CITY OF TWO RIVERS
MANITOWOC COUNTY, WISCONSIN

CITY MANAGER: Greg Buckley

CITY FINANCE/ADMINISTRATIVE SERVICES DIRECTOR: Richard Schultz

CITY COUNCIL: Mark Matthews (President)
                Lee Brocher (Vice-President)
                Joseph Bauknecht
                Kay Koach
                Jay Orvis
                Michael Panosh
                Brian Powell
                Roberta Schuetze
                James Taddy

CITY PLAN COMMISSION: Greg Buckley
                       James McDonald
                       Richard Klinkner
                       Vince Alber
                       Mike Canty
                       Jelane Stone
                       Kay Koach
CITY OF TWO RIVERS
20-YEAR COMPREHENSIVE PLAN

Prepared by:

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

Adopted: March 22, 2010

The preparation of this document was financed through contract #07014-05 between the City of Two Rivers, and the Bay-Lake Regional Planning Commission with financial assistance from the Wisconsin Department of Administration, Division of Intergovernmental Relations. Portions of the transportation element of this plan were underwritten by the Commission’s Regional Transportation Planning Program which is funded by the Wisconsin Department of Transportation and portions of the economic element were underwritten by the Commission's Economic Development Program which is funded by the Economic Development Administration.
RESOLUTION

City of Two Rivers Plan Commission Recommendation
Related to the City of Two Rivers
20-Year Comprehensive Plan

WHEREAS, Wisconsin Statutes 62.23 authorizes the adoption of a Comprehensive Plan for the general purpose of guiding and accomplishing coordinated, adjusted, and harmonious development of the City; and

WHEREAS, an updated Comprehensive Plan has been prepared by the Bay-Lake Regional Planning Commission which contains proposals, programs, descriptions, maps, and explanatory matter regarding natural resources, population, housing, economic development, transportation, land use, public facilities, outdoor recreation and future land use strategy for the 20-year planning period from 2010 to 2030; and

WHEREAS, the Comprehensive Plan has been prepared in accordance with the elements and requirements as defined in Wisconsin Statutes 66.1001 (Smart Growth); and

WHEREAS, the Comprehensive Plan has been reviewed by the City of Two Rivers Plan Commission;

NOW, THEREFORE BE IT RESOLVED that the City of Two Rivers Plan Commission hereby recommends to the Two Rivers City Council that the Comprehensive Plan entitled: City of Two Rivers 20-Year Comprehensive Plan, be adopted by the City Council pursuant to Wisconsin Statutes Sections 62.23 and 66.1001(4).


[Signature]
Chairperson for the Plan Commission
ORDINANCE

AN ORDINANCE to adopt a Comprehensive Plan pursuant to Wisconsin Statutes Section 66.1001 (Smart Growth).

WHEREAS, on August 21, 2006 City of Two Rivers approved a contract with the Bay-Lake Regional Planning Commission to prepare a Comprehensive Plan for the City of Two Rivers under the guidelines of Section 66.1001 Wisconsin Statutes; and,

WHEREAS, the project included a public participation component to guide the preparation of the Comprehensive Plan, which included provisions for wide distribution of the proposed elements of the Comprehensive Plan, and provided an opportunity for written comments to be received from the public and for the City to respond to such comments; and,

WHEREAS, on March 16, 2010 the City of Two Rivers Plan Commission recommended to the City Council adoption of the Comprehensive Plan by resolution, which vote is recorded in the official minutes of the Plan Commission; and,

WHEREAS, the Two Rivers City Council held a public hearing on March 22, 2010 which was preceded by a Class 1 Notice provided as described in Wisconsin Statutes Chapter 985 that was published at least 30 days before the hearing was held, and the notice included all of the following information:

1. The date, time and location of the hearing;
2. A summary of the proposed Comprehensive Plan;
3. The name of the individual employed by the City of Two Rivers who may provide additional information regarding the proposed ordinance;
4. Information relating to where and when the proposed Comprehensive Plan could be inspected before the hearing, and how a copy of the Plan could be obtained; and,

WHEREAS, the City Council of the City of Two Rivers having carefully reviewed the recommendation of the City Plan Commission, having determined that all procedural requirements and notice have been satisfied, having given the matter due consideration, including consideration of the Plan elements relating to issues and opportunities, natural, agricultural and cultural resources, population and housing, economic development, transportation, utilities and community facilities, intergovernmental cooperation, land use and implementation, and having determined that the Comprehensive Plan will serve the general purposes of guiding and accomplishing a coordinated, adjusted and harmonious development of the City of Two Rivers which will, in accordance with existing and future needs, best promote the public health, safety, morals, order, convenience, prosperity and the general welfare, as well as efficiency and economy in the process of development.

NOW, THEREFORE, the City Council of the City of Two Rivers, Manitowoc County, Wisconsin, does ordain as follows:

SECTION 1. The Comprehensive Plan recommended by the City of Two Rivers Plan Commission to the Two Rivers City Council, attached hereto as Exhibit A, is hereby adopted.
SECTION 2. The City Manager is directed to file a copy of the attached Comprehensive Plan for the City of Two Rivers with all the following entities:

1. Every governmental body that is located in whole or in part within the boundaries of the City of Two Rivers;
2. The Clerk of the Town of Two Rivers and the City of Manitowoc;
3. The Wisconsin Land Council;
4. The Wisconsin Department of Administration;
5. The Bay-Lake Regional Planning Commission;
6. The Lester Public Library in the City of Two Rivers.

SECTION 3. Several sections of this ordinance are declared to be severable. If any section or portion thereof shall be declared by a court of competent jurisdiction to be invalid, unlawful, or unenforceable, such decision shall only apply to the specific section or portion thereof directly specified in the decision, and shall not affect the validity of any other provisions, sections or portions thereof of the ordinance. The remainder of the ordinance shall remain in full force and effect. Any other ordinances whose terms are in conflict with the provisions of this ordinance are hereby repealed as to those terms in conflict.

SECTION 4. This ordinance shall take effect and be in force from and after its date of passage and publication as provided by law.

Dated this 22nd day of March, 2010.

Mark O. Matthews
President, City Council

Gregory E. Buckley
City Manager

Attest:

Richard A. Schultz
City Clerk

Approved as to form and legality:

John M. Bruce
City Attorney
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# City Plan

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PURPOSE OF THE COMPREHENSIVE PLAN

The City of Two Rivers 20-Year Comprehensive Plan is a public policy document from which decisions are made that affect the city's growth and development. This comprehensive plan assesses all aspects of the community that give the City of Two Rivers its unique sense of place and guides the city toward its vision of affording its residents a high quality of life.

Municipal comprehensive plans should not attempt to narrowly dictate a single course of action. Rather, the comprehensive plan should broadly define the character of the community and build on its strengths, redirect its weaknesses and suggest strategies that expand on its opportunities.

This 20-Year comprehensive plan for the City of Two Rivers not only serves as a legal document that provides analytical text and a policy guide, but most importantly, the City of Two Rivers 20-Year Comprehensive Plan is a tool to be used in achieving the city’s potential.

State Planning Legislation
As outlined in the Comprehensive Planning legislation, s.66.1001, Wis. Stats., the City of Two Rivers 20-Year Comprehensive Plan addresses the required nine plan elements.

- Issues and Opportunities
- Housing
- Transportation
- Utilities and Community Facilities
- Agriculture, Natural, and Cultural Resources
- Economic Development
- Intergovernmental Cooperation
- Land Use
- Implementation

The comprehensive planning legislation (s.66.1001, Wis. Stats.) further states:

“Beginning on January 1, 2010, if a local governmental unit engages in any of the following actions, those actions shall be consistent with that local governmental unit’s comprehensive plan:

(a) Official mapping established or amended under s. 62.23 (6).
(b) Local subdivision regulation under s. 236.45 or 236.46.
(c) County zoning ordinances enacted or amended under s. 59.69.
(d) City or village zoning ordinances enacted or amended under s. 62.23 (7).
(e) Town zoning ordinances enacted or amended under s. 60.61 or 60.62.
(f) Zoning of shorelands or wetlands in shorelands under s. 59.692, 61.351 or 62.231.”
HOW TO USE THIS PLAN

The City of Two Rivers 20-Year Comprehensive Plan is made up of two volumes containing a total of 10 chapters. Volume I – City Plan consists of Chapters 1 through 4 along with an appendices section for the community’s plan. Volume II – Manitowoc County Resources contains Chapters 5 through 10 along with an appendices section for countywide resources.

**Volume I: City Plan**: This volume describes how the City of Two Rivers envisions itself developing over the next 20 years. It includes detailed background information, city development/preservation strategies, land use projections, a 20-Year Land Use Plan (future land use map), and a plan implementation guide.

- **Chapter 1: Introduction** - contains an overview of the purpose of the plan; state planning legislation; and the plan development process.
- **Chapter 2: Issues and Opportunities** - identifies city specific background information and data; inventories existing city land uses; and identifies development strategies (goals, objectives, and policies).
- **Chapter 3: Future Land Use Plan** - illustrates the city’s recommendations for future land uses through a 20-Year Land Use Plan.
- **Chapter 4: Implementation** – discusses intergovernmental cooperation programs to facilitate joint planning and decision making processes with other government units; and contains a guide to implement the city’s comprehensive plan by prioritizing projects and identifying stakeholders.

**Appendices: City Plan** - Contains city public participation materials; community survey summary; nominal group results; economic strengths, weaknesses, opportunities and threats (S.W.O.T.) workshop results; intergovernmental cooperation workshop results; existing city land use inventory; “smart growth area” descriptions, and other relevant input and materials generated or gathered during the plan development process.

**Volume II: Manitowoc County Resources**: This volume contains countywide background information and data that assisted in the creation of the city’s Issues and Opportunities chapter, future development strategies, and 20-Year Land Use Plan.

- **Chapter 5: Natural, Agricultural, and Cultural Resources** - provides a detailed description of the county’s unique features that comprise its physical landscape.
- **Chapter 6: Population and Housing** - presents countywide historic demographic information along with future population and housing projections.
- **Chapter 7: Economic Development** - highlights labor force statistics; economic composition; and provides an analysis of existing and future economic conditions for the local communities and Manitowoc County.
- **Chapter 8: Transportation** - describes the county’s existing multi-modal transportation system.
- **Chapter 9: Utilities and Community Facilities** - inventories all local and countywide utilities and facilities including schools and emergency services.
Chapter 10: Land Use Controls and Inventory – provides a detailed inventory of existing land uses for Manitowoc County.

Appendices: Manitowoc County Resources - Contains a countywide inventory of natural resources information, endangered and threatened species; a detailed list of available housing, economic development, and transportation financial and technical resources; existing countywide land use inventory; a glossary of definitions; and other relevant input and materials generated or gathered during the plan development process.

PLAN DEVELOPMENT PROCESS

The City of Two Rivers was one of 20 communities to enter into an agreement with Manitowoc County to develop comprehensive plans utilizing a three phase multi-jurisdictional planning process:

First Phase: Inventorizing countywide background information to be used for completion of the local and county plans

- Collection and presentation of countywide background data.
- Manitowoc County Planning Advisory Committee (MCPAC) provided edits and other input on countywide background data.
- Conducted three (3) Open Houses. One in each of the county’s three Planning Clusters (Southern, Lakeshore, and Northwest). These Open Houses allowed the public to review countywide background materials, ask questions, and provide feedback.
- Created the preliminary Volume II: Manitowoc County Resources document to assist with the completion of the local and county comprehensive plans.

Second Phase: Completion and adoption of the local comprehensive plans

- Commenced work on the 20 local comprehensive plans, including City of Two Rivers
- Analyzed City of Two Rivers data to identify existing and potential conflicts.
- Developed the city’s vision statement along with the land use goals, objectives, and policies by using results from the community survey, various issue identification workshops and background data.

- Created a preliminary 20-Year Land Use Plan and preferred land use strategy to guide future growth, development/redevelopment, and conservation within the city over the next 20 years.

- Manitowoc County Planning and Park Commission and MCPAC finalize *Volume II: Manitowoc County Resources* document.

- Public review and Final Open House conducted to present the *City of Two Rivers 20-Year Comprehensive Plan* to the citizens of the community as well as nearby municipalities and government organizations for their feedback. Comments were considered and included in the city’s comprehensive plan where appropriate.

**Third Phase:** Completion and adoption of the *Manitowoc County 20-Year Comprehensive Plan*

- Manitowoc County Planning and Park Commission and MCPAC utilize the background information and data gathered in the first phase, along with the adopted local comprehensive plans completed during the second phase, to create a future land use plan for Manitowoc County.

**Public Participation Process**

**Public Participation Plan**

A major element of the city’s comprehensive planning process is gathering input from citizens and land owners. In accordance with s. 66.1001(4), Wis. Stats., the City of Two Rivers approved “Procedures for Public Participation for Adoption or Amendment of the City of Two Rivers Comprehensive Plan”. A copy of these written procedures is included in Appendix A of *Volume I: City Plan*.

The city held public meetings to review background data, finalize plan elements, and create the City of Two Rivers 20-Year Land Use Plan. In addition to these planning meetings, city representatives participated in several joint planning workshops to identify local and regional issues (i.e., Nominal Group, Economic S.W.O.T., and Intergovernmental Cooperation Workshop), while open houses were also used to gather additional input from the public.

**Community Survey**

The City of Two Rivers conducted a community survey via mail in the Summer of 2008 to gather feelings of residents and landowners toward existing city services in addition to insights on community planning and development issues. This process provided opportunities for additional input from the public in the City of Two Rivers.

Results from the survey were used in addition to other inputs from meetings and workshops to create the city’s vision statement along with the goals, objectives, and policies for the city’s comprehensive plan. A summary of the results of the community survey can be found in Appendix B of *Volume I: City Plan*. 
Nominal Group Exercise

In October 2007, city representatives participated in a Nominal Group Exercise with surrounding municipalities to identify issues and concerns for future development in the city and surrounding area. The issues generated during the exercise and were considered during the development of the city’s vision statement along with the goals, objectives, and policies for the city’s comprehensive plan. The top issues given during the nominal group exercise include:

- Develop high-tech jobs in area to keep youth around
- Promote dev. (e.g. economic, industrial – large communities, commercial in small communities, etc.)
- Develop high density/high tax base along waterfronts
- Retain urban center and rural character

A complete list of responses from the Lakeshore Cluster Nominal Group Exercise can be found in Appendix C of Volume I: City Plan.

Economic S.W.O.T. Workshop

An analysis of a community’s economic Strengths, Weaknesses, Opportunities, and Threats (S.W.O.T.) provides a broad overview of where the city is currently and what its economic health may be in the future. If the city is to develop and maintain a vibrant and diversified economic foundation, it needs to maximize its strengths, offset its weaknesses, take advantage of its opportunities, and minimize its threats.

On March 26, 2008 individuals representing the City of Two Rivers, Manitowoc County Planning Advisory Committee (MCPAC), community and county officials, business leaders, and key civic and non-profit organizations participated in an economic S.W.O.T. workshop. The complete results of the S.W.O.T. workshop can be found in Appendix D of Volume I: City Plan. The following illustrates the top economic S.W.O.T. issues according to the participants which were broken into four groups.

Strengths: Strengths are existing resources and capabilities that can be used as a basis for developing a successful growth plan. The top strengths as voted on by the group are:

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economical/low cost of living</td>
<td>Access to Lake Michigan water</td>
<td>Mainly agriculture and undeveloped</td>
<td>School systems solid (K-14)</td>
</tr>
<tr>
<td>Exec. Schools/education system</td>
<td>Fertile land and good climate for agriculture</td>
<td>Good water source – ground and surface (Lake Michigan)</td>
<td>Access to interstate</td>
</tr>
</tbody>
</table>
Weaknesses: A weakness is a limitation or the absence of certain strengths that may prevent communities from achieving their objectives. The top weaknesses as voted on by the participants include:

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Loss of Jobs</td>
<td>• Lack of population mass leading to many business bypassing county</td>
<td>• Air quality</td>
<td>• High County Taxes</td>
</tr>
<tr>
<td>• Loss of population</td>
<td>• “Drive-through” community</td>
<td>• Climate</td>
<td>• Declining road system</td>
</tr>
</tbody>
</table>

Opportunities: An opportunity is any favorable situation or resource that could enhance economic development. The following are the top opportunities as voted on by the group:

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• More nuclear plants</td>
<td>• Good quality of life can attract new residents</td>
<td>• Education system</td>
<td>• Resources for additional nuclear power</td>
</tr>
<tr>
<td>• Access to I43</td>
<td>• Prime energy production sites (including green energy)</td>
<td>• Lake Michigan</td>
<td>• Shipping - port</td>
</tr>
</tbody>
</table>

Threats: Threats are potential obstacles a community faces concerning economic development. The top threats as voted on by the group include:

<table>
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<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• “Not in my backyard” (nuclear / windmill)</td>
<td>• Industrial leaving for other countries due to low wages in those countries</td>
<td>• Air quality</td>
<td>• Increased energy prices</td>
</tr>
<tr>
<td>• Aging populations / loss job</td>
<td>• Tax structure resulting in lower shared revenue from state</td>
<td>• Aging population</td>
<td>• Declining economy</td>
</tr>
</tbody>
</table>

Intergovernmental Cooperation Workshop

An Intergovernmental Cooperation Workshop was conducted in April 2009 for communities located in the northeast region of Manitowoc County. Representatives from each of the communities within the planning cluster were invited to attend the workshop, along with neighboring municipalities, school districts, civic and recreational clubs, Manitowoc County staff, Wisconsin Department of Natural Resources, Wisconsin Department of Transportation, and other entities and departments that have an interest in or direct impact on, the implementation of the area’s comprehensive plans.

The workshop collected input on any existing or potential conflicts or positive relationships between the communities and their surrounding government jurisdictions. Participants were also
asked to provide potential resolutions to the identified issues or concerns. The items applicable to
the City of Two Rivers were addressed during the comprehensive plan development process or
incorporated into the implementation portion of the comprehensive plan. The list of issues and
conflicts, and resolutions from the Intergovernmental Cooperation Workshop are displayed in
Appendix E of *Volume I: City Plan*.

**Open Houses**

Two (2) “Open Houses” were conducted during the planning process to present background
information and plan recommendations to the public. The first open house was held at the Two
Rivers City Hall on April 24, 2008. This open house provided communities in the northeast
portion of Manitowoc County with countywide background information and data to be used in
the development of the local comprehensive plans.

The second open house, held exclusively for the City of Two Rivers, was conducted at the
conclusion of the planning process to allow residents and other interested individuals the
opportunity to review and comment on the city’s completed draft plan.
# CHAPTER 2:
## ISSUES AND OPPORTUNITIES

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INTRODUCTION

This portion of the City of Two Rivers 20-Year Comprehensive Plan provides an inventory of the city’s environmental attributes and its community services and facilities. Also highlighted are the demographic, economic, and land use trends and forecasts used to prepare the City of Two Rivers 20-Year Land Use Plan (Chapter 3 of Volume I: City Plan).

COMMUNITY ATTRIBUTES

Description of City Planning Area

The City of Two Rivers is located in the eastern portion of Manitowoc County on the shores of Lake Michigan. Located seven (7) miles east of Interstate 43, Two Rivers is strategically located 90 miles north of Milwaukee, 35 miles south of Green Bay, and 40 miles east of the Fox Valley. The city is served by State Highways 42, 310, and 147. The city encompasses an area of approximately 6.5 square miles or approximately 4,170 acres.

Map 2.1 focuses on the general location of the City of Two Rivers in Wisconsin, while Map 2.2 details the City of Two Rivers. The city also maintains an extraterritorial jurisdiction that extends three (3) miles beyond its municipal limits. This area is illustrated on Map 2.3.

Natural Resource Characteristics

The environmental features of Two Rivers define the city’s identity and character. This section includes inventories and discussion on geology and topography, water resources, floodplain, wetlands, and woodlands. These environmental resources help support the natural systems that provide for wildlife and a healthy environment, are a source for economic development opportunities, and provide opportunities for recreation.

Two Rivers’ natural resources are highlighted below with a brief explanation of their importance when planning for the city’s future. In addition, expanded descriptions, definitions, and countywide maps of the various natural resources can be found in Chapter 5 of Volume II: Manitowoc County Resources.

Climate

The climate of the City of Two Rivers is classified as continental. This climate type is characterized by an extreme disparity between summer and winter temperatures, including cold, snowy winters and warm summers with periods of hot, humid conditions. The average annual temperature is 44 degrees Fahrenheit with the coldest month being January (11°F) and the warmest month being July (75°F). In addition, Two Rivers lies within a narrow belt adjacent to Lake Michigan which has a modified continental climate. Lake Michigan’s influence is strongest during spring, summer and fall. The lag in lake water temperature delays the coming of the spring and extends mild temperatures into late fall. This modified climate creates relatively cool summers compared to the hot summer temperatures further inland.

The annual precipitation in the city is 30.2 inches, with over half (52 percent) falling from May through September.

The climate is suitable for most urban outdoor activities and does not severely interfere with the movement of vehicles and other materials; however, extreme cold spells during the winter can affect construction activities.
Geology and Soils

Geology underlying the area has important implications for land use. The area’s bedrock type, soil composition and depth, etc. affects excavation and foundations, residential and industrial developments, highway and street development, etc. The soil composition and depths can also have an impact on the natural filtration for surface water drainage while the type of bedrock provides a pathway for groundwater recharge.

In an effort to limit increased construction costs and impacts to the surface and groundwater, the following geology and soils of the city’s planning area should be considered when planning for growth.

**Bedrock**

The Niagara Dolomite bedrock formation underlies the entire City of Two Rivers and nearly all of Manitowoc County. The bedrock formation consists of sedimentary rocks that are solidified marine sediments which slope southeast toward Lake Michigan.

**Glacial**

The majority of the glacial drift in the City of Two Rivers consists of sandy and loamy (i.e., sand and silt) soils that are underlain by outwash deposits. These soils are found on outwash plains that are dissected by large drainageways. In the case of the City of Two Rivers, these drainageways are the East Twin River and West Twin River.

The *Soil Survey of Calumet and Manitowoc County, Wisconsin* provides a detailed inventory of all soils found in the City of Two Rivers. The survey indicates, among other things, the type of soil, the slope gradient, the suitability of the soils to support certain uses and the degree and kind of limitation of each soil type for certain uses. The maps that accompany the soil survey are a useful planning tool to determine whether certain areas could present problems for development. Refer to *Volume II: Manitowoc County Resources* or the Natural Resources Conservation Service (NRCS) *Soil Survey of Calumet and Manitowoc County, Wisconsin*, for detailed information regarding soils in the city.

**Topography and Slope**

Topography is the surface elevation of natural and man-made features of the earth. Two Rivers terrain varies from nearly level to moderately steep within the city limits. The elevation within the City of Two Rivers is approximately 600 feet above mean sea level. The areas with varying elevations are along the East and West Twin rivers and Lake Michigan, with some higher areas being found just outside of the city’s northeastern limits in proximity to STH 42.

Based on soils characteristics within the City of Two Rivers, most slopes range from zero to less than 12 percent. However, portions of the city’s three (3)-mile planning area contain steep slopes (i.e., slope 12 percent or greater) which are found primarily adjacent to the East and West Twin rivers.

- The topography of the city is displayed on Map 2.4, while Map 2.6 illustrates the areas of steep slope (i.e., slope 12 percent or greater) based on soils characteristics.

By utilizing detailed soil and slope information for the city, areas could be identified as being potentially hazardous for urban development. Some areas which are limited for development could be used for public recreation, open spaces, conservation of existing natural features, and maintenance of valuable biological communities. Changes in existing soil characteristics because of development, grading, increased runoff, and removal of vegetation may cause severe erosion, water pollution and flooding with subsequent damage to public and private property.
CHAPTER 2 - ISSUES AND OPPORTUNITIES

Water Resources

Two Rivers is named for the East Twin and West Twin rivers which flow through the city before joining at the harbor on Lake Michigan. These water features contributed to the history of City of Two Rivers and continue to define the city’s environment. In addition, Molash Creek can be found just outside of the city’s northeastern corporate boundary within the three mile planning area. Map 2.5 illustrates these water features within the city and its planning area.

For more information regarding the area’s water resources see Chapter 5 and Appendix A of Volume II: Manitowoc County Resources.

Lake Michigan Levels

The recent low lake levels have had an impact on recreational boating, marinas, beaches, fishing, and lakeshore properties. Planning for fluctuating lake levels is important as dredging of boat slips, channels, and harbors is very costly. In addition, the changing water levels may be part of a 30-year cycle, so although lake levels are presently low, we may see high lake levels in the future. High water levels could cause flooding and erosion, not only impacting properties along the lake shoreline, but also those properties along the East and West Twin rivers that provide water to the lake.

Lake Michigan levels are constantly monitored at numerous locations including nearby Kewaunee County. Continuous water level data for all of the Great Lakes monitoring sites is listed online at http://glakesonline.nos.noaa.gov/monitor.html. Also, Chapter 5 of Volume II: Manitowoc County Resources provides information on Lake Michigan water levels.

Coastal Resources

The Lake Michigan coastline offers a variety of features for the City of Two Rivers including boating, shipping, beaches, shoreland-wetlands, recreation, unique habitats, etc. It is important to protect these valuable assets in order to help maintain and improve community health and safety, aesthetics, and economic viability. Issues to consider when planning include: shoreline erosion, impacts to coastal wetlands, fluctuating lake levels, nonpoint pollution, public access to the rivers and lake, and economic impacts.

Watersheds

The city is located within the East Twin River, West Twin River, and the Lower Manitowoc River watersheds (Map 5.4 of Volume II: Manitowoc County Resources). The city’s water resources are impacted by activities and land use practices throughout these watersheds.

Floodplains

Floodplains are defined as those areas, excluding the stream channel, subject to inundation by the 100-year recurrence interval flood event. This event has a one percent chance of occurring in any given year. The City of Two Rivers, including its three (3) mile planning area, contains areas of floodplains running predominantly along the East and West Twin rivers (Map 2.6).

For planning purposes, floodplains provide for storm water retention, groundwater recharge, habitat for various types of waterfowl and wildlife and are considered a valuable recreational resource. However, the likelihood of flooding can be increased due to increased development and paving which increases the rate in which storm waters run off the land.
Wetlands
According to the WDNR, wetlands are areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophilic vegetation. Other common names for wetlands are swamps, bogs, and marshes.

Wetlands are a valuable ecological resource that are involved in recharging the underlying groundwater system and are home to a varying combination of plants and animals. Wetland habitats typically contain the highest diversity of plants and animals, including endangered species. Wetlands within the City of Two Rivers and its planning area are identified on Map 2.6.

More information regarding wetlands in surrounding areas and all of Manitowoc County can be found in Chapter 5 of Volume II: Manitowoc County Resources.

Woodlands
There are nearly 590 acres of woodlands within the City of Two Rivers (Map 2.14) with trees lining most of the city streets. The surrounding planning area also contains concentration of woodlands found in the Woodland Dunes, Point Beach State Forest, and along the East and West Twin Rivers.

Woodlands provide environmental benefits such as habitat for wildlife, improved air and water quality, filtering sediment from storm water, serving as a windbreak, help reduce soil erosion, and act as a noise barrier. Woodlands make important contributions to the city’s visual character, screen unsightly developments, and offer multiple recreational choices.

The City of Two Rivers also has an urban forestry program established for the planting and sustained management the community’s trees.

Woodland Dunes
Woodland Dunes is located just southwest of the city. It is a quasi-public nature preserve and covers 1,200 acres of land containing parallel sandy ridges representing former glacial lakes levels that lie 10-20 feet above Lake Michigan's present surface. This is also an important stopping place for many migratory birds, and the site supports several rare plants and animals. For additional significant natural areas in the city’s planning area, see Chapter 5 of Volume II: Manitowoc County Resources.

Environmental Corridors
An environmental corridor is a portion of the landscape that contains and connects natural areas; green space; and scenic, historic, scientific, recreational, and cultural resources. Within this plan, each individual feature that makes up the environmental corridor is referred to as a “plan determinant.” Map 2.6 illustrates the plan determinants within the City of Two Rivers.

The following criteria were used to delineate environmental corridors when developing this comprehensive plan for the City of Two Rivers:

1. wetlands (2 acres or greater);
2. 100-year floodplains;
3. steep slope (12% or greater); and
4. surface waters with a 75-foot building setback.

Environmental corridors, along with other identified areas of environmental significance, should be taken into consideration when making future development decisions in the city and its
planning area. Environmental corridors serve a vital role in protecting local water quality; serving as buffers between different land uses; controlling, moderating, and storing floodwaters; providing nutrient and sediment filtration; and providing fish and wildlife habitat, and recreational opportunities.

For more information regarding environmental corridors, wetlands, floodplains, soils, and surface waters please see Chapter 5 of *Volume II: Manitowoc County Resources*.

**Air Quality**

The legal authority for federal programs regarding air pollution control is based on the 1990 Clean Air Act Amendments. One of the amendments included expanded and modified provisions concerning the attainment of National Ambient Air Quality Standards (NAAQS). According to the U.S. Environmental Protection Agency (EPA), areas that do not meet the EPA’s 8-hour ozone NAAQS standard of 0.08 parts per million are classified as “nonattainment” areas. All of Manitowoc County is identified as a nonattainment area.

By law, nonattainment areas may be subject to certain requirements to reduce ozone-forming pollution and requires states to submit plans for reducing the levels of ozone. Several methods to meet the ozone standard may include stricter controls on emissions by industrial sources, transportation emissions, etc.

**Agricultural Resources**

According to the 2008 land use inventory conducted by the Bay-Lake Regional Planning Commission, the City of Two Rivers contains approximately 300 acres of crop and pasture land, while prime agricultural soils are also scattered throughout the city’s planning area. Although the amount of farmland in the city is small, it does contribute to the significance of agriculture in all of Manitowoc County. Agriculture plays an important role in the economic, cultural, and social structure of Manitowoc County and it is essential to preserve these areas for continued agricultural activities whenever possible. Refer to Chapter 5 of *Volume II: Manitowoc County Resources* for more information on the importance of agriculture in the county.

Although development in portions of the city’s surrounding planning area is attractive to developers because of the ease of access and construction, low land costs, and potential for larger parcels; communities are encouraged to focus on development and improvements in the existing urbanized areas. Development and redevelopment of existing city land can be more cost effective, increase efficiency of already developed land and infrastructure in the city, improve the quality of life for city residents, and result in a stronger tax base. These actions also reduce development pressures in the surrounding planning area, thereby preserving the prime farmland and open space.

**Historic and Cultural Features**

**City of Two Rivers History**

During the early 1800s, Two Rivers was well located as an outlet for trade to the rest of the nation. Commerce traded furs with the Indians, followed by fishing, logging and saw mill operations and the manufacturing of products which added value to the basic raw materials.

Neshotah is the Chippewa name for Two Rivers, which means “a junction of two rivers.” These rivers were called Neshtoto (a.k.a. West Twin River) - flowing from what is now Shoto, and the Mishicot (a.k.a. East Twin River) - flowing from what is now Mishicot.
In 1835, the first parcel of land was transferred from the federal government to D. Wells of Milwaukee, Morgan Martin of Green Bay and S.W. Beal of Fond du Lac. On July 4, 1837 the original town plat was recorded. At that time, the population of Two Rivers stood at 40. The economic mainstay began with commercial fishing and a sawmill.

Colonel Hawathay of the Corps of U.S. Engineers purchased land along the waterway in Kewaunee, Two Rivers, Manitowoc, Sheboygan and Milwaukee, believing that these waterway areas would be settled first and would have value. After his death, all were disposed of except the Two Rivers site called the "Pines" which is now known as Neshotah Park.

In 1840, the population of Manitowoc County was only 240, but in 1847 and 1848, political unrest in Germany would quickly have an impact on the population in the city and Manitowoc County. The issues in Germany brought a variety of cultural groups and nationalities such as French, Bohemians, Norwegians, Polish, Irish, Belgium, Danish, Swedish, and others to the area. By 1848, the population of Two Rivers was 200 people. In 1850, the population of Two Rivers reached 924 and Manitowoc County had a population of 3,702.

On March 31, 1858, the Village of Two Rivers was granted a charter and the Village divided into two wards separated by Washington Street. Then on March 18, 1878, the City of Two Rivers was divided into three wards.

By 1895, the population reached 3,593. This population growth came from the Polish which were being oppressed by the Russians, along with a poor crop harvest which caused the Bohemians to settle in the area. During this time, it was also the beginning of the City's sewer system, with Monroe Street being the first. Then about 1920, the city water system was changed from one of wells with the construction of a water intake in Lake Michigan because the existing wells did not have enough pressure to fight the fire that consumed the pail factory, which threatened the entire community.

The present council-city manager plan was established in Two Rivers on May 1, 1925. A book published in 1957, by Elmer Frederick Beth, entitled "History and Survey of Two Rivers," explained the change from the Mayor form of government to the City Manager form of government. The first city manager was Richard Biehl, then age 39, who came from Westerville, Ohio as their city manager and was paid an initial salary of $5,000.

**Historic and Cultural Points of Interest**

The State Historical Society of Wisconsin’s Architecture and History Inventory (AHI) is a list compiled by many individuals on the belief that various structures contain historical significance. The City of Two Rivers has 171 sites considered to be of historic significance based on the AHI list. Please note that these sites are not all eligible by the State Historical Society of Wisconsin. These are sites that individuals believe should be considered for eligibility.

Of the sites listed in the AHI records, several in the City of Two Rivers are identified in the State and National Register of Historic Places. The National Register recognizes the significance of properties and the accomplishments of all peoples who have made a significant contribution to our country’s history and heritage. Below are a list and a brief description of these sites in the city and its planning area (Map 2.7).

1. **Central Park Historic District**, listed in the state and national register on December 1, 2000, is located in an area bound by 19th, Adams, 16th, and Jefferson streets. The Central Park Historic District was placed on the national registry to encourage preservation and authentic
restoration of the many historical buildings in downtown Two Rivers. Most buildings in the district date from 1890 to 1920. Historic and cultural highlights in the district include:

- **J. E. Hamilton Community House**, located 1520 17th Street, is home to the Parks and Recreation Administrative office as well as the Senior Center.

- **The Historic Washington House**, circa 1850, is a three story inn with a visitor center, an original 1890’s saloon, a ballroom, and an old fashioned ice cream parlor. The building also marks the city's official status as the “Home of the Ice Cream Sundae.” The structure is located at 1622 Jefferson Street.

- **Birthplace of the Ice Cream Sundae**. The ice cream sundae was created in 1881 at Ed Berner’s Ice Cream Parlor in Two Rivers. A Wisconsin historical marker in Central Park honors the event.

- **Two Rivers History Museum**, located at 1810 Jefferson Street, was home to the Sisters of St. Agnes from 1903 to 1993. The museum contains excellent historical & seasonal changing art displays.

- **Hamilton Woodtype and Printing Museum**, located at 1619 Jefferson Street, contains vintage machinery and original patterns for multi-lingual, international production of wood type.

2. **Frenchside Fishing Village Historic District** is comprised of the area around 21st, Jackson, East, 16th, Harbor, and Rogers streets. The district was listed in the state and national register on January 6, 1987. This French-Canadian fisherman settlement began its growth in the late 1842’s. This historical district contains the Rogers Street Fishing Village and Great Lakes Coast Guard Museum which exhibits an 1886 historic lighthouse and various shipwreck displays and artifacts.

Several Lake Michigan shipwrecks highlighted in the museum include the Steamer Vernon site (sank October 29, 1887) five miles northeast of Two Rivers, the Francis Hinton Steamer site (sank November 16, 1909) just south of Two Rivers, and the Rouse Simmons site (a.k.a. Christmas Tree Ship, sank November 23, 1912) located 12 miles northeast of Two Rivers. All three sites are listed on the National Register. There are Wisconsin Maritime Trails markers for these sites either at the Rogers Street Fishing Village or at locations along the lakeshore.

3. **Saint Luke's Church Complex**, located at 1800-1816 Jefferson Street, was listed in the state and national register on February 9, 2001. Dedicated in 1893, the impressive architecture found in the church, convent, and schools makes it a rare collection. The school house is now a housing structure.

4. **Two Rivers Post Office** was listed in the national register on October 24, 2000. Built in 1933, it is a fine example of classical revival style. It is still in operation today located at 1516 18th Street.

5. **Rawley Point Light Station** is located in the city’s planning area in the Point Beach State Forest. It was listed on the state and national register on July 19, 1984. The lighthouse was displayed at the World's Fair in 1893 and erected on the grounds it now sits on in 1894. The lighthouse boasted one of the most powerful lamps on the Great Lakes because of the number of shipwrecks in the area.
One other historic item within Two Rivers that is not listed on the state and national register is the **Bernard Schwartz House**, located at 3425 Adams Street. This was Frank Lloyd Wright's Life Magazine dream house of 1938. The house was created from tide-water Cypress, red concrete floors and brick. The Bernard Schwartz House is only one of three Frank Lloyd Wright-designed houses in the world available for rental occupancy.

The architecture, scale, and uniqueness of the city's old buildings have a broad appeal. Future planning of the city should continue to successfully revitalize residential communities and the downtown area where needed, and capitalize on the unique assets of the past.

### Economic Development Characteristics

The purpose of the economic inventory is to establish strategies for economic growth and vitality that will maintain and enhance the identity and quality of life in the City of Two Rivers for years to come. Because the economy is interrelated with all aspects of community life, the economic development priorities also have an impact on strategies developed for other community characteristics such as natural resources, housing, transportation, utilities, and land use.

The primary source of the economic statistics displayed throughout this document is the Year 2000 Census since Year 2010 Census data was not available during the development of this comprehensive plan. To ensure the most current economic data for the city is displayed within the comprehensive plan, Two Rivers should follow the update/amendment schedule (“Updating and Amending the Comprehensive Plan”) illustrated in Chapter 4 of this document.

### Labor Force Characteristics

Over 66 percent of the residents of city are part of the civilian labor force (i.e., persons sixteen years of age or older who are employed or seeking employment).

The majority (36 percent) of the city’s civilian labor force are employed in Production, transportation, and material moving occupations. Another twenty-four (22) percent are employed in Management, professional, and related occupations. Figure 2.1 illustrates the occupation of employed persons living in the City of Two Rivers in 2000.
Figure 2.1: Occupation of Employed Persons, 2000

According to the 2000 Census, the manufacturing was responsible for employing over 40 percent of the city’s residents. Another 15 percent were employed in educational, health and social services. Employment by industry group for City of Two Rivers residents is illustrated by Table 2.1.

Table 2.1: Employment by Industry Group, 2000

<table>
<thead>
<tr>
<th>Industry</th>
<th>City of Two Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing and hunting and mining</td>
<td>55</td>
</tr>
<tr>
<td>Construction</td>
<td>299</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2,523</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>156</td>
</tr>
<tr>
<td>Retail trade</td>
<td>612</td>
</tr>
<tr>
<td>Transportation and warehousing, and utilities</td>
<td>391</td>
</tr>
<tr>
<td>Information</td>
<td>64</td>
</tr>
<tr>
<td>Finance, insurance, real estate and rental and leasing</td>
<td>145</td>
</tr>
<tr>
<td>Professional, scientific, mgt., admin and waste mgt. service</td>
<td>262</td>
</tr>
<tr>
<td>Educational, health and social services</td>
<td>948</td>
</tr>
<tr>
<td>Arts, entertainment, recreation, accommodation and food services</td>
<td>351</td>
</tr>
<tr>
<td>Other services</td>
<td>283</td>
</tr>
<tr>
<td>Public administration</td>
<td>180</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,269</td>
</tr>
</tbody>
</table>

Major Employers

City of Two Rivers boasts a variety of large employers from both the public and private sectors. The top employers in the city are illustrated in Table 2.2.

Table 2.2: City of Two Rivers Top Employers, 2008

<table>
<thead>
<tr>
<th>Establishment</th>
<th>Product or Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermo Fisher</td>
<td>Laboratory Furniture Manufacturing</td>
</tr>
<tr>
<td>Eggers Industries, Inc</td>
<td>Hardwood Veneer and Plywood Manufacturing</td>
</tr>
<tr>
<td>Aurora Medical Center Of Manitowoc County Inc</td>
<td>General Medical and Surgical Hospitals</td>
</tr>
<tr>
<td>Two Rivers Public School Dist</td>
<td>Education</td>
</tr>
<tr>
<td>Aristo Manufacturing Co</td>
<td>Houseware Appliances Manufacturing</td>
</tr>
</tbody>
</table>


Commuting Patterns

City of Two Rivers residents reported their average commute time to be 18 minutes.

- In 2000, approximately 58 percent of the employed residents of the city worked outside of the City of Two Rivers. The majority of these commuting residents traveled to the City of Manitowoc for work.
- Also during 2000, approximately 2,540 people commuted from other areas to work in City of Two Rivers. The largest number of workers came from the City of Manitowoc.

Community Finances

Full value can be defined as the estimated value of all taxable real property in a community. A community’s full value is often used by states to appropriate state aid and to limit locally imposed taxes.

Table 2.3: Full Value and Total Property Tax, 2000 - 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Full Value</th>
<th>% Change from Previous Year</th>
<th>Total Property Tax</th>
<th>% Change from Previous Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$452,547,100</td>
<td>-</td>
<td>$11,648,289</td>
<td>-</td>
</tr>
<tr>
<td>2001</td>
<td>$481,491,100</td>
<td>6.4%</td>
<td>$12,412,322</td>
<td>6.6%</td>
</tr>
<tr>
<td>2002</td>
<td>$492,736,400</td>
<td>2.3%</td>
<td>$12,827,022</td>
<td>3.3%</td>
</tr>
<tr>
<td>2003</td>
<td>$492,657,100</td>
<td>0.0%</td>
<td>$12,672,461</td>
<td>-1.2%</td>
</tr>
<tr>
<td>2004</td>
<td>$509,623,500</td>
<td>3.4%</td>
<td>$13,018,916</td>
<td>2.7%</td>
</tr>
<tr>
<td>2005</td>
<td>$516,023,000</td>
<td>1.3%</td>
<td>$12,856,255</td>
<td>-1.2%</td>
</tr>
<tr>
<td>2006</td>
<td>$537,566,300</td>
<td>4.2%</td>
<td>$13,145,271</td>
<td>2.2%</td>
</tr>
<tr>
<td>2007</td>
<td>$545,686,400</td>
<td>1.5%</td>
<td>$13,293,940</td>
<td>1.1%</td>
</tr>
<tr>
<td>2008</td>
<td>$565,796,500</td>
<td>3.7%</td>
<td>$13,601,945</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

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

- As shown in Table 2.3, the city’s full value increased by 25 percent between 2000 and 2008. The city’s total property tax also increased by 17 percent during the same time period.

Existing Business Site Inventory and Analysis

To be successful, economic development must function as a part of the whole socio-economic environment. This is accomplished through the development of strategies linked to several
economic development components including infrastructure; business development; workforce development, and community cash flow. These components consist of several elements that influence the quality and effectiveness of economic development within a community.

As detailed on the city’s 2008 land use inventory map (Map 2.14), the City of Two Rivers contains approximately 100 acres of commercial land and an additional 200 acres of industrial land. Over $150 million in construction since 1999 illustrates Two Rivers’ growth in infrastructure improvement, residential development, healthcare, and industrial construction.

Businesses in the city are supplied by quality public utilities, including a new ultra-filtration water plant and a fiber optic network. Quality transportation facilities are maintained in the city, with nearby airports and Interstate 43 located seven (7) miles west of the city. Attributes that can help attract employees include good public and parochial schools (including a newer high school), new library, new hospital and medical center, riverfront property, lakefront property, new fire station, low crime rate, moderately priced housing, and a variety of recreation facilities.

Being situated on shores of Lake Michigan, and having six (6) miles of Lake Michigan beach, the tourism industry also plays a vital role in the City of Two Rivers and businesses that cater to tourism. Motels, campgrounds, and retail stores complement the walking and biking trails as well as the many parks, historic sites, and other area attractions.

Industries continue to be attracted to Two Rivers by the city’s quality work force, moderately priced business properties, low taxes and utility rates, experienced economic development staff, and several incentive programs. Incentives for business development include the Economic Development Tax Credit program and Economic Development Revolving Loan Program.

- **Economic Development Revolving Loan Program**

  The city’s Economic Development Revolving Loan Fund (RLF) is designed to help businesses that locate, expand, or retain jobs in Two Rivers. More than 51 percent of the jobs created or retained must be low-skilled or low-to-moderate income. The city lends $5,000 to $20,000 for every Full Time Equivalent (FTE) job created, as long as the business invests at least twice the amount of the city loan.

  Financing can be used for machinery and equipment (M&E), working capital (WC), and acquisition of real estate. If money is to be used to construct a facility, Davis-Bacon wage rates and bidding of the project apply, thus the city prefers to lend money for M&E and WC.

  From 1987 to 2008 the city has issued 83 business loans. A total of $7.02 million dollars has been loaned since 1987. The average RLF loan amount over the last 21 years has been $84,500. The city has 29 active RLF loans. Current RLF customers include manufacturing and related service providers, as well as commercial businesses.
Other important economic development programs or sites in the City of Two Rivers include:

- **Main Street**
  
  The City of Two Rivers currently contains *Two Rivers Main Street, Inc.* which is an educational non-profit corporation that was accepted into the Wisconsin Main Street Program in 1995. Main Street is a comprehensive revitalization program that promotes the historic and economic redevelopment of traditional businesses in the downtown areas of Wisconsin communities.

- **Industrial Parks**
  
  City of Two Rivers has two (2) fully developed industrial parks.
  
  1. Woodland Drive Industrial Park covers 259 acres with 218 acres still available.
  2. Columbus Drive Industrial Park covers 40 acres and has about 7 acres available.

- **Tax Increment Financing (TIF).**
  
  TIF is a tool available to cities and villages in Wisconsin under section 66.1105 of the Wisconsin Statutes for redeveloping blighted areas, promoting redevelopment through environmental remediation, and encouraging new industrial development. TIF can be used to cover costs of public works or improvements including costs for demolition, land assembly, public improvements, and new buildings.

  - Three (3) of the seven (7) existing TIF districts have assisted industrial development (i.e., Metal Ware/TIF 3, Woodland Industrial Park/TIF 5, and Eggers Industries/TIF 9).
  
  - Four (4) of the existing TIF districts have assisted with redevelopment of blighted properties for residential uses.

Other area groups that assist with business promotion and development include the Two Rivers Business Association, Economic Development Corporation of Manitowoc County, Manitowoc/Two Rivers Chamber of Commerce, and the New North.

**Evaluation of Environmentally Contaminated Sites**

The WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) inventories environmentally contaminated sites located in communities throughout the state. Several of these sites have had, or are planning to have, some type of extensive improvement activities. This cleanup would make the areas available for redevelopment opportunities including new businesses, residences, or recreational facilities.

- According to WDNR tracking system, there have been 177 environmental incidences that have occurred in the City of Two Rivers or surrounding planning area. Of these, nine (9) remain open or conditionally closed, while 38 are classified as historic. The remaining sites are closed or required no action, meaning they may be eligible for redevelopment.

More information regarding environmentally contaminated sites in the city and surrounding areas can be found on the WDNR website ([http://dnr.wi.gov/org/aw/rr/clean.htm](http://dnr.wi.gov/org/aw/rr/clean.htm)).
Transportation Characteristics

Transportation specific information for the City of Two Rivers is highlighted below. For more details on transportation systems in surrounding communities and all of Manitowoc County, please see Chapter 8 of Volume II: Manitowoc County Resources.

Highways and Streets

The City of Two Rivers contains nearly 59 miles of roadway, with the majority of the mileage being under municipal jurisdiction. Table 2.4 lists the mileage of roads under the jurisdiction of the City of Two Rivers, while Map 2.8 illustrates the transportation network and functional classification.

- Portions of STH 42, 147, and 310 in the Two Rivers Urban Area are classified as “urban principal arterials”, meaning there function is to move traffic over medium to long distances, often between regions as well as between major economic centers, quickly, safely and efficiently. The urban minor arterials are numerous, including portions of County Highway VV, Riverview Drive, Jackson Street, Washington Street, etc.

- There are numerous “urban collectors” in the Two Rivers Urban Area including portions of Columbus Street, Roosevelt Avenue, 12th Street and County Highway O, etc. Urban collectors take traffic from the local streets and highways and provide relatively quick and efficient routes to urban centers and facilities.

Table 2.4: Road Miles by Functional Classification, 2007

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Gross Miles</th>
<th>County Miles</th>
<th>Municipal Miles</th>
<th>Arterial</th>
<th>Collector</th>
<th>Local</th>
<th>Arterial</th>
<th>Collector</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Two Rivers</td>
<td>58.66</td>
<td>1.70</td>
<td>56.96</td>
<td>1.13</td>
<td>0.57</td>
<td>4.90</td>
<td>5.61</td>
<td>46.45</td>
<td></td>
</tr>
</tbody>
</table>

Source: Wisconsin Department of Administration.

The city should continue to ensure that its transportation amenities are maintained and improved to allow for safe and efficient movement of not only vehicles, but also for bike and pedestrian traffic.

Traffic Counts

The analysis of past and present traffic volumes is beneficial in determining the traffic conditions in a community. Traffic volumes are usually presented as an Annual Average Daily Traffic (AADT) figure, and are calculated for a particular intersection or stretch of street. The Wisconsin Department of Transportation, as part of its traffic count program, provides highway traffic volumes from selected streets for all state communities on a rotating basis, providing those counts for a community once every three years.

- The average daily traffic volumes on principal arterial streets within the City of Two Rivers are listed in Table 2.5. The daily traffic counts are taken for 48 hours, and are reported as a 24-hour average weekday count for a specific data collection period.
Table 2.5: Annual Average Daily Traffic, 2002, 2005, and 2008

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<tr>
<td>West of Columbus St., City of Two Rivers</td>
<td>14,900</td>
<td>14,500</td>
<td>14,700</td>
<td>200</td>
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<tr>
<td>South of STH 147/22nd St., City of Two Rivers</td>
<td>9,500</td>
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<td>10,500</td>
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<td>(500)</td>
<td>-10.20%</td>
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<td>West of Washington St., City of Two Rivers</td>
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<td>Forest Ave. Southeast of Tannery Rd., City of Two Rivers</td>
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<td>Southeast of CTH VV, City of Two Rivers</td>
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Transit

Manitowoc County is served by one urban transit operation, the Maritime Metro Transit System (MMT). MMT is a publicly owned and operated fixed route transit system serving the cities of Manitowoc and Two Rivers.

Rail

There is no rail service available to the City of Two Rivers. An out of service rail line does exist between the cities of Two Rivers and Manitowoc. The nearest operating rail line is located at the City of Manitowoc, with service provided by the Canadian National Rail Company.

Port and Harbor

Two Rivers Harbor

The harbor at Two Rivers consists of an outer harbor formed by two parallel piers, an inner harbor basin at the confluence of the East and West Twin Rivers, and a channel ½ mile in length and 18 feet deep extending from the basin upstream in the East Twin River to the 22nd Street Bridge. Port service is available nine (9) months of the year. The harbor is protected and served by the U.S. Coast Guard Station located at 13 East Street.

The city’s central business district is adjacent to the harbor area. Other uses include a commercial fishing village, heavy industrial uses, and recreational boating facilities. Major uses of the harbor include charter and commercial fishermen, recreational boaters and fishermen that use the government pier for fishing purposes.
Marinas

- **Seagull Marina and Campgrounds** is found along the West Twin River, just west of the harbor basin. The marina has 30 permanent slips and 20 transient slips. The maximum boat size that the marina can accommodate is 38 feet. The average water depth is 10 feet. Other services include a ramp, a nearby lift, boat sales and service, ships store, gas, electricity, pump out, and dry storage. Charter fishing operators and a campground are located within the marina.

- **Stop-N-Dock Marina** is located along the West Twin River in the city. The marina has 40 permanent slips and five transient slips. The maximum boat size that the marina can accommodate is 30 feet. The average water depth is three feet. Other facilities include a ramp, a nearby lift, electricity, pump out, dry winter storage, a picnic area and recreational vehicle parking.

- **Twin Cities Marine, Inc** is located along the West Twin River in the city. The marina has 25 permanent slips and five transient slips. The maximum boat size that the marina can accommodate is 26 feet. The average water depth is 12 feet. Other facilities include a ramp, a nearby lift, nearby gas, boat sales and service, ships store, electricity, pump out, and dry and winter storage.

- **The Landings Marina** is located along the West Twin River in the city. The marina has 20 permanent slips and six transient slips. The marina offers dockage facilities for boats up to 28 feet. The average water depth is six feet. Other facilities include a ramp, a nearby lift, nearby gas and diesel fuel, electricity, and a fish cleaning area. This marina also has a campground.

- **Stan’s Marina**, located along the East Twin River at 1908 Rogers Street, has camping (6 sites), 12 finger boat slips, a boat launch and bathroom/shower facilities.

- **Rogers Street Fishing Village**, located along the East Twin River at 2010 Rogers Street, has 14 finger slips, fish cleaning station, bathroom/shower facilities and parking.

Bridges

Five (5) bridges provide access across the East and West Twin rivers for the City of Two Rivers.

1. 17th Street bridge spans the East Twin River covering a length of 86.1 meters. The current bridge dates to 1953.
2. STH 310 (Madison Street) bridge is over the West Twin River spanning a distance of 80.9 meters. Replacement of the old bridge was completed in 2008.
3. STH 42 (Washington Street) bridge spans the West Twin River covering a length of 56.8 meters. The current bridge was constructed in 1982.
4. STH 42 (22nd Street) bridge spans the East Twin River with a length of 150.7 meters. The existing bridge was constructed in 2001.
5. CTH VV (45th Street, or Tannery) bridge spans the East Twin River. The existing bridge was constructed in 1992.
The planned replacement of the 17th Street bridge in 2011-12 will mean all five of the bridges in the city will be less than 30 years old.

Air Service

Manitowoc County Airport, located in the City of Manitowoc, is a Transport/Corporate (T/C) airport. A T/C facility indicates that the facility can serve and accommodate corporate jets, small passenger and cargo jet aircraft used in regional service and small airplanes (piston or turboprop) used in commuter air service. The facility is owned and maintained by Manitowoc County.

At the regional level, the primary commercial-passenger and air freight service for residents of the City of Two Rivers is provided by Austin Straubel International Airport located near the City of Green Bay, and General Mitchell International Airport located in Milwaukee.

Austin Straubel International Airport is a full service regional connector providing direct service flights to several cities. Mitchell International Airport is able to provide a wide range of continental and international destinations.

Trucking

Two (2) commercial trucking terminals are located within the City of Two Rivers.

Utilities and Community Facilities

An inventory and assessment of existing facilities is used to determine if there may be condition and capacity issues to meet current and future development needs. Information about the community and public facilities in the City of Two Rivers is outlined below. Map 2.9 illustrates the location of the community facilities within the city.

Utilities Inventory and Analysis

Electric Service

Citizens and businesses of Two Rivers receive their electricity from Two Rivers Water and Light. The city purchases its electric necessities from Wisconsin Public Power Inc. (WPPI) and Two Rivers Water and Light distributes to its customers. Two Rivers Water and Light was founded in 1902 and continues to offers customers some of the lowest electric rates in the area. Three-phase power is also provided to the city’s industrial parks.

Natural Gas

Wisconsin Public Service and ANR Pipeline Company supply natural gas to the area. ANR owns the main line which enters the City of Two Rivers. Wisconsin Public Service then distributes the natural gas to its customers. The capacity of the system is considered adequate for current and future growth of the area.

Telecommunication Facilities

Telephone service is available to the City of Two Rivers through Lakefield Communications. This local company, located at 2205 Forest Avenue in the city, offers local and long distance telephone service along with high-speed DSL internet on an all fiber-optic digital network. Verizon Telephone also offers local and long distance service with digital switching equipment and is linked to a fiber optic/digital microwave network.
The city-wide fiber optic system has 96 strands of fiber available. The City of Two Rivers and the Two Rivers School District cooperated on the installation of the fiber optic system. All city and school buildings are connected to the shared fiber optic system. The network is also available to local businesses.

A variety of service providers also offer cellular and long distance telephone services to residents and businesses.

Cable television is provided throughout the city by Charter Communications, while various satellite dish providers are also available for enhanced television viewing. Satellite providers can also offer broadband solutions.

The telecommunication facilities and service are considered adequate for the city.

**Public Water System**

Municipal water is supplied from Lake Michigan. The capacity of the system is 3 million gallons per day. The average usage is 1.4 million gallons per day with a peak use of about 2.5 million gallons per day. The municipal water system serves the community and its industrial parks with a ground storage capacity of 2 million gallons and an overhead storage capacity of 1 million gallons. The water distribution system consists of 70 miles of mains, ranging from 4 inches to 12 inches in diameter (Map 2.10).

With the new ultrafiltration membrane facility going online in June 2004 and additional capacity designed into the project, the water system is considered adequate for the community for the next 10 to 20 years. One system vulnerability that should be addressed is the need for a second lake intake and/or a second water source (e.g., wells).

**Sanitary Sewer Service**

The entire City of Two Rivers is served by municipal sewer. The collection system consists of 70 miles of mains and 19 lift stations (Map 2.11). The municipal sewer system contains an activated sludge treatment plant with an average load of 1.3 million gallons/day, a peak load of 1.7 million gallons/day and a design load of 3.07 million gallons/day.

The city completed a $5.5 million upgrade of its wastewater treatment facilities in 2009. Since 2008, Two Rivers has also treated all wastewater from the Village of Mishicot, which pumps sewage to the city via a four-mile pipeline.

The city’s sanitary sewer system capacity is considered adequate for the city’s existing and future growth.

- **Sewer Service Area**

  A Sewer Service Area (SSA) identifies established lands where sewer services are intended to be made available during a 20-year planning period. The Manitowoc-Two Rivers Sewer Service Area (SSA) Plan (Map 2.11), which encompasses both cities along with the Village of Mishicot, was delineated using the 20-year population projection, an acceptable residential population density, and a forecast of non-residential development (e.g. commercial and industrial growth) which would result in acreage demand and allocation.
Delineating a service boundary is critical in designing sewage collection and treatment facilities to serve existing and future residents of the SSA in the most cost effective and environmentally sound manner.

**Storm Sewer System**

A majority of the city’s storm sewer system (Map 2.12) consists of curbed streets, sewer drainage and different sized mains in addition to retainage systems on some developed properties.

Aging storm sewer mains will be replaced in conjunction with other improvements to the infrastructure.

In October of 2006, the City of Two Rivers received its NR 216 Municipal Separate Storm Sewer System (MS4) Permit from the Wisconsin Department of Natural Resources (DNR). This MS4 Permit required the City of Two Rivers to develop a municipal storm water program that manages urban non-point source pollution and protects natural resource features such as the West Twin River, East Twin River, Lake Michigan and other environmentally sensitive areas.


**Community Facilities Inventory and Assessment**

**Administrative Facilities**

Two Rivers City Hall, located at 1717 E. Park Street, houses the Police Department, Two Rivers Municipal Court, and other administrative offices. The building is utilized primarily for administration, community meetings and elections. The structure is handicapped accessible, has adequate parking and is suitable for the future needs of the city.

**Solid Waste Disposal & Recycling Facilities**

The city is contracted with a private hauler for curbside pickup of the city’s garbage. The waste is taken to the Ridgeview Landfill in the Town of Franklin.

The City of Two Rivers also has a recycling program that allows for weekly curbside pickup of recyclables including: paper, cardboard, metal, glass, etc.

In addition, the Manitowoc Recycling Center at 3000 Basswood Road in the Town of Manitowoc Rapids also maintains a residential recycling drop-off area that is intended for use by all county residents. There is no trash or garbage drop off at this location.

Manitowoc County Recycling Center also oversees two compost sites, the Basswood Compost Site and the Woodland Compost Site (4191 Woodland Drive, Two Rivers), to serve Manitowoc County residents.

Services are adequate and will continue to be monitored for satisfaction and cost effectiveness.


**Road and Other Maintenance**

Maintenance for the city’s road network and other community facilities is provided by Two Rivers Public Works located at 1415 Lake Street. The city has the necessary machinery to conduct maintenance including snowplows, loaders, dump trucks, street sweeper, mowing equipment, etc.

The Forestry Department trims and plants trees in city parks, cemeteries, and in the terrace area of city streets.

**Postal Services**

The City of Two Rivers postal services are provided by U.S. Post Office located at 1516 18th Street.

Private parcel carriers (UPS, FedEx, etc.) also serve the City of Two Rivers.

**Law Enforcement and Protection**

Police protection is provided by the Two Rivers Police Department. The police department is located at 1717 East Park Street. The Police Department has a staff of 25 full-time officers. There is an active Crime Stoppers program, bicycle patrols, school liaison program, crime prevention committee, and a Junior Police Academy.

Currently the city’s police protection is felt to be adequate and will continue to be evaluated as the city grows.

**Fire Station/EMS Services**

Fire and emergency services are provided by Two Rivers Fire/Rescue located at 2122 Monroe Street. The fire station, constructed in 2001, is strategically placed to provide rapid response time to the over six (6) square miles of city territory. The fire department also performs paramedic intercepts and mutual aid with several surrounding fire and EMS services. The department has 20 full-time personnel, 18 of which are trained to the level of EMT-Paramedic. There is also 15 paid-on-call firefighters.

The Public Protection Classification (PPC) is a Class 4 within the City of Two Rivers and a Class 8 outside of the city. Insurance Service Office (ISO) collects information on municipal fire-protection efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data using their Fire Suppression Rating Schedule (FSRS) and assigns a PPC - a number from 1 to 10. Class 1 represents the best protection, and Class 10 indicates that the area's fire protection does not meet ISO's minimum criteria.

Overall, the fire protection services and emergency medical services provided by Two Rivers Fire/Rescue are considered adequate.
\textbf{Education}

The City of Two Rivers is located within the Two Rivers Public School District. Two Rivers Public Schools maintains the following facilities:

- \textit{Magee Elementary School} (PK – grade 4), 3502 Glenwood Street
- \textit{Koenig Elementary School} (K – grade 4), 114 Lowell Street
- \textit{L. B. Clarke Middle School} (grade 5-grade 8), 4608 Bellevue Place
- \textit{Two Rivers High School} (grade 9-grade 12), 4519 Lincoln Avenue

Three (3) private schools are also found in the City of Two Rivers which may be utilized by residents:

- \textit{Children House of Manitowoc School} (PK – K), 4020 Memorial Drive
- \textit{St Johns Lutheran School} (PK – grade 8), 3607 45th Street
- \textit{St. Peter the Fisherman Catholic School} (PK – grade 8), 1322 33rd Street

Several children in the city may also be home schooled, rather than enrolled in the previously mentioned public and private educational facilities available.

\textbf{Post-Secondary Institutions}

There are three post-secondary institutions in Manitowoc County to offer City of Two Rivers residents. These institutions include:

- \textit{Lakeshore Technical College}, 1290 North Avenue, Cleveland
- \textit{Silver Lake College}, 2406 S. Alverno Road, Manitowoc
- \textit{University of Wisconsin-Manitowoc}, 705 Viebahn, Manitowoc

Other higher education institutions located in nearby counties include UW-Sheboygan and Lakeland College in Sheboygan and Northeast Wisconsin Technical College and UW-Green Bay in Green Bay.

\textbf{Library}

Residents of the City of Two Rivers utilize the Lester Public Library located at 1001 Adams Street in Two Rivers. Lester Public Library is part of the Manitowoc-Calumet Public Library System which is a cooperative network of six (6) public libraries in east central Wisconsin.

\textbf{Health Care}

Residents of the city are able to utilize the \textit{Aurora Medical Center} situated at 5000 Memorial Drive in the City of Two Rivers for their medical needs. \textit{Holy Family Memorial Medical Center} located at 2300 Western Avenue in the City of Manitowoc also serves the community of Two
Rivers. There are three medical clinics in the city along with various chiropractic, dental, and vision practitioners.

**Child Care Facilities**
There are six (6) group day care centers and a number of in-home day care providers that serve the residents of the community.

**Adult Care Facilities**
The City of Two Rivers contains several long-term care and elder care facilities including a nursing home, four (4) Community Based Residential Facilities (CBRF), one (1) Adult Family Home (AFH), and one (1) Residential Care Apartment Complexes (RCAC). (See the Subsidized and Special Needs Housing section in Chapter 6 of *Volume II: Manitowoc County Resources*).

**Cemeteries**
The City of Two Rivers operates two (2) cemeteries. The Pioneer Rest/Calvary cemetery, located at 25th Street and Forest Avenue; and the Holy Cross/Forest View cemetery located at 3801 Mishicot Road.

**Parks and Recreation**
The City of Two Rivers contains a variety of park/recreational sites providing the public with many opportunities. Many of the sites offer opportunities to experience the natural and cultural features of the city and also maintain excellent views of Lake Michigan, while several boat landings also provide access to these water features for fishing or other water sports.

The following is a listing of the various recreational sites within the city and its surrounding planning area. Map 2.13 illustrates the locations of the park and recreation sites in and around the City of Two Rivers.

**Community House**
The J.E. Hamilton Community House, located at 1520 17th Street, is home to the Parks and Recreation Administrative offices as well as the Senior Center. The facility includes a gymnasium, racquetball court, fitness room, meeting rooms, and kitchen facilities.

**Park and Recreation Facilities**
- **Neshotah Park** covers 50 acres along Lake Michigan. The park includes grills, volleyball, tennis courts, horseshoe and basketball courts, restrooms, concessions, picnic areas and beachfront.
  - **Neshotah Beach** is located on Lake Michigan between 17th and 22nd Streets along Zlatnik Drive. It has areas for swimming and launching jet skis and kayaks. The Beach House is used as a bathhouse/changing area and has restrooms and a concession stand. There are shelters in the park which can be rented for private parties and picnics. Neshotah Beach is a major regional attraction and venue for special events.
- **Zander Park** is located on the southside of Two Rivers, across the street from the Woodland Dunes Nature Preserve. It has a shelter, tennis and basketball courts, playground equipment and picnic areas with tables and grills.
- **Vet’s Park** is the city's major public boat launch and fish cleaning station. It has a shelter, playground equipment, and basketball & volleyball courts.
Central Park is the heart of downtown and home to many of the city’s special events. The park covers both sides of Washington Street. On the west side of the park sits the city's band shell and the J.E. Hamilton Community House. On the east is the Two Rivers City Hall.

Paddlers Park is found at the end of 27th Street on the East Twin River. Paddlers Park is a launch site for non-motorized watercraft like kayaks and canoes.

Washington Park contains a pavilion, playground equipment, tennis courts, a fishing pier, and a walking trail along the East Twin River.

Riverside Park is located on the West Twin River and has a fully enclosed shelter/restroom facility. There is playground equipment, basketball courts, and a softball diamond. This park is home to the city’s skateboard park and an off-leash dog park.

Picnic Hill is a passive use park. Heavily wooded, it features nice areas for walking and hiking and has a disc golf course. It is located next to Walsh Field and the Sandy Bay Highlands subdivision on the city's east side.

Walsh Field is located adjacent to Picnic Hill and across the street from Neshotah Park. It has a regulation baseball field in addition to a shelter and bathroom facilities. The stadium style bleachers make it a great place for viewing local baseball, football, and soccer games, as well as the annual 4th of July band concert and fireworks display. It is also home to the Two Rivers Polar Bears semi-pro baseball team.

Taylor Park is a neighborhood park near the Aurora Medical Center. It has playground equipment and a shelter.

Lakeshore Park is located right on Highway 42 (Memorial Drive), overlooking Lake Michigan. It is located next to the Lester Public Library and has picnic areas and playground equipment.

Vietnam Veterans Memorial Park is found on the city’s northeast side, next to the city's little league baseball diamond. Memorial Park has two softball fields, concession area and shelter.

Other Recreation Sites

Point Beach State Forest and Park is accessible all year. Trails are available for hiking, biking, skiing and enjoying the natural beauty. Camp grounds are also available. Visitors can access some of Lake Michigan's many beach fronts from the state park.

Woodland Dunes Nature Center and Preserve is a significant wildlife habitat located between the cities of Manitowoc and Two Rivers. Woodland Dunes offers six trails that allow visitors to explore the 1,200 acre preserve that includes woodlands, meadows and marshes. All trails are relatively level and easily hiked; they range from 1/4 to 1 1/2 miles in length. Two of the trails, Cattail and Yellow Birch, are wheelchair accessible boardwalks. In winter, trails are open for cross-country skiing, although not groomed.

Emerald Hills Golf Course, located at 3659 Riverview Drive in the city, is a nine-hole public golf course that opened in 1930.

Eggers Riverwalk is located along the West Twin River next to the Madison Street bridge.

Mariner’s Trail is considered the longest continuous scenic view of Lake Michigan in Wisconsin. Mariner’s Trail was dedicated on June 1, 2002. The five (5) mile paved trail connects the cities of Manitowoc and Two Rivers, and is situated on the shoreline of Lake Michigan. It is ideal spot for walking, running, biking, dog walking, roller blading, etc.
The Rawley Point Recreational Trail opened on May 15, 2004. The trail has a hard-packed limestone base and connects the City of Two Rivers with Point Beach State Forest. The six (6) mile trail winds through pine and hemlock forests, dunes and fields to the historic Rawley Point Lighthouse at Point Beach State Park.

DEMOGRAPHIC TRENDS AND FORECASTS

The inventory of the city’s demographics and housing may help determine the demand for housing the future population and also the influences on the city’s educational, recreational and community facility capacities over the 20-year planning period.

The main source of the population and housing information displayed throughout this document is the Year 2000 Census because the Year 2010 Census data was not available during the development of this comprehensive plan. To ensure the most current demographic data for the city is displayed within the comprehensive plan, Two Rivers should follow the update/amendment schedule (“Updating and Amending the Comprehensive Plan”) illustrated in Chapter 4 of this document.

Population

Historic Population

As illustrated by Figure 2.2, the City of Two Rivers attained its highest population, 13,553, in 1970. The city has experienced a continued gradual decline in population since that time.

Figure 2.2: Historic Population, 1970 - 2000


Reasons for city’s population decline over the past 30 years may include smaller family sizes; erosion of the area’s manufacturing employment base; area youth seeking career opportunities elsewhere; and out-migration to surrounding rural communities.

For more information regarding historic population and other population trends regarding the city and surrounding areas, please see Chapter 6 and Appendix B of Volume II: Manitowoc County Resources.
Population Projections

By inventorying past population trends it is possible to project the future growth of the city. Population projections allow the City of Two Rivers to identify the area’s future needs for housing, utilities, transportation, recreation, and a number of other population influenced services. A projection developed by the Wisconsin Department of Administration (WDOA) in 2008 was utilized to determine the city’s projected population in the year 2030. Table 2.6 and Figure 2.3 illustrate the WDOA projection for the City of Two Rivers.

Table 2.6: Population Trends and Projections, 1970 - 2030

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Figure 2.3: Population Trends and Projections, 1970 - 2030


Housing

Housing Characteristics

Historic Housing

Although the city’s population has declined over the last 30 years, the U.S. Census indicates that the City of Two Rivers housing units increased by 25 percent, or 1,126 units, between 1970 and 2000 (Figure 2.4).
Figure 2.4: Historic Housing Units, 1970 – 2000

Source: U.S. Bureau of the Census, 1970, Series 100, Table 2; 1980 Census of Population and Housing, STF 1A, Table 4; 1990 Census of Population and Housing, STF 1A; 2000 Census; WDOA Revised Census Counts, 2000 and 2003; and Bay-Lake Regional Planning Commission, 2008.

**Housing Types - Units in Structure**

The 2000 Census indicates that 73 percent of residential structures in the city are one unit, detached structures. Table 2.7 illustrates the breakdown of housing found within the City of Two Rivers.

Table 2.7: Housing Units by Type of Structure, 2000

<table>
<thead>
<tr>
<th>Units</th>
<th>City of Two Rivers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit, detached</td>
<td>4,040</td>
<td>72.8</td>
</tr>
<tr>
<td>1 unit, attached</td>
<td>128</td>
<td>2.3</td>
</tr>
<tr>
<td>2 units</td>
<td>644</td>
<td>11.6</td>
</tr>
<tr>
<td>3 or 4 units</td>
<td>233</td>
<td>4.2</td>
</tr>
<tr>
<td>5 to 9 units</td>
<td>134</td>
<td>2.4</td>
</tr>
<tr>
<td>10 to 19 units</td>
<td>110</td>
<td>2.0</td>
</tr>
<tr>
<td>20 or more units</td>
<td>238</td>
<td>4.3</td>
</tr>
<tr>
<td>Mobile home</td>
<td>25</td>
<td>0.5</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>5,552</td>
<td>100.0</td>
</tr>
</tbody>
</table>


**Housing Occupancy and Tenure**

In 2000, 94 percent of the housing units in the city were occupied (Table 2.8). Of the 5,221 reported occupied units, 73 percent of the units were owner-occupied. The city’s 282 vacant units (unoccupied year-round) made up over five percent of the city’s housing.
Table 2.8: Housing Occupancy and Tenure, 2000

<table>
<thead>
<tr>
<th>Units</th>
<th>City of Two Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Occupied</td>
<td>5,221</td>
</tr>
<tr>
<td>Owner</td>
<td>3,810</td>
</tr>
<tr>
<td>Renter</td>
<td>1,411</td>
</tr>
<tr>
<td>Vacant</td>
<td>326</td>
</tr>
<tr>
<td>Seasonal, Recreational, or Occasional Use</td>
<td>44</td>
</tr>
<tr>
<td>Other</td>
<td>282</td>
</tr>
<tr>
<td>Total Units</td>
<td>5,547</td>
</tr>
</tbody>
</table>


- The 2000 Census indicates that 12,514 people in the City of Two Rivers live in households, while the remaining 125 individuals reside in group quarters (e.g., jails, nursing homes, college dormitories, military quarters, etc.).

**Age of Housing**

According to the 2000 Census, nearly 33 percent of the housing units in the City of Two Rivers were built prior to 1940 (Table 2.9).

Table 2.9: Housing Units by Year Structure Built, 2000

<table>
<thead>
<tr>
<th>Year Structure Built</th>
<th>City of Two Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>1999 to March 2000</td>
<td>49</td>
</tr>
<tr>
<td>1995 to 1998</td>
<td>256</td>
</tr>
<tr>
<td>1990 to 1994</td>
<td>175</td>
</tr>
<tr>
<td>1980 to 1989</td>
<td>252</td>
</tr>
<tr>
<td>1970 to 1979</td>
<td>710</td>
</tr>
<tr>
<td>1960 to 1969</td>
<td>724</td>
</tr>
<tr>
<td>1940 to 1959</td>
<td>1,572</td>
</tr>
<tr>
<td>1939 or earlier</td>
<td>1,814</td>
</tr>
<tr>
<td>Total</td>
<td>5,552</td>
</tr>
</tbody>
</table>


**Housing Values**

The median value of owner-occupied housing units is $77,900 (Table 2.10).
Table 2.10: Value of Specified Owner-Occupied Housing Units, 2000

<table>
<thead>
<tr>
<th>Value*</th>
<th>City of Two Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Less than $50,000</td>
<td>358</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>2,298</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>630</td>
</tr>
<tr>
<td>$150,000 to $199,999</td>
<td>160</td>
</tr>
<tr>
<td>$200,000 to $299,999</td>
<td>73</td>
</tr>
<tr>
<td>$300,000 to $499,999</td>
<td>22</td>
</tr>
<tr>
<td>$500,000 or more</td>
<td>9</td>
</tr>
<tr>
<td>Total Units</td>
<td>3,550</td>
</tr>
</tbody>
</table>

Median Value


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

Providing affordable housing which meets the needs of future city residents is an important element of planning. Housing influences the economy, transportation, infrastructure, natural features, and various other aspects of a comprehensive plan.

Subsidized and Special Needs Housing

Agencies such as Lakeshore CAP and Manitowoc County Habitat for Humanity help locate, finance, and develop housing for first time home buyers, along with persons with various physical and mental disabilities or other special needs.

- As mentioned in the Community Facilities portion of this chapter, the City of Two Rivers maintains seven (7) housing options for seniors and the special needs population.

State and federal agencies that help individuals or families with housing needs include the Wisconsin Housing and Economic Development Authority (WHEDA), U.S. Department of Housing and Urban Development, etc.

Within the city, it is expected that assistance with home improvement and rent will continue to be a great need as the population continues to age.

Housing Development Environment

Within the city exists a number of public services for residential uses including sewer, water, natural gas, electrical service, road maintenance and public protection services. Future housing development and redevelopment should occur within well-defined residential neighborhoods, within and adjacent to these existing services utilizing existing transportation corridors and newly developed neighborhood streets.

The city has many acres of developable lands to accommodate future populations. The lands vary in their aesthetic qualities based upon location to natural features. Existing housing regulations allow for a mix in use and density.
**TIF Districts**

Four (4) of the seven (7) existing TIF districts found in the City of Two Rivers have assisted in the redevelopment of blighted or obsolete properties to housing options for citizens.

**Housing Projections**

Three (3) different projection methods* were utilized to identify future housing possibilities for the City of Two Rivers:

1) WDOA projections developed in 2008;
2) Growth trend projection based on U.S. Census data from 1970 to 2000; and

* These projections reflect future occupied housing units only, meaning vacant housing units are not included.

Table 2.11 and Figure 2.5 illustrate the occupied housing unit projections for the city.

**Table 2.11: Occupied Housing Trends and Projections, 1970 - 2030**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US Census Occupied Housing Units</td>
<td>4,281</td>
<td>4,848</td>
<td>5,164</td>
<td>5,221</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLRPC Projection - Growth Trend</td>
<td>5,221</td>
<td>5,478</td>
<td>5,734</td>
<td>5,929</td>
<td>6,125</td>
<td>6,333</td>
<td>6,542</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BLRPC Projection - Linear Trend</td>
<td>5,221</td>
<td>5,442</td>
<td>5,663</td>
<td>5,819</td>
<td>5,976</td>
<td>6,133</td>
<td>6,290</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008 WDOA Household Projection</td>
<td>5,221</td>
<td>5,281</td>
<td>5,342</td>
<td>5,416</td>
<td>5,467</td>
<td>5,483</td>
<td>5,469</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Figure 2.5: Occupied Housing Trends and Projections, 1970 - 2030**

The occupied housing unit projections for the city are based primarily on past census trends and WDOA projections. However several additional factors need to be considered in conjunction with these housing projections:

- In 2000, 282 housing units in the city were vacant (unoccupied year-round). By 2030, it is anticipated that many of these units be occupied rather than building new.

- The city’s group quarter population may continue to grow as the people increase in age. More of the elderly population may vacate their homes to reside in assisted living facilities, nursing homes, senior housing, etc. creating more vacant single family housing structures and demand for assisted living facilities.

- Low interest rates may motivate many people to build new or buy homes, resulting in an increase in vacant apartment units.

- Any future dramatic increase in interest rates, utility costs and building supplies may make renting a more affordable option. As a result, apartment vacancy rates decline and the demand for more rental units possibly increases. The market for existing homes will soften and the option for many to build a new home may be eliminated.

More information on housing characteristics, as well as projections for Manitowoc County and all of its municipalities can be found in Chapter 6 of Volume II: Manitowoc County Resources.

**LAND USE INVENTORY**

The patterns of development within the city follow those established through the City of Two Rivers history. With the city’s development at the confluence of two major rivers and on the shores of Lake Michigan; residential, service, commercial, and industrial uses located to conveniently serve the population. Industry, relying on waterways for power and transport of goods and supplies, developed near the rivers. Commerce and social establishments formed at the center of the city. Residences that initially concentrated around the city center began to extend outward, filling vacant areas with uses compatible with the surroundings. Some of these patterns have endured over time, however, transportation and technology improvements may have in impact and future growth patterns.

A detailed field inventory of land uses in the City of Two Rivers was completed by the Bay-Lake Regional Planning Commission in 2008. A Standard Land Use Classification (Appendix F of Volume I: City Plan) was used to assist in the city’s land use collection process. Please see Chapter 10 of Volume II: Manitowoc County Resources for a description of the land use categories.

- A breakdown of the city’s existing 2008 land use and acreages is shown on Table 2.12 (Appendix G of Volume I: City Plan contains the city’s detailed land use calculations). Map 2.14 displays the 2008 City of Two Rivers land use inventory.
Table 2.12: 2008 Land Use Inventory

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Total (Acres)</th>
<th>Developed Land (Percent)</th>
<th>Total Land (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEVELOPED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>1,088.4</td>
<td>45.6</td>
<td>26.1</td>
</tr>
<tr>
<td>Single Family</td>
<td>1,015.0</td>
<td>42.5</td>
<td>24.3</td>
</tr>
<tr>
<td>Two-Family</td>
<td>29.2</td>
<td>1.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>38.8</td>
<td>1.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Group Quarters</td>
<td>4.7</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Mobile Homes</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Vacant Residential</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Commercial</td>
<td>116.5</td>
<td>4.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Industrial</td>
<td>201.9</td>
<td>8.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Transportation</td>
<td>573.6</td>
<td>24.0</td>
<td>13.8</td>
</tr>
<tr>
<td>Communications/Utilities</td>
<td>30.5</td>
<td>1.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Institutional/Governmental</td>
<td>195.2</td>
<td>8.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Recreational</td>
<td>182.7</td>
<td>7.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Agricultural Structures</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total Developed Acres</strong></td>
<td>2,389.2</td>
<td>100.0</td>
<td>57.3</td>
</tr>
<tr>
<td><strong>UNDEVELOPED</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croplands/Pasture</td>
<td>302.7</td>
<td>17.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Woodlands</td>
<td>587.1</td>
<td>33.0</td>
<td>14.1</td>
</tr>
<tr>
<td>Other Natural Areas</td>
<td>618.2</td>
<td>34.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Water Features</td>
<td>273.4</td>
<td>15.3</td>
<td>6.6</td>
</tr>
<tr>
<td><strong>Total Undeveloped Acres</strong></td>
<td>1,781.5</td>
<td>100.0</td>
<td>42.7</td>
</tr>
<tr>
<td><strong>Total Land Area</strong></td>
<td>4,170.7</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

COMMUNITY DEVELOPMENT GOALS AND ACTIONS

The City of Two Rivers Plan Commission and City Council will be responsible to implement the following goals which summarize the city's intent regarding growth, development, and preservation during the next 20 years:

RESIDENTIAL DEVELOPMENT GOALS

Promote investment in construction of new housing and the maintenance/upgrading of existing housing to meet existing and future community needs and provide an increased residential tax base.

BUSINESS, INDUSTRIAL, COMMERCIAL AND SERVICE SECTOR GOALS

Encourage business development and expansion that provides employment and entrepreneurial opportunities for residents, provides tax base for the support of municipal services, and provides goods and services that contribute to the community's quality of life.

CITY SERVICES AND INFRASTRUCTURE GOALS

Continue to provide high quality community services at reasonable costs through careful planning, construction and maintenance of the City's infrastructure and recreational facilities to serve the needs of all residents and businesses.

COMMUNITY QUALITY OF LIFE GOALS

Promote the City's natural and cultural features through continued development and expansion of recreational facilities and cultural/artistic events.

THE FOLLOWING COMMUNITY DEVELOPMENT ACTIONS ARE INTENDED TO IMPLEMENT THE ABOVE GOALS:

RESIDENTIAL DEVELOPMENT ACTIONS:

- Include a broad range of housing types appropriate for all segments of the population by amending the zoning ordinance to allow for mixed-unit types in larger projects.
- Expand residential development in a contiguous and efficient manner.
- Encourage new housing developments to incorporate natural and environmentally sensitive areas into design plans in an effort to provide for the preservation of open space and the construction of a variety of housing options.
- Work with area realtors, builders and developers to promote Two Rivers as a high quality “residential community of choice” for people working in or seeking retirement housing in northeast Wisconsin.
- Coordinate with surrounding communities when considering types, density and location of housing expansion.
- Promote existing and new retirement housing development.
- Promote existing and new seasonal housing development, including timeshares.
- Promote waterfront development.
- Continue to market Sandy Bay Highland Subdivision.
• Promote redevelopment along Memorial Drive.
• Promote transit oriented development.
• Continue to create safer and more convenient pedestrian connections.
• Promote reinvestment in existing housing.
• Develop and implement a strong property maintenance enforcement program.

BUSINESS, INDUSTRIAL, COMMERCIAL AND SERVICE SECTOR DEVELOPMENT ACTIONS:
• Work aggressively for the retention and expansion of existing businesses.
• Promote redevelopment and/or reuse of existing industrial buildings.
• Promote redevelopment in the downtown area.
• Continue to emphasize investment by retail and service businesses in the City's downtown area.
• Promote business use of the harbor and along the waterfront.
• Continue to promote development in the Woodland Industrial Park.
• Promote and enhance high-traffic arterial corridors that are vital for commercial redevelopment or revitalization.
• Create a new commercial and/or mixed-use zoning district for the corridors.
• Assist developers in coordination with WisDOT regarding the location and design of access driveways along the corridors.
• Pursue a viable balance of clean manufacturing, professional and personal service, hospitality, retail and institutional employment.
• Promote high quality appearance on redevelopment sites through well-designed buildings, exterior materials, landscaping and signage.
• Encourage site plans that include landscaped off-street parking areas.
• Promote site design flexibility through Planned Unit Development zoning.
• Promote new retail development, especially food/drink establishments.
• Promote hospitality and tourism structured to offer visitors enjoyable experiences while balancing the interests of local residents and other key sectors of the economy.
• Provide financial incentives to support redevelopment projects.
• Promote businesses that can benefit from the city’s potable water system.
• Strengthen collaboration between institutions of higher education and the local business community.
• Continue to promote economic development through active involvement in the Economic Development Corporation of Manitowoc County and NEW North.
• Promote nuclear energy along the lakeshore area.

CITY SERVICES AND INFRASTRUCTURE DEVELOPMENT ACTIONS:
• Continue to provide high quality city services at reasonable costs.
• Plan, construct and maintain public facilities, streets, utilities, parks and public buildings to efficiently serve the needs of current and future generations.
• Continue to evaluate the City buildings and facilities to identify and implement improvements to reduce energy consumption and storm water run-off.
• Continue to improve high-speed and reliable wireless broadband service throughout the City.
• Continue to evaluate and expand the use of local access video, cable and digital internet streaming video to broaden public access to public meetings.
• Strive to have all land area within the City limits be within the School District boundaries.
• Work with local schools to expand curriculum related to local governmental processes.
• Advocate the development of pedestrian trail connections within the community, especially to connect the Two Rivers High School campus to both north and east side residential neighborhoods.
• Continue efforts to obtain the Canadian National Railroad ROW for use in conjunction with redevelopment of adjacent sites and/or for trail use.
• Work with the U.S. Army Corps of Engineers, Coast Guard and other federal and state agencies to plan, fund and implement continued investment in the Two Rivers harbor infrastructure to maintain a viable commercial and recreational port on Lake Michigan.
• Complete feasibility studies in an effort to create a Two Rivers Harbor Master Plan.
• Aggressively pursue continued investment in the state highway infrastructure serving the City; promote continued upgrading of STH 310 as the City's link to I-43 and west to the Fox Valley.
• Work to obtain funding assistance for a second lake in-take and/or development of municipal wells as a back-up water source.

COMMUNITY QUALITY OF LIFE DEVELOPMENT ACTIONS:

• Encourage non-motorized connections, including sidewalks, bicycle paths and recreation trails, to serve all areas of the community offering safe, attractive and barrier-free connectivity that provides a realistic and environmentally sound alternative to private automobiles.
• Expand cultural and artistic amenities in the community.
• Creation of new or expansion of existing park space and recreational facilities.
• Encourage corporate sponsorships for recreational facilities.
• Promote recreational use of the waterways.
• Encourage energy conservation in the community.
• Encourage property owners and businesses to plant trees.
Location
City of Two Rivers
Manitowoc County, Wisconsin

Map 2.1

DISCLAIMER:
This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only. Bay-Lake RPC is not responsible for any inaccuracies herein contained.

Source:
Manitowoc County, 2008;
Q:\myfiles\manitowo\County\Comp2007\
City Planning Area
City of Two Rivers
Manitowoc County, Wisconsin

DISCLAIMER:
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and is not intended to be used as one. This drawing is
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reference purposes only. Bay-Lake RPC is not responsible
for any inaccuracies herein contained.

Source: WDNR, 2005; WisDOT, 2007, 2008;
Manitowoc County, 2005, 2008;
Q:\myfiles\manitowo\County\Comp2007\
Surface Water Features
City of Two Rivers
Manitowoc County, Wisconsin

1. West Twin River
2. East Twin River
3. Lake Michigan
4. Molash Creek

DISCLAIMER:
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Q:\myfiles\manitowo\County\Comp2007\
Historic and Cultural Sites
City of Two Rivers
Manitowoc County, Wisconsin

1. Bernard Schwartz House
2. Great Lakes Coast Guard Museum
3. Hamilton Woodtype and Printing Museum
4. J. E. Hamilton Community House
5. Post Office
6. Rawley Point Lighthouse
7. Rogers Street Fishing Village
8. Saint Luke's Church Complex
9. The Historic Washington House
10. Two Rivers History Museum

Base Map Features
- Community Boundary
- Interstate Highway
- U.S. Highway
- State Highway
- County Highway
- Local Road
- Railroad
- Surface Water

DISCLAIMER:
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Source: WDNR, 2005; WisDOT, 2007, 2008; WHS, 2009; for any inaccuracies herein contained.

Bay-Lake RPC, 2009; Manitowoc County, 2008; City of Two Rivers, 2009; Bay-Lake Regional Planning Commission, 2009.
Q:
myfiles\manitowo\County\Comp2007\Map 2.7
City of Two Rivers
Manitowoc County, Wisconsin

Road Categories
- Principal Arterial
- Minor Arterial
- Collector

Base Map Layers
- Community Boundary
- Interstate Highway
- U.S. Highway
- State Highway
- County Highway
- Local Road
- Railroad
- Surface Water

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City of Two Rivers
20-Year Comprehensive Plan

Volume I: City Plan

Map 2.11
Sanitary Sewer System & Sewer Service Area
City of Two Rivers
Manitowoc County, Wisconsin

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Source: WDNR, 2005; WisDOT, 2007, 2008; WHS, 2009; City of Two Rivers, 2009; Manitowoc County, 2008; Bay-Lake Regional Planning Commission, 2009.
Storm Sewer System
City of Two Rivers
Manitowoc County, Wisconsin

- Wastewater Treatment Plant
- Storm Sewer System

**Base Map Features**
- Community Boundary
- Interstate Highway
- U.S. Highway
- State Highway
- County Highway
- Local Road
- Railroad
- Surface Water

**DISCLAIMER:**
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Source: WDNR, 2005; WisDOT, 2007, 2008; WHS, 2009; City of Two Rivers, 2009; Manitowoc County, 2008; Bay-Lake Regional Planning Commission, 2009; QGIS/manitowoc/County/Comp2009/
2008 Land Use Inventory
City of Two Rivers
Manitowoc County, Wisconsin

RESIDENTIAL
MUNDAN
CITY OF MANITOWOC
TOWN OF TWO RIVERS
TOWN OF MANITOWOC
TOWN OF MANITOWOC

Base Map Features
- Community Boundary
- Interstate Highway
- U.S. Highway
- State Highway
- County Highway
- Local Road
- Railroad
- Surface Water

DISCLAIMER:
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Source: WDNR, 2005; WisDOT, 2007, 2008; Manitowoc County, 2008; City of Two Rivers, 2009; Bay-Lake Regional Planning Commission, 2009.
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INTRODUCTION

This portion of the *City of Two Rivers 20-Year Comprehensive Plan* highlights the city’s future land use plan, known as the 20-Year Land Use Plan. The 20-Year Land Use Plan builds upon the city’s existing land use issues to establish a planning strategy and map which will guide the location and density of future development in the City of Two Rivers over the next 20 years.

PLANNING CRITERIA

Planning criteria are developed in order to give the community a sense in which to base their land use recommendations. The criteria used by the city when developing the 20-Year Land Use Plan were based upon values identified by the State of Wisconsin, existing trends, along with citizen responses from the community survey and meetings that were conducted with the city.

**State Planning Criteria**

The following State criteria are based upon Smart Growth criteria encouraged within community plans:

- Promotion of the redevelopment of lands with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial and industrial structures.
- Encouragement of neighborhood designs that support a range of transportation choices.
- Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources.
- Protection of economically productive areas, including farmland and forests.
- Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low municipal, state governmental and utility costs.
- Preservation of cultural, historic and archaeological sites.
- Encouragement of coordination and cooperation among nearby units of government.
- Building of community identity by revitalizing main streets and enforcing design standards.
- Providing an adequate supply of affordable housing for individuals of all income levels throughout each community.
- Providing adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial and industrial uses.
- Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities at the state, regional and local levels.
- Balancing individual property rights with community interests and goals.
- Planning and development of land uses that create or preserve varied and unique urban and rural communities.
• Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit–dependent and disabled citizens.

LAND USE TRENDS AND FORECASTS

Existing Land Use Issues and Conflicts

• Declining and aging population.
• Vacant and/or unsightly areas and facilities within the city’s established residential neighborhoods and commercial sites.
• Downtown needs to be revived.
• Preservation and enhancement of lands adjacent to the East and West Twin Rivers and Lake Michigan.
• Need better non-motorized / pedestrian transportation linkages, especially for access to high school facilities.
• The city will review its zoning ordinance to correct inconsistencies with the future land use plan.
• Continued cooperation with the surrounding Town of Two Rivers regarding development patterns near municipal boundaries.

Anticipated Land Use Trends

• Natural features will continue to be maintained, preserving the environmental assets, recreational areas and cultural features of the City of Two Rivers.
• Focus on multi-purpose commercial activity (e.g. small retail, professional services, general purpose shopping, etc).
• Redevelopment and revitalization of blighted areas.
• Redevelopment of waterfront sites.
• An increased demand in services and special needs housing as the population age increases.
• Increased presence of subdivisions in the city’s extraterritorial area.
• The city continues to work with the surrounding Town of Two Rivers and City of Manitowoc to conduct cooperative planning efforts, ensuring efficient and cost-effective development patterns and lessening potential conflict.

Development / Redevelopment Consideration

• Continue to aggressively pursue redevelopment of blighted properties within the community. Such redevelopment maintains the fabric of the traditional community, makes efficient use of public infrastructure and service delivery, and helps maintain property values.
• Promote more retail development in the downtown area.
• Priority redevelopment sites in the City of Two Rivers include:
  o Eggers Industries Waterfront Site on the East Twin River
  o West Twin River Brownfields
  o Former Paragon Facility/Site
  o Lakeshore Express Site on Memorial Drive/Lakefront
  o Hansen Florist Site
  o Former Concrete Batch Plant site along 12th Street between Adams and Monroe Streets
  o Abandoned Railroad Corridor that runs parallel to Memorial Drive/STH 42 along the Lake Michigan shoreline
  o East Side of West Twin River, Downtown (Burrows and Freis Sites)
  o Wilson Street Site along the East Twin River between 28th and 29th Streets
  o Site along the East Twin River bounded by Wilson Street, 26th Street and 27th Street
  o Seagull Marina and adjacent City-owned lands
  o Stop-N-Doc/Grummans Sites

Redevelopment efforts at these priority redevelopment sites should emphasize private, taxable development, encouraged through the use of innovative zoning approaches (Planned Unit Development (PUD), Planned Development District (PDD), and conservation subdivisions) and appropriate economic incentives (including tax incremental financing and various State and Federal grants).

• Waterfront sites present some of the greatest redevelopment opportunities in city. Reference the City’s Waterfront Land Use Plan, adopted in November 1999, when considering waterfront development.

• Commercial redevelopment should be encouraged along high-traffic arterial corridors (see identified areas under the Transportation category of the Recommended Development Strategy later in this chapter).

• Encourage residential development in the Sandy Bay Highlands subdivision, along STH 42/Lincoln Avenue (near the Two Rivers High School), and along STH 147 and CTH VV, between the rivers.

• The city should closely monitor all public utility costs and supporting services associated with future development.

• Continue to work cooperatively with surrounding towns and City of Manitowoc to provide quality, cost-effective services.

• Utilize natural areas and cultural sites in the city for potential recreational uses and uses that are more productive from an economic standpoint, while maintaining their natural beauty and function.

• Business and residential sites that are beyond repair should be redeveloped in a way that maintains the overall downtown character, including scale, styles, etc.

• With trends leaning toward larger lot sizes and country living, buildable land within the city’s three (3) mile planning area should be monitored to analyze the trends occurring in
the surrounding Town of Two Rivers. This will help ensure orderly development patterns as the city grows.

- The price of developable lands may vary depending on the surrounding land uses, location, access, services, along with other subjective factors. Land prices in the city will continue to fluctuate as the market continues to change.

## DESIGN YEAR LAND USE PROJECTIONS

### Five Year Incremental Land Use Projections

Wisconsin Statutes require comprehensive plans to include land use projections in five-year increments for future residential, commercial, industrial, and agricultural uses in the community over the 20-year planning period. The City of Two Rivers future land use projections can be viewed in Table 3.1.

### Residential Projections

The potential amount of land needed to accommodate the city’s future residential development was projected utilizing the following data:

- the city’s forecasted housing needs based on the Wisconsin Department of Administration (WDOA) projection (see Table 2.10), and

- an average lot size of 1/3 acre per dwelling unit.

*Note:* The projections are for single family homes and do not account for multiple family and apartment complexes which have greater residential densities.

### Commercial Projections

The ratio of residential acreage to commercial acreage, based on the city’s 2008 land use inventory, was utilized to project possible land needed for future commercial growth in the City of Two Rivers.

### Industrial Projections

Industrial growth was projected in the same manner as the commercial land. The city utilized its 2008 land use inventory to determine the ratio of residential acreage to industrial acreage in order to calculate possible industrial lands needed by the city over the next 20 years.

Table 3.1 illustrates the potential amount of acreage needed for future development within the City of Two Rivers through 2030 based on the WDOA projection for occupied housing units. It is important to note that according to the WDOA housing projection between 2000 and 2030, the city is envisioned to have a housing growth of 248 units.
Table 3.1: Five-Year Incremental Land Use Projections, 2005 - 2030

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<th>Year</th>
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<th>Residential Total</th>
<th>Commercial Acres</th>
<th>Commercial Total</th>
<th>Industrial Acres</th>
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</tr>
</tbody>
</table>


**NOTE:**

- it is not the intent of the plan to see an entire area within a classification to develop, rather the specified uses shall be allowed if consistent with the type, location, and density of the development;
- some of the lands would hinder development based on the nature of the area;
- within residential growth areas, lands must be allocated for future roads, recreation areas, etc. In most standard residential development, these additional factors generally account for approximately 25 percent of the gross land area.

**Agricultural Projections**

Several agricultural lands exist within the Two Rivers city limits with the majority found in the three (3) mile extraterritorial planning area. In an effort to preserve the prime farmland in the surrounding area, future development is recommended to locate near existing growth where adequate facilities and services may be available. As a result, the consumption of the prime agricultural lands in the city’s surrounding planning area is likely to be minimal over the next 20 years.

**20-YEAR LAND USE PLAN**

The city’s 20-Year Land Use Plan was developed based on the information contained in:

1. Background data and projections detailed in Chapter 2 (Issues and Opportunities) of this document;
2. Goals, objectives, and policies found in Chapter 2 (Issues and Opportunities);
3. The City's Waterfront Land Use Plan from 1999; and
4. Results from the 2008 Community Survey, Nominal Group exercise, Economic Strengths, Weaknesses, Opportunities, Threats (S.W.O.T.) workshop, Open Houses, and other public input received during the planning process.

The data contained in the abovementioned sections of the plan were major components in both the development of the 20-Year Land Use Plan Map (Map 3.1) and the following Recommended Development Strategy for the city’s 20-year planning period.
Recommended Development Strategy

This section of the plan details the suggested development strategy for the city’s 20-year planning period as illustrated on Map 3.1. The recommended development areas identified on Map 3.1 extend into the city’s three-mile extraterritorial area, while primarily staying within the Manitowoc-Two Rivers Sewer Service Area (SSA) boundary (Map 2.11) which would make public sewer extensions available to new growth. These suggested growth sites were also established through a joint planning effort between the City of Two Rivers and the Town of Two Rivers. The land use classifications listed below provide information on type, location, and density of future development in the city over the next 20 years.

- Residential
  - Low-Density Single Family
  - Medium-Density Single Family
  - Mixed Residential
- Mixed Use
- Commercial and Service Business
- Industrial
- Governmental/Institutional/Utilities
- Transportation
- Parks and Open Space
- Woodlands/Natural Areas
- Environmental Corridors

Residential

This classification focuses future residential growth adjacent to existing dense developments. It allows for a variety of residential types and densities within the City where the infrastructure can support additional traffic, utilities are accessible, and natural areas are not compromised. Overall this classification promotes orderly and efficient growth patterns.

Recommendations:

- Existing residential neighborhoods (i.e., Existing Urban Development on Map 3.1) found throughout the City will remain during the 20-year planning period with the possibility of infill developments and rehabilitation or redevelopment of existing structures or areas whenever possible.
- Promote adaptive reuse of structures. Consider restoring vacant structures for more beneficial uses (i.e., vacant school or warehouse converted to senior housing, affordable housing, professional offices, etc.).
- Single-family dwellings will be the primary development in the following designated categories within the City's planning area as illustrated on Map 3.1:
  - Low-Density Single Family growth is recommended north and northeast of the City. These areas maintain concentrated growth with larger lot sizes and promote orderly development patterns that are consistent with the existing residential growth while providing a good transition from the urban density of the City to the rural landscape of the surrounding Township. Each development in this classification will be reviewed on a case-by-case basis to limit any inconsistencies or negative impacts to the surrounding environment.
  - Medium-Density Single Family growth is recommended immediately northwest of the City along with several east side locations (Map 3.1). The developments
would allow for concentrated single family dwelling on lot sizes smaller than that of the low-density category, but not matching the high density growth of the City's long established neighborhoods. This promotes orderly growth that is consistent with surrounding existing/proposed single family residential development. The extension of City-owned gravity sewer main along STH 147 in 2007, as part of a regional wastewater initiative with the Village of Mishicot, further strengthens the development potential of this area.

- The **Mixed Residential** category is recommended for lands that are adjacent to STH 42, directly south of the Two Rivers High School. This classification allows for a variety of residential types and densities (i.e., one, two, and multi-family dwellings) where the infrastructure can support the additional traffic, and utilities and public serves are available. This area would also provide for orderly and efficient growth for the City and promote growth near the school facilities. New residential development types should conform to surrounding uses since conflicting sizes and uses may detract from existing properties. Duplexes and single family dwellings could share the same neighborhood. This is done through careful planning and design resulting in higher densities without any noticeable change in the neighborhood character.

- Redevelopment efforts should emphasize the use of innovative zoning approaches (PUD, PDD and Conservation Subdivisions).

- The City-owned Sandy Bay Highlands Subdivision and adjacent properties provide opportunities for new housing in close proximity to the urbanized areas of the City, the high school, existing utility systems and trail systems.

- Promote new housing development in areas contiguous to the City along STH 42 near the high school; along STH 147 north of 45th Street; and along CTH VV west of STH 147, to utilize existing utility infrastructure that has been extended to those areas.

- Encourage residential development along STH 42/Lincoln Avenue. This area is already served by municipal utilities, installed in conjunction with the high school project. Scattered wetlands and drainage ways in the area make it ideal for development using conservation subdivision designs.

- Some of the City's greatest redevelopment opportunities are waterfront sites. Where redevelopment of such sites occurs, the City must strive to incorporate public access to and along the water as a key consideration in assisting such development. In addition, the City's *Waterfront Land Use Plan*, adopted in November 1999, shall also be referenced when waterfront development is considered. Smart Growth Areas 9 and 10 illustrated on Map 3.1 and described in Appendix H are sites recommended for future waterfront high-density waterfront residential growth.

- Future residential development shall be sensitive to natural features within the City and its extraterritorial area. Environmentally sensitive land in areas of new residential development should be preserved to the greatest extent practicable through the use of unique development alternatives such as conservation designs or clustering. These development options will also preserve the wildlife habitat and promote these lands for recreational uses.
• Continue to cooperate in planning activities with the surrounding Townships and the City of Manitowoc for designated residential areas in an effort to achieve consistency and limit conflicts. A cooperative boundary agreement is encouraged in order to ensure each community's cooperation regarding future development and provision of services.

• Evaluate existing Development Agreements to consider modifications that would facilitate and promote additional residential development, including modifying improvement standards to create more cost-effective developments.

Mixed Use
Identifies land allocated in the western portion of the City as a mix of future business and residential uses. These allocated lands are within the Manitowoc-Two Rivers Sewer Service Area (SSA) which would make utilities accessible. In addition, STH 310 could support the additional traffic, provide access and offer quality exposure for future businesses.

Recommendations:
• Promote commercial, professional offices and service businesses in this area.
• Encourage the mix of new businesses which limit conflicts with residential growth. Hours of operation, lighting, increased traffic and buffers are several issues to be considered.
• Business developments should detail frontage roads, driveway access and design, future building sites and building appearance, as well as sign design.
• SGAs 1, 2, 3, 4, 5 and 8 illustrated on Map 3.1 are redevelopment sites recommended for future mixed-use development. Refer to Appendix H for details.

Commercial and Service Business
The majority of this category is illustrated on Map 3.1 in the City's downtown area (Washington Street). This area is the focal point of the City since much of its historic character and existing commercial uses and professional services are locate here. In order to eliminate blighted areas and ensure future economic stability, the City should advocate for revitalization and redevelopment in portions of the downtown area.

The Commercial and Service Business category also identifies several developments along the STH 42, 310 and 147 corridors, which take into consideration the needs of the highway traveler along with the various commercial needs of the community. These highway developments provide for good accessibility and are highly visible from the major roadway.

Recommendations:
• Direct and encourage commercial businesses, tourist related and service oriented uses to the downtown area to retain and maintain the Central Business District.
• Emphasize redevelopment along the East Twin and West Twin River corridors adjacent to the Central Business District.
• Offer a diverse range of sites for commercial development. These sites could include: infill or expansion of existing buildings, preserved and restored historic structures,
building replaced with new structures which conform to the area, or waterfront commercial developments.

- Develop a vision for the future downtown through effective planning and marketing strategies, Community Development Block Grants, or other enhancement programs to improve economic viability.

- Continue to support the Main Street Program in their efforts to promote the design and identity of the downtown through enhancements such as refurbishing and preserving buildings and landmarks with architectural or historical significance to their original appearance, establishing design standards for storefronts, attractive landscaping, decorative lighting, signage, street furniture, etc. while maintaining a pedestrian friendly downtown.

- SGA 6 on Map 3.1 is recommended for redevelopment into office, commercial or service business use. See Appendix H for details.

- Promote and enhance high-traffic arterial corridors that are vital for commercial redevelopment or revitalization. Such corridors include Memorial Drive (STH 42), 22nd Street (STH 310 and STH 42), Lincoln Avenue (STH 42), Forest Avenue/Mishicot Road (STH 147) and Madison Street between Memorial Drive and the West Twin River.
  - Actively pursue uses that will maximize tax base and create new jobs.
  - Actively promote commercial and office developers to consider locating in the corridors.
  - Encourage rezoning for commercial or mixed-use development in appropriate locations.
  - Where appropriate, consolidate smaller lots into larger, more useful redevelopment sites.
  - Promote high quality appearance on redevelopment sites through well-designed buildings, quality exterior materials and attractive landscaping and signage.
  - Encourage site plans that locate and landscape off-street parking areas to reduce their visual impact.
  - Promote site design flexibility through Planned Unit Development (PUD) zoning where applicable.
  - Create a new commercial or mixed-use zoning district for the corridors, if necessary.
  - Provide financial incentives to support desirable redevelopment projects.
  - Assist developers in coordination with WisDOT regarding the location and design of access driveways along corridors.
  - Apply code enforcement to deteriorating properties to enhance their appearances.

- Enhance the City’s major entryways (STH 42 and STH 310) to promote the City’s identity. STH 42 and STH 310 are the City's major “doorways”. As a result continue improvements to these areas will further market the City's character.

- Review the design of the future establishments through building scale and appearance to ensure that its major transportation corridors are not cluttered and distracting.
• Commercial signage will continue to be controlled. Rather than allowing signs to control the City's appearance, the City should review and possible strengthen its sign controls given the ever-improving sign technology.

• Whenever possible, encourage new businesses to utilize vacant structures, rather than constructing new facilities.

**Industrial**

The intent is to support the continued operations of existing industrial uses during the 20-year planning period. The City envisions additional industries which reflect the character of the City and will not impact the surrounding land or its uses.

**Recommendations:**

• Existing industrial sites are expected to remain, with additional developments envisioned near areas of current industry. The industrial sites should be managed in such a way that enhances the aesthetics of the City.

• Work to retain existing manufacturing business by facilitating expansion and modernization.
  
  o Maintain an inventory of available development sites at City industrial parks to accommodate any relocation or expansion of existing manufacturers.

• Support and promote development of additional nuclear power generating facilities.

• Support and promote development of wind energy facilities and wind-related manufacturing and servicing activities.

• Encourage development of new “clean energy” (e.g., solar) production facilities in the community and region.

• New industries are encouraged to utilize vacated structures whenever possible, or utilize the available space in the industrial parks. The City should have discussions with potential industries regarding the possible use of existing vacant structures, rather than constructing new industrial facilities.

• It is important for the City to assist in the design, maintenance, and enhancement of industrial sites within the City.

• Redevelopment of existing industrial sites. Conduct an assessment and cleanup of environmentally contaminated sites in the City and utilize the areas for more productive uses.

• Consider the feasibility of a “small town technology incubator” for tech-related business start-ups.

• Encourage major investment in new production facilities to replace outdated facilities. Aggressively seek State and Federal resources to assist with development of such new facilities.

• Promote development of new manufacturing and service businesses in the Woodland Industrial Park. Pursue discussions with the City of Manitowoc about promoting the Woodland Drive corridor as a venue for businesses tapping new market for “green”
technology, building on the presence of Orion Energy Systems as a high-profile “green” company located in this area. Consider joint options with Manitowoc for improving the infrastructure in this area, and for possible tax base sharing from new development.

- Industrial developments near residential uses are encouraged to incorporate buffers to lessen conflicts and maintain the character of the adjacent neighborhoods.
- Industries within the City should be sensitive to the environment.

Tourism

Promote tourism development that emphasizes area resources, creates economic opportunities and enhances quality of life for residents.

Recommendations:

- Continue and expand promotion of Neshotah Beach as a regional attraction.
- Work with Point Beach State Forest and Woodland Dunes to promote increased “eco-tourism” activities.
- Continue to expand and promote area recreational trails as a tourism attraction.
- Pursue DNR permits for expanded Lake Michigan beach grooming at Neshotah Park and along Memorial Drive.
- Pursue enhanced public access to the North and South Piers with links to area recreational trails.
- Work with various community groups to continue and expand local festivals and special events, focusing such activities in the Central Business District and in the Neshotah Park/Walsh Field complex.
- Explore the feasibility of new private campground facilities as well as the update and modernizing of existing facilities to increase area campground “carrying capacity” during the summer and fall seasons.
- Evaluate the feasibility of adding new and expanding existing tourist lodging facilities, including hotel/motel, high quality seasonal vacation rentals, and timeshares.
- Continue active participation in regional tourism efforts through the Manitowoc Area Visitor and Convention Bureau and WI Department of Tourism.
- Pursue funding for development of safe, convenient facilities for short-term transient dockage for Lake Michigan boaters.
- SGA 11 illustrated on Map 3.1 is recommended for redevelopment into mixed-use waterfront development. See Appendix H for details.
Governmental/Institutional/Utilities

This classification recognizes existing governmental/institutional facilities and utilities within and adjacent to the City.

Recommendations:

- Continue to monitor services provided to City residents and businesses. As development pressures grow the City will continue to monitor the capacities of the existing utilities and services (e.g., fire, emergency, water supply, waste disposal, etc.) to ensure that the services provided are effective and efficient. Utilize the 2008 Community Survey (Appendix B) as a measure of resident satisfaction for existing services.
- Maintain safe accessibility, functionality and visual appearance of the existing governmental/institutional facilities.
- Continue to explore options for more cost effective and efficient service delivery.
- Promote the benefits of the city’s potable water system.
- Become an integral partner of the long-range plans for the Two Rivers School District. Be informed on future projects such as new facilities, improvements to existing structures, efficient and safe routes to school facilities and other district decisions that may have a direct impact on future City planning.
- Explore clean, renewable, and sustainable energy options where feasible. Discuss any possible impacts or inconsistencies to the community’s landscape.
- Continue to apply for grants and other aids to assist with providing needed services and infrastructure.
- Review the existing agreement with Two Rivers Public School District related to the deferred assessment policies for payment of public infrastructure to determine its affect on development.
- Review the City’s Special Assessment Policies to assure that they promote community expansion and development.
- The City Plan Commission and City Council must closely monitor the capacities of the infrastructure and community services that accommodate new development and weigh the future costs to benefits.

Transportation

Map 3.1 identifies the existing street network, proposed streets and recommendations for safety and improved traffic movement in the City.

Recommendations:

- Encourage both pedestrian and vehicular movement throughout the downtown area.
- Maintain the sidewalks throughout the City to help ensure efficient and safe pedestrian movement.
• Continue to utilize the Pavement Surface Evaluation and Rating (PASER) system. The information derived from the PASER survey is used to assess the overall condition of road pavements and to determine the City's road maintenance, restoration and construction needs.

• Update the City's “Official Map” to delineate future road extensions. The Official Map should be consulted when the City Plan Commission and City Council reviews development requests to ensure that all new developments conform to the Official Map. The 20-Year Land Use Plan (Map 3.1) illustrates proposed street within the City and surrounding area. However, the precise location of the proposed streets on Map 3.1 will be determined when lands are platted and after engineering analysis.

• Ensure that minimum transportation standards and public safety interests are met for new developments. This is especially important along the major roadways (STH 42, 310, and 147) which should be highlighted using streetscape and building placement guidelines, etc.

• Continue to pursue widening of STH 310 to four lanes between Two Rivers and I-43. The City needs to continue working regionally with the City of Manitowoc and Manitowoc County to pursue such an upgrade to this vital highway connection to I-43 and west to the Fox Valley.

• Continue to advocate upgrading of Highway 10 as a four lane highway from I-43 to the Fox Valley. The upgrading of the east-west highway connections is vital to the efficient movement of people and goods between the Lakeshore and Fox Cities, and thus important to future economic development in the City.

• Continue to pursue the re-routing of STH 310. One possibly is via Columbus Street and Memorial Drive. The Columbus Street route provides a street that can be easily upgraded to four (4) lanes and provides a cost-effective alternate route. Another option envisions a future road connection from Hawthorne Avenue (STH 310) to 22nd Street with a bridge spanning the West Twin River.

• Secure a commitment from WisDOT to rebuild STH 42 north of 35th Street as an “urban cross section”. Reconstruction of this highway segment with curb, gutter and storm sewer facilities will allow for development of pedestrian facilities (recreational trails or sidewalks) within the right-of-way.

• Explore traffic calming techniques at busy intersections.

• Explore alternative designs for the intersection of Columbus Street and Memorial Drive. Possible improvements to this intersection should also factor the Mariner’s Trail into the design.

• Continue cooperative efforts with the Maritime Metro Transit System (MMT).

• Create a Multi-Modal Trail Master Plan for bike/pedestrian trails.

• Expand existing bike/pedestrian trail system with new trail connections. The existing lakefront trail system consists of Mariner’s Trail between Manitowoc and Two Rivers and Rawley Point Trail between Two Rivers and Point Beach State Forest. Additional trails should be developed as follows:
o Improved downtown area connection between the Mariner’s and Rawley Point trails.
o The City should pursue an off-street connecting trail between Washington Street bridge and the 17th Street bridge, utilizing a waterfront route through Harbor Park and along the river frontage owned by Thermo Fisher south of 17th Street.

- Advocate for developing pedestrian trail access to facilities of Two Rivers High School via routes that include and east-west route from the City's north side (paralleling CTH VV) and a north-south route from the City's east side (paralleling STH 42).
- SGA 7 illustrated on Map 3.1 envisions acquiring the abandoned railroad corridor for trail and redevelopment uses.
- Optimize the use of existing transportation facilities as needed.

**Parks and Open Space**

Promote existing recreational facilities, trails, parks and open spaces within the community. In addition, ensure that existing and future neighborhoods in the City are served with adequate park facilities, ranging from passive to active recreation.

**Recommendations:**

- Review recommendations in the Manitowoc County Park and Open Space Plan. Utilize the plan for maintenance/updating suggestions and creation of new or expansion of existing recreational facilities.
- Continue upgrading facilities to meet the needs of citizens with special needs along with providing opportunities for all ages of the population. Ensure that the recreational facilities are properly maintained and are compliant with the Americans with Disabilities Act (ADA) safety regulations.
- Monitor residential developments in order to determine the need for additional recreational facilities in new developments.
- Advocate for the development of non-motorized, pedestrian trail connections within the community to improve public safety, promote community fitness, conserve fossil fuels and reduce carbon emissions.
- Cooperation in planning future park and recreational facilities. It is recommended that the City cooperate with the City of Manitowoc, Manitowoc County and surrounding towns to promote connectivity of recreational uses.
- Reference the City’s *Waterfront Land Use Plan*, adopted in November 1999, when waterfront development is considered. The waterfront plan illustrates possible land uses and areas for preservation and maintenance that will enhance the overall appearance of the waterfront properties. Types and locations of future developments along with design standards, public access, landscaping and lighting should be taken into consideration.
- Explore possible funding resources for park upgrades or future recreation development. The City should seek public and private donations for funding
recreational facilities. The City is encouraged to contact agencies (e.g., WDNR, Coastal Management, Bay-Lake RPC, etc.) and apply for grant funding to further enhance the quality of the City's beaches and other recreational resources.

- Develop a large new park on the north side. The proposed park may be at the city’s former landfill site or at other appropriate north side locations.
- Continue to promote the City’s marine-related facilities and the recreation/sport activities associated with Lake Michigan.

Environmental Corridors

Many natural features enhance the appearance of the City, are unsuitable for development, and have characteristics critical to the environmental enhancement, ecological stability and water quality of the area.

Environmental corridors are represented by four elements including: (1) 100-year floodplains as defined by the Federal Emergency Management Agency (FEMA), (2) DNR wetlands, (3) steep slopes of 12 percent or greater, and (4) a water setback for buildings from all navigable waterways. These elements provide limitations to development and are generally regulated by either the federal, state or local government unit. Together, these elements represent the portions of the City and surrounding area that are most sensitive to development. The corridors are an overlay to the 20-Year Land Use Plan (Map 3.1) and should be utilized as a reference.

Recommendations:

- Protect environmental corridors as much as possible or have them sensitively designed within development which will help minimize the negative effects on water resources, wildlife habitats and the overall character of the City.
- Utilize unique development options such as conservation designs or clustering.

IDENTIFIED SMART GROWTH AREAS

According to s. 16.965, Wis. Stats., a “smart growth area” is “an area that will enable the development and redevelopment of lands within existing infrastructure and municipal, state and utility services, where practicable, or that will encourage efficient development patterns that are both contiguous to existing development and at densities which have relatively low utility and municipal and state governmental costs.”

The City of Two Rivers contains 11 Smart Growth Areas (SGA) that are illustrated on the 20-Year Land Use Plan Map (Map 3.1) and described in Appendix H of Volume I: City Plan.

20-Year Land Use Plan Map Summary

Table 3.2 contains a summary of land uses, along with their approximate acreage totals, which have been designated on the City of Two Rivers 20-Year Land Use Plan Map (Map 3.1). It is important to note that the 20-Year Land Use Plan acres are by general location and not by individual land uses.
### Table 3.2: 20-Year Land Use Plan Acreage Calculations

<table>
<thead>
<tr>
<th>20-Year Land Use Plan Category</th>
<th>2030 Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Urban Development (Residential)</td>
<td>1,193</td>
</tr>
<tr>
<td>Low Density Single Family Residential</td>
<td>707</td>
</tr>
<tr>
<td>Medium Density Single Family Residential</td>
<td>276</td>
</tr>
<tr>
<td>Mixed Residential (One, Two, &amp; Multi-Family)</td>
<td>139</td>
</tr>
<tr>
<td>Mixed Use (Residential, Commercial, Office, &amp; Service Business)</td>
<td>396</td>
</tr>
<tr>
<td>Commercial &amp; Service Business</td>
<td>184</td>
</tr>
<tr>
<td>Industrial</td>
<td>685</td>
</tr>
<tr>
<td>Governmental/Institutional/Utilities</td>
<td>276</td>
</tr>
<tr>
<td>Transportation</td>
<td>601</td>
</tr>
<tr>
<td>Park and Open Space</td>
<td>331</td>
</tr>
<tr>
<td>Agriculture</td>
<td>68</td>
</tr>
<tr>
<td>Woodlands/Natural Areas</td>
<td>723</td>
</tr>
<tr>
<td>Water Features</td>
<td>290</td>
</tr>
<tr>
<td>Totals</td>
<td>5,871</td>
</tr>
</tbody>
</table>

1. The colors and shapes of the areas shown on this map represent recommended land uses. Implementing these uses will require approval of annexation of lands, if necessary, and approval of appropriate zoning prior to platting and/or development. See Chapter 3 of the Comprehensive Plan report for detailed recommendations on the land use areas shown on this map.

2. Refer to Waterfront Land Use Plan for land uses along the East Twin River and West Twin River.

3. The precise location of proposed streets to be determined when lands are platted and after engineering ana-

4. See Appendix H of Comprehensive Plan report for description of Smart Growth Areas.

5. DISCLAIMER:
This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only. Bay-Lake RPC is not responsible for any inaccuracies herein contained.

6. SOURCE:
WDNR, 2005; Manitowoc County, 2007, 2008; Town of Two Rivers, 2009; City of Two Rivers, 2009; Bay-Lake Regional Planning Commission, 2009.
Q:\MyFiles\MANITOWOC\County\Comp2007\CTwoRivers
# CHAPTER 4: IMPLEMENTATION

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<td><strong>IMPLEMENTATION WORK PLAN</strong></td>
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<td>Stakeholders</td>
<td>4-7</td>
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<td>4-7</td>
</tr>
</tbody>
</table>
CHAPTER 4 - IMPLEMENTATION

INTRODUCTION

This chapter discusses intergovernmental cooperation with the city’s surrounding jurisdictions and other government entities while outlining a variety of actions and activities necessary to implement the development strategies and vision of the City of Two Rivers 20-Year Comprehensive Plan.

In an effort to keep this plan up-to-date with the changing conditions, this section also includes a process for updating/amending the comprehensive plan, along with a mechanism to measure the city’s progress of accomplishing its development goals.

RESPONSIBILITIES OF LOCAL OFFICIALS

The City Plan Commission has the primary responsibility to implement the comprehensive plan. Plan Commission members, along with elected officials, need to be familiar with the future development strategies, vision statement, and maps found within the plan since they provide much of the rationale the city needs in making land use decisions or recommendations. If a decision needs to be made that is inconsistent with the comprehensive plan, the plan must be amended to reflect this change in policy before it can take effect.

The Plan Commission needs to ensure that supporting ordinances are consistent with the comprehensive plan per Wisconsin Statute 66.1001 (3). The city will consult the comprehensive plan when working with other government entities to develop/amend land use ordinances or create additional land use recommendations.

INTERGOVERNMENTAL COOPERATION

This portion of the chapter examines the City of Two Rivers working relationship with the City of Manitowoc, surrounding towns of Two Rivers and Manitowoc, Two Rivers Public Schools, Manitowoc County, Regional Planning Commission, and state and federal government. An inventory of formal intergovernmental agreements, shared resources and consolidated services is also discussed.

This chapter also stresses the importance of the city working cooperatively with neighboring jurisdictions by identifying existing or potential conflicts, communicating visions, and coordinating plans, policies, and programs. These joint efforts assist the city in resolving issues of mutual interest and promoting consistency between plans.

Existing Intergovernmental Activities

Adjacent Governmental Units

The City of Two Rivers shares its borders with the City of Manitowoc and the towns of Two Rivers and Manitowoc. The city’s planning area also extends three (3) miles beyond its municipal boundary into the surrounding towns (Map 2.3 of Volume I: City Plan).

Two Rivers relationship with the City of Manitowoc is best described as constructive. Other than Two Rivers working with the City of Manitowoc on some tourism related activities, both cities tend to operate independently.

Two Rivers relationship with the surrounding towns has been positive. In an effort to maintain strong relations during the planning process, the city held several cooperative planning meetings
with the Town of Two Rivers to identify future land use within the city’s planning area. However, with the power to annex lands; boundary disputes may be possible between the city and the towns.

Several public services are located in the City of Two Rivers and serve the surrounding communities.

- A postal facility, along with public parks and recreation facilities are utilized by residents of the surrounding rural areas. The Two Rivers Public School District provides quality education to students in the surrounding towns. Residents also have access to the Aurora Medical Center for their health care needs.

**School District**

The City of Two Rivers is located within the Two Rivers Public School District along with the Lakeshore Technical College (LTC) District. The city’s relationship with the districts is considered good. The city and its residents can provide input on school activities, future development projects, etc.

**County**

The city enforces its own zoning and other ordinances. Therefore, Manitowoc County has little jurisdiction within the city. However, the county has jurisdiction in the city’s planning area, which extends into the towns of Two Rivers and Manitowoc. The county implements shoreland/floodplain zoning, land divisions, etc. in these unincorporated areas.

The city and Manitowoc County continue to maintain a good relationship with each other fostering general agreements and mutual respect.

**Region**

The City of Two Rivers is a member of the Bay-Lake Regional Planning Commission (BLRPC) that covers the northeast region of the State of Wisconsin. The BLRPC’s annual work program activities include economic development, natural resources, transportation and community planning. Through a positive working relationship, the BLRPC has conducted several work program activities and developed various local plans, reports, and studies that relate directly to planning within the City of Two Rivers.

**State**

The city’s relationship with the State of Wisconsin is one which deals mainly with issues related to transportation (WisDOT), natural resources (WDNR), and shared revenue.

**Inventory of Plans and Agreements Under S. 66.0301, S. 66.0307 or S. 66.0309**

**Cooperative Boundary Plan**

State Statutes 66.0301 and 66.0307 allow municipalities to enter into agreements regarding the location of municipal boundaries. The Cooperative Boundary Plan is any combination of cities, villages, and towns that may determine the boundary lines between themselves under a cooperative plan approved by the Wisconsin Department of Administration (WDOA). The cooperative plan must be made with the general purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory covered by the plan which will, in accordance with existing and future needs, best promote public health, safety, morals, order, convenience, prosperity or general welfare. Cooperative boundary plans cover at least a
10-year period. Additionally, Cooperative boundary agreements are a tool that could also be used for service sharing between local units of government.

Presently, the City of Two Rivers has not entered into a cooperative boundary plan with any municipality.

**Extraterritorial Subdivision regulation**
State Statutes allow an incorporated village or city to extend Extraterritorial Plat Review over surrounding unincorporated areas. This helps cities or villages protect land uses near their boundaries from conflicting uses outside their limits.

The extraterritorial area for the city extends three (3) miles beyond its corporate boundary into the towns of Two Rivers and Manitowoc.

**Extraterritorial Zoning**
State Statutes allow an incorporated village or city to extend extraterritorial zoning over surrounding unincorporated areas. The extraterritorial area for the City of Two Rivers extends three (3) miles beyond its city limits into the surrounding towns of Two Rivers and Manitowoc. However, Extraterritorial zoning requires a joint effort between the city and town(s) to develop a plan for an area to be zoned. The extraterritorial zoning is then established according to the developed plan.

Currently, extraterritorial zoning is not being administered by the City of Two Rivers.

**Inventory of Existing or Potential Conflicts**
An Intergovernmental Cooperation Workshop was conducted in April 2009 for communities located in the northeast region of Manitowoc County. Representatives from each of the communities within the planning cluster were invited to attend the workshop, along with neighboring municipalities, school districts, civic and recreational clubs, Manitowoc County staff, Wisconsin Department of Natural Resources, Wisconsin Department of Transportation, and other entities and departments that have an interest in or direct impact on, the implementation of the area’s comprehensive plans.

The workshop collected input on any existing or potential conflicts and positive relationships between the communities and their surrounding government jurisdictions. Participants were also asked to provide potential resolutions to the identified issues or concerns. The items applicable to the City of Two Rivers were addressed during the comprehensive plan development process or incorporated into the implementation portion of the comprehensive plan. The list of issues and conflicts, and resolutions from the Lakeshore Cluster Intergovernmental Cooperation Workshop are displayed in Appendix E of *Volume I: City Plan*.

**IMPLEMENTATION OF LOCAL LAND USE CONTROLS**

**Zoning**

**City of Two Rivers Zoning Ordinance**
Section 10-1 Code of Ordinances, City of Two Rivers, Wisconsin, entitled *Zoning Code* regulates and restricts the locations, construction and use of buildings, structures, and the use of land in the city. The purpose of the ordinance is to promote the health, safety, morals, comfort, prosperity and general welfare of the City. General zoning utilizes a system of districts
designated for different uses based on land suitability, infrastructure, avoidance of conflict with nearby uses, economic factors, protection of environmental features, and other local factors.

Refer to the City of Two Rivers Zoning Code for detailed information on zoning districts, regulations, restrictions, permitted uses, and zoning maps.

- The comprehensive plan’s preferred land uses need to be compared to the zoning districts to determine compatibility and realignment within various districts. The City Plan Commission and City Council will need to judge when re-zoning should occur, for it is not the intent of the zoning map to immediately become a direct reflection of the comprehensive plan’s 20-Year Land Use Plan Map (Map 3.1). The comprehensive plan is a vision for the future while zoning represents current use.

**Official Mapping**

Under §62.23(6), the City “…may by ordinance or resolution adopt an official map showing the streets, highways, parkways, parks and playgrounds laid out, adopted and established by law.” Once an area is identified on an official map, no building permit may be issued for that site, unless the map is amended.

The official map serves several important functions:

1. It helps assure that when the city acquires lands for streets, or other uses, it will be at a lower vacant land price;
2. It establishes future streets that subdividers must adhere to unless the map is amended; and,
3. It makes potential buyers of land aware that land has been designated for public use.

- The City of Two Rivers Official Map is established in Section 10-1-4 Code of Ordinances, City of Two Rivers, Wisconsin. The city is encouraged to update its official map in order to make it consistent with the existing development patterns and the city’s comprehensive plan. This will help ensure new streets provide connectivity for future development.

**Floodplain Ordinance**

Section 10-2 Code of Ordinances, City of Two Rivers, Wisconsin, entitled *Floodplain Protection and Control* addresses the problems associated with development in floodplain areas.

Section 10-2-30 Code of Ordinances, City of Two Rivers, Wisconsin, entitled *Shoreland-Wetland Zoning* regulates all wetlands in the municipality which are five (5) acres or more and are shown on the city’s final Wetland Inventory Map and which are:

- Within one thousand (1,000) feet of the ordinary high-water mark of navigable lakes, ponds or flowage, and
- Within three hundred (300) feet of the ordinary high-water mark of navigable rivers or streams, or to the landward side of the floodplain, whichever distance is greater.

Refer to the Two Rivers Municipal Code for more information on these regulations.
**Land Division / Subdivision Ordinance**

Section 12-1 Code of Ordinances, City of Two Rivers, Wisconsin, entitled *Subdivision and Platting* addresses the division of land within the city’s boundary.

A land division/subdivision ordinance, as authorized by s. 236, Wis. Stats., regulates the division of raw land into lots for the purpose of sale or building development. The city may regulate, by ordinance, the division of land within its boundary. The land division/subdivision ordinance is related to the general zoning ordinance as it regulates the type of development that takes place on a parcel and the land division/subdivision ordinance regulates how the parcel is created and made ready for development.

- It is recommended that city review and update, as necessary, its subdivision ordinance to regulate how lots are developed and arranged within specific areas.

**Other Ordinances and Regulations**

Other tools to implement the comprehensive plan may include the development/support of additional city controls or regulations such as:

- Building and Electric Codes
- Blighted Building Ordinance
- Landscape Ordinances
- Design Review Ordinances
- Erosion and Stormwater Control Ordinances
- Historic Preservation Ordinances

**COMPREHENSIVE PLAN INTERNAL CONSISTENCY**

The comprehensive plan elements and their respective development strategies should maintain consistency to ensure land use decisions are based on current conditions. In an effort to keep the plan’s uniformity, the city’s Plan Commission and elected officials should conduct periodic reviews of the city’s vision statement and development strategies, along with the 20-Year Land Use Plan text and mapping.

If the City of Two Rivers administers any ordinances or regulations listed under s.66.1001, Wis. Stats., those ordinances need to be reviewed for consistency with the *City of Two Rivers 20-Year Comprehensive Plan*.

**UPDATING AND AMENDING THE COMPREHENSIVE PLAN**

This comprehensive plan shall be updated/amended following s. 66.1001 (4)(b) and the city’s adopted written procedures for fostering public participation (Appendix A of *Volume I: City Plan*). It is recommended that the city’s comprehensive plan be reviewed/updated by the City Plan Commission based on the following schedule:

- **Annually**
  - Review the vision statement and future development strategies;
  - Identify updates to the Wisconsin Department of Administration (WDOA) population and housing estimates, and U.S. Census data;
  - Review implementation priorities and relevance of the development strategies;
  - Update any changes to 20-Year Land Use Plan text or map;
CHAPTER 4 - IMPLEMENTATION

- Ensure consistency with new or revised City of Two Rivers ordinances.

  **Five Years**
  - Review U.S. Census data, WDOA population and housing projections – work with Manitowoc County to update *Volume II: Manitowoc County Resources* as needed;
  - Identify substantial changes over the past five years and any potential impacts to the community in the near future. This helps monitor outcomes of implemented development strategies and identifies any possible needs for the 10-year update;
  - Be aware of updates or completion of other local, county, or regional plans.

  **Ten Years** - required comprehensive plan update per Wisconsin Statute 66.1001(2)(i). Amend the plan as needed based on changing conditions.
  - Conduct a review of the city’s vision statement, 20-Year Land Use Plan development strategies and map, land use recommendations, work with Manitowoc County to update the city’s population, housing, and economic data, along with other relevant planning information inventoried in *Volume II: Manitowoc County Resources*.
  - Review ordinances and other controls for consistency.

IMPLEMENTATION WORK PLAN

City officials should establish a general process and timetable for addressing the development strategies that will ultimately lead to implementing the *City of Two Rivers 20-Year Comprehensive Plan*. Steps to address the development strategies could include the following:

1. To ensure the comprehensive plan remains current, review of the plan should be a standing agenda item for at least two (2) Plan Commission meetings and a minimum of one (1) City Council meeting per year. The review of the comprehensive plan should also include assessment of the land use control tools (e.g., ordinances and regulations) previously listed in this chapter.

2. The Plan Commission and City Council should identify priority policies and programs that need to be addressed within the first 12-24 months. These priority strategies will lead to the implementation of additional policies and programs in subsequent years.

3. City officials should identify key stakeholders and collaborators to assist in the implementation of the development strategies. A list of some of those entities is provided at the end of this chapter.

4. The City of Two Rivers has various tools available, including financial and technical resources, to implementation the community development strategies for housing, economic development, and transportation over the 20-year planning period.

5. The implementation schedule should be evaluated and revised on an annual basis. City officials will need to monitor the Community Inventory and Demographic Trends and Forecasts highlighted in Chapter 2 of *Volume I: City Plan* to ensure the development strategies address the changing conditions of the City of Two Rivers.
Stakeholders
City of Manitowoc
Town of Two Rivers
Town of Manitowoc
Manitowoc County
Manitowoc County Highway Commission
Manitowoc/Two Rivers Chamber of Commerce
Manitowoc County Planning and Parks Commission
Two Rivers Public School District
Bay-Lake Regional Planning Commission
Wisconsin Department of Commerce
Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
Lakeshore Community Action Program
New North
Wisconsin Housing and Economic Development Authority (WHEDA)
Wisconsin Department of Administration
Federal Emergency Management Agency (FEMA)
United States Department of Agriculture, Natural Resources Conservation Service
Environmental Protection Agency (EPA)

Priorities
1. Review and update as needed the city’s zoning standards to address the land use designations detailed on the City of Two Rivers 20-Year Land Use Plan map.

2. Continue to maintain the city website to include contact lists and other pertinent information regarding living in the community and public services available in the City of Two Rivers.

3. Work with the surrounding townships and City of Manitowoc to explore opportunities for streamlining like services.

4. Review and revise, where necessary, development plans previously adopted by the city to ensure consistency with the development goals of this comprehensive plan (e.g., Waterfront Land Use Plan). Consider conducting additional detailed plans or studies (e.g., Comprehensive Park and Recreation Plan) that would assist with the implementation of this comprehensive plan.
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Introduction
The City of Two Rivers planning process is designed to engage stakeholders and facilitate community involvement. Passive and active means of participation outlined in this plan will provide guidance while promoting stakeholders to express ideas, opinions, and expertise throughout the planning process, resulting in a locally supported City of Two Rivers Comprehensive Plan.

The Wisconsin “Smart Growth” or “Comprehensive Planning” statute requires public participation throughout the planning process. Section 66.1001(4)(a) of the Wisconsin State Statutes states:

“The governing body of a local government unit shall adopt written procedures that are designed to foster public participation, including open discussion, communication programs, information services and public meetings for which advance notice has been provided, in every stage of preparation of a comprehensive plan. The written procedures shall provide for wide distribution of proposed, alternative or amended elements of a comprehensive plan and shall provide an opportunity for written comments on the plan to be submitted by members of the public to the governing body and for the governing body to respond to such written comments. The written procedures shall describe the methods the governing body of a local governmental unit will use to distribute proposed, alternative, or amended elements of a comprehensive plan to owners of property, or to persons who have a leasehold interest in property pursuant to which the persons may extract nonmetallic mineral resources in or on property, in which the allowable use or intensity of use of the property is changed by the comprehensive plan.”

The City of Two Rivers recognizes the need for continuous public involvement throughout the planning process in accord with Section 66.1001(4)(a) and hereby adopts these written public participation procedures. These adopted procedures will provide the City of Two Rivers the framework to maximize public involvement in preparing or amending the Comprehensive Plan.

Posting/Notification of all Plan Commission Meetings
Public notification for Plan Commission meetings will be posted at the following locations:

- Two Rivers City Hall
- Other location specific to the community

Two Rivers City Council and Plan Commission members will regularly check these sites to see that posted notifications are replaced if removed. These notifications will be posted during the entire Comprehensive Planning process until the adoption of a comprehensive plan.
Meetings
The City of Two Rivers Plan Commission will participate in periodic public informational hearings/input sessions held at the cluster and local level during the planning process.

In addition, the City Council will conduct a public hearing as required by Chapter 66.1001(4)(d). This hearing will be held upon the completion of the Comprehensive Plan and prior to the Two Rivers City Council voting to adopt the Comprehensive Plan. A notice of the hearing must be published at least 30 days prior to the hearing to meet the requirements for proper notification regarding date, time and location.

Planning Clusters
All meetings conducted by Manitowoc County, UW-Extension, or Bay-Lake Regional Planning Commission staff will be open to the public and posted similar to Plan Commission meetings.

Open Houses
A minimum of one (1) “Open House” shall be held during the development of the comprehensive plan in order to present information regarding the Comprehensive Plan to obtain public comment. The open house will be held near the end of the planning process to present the plan prior to the required public hearing. The open house will provide the public with an opportunity to review and comment on work that has been accomplished by the Plan Commission and the planning team.

Notices
The City of Two Rivers Plan Commission will prepare and post notices of meetings in the local newspaper and notice the meeting within the City of Two Rivers.

Public Comments
Wisconsin’s open records law will be complied with during the preparation or amendment of the Comprehensive Plan. A copy of the draft plan will be kept on file at the Two Rivers City Hall and will be available for public inspection during normal office hours. The public is encouraged to submit written comments on the plan or any amendments of the plan. Written comments should be addressed to the City of Two Rivers Clerk who will record the transmittal and forward copies of the comments to the Two Rivers City Council for consideration.

The Two Rivers City Council and the Plan Commission always welcome written comments regarding issues presented. Direct written responses will be made where response is appropriate.

Distribution of the Adopted Plan
In accordance with State Statute (66.1001(4)), Procedures for Adopting Comprehensive Plans, one copy of the adopted plan or amendment shall be sent to the following:

- Every governmental body that is located in whole or in part within the boundaries of the local governmental unit.
- Every local governmental unit that is adjacent to the local governmental unit which is the subject of the plan.
- The Wisconsin Department of Administration
- The Bay-Lake Regional Planning Commission
• The public library that serves the City of Two Rivers.

Adoption of Comprehensive Plan by Two Rivers City Council
After adoption of a resolution by the City Plan Commission, the Two Rivers City Council will adopt the Comprehensive Plan by ordinance after holding at least one public hearing at which the ordinance relating to the Comprehensive Plan is discussed. A majority vote of the members-elect is necessary for adoption. That hearing will be preceded by a Class 1 notice under Ch. 985 that is published at least 30 days before the hearing is held. The Class 1 notice shall contain at least the following information:
• The date, time, and place of the hearing
• A summary, which may include a map, of the proposed Comprehensive Plan
• The name of an individual employed by the City of Two Rivers who may provide additional information regarding the proposed ordinance.
• Information relating to where and when the proposed Comprehensive Plan may be inspected before the hearing, and how a copy of the plan may be obtained.

Upon the day of publication of the public hearing notice, copies of the plan will be made available for public review at the nearest local library of the city and at the Two Rivers City Hall. Written comments on the plan from members of the public will be accepted by the Two Rivers City Council at any time prior to the hearing and at the public hearing.

Additional Steps for Public Participation
In addition to public participation measures described in this plan, the City of Two Rivers will utilize further means of obtaining public participation as adopted by Manitowoc County in the Manitowoc County Public Participation Plan. The City of Two Rivers reserves the right to execute additional steps, means, or methods in order to gain additional public participation and or additional understanding of the Comprehensive Plan and the process of its development and adoption. These optional steps may include ideas or means not identified in this or the County’s public participation plans.

State Statutes
Where there is a conflict with these written procedures and provisions of s. 66.1001(4), procedures for Adopting a Comprehensive Plan, the state statutes shall apply.

Amendments
The Two Rivers City Council may amend these procedures from time to time.
Like Most About Two Rivers

Q1a. What do you like most about the City of Two Rivers?

This was an open response and the respondents mentioned many varied responses.

To see the complete listing of responses, please contact or visit the Two Rivers City Hall.
Dislike Most About Two Rivers

Q1b. What do you dislike most about the City of Two Rivers?

This was an open response and the respondents mentioned many varied responses.

To see the complete listing of responses, please contact or visit the Two Rivers City Hall.
Q2. Which of the following would be the most effective means of informing you about local issues?

- Local Newspaper: 67%
- City Newsletter: 60%
- Local Radio: 39%
- Expanded Coverage in Local Media: 29%
- Cable TV (Channel 19): 27%
- City Website: 20%

Total Responses: 100%
Local Government Services Ratings

Q3. On a scale from A to F, like a school grading scale, with “A” being Excellent, how would you rate the following local government services? (5=A to 1=F)

<table>
<thead>
<tr>
<th>Service</th>
<th>Mean Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library</td>
<td>4.4</td>
</tr>
<tr>
<td>Ambulance</td>
<td>4.4</td>
</tr>
<tr>
<td>Fire</td>
<td>4.4</td>
</tr>
<tr>
<td>Garbage Collection</td>
<td>4.3</td>
</tr>
<tr>
<td>Recycling Program</td>
<td>4.3</td>
</tr>
<tr>
<td>Park Facilities</td>
<td>4.2</td>
</tr>
<tr>
<td>Police</td>
<td>4.2</td>
</tr>
<tr>
<td>City Hall Customer Service</td>
<td>4.2</td>
</tr>
<tr>
<td>Recreation Programs</td>
<td>4.0</td>
</tr>
<tr>
<td>Electric</td>
<td>4.0</td>
</tr>
<tr>
<td>Water</td>
<td>3.9</td>
</tr>
<tr>
<td>Snow Removal</td>
<td>3.7</td>
</tr>
<tr>
<td>Street Maintenance</td>
<td>3.7</td>
</tr>
<tr>
<td>Public Transit</td>
<td>3.7</td>
</tr>
</tbody>
</table>
Comments About Local Government Services

Q3a. Please add any comments for any of the above services you rated as "C, D, or F".

This was an open response and the respondents mentioned many varied responses.

To see the complete listing of responses, please contact or visit the Two Rivers City Hall.
## Priority Rating of City Initiatives

**Q4. What do you believe to be the priority for each of the following possible City initiatives?**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>More actively control, by ordinance, the appearance and design of new structures and development</td>
<td>28.3%</td>
<td>54.7%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Actively plan and promote redevelopment of riverfront and lakefront areas</td>
<td>16.9%</td>
<td>33.0%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Implement tougher regulations on junk vehicles</td>
<td>22.5%</td>
<td>36.3%</td>
<td>41.2%</td>
</tr>
<tr>
<td>Promote more retail development in the downtown area</td>
<td>7.7%</td>
<td>19.5%</td>
<td>72.6%</td>
</tr>
<tr>
<td>Promote more business development in outlying business areas</td>
<td>14.3%</td>
<td>30.4%</td>
<td>55.3%</td>
</tr>
<tr>
<td>Encourage more single-family housing</td>
<td>25.4%</td>
<td>49.3%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Encourage more multi-family housing</td>
<td>54.3%</td>
<td>38.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Encourage more senior citizen housing</td>
<td>34.8%</td>
<td>47.8%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Continue to enhance the appearance and development along Memorial Drive as a gateway to our community</td>
<td>17.6%</td>
<td>38.4%</td>
<td>44.0%</td>
</tr>
<tr>
<td>Expand WI-FI service area beyond its current downtown limits</td>
<td>37.4%</td>
<td>47.9%</td>
<td>14.6%</td>
</tr>
</tbody>
</table>

- top 3 priorities are highlighted
Support Investing Tax Dollars

Q5. Do you support the city investing tax dollars or forgoing new tax revenues (as in Tax Incremental Funding Districts) to develop more jobs in the city?

- Yes: 54%
- Not Sure: 33%
- No: 13%
## Priority Rating of Economic Development Initiatives

**Q5. How would you rate the priority of the following possible economic development initiatives?**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Low</th>
<th>Average</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting more manufacturing jobs and businesses</td>
<td>9.4%</td>
<td>19.6%</td>
<td>71.0%</td>
</tr>
<tr>
<td>Promoting more non-manufacturing jobs and businesses</td>
<td>14.9%</td>
<td>41.2%</td>
<td>43.9%</td>
</tr>
<tr>
<td>Retaining local retirees</td>
<td>20.2%</td>
<td>52.9%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Attracting retirees to reside in the city</td>
<td>30.5%</td>
<td>45.1%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Promoting development of wind energy facilities</td>
<td>23.1%</td>
<td>29.4%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Promoting development of additional nuclear generating facilities</td>
<td>32.1%</td>
<td>32.3%</td>
<td>35.6%</td>
</tr>
<tr>
<td>Promoting development of a destination resort on Lake Michigan</td>
<td>31.2%</td>
<td>32.4%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Promoting development of a casino</td>
<td>71.2%</td>
<td>12.8%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

➢ top 3 priorities are highlighted
### Ranking of Top Three to Succeed

**Q5. Regarding the possible economic development initiatives, which would you rank as the top three most likely to succeed?**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Percent Ranked in Top Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting more manufacturing jobs and businesses</td>
<td>69.8%</td>
</tr>
<tr>
<td>Promoting more non-manufacturing jobs and businesses</td>
<td>49.8%</td>
</tr>
<tr>
<td>Promoting development of wind energy facilities</td>
<td>41.9%</td>
</tr>
<tr>
<td>Promoting development of a destination resort on Lake Michigan</td>
<td>33.9%</td>
</tr>
<tr>
<td>Retaining local retirees</td>
<td>30.2%</td>
</tr>
<tr>
<td>Promoting development of additional nuclear generating facilities</td>
<td>23.3%</td>
</tr>
<tr>
<td>Attracting retirees to reside in the city</td>
<td>22.0%</td>
</tr>
<tr>
<td>Promoting development of a casino</td>
<td>15.0%</td>
</tr>
</tbody>
</table>
Business/Retail Stores Like To See Recruited

Q5. Name up to three types of businesses or retail stores that you would like to see recruited to Two River's downtown business district (businesses or stores that you would patronize).

This was an open response and the respondents mentioned many varied responses.

To see the complete listing of responses, please contact or visit the Two Rivers City Hall.
Where Live in the City/Type of Home

Q6. Where do you live in the city? (see map)

- Central: 17%
- East: 23%
- North: 40%
- South: 19%
- DK/NA: 1%

Q7. Do you live in a...

- Owner Occupied House, Condo, Apartment: 87%
- Rental Apartment: 8%
- Rental House: 3%
- Other: 2%
- DK/NA: 0%
Respondent's Age/Place of Employment

Q8. What is your age?

- Under 21: 0%
- 21-30: 4%
- 31-40: 8%
- 41-50: 15%
- 51-60: 23%
- 60+: 51%
- DK/NA/Ref: 0%

Q9. Is your current place of employment located in the city of Two Rivers?

- Yes: 24%
- No: 30%
- Retired: 44%
- Unemployed: 3%
Manitowoc County Lakeshore Planning Cluster

Nominal Group Results

October 30, 2007

Flip Chart Rankings/Results

<table>
<thead>
<tr>
<th>Votes</th>
<th>Group 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Develop high-tech jobs in area to keep youth around</td>
</tr>
<tr>
<td>6</td>
<td>Develop high density/high tax base along waterfronts</td>
</tr>
<tr>
<td>5</td>
<td>Preservation of farmland</td>
</tr>
<tr>
<td>5</td>
<td>Maintain, retain existing jobs and create new jobs</td>
</tr>
<tr>
<td>4</td>
<td>Remediate major brownfields</td>
</tr>
<tr>
<td>4</td>
<td>Conversion of ag. land into non-productive uses – land trusts</td>
</tr>
<tr>
<td>3</td>
<td>Combining public services – need more</td>
</tr>
<tr>
<td>2</td>
<td>Evaluate the economic impact of merging Manitowoc and Two Rivers</td>
</tr>
<tr>
<td>2</td>
<td>Development of I-43 Cty JJ for commercial growth</td>
</tr>
<tr>
<td>2</td>
<td>County expo. needs to be relocated to rural area to make room for more development</td>
</tr>
<tr>
<td>2</td>
<td>Return downtown traffic corridors to 2-way traffic</td>
</tr>
<tr>
<td>2</td>
<td>Cleaner air and water should be major concern</td>
</tr>
<tr>
<td>1</td>
<td>Commercial/expansion should be pre-planned institutional</td>
</tr>
<tr>
<td>1</td>
<td>Home ownership affordability</td>
</tr>
<tr>
<td>1</td>
<td>Clean up waterways – make more affective</td>
</tr>
<tr>
<td>1</td>
<td>More development that makes fuel out of garbage</td>
</tr>
<tr>
<td>1</td>
<td>Large scale ag. should be integrated with residential green space and transportation corridors</td>
</tr>
<tr>
<td>1</td>
<td>Restructure tax base statutes – distribution not based on population, but on industry</td>
</tr>
<tr>
<td>1</td>
<td>Assist an expanding energy infrastructure generation and transmission</td>
</tr>
<tr>
<td>1</td>
<td>Promote safe harbor development along Lake Michigan</td>
</tr>
<tr>
<td></td>
<td>Aging labor market needs to be addressed to sustain future business growth and development</td>
</tr>
<tr>
<td></td>
<td>Preserve public views and access to Lake Michigan</td>
</tr>
<tr>
<td></td>
<td>Greater housing density in new subdivisions</td>
</tr>
<tr>
<td></td>
<td>Retain migrant workers – valuable asset to farmers</td>
</tr>
<tr>
<td></td>
<td>Development of economic incubators for business start-ups – encourage business innovation</td>
</tr>
<tr>
<td></td>
<td>Improve opportunities for higher education</td>
</tr>
<tr>
<td></td>
<td>Extending wastewater treatment systems</td>
</tr>
<tr>
<td></td>
<td>Defeat NR115</td>
</tr>
<tr>
<td></td>
<td>Encourage adaptive resuse of old buildings and upper floors of commercial properties</td>
</tr>
<tr>
<td></td>
<td>Encourage friendly industries to locate in communities</td>
</tr>
</tbody>
</table>
### Group 2

<table>
<thead>
<tr>
<th>Votes</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Promote dev. (e.g. economic, industrial – large communities, commercial in small communities, etc.)</td>
</tr>
<tr>
<td>5</td>
<td>Retain urban center and rural character</td>
</tr>
<tr>
<td>5</td>
<td>Maintain rivers and lakefront</td>
</tr>
<tr>
<td>4</td>
<td>Protect water resources in basin</td>
</tr>
<tr>
<td>3</td>
<td>Limit CRP on natural areas</td>
</tr>
<tr>
<td>3</td>
<td>Right to farm</td>
</tr>
<tr>
<td>2</td>
<td>Maintain status quo on growth</td>
</tr>
<tr>
<td>2</td>
<td>Maintain agriculture land</td>
</tr>
<tr>
<td>2</td>
<td>Prevent contamination of surface and groundwater</td>
</tr>
<tr>
<td>2</td>
<td>Concerns of mega farm</td>
</tr>
<tr>
<td>2</td>
<td>Provide community facilities and services</td>
</tr>
<tr>
<td>1</td>
<td>Maintain identity of town</td>
</tr>
<tr>
<td>1</td>
<td>System to handle sewer and water</td>
</tr>
<tr>
<td>1</td>
<td>Promote cluster housing development</td>
</tr>
<tr>
<td>1</td>
<td>Improve industrial base</td>
</tr>
<tr>
<td>1</td>
<td>Sustainability energy sources</td>
</tr>
<tr>
<td>1</td>
<td>Standardize school/education in county</td>
</tr>
<tr>
<td>1</td>
<td>Encourage highest and best dev. uses of interstate (interchanges)</td>
</tr>
<tr>
<td>1</td>
<td>Upgrade Hwy 10 east/west corridor</td>
</tr>
<tr>
<td>1</td>
<td>Promote cleanup of rivers (ex. East Twin River Creeks)</td>
</tr>
<tr>
<td>1</td>
<td>Promote area’s high quality of life</td>
</tr>
<tr>
<td>1</td>
<td>Strengthen traditional downtown business districts (eg. Two Rivers/Manitowoc)</td>
</tr>
<tr>
<td></td>
<td>Promote green energy</td>
</tr>
<tr>
<td></td>
<td>Prevent the decline of older neighborhoods (eg. Two Rivers, Manitowoc)</td>
</tr>
<tr>
<td></td>
<td>Expand recreational facilities (eg. trails, interconnected)</td>
</tr>
<tr>
<td></td>
<td>Affordable housing for low income and elderly near available resources</td>
</tr>
<tr>
<td></td>
<td>Retain/attract workers and baby boomers</td>
</tr>
</tbody>
</table>
Total Worksheet Responses

- Identify areas of Lake Michigan shoreline appropriate for development/areas for preservation
- Need more residential opportunities downtown
- Remediate/develop brownfields: 1512 Washington Street (Mirror); Peninsula north of 10th St. Bridge
- Establish municipal wind ordinance/policies
- Need more “white collar” businesses
- Develop metropolitan plan for providing services
- Return downtown traffic corridors to two-way traffic
- Assure work ready/skilled workforce for employers
- Grow while continuing small town/city environment
- Find funding solutions for provision of municipal service
- I-43/JJ (Waldo) develop commercial
- Rural development-cluster developments
- Employment opportunities
- Roads-maintenance development
- Character of the area to attract new residents
- Affordability of housing
- Home ownership affordability
- Municipal utility ownership
- Quality of education
- Availability of recreation land
- Government understanding its importance (or role) to attract new residents and businesses
- Need job creation (new jobs)
- Retain existing jobs
- Maintain community attractiveness to retain young people
- Lakeshore beach areas preserved
- Jobs – new and old
- Waterways cleaner and more attractive
- Downtown interests need better organizing to set directions for future
- Take better advantage of I-43 as economic engine. Control the growth.
- Development of downtown vacant lands
- Encourage riverfront revitalization along with enhanced pedestrian access
- Continue to provide government financial support for economic development projects
- Overcome market “size” shortfalls to enhance community business mix
- Energize Manitowoc County as an economic development player instead of side line occupant
- Aging labor market needs to be addressed to sustain future business growth and development
- Manitowoc and Two Rivers need to continue to strengthen economic bonds as they are major economic drivers in county
- A culture to encourage business innovation needs to be developed
- Sensitive “water” development
• Energy concerns-modify development codes to permit examination of alternative energy (i.e. wind farms)
• County Expo needs to be relocated into rural area to make room for more retail development
• Magnolia Avenue needs to be installed to open up more areas for development north of Waldo Blvd.
• Continue to work to grow manufacturing along with jobs featuring living wages
• Encourage adaptive re-use of older buildings and upper floors of commercial properties
• Tax equity arrangement needs to be created to stabilize Manty and Two Rivers economic development activities on a more neutral basis
• Business mix of community needs to be more diversified
• Calumet Ave. and Washington Street need beautification
• Continue to grow Manitowoc Public Utilities. A huge asset.
• Restructure tax sharing statutes based on assessed value (industry) rather than population
• Control land use based on zoning (limit zoning changes)
• Preserve lakeshore structure and use
• Control industrial and commercial development based on land use plan and zoning
• Ensure maintenance of public roads
• Ensure high traffic intersections are lighted
• Housing development must follow zoning and land use
• Promote parks and recreation with adjacent property in mind
• Promote safe harbor development along Lake Michigan shoreline
• Preserve agricultural use of land as zoned
• Promote public wastewater treatment extensions where appropriate to preserve groundwater and surface water
• Preserve wetlands for wildlife habitat
• Preserve lakeshore by controlling invasive species
• Monitor land use and residential development
• Traffic flow around the cities of Manitowoc and Two Rivers
• Elimination of Stormwater retention law(s)
• Development of economic incubators for business startups
• Elimination of duplicate services
• Combining of public health and safety agencies – i.e. combined police and fire services for Manitowoc & Two Rivers; combined municipal services – light, water, etc.
• Downtown redevelopment in Manitowoc
• Plan for the “meeting” of city and agricultural uses
• Complete Mariners Trail to Silver Creek Park
• Should Manitowoc and Two Rivers be merged into one community?
• What positive steps can be taken to maintain air quality?
• Will encouraging river homestead development improve the downtown and if so how can it be encouraged?
• Local performing arts groups and activities should be encouraged to make our community more attractive
• Industrial park reduces the feeling of community and requires transportation by vehicle, how can we encourage industry to locate in local areas where workers can walk to work?
• High end restaurants are needed for business entertaining
• More connected bike paths would encourage a healthier lifestyle
• Parking requirements reduce the ability for industries to locate in existing neighborhoods
• RR property at 10th Street Bridge hinders development of other property in the surrounding area
• Woodland Dunes should be protected and enhanced, made part of the communities park type use
• Preserve agricultural spaces
• Preserve Lake Michigan shoreline public spaces
• Re-invent downtown Manitowoc to remain vital instead of declining imp.
• Continue development of industrial park
• Preserve park and recreation space
• Preserve historic areas
• Develop museums to educate and capitalize on rich history of area
• Continue investment in road system – prevent., maint. area vs. reconstruct
• Develop housing and assisted living facilities/communities/services for aging population
• Develop commercial/entertainment for youth
• Develop interconnected trail system for peds separate from vehicles
• Re-develop brownfields
• Affordable housing
• Some commercial development in the northern party of city and town – I43/JJ
• Maintain county parks by using community development (involvement)
• Preserve some strong areas of agriculture
• Work closely with utilities to expand and protect environment
• Preserve (safe) groundwater
• Preserve shoreline from erosion and overdevelopment
• Improve outer limits of downtown Manitowoc around 15th & Wash.
• Promote local retail on city/county website
• Maintain historic areas present and future
• Preserve inland lakes by working closely with DNR
• Have local colleges help in community projects – use these resources
• Use community churches to maintain parks and trails
• Large scale agricultural operations need to be accommodated/integrated with other growth aspects such as residential development and “green space” acquisitions
• Public services need to be considered as residential development outside incorporated area continue
• Rural nature of much of the county should be preserved
• Educational opportunities need to at least continue, better to improve them
• Extraterritorial considerations and impacts of/on communities
• More farm land
• Make fuel out of garbage
• Make the lakes better for fishing
• Expand residential housing opportunities and tax base – single family, waterfront, multifamily, condos/conversion of “other” buildings to housing
• Stop NR115 expanded stormwater permitting
• Expand commercial that services locals and possibly act as a regional retail cluster
• Assist in business expansion and start up of industry
• Provide adequate financing for existing infrastructure (bridges, highways). Upgrade Hwy 310
• Assist developers in providing all types of housing prices and needs
• Expand population of workforce for Manitowoc County businesses
• Delve into an up and coming business cluster like energy (wind, nuclear)
• Assist in expanding the energy “infrastructure” Generation and Transmission
• Local municipalities provide “things to do” for youth through elderly
• Catalog, develop and market significant historic attributes of Manitowoc County
• Map out areas where existing ag is strong and expand on it (dairy to cheese feed lots?)
• Wiser road layouts to maximize number of homes in subdivisions
• Prioritize environmental issues for sake of future generations
• Revamp entire bus system (big buses with few riders)
• Take action as a community (communities) to preserve Lake Michigan. Prevent sewage dumping by large cities
• Ag.-Preserve the prime ag. land for farming.
• Resd. and housing – Keep housing in cluster areas. Do not drop 1 house in middle of 40
• Commercial and Ind. – build along state and cty highways
• Trans. – keep roads in good shape and right away clean
• Population – Growth – keep in housing cluster and within the extraterritorial area of the village
• Utilities – ensure room for growth of utility to supply constant power
• Community facility – provide new town meeting hall for larger meetings and rental to groups
• Park and recreation – Provide areas to local river for fishing, canoeing, and other rec. sports. Also provide access to Ice Age Trail
• Historic – At this time we need to keep the cemeteries up
• (Limit) growth here with support. Town cost – not
• Industrial posturing - no more
• Rural areas - maintain existing
• Right to farm – maintain existing
• But limit on farm size
• No wind mills
• Maintain status quo
• Being able to maintain a town identity (stop absorption of city annexing)
• Being identified as agriculture being the main business
• Providing natural areas – green space – park, etc.
• Preserving marshes/wetlands/woods/forests
• Providing designated areas and/or identifying such for residential growth in the community
• Residential growth in-to some outlying areas is feasible because of the particular topography of the land, (more suited to building than for productive ag. usage, hill, field size, etc.)
• Determine an industrial are – and areas for small businesses
• To much unorganized development (residential). Industrial – need to preserve farmland, too much is lost already due to too much land going into CRP or natural areas. Transportation
system in area is more than adequate. Too much wildlife some do to urbanization and also too many natural areas. Ex: CRP Woodland Dunes.

- Keep development of residential areas in existing residential areas
- Promote tourism on Lake Michigan
- Preserve existing natural resource areas
- Clean pollution in Silver Creek (clean garbage out of creek)
- Keep manufacturing expansion in existing manufacturing areas
- Promote alternate energy utilization
- Build more single family homes (limit apartment and duplex development)
- Take steps to prevent groundwater and surface water contamination
- Provide local incentives for energy consumption reductions (residential and commercial)
- Improve road maintenance
- Our lakeshore should be enhanced
- Declining housing sales industry
- Redevelop river corridors
- Retain urban/rural dichotomy; avoid sprawl
- Preserve public access to rivers and Lake Michigan
- Diversify employment base
- Strengthen and expand traditional downtown
- Prevent decline of older residential neighborhoods
- Need more residential development
- Upgrade highways/310 corridor, lakeshore to Fox Valley
- Achieve moderate population growth
- Halt decline in school age population
- More value added processing of ag. products
- Reroute STH 310 within Two Rivers
- Redevelop vacant ind. sites
- Employ cons. subdivs. For new res. dev.
- Transportation – improve routes to Two Rivers (STH 310?)
- Commercial (industrial) Economics – promote development. Consider what the future is for development (what will it take to keep industry here/not leave areas or U.S.)
- Preserve/enhance lakeshore area/waterways. Enhance recreational facility? Provide area attractions?
- Overall: make Two Rivers a desirable place to work and live
- Protect groundwater – stop water pollution
- Maintain quality roads
- Protect Lake Michigan from pollution, invasive species, etc.
- Promote business development in rural communities
- Like rural atmosphere
- Like close proximity to shopping and retail stores
- Restrict housing in prime ag. areas
- Encourage the highest and best developments along the interstate corridor especially interchanges
• Protect Lake Michigan resources, discourage the loss of Lake Michigan to entities outside the lake basin
• Expand recreational trails, interconnect existing and future trails
• Prevent/discourage the movement of invasive species
• Encourage sustainable development and communities in the cluster
• Continue the marketing of quality of life items in the region
• Demographics need to be analyzed – baby boom how does it affect labor market and services
• Mega farms
• Preservation of natural resources
• Control urban sprawl
• Affordable housing for young and elderly
• Preserve open land
• Rural character – road improvements
• Object to cookie cutter syndrome
• Better control of wildlife – too much wildlife pollution
• Increase industry in
• Maintain natural growth along West Twin Rivers
• Spreading of animal waste
• Utilities wind mills
• Utilities new plants
Manitowoc County Economic S.W.O.T.
MCPAC Results

As part of the Manitowoc County Multi-jurisdictional planning project, the Manitowoc County Planning Advisory Committee (MCPAC) held an Economic SWOT workshop on March 26, 2008 to gather input regarding economic development in the county.

Economic factors internal to the county include strengths (S) or weaknesses (W), and those external to the county include opportunities (O) or threats (T). Such an analysis of the economic setting is referred to as a SWOT analysis. Gathering this information is helpful in evaluating Manitowoc County’s economic resources and capabilities with the competitive and growing environments in the region. The following issues identified during the economic SWOT workshop will help the county to promote its strengths, minimize weaknesses, take full advantage of the opportunities and lessen potential threats.

**STRENGTHS**

Strengths are existing resources and capabilities that can be used as a basis for developing a successful growth plan.

**GROUP 1**

<table>
<thead>
<tr>
<th>SCORE</th>
<th>STRENGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Economical/low cost of living</td>
</tr>
<tr>
<td>6</td>
<td>Exc. schools/education system</td>
</tr>
<tr>
<td>5</td>
<td>Good transportation, water access, interstate</td>
</tr>
<tr>
<td>5</td>
<td>Skilled labor force</td>
</tr>
<tr>
<td>3</td>
<td>Lake Michigan</td>
</tr>
<tr>
<td>3</td>
<td>No county sales tax</td>
</tr>
<tr>
<td>2</td>
<td>Good labor force but need job to stay in area</td>
</tr>
<tr>
<td>2</td>
<td>Work ethic</td>
</tr>
<tr>
<td>1</td>
<td>Strong manufacture</td>
</tr>
<tr>
<td></td>
<td>Cheap housing</td>
</tr>
<tr>
<td></td>
<td>Land and open space</td>
</tr>
<tr>
<td></td>
<td>Strong recreation</td>
</tr>
<tr>
<td>1</td>
<td>Strong manufacture</td>
</tr>
<tr>
<td></td>
<td>Cheap housing</td>
</tr>
<tr>
<td></td>
<td>Land and open space</td>
</tr>
<tr>
<td></td>
<td>Strong recreation</td>
</tr>
</tbody>
</table>

**GROUP 2**

<table>
<thead>
<tr>
<th>SCORE</th>
<th>STRENGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Access to Lake Michigan water</td>
</tr>
<tr>
<td>6</td>
<td>Fertile land and good climate for agriculture</td>
</tr>
<tr>
<td>3</td>
<td>Area not prone to major natural disasters</td>
</tr>
<tr>
<td>2</td>
<td>Adequate electric power availability</td>
</tr>
<tr>
<td>2</td>
<td>Recreational opportunities/tourism potential</td>
</tr>
<tr>
<td>1</td>
<td>Close to several major markets</td>
</tr>
<tr>
<td>1</td>
<td>Fine eating establishments</td>
</tr>
<tr>
<td>1</td>
<td>Low housing costs/affordable housing</td>
</tr>
<tr>
<td>1</td>
<td>Natural areas/parks/open space</td>
</tr>
<tr>
<td>1</td>
<td>Skilled workforce; strong work ethic</td>
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<td>Strong educational system/opportunities (K-University)</td>
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<td>Quality health care</td>
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GROUP 3

**Score** | **Strengths**
--- | ---
6 | Mainly agriculture and undeveloped
5 | Good water source – ground and surface (Lake Michigan)
3 | Scenic lands – recreation – tourism
2 | Diversified work force
2 | Infrastructure
2 | Low cost of living
1 | Good law enforcement
1 | I-43
- | Diversified service industry
- | Good business trends

GROUP 4

**Score** | **Strengths**
--- | ---
6 | School systems solid (K-14)
5 | Access to interstate
3 | Availability of utilities
3 | Strong work ethic
2 | Availability of G.L. water
2 | Strong farming community
1 | Good mix of natural resources – water, wood, etc.
1 | Low crime
1 | Well-educated workforce
- | Ample housing available
- | EDC
- | Expandable RR system
- | High standard of living
- | Large corporations
- | Low poverty
- | Park systems are good
- | Recreational resources
- | Water and sewer system updated

WEAKNESSES

A weakness is a limitation or the absence of certain strengths that keep the county from achieving its objectives.

GROUP 1

**Score** | **Weaknesses**
--- | ---
6 | Loss of jobs
6 | Loss of population
4 | High property tax
3 | County enforcement inconsistent (law enforcement)
3 | Limited number of white collar jobs
2 | Cell, internet, wireless and cable access limited
2 | Lack of a strong redevelopment authority
2 | Many level of inconsistency
1 | Distance to major areas
- | Sanitary and sewer system
GROUP 2

Score Weaknesses
5 Lack of population mass leading to many businesses bypassing county
4 "Drive-through" community
3 Aging population
2 Conservative area
2 Liberal area
2 Loss of manufacturing base—could locate in less urban portions of county
1 High cost of services/lack of efficiencies
1 Unclear direction for development
- Lack of good east/west road connections
- Low educational attainment—those who do pursue higher education often leave area

GROUP 3

Score Weaknesses
4 Air quality
4 Climate
4 Very conservative
3 More government intracommunication
2 Lack of Stormwater runoff authority
2 Limited financial opportunities
1 Lake Michigan—no expansion to east
1 Lake Michigan’s invasive species
- Runoff

GROUP 4

Score Weaknesses
7 High county taxes
5 Declining road system
3 Lack of white collar jobs
3 Not enough industry to retain young people
3 Touch conservative
1 Air quality
1 Heavy dependence on ag.
1 Limited raw material availability for manufacturing
- Limited electricity

OPPORTUNITIES

An opportunity is any favorable situation or resource that could enhance economic development.

GROUP 1

Score Opportunities
13 More nuclear plants
6 Access to I43
5 Biking/walking/trail development
5 Lakefront development
3 Tourism
2 Develop wind farms
2 Small communities with family values
APPENDIX D - ECONOMIC S.W.O.T. RESULTS

1  Lake and rail access
1  New technology to support bigger dairy farms
-  Redevelopment authority
-  Use existing county parks year round

GROUP 2

SCORE OPPORTUNITIES
5  Good quality of life can attract new residents
5  Prime energy production sites (including green energy)
4  Potential to coordinate with educational centers for workforce training opportunities (especially LTC)
2  Strong UW extension and 4-H programs
1  Regional water distribution opportunities (within LM watershed)
1  Use MCPAC to clarify zones for development
-  Housing opportunities along Lake Michigan
-  Talented builders

GROUP 3

SCORE OPPORTUNITIES
5  Education system
5  Lake Michigan
4  Road system is good
2  Not a large population
1  Recreation
1  Sale of lake water
-  Reasonable tax base

GROUP 4

SCORE OPPORTUNITIES
5  Resources for additional nuclear power
5  Shipping – port
4  LTC
2  Alternative energy – ag. and manufacturing
1  I-43
1  Increased utilization of public trans.
-  2-year converted to 4-year
-  Additional tourism
-  High speed train to Chicago

THREATS

Threats are potential obstacles the county faces concerning economic development.

GROUP 1

SCORE THREATS
8  “Not in my backyard” (nuclear/windmill)
6  Aging population/loss job
5  Vacant housing/industrial/commercial property
4  NAFTA/Free trade
3  Poor air quality
2  High taxes in all level
2  Mortgage foreclosure
1  Declining school population
-  Cold weather
-  Shrinking labor force

GROUP 2

SCORE  THREATS
6  Industry leaving for other countries due to low wages in those countries
5  Tax structure resulting in lower shared revenue from state
3  Not respecting individual land rights
3  Unfunded mandates from federal and state governments (i.e. Stormwater mgmt.)
3  Youth leaving the area
1  Low density residential development causing lack of farmland
-  Flight to areas with nicer year-round climates
-  Rising fuel costs affecting transport of manufacturing goods from area

GROUP 3

SCORE  THREATS
5  Air quality
3  Aging population
3  Agric. commodity input costs
3  Lack of high tech jobs
3  Youth leaving
2  Urban sprawl – loss of farmland
1  Animal disease outbreak
-  Animal welfare efforts
-  Lake Michigan compact re: runoff scenarios

GROUP 4

SCORE  THREATS
5  Increased energy prices
4  Declining economy
3  Brain drain
2  Aging housing units
2  Groundwater contamination
2  Health insurance
2  Industry leaving
1  Additional restrictive regulations
1  Aging and declining population
1  High state taxes
1  Shifting economy from industry to tourism
-  Loss of rural
-  Substance abuse
Manitowoc County Lakeshore Planning Cluster
Intergovernmental Cooperation Results

The intergovernmental workshop for the Manitowoc County Lakeshore Planning Cluster was held on April 15, 2009 at Manitowoc City Hall. The results from this workshop area as follows:

Flip Chart Results

Land Use Issues and Conflicts/Positive Working Relationships

- Limit growth to preserve rural farming and natural resources
- Town of Manitowoc has a good cost sharing arrangement with county regarding snow removal, road maintenance/reconstruction. Town of Manitowoc also contracts with Town of Two Rivers for snow removal and some road repair
- Towns sharing of ambulance service with City of Manitowoc
- First responders are positive
- Mishicot Ambulance service includes village and several towns
- T. Two Rivers and C. Two Rivers share snow removal duties on boundaries
- Woodland Road maintenance involves four jurisdictions
- T. Gibson does not have fire Dept.- contracts with Maribel, Mishicot, Tisch Mills
- County Hazmat group is good
- Good cooperation working with Manitowoc city planning staff within 3 mile extraterritorial area
- Wind Turbine issues
- WDNR has good working relationships with local governments
- Pooled resources for elections
- Shared road repair equipment between Towns of Mishicot and Two Creeks, and Village of Mishicot
- Need to coordinate with WisDot where commercial development is planned along State Highways and at interchanges
- Opportunity for communities to tap into the Manitowoc-Brown County water pipeline
- Good cooperation in putting together Mariner’s Trail
- Village of Mishicot sewer lines lead into Two Rivers as part of Manitowoc-Two Rivers Sewer Service Area
- C. Manitowoc has good cooperation with various county agencies (highway dept. / Aging and Disability Resource Center) and with C. Two Rivers (Maritime Metro Transit support)
- Joint service in area of waste management/recycling between Towns of Two Creeks and Mishicot
- Emergency agreements between agencies and jurisdictions (mutual aid agreements, etc.)
- Cities of Manitowoc and Two Rivers have signed on with Brown County for mutual aid agreement in case of large emergencies
- Find sources of discharge into Lake Michigan and other water bodies – everyone must do their fair share to control this.
- Waste Storage at Point Beach Nuclear Plan

Potential Resolutions

- Consolidate purchase of items that all jurisdictions need (road salt, fuel, etc.)
- Revise zoning in towns to implement their plans as Manitowoc Co. Planning maintains zoning for 15 of the 18 towns in the county
- Improved communication between county and local jurisdictions
- Plans need to be reviewed and updated periodically to be kept current
- Need regional cooperation in area of stormwater management
- Continued positive sharing agreements and mutual aid

**Total Worksheet Responses**

**Land Use Issues and Conflicts/Positive Working Relationships**

- Reciprocal agreements fire and police services is positive
- City and county partnered GIS internet mapping system is positive
- Construction of Manitowoc Public Utilities Water Tower in County Industrial Park is a positive
- City of Manitowoc engineering/DPW and County DPW intergovernmental award presented by Chamber of Commerce
- Multi-Jurisdictional Comprehensive Planning Project – 21 Municipalities involved in project
- Shared facility use arrangements – City of Manitowoc and Manitowoc Public School District cooperate in use of gym and park space and time is positive
- Joint dispatch countywide is positive
- The merging of City Health Dept. with County Health Dept. 13 years ago is positive
- Cities of Two Rivers and Manitowoc Joint Tourism Promotions, “Port Cities” marketing campaign is positive
- Wind Turbine Ordinances are a conflict
- Support/Funding Economic Development Corporation-EDC is a conflict
- Construction of Mariner’s Trail is positive
- Long range plans for expo grounds are a conflict
- Joint Transit system (MMT)
- Expo Fair Grounds are county owned – C. Manitowoc sees enormous potential for development and especially wants to relocate the race track – its noisy, dusty, and a detriment to development.
- Rural Transportation (especially for aging/disabled) is lacking – county ADA resources are strained – City of Manitowoc is also fiscally constrained and cannot provide any additional funding.
- Hazmat group is positive
- Metro Drug is positive
- Expo is a positive and negative
- Location of Dirt track and expo grounds (relocation?)
- Urban Sprawl problem
- Wind Turbine locations
- Snow plowing at borders is positive
- Road maintenance / reconstruction is positive
- Roundabout issues
- Location of major arterials in the county to support other jurisdictions
- Run-off from farms
- Tax discrepancies/differences
- Merging of City of Manitowoc and Two Rivers
Desire to limit growth so as to preserve rural farming and natural resources
- Limit odor issues with big farms
- Fire department mutual aid is criticism and not effective
- Shared waste disposal / recycling being applied between the T. of Two Creeks and Mishicot has been very cost beneficial
- Cooperate equipment sharing for road repair
- Emergency warning system countywide
- Good working relationship with county to do our road work (T. Manitowoc)
- Adequate spacing between highway interchanges and new development (preserve infrastructure) with good access management.
- Proper street planning with adjacent units of government plan when possible for boundary agreements relating to annexation around cities and villages.
- Communities should contact WisDot for commercial developments along STH’s, be proactive rather than reactive. The proposed land use map shows commercial development along STH 310. WisDot has 84.25 access controls along much of STH 310.
- Plan for future schools inside communities (Two Rivers example)
- Any need for park and ride lots in Manitowoc County
- Any need for additional intercity transportation
- Any need for additional recreation trails
- When possible, promote infill development rather than at the edge of communities.
- Shared poll place and voting equipment to enhance proper voting.
- County 911 system – fire, ambulance, police and dispatch working together to provide protection
- Need for bridge and culvert replacements
- Need better maintenance of roadside ditches in early spring and fall
- Use of proper erosion controls
- Agreements with county/town highway depts. in various projects requiring heavy equipment (trucks, gravel)
- Mishicot ambulance service between Town of Two Rivers, Town of Two Creeks, Town of Gibson and Mishicot is good.
- Fire fighting agreements is positive
- Snow plowing agreements - good
- Emergency agreements for disasters, any fire in the State Forest, any nuclear accident at the nuclear plant
- Road maintenance and resurfacing
- Fire Dept. mutual aid
- Snow removal agreements with City of Two Rivers and Town of Manitowoc
- Ambulance – T. Two Rivers, T. Two Creeks, Mishicot, Gibson
- Mutual aid with Kew. Fire Dept. (Point Beach)
- Share equipment with T. Town Creeks
- Mariners Trail- County, Manitowoc and Two Rivers worked together to build and maintain. People are enjoying trail use, great for recreation, no need for ordinances, rules agreed with city group, both cities work with friends groups, maintenance
- Sewer – Mishicot is positive
Shared ambulance service is a positive
A potential conflict over the next 20 years could involve the land application of municipal and industrial sludge. (Land application is usually the preferred method of sludge disposal, for economic reasons). Farm land that is adequately separated from houses, wells and business establishments is usually required for this activity; but the amount of such land in the county could slightly decrease over the next 20 years.

**Possible Resolutions**

- Boundary agreement cities of Manitowoc and Two Rivers
- Continue transit service Manty/TR
- Continue mutual aid Manty/TR
- Continue joint tourism Manty/TR
- Possible sharing of water in the future
- Excellent working relationship between City of Manitowoc and county hwy has developed – continued fostering of this partnership is needed as money becomes even tougher to find.
- City of Manitowoc is in process of developing a close working relationship with county aging and disabled resource center thru the mobility mgmt. efforts. We will be working to implement a volunteer driver program to increase service to elderly and disabled while decreasing costs thru a renegotiated “assist-to-transport” agreement. Additional efforts to implement a “single-point-of-contact”: for transportation service will help streamline efforts at lower cost
- Right to farm is a prime vehicle in supporting the desire to limit growth so as to preserve farming and natural resources
- Support from the county on concerns with long-term storage of dry (spent) fuel from the power plant
- Support from the county on road maintenance as a result of traffic in and out of the Point Beach Nuclear Plant
- Support from the county on enforcing abandoned vehicle limits at any one location.
- Need to correctly review/apply rules on farm issues.
- Some communities/county do a great job sharing information for zoning changes on new development along state highways
- Use official mapping powers to plan a future street plan prior to development opportunities
- Continue work to implement county bicycle plan
- An agreement that has been the result of positive working relationships is to “transfer” the use privileges for sludge applications sites (i.e. farm land) from one WDNR permittee to another when desired. This has historically helped communities like the City of Manitowoc to find the farm land that they need.
- At least three resolutions seem possible. (1) Towns should not enact ordinances that completely prohibit the land application of sludge. (2) Existing farm land should be kept adequately isolated from new residential and commercial development, whenever practicable. (3) The sludge treatment processes used at municipal wastewater treatment facilities could be upgraded to produce an “exceptional quality sludge” as defined in NR 204 Wisc. Admin. Code, thereby providing more flexibility with where the sludge is allowed to be land applied. However, these upgrades could be very expensive so are probably not desirable at this time.
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## Appendix G - Detailed Land Use Tabulation

### 2008 City of Two Rivers

#### Detailed Land Use

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<th>CODE</th>
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<td>Telephone and Telegraph Terminals/Dispatch Centers</td>
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<td>Pre-School/Day Care</td>
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<td>Middle Schools</td>
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<td>684</td>
<td>Fraternal Organizations/Clubhouses</td>
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<td>690</td>
<td>Religious and Related Facilities</td>
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<td>691</td>
<td>Churches/Temples/Synagogues</td>
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<td>694</td>
<td>Cemeteries</td>
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<td>699</td>
<td>Vacant Institutional/Governmental</td>
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## 2008 CITY OF TWO RIVERS
### DETAILED LAND USE

<table>
<thead>
<tr>
<th>Code</th>
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<td>Parks/Parkways/Forest-Related Picnic Areas</td>
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<td>741</td>
<td>Playfields/Ball Diamonds/Volleyball Courts</td>
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<td>745</td>
<td>Swimming/Wading Pools</td>
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<td>746</td>
<td>Tennis Courts</td>
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<tr>
<td>751</td>
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<td>AGRICULTURE/SILVICULTURE</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>4,170.67</strong></td>
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The City of Two Rivers 20-Year Land Use Plan (Map 3.1) delineates several Smart Growth Areas (SGA) which are discussed below. The city encourages development or redevelopment in these SGAs because they are already served by existing infrastructure including sanitary sewer, water mains, storm sewers, adjacent roadways, and in some cases, public schools. This existing infrastructure minimizes development costs making these sites a “Smart Growth” choice.

These SGAs are also a smart choice because they are reusing or infilling land that has already been developed. This minimizes the need for new public investment to construct infrastructure along the city’s outer limits which, if constructed, would result in additional public services such as police and fire protection, snow removal, garbage collection, road maintenance and public transit. In most cases, the city is already providing these services to or near these SGAs.

The infilling of these SGAs also helps revitalize the city’s older neighborhoods by mixing compatible uses. Adding new homes or commercial development next to existing homes, schools, restaurants, parks and businesses helps stabilize neighborhoods and induces reinvestment in such neighborhoods.

If cost effective, the city will consider creation of a Tax Incremental District to assist in paying for development costs associated with the SGAs such as land acquisition, building demolition, environmental remediation and supporting infrastructure.

Also, zoning actions are likely necessary to implement the SGAs, depending on specific redevelopment proposals.

The following SGAs include a description of recommended land uses which are subject to revisions or refinements depending on site specific development proposals:

**SGA 1 – Redevelopment of the Former Eggers Site**

Redevelopment of this 3.5 acre site along the East Twin River is a top priority for Two Rivers. The site is two blocks east of Washington Street/STH 42 and is part of an overall redevelopment strategy for the city's central business district and the East Twin River district. A mixed-use development including residential, commercial and marine related uses integrating public access along the waterfront would be ideal.
SGA 2 -- Redevelopment of 24 Acre Brownfield Area along the West Twin River

The four (4) parcels comprising this 24 acre area along the West Twin Rivers are as follows:

<table>
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<th>Owner</th>
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<th>Prior Use</th>
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<td>U.S. Oil</td>
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<td>Lesperance</td>
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<td>Warehouse</td>
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<td>4.25</td>
<td>Vacant</td>
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<td>Abandoned by Seneca</td>
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<td>Oil storage tanks</td>
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<tr>
<td>Products c/o David White</td>
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Prior to preparing any redevelopment plans for this challenging brownfield area, an evaluation of existing conditions is necessary including determining the extent of environmental contamination, related geotechnical studies, and wetland and floodplain delineations. Cooperation of regulatory agencies and funding for a complete environmental evaluation of the subject area will be required. Redevelopment alternatives will depend upon the findings from the environmental studies and evaluations. Preliminary planning includes possible public street extensions into the area including 22nd Street and West River Street intersecting together near the riverfront, and Hayes Street terminating in a cul-de-sac.

SGA 3 -- Redevelopment of the Former Paragon Site for Mixed Residential Use or as a Multi-tenant Incubator Facility

This 26.7 acre site contains 316,880 square feet of industrial building formerly used by Paragon Electric Company, Inc. as a manufacturing and distribution facility.

The site is recommended for redevelopment for mixed residential uses. Costs to acquire the site and make it ready for residential use would include acquisition, building demolition, soil clean-up, geotechnical work and parking lot removal.

As an alternative to redevelopment as described above, the existing industrial building could be renovated for reuse as a multi-tenant incubator for user-specific industrial use.
SGA 4 -- Redevelop the Former Warehouse Site along Roosevelt Avenue and Memorial Drive/STH 42
Redevelopment of this four (4) acre site would include removal of the existing warehouse buildings, environmental remediation as necessary and infrastructure improvements to support new development.

Potential uses could include mixed residential/commercial use on this site which would allow residential dwellings to have views of Lake Michigan. Marketing themes and amenities could be oriented to the second/vacation home/timeshare market.

SGA 5 -- Redevelopment of the Former Hansen Floral Site for Mixed-Use Development
This former floral growing and retail facility site is ideally located in the City's northwest neighborhood to accommodate redevelopment for residential use with commercial/office uses along the Forest Avenue / STH 147 frontage. A nearby stormwater pond on an adjacent parcel will provide public access and aesthetically pleasing views from the upland portion of this site.

Site improvements are necessary to prepare the site for redevelopment includes building demolition, soil/geotechnical work, grading and filling and on-site utilities.

SGA 6 -- Redevelopment of the Former Concrete Batch Plant site along 12th Street between Adams and Monroe Streets
This 1.1 acre site formerly was a concrete batch plant which was removed leaving minor soil contamination which requires remediation. Redevelopment is recommended for office, commercial or service business use. The site was included and zoned as part of the Lakeshore Park residential development, consequently rezoning of the site will be necessary to accommodate any non-residential use.
SGA 7 -- Acquire Abandoned Railroad Corridor for Trail and Redevelopment Uses

The former Wisconsin Central Railroad corridor in Two Rivers runs parallel to Memorial Drive/STH 42 along the Lake Michigan shoreline for about four miles. It has not been used as an active railroad since 1985. Some sections of the existing tracks have been removed. Portions of the railroad right-of-way are adjacent to several potential redevelopment sites. Acquisition of this right-of-way is important to facilitate redevelopment along the Memorial Drive lakefront corridor.

The city's goal is to purchase approximately four miles of right-of-way for use as a pedestrian/bike trail and to support several redevelopment projects. The proposed trail would extend from Woodland Drive to Madison Street and would link with other portions of the City's trail system.

Two SGAs located along the railroad right-of-way are also mentioned in this plan. They are redevelopment of the former Paragon site and redevelopment of the former warehouse site along Roosevelt Avenue/Memorial Drive.

At the time of preparation of this report (late YR 2009), the estimated cost of acquiring the Wisconsin Central Railroad right-of-way is approximately $290,000. Additional costs for environmental remediation will also be necessary. The City may seek funding through the State's Rails to Trails Program for the bike/pedestrian trail. In addition, Tax Incremental District financing and local budget support would be used to assist in the cost of land purchase and remediation.

SGA 8 -- Redevelopment of the Burrows and Neshotah Shores Land along the east side of the West Twin River

This 3.7 acre area is comprised of two sites currently owned by Burrows and Neshotah Shores. The site was previously used for industrial purposes and portions of it may contain environmental contamination.

The area has about 500 feet of frontage along the West Twin River if both ownership parcels were combined. Street access would be available from Washington Street along 15th Street extended or from 16th Street through an existing private drive. Potential uses could include mixed commercial/residential with waterfront views and waterfront access. Public waterfront access would be desirable.
SGA 9 -- Wilson Street Site along the East Twin Rivers between 28th and 29th Streets

This site is located along the west side of Wilson Street between 28th and 29th Streets. It has about 300 feet of frontage along the East Twin River and includes portions of the 100-Year Flood Boundary within the site but leaving an upland portion for residential development.

Wilson Street would have to be extended northward from 28th Street to provide access and utilities.

SGA 10 -- Site along the East Twin River bounded by Wilson Street, 26th Street and 27th Street

This two (2) acre site is located along the East Twin Rivers and comprised of several smaller parcels including a parcel currently used as Paddlers Park, several vacant residential lots and one lot containing an occupied residence along 26th Street.

The L-shaped site has about 300 feet of river frontage which includes portions of the 100-Year Flood Boundary.

With attractive river views, the site offers opportunities for residential development with proper buffering from an existing nearby food processing industry.
SGA 11 -- Redevelopment of the Seagull Marina and adjacent City-owned lands for mixed-use waterfront development including marine uses, marina support, public access and use, private recreational and complimentary commercial and/or residential uses.

This square shaped peninsula area surrounded by water on three sides is home to the Seagull Marina Campground, McDonald's Restaurant and a complex of public functions on City-owned land including the city's wastewater treatment and potable water plants, public works yard, municipal utility offices and vehicle storage.

Redevelopment of this unique area would require continuation of the potable water and wastewater treatment facilities including providing adequate buffer yards around both existing facilities.

Redevelopment uses would build upon the Seagull Marina’s recreational functions and could include the following:

- Improve vehicular access at the Lake Street entry including signage, entry feature and possible realignment of the intersection.
- Develop a pedestrian/bike trail linking Mariner’s Trail to the south pier.
- Improve pedestrian/bike circulation system.
- Develop a bicycle repair/rental facility.
- Revitalize the McDonald’s Restaurant.
- Improve marine waterfront uses and support facilities.
- Provide additional riverside docking facilities.
- Improve campground facilities including landscaping, public areas, waterfront access and support services.
- Improve riverfront sheet piling and docking edges.
- Improve boat launching facilities including lighting, landscaping, parking and support facilities.
- Develop waterfront residential units with boat slips.

The wide variety of existing and potential uses in this area necessitates the preparation of a detailed redevelopment plan for SGA #11.
Planning and Zoning Definitions

Alley: a permanently reserved public or private secondary means of access to an abutting property.

Accessory Structure: a detached subordinate structure located on the same lot as and incidental to the principal structure.

Accessory Use: a use incidental to and on the same lot as a principal use. See also “accessory structure” and “principal building”.

Acre: a unit of area used in land measurement and equal to 43,560 square feet. This is approximately equivalent to 4,840 square yards, 160 square rods, 0.405 hectares, and 4,047 square meters.

Adaptive Reuse: the conversion of obsolescent or historic buildings from their original or most recent use to a new use.

Agricultural Protection Ordinance (APFO): an ordinance that ties development approvals to the availability and adequacy of public facilities. Adequate public facilities are those facilities relating to roads, sewer systems, schools, and water supply and distribution systems.

Administrative Appeal (Appeal): a quasi-judicial* process before the local zoning board to review a contested ordinance interpretation or an order of an administrative zoning official.

Adverse Impact: a negative consequence to the physical, social, or economic environment.

Aesthetic Zoning: the regulation of building or site design to achieve a desirable appearance.

Affordable Housing: housing that has its mortgage, amortization, taxes, insurance, and condominium and association fees constituting no more than 30% of the gross household income per housing unit. If the unit is rental, then the rent and utilities constitute no more than 30% of the gross household income per rental unit. See s. COMM 202.01, Wis. Admin. Code.

Agriculture: the use of land for farming, dairying, pasturage, apiculture (bees), aquaculture (fish, mussels), horticulture, floriculture, viticulture (grapes), or animal and poultry husbandry; this includes the necessary accessory uses for packing, treating, or storing the produce from these activities. See also ss. 30.40(1) and 91.01(1), Wis. Stats.

Agricultural Conservation Easement: conservation easements that restrict specifically farmland from development or specified farming practices and give farmers income, property, and estate tax reductions.

Agricultural Protection Zoning: a method for protecting agricultural land use by stipulating minimum lot sizes or limitations on non-farm use.

Air Rights: the ownership or control of all land, property, and that area of space at and above it at a height that is reasonably necessary or legally required for the full use over the ground surface of land used for railroad or expressway purposes.

Amendment: a local legislative act changing a zoning ordinance to make alterations, to correct errors, or to clarify the zoning ordinance. A class 2 notice must be published and a public hearing must be held before a county board may adopt a proposed amendment. See s. 59.69, Wis. Stats.

Amenities: features that add to the attractive appearance of a development, such as underground utilities, buffer zones, or landscaping.

Americans with Disabilities Act (ADA): a congressional law passed in 1990, which provides a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities as well as clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities.

Amortization: a method of eliminating nonconforming uses (usually minor structures) by requiring the termination of the nonconforming use after a specified period of time, which is generally based on the rate of economic depreciation of the use or structure.

Annexation: the process of incorporating an area of land in a township into a municipality. See ch. 66, subch. II, Wis. Stats.

Appellate Body: a body authorized to review the judgments made by administrative officers. For example, a board of adjustment hears appeals of the decisions of a county zoning administrator.

Aquatic and Terrestrial Resources Inventory (ATRI): a public and private partnership to gather, link, and make available data used for decisions affecting Wisconsin’s landscape; a systematic and comprehensive information management system developed by the Wisconsin DNR to improve environmental and resource management decisions.

Aquifer: a geologic formation, usually comprised of saturated sands, gravel, and cavernous and vesicular rock, that carries water in sufficient quantity for drinking and other uses.

Aquifer Recharge Area: the surface area through which precipitation passes to replenish subsurface water bearing strata of permeable rock, gravel, or sand.

Architectural Control/Review: regulations and procedures requiring the exterior design of structures to be suitable, harmonious, and in keeping with the historic character or general style of surrounding areas.

Area Variance (Variance): the relaxation of a dimensional standard in a zoning ordinance decided by a local zoning board. See ss. 59.69, 60.61, 60.62 and 62.23, Wis. Stats.

Arterial: a major street, which is normally controlled by traffic signs and signals, carrying a large volume of through traffic.

Bargain Sale: the sale of land (to a conservation organization, for example) at less than market value.
Appendix I - Glossary of Terms

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Base Flood: a flood that has a one percent chance of being equaled or exceeded in any given year, commonly called a 100-year flood. See also “floodplain”.

Benchmark: a performance-monitoring standard that allows a local government to periodically measure the progress of a local comprehensive plan’s goals and policies; also, a fixed and recorded elevation point from which another, relative elevation can be surveyed.

Berm: A low earthen ridge constructed as a landscaping feature or to direct runoff or deflect noise.

Best Management Practices (BMPs): the conservation measures and management practices intended to lessen or avoid a development’s impact on surrounding land and water.

Billboard: a sign that identifies or communicates a message related to an activity conducted, a service rendered, or a commodity sold at a location other than where the sign is located.

Block: a unit of land or contiguous lots or parcels bounded by a roadway or other barrier.

Board of Appeals/Board of Adjustment (BOA): a board of appointed individuals that hears appeals on variances and exceptions. Board of Appeals applies to cities, villages, and towns, whereas Board of Adjustment applies to counties.

Brownfields: lands contaminated by spills or leaks and that are perceived to be unsuitable for future development due to its hazardous nature or owner liability concerns.

Buffer Area: an area separating two incompatible types of development or a development and sensitive natural resources.

Build Out: the maximum, theoretical development of land as permitted under zoning regulations.

Build Out Analysis: a projection, based on the maximum, theoretical development of all lands, of the impact of a community’s cumulative growth.

Building Coverage: See “lot coverage”.

Building Line: the line parallel to the street line that passes through the point of the principal building nearest the front lot line.

Building Scale: the relationship between the volume of a building and its surroundings, including the width of street, amount of open space, and volume of surrounding buildings. Volume is determined by the three-dimensional bulk (height, width, and depth) of a structure.

Bulk Regulations: standards that establish the maximum size of structures on a lot and the location where a building can be, including coverage, setbacks, height, impervious surface ratio, floor area ratio, and yard requirements.

Bundle of Rights Concept of Property: See “rights”.

Business Improvement Districts (BID): an area within a municipality consisting of contiguous parcels subject to general real-estate taxes other than railroad rights-of-way and that may include railroad rights-of-way, rivers, or highways continuously bounded by the parcels on at least one side. See s. 66.1109(1)(b), Wis. Stats.

Business Incubator: retail or industrial space, which may offer shared or subsidized management support such as information and advice on regulations, advertising, promotion, marketing, inventory, labor relations, and finances and facility support such as clerical staff, security, electronic equipment, and building maintenance that is affordable to new, low profit-margin businesses.

By Right: a use that complies with all zoning regulations and other applicable ordinances and that is permitted without the consent of a review board.

Capital Improvement: a physical asset that is large in scale or high in cost.

Capital Improvements Plan/Capital Improvements Program (CIP): a city’s or county’s proposal of all future development projects and their respective cost estimates listed according to priority.

Capital Improvement Programming/Capital Improvement Planning: the scheduling of budgetary expenditures for infrastructure to guide and pace development.

Carrying Capacity Analysis: an assessment of a natural resource’s or system’s ability to accommodate development or use without significant degradation.

Census: The census of population and housing, taken by the U.S. Census Bureau in years ending in 0 (zero). Article I of the Constitution requires that a census be taken every ten years for the purpose of reapportioning the U.S. House of Representatives.

Census Tract: a relatively permanent county subdivision delineated to present census data.

Central Business District (CBD): the primary, downtown commercial center of a city.

Certificate of Appropriateness: a permit issued by a historic preservation review board approving the demolition, relocation, or new construction in a historic district.

Certificate of Compliance: an official document declaring that a structure or use complies with permit specifications, building codes, or zoning ordinances.

Cesspool: a buried chamber such as a metal tank, perforated concrete vault, or covered excavation that receives wastewater or sanitary sewage to be collected or discharged to the surrounding soil.
Comprehensive Plan:

Community of Place:

Community Development Zone:

Conditional Use Permit:

Concurrency Test:

Conditional Use:

Concurrency Management System:

Combination Zones:

Collector:

Cluster Development Zoning (Clustering):

Common Open Space:

Community Development Block Grant (CDBG):

Conservation Areas:

Conservation Easement:

City: an incorporated municipality. Cities are divided into the four following classes for administration and the exercise of corporate powers: Also see ch. 62, Wis. Stats.

a) Cities of 150,000 population and over- 1st class cities
b) Cities of 39,000 and less than 150,000 population- 2nd class cities.

c) Cities of 10,000 and less than 39,000 population- 3rd class cities.

d) Cities of less than 10,000 population- 4th class cities.

Clear Zone: an area within a roadway right-of-way that is free of any obstructions, thus providing emergency vehicle access.

Closed (Executive) Session: a governmental meeting or portion closed to everyone but its members and members of its parent body for purposes specified in state law. Governmental meetings are subject to Wisconsin’s ‘Open Meetings Law.’ See s.19.81-19.98, Wis. Stats.

Cluster Development Zoning (Clustering): concentrating the total allowable dwelling units on a tract of land into higher densities on a smaller portion of the tract, leaving the remaining land as open space. For example, in a five-acre minimum lot zoned area, 10 units would be constructed on 50 acres; however, 10 units could also be ‘clustered’ on 20 acres (allowing minimum two-acre lots), leaving the remaining 30 acres as common open space.

Collector: a street designed to carry a moderate volume of traffic from local streets to arterial* streets or from arterial streets to arterial streets.

Combination Zones: a zone that is placed over another, now underlying zone and that adds or replaces existing requirements of the underlying zone.

Commercial District: a zoning area designated for community services, general business, interchange of services, and commercial recreation.

Common Open Space: squares, greens, parks, or green belts intended for the common use of residents.

Community Development Block Grant (CDBG): a grant program administered by the U.S. Department of Housing and Urban Development (HUD), the state departments of Administration and Commerce, and the Wisconsin Housing and Economic Development Authority (WHEDA) that provides money for community rehabilitation and development. See s.16.358 and 560.045, Wis. Stats.

Community Development Zone: Zones meeting certain requirements and designated by the state Department of Commerce for the purpose of administering tax benefits designed to encourage private investment and to improve both the quality and quantity of employment opportunities. The Community Development Zone Program has more than $38 million in tax benefits available to assist businesses that meet certain requirements and are located or willing to locate in one of Wisconsin’s 21 community development zones. See s.560.70, Wis. Stats. See also “enterprise development zone”.

Community of Place: See “sense of place”.

Comprehensive Plan: a county development plan or city, village, town, or regional planning commission master plan prepared under and meeting the content requirements outlined in s.66.1001, Wis. Stats. Comprehensive plans provide a vision and general idea of how land should be used to assure public health, safety, and welfare.

Concurrency Management System: the process used to determine that needed public services are concurrent with a development’s impacts.

Concurrency Test: an analysis of public facilities’ ability to accommodate a development; in other words, adequate capacity of facilities must precede or be concurrent with a development’s demand.

Conditional Use: a land use, construction activity, or structural development, which must be tailored to the site conditions and adjacent property uses through a public and technical review process, that is listed as a conditional use in a zoning district.

Conditional Use Permit: a permit issued by a zoning administrator, if the applicant meets certain additional requirements, allowing a use other than a principally permitted use.

Conditional Zoning: special conditions an owner must meet in order to qualify for a change in a zoning district designation.

Condominium: real estate and improvements where portions are designated for separate ownership and the remainder for common ownership. See s.703.02, Wis. Stat.

Congestion Mitigation and Air Quality Program (CMAQ): a program under the U.S. Department of Transportation intended to fund transportation projects and programs in non-attainment and maintenance areas that reduce transportation-related emissions.

Conservation Areas: environmentally sensitive and valuable lands protected from any activity that would significantly alter their ecological integrity, balance, or character except in cases of overriding public interest.

Conservation Development Zoning: a type of cluster development zoning that emphasizes a planned unit development for preserving open space, wetlands, natural landscaping, floodplains, or other prioritized resources as well as for preventing stormwater runoff.

Conservation Easement: a recorded legal agreement between a landowner and a qualified conservation agency that transfers development rights from the owner to the agency to protect natural or historic features. See s. 700.40, Wis. Stats.
**Conservation Reserve Program:** a federal Department of Agriculture program that pays farmers to convert ‘erodible’ cropland into vegetative cover.

**Consolidated Metropolitan Statistical Area (CMSA):** a statistical area defined by the U.S. Census; a large metropolitan statistical area with a population of one million or more that includes one or more primary metropolitan statistical areas (PMSA). See also “metropolitan statistical area” and “primary metropolitan statistical area” in this category.

**Contested Case:** a hearing similar to a court proceeding where parties have a right to review and object to evidence and cross-examine witnesses who testify.

**Contiguous Properties:** properties sharing a property line.

**Cooperative Agreement:** an agreement between two or more organizations to share in the financing or managing of a property, providing of services, or some other joint venture. Also see ss. 66.0307, 150.84, and 299.80, Wis. Stats. for specific examples of authorized agreements .

**County:** a political subdivision of the state. Counties are delineated in ch. 2, Wis. Stats. Wisconsin has 72 counties. See ch. 59, Wis. Stats.

**cul de sac:** a circular end to a local street [French , “bottom of the bag” ]

**Dedication:** the transfer of property from private to public ownership.

**Deed Restriction:** a limitation, which is recorded with the county register of deeds and to which subsequent owners are bound, on development, maintenance, or use of a property.

**Design Guideline:** an activity standard that preserves the historic or architectural character of a site or building.

**Design Review/Control:** an aesthetic evaluation, considering landscape design, architecture, materials, colors, lighting, and signs, of a development’s impact on a community

**Design Standards:** criteria requiring specific dimensional standards or construction techniques. See also “performance standards”.

**Detachment:** the transposition of land from a municipality back into a township. See s. 66.0227, Wis. Stats.

**Developer:** a person or company that coordinates the ownership, financing, designing, and other activities necessary for the construction of infrastructure or improvements.

**Development:** an artificial change to real estate, including construction, placement of structures, excavation, grading, and paving.

**Development Values:** the economic worth of land based upon the fair market price after residential, commercial, or industrial structures have been added.

**District:** a part, zone, or geographic area within the municipality where certain zoning or development regulations apply.

**Down Zoning:** a change in zoning classification that permits development that is less dense, intense, or restrictive. See also “up zoning”.

**Dwelling Unit:** the space in a building that comprises the living facilities for one family. See also “multifamily,” “single-family attached,” and “single-family detached dwelling”.

**Easement:** written and recorded authorization by a property owner for the use of a designated part of the property by others for a specified purpose. See also “conservation easement”.

**Ecological Impact:** a change in the natural environment that could disrupt wildlife habitat or vegetation, or that could cause air, water, noise, or soil pollution.

**Economic Unit:** units of land that, although they may be separated from one another physically, are considered one economically.

**Eminent Domain:** the right of a government unit to take private property for public use with appropriate compensation to the owner. See ch. 32, Wis. Stats.

**Enabling Act:** legislation authorizing a government agency to do something that was previously forbidden. See also “takings”.

**Enterprise Development Zone:** zones meeting certain statutorily defined criteria and designated by the state Department of Commerce for providing tax incentives to new or expanding businesses whose projects will affect distressed areas. An enterprise development zone is “site specific,” applying to only one business, and is eligible for a maximum of $3.0 million in tax credits. The department can designate up to 79 zones, which can each exist for up to seven years. The department is allowed to vary zone benefits to encourage projects in areas of high distress. See s. 560.70, Wis. Stats. See also “community development zone”.

**Environmental Corridors:** linear areas of natural resources that are critical to maintaining water quality and quantity and to providing habitat linkages that maintain biological diversity. Environmental corridors are often associated with rivers and streams.

**Environmental Impact Ordinance:** a local legislative act requiring an assessment of the potential harmful environmental effects of a pending development so that steps to prevent damage can be taken.
Environmental Impact Report (EIR): a report that assesses an area’s environmental characteristics and then determines the impact that a proposed development will have.

Environmental Impact Statement (EIS): a statement prepared under the National Environmental Policy Act (NEPA) or Wisconsin Environmental Policy Act (WEPA) predicting the impacts a proposed government action is likely to have on the environment and describing the affected environment and the alternative actions considered. See s.1.11, Wis. Stats., P.L.91-190, 42 USC 4331, NR 150, Wis. Admin. Code.

Environmental Nodes: discrete, inherently non-linear areas of natural resources that are sometimes isolated from areas with similar resource features. Planning objectives often include linking environmental nodes.

Environmentally Sensitive Areas: areas such as wetlands, steep slopes, waterways, underground water recharge areas, shores, and natural plant and animal habitats that are easily disturbed by development.

Esplanade: waterfront area intended for public use.

Estate Management Strategies: strategies enacted during a landowner’s lifetime or upon her death to help preserve family lands and farms.

Ex parte Contact: communication, which is normally prohibited, with a decision maker in a quasi-judicial proceeding, which is not part of a public hearing or the official record in a matter.

Exactions: compensation, which may take the form of facilities, land, or an actual dollar amount, that a community requires from a developer as condition of the approval of a proposed development project. Exactions may be incorporated into the community’s zoning code or negotiated on a project-by-project basis; but, they must reflect the type and extent of the expected adverse impacts of the development.

Executive Session: See “closed session”.

Extraterritorial Zoning: a local government’s authority to zone areas outside its boundaries. Under Wisconsin law, the extraterritorial zone for 1st, 2nd, and 3rd class cities extends 3 miles beyond the corporate limits. The limit extends 1½ miles beyond the municipal boundary for 4th class cities and villages. See s.62.23(7a), Wis. Stats.

Exurban Area: the area beyond a city’s suburbs.

Fee Simple Acquisition: the purchase of property via cash payment.

Fee Simple Interest in Property: absolute ownership of and with unrestricted rights of disposition to land. This describes the possession of all rights to property except those reserved to the state. See “rights”.

Fiscal Impact Analysis: the projection of the costs and benefits of additional or new facilities, rentals, or remodeling of existing facilities, including data relative to increased instructional, administrative, maintenance, and energy costs and costs for new or replacement equipment.

Fiscal Impact Report: a report projecting the costs and revenues that will result from a proposed development.

Floating Zone: an unmapped zoning district that is described in ordinance and on the zoning map only when an application for development is approved.

Floodplains: land that has been or may be covered by flood water during a ‘regional flood’ as is defined in NR 116, Wis. Adm. Code. The floodplain includes the floodway and flood fringe, and is commonly referred to as the 100-year floodplain.

- Flood fringe: that portion outside of the floodway covered by water during a regional flood.
This term is generally associated with standing water, but may under local floodplain zoning ordinances, be developed for specified purposes if development is protected from flooding.

- Floodway: the channel of a river or stream and those portions of the floodplain adjoining the channel required to discharge a regional flood.
This term is generally associated with flowing water and is required by local floodplain zoning ordinances to remain undeveloped and free of obstructions. See also “base flood”.

Forest Crop Law: a program enacted in 1927 that exempts DNR approved privately owned forest land from general property taxes but instead requires the owner to make an acreage share payment or a state contribution. Under the program, land is taxed at a constant annual rate while its timber is taxed after harvest. Entries into the FCL closed as of 1 January 1986 with enactment of the Managed Forest Law. Today about 25,000 landowners, owning more than 2.5 million acres, are enrolled in the three existing forest tax laws: Forest Crop Law, Woodland Tax Law, and Managed Forest Law. See ch. 70, Wis. Stats.

Front Lot Line: the lot line separating an interior lot from the street, or the shortest lot line of a corner lot to a street.

Gentrification: the resettlement of low and moderate-income urban neighborhoods by middle and high-income professionals.

Geographic Information System (GIS): computer technology, tools, databases, and applications that provide spatial (geographic) data management, analysis, and mapping capabilities to support policy evaluation, decision-making, and program operations.

Geologic Review: an analysis of geologic features on a site, including hazards such as seismic hazards, surface ruptures, liquefaction, landslides, mud slides, erosion, and sedimentation.
APPENDIX I - GLOSSARY OF TERMS

Gift Credit: a dollar or in-kind matching amount (labor, supplies, land donation, etc.) required to secure funds for a development.

Global Positioning System (GPS): a computerized tool for determining longitudinal and latitudinal coordinates through the use of multiple orbiting satellites.

Green Spaces: See “open spaces”.

Group Quarters: The group quarters population includes all people not living in households. Two general categories of people in group quarters are recognized: (1) the institutionalized population and (2) the noninstitutionalized population.

Growth Management: the pacing of the rate or controlling of the location of development via law enactment to manage a community’s growth.

Growth Trend Series: In a growth series, the starting value is multiplied by the step value to get the next value in the series. The resulting product and each subsequent product is then multiplied by the step value.

Hamlet: a predominantly rural, residential settlement that compactly accommodates development.

Hamlet Lot: a small residential lot in a contiguous group with adjacent and fronting lots oriented toward each other in some ordered geometric way and forming a boundary with the surrounding countryside.

Hazardous Substance: any substance or combination of substances, including solid, semisolid, liquid or gaseous wastes, which may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or which may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration, or physical, chemical, or infectious characteristics. This term includes irritants, strong sensitizers, explosives, and substances that are toxic, corrosive, or flammable. See s.292.01(5), Wis. Stats.

Heavy Industry: the basic processing and manufacturing of products from raw materials; or, a use engaged in the storage or manufacturing processes using flammable or explosive materials or those that potentially involve offensive conditions. See also “light industry”.

Highly Erodible Soils: soils highly susceptible to erosion as determined by an equation that considers soil type, slope, and amount of rainfall but does not consider current land management or vegetative cover. These soils are often identified in county soil survey books.

Historic Area: an area designated by an authority, having buildings or places that are important because of their historical architecture or relationship to a related park or square or because those areas were developed according to a fixed plan based on cultural, historical, or architectural purposes.

Historic Preservation: the research, protection, restoration, and rehabilitation of historic properties.

Historic Property: a building, structure, object, district, area, or site, whether on or beneath the surface of land or water, that is significant in the history, prehistory, architecture, archaeology, or culture of Wisconsin, its rural and urban communities, or the nation. See s.44.31(3), Wis. Stats. See s.13.48(1m)(a), Wis. Stats.

Homeowner’s Association: a nonprofit organization made up of property owners or residents who are then responsible for costs and upkeep of semiprivate community facilities.

Home Rule: constitutional provisions in some states that give local units of government substantial autonomy. Wisconsin is a “strong” home rule state.

Housing Occupancy: refers to whether a housing unit is occupied or vacant.

Housing Tenure: refers to whether the housing occupant is an owner or renter.

Housing Unit: a single-family house, townhouse, mobile home or trailer, apartment, group of rooms, or single room that is occupied as a separate living quarters or, if vacant, is intended for occupancy as a separate living quarters.

Incorporation: orderly and uniform development of territory from town to incorporated status. See ch. 66, subch. II, Wis. Stats.

Impact Fees: cash contributions, contributions of land or interests in land, or any other items of value that are imposed on a developer by a political subdivision to offset the community’s costs resulting from a development. See s. 66.0617, Wis. Stats.

Impervious Surface: a ground cover such as cement, asphalt, or packed clay or rock through which water cannot penetrate; this leads to increases in the amount and velocity of runoff and corresponds to increases in soil erosion and nutrient transport.

Improvements: the actions taken to prepare land, including clearing, building infrastructure such as roads and waterlines, constructing homes or buildings, and adding amenities.

Incentive Zoning: the granting of additional development possibilities to a developer because of the developer’s provision of a public benefit.

Industrial District: a district designated as manufacturing, research and development, or industrial park.

Infill: the development of the last remaining lots in an existing developed area, the new development within an area already served by existing infrastructure and services, or the reuse of already developed, but vacant properties. See also “redevelopment”.

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**Infrastructure:** public utilities, facilities, and delivery systems such as sewers, streets, curbing, sidewalks, and other public services.

**Installment Sale:** a real estate transaction in which the landowner and the recipient negotiate terms for the property to be transferred over an extended period of time rather than all at once.

**Institutionalized Population:** The institutionalized population includes people under formally authorized, supervised care or custody in institutions at the time of enumeration; such as correctional institutions, nursing homes, and juvenile institutions.

**Intermodal Surface Transportation Efficiency Act, 1991 (ISTEA):** a federal transportation act that authorized the first 23 "high priority corridors" of the total 42 authorized by the ISTEA, the National Highway System Designation Act (1995), and the Transportation Equity Act for the 21st Century.

**Intelligent Transportation System (ITS):** a system of technologies, including traveler information systems to inform motorists of weather and road conditions, incident management systems to help emergency crews respond more efficiently to road incidents, and commercial vehicle operations to increase freight transportation efficiency, intended to relieve state highway congestion.

**Interim Zone of Influence:** a procedure for the exchange of information or resolution of conflicts on certain proposed land-uses between a city or town and the county.

**Interim Zone/ Development Controls:** See “moratorium”.

**Judicial Appeal:** the review of a local zoning decision by the state judicial system.

**Land:** soil, the ground surface itself, a subdivision, a tract or parcel, a lot, an open space, or the physical elements below ground.

**Land Banking:** the obtaining, holding, and subsequent release of lands by a local government for controlled development or conservation.

**Land Exchange:** a transaction where a public agency or nonprofit organization exchanges a land parcel for another land parcel with high conservation value.

**Land use Intensity System (LUI):** a comprehensive system created in the mid-1960s by the U.S. Federal Housing Administration for determining or controlling the intensity of land development.

**Land use Inventory:** a study, cataloging the types, extent, distribution, and intensity of current and future uses of land in a given area.

**Land use Plan:** the element of a comprehensive plan that designates and justifies the future use or reuse of land. See s.66.1001, Wis. Stats.

**Landfill:** a disposal facility for solid wastes. See ch.289, Wis. Stats.

**Land Trust:** a private, nonprofit organization that protects natural and cultural resources through conservation easements, land acquisition, and education.

**Large- Lot Zoning:** a requirement that each new house be constructed on a minimum number of acres (generally, five or more acres). Developments that feature large-lot zoning may include the dispersal of some impacts, less efficient infrastructure, and greater areas of land use.

**Leapfrog Development:** new development separated from existing development by substantial vacant land.

**Leaseback:** See “purchase/leaseback”.

**Level of Service (LOS):** a measurement of the quantity and quality of public facilities.

**Light Industry:** the manufacture and distribution of finished products, including processing, fabrication, assembly, treatment, packaging, incidental storage, and sales. See also “heavy industry”.

**Limited Development:** the development of one portion of a property to finance the protection of another portion.

**Linear Trend Series:** In a linear series, the step value, or the difference between the first and next value in the series, is added to the starting value and then added to each subsequent value.

**Lot:** a parcel of land that is occupied or intended for occupancy, including one main building and any accessory buildings, open spaces, or parking spaces. See also “through lot”.

**Lot Area:** the area of a horizontal plane bounded by the vertical planes through front, side, and rear lot lines.

**Lot Averaging:** the design of individual adjoining lots within a residential subdivision where the average lot is the minimum prescribed area for the zoning district.

**Lot- by- Lot Development:** a conventional development approach where each lot is treated as a separate development unit conforming to all land-use, density, and bulk requirements.

**Lot Coverage:** the total when an area of a lot covered by the total projected surface of all buildings, impervious surfaces, or vegetative coverage is divided by the gross area of that lot.

**Lot Depth:** the average horizontal distance between the front and rear lot lines.

**Lot Line:** the property lines at the perimeter of a lot.
Lot Width: the distance between side lot lines. This is generally measured at the front setback, but the specific protocol varies between jurisdictions.

LULU: a locally unwanted land use. See also “NIMBY,” “NIABY,” and “NIMTOO”.

Main Street Program: a comprehensive revitalization program established in 1987 to promote and support the historic and economic redevelopment of traditional business districts in Wisconsin. The Main Street Program is administered by the state Department of Commerce.

Managed Forest Law: a law enacted in 1985, replacing the Forest Crop Law and Woodland Tax Law, that exempts DNR approved privately owned forest land from general property taxes but instead requires the owner to pay an annual acreage payment, a state contribution, a yield tax, or a withdrawal penalty. Landowners have the option to choose a 25 or 50 year contract period. Enrollment is open to all private landowners owning ten or more acres of woodlands. Today about 25,000 landowners, owning more than 2.5 million acres, are enrolled in the three existing forest tax laws: Forest Crop Law (FCL), Woodland Tax Law (WTL), and Managed Forest Law (MFL). See ch. 70, Wis. Stats.

Manufactured Housing: a structure, containing within it plumbing, heating, air-conditioning, and electrical systems, that is transportable in one or more sections of certain sizes and is built on a permanent chassis, and when connected to the required utilities, is designed to be used as a dwelling with or without a permanent foundation. Such housing must comply with the standards established under the National Manufactured Housing Construction and Safety Standards Act. See 42 USC 5401 to 5425 and ch.409, Wis. Stats.

Map: a drawing or other representation that portrays the spatial distribution of the geographic, topographic, or other physical features of an area.

Median age: The midpoint age that separates the younger half of a population from the older half.

Metropolitan Statistical Area (MSA): a statistical area defined by the U.S. Census; a freestanding metropolitan area (i.e. an area with a minimum population of 50,000 and adjacent communities with a high degree of economic and social integration) or a Census Bureau defined urbanized area with a population or 100,000 or greater (75,000 in New England), not closely associated with other metropolitan areas. Nonmetropolitan counties surround these areas typically. See also “consolidated metropolitan statistical area” and “primary metropolitan statistical area”.

Mini-Lot Development: a development containing lots that do not meet the minimum size or other requirements.

Mitigation: the process of compensating for the damages or adverse impacts of a development.

Mitigation Plan: imposed development conditions intended to compensate for the adverse impacts of the development.

Mixed-Use Development: a development that allows multiple compatible uses to be in close proximity to one another in order to minimize transportation infrastructure impacts and to create a compact, efficient neighborhood; for example, single family, multifamily, commercial, and industrial uses are located within a reasonable proximity to each other.

Modernization: the upgrading of existing facilities to increase the input or output, update technology, or lower the unit cost of the operation.

Moratorium: a temporary development freeze or restriction pending the adoption or revision of related public policies or provisions of public infrastructures or services.

Multifamily Dwelling: a building or portion occupied by three or more families living independently of each other.

Multimodal Transportation: an integrated network of various transportation modes, including pedestrian, bicycle, automobile, mass transit, railways, harbors, and airports.

Municipality: a city, village, town, or other unit of local government. The application of this term varies and it often has specific legal meanings.

National Environmental Policy Act (NEPA): a congressional act passed in 1969, establishing a national environmental policy. NEPA requires federal agencies to consider the environmental effects of decisions early in their decision-making processes and to inform the public of likely impacts. Environmental impact statements (EISs) are prepared consistent with this law. NEPA also established the Council on Environmental Quality. See P.L. 91-190, 42 U.S.C. 4321-4347. See also “environmental impact statement” and “Wisconsin Environmental Policy Act (WEPA)”.

National Register of Historic Places in Wisconsin: places in Wisconsin that are listed on the national register of historic places maintained by the U.S. Department of the Interior, National Park Service.

Neighborhood Plan: a plan that provides specific design or property-use regulations in a particular neighborhood or district.

Neighborhood Unit: the model for American suburban development after World War II based around the elementary school with other community facilities located at its center and arterial streets at its perimeter.

Neotraditional Development: a land-use approach that promotes neighborhoods with a variety of housing and architectural types, a central gathering point, and interconnecting streets, alleys, and boulevards edged with greenbelts. See also “New Urbanism” and “smart growth”.

Net Acre: an acre of land excluding street rights-of-way and other publicly dedicated improvements such as parks, open space, and stormwater detention and retention facilities.
New Urbanism: an approach to development that includes the reintegration of components such as housing, employment, retail, and public facilities into compact, pedestrian-friendly neighborhoods linked by mass transit. See also “Neotraditional development” and “smart growth”.

NIABY: Not in anyone’s backyard. See also “LULU,” “NIMBY,” and “NIMTOO”.

NIMBY: Not in my backyard. See also “LULU,” “NIABY,” and “NIMTOO”.

NIMTOO: Not in my term of office. See also “LULU,” “NIMBY,” and “NIABY”.

Nonconforming Activity: an activity that is not permitted under the zoning regulations or does not conform to off-street parking, loading requirements, or performance standards.

Nonconforming Building: any building that does not meet the limitations on building size or location on a lot for its use and district.

Nonconforming by Dimension: a building, structure, or parcel of land that is not compliant with the dimensional regulations of the zoning code.

Nonconforming Lot: a use or activity which lawfully existed prior to the adoption, revision, or amendment of an ordinance but that fails to conform to the current ordinance.

Nonconforming Use: a use (or structure) that lawfully existed prior to the adoption or amendment of an ordinance but that fails to conform to the standards of the current zoning ordinance.

Noncontributing Building: a building or structure that does not add to the historic architecture or association or cultural values of the area.

Noninstitutionalized Population: The noninstitutionalized population includes all people who live in group quarters other than institutions, such as college dormitories, military quarters, and group homes. Also, included are staff residing at institutional group quarters.

North American Industry Classification System (NAICS): a classification system developed by the United States, Canada, and Mexico to provide comparable industrial production statistics collected and published in the three countries. The NAICS replaces the Standard Industrial Classification (SIC) system and provides for increased comparability with the International Standard Industrial Classification (ISIC) system developed and maintained by the United Nations. See also “Standard Industrial Classification (SIC)”.

Office Park: a large tract that has been planned and developed as an integrated facility for a number of separate office buildings and that considers circulation, parking, utilities, and compatibility.

One-Unit, Attached: This is a 1-unit structure that has one or more walls extending from ground to roof separating it from adjoining structures. In row houses (sometimes called townhouses), double houses, or houses attached to nonresidential structures, each house is a separate, attached structure if the dividing or common wall goes from ground to roof.

One-Unit, Detached: This is a 1-unit structure detached from any other house; that is, with open space on all four sides. Such structures are considered detached even if they have an adjoining shed or garage. A one-family house that contains a business is considered detached as long as the building has open space on all four sides. Mobile homes or trailers to which one or more permanent rooms have been added or built also are included.

Open Session: a meeting that is in accordance with Wisconsin’s ‘Open Meetings Law.’ See s.19.85-19.98, Wis. Stats.

Open (Green) Spaces: a substantially undeveloped area, usually including environmental features such as water areas or recreational facilities. See also “common open spaces”.

Ordinance: a local law; a legislative enactment of a local governing body.

Orthophoto Quad: an aerial photograph that has been adjusted, via the correcting of distortions and inaccuracies due to plane tilt, elevation differences, or the curvature of the earth’s surface, to reflect as accurately as possible the actual topography of the earth’s surface.

Outright Donation: the donation of land to a unit of government or a qualified charitable land conservation management organization.

Outright purchase: the acquisition of land for the benefit of the public.

Overlay Zone: an additional land use or zoning requirement that modifies the basic requirements of the underlying designation.

Parcel: See “lot”.

Pedestrian Friendly: a development that is primarily accessible to pedestrians rather than automobiles and with an emphasis on street sidewalks rather than parking.

Performance Standards: general criteria established to limit the impact of land uses or development. See also “design standards”.

Pervious Surface: a ground cover through which water can penetrate at a rate comparable to that of water through undisturbed soils.
Planned Unit Development: land under unified control to be developed in a single development or a programmed series of phases. A planned development includes the provisions, operations, maintenance, facilities, and improvements that will be for the common use of the development districts, but which will not be maintained at general public expense.

Plan Commission: an appointed local government commission authorized to make and adopt a master plan, consistent with s.66.1001, Wis. Stats., for the physical development of the city. See s.62.23, Wis. Stats.

Plat: a map of a lot, parcel, subdivision, or development area where the lines of each land division are shown by accurate distances and bearings.

Point System: numerical values assigned to a development’s impacts on a community’s resources.

Political Subdivision: a city, village, town, county, sanitary district, school district, inland lake protection and rehabilitation district, or other special purpose unit of government.

Pre-acquisition: a technique where one organization (usually a private land trust) purchases a property and holds it until another organization (usually a government agency) can allocate the funds to purchase it.

Preservation: leaving a resource undisturbed and free from harm or damage. While ‘preservation’ is often used interchangeably with ‘conservation,’ the latter entails a connotation of prudent resource use.

Primary Metropolitan Statistical Area (PMSA): a statistical area defined by the U.S. Census; an area within a consolidated metropolitan statistical area consisting of a large urbanized county or cluster of counties that demonstrates very strong internal economic and social links, in addition to close ties to other portions of the larger area. See also “metropolitan statistical area” and “consolidated metropolitan statistical area”.

Prime Agricultural Land: land determined by local governments to be important for sustaining agricultural operations and that are often protected from conversion to other uses. See ch.91, Wis. Stats.

Prime Farmland: farmland classified by the Natural Resources Conservation Service as best for the crop production of row, forage, or fiber because of level topography, drainage, moisture supply, soil texture and depth, and susceptibility to erosion and runoff. Ideally, prime farmland allows least cost to both the farmer and the natural resources. See ch.91, Wis. Stats.

Principal Building: the building, including all parts connected, where the primary use of the lot is conducted.

Private Road: a way open to traffic, excluding driveways, established as a separate tract for the benefit of adjacent properties.

Privately Owned Waste- Treatment Systems (POWTS): sewage treatment and disposal systems, which are also called on-site sanitary systems, that are not connected to sewer lines or wastewater treatment plants.

Public Dedication: reserving land in a subdivision for public use such as a school or park.

Public Road: public property dedicated and reserved for street traffic.

Purchase of Development Rights (PDR): a public or private government initiative that acquires the development rights of property to limit development and protect natural features or open space. See also “rights” and “transfer of development rights”.

Purchase/ Leaseback: an arrangement where a community purchases a natural area and then either leases it back with special lease restrictions or sells it back with deed restrictions designed to protect the natural features of the property.

Quarter, Quarter Zoning: a development standard that limits non-farm development to one house per 40 acres (¼ of ¼ of the original 640- acre section).

Quasi-Judicial Decisions: “resembling a court;” quasi-judicial decision making must follow rules of due process and is midway between legislative and administrative functions. Examples of quasi-judicial decisions include variances, appeals, and conditional-use permits.

Quasi-Public Use/ Facility: a use conducted or a facility owned or operated by a nonprofit or religious institution that provides public services.

Rear-lot Line: a lot line, opposite the front lot line, that generally does not abut a public roadway.

Redevelopment: any proposed replacement of existing development. See also “infill”.

Redevelopment Authority: an authority, known as the “redevelopment authority of the city of [city name],” created in every city with a blighted area. This authority, together with all the necessary or incidental powers, is created to carry out blight elimination, slum clearance, and urban renewal programs and projects as set forth in Wisconsin Statutes. See s.66.1333 (3)(a) 1, Wis. Stats.

Reforestation: the planting or replanting of forest plants.

Regional Plan: a plan that covers multiple jurisdictions, often within the administrative area of a regional planning commission, and that can be prepared jointly by cooperating municipalities, regional planning commissions, state agencies, or other entities.

Requests for Proposals (RFP): a document describing a project or services and soliciting bids for a consultant’s or contractor’s performance.

Requests for Qualifications (RFQ): a document describing the general projects, services, and related qualifications of bidding consultants or contractors.
Reservation of Site: See “public dedication”.

Reserved Life Estate: an arrangement where a landowner sells or donates property to another party (for example, a conservation organization) while retaining the right to lifetime use.

Revolving Fund: a conservation fund, replenished through donations or selling of the land to another conservation organization or a government agency, used to purchase land or easements.

Rezoning: an amendment to a zoning map or zoning ordinance that changes the zoning-district designation and use or development standards.

Right of First Refusal: an agreement between a landowner and another party (for example, a land trust) that gives the other party a chance to match any third-party offer to purchase lands.

Right of Way (ROW): a strip of land occupied by or intended to be occupied by a street, crosswalk, walkway, utility line, or other access.

Rights (The Bundle of Rights Concept of Property): government and private owners each hold portions of the bundle of rights in real property.

Owner property rights include:

- Right to Use: the right to improve, harvest, cultivate, cross over, or not to use.
- Right to Lease: the right to lease for cash or the right to hold a cash, including a share lease or third or fourth lease, a crop share lease, a one year lease, or a perpetual lease.
- Right of Disposition: the right to sell, to bequeath, to mortgage, or to establish trusts on all or part of a property.

Government property rights include:

- Eminent domain: the right to purchase land for public use
- Escheat: the right for the succession in title where there is no known heir
- Regulation
- Taxation

Riparian Areas: the shore area adjacent to a body of water.

Roadway Setback: the required or existing minimum distance between a public roadway (measured from the centerline or edge of right-of-way) and the nearest point on a structure.

Scenic Corridor: a linear landscape feature that is visually attractive (for example, stream corridors or blufflines).

Scenic Easement: an easement* intended to limit development in order to preserve a view or scenic* area.

Seasonal Dwelling: a dwelling not used for permanent residence or not occupied for more than a certain number of days per year. The standard varies between jurisdictions.

Secondary Dwelling Unit: an additional dwelling unit in a freestanding building or above a residential garage and located within or on the same lot as the principal dwelling unit.

Sense of Place: the constructed and natural landmarks and social and economic surroundings that cause someone to identify with a particular place or community.

Set Back: the minimum distance a building, structure, or activity can be separated from a designated feature such as a waterway or bluffline.

Shoreland: a state mandated water resource protection district that Wisconsin counties must adopt.

Shorelands include lands adjacent to navigable waters within 1,000 feet of the ordinary high-water mark of a lake, pond, or flowage and within 300 feet of the ordinary high-water mark or floodplain of a river or stream.

Shoreland- Wetland: shorelands that are designated as wetlands on Wisconsin Wetlands Inventory maps. See Wis. Stats.

Shoreline Stabilization: the placement of structural revetments or landscaping practices to prevent or control shoreline erosion.

Side Lot Line: a lot line that is neither a front lot line nor a rear lot line.

Single-family Attached Dwelling: one of two or more residential buildings having a common wall separating dwelling units.

Single-family Detached Dwelling: a residential building containing not more than one dwelling unit surrounded by open space.

Sign: any device that is sufficiently visible to persons not located on the lot that communicates information to them.

Site Plan: a scaled plan, which accurately and completely shows the site boundaries, dimensions and locations of all buildings and structures, uses, and principal site development features, proposed for a specific lot.

Sliding Scale Zoning: a ratio of dwelling units to land acreage that concentrates development on smaller lots by increasing the minimum lot size for houses built on larger parcels.

Smart Growth: an approach to land-use planning and growth management that recognizes connections between development and quality of life. The features that distinguish smart growth approaches vary. In general, smart growth invests time, attention, and resources in restoring community and vitality to center cities and older suburbs. In developing areas, the
approach is more town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial, and retail uses. Smart-growth approaches preserve open space and other environmental amenities. The term is also used to refer to Wisconsin’s comprehensive planning law. See s.66.1001, Wis. Stats. See also “New Urbanism” and “Neotraditional development.”

Special Designation: the protection of scenic river corridors and other valuable resources through state or federal means such as recognition, acquisition, or technical assistance.

Special District/ Special Purpose Unit of Government: a government entity that is responsible for performing specific tasks and oversight essential to a community’s or region’s well being. Special districts include sanitary districts, metropolitan sewerage districts, drainage districts, inland lake protection and rehabilitation districts, business improvement districts, tax incremental financing districts, architectural conservancy districts, and port authorities.

Special Exception: See “conditional use”.

Spot Zoning: a change in the zoning code or area maps that is applicable to no more than a few parcels and generally regarded as undesirable or illegal because it violates equal treatment and sound planning principles.

Stand: a number of plants growing in a continuous area. Examples include ‘a stand of hardwood’ or ‘a stand of timber.’

Standard Industrial Classification/ Standard Industrial Code (SIC): an industry classification system to facilitate the collection, tabulation, presentation, and analysis of data relating to establishments and to ensure that data about the U.S. economy published by U.S. statistical agencies are uniform and comparable. See also “North American Industry Classification System (NAICS)”.

Statewide Comprehensive Outdoor Recreation Plan (SCORP): a plan that aims to offer a research base and overall guidance for all providers of Wisconsin’s outdoor recreation, including federal, state, county, city, village, and town governments, resorts and other businesses, and a variety of other public and private organizations. Ideally, SCORP is used in conjunction with other planning documents such as property master plans, community park and open space plans, the State Trails Strategic Plan, six-year development plans, and county and regional planning commission plans.

Stewardship Program: a state bonding program established by the Wisconsin Legislature in 1989 and re-authorized in 1999 that provides funds to protect environmentally sensitive areas and to maintain and to increase recreational opportunities across the state.

Stormwater Detention/ Stormwater Retention: the storage of stormwater runoff.

Stormwater Management: the reduction of the quantity of runoff, which affects flooding, or of pollutants generated at a development site and carried in stormwater.

Story: a space in a building between the surface of any floor and the surface of the next above floor or roof.

Subdivision: the description (usually by survey) and recording of separate land parcels or lots.

Summary Abatement: a legal action taken to suppress the continuation of an offensive land use. See also “tax abatement”.

Sustainability: long-term management of ecosystems intended to meet the needs of present human populations without compromising resource availability for future generations.

Sustainable Development: development that meets the needs of the present generation without compromising the needs of future generations.

Takings: government actions that violate the Fifth Amendment to the U.S. Constitution, which reads in part, “nor shall private property be taken for public use, without just compensation.” Such actions include regulations that have the effect of “taking” property. The Supreme Court has established four clear rules that identify situations that amount to a taking and one clear rule that defines situations that do not.

The court has found “takings” in the following circumstances:
- where a landowner has been denied “all economically viable use” of the land;
- where a regulation forced a landowner to allow someone else to enter onto the property;
- where the regulation imposes burdens or costs on a landowner that do not bear a “reasonable relationship” to the impacts of the project on the community; and
- where government can equally accomplish a valid public purpose through regulation or through a requirement of dedicating property, government should use the less intrusive regulation, for example, prohibiting development in a floodplain property.

The Supreme Court has also said that where a regulation is intended merely to prevent a nuisance, it should not be considered a taking.

Tax Abatement: a release of a certain tax liability for a specific period of time and under certain circumstances. See also “summary abatement”.

Tax Increment: additional tax revenue resulting from a property-value increase; the amount obtained by multiplying the total of all property taxes levied on all taxable property within a tax-incremental district in a year by a fraction having as a numerator the value increment for that year in the district and as a denominator that year’s equalized value of all taxable
property in the district. In any year, a tax increment is “positive” if the value increment is positive and “negative” if the value increment is negative. See s.66.1105, Wis. Stats.

Tax Increment Financing (TIF): a local governmental financing of private-sector redevelopment, anticipating the additional revenues of the tax increment. See s.66.1105, Wis. Stats.

Town: the political unit of government; a body corporate and politic, with those powers granted by law. See ch. 60, Wis. Stats.

Township: all land areas in a county not incorporated into municipalities (cities and villages).

Tract: an indefinite stretch or bounded piece of land; in subdivisions, a tract is often divided into individual lots.

Traditional Neighborhood: a compact, mixed-use neighborhood where residential, commercial, and civic buildings are within a close proximity. See also “Neotraditional development” and “New Urbanism”.

Traffic Calming: the process of increasing pedestrian safety via decreasing automobile speed and volume.

Traffic Impact Analysis: an analysis of the impacts of traffic generated by a development.

Traffic Impact Mitigation Measure: an improvement by a developer intended to reduce the traffic impact created by a development.

Transfer of Development Rights: a technique, involving the designation of development (receiving) zones and protected (sending) zones, for guiding growth away from sensitive resources and toward controlled development centers by transferring development rights from one area to another via local law authorization such as a deed or easement. See also “rights” and “purchase of development rights”.

Transit-Oriented Development (TOD): moderate or high-density housing concentrated in mixed-use developments that encourages the use of public transportation.

Transitional Use: a permitted use or structure that inherently acts as a transition or buffer between two or more incompatible uses.

TRANSLINKS 21: a statewide transportation system plan prepared by the Wisconsin Department of Transportation in response to federal and state laws.

Transportation Demand Management (TDM): a strategy that alleviates roadway stress by reducing vehicle density via the increasing of passengers per vehicle.

Transportation enhancements (ISTEA & TEA-21): funds contributed by the federal highway transportation program to enhance cultural, aesthetic, and environmental aspects of local transportation and transit systems.

Underlying Zoning District: a term referring to a zoning district when it is affected by an overly district.

Undevelopable: an area that cannot be developed due to topographic or geologic soil conditions.

Unified Development Code: the combining of development regulations into a single zoning code.

Universal Transverse Mercator Grid (UTM): a civilian grid system, which uses only numbers and can be handled by digital mapping software and Geographic Information Systems.

Unnecessary Hardship: a unique and extreme inability to conform to zoning ordinance provisions due to physical factors; and, one of three tests a property must meet in order to qualify for a zoning variance.

Up Zoning: changing the zoning designation of an area to allow higher densities or less restrictive use. See also “down zoning”.

Urban Area: the area within a municipal boundary that is serviced by infrastructure; an intensively developed area with a relatively large or dense population.

Urban Forest: all trees and associated vegetation in and around a city, village, or concentrated development.

Urban Growth Area: an area designated for urban development and usually designed to protect open space or resources beyond its boundaries.

Urban Growth Boundary: the perimeter of an urban growth area.

Urban Sprawl: low-density, automobile-dependent, and land-consumptive outward growth of a city; the spread of urban congestion and development into suburban and rural areas adjoining urban areas.

Utility Facilities: any above ground structures or facilities used for production, generation, transmission, delivery, collection, or storage of water, sewage, electricity, gas, oil, or electronic signals.

Variance: a relaxation of dimensional standards by a local zoning board in compliance with statutory criteria. See s.59.99(7), Wis. Stats.

Vehicle Miles Traveled (VMT): a measure of automobile and roadway use.

Village: an incorporated area with a population under 5,000. See ch. 61, Wis. Stats.

Watershed: the area where precipitation drains to a single body of water such as a river, wetland, or lake.

Wellhead Protection: a plan to determine the water collecting area for a public well, identify the pollution sources within that area, and detect, prevent, and remedy potential contamination to the collecting area.
Wetlands Inventory Map: a map of wetlands classified according to their vegetation, hydrology, and types of human influence, developed by the Wisconsin Department of Natural Resources, used to identify wetlands for protection.

Wetlands Reserve Program: a federal program with state partnering to restore the functions and values of wetlands and to preserve riparian areas through conservation easements and wetland reconstruction.

Wildlife Habitat Incentives Program: a program that awards landowners federal cost-sharing funds after the installation of improvements to wildlife or fishery habitat.

Wisconsin Administrative Code (Wis. Admin. Code): a component of state law that is a compilation of the rules made by state agencies having rule-making authority. These rules provide the detailed provisions necessary to implement the general policies of specific state statutes.

Wisconsin Environmental Policy Act (WEPA): a state law establishing a state environmental policy. WEPA requires state agencies to consider the environmental effects of decisions early in their decision-making processes and to inform the public of likely impacts and alternatives that were considered. Environmental impact statements (EISs) are prepared consistent with this law. See also “environmental impact statement” and “National Environmental Policy Act (NEPA)”. See NR 150, Wis. Admin. Code, and s.1.11, Wis. Stats.

Wisconsin Initiative for Statewide Cooperation on Landscape Analysis and Data (WISCLAND): a partnership between government agencies, private companies, and nonprofit groups to collect, analyze, and distribute landscape information.

Wisconsin Register of Historic Places: a listing of districts, sites, buildings, structures, and objects that are significant in national, state, or local history, architecture, archaeology, engineering and culture. The Wisconsin register of Historic Places is maintained by the Wisconsin State Historical Society. See s. 44.36, Wis. Stats.

Woodland Tax Law: a law enacted in 1954 that extended land eligibility of the Forest Crop Law to owners of small forest parcels. Entries into the WTL closed as of 1 January 1986 with enactment of the Managed Forest Law. Today about 25,000 landowners, owning more than 2.5 million acres, are enrolled in the three existing forest tax laws: Forest Crop Law, Woodland Tax Law, and Managed Forest Law. See ch. 70, Wis. Stats.

Zero Lot Line: the location of a building in such a manner that one or more of its sides rests directly on its lot line.

Zone: an area designated by an ordinance where specified uses are permitted and development standards are required.

Zoning Inspector: an appointed position to administer and enforce zoning regulations and related ordinances.

Zoning Permit: a permit issued by the land-use or zoning administrator authorizing the recipient to use property in accordance with zoning-code requirements.


Note: All references are to 1999-2000 Wisconsin Statutes.