. Adoption must be by a majority vote of all members. The County Board may require changes from the Planning, Development & Zoning Committee recommended version of the proposed Plan amendment.

i. The County Clerk sends a copy of the adopted ordinance and Plan amendment (not the entire Comprehensive Plan) to all adjacent and surrounding government jurisdictions, nonmetallic mine operators, any person who has registered a marketable nonmetallic mineral deposit with the local govern-
The Shawano County Comprehensive Plan is intended to function cooperatively with local community plans. This fact highlights the importance of striving for ongoing consistency between local community comprehensive plans and this county-level Plan. Plan consistency will help achieve the desired pattern of future growth and consistent, predictable decision making because local governments and the County will be “reading from the same playbook.” This is particularly important because, under State law, Shawano County shares zoning and land division review authority with many local governments.

Local governments in Shawano County should play a central role in decisions to amend the Shawano County Comprehensive Plan that affect them. More specifically, the County should not approve an amendment to the Future Land Use map in this document (Maps 7a, 7b, and 7c) or the Farmland Preservation Plan map (Maps 4a-4i) unless it is first recommended for approval by the affected town board, village board, or city council.

Coordination between incorporation of local plans into this County Comprehensive Plan and County decision making is described in detail in the Intergovernmental Cooperation Chapter.

**Plan Update**

As opposed to an amendment, an update is often a substantial re-write of the Plan document and maps. The State comprehensive planning law requires that this Comprehensive Plan be updated at least once every ten years. The State farmland preservation law requires that farmland preservation plans, which are components of comprehensive plans, also be updated once every ten years. The County completed an update to this Comprehensive Plan in 2013. The update included (a) changes to incorporate farmland preservation plan components and update the Plan based on activities completed and commenced since the original Comprehensive Plan was adopted in 2009 and (b) amendments to update demographic data using 2010 U.S. Census of Population data and other more recent data sources. In this manner, this Comprehensive Plan and its farmland preservation plan component will follow the same 10-year update cycle, with the next update due in 2023.

**Consistency Among Plan Elements**

The State comprehensive planning statute requires that the implementation element “describe how each of the elements of the comprehensive plan shall be integrated and made consistent with the other elements of the comprehensive plan.” Because the various elements of the Shawano County Comprehensive Plan were prepared simultaneously, and the farmland preservation plan components were integrated rather than adopted as a stand-alone plan. No known internal inconsistencies exist between the different elements of chapters of this Plan. However, in the event of any specific inconsistency between the farmland preservation plan components of this Plan and other provisions, the farmland preservation plan components take precedence. The Plan was also carefully written to balance the various goals and interests in the towns.
Appendix I: Results of Public Participation Activities

Survey Results
A County-wide survey was conducted as part of the Shawano Area Communities Comprehensive Planning Project. In the fall of 2006, 9,993 surveys were sent out to a representative sampling of the 16,312 total households in the County. A total of 1,014 surveys were returned—a 10% response rate, providing a significant response. Statistically speaking, the answers to the survey questions generally yielded a “confidence interval” of between 2 and 3 at a “confidence level” of 95%, which means that we can be 95% certain that if every household in the County had responded to a given question, the responses would have varied by less than 3% from the results that were obtained through this survey.

The results of the survey will be considered along with the other public input generated in the comprehensive planning process—the community plan direction workshop, special places photo exercise, land use workshop, open house, and public hearing—to obtain an accurate assessment of public opinion on planning issues, and help guide the directions and recommendations of the County and local participating community plans. The responses to the survey will help guide County and local planning committees to ensure that the directions they are pursuing in their plan are aligned with general public perceptions on issues.

Following are some highlights of the results:

1. In 2005 Shawano County’s population was about 42,000. The population grew by 17% between 1980 and 2005. How do you feel about this growth rate?
   - Just right: 68.3%
   - Too fast: 24.5%
   - Too slow: 7.2%

2. Which statement best reflects your opinion on new development in your community?
   - Should be allowed anywhere desired by property owners: 15.1%
   - Should be thought out/planned by community with property owner input: 84.9%

3. What is the most important reason you chose to live in Shawano County?
   - Near family or friends: 26.7%
   - Near job: 15.8%
   - Close to lake or river: 12.8%
   - Small town atmosphere: 10.4%
   - What is the second (or third) most important reason you chose to live in Shawano County?
   - Top responses:
     - Small town atmosphere
     - Close to outdoor recreation
     - Natural beauty
     - Near family and friends

4. What types of new housing would you like to see in the future?
   - Single-family homes, not starter: 51.9%
   - Starter homes: 38.3%
5. What type of new non-residential development would you like to see in the future?
   - Neighborhood shopping: 32.5%
   - Sit-down restaurants: 32.5%
   - Farming and related businesses: 32%
   - Larger-scale shopping: 29.9%
   - Specialty stores: 24.2%
   - Recreation & tourism based: 22.5%

6. What types of new parks, public lands, and recreational facilities would you like to see in your area in the future?
   - Natural areas (trails, wildlife viewing, nature centers): 46.3%
   - Trails for non-motorized uses (bicycles, hikers, skiers): 36.7%
   - Waterfront parks (beaches, boat launches, picnic facilities): 25.5%
   - Neighborhood parks: 25.2%
   - None needed: 25.2%
   - Trails for motorized vehicles (snowmobiles, ATVs): 24%

7. What measures should your community and/or Shawano County take to preserve farmland and farming?
   - Limit housing in farming areas to minimize conflicts: 54.9%
   - Support development of new uses for agricultural products: 48.1%
   - Support agricultural-related businesses: 46.4%
   - Encourage enrollment in existing farmland preservation programs: 43.1%

What measures should your community and/or Shawano County take to preserve forest land and forestry?
   - Encourage use of “Best Management Practices” for forestland: 67.8%
   - Limit housing in forested areas to minimize conflicts: 55.2%
   - Encourage participation in State programs to preserve forests: 46.9%
   - Support value-added forest product industries: 41.1%

8. What are the biggest problems or concerns facing your area?
   - Increase in taxes
   - Shortages of job opportunities
   - Low wages
   - Lack of businesses/shopping/services
   - Lack of opportunities for youth

9. What do you see as the most important “key future directions” for your area?
   - Maintaining rural character
   - Promotion of business/shopping area development
   - Promotion of industrial development
   - Use of sign and other appearance regulations to preserve scenery
   - Farming as an important part of the area’s future
• Actively working to protect the natural environment

The survey asked several demographic questions. Where available, year 2000 U.S. Census data is provided to compare the characteristics of survey respondents to those reported by the Census.

10. How long have you lived in Shawano County, or owned property here?
   • More than 15 years: 70.8%
   • Less than 5 years: 12.9%
   • Six to ten years: 10%
   • Eleven to 15 years: 6.3%

11. Please indicate the number of adults in your household who work in these locations as their primary place of employment:

<table>
<thead>
<tr>
<th>Location</th>
<th>Survey</th>
<th>2000 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Shawano</td>
<td>16.5%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Elsewhere in Shawano CO</td>
<td>27.7%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Brown County</td>
<td>10.0%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Marathon County</td>
<td>4.2%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Oconto County</td>
<td>0.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>3.5%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>3.9%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Retired or not working</td>
<td>27.9%</td>
<td>34.1%</td>
</tr>
</tbody>
</table>

The survey results for this question are similar to Census data, indicating that the respondents reflect the general population with regards to place of employment.

12. What is your age?
   • 18 to 25: 1%
   • 26 to 35: 7.6%
   • 36 to 45: 14.4%
   • 46 to 55: 22.8%
   • 56 to 65: 23.4%
   • Over 65: 30.9%

According to the 2000 U.S. Census, 16.8% of Shawano County residents are over 65 years of age. This indicates that the more persons over 65 answered the survey than might be expected, given the composition of the general population. This is a fairly common trend for surveys.

13. How many of the persons in your household are younger than 18 years old?
   • None: 75.3%
   • One: 9.6%
   • Two: 10.2%
   • Three: 3%
   • Four: 1.2%

According to the 2000 U.S. Census, 25.7% of Shawano County residents are under 18 years of age.
14. If you are a resident of Shawano County, do you own or rent your residence in Shawano County?

<table>
<thead>
<tr>
<th>Survey</th>
<th>2000 Census:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own:</td>
<td>95.6%</td>
</tr>
<tr>
<td>Rent:</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>78.2%</td>
</tr>
</tbody>
</table>

The results indicate that survey respondents were more likely to own the home they lived in than the general population.

The survey results were also analyzed by cluster (eastern, central, and western). The outcome of this analysis showed a remarkable consistency in responses. The top answers to each question were very similar no matter where in the county the respondent resided. One small difference noted was a difference in importance placed on preservation of farmland and forestland. Respondents in the eastern and central clusters tended to place more value on farmland preservation, while preservation of forestland was more emphasized in the western cluster.

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**Focus Groups Summaries**

**Transportation Focus Group Meeting**

Twenty-two people attended this 1.5-hour meeting held on December 12, 2006.

- The Transportation Focus Group consisted of members from the Shawano County Highway Department, Wisconsin Department of Transportation, elected officials from the participating communities, and the East Central Wisconsin Regional Planning Commission.
- WisDOT is conducting a study to look at the conversion of STH 29 within Shawano County to a facility that meets freeway standards, with limited access. Frontage roads are being planned as part of the State Highway 29 Right of Way Preservation Study. Access to the Highway 29 will be controlled with a 5-8 mile distance between interchanges.
- Highway 45 from Wittenberg to the north Shawano County line is planned to remain a two-lane highway with passing lanes.
- Highway 47 is also planned to remain a two-lane highway with passing lanes. Extra right of way in excess of 66-feet will be needed for passing lane construction.
- Highway 22 has an approximately ADT of 8,600. Improvements to the Highway 22 Bridge would include expansion to four lanes and a larger urban cross section.
- The Department of Transportation is currently conducting a corridor study of Highway 45 from Highway 29 to Antigo and Highway 45 from Highway 29 to New London. The goal of the corridor study is to improve traffic flow and safety (passing lanes, access control). The two year corridor studies are anticipated to begin in 2008.
- A direct County Highway route to the casino from Highway 29 is being examined.
- Other modes of transportation were discussed.
- The City of Shawano is pursuing a safe routes to school study, trails off the Mountain Bay trail, trail connection of existing parks. The City of Shawano has also been attempting to get funds to construct a safety island for the Mountain Bay Trail road crossing.
- The focus group noted that ATV use has been exceeding snowmobile use, a pathway is needed across the Highway 22 Bridge, and that there are conflicts between agricultural equipment and vehicles.
• An Environmental Assessment is being conducted to examine three alternative routes to the casino from State Highway 29. The County is sponsoring the Environmental Assessment and the Tribe has provided funding for the Assessment.

• After access control improvements, bridges will be required for ATV and snowmobile crossings of Highway 29.

• County Highway Q, State Highway 45 and State Highway 29 intersections are confusing and unsafe.

Natural Resources Focus Group Meeting
Twenty-seven people attended this 1.5-hour meeting held on December 13, 2006.

1. What/where are the important existing natural and recreational resources in the county?
   • Shawano Lake (natural and economic resource, recreation)
   • In the Eastern portion of the County - crop land, while trout streams are important in the Western portion of the County
   • Lakes and rivers
   • At a regional level the Wolf River Corridor and Shawano Lake
   • Balsam River Dam needs to be repaired.
   • In Western Shawano County conversion of managed forest lands is a concern
   • The Navarino Wildlife Area is an important natural and recreational resource due to size, access ability to the Wolf River, wetlands, grasslands, combination of Northern and Southern Wisconsin species, education, and 50-90 miles of trails.
   • Wetlands and their impact on navigable waters
   • Importance of keeping county lands open to recreation
   • Mountain Bay Trail
   • Lower Wolf River Basin, Land Legacy sites, Wiouwash Trail, County/City parks
   • Ground Water: problems in the Red Springs and Bartelme area with nitrates and problems in the Eastern portion of Shawano County with arsenic due to increased development

2. What/Where are the issues facing the “special places” in the county?
   • High deer population (eating young trees) and declined access to Forest Management Land for hunting
   • Invasive species in Shawano Lake
   • Cold water resources being impacted by development
   • Shoreland development
   • Loss of woods
   • Loss of public access to lands/waters
   • Global warming

3. How should the county work to preserve/enhance these areas?
   • Education on existing natural resources regulation (yearly meetings on regulation)
   • Environmental education from the University of Wisconsin – Steven's Point for area schools
   • Lack of incentive to participate in Managed Forest Law
   • Opportunities for wetland mitigations, wetland buffers to compensate infringement, preserve wetland areas in other locations
   • Natural resource information provided to local level
• A map of conversion of Managed Forest Land in Shawano County is necessary
• Arial views of change by jurisdiction would also be helpful

4. What types of additional recreation (active and passive) are needed in the county?
• Expansion of the Mountain Bay and Wiouwash trail (would need additional right of way)
• Access to land for hunting. Current limitation to access has increased the demand on the Navarino Wildlife Area.
• Safer pedestrian and bicycle opportunities such as bike lanes, paths, and sidewalk systems in Cities and Villages.
• Opportunities are needed to get youth in the natural environment

5. Should the county and local governments promote recreational tourism opportunities?
• Not until natural resources are properly managed.

6. What are the future challenges and opportunities for recreation over the next 20 years?
• Access points to navigate water
• County coordinated fishing license

7. How can we best respond to motorized and non-motorized trail users?
• Pristine areas are appropriate for hiking
• Already developed areas are more appropriate for motorized trail users

8. Other Issues.
• Criteria for prioritizing natural resources such as a natural resource rating scale would be helpful.
• Strong property rights view in county
• Hunting and fishing activities are declining while hiking and other quiet sports such as birding are growing in popularity.
• Wind energy and County unfriendliness to wind power
• Multi-level government planning is needed for parks and recreation
• Tensions have been observed between motorized

**Agricultural Focus Group Meeting**

This 1.5-hour meeting was held on December 13, 2006.

• The best way to keep farmers farming is to make agriculture profitable.
• There is a good base of farmers within the County.
• Farm land has increased in value and is scarce
• There are opportunities to work with the Menominee for cellulose production
• Farmers need to conserve energy in production
• A processing facility such as a cheese plant is needed in the County.
• The State of Wisconsin is losing approximately 1.5 townships of farm land per year
• Agricultural science curriculum is needed in area schools
• All land is appropriate for preservation
• Conservation subdivision education
• Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR) Programs were discussed.
• The Town of Dunn PDR program pays $2000 an acre and funding for this program is generated by 1/3 local property tax and 2/3 state and federal tax dollars.
• Good zoning, farmer involvement in local government and resident non-farmers who support farmers have facilitated farming in the Eastern part of Shawano County.
• Biobased production in future for fuels and plastic
• Methane digestion power
• Need for food safety/traceability
• Agricultural Zoning should not be tied to soil type
• Cluster development, eco-subdivisions, and conservation developments may be good ways to balance development pressures and agricultural land.
• Mass transit discussions, came up in this group.

Natural Resources/Recreation Focus Group Meeting
This 1.5-hour meeting was held on October 16, 2007. Participants included representatives from resource/recreation based organizations and citizens interested and knowledgeable on resource issues.

1. Purchase of Development Rights (PDR) Idea
• Possibly ATC payments could be used to purchase conservation easements from interested sellers
• ATC funds must be spent on environmental protection; maybe focused on surface water quality?
• Is the Tigerton block of land available as one large block?
• Perhaps ATC funds could be used as local match for state/federal development rights purchase matching grants
• The Wolf River corridor is a resource of statewide significance—could be focus; location of sturgeon, archeological and historic resources; biotic inventory available (Wolf River Bottom Land Natural Resource Area)
• Red River corridor is pristine; possibly another target
• Possible partnership with The Nature Conservancy or Northeastern Wisconsin Land Trust
• PDR program/conservation easements would ideally secure public hunting rights
• Don’t oversell PDR; sometimes direct public purchase is better; state makes payments in lieu of taxes to local governments

2. Land Evaluation and Site Assessment (LESA) System—Potential Evaluation Components:
• Whether conservation neighborhood design/clustering used
• Development closer versus farther from road
• Land capability class for forestry
• Slopes
• Proximity to class I stream
• Lot size
• Location relative to Wolf River Bottom Land Natural Resource Area
• Location relative to Land Legacy sites
• Presence of historic/archeological resources
• % lot coverage
• Methods of stormwater management
1. Nutrient management plan on land?
2. MFL open or closed?
3. In priority watershed?
4. Shallow water table or fractured bedrock

3. Environmental Education/ Stewardship
   - Focus in Natural Resources chapter of plan should be on how public benefits from natural resource preservation—wild areas, clean water, adjacent land values, recreational opportunities, economic health.
   - Environmental education should be more integrated into school curricula
   - Opportunity areas include Navarino Nature Center, School Forest, Little School Nature Center.
   - Summer school projects provide best opportunities for “outdoor lab” learning.
   - Folks need to learn connections between human, natural and food systems
   - Should provide call-out box in comprehensive plan as to how land protection is economically good for local governments

4. Bio-energy/ “Green” Opportunities
   - Land here grows good trees, but quality woods have largely been cut from forests
   - Can forests in area be certified as sustainable?
   - Cellulosic ethanol appears to be the wave of the future; using perennial plants including low-grade trees instead of corn and soy—less energy to grow.

5. Other topics
   - Lakes and streams in the County have already been classified; perhaps this information could be used in the development or implementation of the comprehensive plan.
   - Dam maintenance is an issue; Balsam Road, Red River, and Shawano; water level fluctuations can affect habitat.
   - Tree preservation in urban areas is important.
   - Need to map invasive specie locations and locations of recreational access to water bodies
   - Consider implementing a Web-based GIS system
   - Waupaca County did some good things with its comprehensive plan with respect to natural resources—should review this
   - State needs to increase incentives to keep MFL lands open for recreational use

Agriculture Focus Group Meeting
This 1.5-hour meeting was held on October 17, 2007. Participants included local farmers and representatives from farm-based organizations

1. Land Evaluation and Site Assessment (LESA) System—Potential Evaluation Components:
   - Reward for smaller lot sizes (max maybe 3 acres)
   - Reward for 2-3 lot clusters instead of large, isolated lots
   - Discourage development near recreational “40s”
   - # of housing units nearby
   - Are commuter/agricultural transportation conflicts likely?
   - In a sewer service area or not?
   - Development shouldn’t leave oddly shaped remainder properties
• Agricultural soil quality
• Weight development siting towards areas where there is already existing development
• Maintain large blocks of contiguous farmland

2. Development density in farming areas
• A housing density of one home per 10 acres may be too great to also expect that farming will be able to survive in that same area
• 1 per 35 acre densities seem about right, may even provide a slight incentive (e.g., one extra home), if home builders agree to cluster

3. Purchase of Development Rights (PDR) Idea
• Consider introduction of a pilot program first
• Pilot program should maybe not pick a specific geographic area, but rather criteria that would rate a piece of land higher or lower for voluntary development rights purchases, regardless of where it is located
• A LESA system could be developed to evaluate and rate particular lands for PDR purchases
• Focus on where development pressure may be the greatest
• Could ATC funds be used?—if so, may have to tie PDR program to water quality protection somehow—or maybe preserve farms through conservation easements next to recreation or wildlife areas
• PDR is a late stop on a natural progression from standard zoning to cluster development to PDR
• Is there political will for PDR? Maybe—if local taxes aren’t the funding source

4. Other topics
• Increasing non-farm development allowable on farmland will increase the price of the farmland, making it more difficult for farmers to buy
• We need places to build ag-related, value added uses like ethanol plants
• Could there be such as thing as “agricultural enterprise zones?” Doesn’t it make sense to have areas specifically for agriculture so that they can share services?
• Making cities more healthy and attractive places to live will reduce the pressure to convert farmland for housing in the countryside
• There is a shift in dairy—larger operations generate lots of traffic, more smells, and noise—they need bigger buffer zones around them
• Where are the places for large-scale livestock operations in the County?
• Need to make agriculture profitable—need a local food movement and artisan food movement
• Where does wind energy fit into County energy productions and zoning?

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**Steering Committee Meeting Minutes**

**December 5, 2007**

Members present: Robert Krause, Ken Capelle, Dennis Hartleben, Kathy Luebke, James Martin, Raymond Heinritz, Charles Dallas, and Jon Zwirschitz

Members absent: Sterling Schreiber

Others present: Tim Ryan – Shawano Leader

Location & Time: Room A & B, Basement of Courthouse at 10:00 AM

1) Chairman Krause called the meeting to order at 10:20 A.M.
2) Motion by Dennis Hartleben, second by Charles Dallas to deviate from order of items listed on agenda if necessary. Motion carried 8-0.

Melinda Barlow informed the Committee that the planning consultants from Vandewalle and Associates would not be attending the meeting and suggested that, in consideration of this, the agenda be limited to review of the Agriculture and Land Use Elements of the draft County Comprehensive Plan. The Committee came to consensus that was an appropriate way to proceed.

3) Public comments: None presented.

4) Committee discussed minute procedure. Ms. Barlow informed the committee that the minutes from the September 6, 2006 Comprehensive Plan Steering Committee meeting were approved at the September 20, 2006 Planning, Development and Zoning Committee Meeting and that in the future the Comprehensive Plan Steering Committee would approve the minutes at their subsequent meeting.

5) Ms. Barlow informed the Committee of recent events in the comprehensive planning process, including the October Cluster Meetings to review the participating jurisdictions’ future land use maps.

6) Ms. Barlow handed out information regarding the status of development of local comprehensive plans within the County. Chair Krause inquired if the local communities had approved the land use element of their comprehensive plans. Ms. Barlow stated that the municipalities had not formally accepted the elements, however, the majority of the communities were satisfied with their future land use map and associated comprehensive plan chapter. The Committee discussed areas where there was dispute as to the mapped future land use. The Committee agreed that these issues should be resolved at the local level and that development of intergovernmental agreements should be encouraged.

7) The Committee discussed the recommendations and policies of the Land Use Element of the Shawano County Comprehensive Plan. The key themes of the Land Use Element were reviewed in greater detail, including:

   a. Encouragement of low maximum allowed residential densities in conjunction with a relatively small maximum lot size and how this concept can radically reduce the land needed to support future residential development.

   b. Additional information for development application review, for instance requiring a detailed site plan for conditional use permit approval and requiring that a development application be reviewed simultaneously with rezone requests.

The Residential (2.5-10) category was discussed in regards to the Town of Pella Comprehensive Plan. The Town of Pella has chosen to map the majority of their Town within this category while the other adjacent Towns have chosen the Agriculture and Resource Preservation Future Land Use Category.

The Committee reviewed the Environmental Corridor Overlay coverage and discussed the procedure to amend the overlay. Planning Staff explained that the coverage was based on information from the Wisconsin DNR, FEMA, shoreland setback areas, and steep slopes and that in order to alter the coverage verification that the property did not contain the mapped environmentally sensitive area would be required.

The Comprehensive Plan amendment procedure was discussed. Ms. Barlow stated that any amendments to the comprehensive plan would require development of a public participation plan, a public hearing before the Planning, Development and Zoning Committee and final approval by the County Board. Due to the nature of the process an update to the fee schedule would be necessary and that review would be appropriate on an annual basis.

8) The Committee did not discuss any other issues.

9) Ms. Barlow provided the Committee with a summary of upcoming comprehensive planning activities at the local, cluster, and county levels. The Committee discussed having the Comprehensive Plan
Steering Committee meeting on a day separate from the Planning, Development and Zoning Committee Meeting. The Committee discussed their next meeting date and determined that January 8, 2008 at 9:00 AM was the Committee’s first choice with January 15, 2008 at 9:00 AM being chosen as an alternate meeting date.

10) Letters and correspondence: None presented.

11) Adjournment: Motion by Dennis Hartleben, second by Charles Dallas to adjourn the meeting at 12:17 P.M. Motion carried 8-0.

January 8, 2008
Members present: Robert Krause, Ken Capelle, Dennis Hartleben, Kathy Luebke, James Martin, Charles Dallas, and Jon Zwirschitz

Members absent: Raymond Heinritz

Location & Time: Room A & B, Basement of Courthouse at 9:00 AM

1) Chairman Krause called the meeting to order at 9:03 A.M.

2) Motion by Charles Dallas, second by Dennis Hartleben to deviate from order of items listed on agenda if necessary. Motion carried 7-0.

3) Public comments: None presented.

4) Dana Jensen from Vandewalle and Associates discussed the project timeframe at the local, cluster, and county levels. Ms. Jensen informed the Committee that local plan adoption is scheduled for late Spring or early Summer 2008 with the County’s plan adoption to following in late Fall of 2008. Ms. Jensen also informed the Committee that draft plans were available for all participating communities and that meetings are scheduled at the local level to discuss the first comprehensive plan drafts.

Ms. Jensen stated that there are two upcoming cluster level comprehensive plan meetings. A meeting is scheduled for January 23, 2008 for jurisdictions not participating in the Shawano County lead comprehensive planning process. A cluster meeting is also scheduled for January 24, 2008 for incorporated areas. Ms. Jensen informed the Committee that Mark Roffers from Vandewalle and Associates would be presenting a project status report at the January 23, 2008 County Board Meeting.

5) Ms. Jensen inquired if the Committee had any additional questions regarding the Land Use Element of the County’s Comprehensive Plan. Ms. Jensen stated that differentiation between density and lot size is a key theme of the Land Use Element and that this is often a difficult concept for communities to understand. Ms. Jensen and Mr. Roffers, led the Committee in an exercise to illustrate this distinction in the Agriculture and Natural Resource Preservation future land use designation.

6) The Committee discussed the best way to incorporate communities who developed comprehensive plans prior to the County. The Committee reviewed a draft summary prepared by Vandewalle and Associates on how the County’s comprehensive plan would reflect already developed plans and how future land use decisions would proceed in regards to communities not participating in the County’s comprehensive planning process.

Chair Krause indicated that the County should try to facilitate incorporation of existing community plans and that costs associated with developing consistency among existing plans and the County plan may be overly burdensome for these communities. The Committee discussed possible ways for sharing these costs.

7) The Committee did not discuss any other issues.

8) Jon Zwirschitz motioned to approve the December 5, 2007 minutes as presented. Motioned seconded by Charles Dallas. Motion carried 7-0.
9) The Committee discussed their next meeting date and determined that the next Comprehensive Plan Steering Committee meeting would be on February 5, 2008 at 9:00 AM.

10) Letters and correspondence: None presented.

11) Adjournment: Motion by Charles Dallas, second by Dennis Hartleben to adjourn the meeting at 11:30 AM. Motion carried 7-0.

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February 5, 2008

Members present: Robert Krause, Raymond Heinritz, Ken Capelle, Kathy Luebke, James Martin, and Charles Dallas

Members absent: Jon Zwirschitz & Dennis Hartleben

Location & Time: Room A & B, Basement of Courthouse at 9:00 AM

1) Chairman Krause called the meeting to order at 9:05 AM.

2) Motion by Charles Dallas, second by Raymond Heinritz to deviate from order of items listed on agenda if necessary. Motion carried 7-0.

3) Public comments: None presented.

4) Motion by Kathy Luebke, seconded by Ken Capelle to approve the minutes from the January 8, 2008 Comprehensive Plan Steering Committee as presented. Motion carried 7-0.

5) Mark Roffers, Planning Consultant from Vandewalle and Associates summarized the past month’s comprehensive plan activities, including individual meetings with local communities to present the first draft of their comprehensive plans. Mr. Roffers stated that all local plans should be adopted by early Summer 2008 with County Plan adoption to follow in December 2008.

Mr. Roffers informed the Committee that the City of Shawano met with the adjoining Towns of Washington and Belle Plaine in January and that these meetings started an open dialogue between the City and the Towns concerning land use issues. Melinda Barlow, Shawano County Planner, stated that the meeting with the Town of Washington had particularly been beneficial to help the Town develop an understanding of the City’s challenges in attracting single-family residential development.

Mr. Roffers provided a brief summary of the Non-Participating Community meeting held on January 23, 2008. Mr. Roffers noted that approximately 50 individuals attended the meeting representing the communities of Hartland, Green Valley, Lessor, and Richmond. Mr. Roffers stated that there was a great deal of discussion concerning correlation of the land use categories used in plans prepared outside of the Shawano County led comprehensive planning process with the land use categories established at the County level.

Mr. Roffers stated that the Incorporated Areas meeting in the Village of Wittenberg had more limited attendance with representatives from the majority of Villages within Shawano County attending the meeting.

6) Mr. Roffers led the Committee in review of the Agricultural Resources, Natural Resources and Cultural Resources elements of the County’s Comprehensive Plan. The Committee discussed the potential development of a purchase of development rights program for agricultural lands and environmentally sensitive areas. Chair Krause stated that he had received information from the Wisconsin Farm Bureau regarding opportunities to sell carbon credits.

The Committee discussed development of a countywide stormwater management ordinance to help protect ground and surface water while ensuring that stormwater from new development does not adversely impact existing property owners.

The Committee reviewed the future land use categories contained within the draft comprehensive plan and determined that the title of the Open Lands and Residential category should also reference...
agricultural uses. Motion by Raymond Heinritz, seconded by Charles Dallas to change the title of the Open Lands and Residential future land use category to Agriculture, Open Lands, and Residential. Motion carried 7-0.

7) Mr. Roffers presented the Committee with the first draft of the Utilities and Community Facilities and Transportation elements for review at their next meeting.

8) The Committee discussed their next meeting date and determined that the next Comprehensive Plan Steering Committee meeting would be on March 18, 2008 at 9:00 AM.

9) Letters and correspondence: None presented.

Adjournment: Motion by Charles Dallas, second by Ken Capelle to adjourn the meeting at 11:37 A.M. Motion carried 7-0.

March 18, 2008
Members present: Robert Krause, Kathy Luebke, Ken Capelle, Dennis Hartleben, Jon Zwirschitz, James Martin, Raymond Heinritz, Charles Dallas

Location & Time: Room A & B, Basement of Courthouse at 9:00 AM

1) Chairman Krause called the meeting to order at 9:05 A.M.

2) Motion by Raymond Heinritz, second by James Martin to deviate from order of items listed on agenda if necessary. Motion carried 8-0.

3) Public comments. Brian Moesch, Town of Wescott Supervisor, informed the Committee that through the Town of Wescott’s comprehensive planning process there has been an identified need to have a future land use category equivalent to the existing Agricultural Residential category. Mr. Moesch stated that there is a conflict with the continuation of agricultural uses within residentially zoned land.

Chair Krause stated that the County’s Comprehensive Plan Steering Committee would not alter the local comprehensive plan’s future land use maps.

Mr. Moesch stated that there is not a County future land use category equivalent to the existing Agricultural Residential zoning district.

Mark Roffers, Vandewalle and Associates, stated that this was discussed at the Non-Participating Community meeting and in response the Comprehensive Plan Steering Committee had changed the Open Lands and Residential (10-35) future land use category name to Agriculture, Open Lands and Residential (10-35).

Chair Krause stated that the County Comprehensive Plan would provide a base for the more detailed local plans.

4) Motion by Jon Zwirschitz, seconded by Charles Dallas to approve the minutes from the February 5, 2008 Comprehensive Plan Steering Committee as presented. Motion carried 8-0.

5) Melinda Barlow stated that the County was completing the last set of local meetings to review the first comprehensive plan drafts.

Mr. Roffers stated that the final cluster meetings would be in approximately six weeks and that the consultants are working on preparation of the public review drafts of local Comprehensive Plans.

Melinda Barlow informed the Committee about an upcoming meeting co-facilitated by Shawano County and the Realtor’s Association. Ms. Barlow stated that it is planned that there would be a meeting at each of the three cluster levels and the meeting would be a venue for the Realtor’s to provide their comments on the comprehensive plans.
The Committee discussed having three separate meetings with the Realtor’s and determined that one meeting at the City of Shawano would be appropriate.

6) Mr. Roffers led the Committee in review of the Housing and Neighborhood Development, Transportation, and Utilities and Community Facilities elements of the County’s Comprehensive Plan.

Charles Dallas stated that the Redevelopment Authority is used to preserve historic structures within the City of Shawano and that finding a valid economic use of existing structures is key.

Mr. Roffers recommended a policy that balances preservation with economic realities.

Mr. Roffers led the Committee in a discussion regarding the Housing and Neighborhood Development chapter of the County’s Comprehensive Plan. Mr. Roffers stated that there is more than ample land provided for development in all the local comprehensive plans and that the amount of land provided for residential use far exceeds projected demand.

Chair Krause stated that the County Plan needs to stress that the local units of government independently created their future land use maps which collectively constitute the County’s Future Land Use Map.

Chair Krause stated that the Housing and Neighborhood Development Element should be amended to include mobile homes as a mechanism to provide affordable housing in rural areas.

Mr. Roffers introduced the Transportation element of the County’s Comprehensive Plan.

The Committee discussed participation in a Safe Routes to School study and associated grant application in 2009 as well as development of a countywide bicycle and pedestrian plan as a means of recreation and tourism.

The Committee stated that the Utilities and Communities Facilities Map needed to depict the following:

- All County Park and Ride Facilities
- Town of Richmond Sanitary District
- Green Valley Sanitary District

The Committee also stated that the Plan should encourage greater joint planning between the Sanitary Districts and local units of government.

The Committee agreed to reference the SAGE program requiring a 1:15 teacher to student ratio within the Utilities and Community Facilities element.

7) Mr. Roffers presented the Committee with the first draft of the Issues and Opportunities and Intergovernmental Cooperation elements for review at their next meeting.

8) Letters and correspondence: None presented.

Adjournment: Motion by Charles Dallas, second by Dennis Hartleben to adjourn the meeting at 11:23 A.M. Motion carried 8-0.

March 25, 2008

Members present: Robert Krause, Kathy Luebke, Ken Capelle, Dennis Hartleben, Jon Zwirschitz, James Martin, Raymond Heinritz, Charles Dallas

Location & Time: Room A & B, Basement of Courthouse at 9:00 AM

1) Chairman Krause called the meeting to order at 9:02 A.M.

2) Motion by Raymond Heinritz, second by Charles Dallas to deviate from order of items listed on agenda if necessary. Motion carried 8-0.
3) Public Comments. No members of the public were present.

4) Motion by Kathy Luebke, seconded by Dennis Hartleben to table approval of the minutes of the March 18, 2008 meeting. Motion carried 8-0.

5) Melinda Barlow stated that the Stockbridge-Munsee Community had appointed Shannon Holsey to the Shawano County Comprehensive Plan Steering Committee and that this appointment would also have to be approved by the Shawano County Board.

Mark Roffers of Vandewalle and Associates provided the Committee with a summary of the existing County Land Division and Zoning Ordinances. Mr. Roffers informed the Committee that the summary would also be a component of the Implementation Element of the County’s Comprehensive Plan.

Mr. Roffers stated that after the Comprehensive Plan Steering Committee had reviewed the draft elements of the County’s Comprehensive Plan, the project focus would return to completion and adoption of the local comprehensive plans with a Steering Committee meeting in late Summer to review the revised County Comprehensive Plan.

Mr. Roffers led the Committee in review of the Issues and Opportunities Element, which contains a summary of the public participation exercises completed as part of the Comprehensive Planning process and demographic information from the US Census.

Mr. Roffers presented the Economic Development Element of the County’s Comprehensive Plan and emphasized the key element themes of retain, grow and attract. Mr. Roffers stressed that all other plan elements rely on a healthy economy.

Chair Krause stated that it would be beneficial for a representative of the Stockbridge-Munsee Community to review the draft comprehensive plan elements.

The Committee discussed the need to balance fostering economic development and quality development.

The Committee discussed how to incorporate communities not participating in the County’s process and the need to identify other opportunities for intergovernmental cooperation. The Committee stated that the comprehensive plan should address planning for unincorporated rural communities (hamlets).

Mr. Roffers stated that there will be areas where items are not resolved at the time of comprehensive plan adoption; however, the plan will contain a timeline for how those issues should be resolved.

6) Mr. Roffers recommended that the County rewrite the zoning ordinance and that although some towns may leave County zoning it is important to not coerce them into staying with the County.

7) Letters and correspondence: None presented.

Adjournment: Motion by Jon Zwirschitz, second by Dennis Hartleben to adjourn the meeting at 11:15 A.M. Motion carried 8-0.

June 10, 2008
Members present: Kathy Luebke, Ken Capelle, Dennis Hartleben, Raymond Heinritz, and Marlin Noffke
Members Absent: Jon Zwirschitz, James Martin, and Charles Dallas
Location & Time: Room 202, 2nd Floor of Courthouse at 9:00 AM

1) Vice Chair Ken Capelle called the meeting to order at 9:10 A.M.

2) Motion by Kathy Luebke, second by Raymond Heinritz to deviate from order of items listed on agenda if necessary. Motion carried 5-0.
3) Public Comments. Mr. Heinritz expressed concern that the Stockbridge-Munsee Community did not have a representative at the meeting.

Melinda Barlow, County Planner, stated that the meeting materials had been sent to Shannon Holsey. Mr. Heinritz stated that it was important for the Tribe to have a representative at the County Steering Committee meetings, particularly for review of the Intergovernmental Element of the Comprehensive Plan.

Ms. Barlow stated that she would contact Ms. Holsey to convey the Committee’s concern.

4) Motion by Raymond Heinritz, seconded by Ken Capelle to approve the March 18, 2008 and March 25, 2008 minutes as written. Motion carried 5-0.

5) Mark Roffers, of Vandewalle and Associates, updated the Committee on the status of the local comprehensive planning process. Mr. Roffers stated that all communities had received the Public Review Draft of their comprehensive plans with the exception of the Town of Pella and the City of Shawano. Mr. Roffers also informed the Committee that work would recommence on the late coming community plans since signing of the Department of Administration Grant Agreement.

Ms. Barlow informed the Committee that she spoke with Jim Stadler, City of Shawano Administrator, and he indicated that the City was progressing with their plan review process.

Mr. Roffers stated that he and Tim Reed, Planning Director, had met with the Town of Pella and that the Town was contemplating transferring a majority of the land currently in the Residential future land use category into the Agriculture, Open Lands and Residential category.

Mr. Roffers advised the Committee that August 1st, is the targeted date for local plan adoption. Mr. Roffers stated that the meeting with the Realtor’s went well and that the Committee should anticipate recommendations related to plan content from the development community through the plan adoption process.

Mr. Heinritz conveyed that it is difficult for many people to understand the difference between density and lot size and that the recent Frequently Asked Question handout provided a good explanation.

Mr. Roffers informed the Committee that Vandewalle would spend the majority of the summer revising and finalizing the County Comprehensive Plan for the Public Open Houses in September. Mr. Roffers also stated that participants at the Focus Group Meetings held in 2006 and 2007 would receive copies of their related plan elements for review and comment.

Ms. Barlow stated that the County Comprehensive Plan would come before the Planning, Development, and Zoning Committee during October in preparation for the December 2008 County Board meeting.

6) Mr. Roffers lead the Committee in a discussion regarding the communities who were not participating in the County facilitated comprehensive planning process.

Mr. Capelle inquired how non-planning communities would be able to legally make land use decisions.

Mr. Roffers replied that this would most likely be answered in the courts.

Mr. Roffers discussed how communities with plans prepared outside of the County planning process could be included on the County’s Future Land Use Map. Mr. Roffers stated that the communities would just need to transfer their future land use categories into the County’s categories, primarily due to mapping logistics.

Mr. Noffke stated that the Town of Hartland’s planning consultant choose their future land use categories and that the future land use map for the Town did not reflect local land use desires. Mr.
Noffke said that the primary local intent was to allow rezoning for residential use in the Town of Hartland.

Mr. Roffers inquired if this was for large subdivisions or for the creation of a few residential lots.

Mr. Noffke stated that it was for a house or two and that there had been a situation where a farmer with 240 acres could not construct a house due to an income requirement of the previous AG-1 zone.

7) Mr. Roffers lead the committee in review of the Implementation Element of the County’s Comprehensive Plan and stated that the element contains information from the other plan elements, interim rules for land use decision making, and the plan adoption and amendment processes.

Mr. Capelle stated that the LESA system worked well in the review of the Pensaukee Lake rezone application.

Robert Jacobson, Zoning Administrator, stated that it worked well; however, we need to create a system tailored to Shawano County.

Mr. Roffers commented that pages 245-248 of the Implementation Element contain a critique of the existing Zoning and Land Division Ordinances and pages 249-250 contain information on strategies for land use decisions in the interim between plan adoption and the Zoning Code rewrite. Mr. Roffers informed the Committee that a LESA system would be a valuable tool to use in the interim to ensure that land use decisions are consistent with the adopted comprehensive plans.

Mr. Capelle inquired if the results from the LESA review would be available at the local level prior to application review.

Mr. Jacobson stated that the Department would attempt to include that information prior to the local meeting.

Ms. Barlow stated that the Implementation Element should be revised to allow comprehensive plan amendments on an annual basis to allow for a more holistic review of proposed amendments and limit County costs.

The Committee agreed with accepting comprehensive plan amendments on an annual basis.

8) The Committee determined that their next meeting would be on August 26, 2008 at 9:00 AM.

9) Letters and correspondence: Ms. Barlow informed the Committee that the County was successful in obtaining a Grant from the Department of Administration for the late coming communities of the Village of Bowler, Town of Aniwa, and Village of Eland and correspondence to that affect was included in the Committee’s packet.

10) Adjournment: Motion by Ray Heinritz, second by Dennis Hartleben to adjourn the meeting at 10:53 A.M. Motion carried 5-0.

**August 26, 2008**

Members present: Kathy Luebke, Ken Capelle, Dennis Hartleben, Raymond Heinritz, Marlin Noffke, Charles Dallas and Jon Zwirschitz

Members Absent: James Martin

Others Present: Mark Roffers, Melinda Barlow, Tim Reed, Jason Sergeant, Brandy Howe

Location & Time: Meeting Rooms A+B of Shawano County Courthouse at 9:00 AM

1) Call to Order: Jon Zwirschitz called the meeting to order at 9:02 A.M.

2) Motion to deviate from the Order on the Agenda: Motion by Ken Capelle, second by Charles Dallas to deviate from order of items listed on agenda if necessary. Motion carried 7-0.
3) Public Comments: None presented.

4) Approval of Minutes: Motion by Kathy Luebke, seconded by Charles Dallas to approve the June 10, 2008 minutes as written. Motion carried 7-0.

5) Update on Local and County Planning Process: Melinda Barlow gave an update on the status of the plan adoption process and distributed maps to illustrate the status across the county; adoption process is for the most part on track with a few delays in some jurisdictions. Ms. Barlow indicated that the Towns of Almon, Birnamwood, Grant, Maple Grove, Navarino and Red Springs had adopted their Comprehensive Plans.

Ms. Barlow informed the Committee that the Town of Herman is possibly changing a majority of its land use to the Agriculture, Open Lands and Residential (1:10) future land use category. Ms. Barlow informed the Committee that a local group of citizens is engaged in the Town of Herman in discussions and that the matter should be worked out very shortly.

Mark Roffers, of Vandewalle and Associates, asked Ms. Barlow for clarification on the “yellow categories” depicted on the status map. She indicated one of the categories was not needed and could be removed from the map; these categories are government units that are still reviewing comprehensive plan drafts. Ms. Barlow expects these towns to have their plans adopted by October.

Charles Dallas stated he would check with the City of Shawano to find out what the status of adopting their plan is. Ms. Barlow indicated that some communities don’t understand the need to adopt the plans, when the State mandate does not take affect until 2010. She noted that the Department of Administration grant cannot be finalized until all participating communities have adopted their local plans. The Committee expressed concern over the lack of adoption and discussed options to encourage adoption. Marlin Noffke encouraged the Committee to be friendly towards the participating communities, because past tensions may be causing current delays. Ms. Luebke asked Ms. Barlow if she thinks the plans currently being delayed would also see adoption by October. Ms. Barlow said they would.

Mr. Dallas asked Ms. Barlow if she saw or was aware of the Town of Richmond’s questionnaire being distributed. She indicated she was not aware of it, but stated it was great they are starting the planning process. Mr. Dallas said he could get a copy for Ms. Barlow.

Marlin Noffke asked if a different color could be shown for communities that are not participating in the County’s planning process. Ms. Barlow said that could be done in future revisions of the map.

Mr. Roffers indicated that future land use information for the Towns of Green Valley and Fairbanks would be integrated into the County’s Future Land Use Map. He also indicated that the Town of Fairbanks could choose to adopt the County’s comprehensive plan as its own.

6) Review of Draft #2 of County Comprehensive Plan: Mark Roffers, of Vandewalle and Associates, suggested the committee review the plan chapter by chapter. The Committee agreed. Mr. Roffers then lead the committee through the latest draft of the plan. He first informed of the future process for adoption. Three open houses would be held in the next two months. A 4-6 pages summary will be prepared by Vandewalle and Associates for distribution at these open houses.

Mr. Roffers stated that maps were now added to Chapter 1, along with 4 key themes for the plan. Chapter 2 had no alterations. He pointed out that Chapter 3 contained new information. Ken Capelle asked that the data in Figure 3.1 be updated to reflect information from at least 2005. Mr. Roffers indicated he would see if more current data was available. Marlin Noffke suggested a better definition of “hobby farms” should be included in the plan. Mr. Roffers suggested this be added to the “Explore Zoning Approaches for Siting Agricultural Operations of Varying Sizes” or “Promote Continuation of the “Family” Farm through Strategies to Increase Family Incomes” categories on page 51.
In Chapter 4 Mr. Roffers called the Committee’s attention to the new section concerning carbon credits in the county. In Chapter 5, he also pointed out the new addition of a list of cultural resources in the County. Marlin Noffke mentioned he was surprised by the addition of the Shawano Post Office. Jason Sergeant pointed out, according to the draft plan; the Shawano Post Office is on the National Register of Historic Places. Marlin Noffke suggested Vandewalle and Associates contact the Historical Society in Shawano for more information for the Cultural Resources section of the document. Mr. Roffers suggested that the relevant section be forwarded to the historical society for review. Ms. Barlow offered to do this. He also suggested using them as a source for better photos of historic buildings.

In Chapter 6 Mr. Roffers pointed out that “Hobby Farms” should also be mentioned in the existing Agriculture land use category. Ken Capelle mentioned that a zoning ordinance re-write could address the term and help to define a “hobby/family farm.” The Committee agreed with Mr. Roffers suggestion that that maps 6.7, 6.8, and 6.9 be full page. Marlin Noffke suggested encouraging, not restricting, rural businesses that bring in more tax money than normal, such as nurseries. Mr. Roffers led the Committee in a discussion about Map 7. The Committee and Mr. Roffers decided to eliminate section numbers from the map, split it into three maps based upon clusters, make highway labels smaller and remove non-essential waterway names.

In Chapter 7, Tim Reed mentioned the Rustic Road designation for Highway M, may be removed, due to the restrictions it places on further developing the road and its current status as a main transportation corridor.

In Chapter 8, Ken Capelle asked Mark if the fire zones map could be made in color and easier to read. Mark suggested a higher quality digital image be used so it is easier to read. The Committee agreed. Charles Dallas suggested adding the word “former” before the references to Shawano Gresham School District. Mr. Roffers and the Committee agreed. The Committee briefly discussed whether or not private schools should be included in the text and maps of Chapter 8. The Committee agreed to Mr. Roffers’ suggestion of adding text that referred to the fact that there are several private schools in the county and there importance to the County. Kathy Luebke requested the words “above-average potential” be removed from page 172, in reference to wind energy. The Committee further discussed wind turbines in the county. Mr. Roffers suggested, and the Committee agreed, to removing the section of page 172 that refers to wind energy potential in the county, as well as small modifications elsewhere in Chapter 8 to remove wind turbine references. In Chapter 9, Mark Roffers pointed out the new section about standards for mobile homes and hunting shacks, on page 189.

In Chapter 10, Charles Dallas requested the data in Figure 10.4 be updated. Mr. Roffers stated he would look into new data and also reflect the recent split of the Shawano-Gresham School District. He also pointed out the new Table 10.5 and its reflection of manufacturing as the top tax earning business for the County. On page 208, Mr. Dallas suggested adding the Economic Strength of, “quality affordable workforce.” Mr. Roffers pointed out the additional information regarding design standards, on pages 222-225.

In Chapter 11, Raymond Heinritz initiated a discussion over trust lands. Mr. Heinritz asked what happens to how land is reflected in the plan, during transition. Melinda Barlow said an updated map would be created to show the current boundaries of trust lands. Marlin Noffke asked Mark Roffers what assistance was available to help communities create boundary agreements. Mr. Roffers said he could provide examples of these agreements for Mr. Noffke. Melinda Barlow said the County would review Figure 11.1 and update communities that have land use conflicts. Mr. Noffke asked why some municipalities were not mentioned in Figure 11.1. Mr. Roffers pointed out that the Figure only includes communities participating in the Shawano Area Communities Comprehensive Planning Project.

In Chapter 12, Mr. Roffers gave the committee an overview of Figure 12.1, Priority Implementation Strategies. Kathy Luebke pointed out that priority #8, adopting the Comprehensive Plan should be
the first priority. Mr. Roffers identified the importance of working with local municipalities and inviting them to participate in the County Zoning Ordinance re-write. Tim Reed stated, helping Villages with zoning now, would make enforcement much easier in the future. Raymond Heinritz requested an example of this type of County/municipality arrangement. Melinda Barlow described Cecil’s arrangement of contracting its planning services out. The County could act as a consultant in such a situation, instead of Cecil hiring a private consultant. She pointed out that fees charged and costs to the County would need to be calculated.

7) Schedule Open Houses to Review County Comprehensive Plan. Kathy Luebke asked if the Towns had to have their plans done before the County’s plan was complete. Mark Roffers said this was not necessary; the County plan can be amended with any changes the Towns make. The Committee also identified the City of Shawano’s lack of adoption, as being one of the biggest hurdles to County adoption of the comprehensive plan. Ms. Barlow said the open house would be scheduled for early October and the Committee would be informed promptly of the dates. Mr. Rothers informed the Committee that the plan would go to the Planning, Development and Zoning Committee for recommendation for approval.

8) Letters and Correspondence. None. Raymond Heinritz commented that he would welcome Shannon Holsey from Stockbridge-Munsee, and looks forward to working with her. The Committee expressed concern that she is coming onto the committee at the very end of the process. Melinda Barlow said she would meet with Ms. Holsey and update her on the plan and its progress to date. The Committee agreed to meet again on November 11th at 9:00AM.

9) Adjournment. Motion by Charles Dallas, second by Raymond Heinritz to adjourn the meeting at 11:19AM. Motion carried 7-0.

November 5, 2008
Members present: Kathy Luebke, Ken Capelle, Dennis Hartleben, Raymond Heinritz, Marlin Noffke, James Martin and Jon Zwirschitz

Members Absent: Charles Dallas

Others Present: Melinda Barlow, Tim Reed, and Robert Jacobson

Location & Time: Meeting Room A of Shawano County Courthouse at 10:00 AM

1) Call to Order: Jon Zwirschitz called the meeting to order at 10:05 A.M.

2) Motion to deviate from the Order on the Agenda: Motion by Ray Heinritz, second by Marlin Noffke to deviate from order of items listed on agenda if necessary. Motion carried 7-0.

3) Public Comments: None presented.

4) Approval of Minutes: Motion by Ken Capelle, seconded by Ray Heinritz to approve the August 26, 2008 minutes as written. Motion carried 7-0.

5) Update on Local and County Planning Process: Melinda Barlow informed the Committee that although Charles Dallas was unable to attend the meeting he had provided an email stating that he had no reservations in recommending the County’s Comprehensive Plan to the County Board and thanked Melinda Barlow and Mark Roffers for their work in drafting the plan.

Ms. Barlow gave an update on the status of the plan adoption process and distributed a table indicating the individual jurisdiction status; adoption process is on track in the vast majority of the participating communities with the City of Shawano lagging slightly.

6) Discussion of October Comprehensive Plan Open Houses: Melinda Barlow provided a summary of the three Comprehensive Plan Open Houses. Ms. Barlow relayed that although there was a great deal of media coverage of the Open Houses, attendance was primarily limited to people who had previously been involved in the process at the local level. Melinda Barlow stated that the only concern ex-
pressed by open house participants was related to the County Plan containing information that was contradictory to the local comprehensive plans. Ms. Barlow reiterated that the County Plan is a compilation of the local plans and that the county plan document is larger than the local plans because it contains greater detail on how to accomplish the objectives outlined in the 26 local comprehensive plans.

7) Review of the Public Review Draft of the Shawano County Comprehensive Plan: The Committee reviewed the Public Review Draft of the Shawano County Comprehensive Plan and recommended several changes to Maps 1 and 5 in order to ease legibility (width of surface water and municipal boundary lines).

Kathy Luebke indicated that the Ambulance and Fire District Maps were identical and that this should be corrected.

8) Letters and Correspondence. Melinda Barlow stated that the County had received correspondence from the Wisconsin Department of Transportation and the Department of Natural Resources concerning the County’s Comprehensive Plan. Ms. Barlow relayed that the Department of Transportation had requested the County revise the Transportation and Community Facilities Map to reflect the latest results from the Highway 29 Corridor Plan. Melinda Barlow discussed that there would be some difficulties in accomplishing that at this point and in doing so the County’s plan would be different from the local plans which is something the Consultants and the Planning Department felt uncomfortable with. The Committee discussed methods to incorporate WisDOT’s comments and the Highway 29 Plan without being in contradiction to the local plans. The consensus of the Committee was that a paragraph should be added to the Transportation Element discussing the differences from the County’s Transportation and Communities Facilities Map and the current WisDOT Highway 29 Plan. The paragraph should also contain a summary on how the final Highway 29 Plan will be reflected in amendments to the local and county comprehensive plans.

Melinda Barlow also relayed that the Department of Natural Resources had stated that they did not believe it was necessary to list the Brownfield sites within the Economic Development Element. Ms. Barlow relayed that the local comprehensive plans contained this information and that there was strong support at the local level for the plans containing this information. The Committee was in agreement that this information should be included in the plan.

9) Recommendation of Draft County Comprehensive Plan to the Planning, Development and Zoning Committee. The Committee agreed that the draft Comprehensive Plan was acceptable. Ray Heinritz motioned to recommend that the Shawano County Board of Supervisors adopt the County Comprehensive Plan. The motion was seconded by James Martin. Motion carried 7-0.

Adjournment. Motion by Kathy Luebke, second by Raymond Heinritz to adjourn the meeting at 10:48 AM. Motion carried 7-0.

December 3, 2008

Members present: Kathy Luebke, Ken Capelle, Dennis Hartleben, Raymond Heinritz, Marlin Noffke, and Jon Zwischitz

Members Absent: None.


Location & Time: Room A & B, Basement of Courthouse at 8:30 AM

Call to Order: Chairman Zwischitz called the meeting to order at 8:30 A.M.

Draft County Comprehensive Plan: Plan consultant Mark Roffers, from Vandewalle and Associates, provided an overview of the planning process for the committee and those in attendance. He stated the County Plan is informed and guided by all the individual Town Plans. Mr. Roffers stated the final draft plan will come before
the County Board at their January 2009 session in the form of another public hearing forum. The following people in attendance spoke/presented comments on the plan for committee consideration: Gene Hoppe, Phil Zuhse, Bob Krause, Terry Hilgenberg, Dave Passehl and Jim Martin. Some of the concerns related to the plan being too specific and specificity should be in the form of a zoning ordinance and that the plan should state the zoning ordinance rewrite will be a comprehensive revision so that those Town’s desiring to exit from County Zoning can do such. No other correspondence, either oral or written was presented at the public hearing.

Chairman Zwirschitz closed the public hearing at 10:10 A.M.

Agenda:

*Draft County Comprehensive Plan Vote 5 Yes 0 No Motion by Ken Capelle, second by Jon Zwirschitz to recommend approval as amended. Motion carried.

*Resolution will be prepared and placed on the December 17, 2008 County Board agenda.
Appendix II: Land Evaluation and Site Assessment (LESA) System

Introduction

As an implementation step to follow development of the Shawano County Comprehensive Plan, the County determined that it would benefit from a systematic evaluation tool to consider proposals for new development and land preservation. An objective tool to inform these sometimes controversial decisions helps to ensure that all proposals are considered against the same fair and objective criteria and minimize perceptions of favoritism. With a carefully crafted decision-making system, the County and local communities can more effectively and efficiently achieve objectives of protecting its “working” agricultural and forested land, promoting recreation, preserving open spaces, and providing opportunities for growth and development.

The County’s Land Evaluation and Site Assessment (LESA) system is a numeric rating system that will be used for evaluating sites on their suitability for development and/or preservation based on their value as farm, forest, natural resource, or recreational land. The Land Evaluation (LE) component of the LESA system rates the soil-based qualities of a site for particular use (agriculture, forestry, recreation).

Site Assessment (SA) factors that are part of the LESA system identify criteria other than soils that contribute to the quality of a site for agriculture, forestry, or recreation use. The Site Assessment component includes social, economic, and geographic factors that affect land use decision making and quantify the implications of developing a site.

Shawano County intends to implement LESA as an evaluation system for the following types of proposals pertaining to the development and/or preservation of agricultural, forestland, recreational, and natural areas:

- Rezoning out of agriculture, forestry, natural resource, or recreation zoning districts to facilitate a development proposal.
- Subdivision plats or Certified Survey Maps that lead to the division of lots and development, usually housing.
- Preservation of agriculture, forestry, natural resource or recreation lands through farmland preservation plan mapping, conservation easements, purchase of development rights, or acquisition programs, if implemented in the future.

The following pages present the LESA system the County will use to assist with the types of land use decisions listed above, developed as part of the 2011 updated County Zoning Ordinance.

**Land Evaluation (LE) Component**

1. **Soil Quality – Agricultural**
   a. Soil Classifications: Points awarded based on most common soil classification on parent parcel from which development proposal is offered.

<table>
<thead>
<tr>
<th>Soil Class</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes IV-VIII</td>
<td>5</td>
</tr>
<tr>
<td>Class III</td>
<td>4</td>
</tr>
<tr>
<td>Class II</td>
<td>3</td>
</tr>
<tr>
<td>Class I</td>
<td>0</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>
b. Important Farmland Ratings: Points awarded based on most common soil classification on parent parcel from which development proposal is offered.

<table>
<thead>
<tr>
<th>Soil Rating</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Rated</td>
<td>5</td>
</tr>
<tr>
<td>Locally Important Farmland, Where Drained</td>
<td>4</td>
</tr>
<tr>
<td>Locally Important Farmland</td>
<td>3</td>
</tr>
<tr>
<td>Unique Farmland, Where Drained and Protected from Frequent Flooding</td>
<td>2</td>
</tr>
<tr>
<td>Prime Farmland, Where Drained</td>
<td>1</td>
</tr>
<tr>
<td>Prime Farmland</td>
<td>0</td>
</tr>
</tbody>
</table>

2. Presence of Sensitive Environmental Features

a. Water Body: Points awarded based on proximity of proposed development site to navigable water body.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ mile or greater</td>
<td>5</td>
</tr>
<tr>
<td>¼ mile to ½ mile</td>
<td>4</td>
</tr>
<tr>
<td>500 feet to ¼ mile</td>
<td>3</td>
</tr>
<tr>
<td>75 feet to 500 feet</td>
<td>2</td>
</tr>
<tr>
<td>Less than 75 feet</td>
<td>1</td>
</tr>
</tbody>
</table>

b. Wetlands: Points awarded based on percentage of proposed development site with delineated wetlands.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>1-10</td>
<td>4</td>
</tr>
<tr>
<td>11-20</td>
<td>3</td>
</tr>
<tr>
<td>21-30</td>
<td>2</td>
</tr>
<tr>
<td>Greater than 30</td>
<td>1</td>
</tr>
</tbody>
</table>

b. Steep Slopes: Points awarded based on presence of slopes in excess of 12 percent within proposed development site.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

Points Awarded
d. Hydric or Alluvial Soils: Points awarded based on percentage of development site with hydric or alluvial soils.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>1-10</td>
<td>4</td>
</tr>
<tr>
<td>11-20</td>
<td>3</td>
</tr>
<tr>
<td>21-30</td>
<td>2</td>
</tr>
<tr>
<td>Greater than 30</td>
<td>1</td>
</tr>
</tbody>
</table>

Points Awarded

**SITE ASSESSMENT (SA) COMPONENT**

1. Site

a. Size of Site to be Developed: Points awarded based on amount of land proposed to be developed or divided.

<table>
<thead>
<tr>
<th>Acreage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2</td>
<td>5</td>
</tr>
<tr>
<td>2-5</td>
<td>4</td>
</tr>
<tr>
<td>5-10</td>
<td>3</td>
</tr>
<tr>
<td>10-20</td>
<td>2</td>
</tr>
<tr>
<td>Greater than 20</td>
<td>1</td>
</tr>
</tbody>
</table>

Points Awarded

b. Size of Site to Remain in Agricultural/Forestry Use: Points awarded based on amount of land to remain in active agricultural or forestry use following development.

<table>
<thead>
<tr>
<th>Acreage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 50</td>
<td>5</td>
</tr>
<tr>
<td>31-50</td>
<td>4</td>
</tr>
<tr>
<td>21-30</td>
<td>3</td>
</tr>
<tr>
<td>11-20</td>
<td>2</td>
</tr>
<tr>
<td>Less than 10</td>
<td>1</td>
</tr>
</tbody>
</table>

Points Awarded
c. New Lot Sizes: Points awarded based on the average size of new lots to be developed or divided.

<table>
<thead>
<tr>
<th>New Lot Acreage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1.5</td>
<td>5</td>
</tr>
<tr>
<td>1.5-2.5</td>
<td>3</td>
</tr>
<tr>
<td>Greater than 2.5</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

d. Design: Points awarded based on use of conservation design or clustering techniques, per Zoning Ordinance and/or applicable comprehensive plan.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>

2. Remaining Lands

a. Nutrient management plan and BMPs: Points awarded based on whether remaining farm-land/forestland will implement a nutrient management plan and/or use best forestry management practices.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>

b. Managed Forest Lands Program: Points awarded based on whether majority of remaining land will be enrolled in the Managed Forest Lands program.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>

c. Hunting: Points awarded based on whether majority of remaining land will be open for public hunting.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>
3. **Area Conditions**

a. Managed Forest Lands: Points awarded based on proximity of land proposed for development to “open” Managed Forest Lands in area.

<table>
<thead>
<tr>
<th>Miles away</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 3</td>
<td>5</td>
</tr>
<tr>
<td>Between 2-3</td>
<td>4</td>
</tr>
<tr>
<td>Between 1-1.99</td>
<td>3</td>
</tr>
<tr>
<td>Less than 1</td>
<td>2</td>
</tr>
<tr>
<td>Adjacent</td>
<td>1</td>
</tr>
<tr>
<td><strong>Points Awarded</strong></td>
<td></td>
</tr>
</tbody>
</table>

b. Public Open Space: Points awarded based on proximity of land proposed for development to publicly owned land managed for recreation and/or natural resources protection.

<table>
<thead>
<tr>
<th>Miles away</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 3</td>
<td>5</td>
</tr>
<tr>
<td>Between 2-3</td>
<td>4</td>
</tr>
<tr>
<td>Between 1-1.99</td>
<td>3</td>
</tr>
<tr>
<td>Less than 1</td>
<td>2</td>
</tr>
<tr>
<td>Adjacent</td>
<td>1</td>
</tr>
<tr>
<td><strong>Points Awarded</strong></td>
<td></td>
</tr>
</tbody>
</table>

c. Nearby Zoning: Points awarded based on amount of land within a one mile radius of land proposed for development that is zoned FP-1 or FP-2.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20</td>
<td>5</td>
</tr>
<tr>
<td>21-40</td>
<td>4</td>
</tr>
<tr>
<td>41-60</td>
<td>3</td>
</tr>
<tr>
<td>61-80</td>
<td>2</td>
</tr>
<tr>
<td>81-100</td>
<td>1</td>
</tr>
<tr>
<td><strong>Points Awarded</strong></td>
<td></td>
</tr>
</tbody>
</table>

d. Nearby Homes: Points awarded based on number of existing residences within a one mile radius of land proposed for development.

<table>
<thead>
<tr>
<th>Number</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 10</td>
<td>5</td>
</tr>
<tr>
<td>9-10</td>
<td>4</td>
</tr>
<tr>
<td>6-8</td>
<td>3</td>
</tr>
<tr>
<td>3-5</td>
<td>2</td>
</tr>
<tr>
<td>1-2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Points Awarded</strong></td>
<td></td>
</tr>
</tbody>
</table>
e. Proximity to Cities and Villages: Points awarded based on proximity of land proposed for development to city or village boundaries.

<table>
<thead>
<tr>
<th>Miles</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 3</td>
<td>5</td>
</tr>
<tr>
<td>1.5-3</td>
<td>3</td>
</tr>
<tr>
<td>Less than 1.5</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

f. Parcel Size: Points awarded based on average size of ownership parcels within a one mile radius or land proposed for development.

<table>
<thead>
<tr>
<th>Acres</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25</td>
<td>5</td>
</tr>
<tr>
<td>25-50</td>
<td>4</td>
</tr>
<tr>
<td>51-75</td>
<td>3</td>
</tr>
<tr>
<td>76-100</td>
<td>2</td>
</tr>
<tr>
<td>More than 100</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

4. Natural and Cultural Resources

a. Water Quality: Points awarded based on projected percentage of impervious area within the area proposed for development.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30</td>
<td>5</td>
</tr>
<tr>
<td>30-49</td>
<td>4</td>
</tr>
<tr>
<td>50-69</td>
<td>3</td>
</tr>
<tr>
<td>70-89</td>
<td>2</td>
</tr>
<tr>
<td>90-100</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

b. Water Quality: Points awarded based on location of proposed development site in a groundwater recharge area or not.

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No/info not available</td>
<td>5</td>
</tr>
<tr>
<td>Yes, in area</td>
<td>0</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

c. Water Quality: Points awarded based on location of proposed development site in a public wellhead protection area.

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, not in area</td>
<td>5</td>
</tr>
<tr>
<td>Yes, in area</td>
<td>0</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

d. Water Quality: Points awarded based on proximity to Class I water bodies from proposed development site.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ mile or greater</td>
<td>5</td>
</tr>
<tr>
<td>¼ mile to ½ mile</td>
<td>4</td>
</tr>
<tr>
<td>500 feet to ¼ mile</td>
<td>3</td>
</tr>
<tr>
<td>75 feet to 500 feet</td>
<td>2</td>
</tr>
<tr>
<td>Less than 75 feet</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>


e. Natural Resource Protection Area: Points awarded based on location of parent parcel from which development site proposed relative to a Natural Resource Protection Area (e.g. Land Legacy site, Wolf River Bottomlands Natural Resource Area).

<table>
<thead>
<tr>
<th>Miles</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 3</td>
<td>5</td>
</tr>
<tr>
<td>Between 2-3</td>
<td>4</td>
</tr>
<tr>
<td>Between 1-1.99</td>
<td>3</td>
</tr>
<tr>
<td>Less than 1</td>
<td>2</td>
</tr>
<tr>
<td>Adjacent</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

f. Endangered or Rare Species: Points awarded based on presence of State identified endangered or rare species in the section where development is proposed.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No presence</td>
</tr>
<tr>
<td>Yes, a presence</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>

g. Archeological Resources: Points awarded based on presence of registered archeological site on the parent parcel from which the development site is proposed.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No presence</td>
</tr>
<tr>
<td>Yes, a presence</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>

h. Historic Resources: Points awarded based on presence of registered or eligible National or State historic site on the parent parcel from which the development site is proposed.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No presence</td>
</tr>
<tr>
<td>Yes, a presence</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>
5. **Land Use and Transportation**

a. Land Use Conflicts: Points awarded based on presence of livestock operations within ½ mile of the proposed development site.

<table>
<thead>
<tr>
<th>Points Awarded</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No presence</td>
<td>5</td>
</tr>
<tr>
<td>Yes, a presence</td>
<td>0</td>
</tr>
</tbody>
</table>

b. Land Use Conflicts: Points awarded based on presence of a shooting range or game farm within ½ mile of the proposed development site.

<table>
<thead>
<tr>
<th>Points Awarded</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No presence</td>
<td>5</td>
</tr>
<tr>
<td>Yes, a presence</td>
<td>0</td>
</tr>
</tbody>
</table>

c. Land Use Conflicts: Points awarded based on presence of a mineral extraction site within ½ mile of the proposed development site.

<table>
<thead>
<tr>
<th>Points Awarded</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>No presence</td>
<td>5</td>
</tr>
<tr>
<td>Yes, a presence</td>
<td>0</td>
</tr>
</tbody>
</table>

d. Transportation: Points awarded based on whether proposed development site is located on an existing road, as opposed to requiring the construction of new roads.

<table>
<thead>
<tr>
<th>Points Awarded</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, on existing roads</td>
<td>5</td>
</tr>
<tr>
<td>No, new road required</td>
<td>0</td>
</tr>
</tbody>
</table>

e. Transportation: Points awarded based on characteristics of nearest abutting existing street to parcel where development is proposed.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved public road with urban characteristics (e.g. with curb or sidewalks)</td>
<td>5</td>
</tr>
<tr>
<td>Paved public road with rural characteristics (e.g. no curb, gravel shoulder)</td>
<td>3</td>
</tr>
<tr>
<td>Gravel road or private road</td>
<td>0</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>
f. Transportation: Points awarded based on principal traffic movement function of nearest abutting existing street to proposed development site.

<table>
<thead>
<tr>
<th>Principal traffic movement function</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>General traffic</td>
<td>5</td>
</tr>
<tr>
<td>Agriculture/forestry traffic</td>
<td>0</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

6. Utilities (Note: 6a through c apply only to development proposals served by private well and waste treatment systems. For other proposals, add 10 points.)

a. Sewer Service: Points awarded based on whether proposed development site is within an existing or planned Sewer Service Area or utility/sanitary district.

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not within</td>
</tr>
<tr>
<td>Yes, within</td>
</tr>
<tr>
<td>Points Awarded</td>
</tr>
</tbody>
</table>

b. Sewer Service: Points awarded based on distance to public sanitary sewer system from the proposed development site.

<table>
<thead>
<tr>
<th>Miles</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 3</td>
<td>5</td>
</tr>
<tr>
<td>1.5-3</td>
<td>3</td>
</tr>
<tr>
<td>Less than 1.5</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

c. Soil Suitability: Points awarded based on soil suitability for on-site wastewater treatment within the proposed development site.

<table>
<thead>
<tr>
<th>Suitability</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>5</td>
</tr>
<tr>
<td>Moderate</td>
<td>3</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
</tr>
<tr>
<td>Points Awarded</td>
<td></td>
</tr>
</tbody>
</table>

SCORING

Land Evaluation (LE) subtotal: __
Site Assessment (SA) subtotal: __
TOTAL LESA SCORE: __

Evaluation of TOTAL LESA SCORE

<table>
<thead>
<tr>
<th>LESA Score Range</th>
<th>LESA Tier</th>
<th>Suitability for Development or Preservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-89</td>
<td>Tier I</td>
<td>Most suitable for continued farmland, forestry, or open space use; least suitable for development</td>
</tr>
<tr>
<td>90-150</td>
<td>Tier II</td>
<td>Moderately suitable for either farmland, forestry, open space use, or for development</td>
</tr>
<tr>
<td>Greater than 150</td>
<td>Tier III</td>
<td>Most suitable for development; least suitable for continued farmland, forestry, or open space use</td>
</tr>
</tbody>
</table>
Appendix III: Adoption Resolution and Ordinance

ADD RESOLUTION AND ORDIANNCE FROM 2013 PLAN UPDATE APPROVAL ONCE PLAN IS ADOPTED
ORDINANCE NO. 1-09

AN ORDINANCE TO ADOPT THE COMPREHENSIVE PLAN OF
SHAWANO COUNTY, WISCONSIN

The County Board of Shawano County, Wisconsin, does ordain as follows:

SECTION 1. Pursuant to Section 66.1001, and in conjunction with Sections
60.22(3) and 62.23(2) and (3) of the Wisconsin Statutes, Shawano County is
authorized to prepare and adopt a comprehensive plan as defined in sections
66.1001(1)(a) and 66.1001(2) of the Wisconsin Statutes.

SECTION 2. The County Board of Shawano County has adopted and followed
written procedures designed to foster public participation in every stage of the
preparation of a comprehensive plan as required by section 66.1001(4)(a) of
Wisconsin Statutes.

SECTION 3. The Planning, Development and Zoning Committee of Shawano
County, by a unanimous vote of the entire Committee recorded in its official
minutes, has adopted a resolution recommending to the County Board the adoption
of the document entitled, "SHAWANO COUNTY COMPREHENSIVE PLAN," containing
all of the elements specified in section 66.1001(2) of the Wisconsin Statutes, and
such resolution is attached hereto.

SECTION 4. Shawano County has held at least one public hearing on this
ordinance, in compliance with the requirements of section 66.1001(4)(d) of
Wisconsin Statutes, and provided numerous other opportunities for public
involvement per its adopted public participation strategy and procedures.

SECTION 5. The County Board of Shawano County, Wisconsin, does, by
enactment of this ordinance, formally adopt the document entitled, "SHAWANO
COUNTY COMPREHENSIVE PLAN," pursuant to section 66.1001(4)(c) of Wisconsin
Statutes.

SECTION 6. This ordinance shall take effect upon passage by a majority vote
of the members-elect of the County Board and publication/posting as required by
law.

Submitted by: Jon Zwirschitz
             Marlin Noffke
             Kathy Luebke
             Dennis Hartleben
             Ken Capelle

PLANNING, DEVELOPMENT & ZONING COMMITTEE
ORDINANCE NO.
ADOPTING AND RECOMMENDING THE COMPREHENSIVE PLAN FOR
SHAWANO COUNTY, WISCONSIN

WHEREAS, section 66.1001(4), Wisconsin Statutes, establishes the required procedure for a local government to adopt a comprehensive plan, and section 66.1001(2) identifies the required elements of a comprehensive plan; and

WHEREAS, the Shawano County Planning, Development and Zoning Committee has the authority to recommend that the County Board adopt a comprehensive plan under section 66.1001(4)(b); and

WHEREAS, the County has prepared the attached document (named Shawano County Comprehensive Plan), containing all maps and other descriptive materials, to be the comprehensive plan for the County under section 66.1001, Wisconsin Statutes; and

NOW, THEREFORE, BE IT RESOLVED that the Planning, Development and Zoning Committee of Shawano County hereby adopts the attached Comprehensive Plan as the County’s comprehensive plan under section 66.1001(4), Wisconsin Statutes; and

BE IT FINALLY RESOLVED that the Planning, Development and Zoning Committee hereby recommend that, following a public hearing, the County Board adopt an ordinance to constitute official County approval of the Shawano County Comprehensive Plan as the County’s comprehensive plan under section 66.1001, Wisconsin Statutes.

Submitted by,

Jon Zwirchitz

Marlin Noffke
Appendix IV: Conditions and Trends Related To Agriculture

This appendix contains details about those existing conditions and trends in Shawano County that influence development and preservation, in order to advise the this Plan’s Agricultural Resources chapter and associated land use policies and decisions. Included are population, demographic, housing, and agricultural trends, along with background information on municipal expansion, natural resources, utilities and community facilities, transportation, and economic development. The information meets requirements for county farmland preservation plans from Chapter 91 of Wisconsin Statutes.

**Agricultural Trend and Expectations Overview**
- Historically high commodity prices bolster agricultural sector
- Farmland acres and numbers have stabilized in recent years
- More larger and smaller farms, and fewer mid-sized farms
- Organic and local foods movement expands opportunities
- New uses for agricultural products – e.g., biofuel, bio-plastics

**Population, Demographic, and Housing Trends**

Figure IV-1 compares Shawano County’s population trends from 1970 to 2010 with the State and abutting counties, represented on the map that follows. Over this forty year period, Shawano County has grown at a steady pace – an increase in 28 percent, similar to the State average. The County grew by just over 3 percent between 2000 and 2010, slower than the pace of most neighboring counties and the State.
Figure IV-1: County and State Population Trends

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>32,650</td>
<td>35,928</td>
<td>37,157</td>
<td>40,665</td>
<td>41,949</td>
<td>3.16%</td>
<td>28.48%</td>
</tr>
<tr>
<td>Brown County</td>
<td>158,244</td>
<td>175,280</td>
<td>194,594</td>
<td>226,778</td>
<td>248,007</td>
<td>9.36%</td>
<td>56.72%</td>
</tr>
<tr>
<td>Langlade County</td>
<td>19,220</td>
<td>19,978</td>
<td>19,505</td>
<td>20,740</td>
<td>19,977</td>
<td>-3.68%</td>
<td>3.94%</td>
</tr>
<tr>
<td>Marathon County</td>
<td>97,457</td>
<td>111,270</td>
<td>115,400</td>
<td>125,834</td>
<td>134,063</td>
<td>6.54%</td>
<td>37.56%</td>
</tr>
<tr>
<td>Menominee County</td>
<td>2,607</td>
<td>3,373</td>
<td>3,890</td>
<td>4,562</td>
<td>4,232</td>
<td>-7.23%</td>
<td>62.33%</td>
</tr>
<tr>
<td>Oconto County</td>
<td>25,553</td>
<td>28,947</td>
<td>30,226</td>
<td>35,634</td>
<td>37,660</td>
<td>5.69%</td>
<td>47.38%</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>119,398</td>
<td>128,730</td>
<td>140,510</td>
<td>160,971</td>
<td>176,695</td>
<td>9.77%</td>
<td>47.99%</td>
</tr>
<tr>
<td>Portage County</td>
<td>47,541</td>
<td>57,420</td>
<td>61,405</td>
<td>67,182</td>
<td>70,019</td>
<td>4.22%</td>
<td>47.28%</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>37,780</td>
<td>42,831</td>
<td>46,104</td>
<td>51,825</td>
<td>52,410</td>
<td>1.13%</td>
<td>38.72%</td>
</tr>
<tr>
<td>East Central Region</td>
<td>475,090</td>
<td>511,033</td>
<td>542,712</td>
<td>609,558</td>
<td>651,835</td>
<td>6.94%</td>
<td>37.20%</td>
</tr>
<tr>
<td>State of Wisconsin</td>
<td>4,417,731</td>
<td>4,705,767</td>
<td>4,891,769</td>
<td>5,363,675</td>
<td>5,686,986</td>
<td>6.03%</td>
<td>28.73%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 1970 – 2010

Figure IV-2 charts growth in the communities within Shawano County over the past forty years. Growth across the County has been variable. From 1970 to 2010, the Towns of Bartelme, Red Springs and Washington experienced the highest overall percentage growth. Bartleme’s and Red Spring’s growth is attributed largely to the growth of Stockbridge-Munsee Community within these township areas. Washington’s growth may be attributed to waterfront and other subdivision development. The Villages of Eland and Tigerton, and the Towns of Maple Grove, Germania, Aniwa, and Fairbanks, all experienced overall population decline. This may be attributed to different combinations of strong preservation policies, aging populations, and relative remoteness from urban areas.
## Figure IV-2: Local Government Population Trends, Shawano County

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Shawano</td>
<td>6,488</td>
<td>7,013</td>
<td>7,598</td>
<td>8,298</td>
<td>9,305</td>
<td>12.14%</td>
<td>43.42%</td>
</tr>
<tr>
<td>C. Marion (part)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>25</td>
<td>2400.00%</td>
<td>-</td>
</tr>
<tr>
<td>V. Aniwa</td>
<td>233</td>
<td>273</td>
<td>249</td>
<td>272</td>
<td>260</td>
<td>-4.41%</td>
<td>11.59%</td>
</tr>
<tr>
<td>V. Birnamwood (pt.)</td>
<td>632</td>
<td>688</td>
<td>687</td>
<td>785</td>
<td>802</td>
<td>2.17%</td>
<td>26.90%</td>
</tr>
<tr>
<td>V. Bonduel</td>
<td>995</td>
<td>1,160</td>
<td>1,210</td>
<td>1,416</td>
<td>1,478</td>
<td>4.38%</td>
<td>48.54%</td>
</tr>
<tr>
<td>V. Bowlmer</td>
<td>272</td>
<td>329</td>
<td>279</td>
<td>343</td>
<td>302</td>
<td>-11.95%</td>
<td>11.03%</td>
</tr>
<tr>
<td>V. Cecil</td>
<td>369</td>
<td>445</td>
<td>373</td>
<td>466</td>
<td>570</td>
<td>22.32%</td>
<td>54.47%</td>
</tr>
<tr>
<td>V. Eland</td>
<td>229</td>
<td>230</td>
<td>247</td>
<td>251</td>
<td>202</td>
<td>-19.52%</td>
<td>-11.79%</td>
</tr>
<tr>
<td>V. Gresham</td>
<td>448</td>
<td>534</td>
<td>515</td>
<td>575</td>
<td>586</td>
<td>1.91%</td>
<td>30.80%</td>
</tr>
<tr>
<td>V. Mattoon</td>
<td>377</td>
<td>382</td>
<td>431</td>
<td>466</td>
<td>438</td>
<td>-6.01%</td>
<td>16.18%</td>
</tr>
<tr>
<td>V. Pulaski (part)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45</td>
<td>218</td>
<td>384.44%</td>
<td>-</td>
</tr>
<tr>
<td>V. Tigerton</td>
<td>742</td>
<td>865</td>
<td>815</td>
<td>764</td>
<td>741</td>
<td>-3.01%</td>
<td>-0.13%</td>
</tr>
<tr>
<td>V. Wittenberg</td>
<td>895</td>
<td>997</td>
<td>1,145</td>
<td>1,177</td>
<td>1,081</td>
<td>-8.16%</td>
<td>20.78%</td>
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<tr>
<td>T. Almon</td>
<td>505</td>
<td>632</td>
<td>557</td>
<td>591</td>
<td>584</td>
<td>-1.18%</td>
<td>15.64%</td>
</tr>
<tr>
<td>T. Angelica</td>
<td>1,433</td>
<td>1,522</td>
<td>1,417</td>
<td>1,635</td>
<td>1,793</td>
<td>9.66%</td>
<td>25.12%</td>
</tr>
<tr>
<td>T. Aniwa</td>
<td>598</td>
<td>612</td>
<td>601</td>
<td>586</td>
<td>541</td>
<td>-7.68%</td>
<td>-9.53%</td>
</tr>
<tr>
<td>T. Bartelme</td>
<td>399</td>
<td>583</td>
<td>618</td>
<td>700</td>
<td>819</td>
<td>17.00%</td>
<td>105.26%</td>
</tr>
<tr>
<td>T. Belle Plaine</td>
<td>1,636</td>
<td>1,626</td>
<td>1,792</td>
<td>1,867</td>
<td>1,855</td>
<td>-0.64%</td>
<td>13.39%</td>
</tr>
<tr>
<td>T. Birnamwood</td>
<td>484</td>
<td>570</td>
<td>632</td>
<td>711</td>
<td>763</td>
<td>7.31%</td>
<td>57.64%</td>
</tr>
<tr>
<td>T. Fairbanks</td>
<td>631</td>
<td>608</td>
<td>600</td>
<td>687</td>
<td>616</td>
<td>-10.33%</td>
<td>-2.38%</td>
</tr>
<tr>
<td>T. Germania</td>
<td>389</td>
<td>392</td>
<td>410</td>
<td>339</td>
<td>332</td>
<td>-2.06%</td>
<td>-14.65%</td>
</tr>
<tr>
<td>T. Grant</td>
<td>912</td>
<td>976</td>
<td>946</td>
<td>974</td>
<td>991</td>
<td>1.75%</td>
<td>8.66%</td>
</tr>
<tr>
<td>T. Green Valley</td>
<td>984</td>
<td>1,054</td>
<td>984</td>
<td>1,024</td>
<td>1,089</td>
<td>6.35%</td>
<td>10.67%</td>
</tr>
<tr>
<td>T. Hartland</td>
<td>820</td>
<td>872</td>
<td>764</td>
<td>825</td>
<td>904</td>
<td>9.58%</td>
<td>10.24%</td>
</tr>
<tr>
<td>T. Herman</td>
<td>759</td>
<td>834</td>
<td>739</td>
<td>741</td>
<td>776</td>
<td>4.72%</td>
<td>2.24%</td>
</tr>
<tr>
<td>T. Hutchins</td>
<td>409</td>
<td>467</td>
<td>523</td>
<td>539</td>
<td>600</td>
<td>11.32%</td>
<td>46.70%</td>
</tr>
<tr>
<td>T. Lessor</td>
<td>911</td>
<td>955</td>
<td>892</td>
<td>1,112</td>
<td>1,263</td>
<td>13.58%</td>
<td>38.64%</td>
</tr>
<tr>
<td>T. Maple Grove</td>
<td>1,258</td>
<td>1,271</td>
<td>1,159</td>
<td>1,045</td>
<td>972</td>
<td>-6.99%</td>
<td>-22.73%</td>
</tr>
<tr>
<td>T. Morris</td>
<td>411</td>
<td>447</td>
<td>453</td>
<td>485</td>
<td>453</td>
<td>-6.60%</td>
<td>10.22%</td>
</tr>
<tr>
<td>T. Navarino</td>
<td>440</td>
<td>456</td>
<td>439</td>
<td>422</td>
<td>446</td>
<td>5.69%</td>
<td>1.36%</td>
</tr>
<tr>
<td>T. Pella</td>
<td>734</td>
<td>788</td>
<td>885</td>
<td>877</td>
<td>865</td>
<td>-1.37%</td>
<td>17.85%</td>
</tr>
<tr>
<td>T. Red Springs</td>
<td>474</td>
<td>524</td>
<td>614</td>
<td>981</td>
<td>925</td>
<td>-5.71%</td>
<td>95.15%</td>
</tr>
<tr>
<td>T. Richmond</td>
<td>1,397</td>
<td>1,543</td>
<td>1,587</td>
<td>1,719</td>
<td>1,864</td>
<td>8.44%</td>
<td>33.43%</td>
</tr>
<tr>
<td>T. Seneca</td>
<td>532</td>
<td>525</td>
<td>538</td>
<td>567</td>
<td>558</td>
<td>-1.59%</td>
<td>4.89%</td>
</tr>
<tr>
<td>T. Washington</td>
<td>974</td>
<td>1,374</td>
<td>1,620</td>
<td>1,903</td>
<td>1,895</td>
<td>-0.42%</td>
<td>94.56%</td>
</tr>
<tr>
<td>T. Waukechon</td>
<td>906</td>
<td>874</td>
<td>876</td>
<td>928</td>
<td>1,021</td>
<td>10.02%</td>
<td>12.69%</td>
</tr>
<tr>
<td>T. Wescott</td>
<td>2,251</td>
<td>2,668</td>
<td>3,085</td>
<td>3,653</td>
<td>3,183</td>
<td>-12.87%</td>
<td>41.40%</td>
</tr>
<tr>
<td>T. Wittenberg</td>
<td>723</td>
<td>829</td>
<td>877</td>
<td>894</td>
<td>833</td>
<td>-6.82%</td>
<td>15.21%</td>
</tr>
</tbody>
</table>

Shawano County 32,650 35,928 37,157 40,664 41,949 3.16% 28.48%

*Source: U.S. Census Bureau, 1970 - 2010*
Figure IV-3 compares 2010 age and gender distribution data for Shawano County to neighboring counties and Wisconsin. Age distribution is an important factor when considering the future demands for housing, schools, parks, recreational facilities, and social services. Shawano County’s 2010 median age of 43 is older than the State median, and generally higher than those of neighboring counties that range from 36 to 46. Also, 18 percent of the population in Shawano County is age 65 and older, higher than the State average but fairly commonplace among rural counties. This aging highlights the need to continue to plan for appropriate housing, transportation and services to accommodate the aging and elderly population, which often does not equate to relatively isolated houses in rural locations.

**Figure IV-3: Age and Gender Distribution, 2010**

<table>
<thead>
<tr>
<th>County</th>
<th>Median Age</th>
<th>Under 18 (%)</th>
<th>65 and over (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>43.0</td>
<td>22.8%</td>
<td>18.3%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Brown County</td>
<td>36.2</td>
<td>24.9%</td>
<td>11.6%</td>
<td>50.5%</td>
</tr>
<tr>
<td>Langlade County</td>
<td>45.7</td>
<td>21.1%</td>
<td>20.0%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Marathon County</td>
<td>39.4</td>
<td>24.5%</td>
<td>14.2%</td>
<td>49.8%</td>
</tr>
<tr>
<td>Menominee County</td>
<td>31.4</td>
<td>32.6%</td>
<td>11.4%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Oconto County</td>
<td>43.7</td>
<td>22.4%</td>
<td>16.0%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>37.1</td>
<td>25.1%</td>
<td>11.8%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Portage County</td>
<td>35.8</td>
<td>20.8%</td>
<td>12.8%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>43.5</td>
<td>22.6%</td>
<td>18.1%</td>
<td>49.5%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>38.5</td>
<td>23.6%</td>
<td>13.7%</td>
<td>50.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2010

As shown in Figure IV-4, educational attainment is continuing to rise, both in Shawano County and Statewide. The percentage of population graduating from high school in Shawano County in 2010 was nearly the same as State average, and comparable to neighboring counties. In contrast, the percentage of Shawano County residents attaining a bachelor’s degree or higher was somewhat lower than State average. This may correlate to the types of employment opportunities that have been commonplace in the County.
Figure IV-4: Educational Attainment, 2000-2010

<table>
<thead>
<tr>
<th></th>
<th>High School Graduates or Higher</th>
<th>Bachelor's Degree or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>81.5%</td>
<td>88.1%</td>
</tr>
<tr>
<td>Brown County</td>
<td>86.3%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Langlade County</td>
<td>80.9%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Marathon County</td>
<td>83.8%</td>
<td>88.8%</td>
</tr>
<tr>
<td>Menominee County</td>
<td>78.2%</td>
<td>86.3%</td>
</tr>
<tr>
<td>Oconto County</td>
<td>80.6%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>88.1%</td>
<td>92.5%</td>
</tr>
<tr>
<td>Portage County</td>
<td>86.5%</td>
<td>90.6%</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>82.7%</td>
<td>88.6%</td>
</tr>
<tr>
<td>State of Wisconsin</td>
<td>85.1%</td>
<td>89.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2000 & 2010

Figure IV-5 compares the County’s housing characteristics with surrounding counties and the State. With a vacancy rate of 16.7 percent, Shawano County is slightly above the State average. Vacancy rates amongst nearby counties are variable, and somewhat dependent on the amount of seasonal housing. A housing unit is vacant if no one is living in it at the time when it is counted, which is in late winter or early spring. A high percentage of Shawano County’s housing is owner occupied. Shawano County’s housing is below the State’s and most nearby counties’ median values and rents. This suggests affordable housing opportunities within the County, and that Shawano County is generally more rural than many nearby counties and the State as a whole.

Figure IV-5: Housing Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Total Housing Units</th>
<th>Vacant (%)</th>
<th>Owner Occupied (%)</th>
<th>Median Value Owner Occupied</th>
<th>Median Gross Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shawano County</td>
<td>20,641</td>
<td>16.7%</td>
<td>76.0%</td>
<td>$124,800</td>
<td>$593</td>
</tr>
<tr>
<td>Brown County</td>
<td>103,930</td>
<td>6.2%</td>
<td>67.0%</td>
<td>$159,900</td>
<td>$668</td>
</tr>
<tr>
<td>Langlade County</td>
<td>12,314</td>
<td>28.1%</td>
<td>78.2%</td>
<td>$107,100</td>
<td>$506</td>
</tr>
<tr>
<td>Marathon County</td>
<td>57,392</td>
<td>7.9%</td>
<td>74.5%</td>
<td>$141,700</td>
<td>$663</td>
</tr>
<tr>
<td>Menominee County</td>
<td>2,381</td>
<td>39.5%</td>
<td>67.4%</td>
<td>$96,000</td>
<td>$462</td>
</tr>
<tr>
<td>Oconto County</td>
<td>23,406</td>
<td>30.3%</td>
<td>81.9%</td>
<td>$147,300</td>
<td>$574</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>72,822</td>
<td>5.2%</td>
<td>72.6%</td>
<td>$155,300</td>
<td>$687</td>
</tr>
<tr>
<td>Portage County</td>
<td>29,861</td>
<td>6.8%</td>
<td>68.9%</td>
<td>$144,400</td>
<td>$644</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>25,244</td>
<td>14.4%</td>
<td>75.2%</td>
<td>$138,300</td>
<td>$629</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>2,609,819</td>
<td>12.6%</td>
<td>69.1%</td>
<td>$169,700</td>
<td>$735</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2007-2011 5-year Estimates, DP-04
Agricultural Trends and Expectations

Agriculture is a prominent land use in Shawano County, as well as an important component of Shawano's local economy, heritage, and character. This is particularly the case in the eastern portion of the County. Farming is also a way of life for many County residents. The agricultural landscape enhances Shawano’s aesthetic appeal, and the seasonal changes of growing crops, the colors and textures of farm fields, and the architecturally significant farm buildings all contribute to Shawano’s rural character. The character, location, viability, and future expectations of farming in the County are described below.

Economic Contribution of Agriculture

Agriculture is central to Shawano County’s economic and land use future. The eastern half of the County is dominated by a mixture of dairy and cash crop farms. The western third of the County has significant areas of woodlots and forest, interspersed with agricultural fields. The center of the County has a higher population concentration, non-farm development, and State owned land. Map IV-1 indicates the current, specific agricultural uses in different parts of the County, including different forms of cash cropping, dairying, and grazing.

Depending on what source is used, Shawano County’s farmers own and manage somewhere between 1/3 and ½ of the County’s total land base. According the UW-Madison/UW Extension, the industry also contributes over 4,267 jobs in the County, accounts for over $487 million of business sales in the County, contributes $175 million to County income, and pays $16 million in property taxes. Dairy is the largest part of agriculture in the County, generating one half of agricultural business sales.

Agricultural Production and Specialties

Sales of agricultural commodities produced in Shawano County are of great importance to the County’s economy. According to the 2002 Census of Agriculture, Shawano County ranks in the top ten counties in the State for sale of cut Christmas trees, milk and other dairy products from cows, and horses and ponies.

Again according to the UW-Madison/UW Extension, milk alone contributed $133.4 million in sales in 2007 (last available years). Grain generated $17.8 million in sales in 2007. Other commodities produced in the County and their 2007 sales value includes sheep and goats ($0.65 million), Christmas trees ($0.62 million), and hogs and pigs ($0.51 million).

The UW Extension’s 2011 Value and Economic Impact of Agriculture Report further describes the impact of Shawano County’s dairy specialization. On-farm milk production generated $156.5 million in business sales in 2007, with processing milk into dairy products yielding another $87.1 million in 2007. There are five dairy plants processing milk into products within the County. On-farm milk production accounted for 1,465 jobs and dairy processing accounted for 347 jobs.
MAP IV-1: GEOGRAPHIC DISTRIBUTION OF FARMING IN SHAWANO COUNTY
Agricultural Soils
The Natural Resources Conservation Service groups soils based on their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. These capability classifications are based on numerous criteria that include, but are not limited to, the soil’s salinity; capacity to hold moisture; potential for erosion; depth, texture, and structure; as well as local climatic limitations (e.g., temperature and rainfall). Under this system of classification, soils are separated into eight classes.

Within Shawano County, soils in Classes I, II, and III are considered “prime farmland.”

Generally, Class I and Class II soils are the best suited for the cultivation of crops. Class I soils have few limitations that restrict their use for cropland. These soils can sustain a wide variety of plants and are well suited for cultivated crops, pasture plants, range lands, and woodlands. Class II soils have moderate limitations that restrict the types of plants that can be grown or that require simple conservation practices or soil management techniques to prevent deterioration over time. However, these practices are generally easy to apply, and, therefore, these soils are still able to sustain cultivated crops, pasture plants, range lands, and woodlands.

Soils in Class III have limitations that, under natural circumstances, restrict the types of plants that can be grown, and/or that alter the timing of planting, tillage, and harvesting. However, with the application and careful management of special conservation practices, these soils may still be used for cultivated crops, pasture plants, woodlands, and range lands.

Soils in capability classes IV through VIII present increasingly severe limitations to the cultivation of crops. Soils in Class VIII have limitations that entirely preclude their use for commercial plant production.

Map 4 (Soil Suitability for Agriculture) depicts the locations of Class I, II, and III soils in the County. Generally, Class I and II soils are located in highest concentration in the eastern portion of the County. Some Class I and II soil types are also found within the central and western parts of the County. Countywide, 0.1 percent of the lands are Class I soils, 50.5 percent are Class II soils, and 14.1 percent are Class III soils.

Agricultural Trends
As suggested by Figure IV-6, the total acres of cropland in Shawano County have declined since the early 1990s, with most of that decrease occurring during the 1990s. Harvest cropland followed a similar pattern, though it fluctuated more significantly.

The number of acres devoted to corn for grain production increased by 22 percent between 1992 and 2007, while oat production decreased by 24 percent. Wheat for grain experienced the largest increase overall of 48 percent from 2002 to 2007. Increased commodities since 2007 may have further boosted the acreage in Shawano County devoted to corn and wheat.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cropland (acres)</td>
<td>207,174</td>
<td>184,047</td>
<td>187,722</td>
<td>189,064</td>
<td>-8.74%</td>
<td>0.71%</td>
</tr>
<tr>
<td>Harvested cropland (acres)</td>
<td>175,831</td>
<td>159,993</td>
<td>164,162</td>
<td>173,324</td>
<td>-1.43%</td>
<td>5.58%</td>
</tr>
<tr>
<td>Corn for grain (acres)</td>
<td>32,448</td>
<td>39,246</td>
<td>40,937</td>
<td>50,144</td>
<td>54.54%</td>
<td>22.49%</td>
</tr>
<tr>
<td>Wheat for grain (acres)</td>
<td>-</td>
<td>-</td>
<td>3,069</td>
<td>4,530</td>
<td>-</td>
<td>47.61%</td>
</tr>
<tr>
<td>Oats for grain (acres)</td>
<td>8,161</td>
<td>12,753</td>
<td>6,010</td>
<td>4,532</td>
<td>-44.47%</td>
<td>-24.59%</td>
</tr>
</tbody>
</table>

As suggested by Figure IV-7, the number of farms in Shawano County increased slightly from 1992 to 2007. At the same time, the total acreage of farmland has decreased, with all of that increase occurring in the 1990s. Figure B-7 also suggests a growing trend toward smaller farms throughout the County. The average farm size dropped from 207 acres in 1992 to 187 acres in 2007.

Figure IV-7: Shawano County Farmland Number, Acreage, and Average Size

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Farms</td>
<td>1,437</td>
<td>1,337</td>
<td>1,465</td>
<td>1,450</td>
<td>0.90%</td>
<td>-1.02%</td>
</tr>
<tr>
<td>Farmland (acres)</td>
<td>297,984</td>
<td>270,478</td>
<td>270,534</td>
<td>271,718</td>
<td>-8.81%</td>
<td>0.44%</td>
</tr>
<tr>
<td>Average Farm Size (acres)</td>
<td>207</td>
<td>202</td>
<td>185</td>
<td>187</td>
<td>-9.66%</td>
<td>1.08%</td>
</tr>
</tbody>
</table>


\(^a\) Non-adjusted figure: this figure represents the old methodology for counting farms.
\(^b\) Adjusted figure: in 1997, the USDA revised its methodology for counting farms. The new methodology is more accurate and, as a result, is able to count small farms that would not be counted using the old methodology. In 1997, the National Agricultural Statistical Service changed its data collection methodology to reflect under-coverage of small farms. This resulted in two numbers for 1997. The non-adjusted figure should be used when comparing 1992 to 1997. The adjusted figure should be used when comparing 1997 to 2002 and 2007.

Mirroring State and National trends, farm size has shifted in the County. Smaller farms and very large farms are increasing, while mid-sized farms are generally decreasing in number. Farms of 1-9 acres increased in number by 75 percent between 1992 and 2007, and nearly 30 percent between 2002 and 2007. The number of 10 – 49 acre farms also increased substantially between 1992 and 2007 – increasing by 120 percent. Farms of 50 – 179 acres remained fairly stable, but those between 180 – 999 acres decreased. Farms of 1000+ acres increased most significantly in percentage – more than tripling in number from 1992 to 2007 and increasing 42 percent from 2002 to 2007.

Figure IV-8: Shawano County Farm Size Trends

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9 acres</td>
<td>32</td>
<td>49</td>
<td>44</td>
<td>56</td>
<td>75.00%</td>
<td>27.27%</td>
</tr>
<tr>
<td>10-49 acres</td>
<td>149</td>
<td>156</td>
<td>302</td>
<td>328</td>
<td>120.13%</td>
<td>8.61%</td>
</tr>
<tr>
<td>50-179 acres</td>
<td>592</td>
<td>561</td>
<td>595</td>
<td>601</td>
<td>1.52%</td>
<td>1.01%</td>
</tr>
<tr>
<td>180-499 acres</td>
<td>577</td>
<td>485</td>
<td>426</td>
<td>359</td>
<td>-37.78%</td>
<td>-15.73%</td>
</tr>
<tr>
<td>500-999 acres</td>
<td>81</td>
<td>76</td>
<td>79</td>
<td>79</td>
<td>-2.47%</td>
<td>0.00%</td>
</tr>
<tr>
<td>1,000+ acres</td>
<td>6</td>
<td>10</td>
<td>19</td>
<td>27</td>
<td>350.00%</td>
<td>42.11%</td>
</tr>
</tbody>
</table>


Agricultural Processing

A number of processing companies support and add value to agricultural products in Shawano County. According to the Wisconsin Food Processing Directory (Forward Wisconsin) and the County Land Conservation Division, the following processing operations are located in Shawano County. This list may not be all-inclusive.

- Oak Grove Dairy (Pella) - Cheese Manufacturing
- Graf Creamery (Angelica) - Butter Production
• Belle Plaine Cheese Factory (Shawano) – Cheese
• Laney Cheese (Maple Grove) – Cheese
• Bults Bakery (Shawano) – Retail Bakery
• Nueske’s (Wittenberg) – Meat Processing and Production
• Ardex All American Mineral Co (Shawano) – Feed Manufacturers
• Twigs Beverages (Shawano) – Bottlers
• Hanke Farm (Wittenberg) – Food Preparation
• Kropf’s Meat Processing (Bowler) – Butchering
• Pond Hill Processing (Wittenberg) – Butchering
• Adams Meats (Pella) – Butchering
• Pingel’s Fenceline Meats (Shawano) – Butchering
• Witt Sausage & Meats (Shawano) – Butchering
• Lawrenz’s Sausage Shop (Bonduel) – Butchering

In general, the supply of these types of agricultural processors in and near the County is stable to slightly declining over the last decade or so. It is the hope, though, that these existing businesses will be retained and expand, and new processing businesses will begin in Shawano County. Certainly, a variety of business parks and zoning districts in the County support their continuation and expansion. Also, growing interests on eating locally and on food security may influence these trends.

Agricultural Storage, Supply, and Distribution
Farms in Shawano County are served by a network of local agricultural support businesses, such as implement dealers, feed and seed operations, and transportation systems (including rail). These provide necessary services, materials, and access to markets for the County’s farmers. According to the Wisconsin Food Processing Directory (Forward Wisconsin) and the County Land Conservation Division, the following processing operations are located in Shawano County. This list may not be all-inclusive.

• Aniwa Feed Store (Aniwa) – Feed Storage and Supply
• United Co-Op (Shawano) – Feed Storage and Supply
• Nutrition Service Co (Angelica) – Feed Storage and Supply
• Rew Motors (Aniwa) – Agricultural Implements
• Caroline Implement (Grant) – Agricultural Implements
• Riesterer & Schnell (Angelica) – Agricultural Implements
• Brown’s Farm Service (Angelica) – Agricultural Implements
• Ag Ventures (Shawano) – Agricultural Implements and Supply
• AgSource Laboratories (Bonduel) – Soil Analysis, Record Management and Information Services
• Cooperative Resource International (Shawano) – Dairy and Beef Sires and Service

This represents a healthy mix and distribution of suppliers and service providers for the agricultural industry in Shawano County. Maintenance and expansion of these businesses are critical to the economics of farmland preservation in Shawano County.

Market Value of Farm Products
Figure IV-9 depicts changes in the market value of farm products sold in Shawano County and the amount of government subsidies paid to farmers in the County from 1992 to 2007. The market value of farm products
sold in Shawano County increased by nearly 60 percent from 1992 to 2007. Government payments to farmers increased by 40 percent from 1992 to 2007, but the average payment per farm decreased by 53 percent during this period.

**Figure IV-9: Changes in Market Value and Government Payments**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of farm products sold</td>
<td>$124,594,000</td>
<td>$126,533,000</td>
<td>$130,115,000</td>
<td>$199,105,000</td>
<td>59.80%</td>
<td>53.02%</td>
</tr>
<tr>
<td>Ave. per farm</td>
<td>$86,704</td>
<td>$94,640</td>
<td>$88,816</td>
<td>$137,314</td>
<td>58.37%</td>
<td>54.61%</td>
</tr>
<tr>
<td>Govt Payments</td>
<td>-</td>
<td>-</td>
<td>$5,198,000</td>
<td>$3,097,000</td>
<td>-</td>
<td>-40.42%</td>
</tr>
<tr>
<td>Ave. per farm</td>
<td>-</td>
<td>-</td>
<td>$6,995.96</td>
<td>$3,294.68</td>
<td>-</td>
<td>-52.91%</td>
</tr>
</tbody>
</table>


Figure IV-10 depicts the total number of agricultural land sales in Shawano County compared to neighboring counties and the State, including the number of sales and acres converted to non-agricultural uses. Well over 90% of the number of transactions and acres transacted remained in agricultural use, with 292 acres of Shawano County farmland was converted to non-agricultural uses from 2009 to 2011. Other anecdotal information suggests that the market for agricultural land that will continue in production is strong, with reported per acre land values for continued agricultural use upwards of $3,500 to $4,500 per acre.
Figure IV-10: Agricultural Land Sales, 2009-2011

<table>
<thead>
<tr>
<th></th>
<th>Land Continuing in Agricultural Use</th>
<th>Land Converted to Other Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transactions</td>
<td>Acres Sold</td>
</tr>
<tr>
<td><strong>2011</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shawano County</td>
<td>29</td>
<td>1,560</td>
</tr>
<tr>
<td>Brown County</td>
<td>28</td>
<td>1,671</td>
</tr>
<tr>
<td>Langlade County</td>
<td>13</td>
<td>691</td>
</tr>
<tr>
<td>Marathon County</td>
<td>59</td>
<td>3,948</td>
</tr>
<tr>
<td>Oconto County</td>
<td>27</td>
<td>1,465</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>33</td>
<td>2,416</td>
</tr>
<tr>
<td>Portage County</td>
<td>18</td>
<td>1,090</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>23</td>
<td>1,408</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1,784</td>
<td>129,108</td>
</tr>
<tr>
<td><strong>2010</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shawano County</td>
<td>33</td>
<td>1,655</td>
</tr>
<tr>
<td>Brown County</td>
<td>21</td>
<td>851</td>
</tr>
<tr>
<td>Langlade County</td>
<td>6</td>
<td>459</td>
</tr>
<tr>
<td>Marathon County</td>
<td>69</td>
<td>4,219</td>
</tr>
<tr>
<td>Oconto County</td>
<td>21</td>
<td>1,319</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>18</td>
<td>1,622</td>
</tr>
<tr>
<td>Portage County</td>
<td>11</td>
<td>755</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>10</td>
<td>570</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1,425</td>
<td>103,619</td>
</tr>
<tr>
<td><strong>2009</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shawano County</td>
<td>34</td>
<td>2,041</td>
</tr>
<tr>
<td>Brown County</td>
<td>10</td>
<td>906</td>
</tr>
<tr>
<td>Langlade County</td>
<td>8</td>
<td>1,021</td>
</tr>
<tr>
<td>Marathon County</td>
<td>44</td>
<td>3,145</td>
</tr>
<tr>
<td>Oconto County</td>
<td>8</td>
<td>587</td>
</tr>
<tr>
<td>Outagamie County</td>
<td>13</td>
<td>900</td>
</tr>
<tr>
<td>Portage County</td>
<td>15</td>
<td>1,037</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>10</td>
<td>609</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1,020</td>
<td>72,432</td>
</tr>
</tbody>
</table>

Source: National Agricultural Statistics Service
Anticipated Changes in Agricultural Processing, Supply, and Distribution

The County expects that the generally favorable agricultural trends reflected above will continue over the next ten or so years. This will particularly be the case if farm commodity prices remain relatively strong, weather is relatively stable, and non-agricultural development is managed in predominantly agricultural areas. Areas specifically planned for Farmland and Forest Preservation will be key locations for continued agricultural activities, but other productive areas will also have continued agricultural viability.

The supply of agricultural products in Shawano County should continue to grow as demand for food, alternative fuels, building materials, and new uses for agricultural products increases. The decreasing supply of agricultural land in metropolitan areas will also boost agricultural demands for Shawano County farm and forest lands. Dairying, cash cropping, and timber harvesting should continue to be the major components of the local agricultural economy.

The County anticipates the continuation of agricultural storage, processing, supply, and distribution businesses in appropriate locations that are close to the farms they serve. Through organizations like Shawano County Economic Progress, Inc. (SCEPI), the County intends to work to help retain and expand existing processing facilities. Opportunities for additional agricultural processing locations at different scales are plentiful. The County zoning ordinance enables a wide range of on-farm processing activities and farm supply operations in rural areas, which will be particularly viable in areas where non-farm residential development is minimized. The area’s industrial parks provide several viable locations for larger-scale processing facilities.

Particularly with the expansion of and continued attentions toward Highway 29, the agricultural distribution system in the County is strong. Still, ongoing budget challenges at the federal, state, county, and town levels could result in deferred maintenance to the road system, which could negatively affect agricultural distribution over time.

Parallel to the County’s farmland preservation planning process, the UW-Extension conducted an assessment of Shawano County’s agricultural economy. UW-Extension staff identified the following trends, opportunities, and challenges to the development of agricultural enterprises in the County:

- **Consumption Patterns Driven by Economic Recovery:** Macroeconomic conditions present opportunities for some agricultural industries and challenges for others. Lower disposable incomes, declining consumer confidence, and higher unemployment has reduced spending on some discretionary food such as snack foods, fresh foods, premium prepared meals, and branded products. As incomes rise and unemployment rates improve, demand for products such as frozen foods and at-home food may decrease as households choose to eat out more.

- **Consolidation and Economies of Scale:** Despite fragmentation in the agricultural industry, it is undergoing consolidation through merger and acquisition activities. Large companies are looking to develop greater market shares, tend to have lower per unit costs, and are able to save on bulk purchases and labor costs. Supermarkets, grocery stores and other firms are also consolidating operations and growing private labels to create buying power, reduce inventories and develop resistance to price increases.

- **Product Differentiation and Diversification:** Agricultural processing firms that rely on seasonal demand are developing a range of products that enable facilities to operate near capacity on a year-round basis. Other firms are diversifying products to develop new revenue streams and create brand recognition outside traditional product lines.

- **Increasing Use of Technology:** Growing use of technology will increase the technical skills needed by workers in the industry. Specific uses of new technology include food research and development (in which new product development is a critical source of competitive advantage); increased
computerization and automation in production processes (e.g., using new technologies in collators, conveyor lines, automated case packers, and carton drops); and increased packaging, transportation and storing technologies to extend shelf lives of fresh and packaged products.

- **Pollution Reduction and Prevention:** Many food manufacturing firms face significant pollution compliance and treatment costs, including those related to wastewater treatment. Some food manufacturers are exploring proactive pollution measures, such as developing anaerobic digesters (e.g., Kraft Foods in Beaver Dam), as means for reducing permitting costs and extending compliance schedules.

- **Growing Export Markets:** Exports outside of the United States still represent a small share of revenue. Many food manufacturing firms are looking to increase exports as a way to grow sales in a largely saturated domestic market (dairy exports reached record levels in 2011).

**POTENTIAL RESOURCES FOR IMPLEMENTATION OF AGRICULTURAL INITIATIVES**

The following is a list of programs and resources available to help implement agricultural-related initiatives described in this Plan or as may be otherwise pursued. The list includes the name of the program, a general description, and a link to obtain more information as needed to link resources to specific agricultural development opportunities.

**Agribusiness Guarantee**
Provides low interest, long term loans to develop or expand production of products using a Wisconsin raw agricultural commodity. Funding can be used for a wide variety of items including equipment, buildings, land, capital, inventory, and refinancing.

Source: Wisconsin Housing and Economic Development Authority (WHEDA)

**Value-Added Dairy Revolving Loans**
Encourages adding value to dairy products, by helping to fund new equipment and installation. The goal of the loan is to increase Wisconsin’s value-added dairy production by building a partnership between the processor and their bank.

Source: Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)

**Producers First**
A program providing technical support and consultation to expand agricultural producer capacity.

Source: DATCP
Link: [http://datcp.wi.gov/Business/Buy_Local_Buy_Wisconsin/Producers_First/index.aspx](http://datcp.wi.gov/Business/Buy_Local_Buy_Wisconsin/Producers_First/index.aspx)

**Organic Growers Support**
Resources and support to help farmers grow organic successfully.

Source: Midwest Organic and Sustainable Education Service
Link: [http://www.mosesorganic.org/](http://www.mosesorganic.org/)

**Agriculture and Food Related Initiatives (AFRI)**
Funding for research on agriculture and food related initiatives, geared primarily toward University or Extension.

Source: United States Department of Agriculture (USDA)
**Farm to School Lunch**
A program promoting the direct connection between farms and school lunch programs.

Source: Collaboration of different groups
Link: [http://www.farmtoschool.org/WI/orgs.htm](http://www.farmtoschool.org/WI/orgs.htm)

**“Food Systems” Development Support**
Various programs, research support, and technical support for projects that help development local systems. A food system includes all processes and infrastructure involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items.

Source: UW- Wisconsin Center for Integrated Agricultural Studies (CIAS):
Link: [http://www.cias.wisc.edu/category/farm-to-fork/](http://www.cias.wisc.edu/category/farm-to-fork/)

**Loan Guarantee Program**
Encourages early commercial use of new or improved technologies in energy, with the potential to link local biomass to energy production.

Source: U.S. Department of Energy (DOE)
Link: [http://www.lgprogram.energy.gov/](http://www.lgprogram.energy.gov/)

**State Energy Program - Recovery Act, Clean Energy**
Encourages the adoption of emerging renewable energy and energy-efficient technologies, including linking biomass to energy production.

Source: Wisconsin Economic Development Corporation
Link: [http://wedc.org/sep](http://wedc.org/sep)

**Biomass Crop Assistance Program (BCAP) Conversion Project**
Provides assistance in establishment of biomass crops.

Source: USDA Farm Service Agency

**Rural Energy for America Program (REAP) Guaranteed Loan**
A program encouraging the commercial financing of renewable energy and energy efficiency, including biomass.

Source: USDA
Link: [http://www.rurdev.usda.gov/BCP_ReapLoans.htm](http://www.rurdev.usda.gov/BCP_ReapLoans.htm)

**Agricultural Tourism Assistance**
Resources and support for rural and agricultural based tourism initiatives

Source: Wisconsin Agricultural Tourism Association
Link: [http://www.visitdairyland.com/](http://www.visitdairyland.com/)

**Carbon Credit Program**
A program promoting carbon credits as a way to gain profit from sustainable agricultural practices. Carbon credits are certificates that represent a reduction of greenhouse gases in the atmosphere. Projects that prevent the generation of greenhouse gases earn these credits, which can in turn then be sold to other businesses and individuals to offset the emissions they generate.

Source: Wisconsin Farmers Union
Link: [http://www.wisconsinfarmersunion.com](http://www.wisconsinfarmersunion.com)
**LAND USE ISSUES RELATED TO AGRICULTURE**

Shawano County’s “working lands” define not only the economy of the area, but the heritage and lifestyle of many parts of the County. Preserving agricultural land uses and a rural way of life are important components of the future vision for the County. The growing national market for agricultural products—including the demand for organic products, value-added agriculture, niche and specialty crops, and the role for agriculture in biotechnology—all create a significant opportunity for agricultural-based economic growth in Shawano County.

A large amount of residential development in agricultural areas makes farming difficult to continue. There are numerous conflicts between such uses, including, noise, odors, use of roads, and hours of operation. Further, a significant number of nonagricultural uses in farming areas brings a sense of impermanence of agricultural uses, which discourages further investment by remaining farmers.

**Municipal Expansion**

Expansion of municipal boundaries in Shawano County will likely be based on comprehensive plans and population increases. In addition, the County encourages higher density residential development and non-agricultural businesses and industries in areas where public utilities will be available. Shawano County also intends to work with incorporated municipalities and adjoining towns to preserve sufficient area around existing cities and villages to allow reasonable municipal growth, balancing such growth with farmland preservation, natural resource protection, and the desires of town governments and residents. Municipal expansion in accordance with a city/town or village/town intergovernmental boundary agreement or cooperative boundary plan is usually the best way to achieve such balance.

**NATURAL RESOURCES OVERVIEW**

Shawano County’s landscape is defined by a rich mosaic of farm fields and farmsteads, lakes, streams, woodlots, wetlands, hills, and other natural features. Maintenance of the County’s natural features is important for community appearance, the ecological functions, recreation, quality of life, and the County economy. The following describes the County’s key natural resource features and areas, documented more fully in the Natural Resources chapter.

**Water Resources**

Shawano County has 135 lakes and ponds and 595 miles of rivers and streams, including 400 miles of trout streams. Combined, surface water comprises 18 square miles, or roughly 2 percent, of the County’s land area. Shawano County is located almost entirely within the Wolf River Basin, with a small portion of eastern Shawano County located within the Upper Green Bay Basin. The Upper Green Bay Basin extends into the Towns of Angelica, Green Valley, Hartland, Maple Grove, and Washington on the far eastern portion of the County. The Oconto River, which crosses through the northeastern corner of the County, is one of the Basin’s top three most significant water resources.

Besides the Wolf and Oconto rivers, the Embarrass River and the Red River are the other two most significant surface water resources in the County. Both provide exceptional natural and fishing habitats.

Natural lakes account for about 85 percent of the lake surface area in the County, while the other 15 percent are impounded waters. All of the natural lakes are relatively shallow, warm water fisheries in the mesotrophic to eutrophic class supporting various game and pan fish populations. Shawano Lake is the most significant in both size (over 6,000 acres) and recreational use.

**Floodplains**

The Federal Emergency Management Agency (FEMA) designates floodplains. These are areas predicted to be inundated with flood waters in the 100-year storm event (i.e., a storm that has a 1 percent chance of happening in any given year). Development within floodplains is strongly discouraged so as to avoid property
damage. The Natural Features Map (Map 5) shows the 49,637 acres of land in the County that are classified as floodplain. This comprises approximately 8.5 percent of the total County land area. Furthermore, floodplain areas in the County correspond closely with the surface waters shown on Map 5.

**Wetlands**

Wetland habitats comprise approximately 22 percent of the County’s total land area. These ecosystems play significant roles in maintaining the quality of groundwater and surface water and provide valuable habitats for fish, birds, and other wildlife. These habitats are well distributed throughout the County. A particularly large tract of wetland habitat is located in the Navarino State Wildlife Area in the southeastern portion of the County.

In 2009, there were 282.4 acres of wetland in Shawano County enrolled in the Wetland Reserve Program (WRP). This is a voluntary program that provides technical and financial assistance to eligible landowners to address wetland, wildlife habitat, soil, water, and related natural resource concerns on private lands. The program provides an opportunity for landowners to receive financial incentives to enhance wetlands in exchange for retiring marginal land from farming.

All wetlands of 5 or more acres in the County have been identified and mapped by WisDNR through its Wisconsin Wetlands Inventory. The County’s shoreland-wetland zoning ordinance generally regulates uses and prevents development in wetlands of 5 acres of greater, when located within a shoreland area.

**Upland Woods**

Shawano County is located within Wisconsin’s northern forest zone, characterized by a mixture of coniferous and deciduous forest types. Woodlands comprise approximately half of Shawano County’s total land area. In 2004, 248,844 acres or nearly 43 percent of Shawano County’s land base were classified as forest by the Wisconsin Department of Natural Resources. All but 11,397 acres are privately owned. Typical tree species include Hemlock, Beech, Sugar Maple, Yellow Birch, Aspen, and White and Red Pine. The western portion of the County falls more specifically within the Forest Transition ecological landscape; dense hardwood forests and timber stands are more characteristic of the western portion of the County. The eastern 2/3 of the County is located primarily within the Northern Lake Michigan Coastal ecological landscape. Eastern Shawano County is dominated by areas of lowland hardwoods, lowland conifers, Aspen, and Birch. Woodland areas are illustrated on Map 5 in the body of Shawano County Comprehensive Plan document.

**Parks and Other Public Lands**

Shawano County owns 1,400 acres of land presently or potentially available for outdoor recreation, comprised of the following facilities, which are also shown on Map 8 in the body of the Shawano County Comprehensive Plan:

- Six named County park sites (207 acres).
- Five sites dedicated primarily to wildlife habitat, hunting, and fishing (481 acres).
- The Shawano County Farm Property, with facilities consisting of over three miles of groomed cross-country ski trail and a small sledding hill (646 acres).

In addition, there are thousands of acres of State-owned park and recreation properties/facilities:

- The Navarino State Wildlife Area is about 15,000 acres of State-owned/managed land, the majority of which is located in the Town of Navarino.
- There are three trails in Shawano County: the Wiouwash Trail, the Mountain Bay Trail, and the Nicolet Trail.
- The Embarrass River ATV Park is located in the eastern part of the Village of Tigerton. The park is 504 acres and has over 20 miles of ATV trails and a 37-site campground.
- The Jung Hemlock-Beech Forest is an 80 acre State Natural Area comprising a remnant of the once extensive northern mesic forest that covered northern Wisconsin.

**ECONOMIC GROWTH**

As of 2010, the population of Shawano County was 41,949, with a labor force of 21,595.

According to the 2010 Census, the leading industries are Educational Services, Health Care and Social Assistance (20.9%), and Manufacturing (19.1%). Top manufacturing employers include wood or paper products manufacturers, agricultural production and processing, and high quality metal castings. This again suggests the importance of agriculture to Shawano County’s economy. Of the non-manufacturing employers, two are large scale retailers, two are healthcare organizations, one is non-governmental housing and social services provider, and two are entertainment related to the gaming industries. Six of the largest employers are school districts and other government entities. In addition, the list includes one employment services company and one newspaper.

The economic base of lands within the County consists of industrial and business parks in the City and several of the villages; commercial development corridors; small downtowns/unincorporated villages; highway-commercial development at some Highway 29 interchanges and farming with few small non-farm businesses in scattered locations.

There are eight industrial parks in the following Shawano County communities: Birnamwood, Bonduel, Gresham, Marion, Shawano (Raasch Industrial Park, Bay Lakes Industrial Park, and Shawano Municipal Utilities Industrial Lands), Tigerton, Wittenberg, and Pulaski (industrial park on 35 acres in Shawano County). Combined, these parks provide 765 acres of industrial land use. Still, the vast majority of these industrial parks were vacant and available for development.

Figure IV-11 summarizes strengths and weaknesses for economic development in Shawano County as indicated from the preceding analysis and input from County employers, economic development agencies, and other citizens.
**Figur e IV-11: Shawano County Strengths and Weaknesses for Economic Development**

<table>
<thead>
<tr>
<th>Strengths / Opportunities</th>
<th>Weaknesses / Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural areas/open space suitable for hunting, fishing, and nature-based recreation that</td>
<td>Distance from larger metro areas</td>
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<tr>
<td>enhance attraction potential and also build a nature-based economy</td>
<td>High fuel and delivery costs</td>
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<tr>
<td>Mature agriculture and timber based industries and infrastructure that benefit from local</td>
<td>Global competition in agriculture, timber, and manufacturing</td>
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<tr>
<td>climate, soils, and tree cover</td>
<td>Regional disinvestment in agriculture and timber industries</td>
</tr>
<tr>
<td>Central location relative to surrounding metro areas</td>
<td>High entry costs for traditional agriculture or timber harvesting</td>
</tr>
<tr>
<td>Improving transportation network including recent expansion of Highway 29</td>
<td>Fragmentation in the ownership of agricultural and forest lands</td>
</tr>
<tr>
<td>Historic and “small town” character</td>
<td>Modest population base and growth</td>
</tr>
<tr>
<td>Local community festivals and markets</td>
<td>Workforce attraction and retention (“brain drain”)</td>
</tr>
<tr>
<td>Investment in urban infrastructure in the City of Shawano and several villages</td>
<td>Workforce training/education; shortage of technical college sites in the County</td>
</tr>
<tr>
<td>Pro-Business atmosphere</td>
<td>Distance from regional research and development centers</td>
</tr>
<tr>
<td>Established manufacturing sectors such as natural products processing, tool &amp; die,</td>
<td>Perceived lack of cultural and commercial amenities</td>
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<tr>
<td>firefighting equipment and other high value products</td>
<td>Outsourcing of manufacturing</td>
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<tr>
<td>Economic development programs (e.g., TIF)</td>
<td>Potential loss of rail service</td>
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<tr>
<td>Gaming industry</td>
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<tr>
<td>Relatively low cost of living</td>
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<tr>
<td>Active economic development organizations</td>
<td></td>
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<tr>
<td>Active and diverse arts culture</td>
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<tr>
<td>Quality, affordable labor force</td>
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</tr>
</tbody>
</table>

**Utilities, Community Facilities and Services**

**Community Facilities**
Shawano County’s government offices operate out of several buildings in the City of Shawano, most are located in the County’s Courthouse building on North Main Street. The County Fairgrounds occupies a 60-acre site in the City of Shawano. This property is leased and managed by the Shawano Area Agricultural Society. The County Fair is held every year during Labor Day Weekend.

The County’s Maple Lane Health Care Center and additional undeveloped County land is located along STH 22 south of the City of Shawano, in the Town of Belle Plaine.

**Telecommunication and Utilities**
Telephone services are provided to the County by six companies, including Frontier Communications, Wisconsin Public Service Corp., Verizon, Bonduel Telephone Company, Northeast Telephone Company, and Wittenberg Telephone Company.

Electric and gas power are provided to the County by six companies, including WE Energies, Shawano Municipal Utilities, Alliant-Wisconsin Power and Light, Gresham Municipal Light and Power Utility, Central
Wisconsin Electric Cooperative, and Wisconsin Public Service Corp. Five hydroelectric power facilities are located in Shawano County.

High voltage electric transmission lines are provided by the American Transmission Company, with several new lines installation throughout the County over the past five years.

**Public Safety**
The Shawano County Sheriff’s Department serves as the primary law enforcement in the County. Shawano County is served by 15 fire districts, illustrated in Figure 8.1 in the body of this Comprehensive Plan. The largest department is the Shawano Area Fire Department, which serves the City of Shawano and the Towns of Belle Plaine, Richmond, Waukechon, and Wescott. Shawano County has ten emergency medical service districts (see Figure 8.2 for district boundaries). The largest district encompasses the City of Shawano, the villages of Cecil and Bonduel, and the Towns of Richmond, Wescott, Washington, Hartland, Waukechon, Belle Plaine, and Pella.

**Water Supply**
The majority of Shawano County’s unincorporated towns obtain their water supply from private wells. The City of Shawano and most of the County’s incorporated villages, with the exception of Aniwa and Eland, are served by municipal water systems. The Stockbridge-Munsee Community also maintains a public water system. These public systems draw groundwater from 20 active wells around the County. Approximately 2.4 million gallons of water are pumped everyday within the County.

**Wastewater**
The majority of Shawano County’s unincorporated towns handle the treatment of domestic and commercial wastewater through the use of individual private on-site wastewater treatment systems, often referred to as septic systems, which generally discharge the wastewater to underground drainage fields. There are currently six types of on-site treatment system designs authorized for use today: conventional (underground), mound, pressure distribution, at-grade, holding tank, and sand filter systems.

Under SPS 385 of the Wisconsin Administrative Code, the State specifies the siting, design, installation, and inspection of most private on-site sewage treatment systems in the State, regulated by individual counties. This code allows conventional on-site systems and alternative systems, such as those that employ biological or chemical treatment. In some cases, alternative waste treatment systems can be used in areas where conventional systems are not feasible due to unsuitable soil conditions.

The Shawano County Sanitarian regulates the placement of on-site wastewater treatment systems throughout Shawano County, under the Shawano County Sanitary Code.

**Waste Management**
Local communities have their own systems in place for refuse collection – generally with options to either drop off their garbage at a designated site in the community or arrange for home pick-up through a private hauler. Recyclables are also collected. Shawano County is party to a tri-County agreement with Portage and Marathon counties wherein waste is hauled to the City of Shawano (where the landfill is soon to reach its design capacity) and then transported to Marathon County.

Recycling in the County is handled through a contract with One Source, which recently completed a facility in Howard, Wisconsin. Hazardous waste is handled through an agreement with Brown County Port and Solid Waste. Shawano County residents can deposit their hazardous waste at the Brown County Household Hazardous Waste Site located in Green Bay.
TRANSPORTATION

Highways
Shawano County is served by one United States Highway (USH) and several State Trunk Highways (STHs), all of which link the County with the region’s major cities. These links channel commuter flows, allow the transport of agricultural, forestry, and other products; and provide excellent access for residents, employees, and businesses. They are also important to visitors and the recreation-oriented tourism which is prevalent in the County. Major highways include USH 45 and STH 29, which serve as the County’s primary east-west traffic artery.

Other State Trunk Highways include 156, 187, 47, 22, and 55. The County’s rural areas are served by a 253-mile network of County Trunk Highways (CTHs).

Railroads
Shawano County has one active rail line running from the Fox River Valley north to the City of Shawano. This line is owned by Canadian National. Canadian National is the parent company of Duluth, Missabe & Iron Range, Wisconsin Central Limited and the Sault St. Marie Railroad. This line transfers pulp and paper, and bulk cargo. An abandoned portion of this rail line continues from the City of Shawano northwest through the Towns of Wescott, Richmond, Herman and Red Springs. This line is owned by Canadian National.

Air Transportation
There is one airport in Shawano County, located in the City of Shawano. The Shawano Municipal Airport is open to the public and mainly serves local aviation needs. Located southeast of Shawano Lake, the airport also acts as a seaplane base. The airport has two paved runways in good condition; the main runway is 3,900 feet long and the smaller runway is 2,225 feet long. In July 2008, the County Airport Commission purchased a 40-acre property just east of the airport for future expansion. As part of the airport’s long range plans, the addition of a 1,000 foot navigation easement will be provided for the extension of the existing 3,900 foot runway.

Austin Straubel International in Green Bay, Wittman Regional Airport in Oshkosh, Outagamie County Regional Airport in Appleton, Central Wisconsin Airport in Mosinee, and General Mitchell International Airport in Milwaukee also serve the region.

Public Transportation
Paratransit is specialized transit service to specific segments of the population that require more accessible vehicles and flexible routing. Shawano County has several paratransit providers who serve the elderly and disabled including Workshop Transportation run by Shawano County Department of Community Programs. Some counties provide flexible fixed route services with buses or minibuses, to give elderly and disabled persons in rural areas an opportunity to travel to larger communities for shopping, nutrition, or other appointments. One example of this type of flexible fixed route service is provided in Shawano County, picking up persons in a different area of the County one day each week, into the City of Shawano, and occasionally to larger shopping areas in Appleton or Green Bay.

The Wisconsin Department of Transportation has created a statewide map of existing transportation systems throughout the State that includes the following categories: commuter rail, large bus systems, rural networks, shared ride taxi service, small bus systems, and intercity bus service. The private company Lamers offers intercity bus service that runs along USH 45 with stops in the Villages of Tigerton and Wittenberg. The City of Shawano offers municipal shared ride taxi service.