

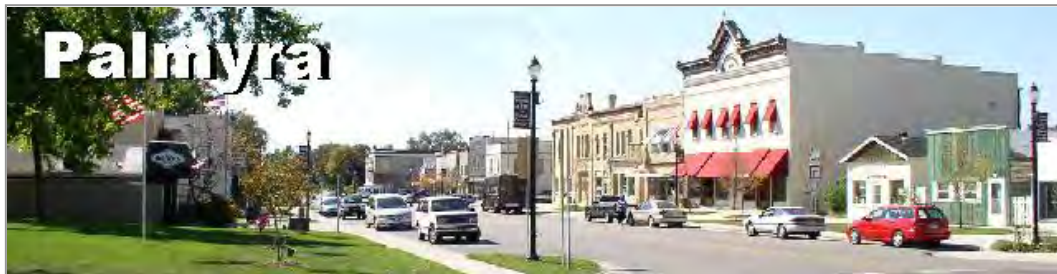
# VILLAGE OF PALMYRA

JEFFERSON COUNTY, WISCONSIN

## COMPREHENSIVE PLAN 2008-2030

(Originally Adopted 05-19-08)

(As Amended 01-16-12)



Source: WIDNR



Prepared by: MSA PROFESSIONAL SERVICES, INC.

STATE OF WISCONSIN VILLAGE OF PALMYRA JEFFERSON COUNTY

ORDINANCE # 2012-01

**RE: ORDINANCE TO AMEND THE VILLAGE OF PALMYRA  
COMPREHENSIVE PLAN 2008-2030  
AS PREPARED BY THE VILLAGE OF PALMYRA PLAN COMMISSION**

The Village Board of the Village of Palmyra, Wisconsin, do ordain as follows:

Section 1. Pursuant to section 66.1001(1)(a) and 66.1001(2) of the Wisconsin Statutes, the Village of Palmyra is authorized to prepare, adopt, and amend a comprehensive plan.

Section 2. The Village Board has found it necessary to make certain amendments to the Village of Palmyra Comprehensive Plan originally adopted May 19, 2008.

Section 3. The Village of Palmyra Plan Commission has reviewed the recommended amendments to the Comprehensive Plan at a regular monthly meeting.

Section 4. The Village has held at least one public hearing on this ordinance, in compliance with the requirements of section 66.1001(4)(d) of the Wisconsin Statutes.

Section 5. The Palmyra Village Board, does, by enactment of this ordinance, formally amend the document entitled, "Village of Palmyra Comprehensive Plan 2008-2030," pursuant to section 66.1001(4)(c) of the Wisconsin Statutes.

Section 6. This ordinance shall take effect upon passage by a majority vote of the members-elect of the Village Board and publication as required by law.

Adopted this 16 day of JAN, 2012

Village President: 

(Published/Posted): 2-2-2012

(Approved, Vetoed): 7 yes, 0 No

Attest:

  
Village Clerk

## PLAN AMENDMENTS

The following lists the dates and page numbers of any amendments to this comprehensive plan since its original adoption.

<u>AMENDMENT DATE</u>	<u>PAGE #</u>
01/16/12	Future Land Use Map 6 & 6A
Summary: Incorporated recommendations from the Village's Official Map adopted in 2011, and the Village's Comprehensive Outdoor Recreation Plan adopted in 2010, municipal boundary amendments to reflect annexations approved since the plan was adopted and associated future land use designations.	

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Donald Beaver	Trustee
Frank Kostopolous	Trustee
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## EXECUTIVE SUMMARY

In 2007, the Village of Palmyra requested the assistance of MSA Professional Services, Inc. to complete a Comprehensive Plan that complied with Wisconsin's "Smart Growth" requirements, State Statute 66.1001. This Plan is a guidebook for future development of the Village of Palmyra and surrounding area. Given the Village has extraterritorial plat approval authority; those lands within 1.5 miles of the corporate limits are included in the Planning Area. (See Map 1: Planning Area). The Plan provides the most recent available statistics and survey data, documents the important issues of concern identified by Village residents, and sets forth goals, objectives, policies, and recommendations for actions to be pursued by the Village in the coming years. The Plan covers topics mandated by Wisconsin State Statute 66.1001, but the content of the Plan reflects local concerns. This Plan looks forward to year 2030, but it should be reviewed annually and fully updated every ten years.

The Village last completed a land use plan in 1994; however, this plan was over 13 years old and did not comply with State Statute 66.1001. Although this Plan will replace the 1994 Plan, some information from that plan was used in this planning process. The recommendations of this Plan are generally consistent with other adopted local, regional, and state plans, and sound planning practices. All neighboring communities, including Jefferson County, were distributed a draft and final version of this Plan.

In order to foster greater public participation the Village of Palmyra Board elected to form a Citizen Advisory Committee (CAC) to work with MSA to develop the Comprehensive Plan. Members of the CAC represented a diverse group of stakeholders, chosen by the Village Board from a list of persons who contacted the Village interested in participating. The CAC met 10 times over the course of a year to review project material and to make policy recommendations. Over the course of these meetings several themes emerged which are highlighted below and discussed in more detail within this Plan.

- ❖ Continue to market the community as the "Heartbeat of the Kettle Moraine." The words Palmyra and the Kettle Moraine should be synonymous,
- ❖ Maintain the Downtown as the central commercial, retail, and civic hub of the community,
- ❖ Grow Palmyra's economy and job base through the expansion of the Industrial Park,
- ❖ New growth should be held to a high standard of community design reflective of traditional neighborhoods in Palmyra, with a focus on developing housing for all cycles of life,
- ❖ Protect sensitive natural resources within and around the Village of Palmyra.

The remaining portion of this Plan is organized into five chapters:

- **Chapter 1: Introduction** – describes the Wisconsin's Comprehensive Planning requirements and the planning process used to complete this Plan.
- **Chapter 2: Vision, Goals, Objectives, & Policies** - describes the community vision, goals, objectives, and policies for each element of the comprehensive plan.
- **Chapter 3: Future Land Use** – a summary of the future land use plan for the Village of Palmyra.
- **Chapter 4: Implementation** - a compilation of recommendations and specific actions to be completed in a stated sequence to implement the goals, objectives, & policies contained in Chapter 2.
- **Chapter 5: Existing Conditions** - summarizes background information as required for the nine planning elements to be included in comprehensive plans (as per Wisconsin Statute 66.1001). This information provides a basis for creating goals, objectives, policies, maps, and actions guiding future development in the Village of Palmyra.



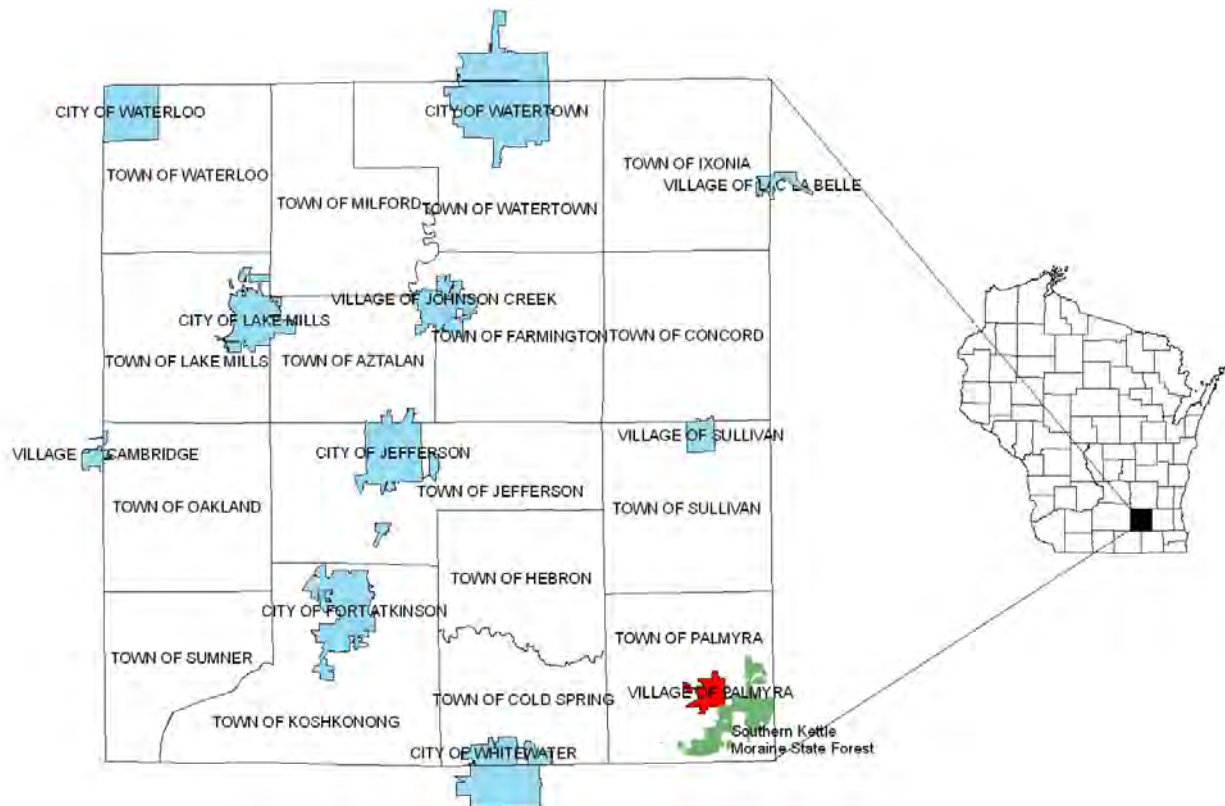
# 1 INTRODUCTION

## 1.1 REGIONAL CONTEXT

Officially incorporated in 1866, the Village of Palmyra is located in southeastern Wisconsin (Jefferson County), 60 miles East of Madison WI & 45 miles West of Milwaukee WI. The Village borders the Southern Kettle Moraine State Forest and thus has branded itself as the “Heartbeat of the Kettle Moraine.” The Village is approximately 797 acres in size (1.25 sq.mi.). The entire Planning Area is approximately 10,850 acres, or 17 square miles. The 2005 population for the Village was 1,775 (1,425 persons per sq.mi.).

Jefferson County was established in 1836, and is bordered on the west by Dane County, on the south by Rock and Walworth County, on the east by Waukesha County, and on the north by Dodge County. The total area is approximately 372,223 acres, or 582 square miles. The population in 2005 was 79,188 (136 persons per sq.mi.). Sixteen towns, five villages, and six cities are included in the County. Watertown (pop. 22,973), Whitewater (pop. 13,938), and Fort Atkinson (pop. 12,046) are the largest cities; although large portions of both Watertown and Whitewater are outside of Jefferson County. The City of Jefferson, located in the central part of the County, is the county seat.

Figure 1.1: Jefferson County Communities



## 1.2 WISCONSIN COMPREHENSIVE PLANNING LAW

Under the Comprehensive Planning legislation [s. 66.1001 Wis. Stats.], adopted by the State in October of 1999 and also known as “Smart Growth,” beginning on January 1, 2010 if the Village of Palmyra engages in any of the actions listed below, those actions shall be consistent with its comprehensive plan:

- Official mapping established or amended under s. 62.23 (6)
- Local subdivision regulations under s. 236.45 or 236.46
- County zoning ordinances enacted or amended under s. 62.23 (7)
- Town, village, or city zoning ordinances enacted or amended under s. 60.61, 60.62, 60.23 (7)
- Zoning of shorelands or wetlands in shorelands under s. 59.692, 61.351 or 62.231

### The Law Defines a Comprehensive Plan as containing nine required elements:

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

The Comprehensive Planning Law in Wisconsin requires public participation at every stage of the comprehensive planning process. “Public participation” is defined as adopting and implementing written procedures for public participation that include but are not limited to broad notice provisions, the opportunity for the public and impacted jurisdictions to review and comment on draft plans, and the holding of a public hearing prior to plan adoption.

The Comprehensive Planning Law standardizes the procedure for adopting a comprehensive plan. The plan commission must submit a recommendation on the comprehensive plan to the chief elected body. The local governing body may then adopt and enact the plan by ordinance.

In addition to ensuring local residents and businesses have the opportunity to review and comment on the plan, the Comprehensive Planning Law requires that copies of the draft and final comprehensive plans be sent to adjacent communities, the Wisconsin Department of Administration, the regional planning commission & public library serving the area, and all other area jurisdictions located entirely or partially within the boundaries of the community.

### The Role of a Comprehensive Plan for the Village of Palmyra

This planning document is intended to be a “living” guide for the future overall development of the Village of Palmyra. It serves the following purposes:

- The plan acts as a benchmark to where the community is now in terms of current strengths, weaknesses, opportunities and threats to quality of life.
- It provides a means of measuring progress for existing and future Village leaders.
- It clearly defines areas appropriate for development, redevelopment, and preservation.
- It identifies opportunities to update and strengthen the Village of Palmyra’s land use implementation tools.
- It can be used as supporting documentation for Village of Palmyra policies and regulations as well as grant funding requests for public & private projects.

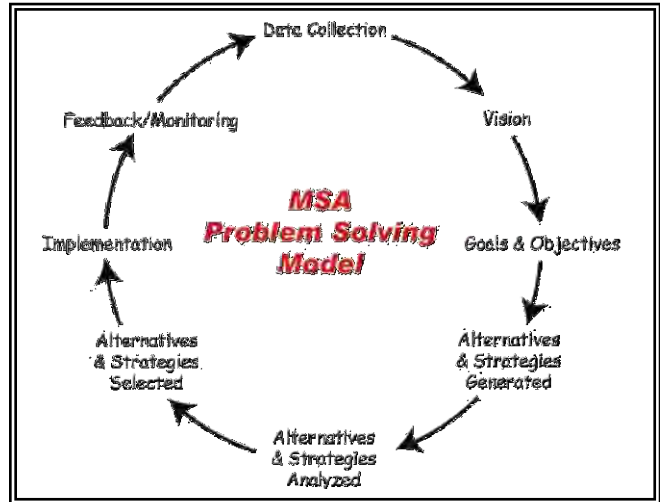
- In addition to any applicable zoning ordinances, it will be a primary document used by the Plan Commission and the Village Board to evaluate development proposals within the Village of Palmyra.

The most important function the plan will serve is as a resource manual assisting in the evaluation of land use related requests and the provision of design recommendations for various types of development. It establishes a standard for all land use decisions in the Village of Palmyra. Communities who consistently make land use decisions based on their comprehensive plan reduce their exposure to legal action, increase their opportunities to save money and improve the quality and compatibility of new development.

### 1.3 PLANNING PROCESS

In 2007, the Village of Palmyra requested the assistance of MSA Professional Services, Inc. to complete a Comprehensive Plan complying with Wisconsin's "Smart Growth" requirements, State Statute 66.1001. In order to foster greater public participation the Village of Palmyra Board elected to form a Citizen Advisory Committee (CAC) to work with MSA to develop the Comprehensive Plan. Members of the CAC were chosen by the Village Board from a list of persons who contacted the Village interested in participating. The CAC represented a diverse group of stakeholders and included as members current and former Village Board members, representatives from area businesses, school board members, members of Village departments, and representatives from the Town of Palmyra. The CAC met monthly over the course of a year and was responsible for reviewing data, creating a community vision & goals, selecting preferred planning policies, and making a final recommendation to the Village Plan Commission and Board.

Figure 1.2: MSA Problem Solving Model



As part of the Comprehensive Planning legislation, every community must develop a public participation plan at the beginning of the planning process. The purpose of the public participation plan is to outline procedures for public involvement during every stage of the planning process. (See Appendix A for the complete Public Participation Plan.) Some of key components of the public participation plan include:

- Use of a temporary website to track project progress and post project information,
- Use of a Community Survey to gain insight from Village residents on key issues (See Appendix B for the complete Community Survey),
- Distribution of the draft plan to neighboring municipalities for review,
- A public hearing before the Village Board.

### 1.4 SELECTION OF THE PLANNING AREA

The study area for this Plan generally includes all lands in which the Village has both a short and long term interest in planning and development activity. The Planning Area includes all lands within the current municipal limits and within Palmyra's Urban Service Area (USA). The boundaries of the USA corresponds to those areas where public sanitary sewer service is either currently available or could be cost-effectively served by public sanitary sewer systems at some point in the future according to the Jefferson County 1999 Agricultural Preservation and Land Use Plan. Given the Village has extraterritorial plat approval authority, those lands within 1.5 miles of the corporate limits are also included in the Planning Area. (See Map 1: Planning Area).

## 1.5 COMMUNITY SWOT ANALYSIS

At the beginning of the planning process, a Community SWOT exercise was conducted to gather initial data from CAC members regarding the Strengths, Weaknesses, Opportunities, and Threats for the Palmyra community.

Strengths:	Things that you like about the Village of Palmyra that you wouldn't change.
Weaknesses:	Things that you don't like about the Village of Palmyra that should be improved.
Opportunities:	Things that could benefit the Village of Palmyra in the future.
Threats:	Things that could harm the Village of Palmyra in the future.

Participants discussed the following **strengths** in the Village of Palmyra:

- Closeness of the community
- Rich history (historical society & museum)
- School system
- Proximity to outdoor amenities
- Southern Kettle Moraine State Forest
- Airport
- Lower Spring & Blue Spring Lakes
- Proximity to Old World WI & UW-Whitewater
- FS Mill
- Railroad & Industrial Park
- Holiday decorations
- Corporate citizenship
- Religious institutions (4 churches)
- Walkable community
- Health clinic & dentist office
- Park & recreation facilities
- Active civic groups
- Community room in the High School
- Boy Scout Cabin
- Enterprise
- Nightcap
- Other restaurants

Participants discussed the following **weaknesses** in the Village of Palmyra:

- Empty retail downtown
- Small size limits tax base
- Lack of a senior center
- Industrial park is full
- Little knowledge & application of past Village Land Use Plans

Participants discussed the following **opportunities** in the Village of Palmyra

- Market the community and its surrounding amenities

Participants discussed the following **threats** in the Village of Palmyra

- Increasing energy costs
- Additional business closings
- Deteriorating roads and public facilities
- Lack of space for new industrial businesses

## 2 VISION, GOALS, OBJECTIVES, & POLICIES

In the summer of 2007, MSA held a number of public meetings with the Citizen Advisory Committee to develop a vision statement for the community. A vision statement identifies where an organization (the Village of Palmyra) intends to be in the future and how to meet the future needs of its stakeholders: citizens. The vision statement incorporates a shared understanding of the nature and purpose of the organization and uses this understanding to move towards a greater purpose together. The vision statement is written in present tense and describes an ideal future condition.

### **The Village of Palmyra is a...**

**Vibrant small town community which is widely known as the “Heartbeat of the Kettle Moraine” due to its connection to the Southern Kettle Moraine State Forest. This connection is emphasized through local tourism businesses, community events, and local design. The Village maintains a healthy and attractive downtown business district, serving the needs of both residents and visitors; connected to the Ice Age Trail via a local bicycle and pedestrian trail.**

**The Village maintains a growing business sector that provides family supporting jobs to area residents. A diverse transportation network supports businesses in the industrial park, and the community as a whole. New residential developments reflect a mix of housing types, sizes, and styles to meet the varied needs of residents. The Village manages growth at a reasonable pace and new development is designed and sited to reflect the traditional character of the Village and to preserve sensitive environmental areas. The traditional character of the Village is exemplified by:**

**Its small town charm, friendliness & community spirit,  
Its historical development and preservation of historical sites and structures,  
Its rural and agricultural heritage,  
Its natural environment, especially its connection to the Southern Kettle Moraine State Forest,  
Its positive growth orientation**

**The Village maintains strong public infrastructure and continues to work to maintain the quality of the areas two Lakes, Lower Spring Lake and Blue Spring Lake. Local leaders continue to work with the Town of Palmyra and Jefferson County to manage development and the delivery of services for the betterment of the region.**

### **General Goals**

This chapter contains goals specific to the required elements of a comprehensive plan. The following three goals are more general in nature, and along with the vision statement, are intended to guide the actions of the Village of Palmyra. The essence of these goals is reflected throughout the entire plan. If there is a question regarding a decision that is not clearly conveyed in the details of this comprehensive plan, then the decision should be based on the intent of the vision statement and the general goals.

- **Protect and improve the health, safety, and welfare of residents in the Village of Palmyra.**
- **Preserve and enhance the quality of life for the residents of the Village of Palmyra.**
- **Protect and reinforce the community character of the Village of Palmyra.**

Each element of the comprehensive plan contains goals, objectives, and policies established during the planning process based on the information contained in Chapter 5, Existing Conditions. This section defines goals, objectives, and policies as follows:

Goal: A goal is a long-term target that states what the community wants to accomplish. The statement is written in general terms and offers a desired condition.

Objective: An objective is a statement that identifies a course of action to achieve a goal. They are more specific than goals and are usually attainable through planning and implementation activities.

Policy: A policy is a general course of action or rule of conduct that should be followed in order to achieve the goals and objectives of the plan. Policies are written as actions that can be implemented, or as general rules to be followed by decision-makers. Policies that direct action using the words “shall” or “will” are intended to be mandatory aspects of the implementation of the Village of Palmyra Comprehensive Plan. Those policies using the words “should,” “encourage,” “discourage,” or “may” are advisory and intended to serve as a guide.

## 2.1 HOUSING

### 2.1.1 Issues Raised During the Planning Process

Members of the CAC were concerned that some homes within the Village were either beginning to show their age or were not being properly maintained by their owners. The CAC was concerned this trend could negatively affect the community's image and property values.

According to the *Community Survey*, 81% of respondents either strongly agreed or agreed that the Village should focus on improving existing housing quality.



The CAC raised concerns regarding the “cookie cutter” subdivisions they see being built in other communities. Aspects of these developments include repeating facades, monotonous uses, and repetitive floor plans. Members did not want to see these types of developments in Palmyra.

The CAC thought there would be a greater need for elderly and senior housing in the future. CAC members noted there are many seniors, or “empty nesters,” currently living in homes with 3-5 bedrooms. These homes typically are too big to maintain and would be ideal for new or younger families. However, the CAC noted there are very limited options for seniors to turn to within the Village. The CAC acknowledged the ideal housing would include options for both homeownership and renting, have ground floor mechanicals (washers/dryers), doorways and fixtures designed for seniors, and include garages. The CAC noted successful developments in Whitewater as an example. Without these developments, the CAC believes many of the seniors and elderly within the community will have to relocate to other communities.

According to the *Community Survey*, 53.9% of respondents either strongly agreed or agreed that senior condominiums or apartments are needed and 52.3% of respondents either strongly agreed or agreed that assisted living facilities for seniors are needed in Palmyra.

### 2.1.2 Goals, Objectives, & Policies

**Goal 1: Provide for the residential needs of all Village residents to meet existing and forecasted housing demands, and attract new residents.**

Objectives:

1. Plan for a range of housing that meets the needs of area residents of various income levels, age, lifestyle, and health status.

Policies:

1. Include affordable housing in any future discussions with developers regarding new residential growth or redevelopment. Explore opportunities to provide incentives for developers and homebuilders that create high quality housing that are affordable for first-time buyers, low to moderate-income households, and elderly residents on fixed incomes.



2. Encourage development and/or redevelopment of properties for residential uses to meet the needs of area seniors. Include senior housing in any future discussions with developers regarding new residential developments.
3. Encourage the location of multi-family apartment buildings, senior housing, and special needs housing inside of the Village where full urban services necessary to support these types of facilities are available.

**Goal 2: Maintain housing properties, types and densities that reinforce the traditional character of the Village and the surrounding rural area.**

Objectives:

1. Support traditional neighborhood development in most areas of the Village and conservation subdivision development in areas adjacent to environmental sensitive areas.
2. Ensure that residential development is built and maintained according to levels deemed safe by industry standards.
3. Support programs that maintain or rehabilitate the Village's existing housing stock.

Policies:

1. Require the integration of varied housing types and lot sizes within the Village. This includes a blend of single-family, two-family, multi-family, or senior housing choices within the community.
2. Plan for multi-family developments in parts of the Village where streets and sidewalks can handle increased amounts of traffic; there are adequate parks, open spaces, shopping, and civic facilities existing or planned nearby; and the utility system and schools in the area have sufficient capacity. Disperse such developments in smaller projects throughout the Village, rather than larger projects in isolated areas.
3. In appropriate areas, encourage creative mixed-use developments that include residential units above small businesses, providing unique housing options for young professionals, empty nesters, and others.
4. Maintain a comprehensive building code that requires inspection of new structures and repair of unsafe and unsanitary housing conditions.
5. Encourage voluntary efforts by private homeowners to maintain, rehabilitate, update or otherwise make improvements to their homes. Discourage the use of residential properties for the accumulation of "junk" materials.

*Traditional Neighborhood Design (TND)* is a planning concept that calls for neighborhoods to be designed in the format of small, early 20th century villages. Those traditional formats were characterized by one-family and two-family homes on small lots, narrow front setbacks with front porches and gardens, detached garages in the backyard, walkable "Main Street" commercial areas with shops lining the sidewalk, and public parks, town greens, or village squares.

TND is intended to provide an alternative to bland subdivisions and suburban sprawl. Most contemporary development is characterized by an orientation to the automobile, separation of land uses, and low intensities. In contrast, TND calls for compact, pedestrian-oriented neighborhoods with a mix of commercial and residential uses, a variety of housing types, and public places where people have opportunities to socialize and engage in civic life.

*Conservation Subdivisions* are an alternative approach to the conventional lot-by-lot division of land, which spreads development evenly throughout a parcel with little regard to impacts on the natural and cultural features of the area. Residential lots are grouped or "clustered" on only a portion of a parcel of land while the remainder of the site is permanently preserved as open space.

"Junk" – Any worn out or discarded materials including but not necessarily limited to scrap metal, inoperable motor vehicles and parts, construction material, household wastes, including garbage and discarded appliances.

## 2.2 TRANSPORTATION

### 2.2.1 Issues Raised During the Planning Process

The CAC noted traffic and safety concerns at all of the intersections along Main Street due to poor visual triangles. In addition, some of the intersections are three way stops (west bound doesn't have a control sign). This is sometimes confusing,

particularly for visitors not familiar with the local streets. The CAC also raised issues regarding the land use implications if the airport built a crosswind runway, namely the inability to expand the current industrial park.



According to the *Community Survey*, 71.4% of respondents rate the condition of local roads as either excellent or good.

### 2.2.2 Goals, Objectives, & Policies

**Goal 1: Provide for a safe, efficient, multi-modal, and well-maintained transportation network for all residents, businesses, and emergency vehicles.**

#### Objectives:

1. Maintain the Village's transportation network at a level of service desired by Village residents and businesses.
2. Manage access & design of the transportation network in order to effectively maintain the safe and functional integrity of Village transportation facilities.
3. Coordinate major transportation projects with land development, neighboring communities, and WisDOT.

#### Policies:

1. Transportation Design – Improve connections between developments by encouraging traditional or modified grid-like street patterns as opposed to multiple cul-de-sacs and dead end roads. Discourage the development of roadways in environmentally sensitive areas. Consider the use of transportation calming devices & alternative designs to provide a safe & fluid street network.
2. Transportation Alternatives for Disabled & Elderly Residents – Collaborate with Jefferson County to continue to provide transportation services for disabled & elderly residents. Support private transportation providers that serve this sector of the population.
3. Incorporation of Pedestrian & Bicycle Planning – Require that developments address the necessity of adequate walking & bicycling areas and routes in residential and commercial areas. Most local streets may be served without the use of sidewalks; however, development along collector or arterial streets should provide separate off-road facilities. Bicycle and pedestrian ways shall be designed to connect to adjacent developments, schools, parks, shopping areas, and existing or planned pedestrian or bicycle facilities. Collaborate with Jefferson County and WIDNR to connect Village parks and trails with regional recreational facilities via separate trails or marked routes on existing roads.
4. Protection of Village Roads – Encourage traffic patterns that keep a majority of traffic on arterial and collector streets. Roads shall be built according to their functional classification & Village standards. Where appropriate, designate weight restrictions and truck routes, to protect local roads.

5. Maintain Condition Standards for Village Roadways – Maintain an average PASER rating of 7 for all Village Roads (considering budgetary constraints), and establish and prioritize future road projects based on the applicable PASER scores, ADT data, and safety concerns.
6. Coordination of Improvements to County and State Highways – Stay apprised of the WisDOT and Jefferson County’s efforts to maintain and improve State and County roads within and near the Village. Coordinate improvements to local roads whenever feasible.
7. Joint Planning of Roads that Cross Jurisdictions – Work with the Town of Palmyra to plan, construct and maintain those roadways that affect both jurisdictions, including cost sharing where appropriate. Require intergovernmental agreements that define the responsibilities of the Village, developers and the Town of Palmyra regarding any required improvements to Village and Town roads and funding of such improvements.

“PASER” – Pavement Surface Evaluation & Rating. The WisDOT recommends municipalities maintain an average rating of “7” for all roads. Additional PASER information is found in Chapter 5.3.5.1

### **Goal 2: Be prepared to address other transportation-related policies required by Wisconsin’s Comprehensive Planning law.**

#### Objectives:

1. Specifically identify any areas required by Wisconsin’s Comprehensive Planning law that do not have direct applicability to the Village at this time.

#### Policies:

1. Future Cooperation and Planning – The Village will actively participate in any planning for any form of public transit, passenger rail, public air transportation or water transportation should any of these transportation alternatives become feasible in the Village in the future.

## 2.3 AGRICULTURAL, NATURAL, & CULTURAL RESOURCES

### 2.3.1 Issues Raised During the Planning Process

CAC members acknowledged the need to continue to preserve the water quality of both Blue Spring Lake and Lower Spring Lake. The CAC noted there had been some problems with manure runoff into LSL, but this seems to have been addressed. CAC was also concerned about the quality & quantity of ground water levels in the local aquifer.

According to the *Community Survey*, 74.5% of respondents indicated the preservation of surface water was very important.



### 2.3.2 Goals, Objectives, & Policies

**Goal 1: Reinforce the rural character of the Village and surrounding landscape by encouraging the preservation of productive farmland, sensitive environmental areas, wildlife habitat, rural vistas, and local cultural resources.**

#### Objectives:

1. Protect agricultural resource areas in the Village's Extraterritorial Jurisdiction, until such time as annexation occurs.
2. Minimize fragmentation of productive agricultural cropland, forests, and natural areas surrounding developed areas of the Village.
3. Minimize the potential impact on natural resources, environmental corridors, and wildlife habitat when evaluating potential residential, commercial, industrial, and intensive agricultural uses.
4. Minimize the potential impact on local cultural resources when evaluating new developments.

#### Policies:

1. Support the preservation of agricultural lands for continued agricultural use. The Village will place a high priority on directing development away from areas that have been historically productive farmland, are in agricultural use, or contain prime soils until annexation occurs.
2. Avoid development in areas that have documented threatened and endangered species, or have severe limitations due to steep slopes, poor soils, or sensitive environmental areas such as wetlands, floodplains, and streams in order to protect the benefits and functions they provide. The Village shall require these natural resources features to be depicted on all site plans, preliminary plats, and certified survey maps in order to facilitate preservation of natural resources.

Map 3 illustrates the location of prime farmlands in and surrounding the Village of Palmyra according to the Jefferson County Soil Survey. There are three categories of prime farmland that are mapped: 1) soils identified by the NRCS as prime farmland soils; 2) soils identified by the NRCS as prime farmland soils when drained; and 3) soils identified by the NRCS as farmland of statewide importance.

3. Collaborate with Jefferson County and the Wisconsin Department of Natural Resources (WDNR) to link Palmyra's Historic Downtown and park facilities to regional trails and parks, with particular emphasis on connection to the Southern Kettle Moraine Forest.
4. Encourage maintenance and rehabilitation of historic areas and buildings. Ensure that any known cemeteries, human burials or archaeological sites are protected from encroachment by roads or other development activities. Construction activities on a development site shall cease when unidentifiable archaeological artifacts are uncovered during either land preparation or construction. The developer shall notify the Village of such potential discovery.
5. Support community events and programs that celebrate the history and culture of the Village.

**Goal 2: Reduce the potential for land use conflicts between farm and non-farm uses on the periphery of the Village.**

Objectives:

1. Encourage existing and expanding farm or forestry operations to follow "Best Management Practices."

Policies:

1. All existing, expanding, or new farming or forestry operations are encouraged to incorporate the most current "Best Management Practices" (BMPs) or "Generally Accepted Agricultural and Management Practices" (GAAMPS) as identified by but not limited to the following agencies:
  - a. Jefferson County
  - b. University of Wisconsin Extension
  - c. Wisconsin Department of Agriculture, Trade and Consumer Protection
  - d. Wisconsin Department of Natural Resources
  - e. National Resource Conservation Service

## 2.4 UTILITIES & COMMUNITY FACILITIES

### 2.4.1 Issues Raised During the Planning Process

The CAC expressed a desire to continue to strengthen the Village's connection to the Southern Kettle Moraine State Forest. The CAC noted there appears to be enough parkland in the Village to meet current needs; however, a possible park on the Trotter property east of the airport runway was discussed as an option to provide more park space within walking distance to residents who live in the northern area of the Village. In addition, the CAC expressed a desire to see the County or State develop an area for ATV use, as this has increased in popularity.



When asked to rate the utilities and facilities in Palmyra, the majority of respondents indicated all listed services as either excellent or good.  
*(Refer to Appendix B: Community Survey)*

The CAC acknowledged there might be a need to upgrade both the Police and Village Hall in the future. Both buildings are structurally fine, but heating and cooling costs are expensive and additional office space may be needed. In addition, the CAC thought the lack of a senior center was a community weakness.

### 2.4.2 Goals, Objectives, & Policies

#### Goal 1: Maintain high quality Village services and facilities.

##### Objectives:

1. Ensure that public and private community facilities and utilities are constructed and maintained according to professional and governmental standards (including handicap accessibility) and do not detract from the character of the Village.
2. Phase new development in a manner consistent with public facility and service capacity and community expectations.
3. Annually evaluate the condition of public facilities and equipment to ensure that they will continue to meet Village needs.
4. Monitor satisfaction with local emergency services, and other utility or community services, and seek adjustments as necessary to maintain adequate service levels.

##### Policies:

1. Utility Services - Ensure the provision of reliable, efficient, and well-planned utilities to adequately serve existing and planned development. Development permits shall not be issued unless there is adequate provision for necessary public facilities to serve such developments.
2. Sanitary Sewer – The capacity of the system should be closely monitored to ensure that it continues to meet the needs of development across the Village. Plan for sanitary sewer facilities on a system basis, rather than as a series of individual projects. Require that developers locate and size utilities with enough capacity to serve future extensions. If utilities must be oversized to serve an area that is

- not within the current development, development agreements should be used to recapture the additional costs to the initial developer. Continue to contract with the Blue Spring Lake Sanitary District to provide sanitary sewer services under mutually identified terms. In areas not served by municipal sewer, the Village of Palmyra requires adherence to the Wisconsin Sanitary Code & Jefferson County Sanitary Code.
3. Water Supply - The quality and quantity of water from the Village wells should be closely monitored to ensure that it continues to meet the needs of users. Encourage programs that support water conservation within the Village & region.
  4. Stormwater Management – Control stormwater quality and quantity impacts from development. Maintain natural drainage patterns, as existing drainage corridors, streams, floodplains, and wetlands, can provide for stormwater quality and quantity control benefits to the community. Direct that developers be responsible for erosion control and stormwater quality and quantity control both during and after site preparation and construction activities.
  5. Solid Waste & Recycling – Annually review levels of service provided by the contracted solid waste disposal and recycling services and meet with them to address any concerns raised by residents or local businesses. Encourage participation in Jefferson County’s Clean Sweep program for the disposal of hazardous materials.
  6. Parks – Maintain Village Park and Lions Park as focus areas for community gatherings and recreation. Require all proposed residential developments to dedicate land, or pay a fee in lieu thereof, for public park, recreation, and open space acquisition and development. Maintain an adequate amount of park and open space land, located throughout the community, to ensure all neighborhoods have access to recreational facilities.
  7. Power Plants, Transmission Lines, and Telecommunication Facilities – Actively participate in the planning and siting of any major transmission lines, facilities, natural gas lines, wind towers, or telecommunication towers. If such facilities are proposed, they should be located in an area safely away from existing residential uses and should respect environmentally sensitive areas. Underground placement and co-location (or corridor sharing) of new utilities is encouraged.
  8. Cemeteries – Collaborate with the local churches regarding the need for additional cemeteries or cemetery expansion.
  9. Special Needs Facilities – Work with Jefferson County and adjacent towns to maintain and improve access to special needs facilities (i.e. health care, childcare) for area residents. Actively participate in the planning and siting of any new special needs facility. Encourage all public facilities (including parks) be upgraded for handicap accessibility.
  10. Emergency Services - Work with the Palmyra Police & Fire Departments, and Jefferson County Sheriffs Department to maintain adequate provision of emergency services (i.e. fire, police, EMS) for Village residents and businesses, and review service provision levels with the appropriate agencies annually.
  11. Schools - Collaborate with the Palmyra-Eagle School District and the Waukesha County Technical College to provide high quality educational facilities and opportunities for Village residents. Actively participate in the planning and siting of any new school facility.
  12. Libraries - Work with Powers Memorial Public Library to maintain and improve access to public library facilities & services for Village residents, as well as residents from area Towns as applicable.

National Recreation and Park Association recommends that most residents should be within a ten minute walk or 1/3 mile from a public park or open space area and communities should maintain an average of 12 acres of park and recreational land per 1,000 residents.



## 2.5 ECONOMIC DEVELOPMENT

### 2.5.1 Issues Raised During the Planning Process

The CAC expressed a desire to continue to maintain the Downtown as the main commercial & retail area within the Village; however, the CAC noted that recently there has been a lack of new business growth in the downtown. Currently there are a number of buildings that are vacant either because of their condition or because the price to buy or rent these buildings is higher than what most business startups can afford.



The CAC thought there was significant opportunity to strengthen the community's image as the "Heartbeat of the Kettle Moraine" and to add more nature based tourism businesses to the local economy.

According to the *Community Survey*, a majority of respondents (52.7%) indicated they thought the economy in Palmyra was stable; however, only 8.1% described the economy as growing.

The CAC was also concerned about the Village's ability to attract new industrial or office uses, especially given the fact that there is no available space within the existing boundaries of the industrial park. The CAC acknowledged that a growing business sector was important to the stability of the local economy.

### 2.5.2 Goals, Objectives, & Policies

**Goal 1: Attract and retain businesses that strengthen and diversify the local economy.**

Objectives:

1. Seek local & regional businesses that strengthen and diversify the economic base, expand and enhance the tax base, improve wage and salary levels, and utilize the resident labor force.
2. Develop a long-term area strategy to promote sustainable economic development, with a special emphasis on branding & marketing the Village as the "Heartbeat of the Kettle Moraine."

Policies:

1. Encourage tourism, light manufacturing, and small-scale neighborhood commerce and office use as the major economic development types in the Village.
2. The Village encourages public-private partnerships as a way to promote investment in the Village and to spur downtown revitalization.
3. Improve coordination between the Village, area municipalities, Jefferson County, and other organizations to pursue economic development growth.

According to the *Community Survey*, when asked what types of nonresidential development would be best for Palmyra respondents listed *neighborhood commercial and office use and tourism related businesses* as their two priorities.

4. Support the development of agricultural related businesses within the Extraterritorial Jurisdiction that provide opportunities for area farmers and entrepreneurs to diversify and add value to local agricultural products.

**Goal 2: Reduce the potential for land use conflicts between business and non-business uses.**

Objectives:

1. Direct new and expanding development to qualified areas as defined in this plan (see Map 6: Future Land Use).
2. Maintain design guidelines for businesses to address landscaping, aesthetics, lighting, noise, parking, and access. (Refer to 2.8 Community Design Principles)
3. Maintain standards and limitations for home occupations and home based businesses in residential areas to minimize noise, traffic, and other disturbances.

*Home occupations* refer to office types of uses that do not alter the residential character of a home and its neighborhood.

*Home based businesses* are selected types of small businesses that can include buildings, yards, and vehicles, that have the physical appearance of a business rather than a home, located on the same parcel of land as the residence. Examples may include veterinary, animal boarding, hair styling, or woodworking businesses.

Policies:

1. Promote a strong downtown business district while allowing for limited commercial development at the edge of the Village as part of new traditional neighborhood developments or planned commercial nodes. Discourage unplanned, incremental strip commercial development along major community corridors, such as STH 59 & 106 and CTH H & E.
2. Encourage brownfield or infill development or expansion of existing business and industry parks in the Village before considering creating new business or industry parks.
3. Large-scale industrial and commercial businesses (those that generate large volumes of traffic or wastewater, or have a high water demand) shall locate within or adjacent to the Palmyra Industrial Park where a full range of utilities, services, roads, and other infrastructure is available to adequately support such developments.
4. Ensure that new businesses do not detract from the character of the Village. (Refer to 2.8 Community Design Principles)
5. Prohibit home based businesses in residential subdivisions that would cause safety, public health, or land use conflicts with adjacent residential uses due to such things as increased noise, traffic, and lighting.

*Brownfield development* refers to the redevelopment of blighted or contaminated commercial or industrial parcels.

*Infill development* refers to developing vacant sites within built up areas or redeveloping existing parcels.

## 2.6 INTERGOVERNMENTAL COOPERATION

### 2.6.1 Issues Raised During the Planning Process

No significant intergovernmental conflicts were identified during the planning process. The CAC recognized the increasing need to coordinate Village policies and plans with Jefferson County, the Town of Palmyra, the Blue Spring Lake Sanitary District, and the Palmyra-Eagle School District.



### 2.6.2 Goals, Objectives, & Policies

**Goal 1: Maintain mutually beneficial relationships with neighboring municipalities, Jefferson County, State & Federal agencies, and the schools serving Palmyra residents.**

Objectives:

1. Coordinate with Jefferson County and the Town of Palmyra to jointly plan boundary areas and coordinate their long-term growth plans with the Village Comprehensive Plan.
2. Coordinate Village planning efforts with the Palmyra-Eagle School District as necessary to allow the district to properly plan for facility needs.
3. Identify existing and potential conflicts with Jefferson County and the Town of Palmyra and establish procedures to address them.

Policies:

1. Encourage an efficient and compatible land use pattern that minimizes conflicts between land uses across municipal boundaries and preserves farming and natural resources in mutually agreed areas. To the extent possible, coordinate the Village's Comprehensive Plan with Jefferson County's and any future plan for the Town of Palmyra.
2. Utilize the Extraterritorial Land Division authority to ensure that development in the Village's Extraterritorial Jurisdiction is coordinated with the Village's Comprehensive Plan.
3. Prior to the adoption of the Village Comprehensive Plan, and for subsequent updates, request comments from Palmyra-Eagle School District officials, the Town of Palmyra, and Jefferson County.
4. Request that School District officials keep the Village apprised of any plans for new facilities that could either be located in the Village or near enough to the Village's jurisdiction that Village streets could be affected.
5. Actively participate, review, monitor, and comment on pending plans from the Town of Palmyra, Jefferson County, Blue Spring Lake Sanitary District, and State or Federal agencies on land use or planning activities that would affect the Village.
6. Continually work with neighboring municipalities to identify opportunities for shared services or other cooperative planning efforts.

## 2.7 LAND USE

### 2.7.1 Issues Raised During the Planning Process

The CAC acknowledged that some growth in Palmyra was either needed or inevitable. However, this growth should not come at the expense of the community's character or its natural resources. In addition, the CAC thought the Village should promote a land use pattern that promotes compatibility and efficacy in the delivery of utilities.



### 2.7.2 Goals, Objectives, & Policies

**Goal 1: Ensure that a desirable balance and distribution of land uses is achieved which reinforces the Village's unique community character & sense of place.**

#### Objectives:

1. Maintain a comprehensive future land use plan and map that coordinates housing, economic development, recreation, and the preservation of farmland, open space and natural resources within and surrounding the Village.
2. Preserve the Village's ability to continue to grow in an orderly approach.

#### Policies:

1. Support traditional neighborhood development in most areas of the Village and conservation subdivision development in areas adjacent to environmentally sensitive areas.
2. Require the integration of varied housing types and lot sizes within the Village. This includes a blend of single-family, two-family, multi-family, or senior housing choices within the community.
3. In designated areas, support mixed-use development projects that integrate non-residential and residential uses into high quality, cohesive places.
4. Prohibit incompatible land use (e.g. high traffic generators, noisy or unaesthetic uses) from locating within single-family residential neighborhoods.
5. Encourage rehabilitation, redevelopment, and infill development of older areas in the downtown in a manner that reinforces community character.
6. Coordinate development policies for rural areas within the Planning Area with the Jefferson County 1999 Agricultural Preservation & Land Use Plan.
7. Discourage the creation of non-agriculturally related office, commercial, and industrial developments not served by public water and sanitary sewer within the Planning Area.
8. Reserve the right of ways for future streets, pedestrian and bicycle paths, bridges, utilities, rail lines, transit facilities and other transportation-related features.

## Goal 2: Balance land use regulations and individual property rights with community interests.

### Objectives:

1. Provide flexibility in development options/tools to create win-win outcomes between landowner desires and community interests.
2. Maintain policies for considering revisions to the Future Land Use Map if and when requested by eligible petitioners.
3. Maintain policies for interpreting future land use boundaries.

### Policies:

1. Planned Unit Development: A subdivider may elect to apply for approval of a plat employing a planned unit development (PUD) design.
2. Conservation Subdivision Development: A subdivider may elect to apply for approval of a plat employing a conservation subdivision design.
3. Purchase of Development Rights:<sup>1</sup> The use of purchase of development rights should be discouraged within the Village's Urban Service Area in order to preserve the community's ability to grow.
4. Transfer of Development Rights:<sup>2</sup> The use of transfer of development rights may be considered within the Planning Area if Jefferson County develops this program.
5. Reclassifying Future Land Use:<sup>3</sup> A property owner may petition for a change to the Future Land Use Map. The Village will consider petitions based on the following criteria:
  - a. Agricultural Criteria: The land does not have a history of productive farming activities or is not viable for long-term agricultural use. The land is too small to be economically used for agricultural purposes, or is inaccessible to the machinery needed to produce and harvest products.
  - b. Compatibility Criteria: The proposed change will not cause any conflicts with neighboring land uses. A petitioner may indicate approaches that will minimize incompatibilities between uses.

*A Planned Unit Development (PUD) refers to a parcel of land planned as a single unit, rather than as an aggregate of individual lots, with design flexibility from traditional siting regulations. Within a PUD, variations of densities, setbacks, streets widths, and other requirements are allowed. The variety of development that is possible using PUDs creates opportunities for creativity and innovation within developments. Since there is some latitude in the design of PUDs, the approval process provides opportunities for cooperative planning between the developer, reviewing boards, and other interested parties.*

*Purchase of Development Rights (PDR) refers to a public program to pay landowners the fair market value of their development rights in exchange for a permanent conservation easement that restricts development of the property.*

*Transfer of Development Rights (TDR) refers to a program to relocate potential development from areas where proposed land use or environmental impacts are considered undesirable (the "donor" or "sending" site) to another ("receiver") site chosen on the basis of its ability to accommodate additional units of development beyond that for which it was allowed under a comprehensive plan or zoning ordinance.*

<sup>1</sup> Jefferson County maintains a volunteer Conservation Easement Program. The County may consider a purchasing (vs. donating) development rights program in the future.

<sup>2</sup> No such program existed when this plan was completed.

<sup>3</sup> Petitions to change future land use classifications may only be submitted by landowners (or their agents) within the Planning Area, by Village Officials, or by officials from adjacent municipalities.

- c. Natural Resources Criteria: The land does not include important natural features such as wetlands, floodplains, steep slopes, or significant woodlands, which will be adversely affected by the proposed development. The proposed building envelope is not located within the setback of Shoreland & Floodplain zones (raised above regional flood line). The proposed development will not result in undue water, air, light, or noise pollution. Petitioner may indicate approaches that will preserve or enhance the most important and sensitive natural features of the proposed site.
  - d. Emergency Vehicle Access Criteria: The lay of the land will allow for construction of appropriate roads and/or driveways that are suitable for travel or access by emergency vehicles.
  - e. Ability to Provide Services Criteria: Provision of public facilities and services will not place an unreasonable burden on the ability of the Village to provide and fund those facilities and services. Petitioners may demonstrate to the Village that the current level of services in the Village, including but not limited to school capacity, transportation system capacity, emergency services capacity (police, fire, EMS), parks and recreation, library services, and potentially water and/or sewer services, are adequate to serve the proposed use. Petitioners may also demonstrate how they will assist the Village with any shortcomings in public services or facilities.
  - f. Public Need Criteria: There is a clear public need for the proposed change or unanticipated circumstances has resulted in a need for the change.
6. Interpreting Boundaries<sup>4</sup>: Where uncertainty exists as to the boundaries of districts shown on the Future Land Use Map, the following rules shall apply:
- a. Boundaries indicated as approximately following the centerlines of streets, highways, or alleys shall be construed to follow such centerlines.
  - b. Boundaries indicated as approximately following platted lot lines or U.S. Public Land Survey lines shall be construed as following such lot lines.
  - c. Boundaries indicated as approximately following municipal boundaries shall be construed as following such boundaries.
  - d. Boundaries indicated as following railroad lines shall be construed to be midway between the main tracks.
  - e. Boundaries indicated as following shorelines and floodplains, shall be construed to follow such shorelines and floodplains, and in the event of change in the shorelines and floodplains, it shall be construed as moving the mapped boundary.
  - f. Boundaries indicated as following the centerlines of streams, rivers, canals, or other bodies of water shall be construed to follow such centerlines.
  - g. Boundaries indicated as parallel to extension of features indicated in the preceding above shall be so construed. The scale of the map shall determine distances not specifically indicated on the Future Land Use Map.

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<sup>4</sup> With respect to the accuracy of this and other maps included in this document, a disclaimer is necessary. The Village of Palmyra and MSA Professional Services have prepared and reviewed maps herein. It has been mutually understood that these maps were accurate for planning purposes and that they will continue to be used to make planning and zoning decisions. Due to scale limitations or potential data errors, it is recognized that disputes may arise concerning areas delineated on the maps. If a landowner or any other party alleges error or misrepresentation of map delineations, he or she must submit proof from recognized professionals that such is the case. If any errors are found, parties will be notified and relevant maps will be corrected.



## 2.8 COMMUNITY DESIGN PRINCIPLES

### 2.8.1 Issues Raised During the Planning Process

The CAC raised a number of concerns regarding the design of development within the community including: signage, lighting, landscaping, building design & materials, and transportation facilities. In general, the CAC thought development should strive to enhance the community's character, minimize impacts to adjacent uses, and reflect sound architectural, planning, and engineering principles.

### 2.8.2 Goals, Objectives, & Policies

**Goal 1: Promote high quality site and building designs within the community to uphold property values and reinforce the character of the Village.**

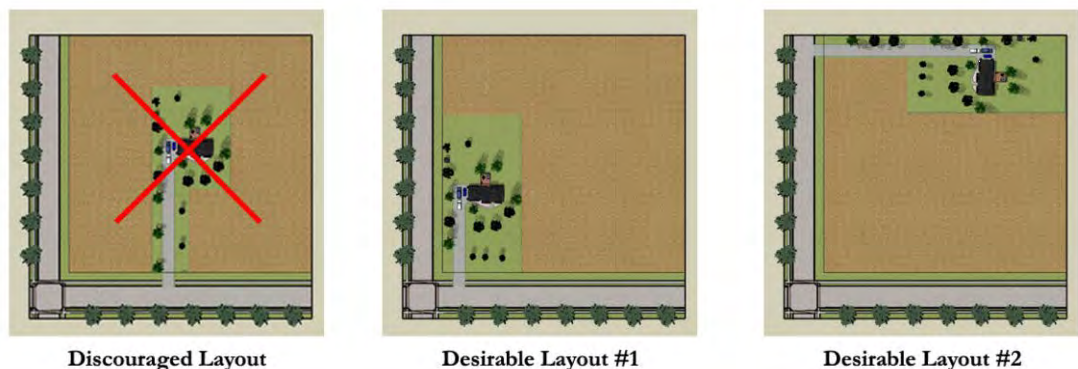
Objectives:

1. Maintain site and building design guidelines for all new development, which reinforces traditional neighborhood design and new urbanism principles.

Policies:

1. Agricultural Preservation Areas: Lots, buildings, and driveways within the Agricultural Preservation Areas shall be configured to be located on the least productive soils and shall not fragment large tracts of agricultural land by placing building envelopes and driveways in the middle of large parcels (greater than 10 acres).

Figure 2.1: Building Layout in Agricultural Areas



2. Environmentally Sensitive Areas: Avoid fragmentation and isolation of remaining natural areas and corridors. Lots and buildings shall be configured to retain large tracts of undeveloped land. Developers shall strive to connect undeveloped lands with existing undeveloped areas to maintain environmental corridors. No buildings shall be allowed in areas with slopes greater than 20% and building development shall be severely limited in areas designated as wetlands, floodplains, and areas with slopes between 12-20%. To the extent possible, developers shall preserve existing woodlands and mature trees during and after development.
  - a. Conservation Subdivisions: Development proposed in areas containing environmentally sensitive areas are encouraged to use conservation subdivision design principles, such as:



*Conservation Subdivisions* are an alternative approach to the conventional lot-by-lot division of land in rural areas, which spreads development evenly throughout a parcel with little regard to impacts on the natural and cultural features of the area. Conservation Subdivisions allow for an adjustment in the location of residential dwelling units on a parcel of land so long as the total number of dwelling units does not exceed the number of units otherwise permitted in the zoning district or comprehensive plan. This clustering of the dwellings into a small area is made possible by reducing the individual lot sizes. The dwelling units are grouped or “clustered” on only a portion of a parcel of land. The remainder of the site is permanently preserved as open space or farmland held in common or private ownership. Sometimes additional dwelling units may be permitted if certain objectives are achieved. Conservation subdivisions enable a developer to concentrate units on the most buildable portion of a site, preserving natural drainage systems, open space, and environmentally and culturally sensitive areas. A conservation subdivision should identify a conservation theme such as forest stewardship, water quality preservation, farmland preservation, natural habitat restoration, viewshed preservation, or archaeological and historic properties preservation.

- Hiding development from main roads to the extent possible through natural topography, vegetation (e.g. tree lines, wooded edges), landscaped bufferyards, and setbacks.
- Provide vegetative buffers between building sites, wetlands, and streams beyond minimum setback standards.
- Preserve mature trees, stone rows, fence lines, and tree lines.
- Arrange lots so that houses are not placed on exposed hilltops or ridgelines.
- Design streets and lot layouts to blend with natural land contours.
- Create pedestrian trails through common open space areas.
- Restore the quality and continuity of degraded environmental areas within the subdivision, such as streams and wetlands.
- Encourage stormwater management treatment systems that focus on Best Management Practices (BMPs).

Figure 2.2: Conventional vs. Conservation Subdivision Design

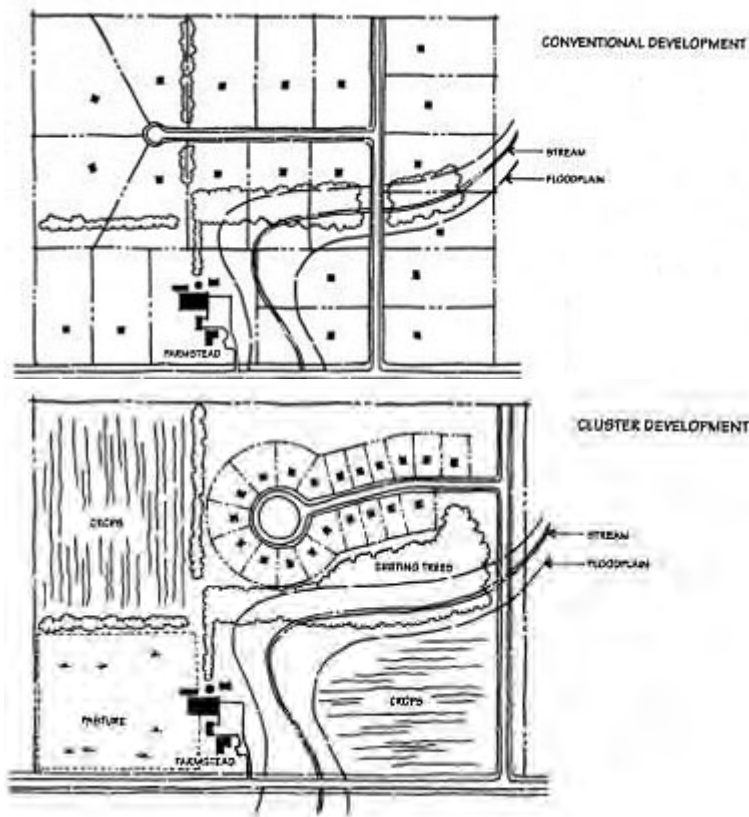


Figure 2.3: Residential Screening



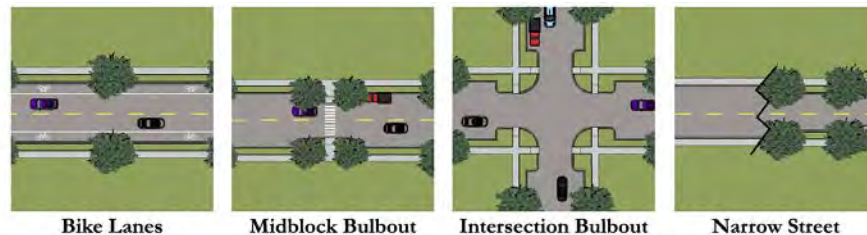
3. **Transportation Facilities:** Transportation facilities for new developments shall be constructed according to local ordinances and shall allow for safe ingress and egress of vehicles. Most lots shall take access from interior local streets to minimize the impacts to existing transportation facilities and new facilities shall address future connectivity to surrounding properties.

**Figure 2.4: Traditional v. Cul-de-Sac Street Design**



- a. **Street Design:** Streets should be designed to the minimum width that will reasonably satisfy all realistic needs. Local streets should not appear as wide collector streets, or “micro-freeways,” which encourages higher travel speeds. Streets should be laid out in a manner that takes advantage of the natural topography and aligns with existing facilities. The use of traditional or modified grid-like street patterns, as opposed to multiple cul-de-sacs and dead end roads, is strongly encouraged.
- b. **Transportation Calming Devices:** The use of transportation calming devices & alternative designs are encouraged. Specific measures may include: curb extensions/intersection bump outs, round about, tear drop islands, speed bumps & raised devices, median & refuge islands, or turning circles.
- c. **Pedestrian and Bicycle Improvements:** are strongly encouraged, especially in areas near existing facilities. Specific measures include sidewalks, on street bike lanes, bicycle route markers, off street trails, and tweetens (mid-block foot paths). Most local streets may be served without the use of sidewalks; however, development along collector or arterial streets should provide separate off-road facilities. Bicycle and pedestrian ways shall be designed to connect to adjacent developments, schools, parks, shopping areas, and existing or planned pedestrian or bicycle facilities.

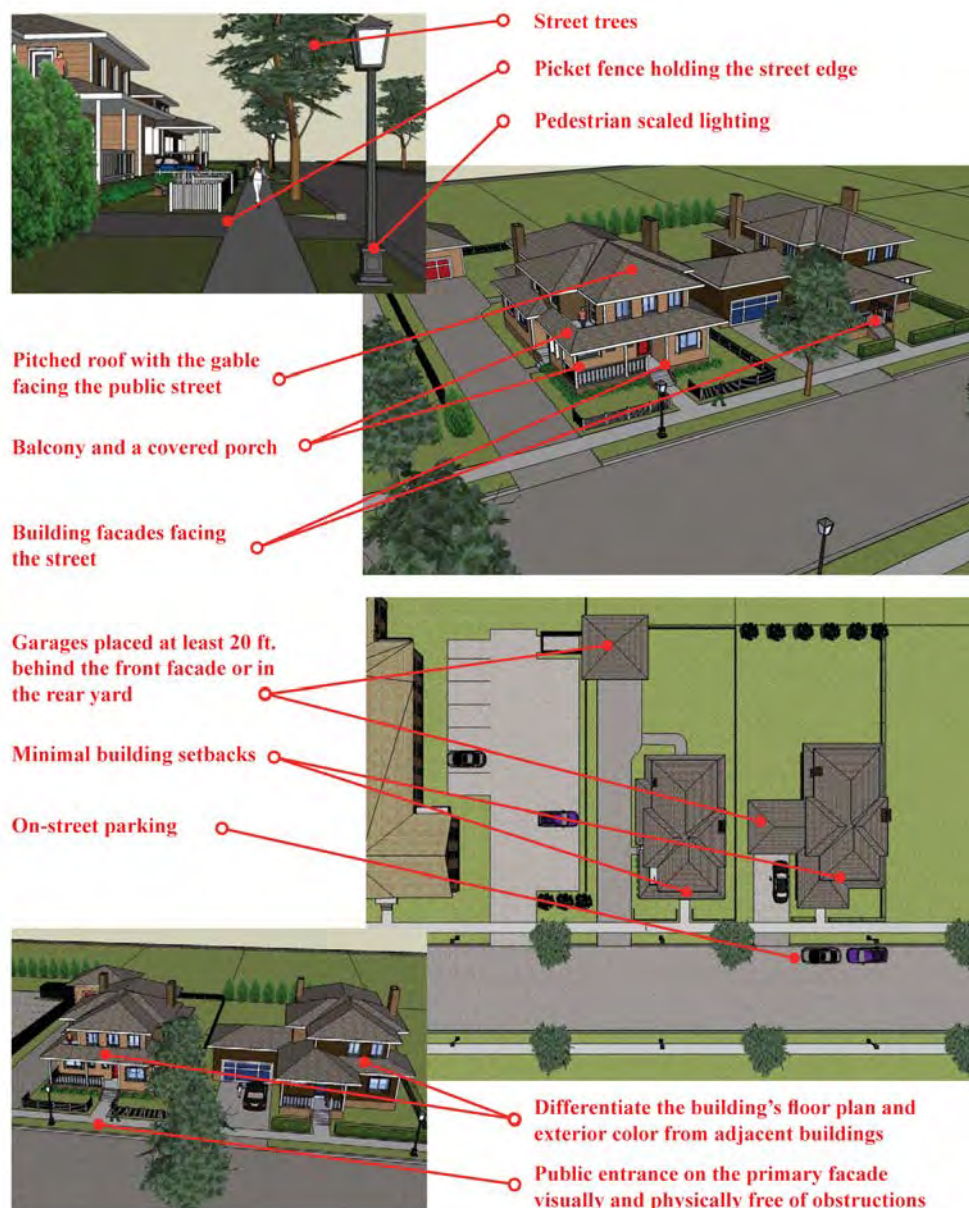
**Figure 2.5: Alternative Transportation Designs**



4. **Single-Family Design Guidelines:** Single-family housing is the most significant and prevalent building type found within the municipality; therefore, single-family housing can greatly affect the municipality’s overall character. With the intent to plan, design, and develop future growth, it is recommended that the Village encourage new single-family residential developments to employ aspects of traditional neighborhood design, including the elements listed below and illustrated in Figure 2.6.
  - a. **Relationship to the Street:** Design the building such that the primary building façade is orientated towards the street. Provide a public entrance on the primary building façade that is visually and functionally free of obstruction. Place the building within close proximity to the sidewalk (usually within twenty feet of the street’s right-of-way), or incorporate a garden wall and/or a fence line (picket, wrought iron, etc.) that can maintain the existing street wall. Pitched roofs should orientate the gable parallel to the street.
  - b. **Architectural Character:** Design the building using high-quality architectural elements that provides visual interest and human scale that relates to the surrounding neighborhood context and the Village’s overall character.
  - c. **Building Materials:** Use high-quality exterior finish materials such as kiln-fired brick, stucco, aluminum siding, and wood. All exposed sides of the building should have similar or complementary materials as used on the front façade.

- d. Building Projections: Provide balconies, covered porches, and bay windows, especially on facades facing public streets.
- e. Garages: Place garages at least 20 feet behind the front façade of the home or in the rear yard to avoid a “garage-scape” street appearance. Garages accessed by an alley have a potential for an additional ancillary housing unit above the garage.
- f. Landscaping: Provide generous landscaping, with an emphasis on native plant species, especially along street frontages.
- g. Lighting: Exterior lights should be full-cut-off fixtures that are directed to the ground to minimize glare and light pollution.
- h. Neighborhood Diversity: Vary the lot sizes, building heights, building exterior colors, and housing floor plans within any given street block.

Figure 2.6: Desired Single-Family Development



5. Multi-Family Design Guidelines: Multi-family housing is a necessary building type that provides housing options for elderly, young adults, Village employees, etc. However many developments incorporating multi-family housing receive resistance. In some instances this can be contributed to poorly and cheaply designed buildings. In order to mitigate this opposition, it is recommended that the Village enact design guidelines for multi-family housing that is planned, expanded, or significantly renovated (50% or more of the current assessed improvement value). The general guidelines listed below and the diagram on the subsequent page will provide assistance in guiding future multi-family development:
- a. Relationship to the Street: Design the building such that the primary building façade is orientated towards the street. Provide a public entrance on the primary building façade that is visually and functionally free of obstruction. Place the building within close proximity to the sidewalk (usually within twenty feet of the street's right-of-way), or incorporate a garden wall and/or a fence line (picket, wrought iron, etc.) that can maintain the existing street wall.
  - b. Architectural Character: Design the building using high-quality architectural elements that provides visual interest and human scale that relates to the surrounding neighborhood context and the Village's overall character. This can be accomplished by using, but is not limited to, the following techniques: expression of structural bays, variation in materials, variation in building plane, articulation of the roofline or cornice, use of vertically-proportioned windows, pitched roof with the gable(s) facing the street, etc.
  - c. Building Materials: Use high-quality exterior finish materials such as kiln-fired brick, stucco, wood, and fiber cement siding. All exposed sides of the building should have similar or complementary materials as used on the front façade.
  - d. Building Projections: Provide balconies, covered porches, and bay windows, especially on facades facing public streets.
  - e. Parking and Buffering: Fit the parking below the building or place surface parking behind the building. Provide landscaping of sufficient size to screen out unsightly parking areas from the street and neighboring properties. Insert landscape islands in parking lots with more than eighteen consecutive stalls.
  - f. Service Areas: Trash containers, recycling containers, street-level mechanical, and rooftop mechanical should be located or screened so that they are not visible from a public street. Screening should be compatible with building architecture and other site features.
  - g. Common Open Space: Provide gardens, grass areas, and playgrounds to serve the needs of the residents. The use of contiguous back yards to create a larger network of open space is encouraged.



Figure 2.7: Multi-Family Design Guidelines

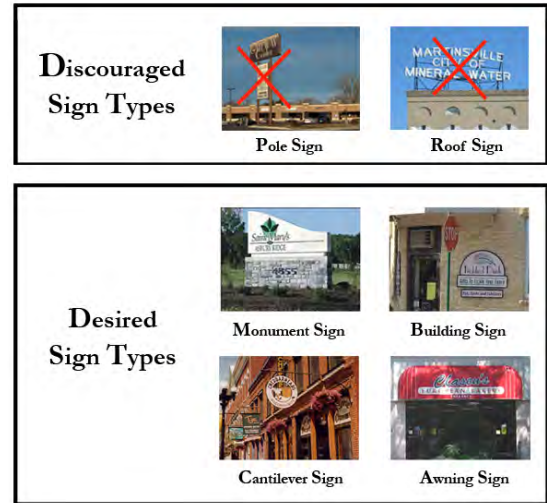


6. Commercial and Industrial Design Guidelines: Commercial and industrial uses provide the Village with economic stability and provides goods, services, and jobs for its residents. However, these uses generally do not construct buildings that are adaptable to other uses and can become an eyesore if they sit vacant. In order to alleviate some of the negative impacts these buildings have on a community, it is recommended that the Village enact design guidelines for commercial and industrial uses that are planned, expanded, or significantly renovated (50% or more of the current assessed improvement value). To ensure high-quality and long-lasting projects the following guidelines and illustrations will provide assistance in guiding future business development:
  - a. Relationship to the Street: Design the building such that the primary building façade is orientated towards the street. Provide a public entrance on the primary building façade that is visually and functionally free of obstruction.

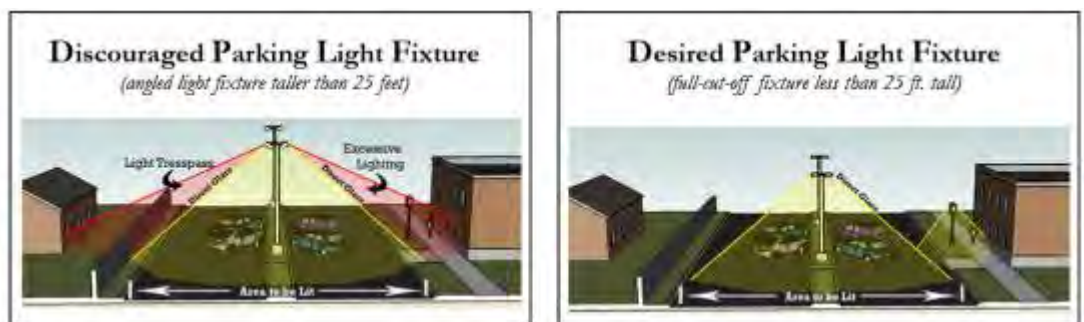
- b. **Architectural Character:** Design the building using high-quality architectural elements that provides visual interest and human scale that relates to the surrounding neighborhood context and the Village's overall character. This can be accomplished by using, but is not limited to, the following techniques: expression of structural bays, variation in materials, variation in building plane, articulation of the roofline or cornice, use of vertically-proportioned windows, pitched roof with the gable(s) facing the street, etc.
- c. **Building Materials:** Use high-quality exterior finish materials such as kiln-fired brick, stucco, and wood. All exposed sides of the building should have similar or complementary materials as used on the front façade.
- d. **Building Projections:** Canopies, awnings, and/or gable-roof projections should be provided along facades that give access to the building.

**Figure 2.8: Desired Sign Types**

- e. **Signage:** Use pedestrian-scaled sign types: building-mounted, window, projecting, monument, and awning. Signs should not be excessive in height or square footage.
- f. **Parking:** Fit the parking below the building or place it on the side/back of the building, wherever feasible. Provide shared parking and access between properties to minimize the number of curb cuts. Provide vegetative buffers between pedestrian circulation routes and vehicular parking/circulation. Access drive lanes should have adequate throat depths to allow for proper vehicle stacking.
- g. **Landscaping:** Provide generous landscaping, with an emphasis on native plant species. Landscaping should be placed along street frontages, between incompatible land uses, along parking areas, and in islands of larger parking lots.
- h. **Stormwater:** Use rain gardens and bio-retention basins on-site (i.e. in parking islands) in order to filter pollutants and infiltrate runoff, wherever feasible.
- i. **Lighting:** Exterior lights should be full-cut-off fixtures that are directed towards the ground to minimize glare and light pollution.



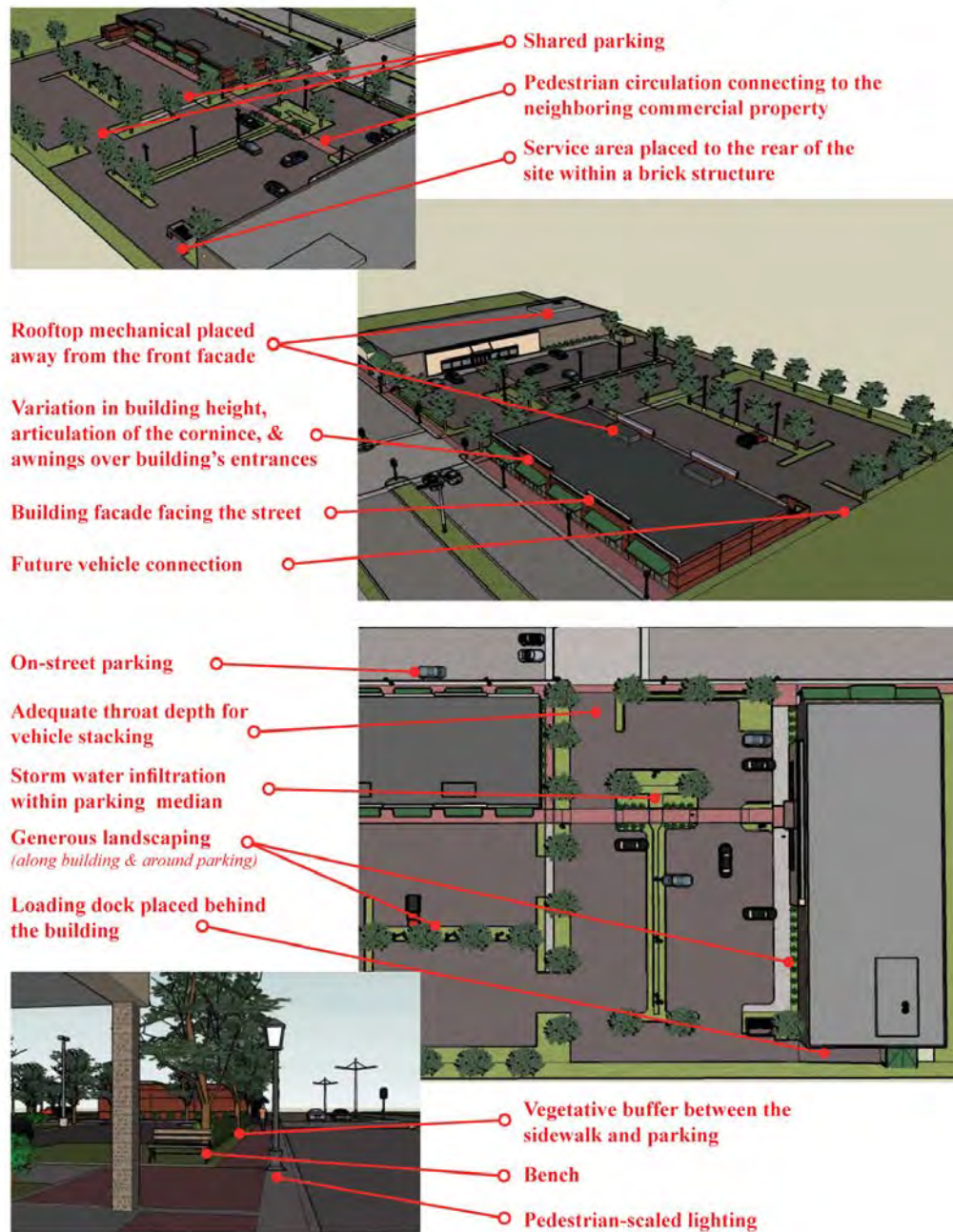
**Figure 2.9: Desired Outdoor Lighting**



- j. **Service Areas:** Trash and recycling containers/dumpsters, street-level mechanical, rooftop mechanical, outdoor storage, and loading docks should be located or screened so that they are not visible from a public street. Screening should be compatible with building architecture and other site features.



Figure 2.10: Business Design Guidelines





## 3 FUTURE LAND USE PLAN

### 3.1 FUTURE LAND USE SUMMARY

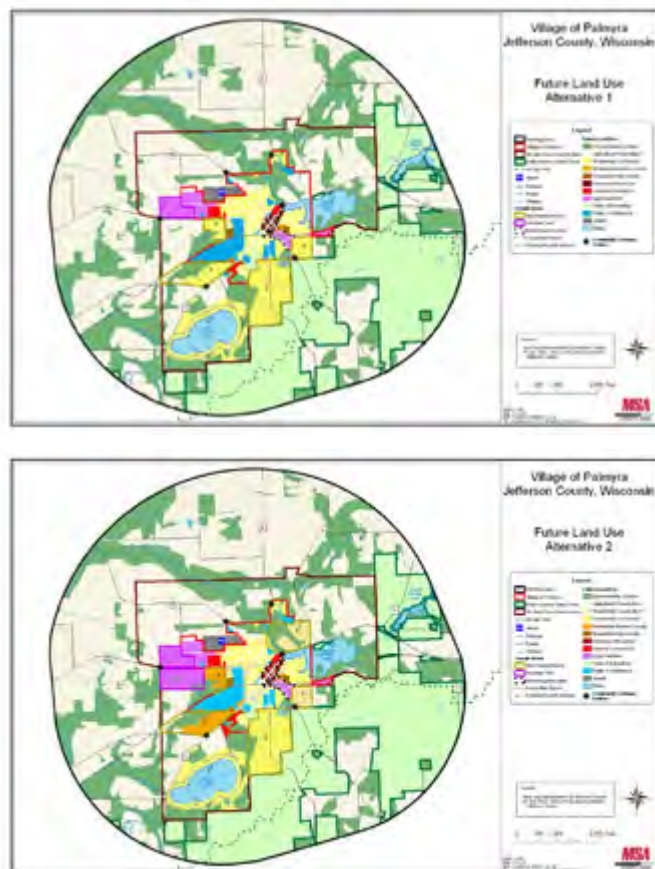
The following chapter summarizes the future land use plan for the Village of Palmyra and covers all of the information required under SS66.1001. The information is intended to provide a written explanation of the Village of Palmyra Future Land Use Map (See Appendix E), which depicts the Village of Palmyra desired pattern of land use and establishes the Village's vision and intent for the future through their descriptions and related objectives and policies (Chapter 2). The future land use plan identifies areas of similar character, use, and density. These land use areas are not zoning districts, as they do not legally set performance criteria for land uses (i.e. setbacks, height restrictions, etc.).

The Future Land Use Map has been designed to accommodate a larger population than what is projected by WIDOA forecasts (Refer to Chapter 5, Existing Conditions). The Village does not assume that all areas depicted on the Future Land Use Map will develop during the next 20 years. Instead, the Future Land Use Map depicts those areas that are the most logical development areas based on the goals and policies of this plan, overall development trends, environmental constraints, proximity to existing development, and the ability to provide services. The Village does not support the rezoning or development of all the lands identified on the maps immediately following adoption of this Plan. Other factors, such as the ability to provide services and the phasing of development, will have to be considered.

#### 3.1.1 Future Land Use Alternatives

Upon completion of the existing conditions analysis, community survey, and planning policies, the consultant prepared two future land use alternatives for review by the CAC. The alternatives identified different development options and aspects of each growth plan were combined into the recommendations contained in this chapter.

Figure 3.1: Future Land Use Alternatives 1 & 2



**Alternative 1** was developed assuming a low-density single-family residential development in all new growth areas. A small amount of industrial park expansion was expected. The Downtown continued to serve as a civic, retail, service, and gathering place for area residents. Outside of this district, very little new commercial development was outlined. The alternative recommended the development of an “on road” bike route from the Ice Age Trail to the downtown mini park.

**Alternative 2** was developed assuming a higher intensity land use pattern within new growth areas. This includes the development of additional commercial areas outside of the downtown, greater industrial expansion, and higher density residential land uses along STH 59 and CTH H. The plan also recommends the development of conservation subdivisions near environmentally sensitive areas. An additional “on road” bike route is recommended to loop the Village's parks with the downtown and neighborhood schools.

### 3.1.2 Future Land Use Plan

The proposed pattern of land use is depicted in Map 6 & 6a (See Appendix E). The Future Land Use Plan, in conjunction with the other chapters of this plan, should be used by Village staff and officials to guide recommendations and decisions on rezoning and other development requests.

#### Land Use Recommendations for Existing Developed Areas

This Plan generally proposes minor changes in the existing land use pattern within the developed portions of Palmyra. There are a few opportunities for infill development and redevelopment in the downtown area and within the central industrial area. The recommendations for the existing developed area by major land use are as follows:

- Residential - Low Density. This land use category includes most of the existing residential development within the Village. These areas are intended to be primarily single family residential with the potential for some duplex or small multi-family developments, with a total density not to exceed 5 units per acre.
- Residential - Medium Density. These areas are suitable for residential development at a density between 5-10 units per acre. They include areas within the Village that are either existing duplexes or small multi-family developments (less than 8 units per acre). New medium density residential development is planned for the existing vacant parcel at the corner of Wilson and Second St. and along W. Main St. in front of the high school.
- Residential - High Density. This land use category includes most of the existing multi-family apartment complexes and the mobile home park. These areas are intended to be primarily multi-family residential with a density greater than 10 units per acre. New high-density residential development is planned for the existing single-family parcel between the Second St. Apartments and the railroad.
- Downtown Mixed Use. Includes those lands within the historic downtown. These areas are intended for pedestrian-oriented commercial, office, entertainment, institutional, and residential uses in a “traditional downtown setting” with on-street parking and minimal building setbacks. This area is also identified as a potential Redevelopment Area. Several parcels within this area are under utilized or are in disrepair. Within this area, the Village should actively promote the rehabilitation or redevelopment of these parcels for commercial, civic, or mixed uses.
- General Commercial. This land use category includes locations where retail goods and/or services are sold or where office activities take place. Most of these areas are currently developed with the exception of one parcel along E. Main St., between the two gas stations, and along CTH H. The intensity of commercial development is regulated by the Village’s zoning ordinance. The creation of new “strip” retail development, or long linear corridors of purely commercial growth is strongly discouraged.
- General Industrial. Includes those lands appropriate for indoor manufacturing, warehousing, distribution, office and outdoor storage usage. The intensity of office & industrial development is regulated by the Village’s zoning ordinance. There are two distinct industrial areas within the Village. The Palmyra Industrial Park on STH 59 is the newer of the two areas and contains the Village’s largest employer, Standard Process. Lots within the industrial park are generally of a size to accommodate the demands of today’s industrial and office needs. The Central Industrial area is typical of most old industrial areas. It was built around the use of the railroad and contains some warehousing and lumberyard business. This area is also identified as a potential Redevelopment Area. Several properties within this area are underutilized, vacant, or in disrepair. In addition, the small size of these parcels, and the adjacent residential uses, makes them undesirable for many of today’s industrial businesses. Within this area, the Village should actively promote the rehabilitation or redevelopment of these parcels for smaller and less intensive business or light industrial uses, including appropriately planned mixed uses or historical restoration projects.
- Park & Recreation – Includes property where recreation is the primary activity and where there is typically no commercial or residential use. The Village, County, or State usually owns these properties. Some stormwater management or other utility/institutional uses (e.g., water towers) maybe located within these areas. No new parks have been identified. The Future Land Use Map does identify several Potential Bike Routes. These are areas intended for “on-street” or “off-road” bike routes. The purposes of these routes are to encourage safe

bicycle & pedestrian travel between important civic, business, and recreational resources within the community. On-street routes may be accomplished through a combination of signage or pavement markings.

- **Public & Institutional** – This land use category includes properties owned by the Village, the school district, and religious institutions. These uses are planned to remain at their present locations in and near the central parts of the Village to continue to conveniently serve residents. No new public uses have been identified.

#### Land Use Recommendations for the Urban Service Area

The Future Land Use Map also provides land use recommendations for all lands within the Village's Urban Service Area (USA).

- **Planned Neighborhoods**. This Plan recommends that new areas of residential development be designed as neighborhoods, rather than a series of uncoordinated "cookie cutter" subdivisions. Potential areas for Planned Neighborhoods were chosen based on the ability to provide urban services and the compatibility with adjacent uses. Planned Neighborhoods should feature a variety of lot sizes and housing styles. These areas should include a carefully planned mixture of predominately single-family residential development combined with two-family and multi-family developments. This allows higher density development to be dispersed throughout the community instead of being concentrated in any one area. A small amount of neighborhood business uses or mixed uses may be appropriate; however, incremental commercial strip development is discouraged, as the downtown should remain the focal point of retail services in the community. Planned Neighborhoods should include opportunities for residents to gather through the development of public open spaces or parks.

*South Planned Neighborhood* – This neighborhood extends from the Village's southern boundary to the Southern Kettle Moraine State Forest. Approximately 75% of the developed portion of the neighborhood should be low density single-family residential (<5 units/ac). The remaining portion should feature a mix of medium density two-family or small multifamily developments (5-10 units/ac). Appropriate developments would include a mix of condominiums specifically for seniors. A limited amount of mixed use or neighborhood business development maybe appropriate; however, the location of this neighborhood relative to transportation facilities makes it ill-suited for much business growth. Recreational pedestrian and bicycle trails are highly encouraged due to the proximity to the Southern Kettle Moraine State Forest. Much of this neighborhood is currently in agricultural or open space use and significant landscaping improvements should accompany development proposals.

*Southwest Planned Neighborhood* – This is the largest of the three planned neighborhoods. Approximately 65% of the developed portion of the neighborhood should be low density single-family residential (<5 units/ac). The remaining portion should feature a mix of medium density two-family or small multifamily developments (5-10 units/ac). Limited amounts of mixed use or neighborhood business development maybe appropriate near the intersection of CTH H and Marsh Rd. or near CTH H and Blue Spring Lake Dr. This neighborhood features a significant amount of environmentally sensitive lands, therefore, the use of conservation subdivision design maybe appropriate. There is an existing recreational trail on the grounds of the high school and development within this neighborhood is strongly encouraged to develop either on or off road pedestrian or bicycle trails that connect to this existing resource. Direct access to CTH H

The boundaries of the USA corresponds to those areas where public sanitary sewer service is either currently available or could be cost-effectively served by public sanitary sewer systems at some point in the future according to Jefferson County.

The purpose of the USA delineations is to encourage development at "urban densities" so there will be less development pressure on the rural areas of Jefferson County. The second purpose of the USA is to delineate areas around the Village to preserve a reasonable expansion area for future urban development. Allowing areas on the edges of incorporated municipalities to be "prematurely" developed on private utilities often makes future higher density urban development on public utilities difficult and costly.

The size and boundaries of the Palmyra USA were based on local municipal plans and meetings with municipal engineers and other local officials. The USA boundaries are delineated with sufficient area to accommodate the projected year 2020 population, recognizing there is a "flexibility factor" that must be taken into consideration because land that is potentially serviceable land may not be available on the market place at a particular time.

The USA boundary may be amended by the Jefferson County Board of Supervisors upon request of the Village of Palmyra provided the Village could demonstrate there is a lack of adequate land available for development in the existing USA. (Source: Jefferson County 1999 Agricultural Preservation and Land Use Plan)

should be limited in order to maintain the safe and efficient flow of traffic through this neighborhood. Due to the size of this neighborhood and the relative demand for new development in Palmyra, it is recommended that those lands south of Marsh Rd. remain as Transitional Agriculture until such point as development is warranted.

*West Planned Neighborhood* – This is the smallest of the three planned neighborhoods. Due to the proximity of this neighborhood to the industrial park, this area is ill suited for single-family residential development. Approximately 75% of the developed portion of the neighborhood should be medium density two-family or small multifamily developments (5-10 units/ac). The remaining portion may feature a mix of high-density residential developments (>10 units/ac). A limited amount of mixed use or neighborhood business development maybe appropriate along STH 59.

- Planned Office & Industrial. This Plan recommends the further expansion of the existing industrial park in order to provide areas for new office and industrial uses. The proposed site provides convenient access to STH 59; however, direct access to STH 59 should be prohibited in order to maintain the safe and efficient flow of traffic through this area. Some larger regional retail businesses maybe appropriate along STH 59; however, smaller retail and service uses should be reserved for the Downtown or General Commercial areas. A Potential Road Extension is suggested from the existing industrial park to STH 106 to support the safe and efficient flow of traffic to and from the industrial park. The intensity of office and industrial development is regulated by the Village’s zoning ordinance. The Future Land Use Map shows a vegetative buffer between this proposed business park and the planned West Neighborhood.
- Transitional Agriculture. The Transitional Agriculture classification denotes areas that may develop in the next 20 years, but are not needed at this time. Development policies within these areas shall be the same as those for the Agricultural Preservation areas.
- Environmental Corridor<sup>5</sup> – continuous systems of environmentally sensitive lands and natural resources requiring protection from disturbance and development. Mapped environmental corridors include all land that meets one or more of the following conditions:
  1. Public-owned park, recreation, and conservancy lands (e.g., county parks, WIDNR hunting grounds, and Kettle Moraine State Forest), or
  2. Water bodies and wetlands mapped as part of the WIDNR Wetland Inventory, or
  3. 100-Year Floodplains based on FEMA maps, or
  4. Contiguous woodlands over 10 acres in size outside of the current Village limits, or
  5. Areas with steep slopes greater than 20%

These areas generally correspond to areas outlined as “Environmental Corridor” in the Jefferson County Agricultural & Preservation Plan (1999). Per the goals, objectives, and polices of this Plan, development policies within these areas will be coordinated with those in the Jefferson County Plan.

1. Environmental corridors should be treated as “overlay districts” in which the environmental corridor policies would be applied in addition to the land use regulations and zoning requirements applicable in the underlying land use or zoning district. No development on delineated wetlands or floodplains.
2. Development densities within designated environmental corridors should be no greater than one dwelling unit per 10 acres. WIDNR delineated wetlands and land within the 100-year floodplain should not be used in calculating allowable densities.
3. Building, road construction, or land disturbance associated with nonagricultural development should be prohibited on slopes in excess of 20 percent.
4. All proposed nonagricultural development within environmental corridors should be subject to site plan review to evaluate the development’s potential impact on the environment.
5. No buildings should be constructed within 75 feet of WIDNR Wetlands or navigable bodies of water.

<sup>5</sup> It should be noted that environmental corridor delineations are shown only for local land use planning purposes and do not indicate any additional County, State or Federal regulations that would affect a landowner’s ability to utilize the property for agricultural or development purposes.

- **Community Gateway Feature.** The other notable features within the Urban Service Area are community gateways. These high quality public entry monuments or art should be placed at key locations to formally announce entry into the Village. They provide the first chance to make a favorable impression on visitors. Each gateway feature need not be identical but all should be designed to reinforce the community's character and sense of place as the "Heartbeat of the Kettle Moraine."

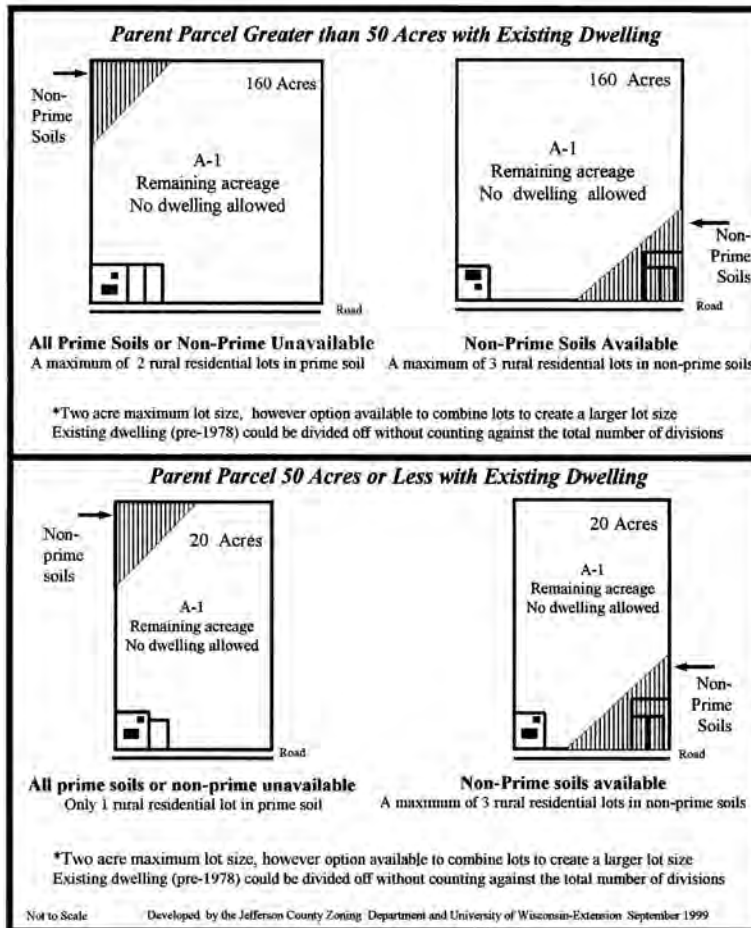


### Land Use Recommendations for the Planning Area

The Future Land Use Map also provides land use recommendations for all lands outside of the Village's Urban Service Area (USA) but within its 1 ½ mile extraterritorial jurisdiction (ETJ).

- **Agricultural Preservation** – areas intended to be preserved for farming, farmsteads, forestry, and open space, farm family businesses, or other agricultural related businesses. The majorities of these lands are undeveloped or may contain farmsteads or low-density rural residences. These areas generally correspond to the areas outlined as "Agricultural Preservation" in the Jefferson County Agricultural & Preservation Plan (1999).

Figure 3.3: Agricultural Preservation Development Policies



Per the goals, objectives, and policies of this Plan, residential development policies within these areas will be coordinated with those in the Jefferson County Plan, summarized in Figure 3.3. Non-farm related commercial and industrial uses shall be discouraged in these areas. Such uses shall be encouraged to be located in areas mapped as "General Commercial" or "Industrial" use on the Future Land Use Map.

## 4 IMPLEMENTATION

### 4.1 IMPLEMENTATION SUMMARY

The implementation element is defined as a compilation of recommendations, or specific actions, to be completed in stated sequence to implement the goals, objectives, and policies contained within this plan. In addition, this chapter describes how each of the elements of the comprehensive plan will be integrated and made consistent with the other elements of the comprehensive plan, and includes a mechanism to measure the local governmental unit's progress toward achieving all aspects of the comprehensive plan. The element also includes a process for adopting and updating the Comprehensive Plan.

### 4.2 RECOMMENDATIONS

This section of the Plan presents recommendations developed in order to address issues raised by the CAC and to expand on the goals, objectives, and policies described in Chapter 2. It should be noted that some of the recommendations may require considerable cooperation with others, including the citizens of Palmyra, local civic and business associations, neighboring municipalities, Jefferson County and State agencies. Each recommendation is accompanied by a suggested timeline for completion. A consolidated list of recommendations appears in Appendix D. In addition, refer to Appendix C for a list of Technical & Financial Resources available the community through various State agencies.

#### Timelines:

*Continual: This action does not require a specific task to be completed. It is enforced through continued conscious decision-making, existing ordinances, or by following the policies of this Plan, which is adopted by ordinance.*

*Short Term: This indicates that action should be taken in the next 5 years (highest priority).*

*Mid Term: This indicates that action should be taken in the next 10 years (medium priority).*

*Long Term: This indicates that action should be taken in the next 20 years (low priority).*

#### 4.2.1 Housing Recommendations

##### 1. Maintenance of Existing Residential Properties

The existing Village Zoning Ordinance contains provisions that address the general maintenance of building structures in the Village, including litter control, outside storage and exterior conditions. Like most communities, the Village issues citations when complaints are brought to the attention of local officials.

- Maintain & enforce Village building codes (*Continual*)

In many cases, individuals do not feel comfortable filing a complaint against a neighbor's property; therefore, many violations go unnoticed or are not enforced. Many communities are supplementing their reactive/violation driving approach to this issue and are encouraging better home maintenance through more proactive methods. Two options used by many communities include home improvement contests and low interest loans.

The *Uniform Dwelling Code* (UDC) is the statewide building code for one- and two-family dwellings built since June 1, 1980. As of January 1, 2005, there is enforcement of the UDC in all Wisconsin municipalities. Municipal or county building inspectors must be state-certified to enforce the UDC. In lieu of local enforcement, municipalities have the option to have the state provide enforcement through state-certified inspection agencies for just new homes. Permit requirements for alterations and additions will vary by municipality. Regardless of permit requirements, state statutes require compliance with the UDC rules by owners and builders even if there is no enforcement. The Village requires adherence to the Uniform Dwelling Code, including building permit & inspection requirements.

In the State of Wisconsin, the 2000 International Mechanical Code (IMC) and 2000 International Energy Conservation Code (IECC) have been adopted with Wisconsin amendments for application to commercial buildings. The Village requires adherence to all State, County, and local mechanical codes.



Home improvement contests are generally seasonally driven and can include competitions for the best holiday lights or gardens/landscaping. Usually the contests are sponsored through the chamber of commerce and offer prizes from local businesses. The purpose of these contests is to reinvigorate residents to make home improvements and to strengthen their sense of community. Similarly, many communities hold “Clean Sweep Days,” which offer residents opportunities to safely dispose of hazardous materials.

- Organize an annual home improvement contest(s). (*Short Term*)
- Participate in the Jefferson County Clean Sweep Program. (*Continual*)

A *Community Development Authority* is a separate body politic for the purpose of carrying out blight elimination, slum clearance, urban renewal projects, and housing projects. CDA's consist of seven members, appointed by the Village Board, with sufficient ability and experience in the fields of urban renewal, community development, and housing. (State Statute 66.1335)

Home improvement contests are generally limited to beautification purposes and thus do not deal with larger structural issues. One option to address this is to offer low or zero percent interest loans to residents considering home improvement projects. Typically, these loans are made available through a local Community Development Authority (CDA). The CDA usually sets limits as to what funds may be used for and typically, they are only made available to residents below a specified income class.

According to the *Community Survey*, 81% of respondents either strongly agreed or agreed that the Village should focus on improving existing housing quality.

- Offer home improvement loans to qualifying residents. (*Continual*)

### 2. Promoting Well Planned Neighborhoods

The CAC raised concerns regarding the type and style of new housing in the Village. This Plan contains a number of policies intended to promote “traditional neighborhood design,” which seeks to replicate some of the design characteristics of pre World War II neighborhoods in Palmyra. Following the policies of this Plan should help to alleviate the CAC’s concerns.

## 4.2.2 Transportation Recommendations

### 1. Maintain and Improve the Existing Transportation Network

Maintaining and improving both the condition & functionality of the Village’s transportation network is an important transportation recommendation. Specific considerations include:

- Investigate the visibility & functionality of each intersection within the Downtown, making improvements where necessary. (*Short Term*)
- Incorporate and schedule transportation improvements in the Village’s Capital Improvements Plan. (*Continual*)
- Continue the use of the PASER program for street maintenance planning and inventory. (*Continual*)

### 2. Promote Well Planned Transportation Networks

This Plan contains a number of policies intended to promote “traditional neighborhood design,” which seeks to replicate some of the design characteristics of pre World War II neighborhoods in Palmyra. Following the policies of this Plan should help to alleviate the CAC’s concerns. Specific consideration include:

- Maintain a Functional Classification Plan. (Refer to Map 2 & 2A: Transportation Facilities). The Future Land Use Plan (Chapter 3) establishes a number of new growth areas, including significant new residential growth along Tamarack Road. In order to maintain an efficient safe flow of traffic to this new neighborhood the Village should upgrade Tamarack Road to a Local Collector. (Refer to Map 2 & 2A: Transportation Facilities) (*Continual*)
- Improve Northwest St. The development of the Southwest Neighborhood will likely increase the amount of traffic on Northwest St., as this provides the easiest access to STH 59 and the Palmyra Industrial Park. The Village should monitor the level of traffic on this road and make improvements as necessary. (*Long Term*)



- Adopt & enforce an Official Map to protect roadway corridors and obtain sufficient rights-of-way for existing & planned roadways. Include the potential road extension from STH 106 to the Palmyra Industrial Park, as shown on the Future Land Use Map. *(Short Term)*
- Promote Transit Service Alternatives. The Village should continue working with Jefferson County, neighboring municipalities, and private vendors to expand alternative transportation options for Village residents.
  - Provide information and assistance on vanpool options available to Village residents through Jefferson County. *(Continual)*
  - Explore the potential for a Park-n-Ride facility in Palmyra to accommodate and promote car-pooling. *(Short Term)*

An *Official Map* shows areas identified necessary for future public streets, recreation areas, and other public grounds. By showing the area on the Official Map, the municipality puts the property owner on notice that the property has been reserved for future taking for a public facility or purpose. The municipality may refuse to issue a permit for any building or development on the designated parcel; however, the municipality has one year to purchase the property upon notice by the owner of the intended development.

### 4.2.3 Agriculture, Natural, & Cultural Resource Recommendations

#### 1. Monitor Changes to the Jefferson County Agricultural Preservation & Land Use Plan

This Plan recognizes the importance agricultural activities are to the County's economy and sense of rural character. As such, the Village has adopted the same agricultural preservation policies as Jefferson County for the land within the Planning Area. The Village should monitor any changes in County policy, making changes to this Plan as necessary. *(Continual)*

#### 2. Improve the water quality of Blue Spring Lake and Lower Spring Lake.

The Village should continue to work with area lake associations, Jefferson County, and the WIDNR to improve the water quality of these two lakes. Recommendations from lake management plans should be supported. The Village should reduce potential sediment delivery to area waterways by working to reduce the amount of impervious surfaces within new development and by maintaining erosion and stormwater control ordinances. The Village should also support non-regulatory measures to reduce urban runoff, such as rain gardens and bio-infiltration systems. *(Continual)*

#### 3. Monitor the level of water in the local aquifer.

The Village should work with the WIDNR & the Rock River Coalition to monitor ground water levels in the Palmyra area.

- Create wellhead protection plans for the two existing wells and any new wells created in the Village. *(Short Term)*
- Participate in Rock River Coalition GFLOW Modeling Project. *(Short Term)*

*Wellhead Protection Plans* aims to prevent contaminants from entering the area of land around a public water supply well. Through this program, a community can identify the recharge area for its well or wells, inventory potential contaminant sources within that area and take steps to manage that area to protect its wells from contamination.

GFLOW is a groundwater computer-modeling program designed to help communities manage their groundwater resources and answer such questions as: How would a new large quantity groundwater user (such as an irrigation well, an ethanol plant, a large factory with water cooling needs, a large subdivision) affect the existing groundwater table? Will it dry up existing wells? Will it dry up springs or wetlands? Will it affect the flow in a stream?

#### 4. Protect important natural resources.

Avoid development in areas that have documented threatened and endangered species, or have severe limitations due to steep slopes, poor soils, or sensitive environmental areas such as wetlands, floodplains, and streams in order to protect the benefits and functions they provide. The Village shall require these natural resources features to be depicted on all site plans, preliminary plats, and certified survey maps in order to facilitate preservation of natural resources. *(Continual)*

## 5. Promote Cultural Resources.

The Village should continue to promote its rich history through cultural events and the rehabilitation of historic properties. In addition, the Village should consider the use of outdoor public art within the downtown, parks, and new neighborhoods. The use of public art is a convenient way to promote a unique sense of place. The Village could consider holding a contest amongst local artisans to create public art pieces for the downtown or could require such installments as part of new developments. Public outdoor art should depict aspects of the Village's history or enhance the community's image as the "Heartbeat of the Kettle Moraine." *(Continual)*



## 4.2.4 Utilities & Community Facilities Recommendations

### 1. Maintain and Improve Park & Recreational Facilities

The amount of parkland is sufficient to meet Palmyra's current needs. However, the Village should require the establishment of new park and recreational facilities as part of the development of planned neighborhoods in order to maintain a desired level of service consistent with national standards. Key recommendations include:

When asked how Palmyra should invest in recreational facilities over the next ten years, the types of facilities supported most by respondents were *playground equipment, picnic areas, bike and pedestrian trails, sports fields, and basketball courts.* (Refer to Appendix B: Community Survey)

- Implement the recommendations of the Jefferson County Bikeway & Pedestrianway Plan (Chapter 5.4, Table 5.14). *(Mid Term)*
- Build bicycle routes to the Southern Kettle Moraine State Forest. In order to encourage tourism the Village should construct bicycle trails from the downtown to the Ice Age Trail. The Future Land Use Plan designates two trails; one linking the Horse Riders Camp Ground to the Village via Little Prairie Rd., and the other establishing a connection between Village Park, the South Neighborhood, and the Ice Age Trail. Ideally, these trails would be built as separate off-road facilities; however, increasing the shoulder width of these roads and providing designated bicycle lanes is a viable alternative. Providing a literal connection to the Ice Age Trail is essential to strengthening the Village's image as the "Heartbeat of the Kettle Moraine." *(Mid Term)*
- Create a pedestrian and bicycle network within the Village. The Village should create a network of on-street bicycle routes, which would connect important social, civic, and economic destinations within the community. The Future Land Use Plan proposes creating a looping bicycle route that would link the downtown with area parks and schools. Most segments of the route could be established with simple route markers; however, the Village should consider additional painted lanes along Maple St. due to the higher levels of traffic. *(Short Term)*



### 2. Implement the Recommendations of the Operating and Needs Review (ONR) for the WWTF

In September of 2005, the Village completed an Operating and Needs Review for its WWTF. Due to stricter WIDNR ammonia limits, the ONR recommended the Village upgrade its current lagoon system to achieve nitrification (ammonia removal) no later than October 1, 2014. This would involve the construction of a new complete-mix lagoon cell upstream of the existing primary lagoon and the addition of new blowers, aeration equipment and controls in roughly the spring of 2013. The ONR suggested the Village should implement a plan to increase the current sewer rates by approximately 45% over the next 9 years (5% per year) to meet the costs of upgrading the existing aerated lagoons to comply with the future ammonia limits. *(Short Term)*



Review

### 3. Conduct a Long Range Facilities Study

Conduct a long-range facilities study to assess the need for new or expanded Village facilities, including: administrative, emergency, library, and senior facilities. *(Mid Term)*

#### 4. Maintain a Capital Improvement Plan

The purpose of a CIP is to provide a strategic framework for making prioritized short-term investments in the community's infrastructure, such as sewer and road extensions. Table 4.1 contains an abbreviated list of potential projects within the next five years. Refer to Appendix D for more detail.

Table 4.1: Capital Improvement Plan

Year 2008	Pending Projects or Needs
Chestnut Street	Water main upgrade, pavement upgrade
Carriage Way/Court	Pavement upgrade
Beech Street	Pavement upgrade
Year 2009	Pending Projects or Needs
Garfield Street	Water main upgrade, pavement upgrade including storm sewer and curb and gutter
STH 59	Roadway reconstruction (WisDOT), curb and gutter replacement, new water main and storm sewers
Vallee Street	Extend a new 8" water main to the hydrant, new pavement, drainage improvements
Year 2010	Pending Projects or Needs
Anemone Ave	Water main upgrade, pavement upgrade
Bluff Street	Pavement & shoulder upgrades
Industrial Park	Potential industrial park expansion following STH 59 improvements
Year 2011	Pending Projects or Needs
West Main Street	Pavement & shoulder upgrades
Year 2012	Pending Projects or Needs
West Main Street	Pavement & shoulder upgrades

#### 4.2.5 Economic Development Recommendations

##### 1. Plan for Continued Office & Industrial Growth.

The planning project raised concerns regarding the lack of available land for new office and industrial businesses. At present, the existing industrial park does not have any additional building sites. The Future Land Use Plan designates the land around the park for continued business expansion. The Village may wish to pursue the use of TIF funds in order to acquire or prepare these lands for new business developments. *(Continual)*

According to the *Community Survey*, a majority of respondents (61.1%) indicated Palmyra should expand the existing industrial park or create a second industrial park.

## 2. Redevelop the Downtown & Central Industrial Area.

A few buildings within the downtown and within the central industrial area are either blighted or vacant. The Future Land Use Plan identifies these areas as potential redevelopment areas. The Village should consider creating a detailed revitalization plan for these areas identifying sites to be raised or redeveloped into new uses. The Village should consider the use of TIF or a Community Development Authority to assist with the redevelopment of these parcels. *(Mid Term)*



*TIF, or Tax Increment Financing, is an economic development program that helps promote local tax base expansion by using property tax revenues to fund site improvements to attract new development or eliminate blight. With TIF, a municipality “captures” the additional property taxes generated within the TIF District that would have gone to other taxing jurisdictions and uses the “tax increments” to finance public improvements.*

## 3. Coordinate Economic Development Efforts.

The Village should actively work with the Jefferson County Economic and Development Consortium to build strategic alliances to promote business growth in Palmyra. The JCEDC is in the process of creating a countywide economic development initiative, which will provide a detailed vision of what the Jefferson County economy should look like in the future. One of the goals of the economic development initiative is to build upon the unique place-based assets of the County to overcome challenges to business growth. The Village’s proximity to the Southern Kettle Moraine State Forest and the Ice Age Trail give it a distinct advantage over many other communities in the County. The Village should capture this advantage by promoting itself as an ideal location for nature based tourism businesses. *(Continual)*

The Jefferson County Economic Development Consortium (JCEDC) serves as the lead economic development organization in Jefferson County. The Consortium was formed in June 2003 to implement Jefferson’s Overall Economic Development Program and to achieve the economic development goals of the County. Its overall goals are to foster and encourage responsible, sustainable economic development activities that result in job creation, job retention, increase the tax base and improve the quality of life for the citizens of Jefferson County.

### 4.2.6 Intergovernmental Cooperation Recommendations

#### 1. Coordinate Growth Plans with the Town of Palmyra and Jefferson County.

Prior to the adoption of this Plan, and for subsequent updates, request comments from the officials from the Town of Palmyra and Jefferson County. *(Continual)*

#### 2. Coordinate the Development of Planned Neighborhoods with the Palmyra-Eagle School District.

The Future Land Use Plan supports the creation of three new residential neighborhoods. Planning for these new neighborhoods should include discussion with officials from the Palmyra-Eagle School District concerning the need to provide or update school facilities to support these developments. Prior to the adoption of the this Plan, and for subsequent updates, request comments from Palmyra-Eagle School District officials. *(Continual)*

## 4.2.7 Land Use Recommendations

### 1. Require Detailed Neighborhood Planning.

The Future Land Use Plan recommends the development of Planned Neighborhoods. This concept encourages the creation of a mix of residential, institutional, recreational, and neighborhood business developments in the spirit of Traditional Neighborhood Design. In order to foster a cohesive development pattern the Village should prepare detailed neighborhoods plans for South & Southwestern Planned Neighborhoods and adopt them as a component to this Comprehensive Plan.<sup>6</sup> (*Long Term*)

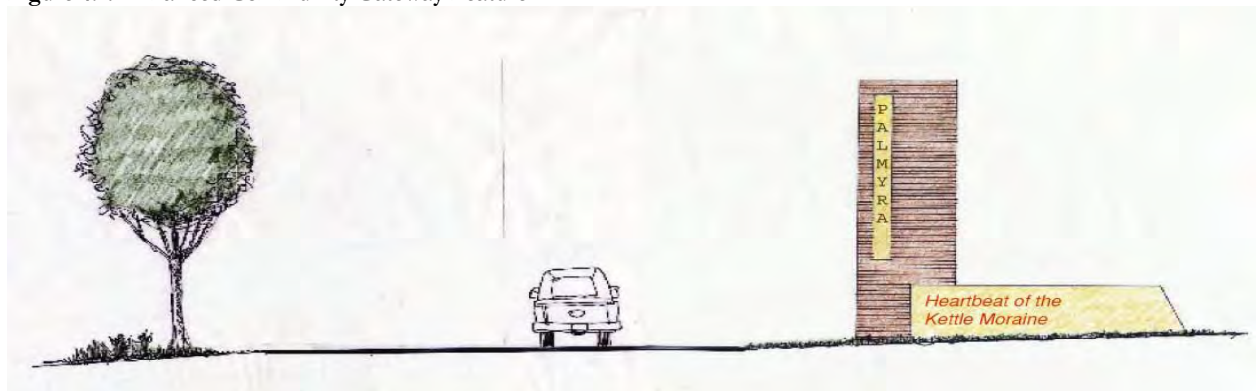
*Neighborhood Plans* are prepared with the purpose of guiding the growth and development for either largely undeveloped lands at a community's edge, or for existing built up areas that are in need of revitalization. A neighborhood plan is developed for a clearly delineated area and gives more detailed recommendations than would be provided in the comprehensive plan. A neighborhood plan does not function to replace the comprehensive plan but rather serves to augment it. It builds on the goals, policies and implementation steps in the comprehensive plan to provide a finer level of detail. Such plans should specify the location of proposed streets, sewer & water utilities, land uses, densities, open space, stormwater management facilities, recreational areas, and institutional uses.

By preparing a neighborhood plan a clear signal is sent to the development community, landowners, and existing/future policy makers regarding expectations and desires of the community. The result is a “win-win” situation where the community gains the benefits of new tax base and a quality built environment that lends a sense of vibrancy to the community, while the development community gains project efficiency by avoiding protracted community debates or the possible denial of proposed projects. In addition, property within well-planned neighborhoods is typically more marketable and attractive to future buyers.

### 2. Upgrade Community Gateway Features.

The Future Land Use Plan recommends the use of community gateway features at key locations to formally announce entry into the Village. Currently the Village employs two such features, one near St Mary's Cemetery on STH 106 and the other at the corner of Mill Rd. and E. Main St. However, these two features are undersized and difficult to read given the speed on these roadways. These features would be better served at locations south of the Village along Tamarack or Little Prairie Rd and could be combined with an information board providing business listing for the downtown as a way to encourage users of the Ice Age Trail to visit the downtown. Higher traffic roadways should be upgraded with more visible gateway features. Each gateway feature need not be identical but all should be designed to reinforce the community's character and sense of place as the “*Heartbeat of the Kettle Moraine.*” (*Mid-Term*)

Figure 4.1: Enhanced Community Gateway Feature



<sup>6</sup> Criteria to initiate a neighborhood planning process includes: when development in an area is imminent, when sewer service is anticipated to extend into the area, or when petitions for such plans are brought forward by residents within the area or by Village Officials.

### **3. Review Existing Ordinances for Consistency with this Plan.**

The Palmyra Zoning Ordinance will be the primary tool used to implement the Future Land Use Plan and the policies of this Plan. Zoning is used to control the use of land and the design and placement of structures. A zoning ordinance establishes how lots may be developed, including setbacks and separation for structures, the height and bulk of those structures, and density. The general purpose for zoning is to avoid undesirable side effects of development by segregating incompatible uses and by setting standards for individual uses. It is also one of the important legal tools that a community can use to control development and growth.

Beginning January 1, 2010, zoning changes must be consistent with the Comprehensive Plan. This Plan provides a number of policies and recommendations, which support Traditional Neighborhood Design and Conservation Subdivision design. The Village should review all existing ordinances for consistency with the policies of this Plan, including zoning, land division, subdivision, site, building, and landscaping regulations. (*Short Term*)

## **4.3 PLAN ADOPTION**

In order to implement this Plan it must be recommended for approval by the Village Plan Commission. One copy of the Plan adopted by the Plan Commission for recommendation to the Village Board is required to be sent to: (a) Every governmental body that is located in whole or in part within the boundaries of the Village, including any school district, sanitary district, or other special district, (b) the clerk of every city, village, town, and county that is adjacent to the Village, (c) the Department of Administration, (d) the regional planning commission in which the Village is located, (e) the public library that serves the area in which the Village is located. The Village will also send one copy of the plan, per written request, to any operator who has applied for or obtained a nonmetallic reclamation permit, a person who has registered a marketable nonmetallic mineral deposit, or any other property owner or leaseholder that has an interest in property allowing the extraction of nonmetallic mineral resources. (Refer to Section 66.1001(4)(b), Stats.)

After the Commission adopts the Plan by resolution, the Village Board must adopt the Plan by ordinance. Prior to adopting the Plan, the Village Board will hold at least one public hearing to discuss the recommended plan (SS 66.1001 (4)(d)). At least 30 days prior to the hearing a Class 1 notice will be published that contains, at a minimum, the following:

- The date, time and location of the hearing,
- A summary of the proposed plan or plan amendment,
- The local government staff who may be contacted for additional information,
- Where to inspect and how to obtain a copy of the proposal before the hearing.

Prior to adopting the Plan, the Village Board will provide an opportunity for written comments by the public and respond to such comments through review and discussion at a Village Board meeting.

The Village Board, by a majority vote, shall enact the ordinance adopting the recommended plan (Section 66.1001(4)(c), Stats.). The adopted plan and ordinance shall be distributed to the aforementioned parties in Section 66.1001(4)(b), Stats. The plan shall contain all nine elements identified in Section 66.1001(2), Stats. If the Village Board asks the Planning Commission to revise the recommended plan, it is not mandatory that these revisions be sent to the distribution list. However, in the spirit of public participation and intergovernmental cooperation, revisions that constitute a substantial change to the recommended plan may be sent to the distribution list.

## **4.4 CONSISTENCY AMONG PLAN ELEMENTS**

Once formally adopted, the Plan becomes a tool for communicating the community's land use policy and for coordinating legislative decisions. Per the requirements of Wisconsin's Comprehensive Planning Law, beginning on January 1, 2010 if the Village of Palmyra engages in any of the actions listed below, those actions shall be consistent with its comprehensive plan:



- Official mapping established or amended under s. 62.23 (6)
- Local subdivision regulations under s. 236.45 or 236.46
- County zoning ordinances enacted or amended under s. 62.23 (7)
- Town, village, or city zoning ordinances enacted or amended under s. 60.61, 60.62, 60.23 (7)
- Zoning of shorelands or wetlands in shorelands under s. 59.692, 61.351 or 62.231

An action shall be deemed consistent if:

1. It furthers, or at least does not interfere with, the goals, objectives, and policies of this plan,
2. It is compatible with the proposed future land uses and densities/intensities contained in this plan,
3. It carries out, as applicable, any specific proposals for community facilities, including transportation facilities, other specific public actions, or actions proposed by nonprofit and for-profit organizations that are contained in the plan.

The State of Wisconsin planning legislation requires that the implementation element describe how each of the nine-elements will be integrated and made consistent with the other elements of the plan. Prior to adoption of the plan the Village of Palmyra reviewed, updated, and completed all elements of this plan together, and no inconsistencies were found.

### **Inconsistencies with the 1999 Jefferson County Agricultural Preservation & Land Use Plan**

No inconsistencies were found. In developing this Plan, the Village of Palmyra strived to maintain consistency among development policies for areas in which planning authority overlaps with Jefferson County. This Plan maintains the same Urban Service Area boundary as the County's 1999 Plan, and for all areas outside of the municipal boundary, maintains the same agricultural preservation and environmental corridor policies. The policies of this Plan encourage continued cooperation with Jefferson County.

### **Inconsistencies with Town of Palmyra's Comprehensive Plan**

Land use in the Town of Palmyra is regulated under the County's Agricultural Preservation & Land Use Plan as well as the County's Zoning Code. The policies of this Plan encourage continued cooperation with Town of Palmyra.

## **4.5 PLAN MONITORING, AMENDING & UPDATING**

To monitor consistency with the Comprehensive Plan the Village shall regularly revisit this plan to review its content prior to any important decisions, especially those that will affect land use. Members of the Village Board, Plan Commission and any other decision-making body should periodically review the plan and identify areas that need to be amended. Special attention should be paid to the recommendations identified in this plan, and to the timetable for their completion. Completed actions should be celebrated and removed, while those actions not yet carried out should be given new deadlines and assigned to specific individuals, boards or committees for completion per the new schedule.

Although this Plan has described policies and recommendations for future implementation, it is impossible to predict the exact future conditions in the Village. Amendments may be appropriate in years following the adoption of the Plan, particularly when the Plan becomes contradictory toward emerging issues or trends. An amendment may also be needed to accommodate a unique proposal not previously considered; however, amendments should be carefully considered and should not become the standard response to proposals that do not fit the plan. Frequent amendments to meet individual development proposals should be avoided or the Plan loses integrity and becomes meaningless.

Amendments are any changes to plan text or maps and are defined as either being minor or major. Minor amendments are defined as changes to plan text or maps that are not associated with a development proposal. Major amendments are defined as changes to plan text or maps that are associated with a development proposal. In order to provide economies of scale, minor amendment requests should be collected throughout the year and addressed at a specified annual joint meeting of the Plan Commission & Village



Board (recommended for January to review requests of the previous year). Major amendments requests (i.e. Future Land Use amendments) can be aligned with the development review process (i.e. zoning or subdivision meetings). The processes are essentially the same (plan commission recommendation, public hearing, governing body takes final action) except for some differences in notice requirements. Using the more stringent notice requirements of the State comprehensive law can satisfy both processes.

Whether reviewing the request for a minor or major amendment, it is important to ensure that the change does not trigger the need to alter something else in the Plan. The proposed amendment should be evaluated based on its merits and whether it is consistent, or would cause inconsistencies, with the other elements of the Plan.

- **Recommendation: Hold one annual joint meeting between the Village Board and Plan Commission to:**
  - Review the Village's progress in implementing the recommendations of the Plan,
  - Establish new deadlines and responsibilities for new or unfinished recommendations,
  - Identify any minor or major plan amendments that are needed or have been requested for review.

Frequent requests for minor or major amendments to the comprehensive plan should signal the need for a plan update. Unlike an amendment, the plan update is a major re-write of the plan document and supporting maps. Per the requirements of State comprehensive planning law, this Plan needs to be updated at least once every ten years. Updates could be coordinated with the release of new demographic and economic data (as with new census), or the release of updated mapping layers (such as FEMA Flood Maps), as the assumptions of the previous plan might be reconsidered in light of the new information.

- **Recommendation: Update this Comprehensive Plan at least once every ten years per the requirements of the State comprehensive planning law.**

To follow State comprehensive planning law, the Village shall use the same process to amend or update the plan as it originally followed when it was initially adopted (regardless of how minor the amendment or change is). Proposed amendments should be channeled through the local Plan Commission for recommendation, with final action occurring at the Village Board, including proper public notices and hearings. For most amendments, the Village does not need to circulate the entire plan to the aforementioned parties in Section 66.1001(4)(b), only the portion that is being amended. All the governmental entities to whom this amendment is submitted will have already received the full version of the plan when it was originally adopted. For the purpose of record keeping, Page ii of this Plan contains an area to list any amendments made to this plan after its original adoption.

## 4.6 SEVERABILITY

If any provision of this Comprehensive Plan shall be found to be invalid or unconstitutional, or if the application of this Comprehensive Plan to any person or circumstances is found to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the other provisions or applications of this Comprehensive Plan, which can be given effect without the invalid or unconstitutional provision or application.

## 5 EXISTING CONDITIONS

The following chapter summarizes background information as required for the nine planning elements to be included in comprehensive plans (as per Wisconsin Statute 66.1001). The information is compiled at the County and municipal level to the extent that such data is available or can be synthesized from standard data sources. Much of the data comes from secondary sources, consisting primarily of the U.S. Census. Caution should be given as a majority of the data that the US Census collects is from a sample of the total population; and therefore, are subject to both sampling errors (deviations from the true population) and nonsampling errors (human and processing errors).

### 5.1 ISSUES & OPPORTUNITIES

This element provides a baseline assessment of the Village of Palmyra past, current, and projected population statistics and covers all of the information required under *SS66.1001*. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development in the Village of Palmyra.

#### 5.1.1 Population Statistics & Projections

The following displays the population statistics and projections that were prepared as part of the requirements of the Comprehensive Planning legislation. Other demographic data and statistics, such as employment and housing characteristics, are in their corresponding chapters.

Table 5.1: Population & Age Distribution

Population	Village of Palmyra Number	Village of Palmyra Percent	Jefferson County Number	Jefferson County Percent	Wisconsin Number	Wisconsin Percent
Total Population (1970)	1,341	100.0%	60,060	100.0%	4,417,821	100.0%
Total Population (1980)	1,515	100.0%	66,152	100.0%	4,705,642	100.0%
Total Population (1990)	1,540	100.0%	67,783	100.0%	4,891,769	100.0%
Total Population (2000)	1,766	100.0%	75,767	100.0%	5,363,675	100.0%
Total Population (2005)*	1,775	100.0%	79,188	100.0%	5,580,757	100.0%
<b>SEX AND AGE (2000)</b>						
Male	863	48.9%	36,712	48.5%	2,649,041	49.4%
Female	903	51.1%	37,309	49.2%	2,714,634	50.6%
Under 5 years	119	6.7%	4,695	6.2%	342,340	6.4%
5 to 9 years	122	6.9%	5,022	6.6%	379,484	7.1%
10 to 14 years	136	7.7%	5,553	7.3%	403,074	7.5%
15 to 19 years	154	8.7%	5,414	7.1%	407,195	7.6%
20 to 24 years	93	5.3%	4,278	5.6%	357,292	6.7%
25 to 34 years	263	14.9%	10,042	13.3%	706,168	13.2%
35 to 44 years	314	17.8%	12,457	16.4%	875,522	16.3%
45 to 54 years	205	11.6%	10,429	13.8%	732,306	13.7%
55 to 59 years	86	4.9%	3,702	4.9%	252,742	4.7%
60 to 64 years	71	4.0%	3,070	4.1%	204,999	3.8%
65 to 74 years	107	6.1%	4,752	6.3%	355,307	6.6%
75 to 84 years	75	4.2%	3,366	4.4%	251,621	4.7%
85 years and over	21	1.2%	1,241	1.6%	95,625	1.8%
<b>Median Age (2000)</b>	<b>34.9</b>		<b>36.6</b>		<b>36.0</b>	

Source: US Census, \*WIDOA Estimate

From year 1970 to 2000, the population for the Village of Palmyra increased by 32%, which was the same growth rate experienced by Jefferson County. However, since 2000 the population in the Village has only increased by .5% while growth in Jefferson County was 4.5%. The median population for Wisconsin villages in year 2005 was 714. On average Wisconsin villages grew in population by 47% from year 1970 to 2000 and by 3.8% from year 2000 to 2005.

The highest age group is those 35 to 44 years old (17.8%). This is also the highest percentage age cohort for Jefferson County and the State. The median age is 34.9, which is lower than the County and State median age. Approximately 15.5% of the population is at or near retirement age (60+), which is less than the County (16.4%) and the State (16.9%) averages.

Population projections allow a community to anticipate and plan for future growth needs. In year 2004, the Wisconsin Department of Administration released population projections to year 2025 for every municipality in Wisconsin, and projections to year 2030 for counties. The WIDOA projected the Village of Palmyra population will grow to 2,055 by year 2025, about 2.25% of the Jefferson County total for that year. The WIDOA projects the population in Jefferson County will increase to 94,259 by year 2030. In order to derive municipal population projections for 2030, MSA held constant the WIDOA county total and the 2025 proportion of countywide population. This resulted in a 2030 population projection of 2,118, an increase of 19.9% since year 2000. The WIDOA projects the population in Jefferson County will increase by 24.4% over this horizon. However, it should be noted that the WIDOA projection methodology tends to rely heavily on past population trends. The WIDOA states that...

“Local geophysical conditions, environmental concerns, current comprehensive land use plans, existing zoning restrictions, taxation, and other policies influence business and residential location. These and other similar factors can govern the course of local development and have a profound effect on future population change were not taken into consideration in the development of these projections.”

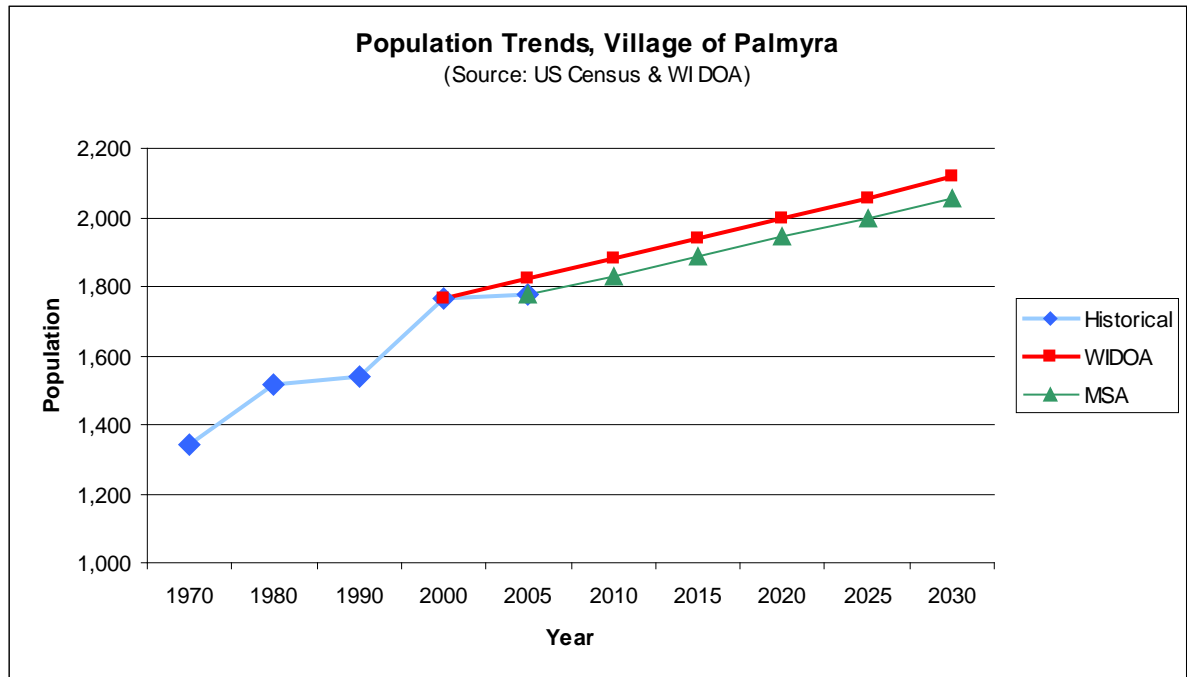
In year 2004 the WIDOA projected the Village would have a population of 1,826 by 2005. The actual 2005 population was 1,775, which represents an error of 3%. In the 1994 Land Use Plan for the Village, the WIDOA had projected a population of 1,856 for year 2000, an over estimate of 5%. Since the WIDOA has tended to over estimate the Village’s population projections, MSA developed an additional projection 3% lower than each WIDOA figure. Caution should be given, as both MSA and WIDOA figures do not account for changes in local land use regulations, which could affect population growth.

Table 5.2: Population Projections

Population	Village of Palmyra	Village of Palmyra	Town of Palmyra	Jefferson County	Wisconsin
Total Population (1970)	1,341	1,341	875	60,060	4,417,821
Total Population (1980)	1,515	1,515	1,069	66,152	4,705,642
Total Population (1990)	1,540	1,540	1,176	67,783	4,891,769
Total Population (2000)	1,766	1,766	1,145	75,767	5,363,675
Total Population (2005)*	1,775	1,775	1,188	79,188	5,580,757
<b>Projection</b>	<b>WIDOA</b>	<b>MSA</b>			
Total Population (2005)	1,826	1,775	1,157	79,030	5,563,896
Total Population (2010)	1,884	1,827	1,168	82,161	5,751,470
Total Population (2015)	1,939	1,881	1,178	85,178	5,931,386
Total Population (2020)	1,996	1,936	1,189	88,302	6,110,878
Total Population (2025)	2,055	1,993	1,202	91,464	6,274,867
Total Population (2030)**	2,118	2,054	1,239	94,259	6,415,923
<b>Percent Growth (2000-2030)</b>	19.9%	16.3%	8.2%	24.4%	19.6%

Source: US Census, Projection WIDOA, \*2005 WIDOA Estimate, \*\*MSA Projection for Municipalities

Figure 5.1: Population Trends



## 5.2 HOUSING

This element provides a baseline assessment of the Village of Palmyra current housing stock and covers all of the information required under SS66.1001. Information includes: past and projected number of households, age & structural characteristics, occupancy & tenure characteristics, and value & affordability characteristics. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development and maintenance of housing in the Village of Palmyra.

### 5.2.1 Households & Housing Units: Past, Present, and Future

In year 2000, there were 689 households in the Village of Palmyra, an increase of 66% since 1970. During the same period, total households increased by 58% and 57%, respectively, for all of Jefferson County and the State. The median number of households for Wisconsin villages in year 2000 was 279. The higher increase in households (66%) vs. population (32%), from year 1970 to 1990, can be attributed to the decrease in the average size of households. Since 1970, the number of persons per household has been decreasing in Wisconsin. In Palmyra, the number of persons per household has decreased from 3.2 to 2.6, a trend that can be attributed to smaller family sizes and increases in life expectancy.

Table 5.3: Households & Housing Units

Housing	Village of Palmyra	Town of Palmyra	Jefferson County	Wisconsin
Total Households (1970)	414	Unknown	17,800	1,328,804
Total Households (1980)	526	Unknown	22,264	1,652,261
Total Households (1990)	567	417	24,019	1,822,118
Total Households (2000)	689	435	28,205	2,084,544
People per Household (1970)	3.2	Unknown	3.4	3.3
People per Household (1980)	2.9	Unknown	3.0	2.8
People per Household (1990)	2.7	2.8	2.8	2.7
People per Household (2000)	2.6	2.6	2.6	2.6
Housing Units (1970)	440	Unknown	10,168	1,482,322
Housing Units (1980)	557	Unknown	12,741	1,863,857
Housing Units (1990)	600	549	25,719	2,055,774
Housing Units (2000)	725	512	30,092	2,321,144

Source: US Census, \*WIDOA Estimate

\*Total Households include any unit that is occupied.

\*\*Housing units are all those available, including occupied and vacant units or seasonal units.

Housing projections allow a community to begin to anticipate future land use needs. The household projections were derived using a preliminary report from the Wisconsin Department of Administration (2002). The WIDOA projected the Village of Palmyra total households will reach 847 by year 2025, comprising 2.34% of the Jefferson County total. The WIDOA projected there will be 37,494 households in Jefferson County by year 2030, but has not yet published population and household projections at the municipal level.

MSA utilized WIDOA projections to derive 2030 household projections for municipalities in three steps. Since household size is projected to continue to decline in the future, the first step was to project the 2030 household size based on WIDOA trends. For the Village of Palmyra, there are expected to be 2.42 people per household in year 2030. Next, the projected 2030 population was divided by the 2030 household size. Finally, an adjustment factor was used to ensure that the total number of households for all Jefferson County municipalities added up to the WIDOA county total of 37,494. The 2030 projected number of households in the Village is 876, a 27.1% increase from 2000 to 2030. The WIDOA and MSA household figures are

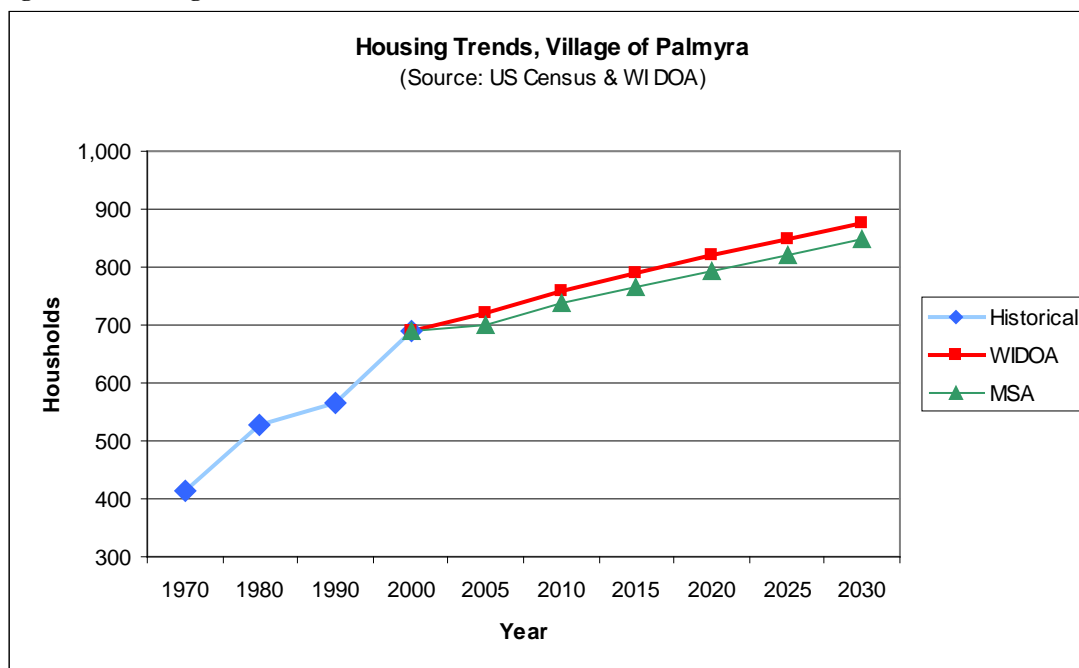
derived from their population projections; therefore, they have the same limitations. MSA developed an additional projection 3% lower than each WIDOA figure to account for the over estimation. Data in Table 5.4 indicates that housing growth in the Village of Palmyra will be slower than Jefferson County, and close to the State overall. Meanwhile, growth in households in the Town of Palmyra is expected to occur at a much lower rate of 14.9%.

Table 5.4: Projected Households

Household Projections	Village of Palmyra (WIDOA)	Village of Palmyra (MSA)	Town of Palmyra	Jefferson County	Wisconsin
Total Households (2005)	722	700	446	29,860	2,190,210
Total Households (2010)	759	736	458	31,680	2,303,238
Total Households (2015)	790	766	467	33,248	2,406,798
Total Households (2020)	819	794	475	34,772	2,506,932
Total Households (2025)	847	822	483	36,207	2,592,462
Total Households (2030)	876	850	500	37,494	2,667,688
Percent Growth (2000-2030)	27.1%	23.3%	14.9%	32.9%	28.0%

Source: US Census, WIDOA, \*MSA Projections for Municipalities

Figure 5.2: Housing Trends



### 5.2.3 Age & Structural Characteristics

Table 5.5: Housing Age Characteristics

Year Structure Built	Percent
1939 or Earlier	31.9%
1940 to 1959	16.3%
1960 to 1969	9.1%
1970 to 1979	20.2%
1980 to 1989	9.0%
1990 to 1994	7.6%
1995 to 1998	5.6%
1999 to March 2000	0.3%
<b>Total</b>	<b>100.0%</b>

Source: US Census, Village of Palmyra

The age of a home is a simplistic measure for the likelihood of problems or repair needs. Older homes, even when well cared for, are generally less energy efficient than more recently-built homes and are more likely to have components now known to be unsafe, such as lead pipes, lead paint, and asbestos products. Of the Village of Palmyra's 725 housing units, 42% were built before 1970 and 32% were built before 1940. With 32% of the housing stock 60+ years in age, the condition of the housing stock could become an issue if homes are not well cared for. The percentage of older homes (60+ years) is identical to the County's average.

Beginning in 2005, Wisconsin State Statutes require all municipalities to adopt and enforce the requirements of the Uniform Dwelling Code (UDC) for one and two family dwellings. This requirement will ensure that new residential buildings are built to safe standards, which will lead to an improvement in the housing stock of communities. The UDC is administered by the Wisconsin Department of Commerce.

As of the 2000 US Census, 66% of the Village of Palmyra's housing units were single-family homes, 10% of the housing units were within buildings with 2-4 units, and 13% of the units were in multifamily residential buildings with at least 10 units. Mobile homes and multifamily dwellings with 5-9 units made up the remainder of the housing stock in 2000.

### 5.2.4 Occupancy & Tenure Characteristics

According to the 2000 Census, the Village of Palmyra had 689 occupied households. Of these, 67.6% were owner occupied at the time of the Census, an increase of 4.3% since 1990. There were 36 vacant housing units for a total of 5%. Economists and urban planners consider a vacancy rate of 5% to be the ideal balance between the interests of a seller and buyer, or landlord and tenant.

Figure 5.3: Housing Unit Types

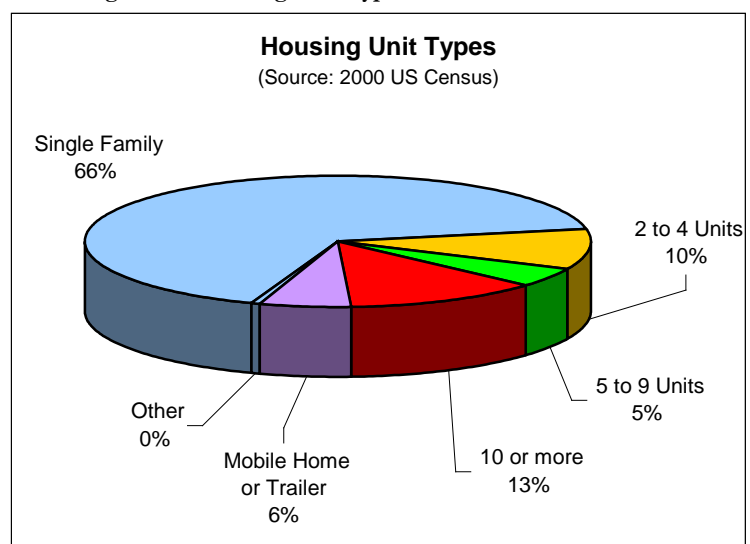


Table 5.6: Housing Occupancy Characteristics

Occupancy	1990 Number	1990 Percent	2000 Number	2000 Percent
Owner Occupied Housing Units	360	60.0%	466	64.3%
Renter Occupied Housing Units	207	34.5%	223	30.8%
Vacant Housing Units	33	5.5%	36	5.0%
Homeowner Vacancy Rate	-	NA	-	0.6%
Rental Vacancy Rate	-	NA	-	4.7%

Source: US Census, Village of Palmyra



Of the owner-occupied housing units in year 2000, 45% had been lived in by the same householder for five or fewer years (1995-2000) and 65% for 10 or fewer years (1990-2000). Of the population five years and older, 56% have lived in the same house since 1995, 17% lived elsewhere in Jefferson County, and 27% lived outside of Jefferson County. This shows that households moving to the Village within the last five years (1995-2000) arrived more frequently from outside the County than from within it.

Table 5.7: Housing Tenure & Residency

Year Head of Household Moved into Unit	Percent of Housing Units	Residence in 1995	Percent of Population 5 years an older
1969 or earlier	10.6%	Same House in 1995	55.8%
1970 to 1979	8.1%	Different House in US in 1995	44.2%
1980 to 1989	16.0%	Same County	17.4%
1990 to 1994	20.4%	Different County	26.8%
1995 to 2000	44.9%	Same State	23.5%
		Different State	3.2%

Source: US Census, Village of Palmyra

### 5.2.5 Value & Affordability Characteristics

In year 2000, the median value for a home in the Village of Palmyra was \$112,300, compared to \$123,800 for Jefferson County and \$112,200 for Wisconsin. The median value increased 73% from 1990, the County and State increased 59% and 81% respectively. In contrast, median household income only increased 48% for Village households from year 1990 to 2000 (see Economic Development). Most homes, 80%, ranged in value between \$50,000 and \$149,999. The median rent in the Village of Palmyra was \$454, compared to \$455 for Jefferson County and \$540 for Wisconsin.

Table 5.8: Home Value and Rental Statistics

Value of Owner-Occupied Units	1990 Percent	2000 Percent	Gross Rent for Occupied Units	1990 Percent	2000 Percent
Less than \$50,000	0.4%	1.3%	Less than \$200	17.6%	2.3%
\$50,000 to \$99,999	57.5%	31.0%	\$200 to \$299	29.8%	5.9%
\$100,000 to \$149,999	3.3%	56.9%	\$300 to \$499	44.9%	29.4%
\$150,000 to \$199,999	0.3%	6.4%	\$500 to \$749	3.4%	48.9%
\$200,000 to \$299,999	0.0%	4.4%	\$750 to \$999	0.0%	10.0%
\$300,000 to \$499,999	0.0%	0.0%	\$1,000 to \$1,499	0.0%	0.0%
\$500,000 to \$999,999	0.3%	0.0%	\$1,500 or more	0.0%	0.0%
\$1,000,000 or more	0.0%	0.0%	No cash rent	4.4%	3.6%
<b>Median Value</b>	<b>\$54,300</b>	<b>\$112,300</b>	<b>Median Rent</b>	<b>\$301</b>	<b>\$563</b>

Source: US Census, Village of Palmyra

Table 5.9: Recent Home Sales, Jefferson County

Year	Number of Home Sales	Median Sale Price YTD
2001	604	\$130,500
2002	832	\$133,700
2003	995	\$138,900
2004	849	\$151,400
2005	810	\$160,000
<b>Average</b>	<b>818</b>	<b>\$142,900</b>

Source: WI Realtors Association, Jefferson County

Table 5.9 displays the number of home sales and the median sale price for housing transactions in Jefferson County from year 2001 to 2005. Since year 2001, the median price of home sales has increased by 23%.

In the Village of Palmyra, affordable housing opportunities are often provided through the sale of older housing units located throughout the Village. According to the U.S. Department of Housing and Urban Development (HUD), housing is generally considered affordable when the owner or renter's monthly costs do not exceed 30% of their total gross monthly income. Among

households that own their homes, only 12% exceeded the “affordable” threshold in year 2000. In year 2000, the median percentage of household income spent on owner occupied units with a mortgage was 19.8%, compared to 20.3% for the County. These figures are far below the 30% threshold established by HUD. This data indicates that housing is generally affordable to most Village residents.

Table 5.10: Home Costs Compared to Income

Selected Monthly Owner Costs as a Percentage of Household Income	Percent	Gross Rent as a Percentage of Household Income	Percent
Less than 15%	37.9%	Less than 15%	24.4%
15% to 19.9%	22.0%	15% to 19.9%	14.6%
20% to 24.9%	14.9%	20% to 24.9%	4.9%
25% to 29.9%	12.9%	25% to 29.9%	2.4%
30% to 34.9%	5.1%	30% to 34.9%	9.8%
35% or more	7.3%	35% or more	14.6%
Not computed	-	Not computed	29.3%
<b>Median</b> (1990) with mortgage	21.6%	<b>Median</b> (1990)	21.0%
<b>Median</b> (2000) with mortgage	19.8%	<b>Median</b> (2000)	18.8%

Source: US Census, Village of Palmyra

## 5.3 TRANSPORTATION

This element provides a baseline assessment of the Village of Palmyra transportation facilities and covers all of the information required under SS66.1001. Information includes: commuting patterns, traffic counts, transit service, transportation facilities for the disabled, pedestrian & bicycle transportation, rail road service, aviation service, trucking, water transportation, maintenance & improvements, and state & regional transportation plans. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development and maintenance of transportation facilities in the Village of Palmyra.

### 5.3.2 Existing Transportation Facilities

#### 5.3.2.1 Highways & the Local Street Network

There are approximately 43.3 miles of roadway within the Planning Area. All federal, state, county, and local roads are classified into categories under the “Roadway Functional Classification System.” Functional classification is the process by which the nation's network of streets and highways are ranked according to the type of service they provide. It determines how travel is "channelized" within the roadway network by defining the part that any road or street should play in serving the flow of trips through a roadway network. In general, roadways with a higher functional classification should be designed with limited access and higher speed traffic. (Refer to the Village of Palmyra Transportation Facilities Map)

- **Arterials** –accommodate interstate and interregional trips with severe limitation on land access. Arterials are designed for high-speed traffic.
- **Collectors** – serve the dual function of providing for both traffic mobility and limited land access. The primary function is to collect traffic from local streets and convey it to arterial roadways. Collectors are designed for moderate speed traffic.
- **Local Roads** – provide direct access to residential, commercial, and industrial development. Local roads are designed for low speed traffic.

#### 5.3.2.2 Commuting Patterns

Table 5.11: Commuting Methods

Commuting Methods, Residents 16 Years or Older	Number	Percent
Car, Truck, Van (alone)	711	82.4%
Car, Truck, Van (carpooled)	93	10.8%
Public Transportation (including taxi)	2	0.2%
Walked	33	3.8%
Other Means	11	1.3%
Worked at Home	13	1.5%
Mean Travel Time to Work (minutes)	28.2	X
<b>Total (Workers 16 Years or Over)</b>	<b>863</b>	<b>100.0%</b>

Source: US Census, Village of Palmyra

presumably in the Milwaukee Metro Area.

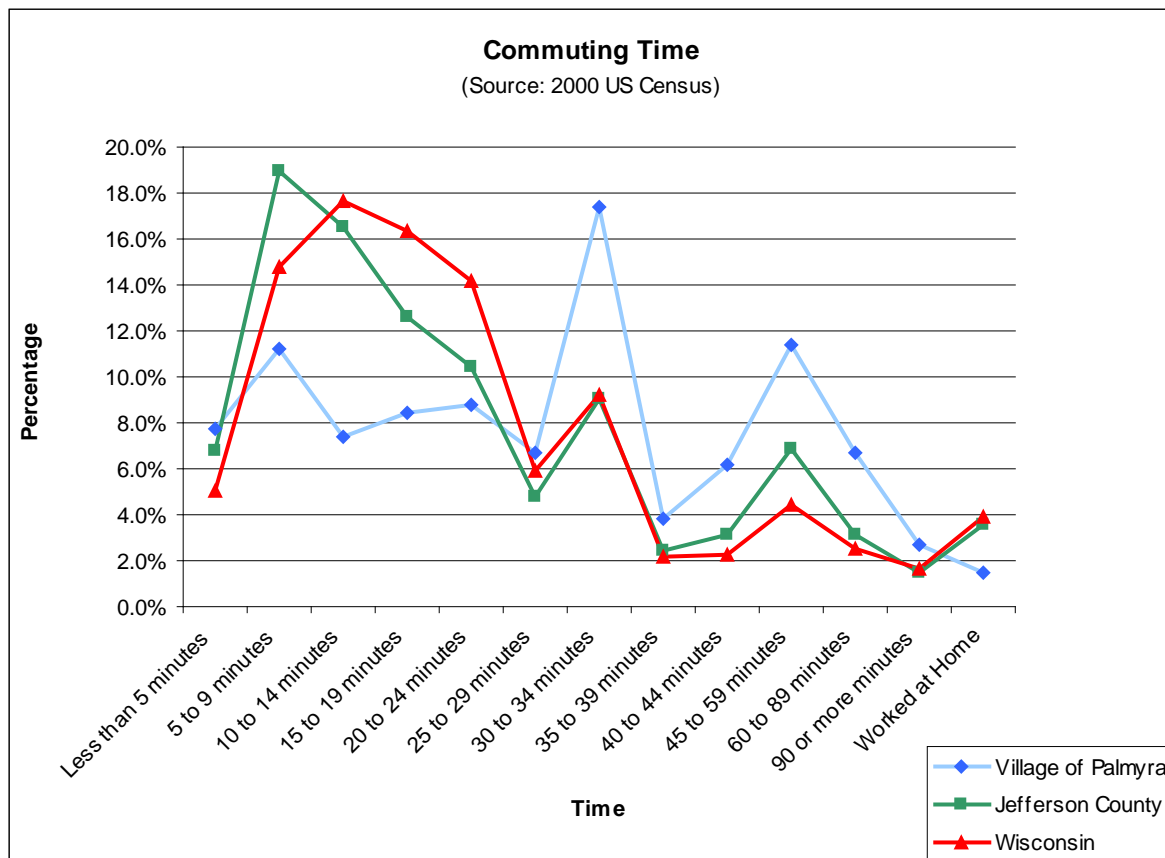
Table 5.11 shows commuting choices for resident workers over age 16. Nearly 93% of local workers use automobiles to commute to work, and of these about 11% percent report carpooling. About 1.5% of residents worked at home and did not commute to work. (County average is 3.6%) Most residents can travel to work in about 28 minutes. This is higher than the overall State of Wisconsin mean travel time to work of 21 minutes. The higher commuting times maybe due to the high percentage of residents who work outside of Jefferson County (see Table 5.12),

Table 5.12: Residents Place of Work

Place of Work, Residents 16 Years or Older	Village of Palmyra	Jefferson County
In County	33.8%	60.5%
Outside of County	66.2%	38.9%
Outside of State	0.0%	0.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

Source: US Census

Figure 5.4: Commuting Time



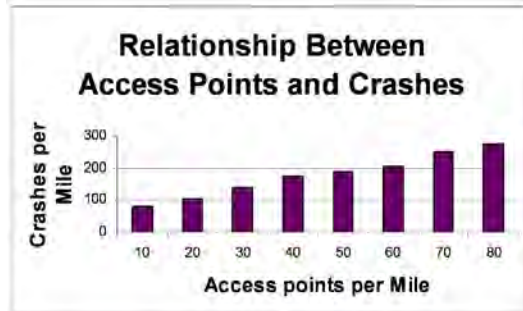
### 5.3.2.3 Traffic Counts

Annual Average Daily Traffic (AADT) counts are defined as the total volume of vehicle traffic in both directions of a highway or road for an average day. The AADT counts can offer indications of traffic circulation problems and trends and also provide justification for road construction and maintenance. WisDOT provides highway traffic volumes from selected roads and streets for all communities in the State once every three years. WisDOT calculates AADT by multiplying raw hourly traffic counts by seasonal, day-of-week, and axle adjustment factors. The Transportation Facilities Map (See Appendix E) displays AADT along STH & CTH in the Village of Palmyra for 2000 and 2004. All of these primary Village streets are operating well below design capacity, which according to the Highway Capacity Manual (Second Edition) is 13,000 AADT for a two lane urban street.

### 5.3.2.4 Access Management & Safety

Studies show a strong correlation between: 1) an increase in crashes, 2) an increase in the number of access points per mile, and 3) the volume of traffic at each access point. Simply put, when there are more access points, carrying capacity is reduced and safety is compromised.

Figure 5.5: Relationship Between Access Points And Crashes



The authority of granting access rights to roadways is ordinarily assigned based upon the functional classification of the roads. Arterials should fall under state jurisdiction, collectors under county jurisdiction, and local roads should be a local responsibility. Through implementation of its adopted *Access Management System Plan*, the WisDOT plans for and controls the number and location of driveways and streets intersecting state highways. In general, arterials should have the fewest access points since they are intended to move traffic through an area. Collectors and local roads

should be permitted to have more access points since they function more to provide access to adjacent land.

It is estimated that a single-family home generates 9.5 trips per day. A trip is defined as a one-way journey from a production end (origin) to an attraction end (destination). On a local road, one new home may not make much difference, but 10 new homes on a road can have quite an impact on safety and mobility.

Table 5.13: Trip Generation Estimates

	Rates			
Land Use	Base Unit	AM Peak	ADT	ADT Range
Residential				
Single Family Home	per dwelling unit	.75	9.55	4.31-21.85
Apartment Building	per dwelling unit	.41	6.63	2.00-11.81
Condo/Town Home	per dwelling unit	.44	10.71	1.83-11.79
Retirement Community	per dwelling unit	.29	5.86	
Mobile Home Park	per dwelling unit	.43	4.81	2.29-10.42
Recreational Home	per dwelling unit	.30	3.16	3.00-3.24
Retail				
Shopping Center	per 1,000 GLA	1.03	42.92	12.5-270.8
Discount Club	per 1,000 GFA	65	41.8	25.4-78.02
Restaurant				
(High-turnover)	per 1,000 GFA	9.27	130.34	73.5-246.0
Convenience Mart w/ Gas Pumps	per 1,000 GFA		845.60	578.52-1084.72
Convenience Market (24-hour)	per 1,000 GFA	65.3	737.99	330.0-1438.0
Specialty Retail	per 1,000 GFA	6.41	40.67	21.3-50.9
Office				
Business Park	per employee	.45	4.04	3.25-8.19
General Office Bldg	per employee	.48	3.32	1.59-7.28
R & D Center	per employee	.43	2.77	.96-10.63
Medical-Dental	per 1,000 GFA	3.6	36.13	23.16-50.51
Industrial				
Industrial Park	per employee	.43	3.34	1.24-8.8
Manufacturing	per employee	.39	2.10	.60-6.66
Warehousing	1,000 GFA	.55	3.89	1.47-15.71
Other				
Service Station	per pump	12.8	168.56	73.0-306.0
City Park	per acre	1.59	NA	NA
County Park	per acre	.52	2.28	17-53.4
State Park	per acre	.02	.61	.10-2.94
Movie Theatre	per movie screen	89.48	529.47	143.5-171.5
w/Matinee	Saturday	(PM Peak)		
Day Care Center	per 1,000 GFA	13.5	79.26	57.17-126.07

Source: Institute of Transportation Engineers (ITE), Trip Generation

Source: Institute of Transportation Engineers (ITE). Trip Generation.

### 5.3.3 Additional Modes of Transportation

#### 5.3.3.1 Transit Service

Currently no bus service exists within the Village of Palmyra. The need for this service should be monitored and coordinated with Jefferson County. Greyhound Lines does make stops at the Johnson Creek Mall, approximately 20 miles from the Village. In addition, there is a Park – N – Ride lot in Johnson Creek along Interstate 94.

#### 5.3.3.2 Transportation Facilities for the Elderly or Disabled

Jefferson County Department of Human Services provides transportation for elderly and disabled citizens of Jefferson County. Transportation services are available which allow County residents to get to medical appointments. The service uses voluntary drivers and has an approximate monthly ridership of 200 people. The Department of Human Services also offers van service once a week for grocery shopping. This service also uses voluntary drivers. Both services are available to Palmyra residents.

#### 5.3.3.3 Pedestrian & Bicycle Transportation

Figure 5.6: Bicycling Conditions



Walkers and bikers currently use the Village's existing roadways and sidewalks, although sidewalks are not available in some portions of the Village. The WisDOT maintains a map of bicycling conditions for Jefferson County. These maps have been recently updated using 2004 traffic and roadway data.

<http://www.dot.wisconsin.gov/travel/bike-foot/countymaps.htm>. Figure 5.6 displays the portion of the map for the Planning Area. Green routes indicated roadways considered to be in the best condition for biking, blue routes indicate moderate conditions for biking, and red routes indicate undesirable conditions. In addition, Jefferson County has two off road trails, although neither connects to the Village of Palmyra. The Glacial Drumlin Trail, developed in 1986, bisects the County from east to west. It starts in Cottage Grove (Dane County) and traverses 52 miles to the Fox River Sanctuary in Waukesha. Closest access for Village residents is in the Village of Sullivan (via County E) approximately 10 miles away. The other notable trail is the Glacial River Trail, a multi-modal trail that travels from the City of Fort Atkinson south to the Rock County line on a former railroad bed along Highway 26.

In 1996, Jefferson County completed a *Bikeway & Pedestrianway Plan*. The primary objectives of this planning effort were:

- To identify desirable bicycle and pedestrian facility routes within Jefferson County and its communities along with recommended linkages between the communities.
- To develop detailed bikeway/pedestrianway plans within the communities of Fort Atkinson, Jefferson, Waterloo, Watertown, Whitewater, Johnson Creek, Sullivan, Lake Mills and Palmyra.
- To provide recommendations including but not limited to new off-road routes, improved existing street routes, signage and marking, and route promotion.
- To develop a plan, which outlines recommended projects, priorities, estimated costs, and fund sources for future implementation of bikeway/pedestrianway improvements.



- To recommend specific educational and promotional approaches associated with bicycling, walking and other non-motorized alternative forms of safe transportation.

The Bikeway & Pedestrianway Plan notes the following for the Village of Palmyra:

“The Village of Palmyra is beginning to promote itself as "The Heartbeat of the Kettle Moraine" to capture some of the tourism activity generated by mountain bicyclists visiting the Kettle Moraine area. Increasing bicycle travel to and through Palmyra is therefore a major goal of the Village.”

“The village streets and town roads around Palmyra are low volume/low speed roadways well suited for bicycling activities. Major roadway improvement projects are therefore not a high priority. Instead, the distribution of bicycling guide maps and tourism information to Kettle Moraine visitors is viewed as the highest priority bicycle/pedestrian project for Palmyra. However, the Village does wish to pursue a future off-road bicycle accommodation to link with the Kettle Moraine trails.”

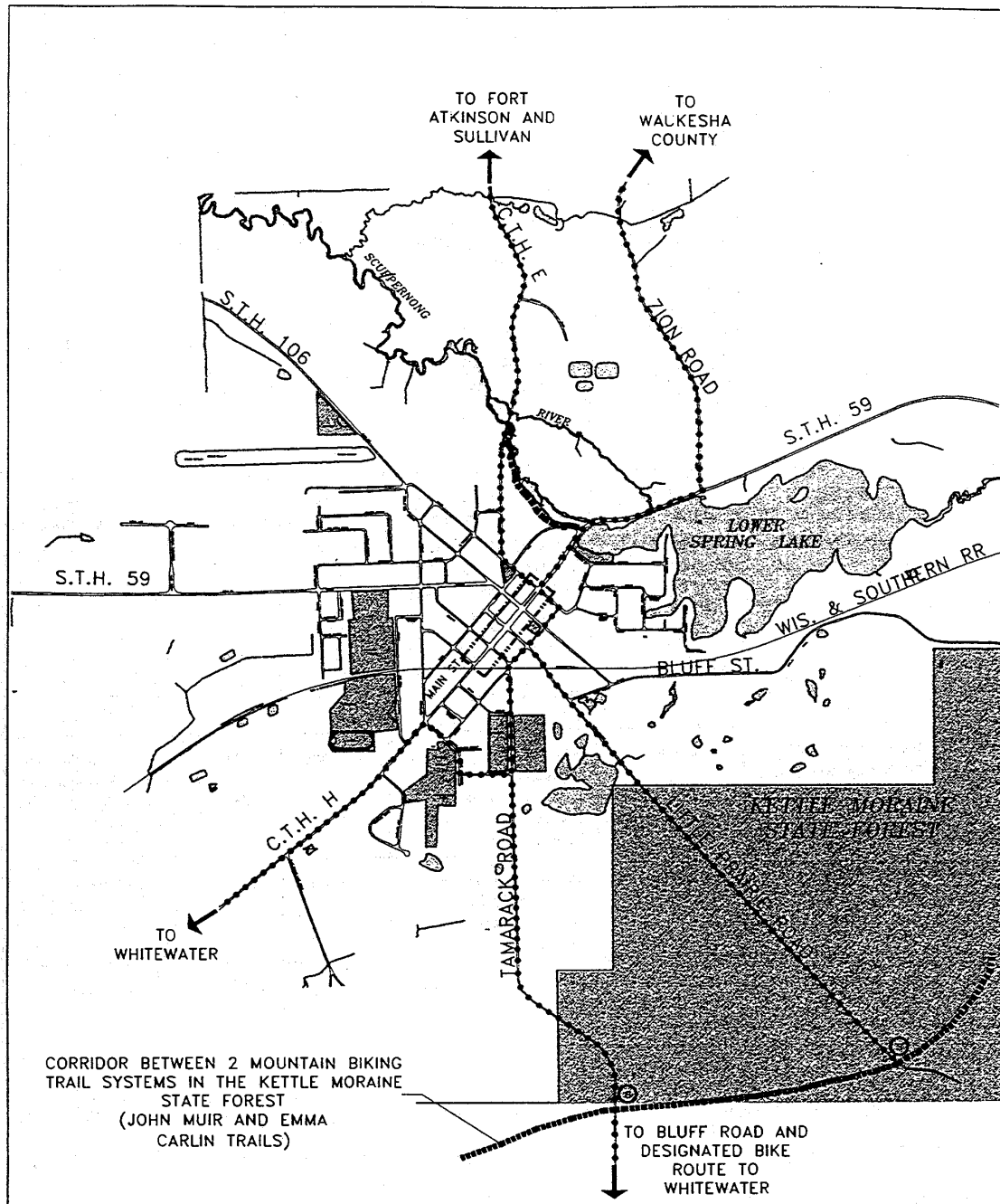
Projects included in the Plan are listed in Table 5.14 and Figure 5.7.

**Table 5.14: Jefferson County Bikeway & Pedestrianway Plan, Palmyra Projects**

Project	Location	Recommendations	Priority	Cost	Implementer
Palmyra Bike Route Guide	Loop rides through Palmyra, Kettle Moraine and vicinity	Develop and publish information targeted to Kettle Moraine visitors	Immediate (1996-2000)	--	Village of Palmyra
Visitor Center	Downtown	Offer bicycling, tourist and community information	Immediate (1996-2000)	--	Village of Palmyra
Traffic calming/main street improvements	Downtown	Consider curb bulbs and median improvements to provide space for outdoor seating and bike parking	Long-range (2010-2045)	Varies upon design	Village of Palmyra County Hwys WisDOT
Bicycle parking	Downtown, schools, parks	Install recommended bike parking in convenient and safe locations	Immediate (1996-2000)	\$75/bike	Village of Palmyra
Bike Jefferson County signing	Downtown; at intersections with trails and Tamarack/Little Prairie Roads	Post directional signing	Immediate (1996-2000)	\$200/sign	County Parks
Linkage with the Kettle Moraine mountain biking trails and the Ice Age hiking trail	From downtown to trails	Develop parallel limestone path along Little Prairie Road and/or widen roadway at hills and curves or reduce speed limit	Moderate to Long-range (2000-2045)	TBD	Village of Palmyra WisDNR County Hwys
Scuppernong River Greenway	From Hwy 59, northwest along south side of river to Hwy E	Preserve flood plain land from future development; develop multi-use trail along river and within sewer right-of-way	Long-range (2010-2045)	\$40,000	Village of Palmyra

Source: Jefferson County Bikeway & Pedestrianway Plan, 1996

Figure 5.7: Jefferson County Bikeway & Pedestrian Plan for Palmyra



**VILLAGE OF PALMYRA  
JEFFERSON COUNTY, WISCONSIN  
BIKEWAY AND PEDESTRIAN PLAN  
RECOMMENDED IMPROVEMENTS**

**LEGEND:**

- MULTI-USE TRAIL
- MAPPED BIKE ROUTE
- STREETSCAPE IMPROVEMENTS
- S DIRECTIONAL SIGN



PREPARED BY:  
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Bicycles &**  
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**R.A. Smith & Associates**

As a result of this planning effort, the Jefferson County Parks Department developed a pamphlet titled *Bike Jefferson County, A Guide to 12 Recreational Loop Rides*. The guide contains two loop rides that pass through Lions Park in the Village of Palmyra.

Figure 5.8: Bike Jefferson County, Ride #11

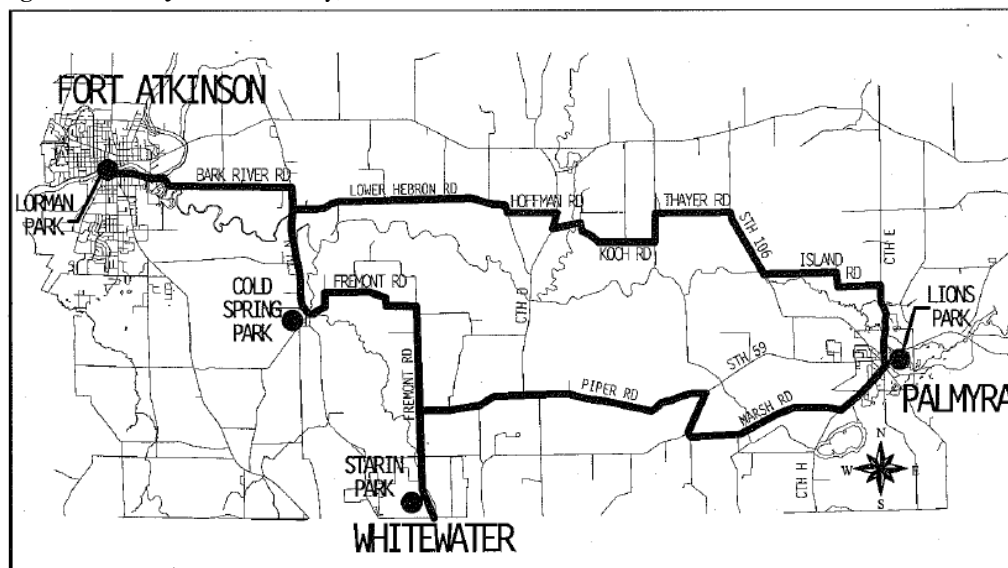
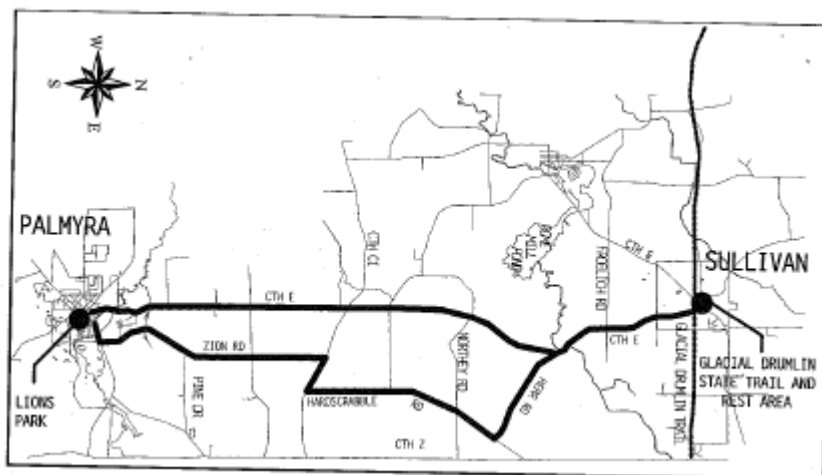


Figure 5.9: Bike Jefferson County, Ride #8



The *Wisconsin Bicycle Facility Design Handbook*, available online, provides information to assist local jurisdictions in implementing bicycle-related improvements. It provides information that can help to determine if paved shoulders are necessary. In addition, the WisDOT has developed the *Bicycle Transportation Plan 2020* and the *Pedestrian Plan 2020*. These plans are intended to help both communities and individuals in developing bicycle and pedestrian friendly facilities.

#### 5.3.3.4 Rail Road Service

Wisconsin's rail facilities are comprised of four major (Class 1) railroads, three regional railroads, and four local railroads. Freight railroads provide key transportation services to manufacturers and other industrial firms. Over the last ten years, the amount of Wisconsin track-miles owned by railroads has declined, due in large part to the consolidation of railroad operators and the subsequent elimination of duplicate routes. A recent commodity forecast predicts growth in state freight rail tonnage of 51% by the year 2020. Freight rail does pass through the Village via the Wisconsin & Southern Railroad Company. According to WSOR, one of the main problems facing freight service is the condition of railroads. Many older railroad bridges, tracks, and beds were not designed to meet the tonnage of today's rail cars. The WSOR plans to upgrade the portion of track that passes through the Village of Palmyra (from Milton to Waukesha) in 2009-2010. The scope of work includes ties, rail, and surfacing, which will allow WSOR to handle the tonnage of larger cars. (Source: WSOR 3-5-7 Year Plan, 2002)

Figure 5.10: Proposed Midwest Regional Rail System



\*Indiana DOT is evaluating additional passenger rail service to South Bend and to Louisville.  
 \*\*In Missouri, current restrictions limit train speeds to 79 mph.

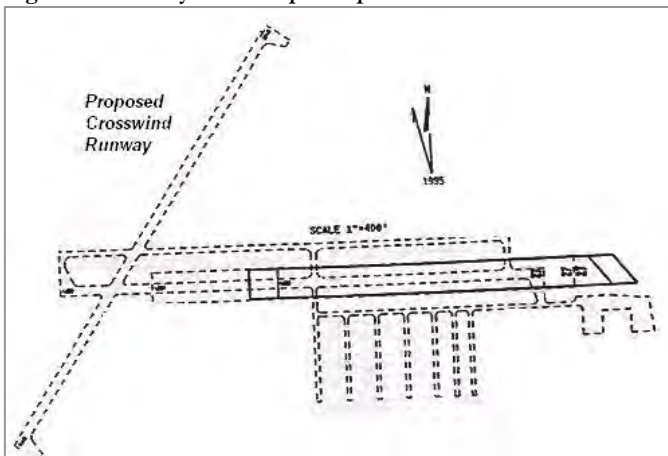
Amtrak operates two passenger trains in Wisconsin: the long-distance Empire Builder operating from Chicago to Seattle and Portland, with six Wisconsin stops; and the Hiawatha Service that carries about 470,000 people each year on seven daily round-trips in the Chicago-Milwaukee corridor. The WisDOT has been studying ways in which passenger rail could be expanded. WisDOT, along with Amtrak and eight other state DOTs, is currently evaluating the Midwest Regional Rail System (MWRRS), a proposed 3,000-mile Chicago based passenger rail network. The MWRRS would provide frequent train trips between Chicago, Milwaukee, Madison, La Crosse, Eau Claire, St. Paul, Milwaukee, and Green Bay. Modern

trains operating at peak speeds of up to 110-mph could produce travel times competitive with driving or flying. A transfer station is likely to be located in Johnson Creek. (Source: WisDOT Rail Issues and Opportunities Report, 2004)

### 5.3.3.5 Aviation Service

As of January 2000, the State Airport System is comprised of 95 publicly owned, public use airports and five privately owned, public use airports. In its *State Airport System Plan 2020*, the WisDOT does not forecast any additional airports will be constructed by year 2020. The Federal Aviation Administration (FAA) classifies airports into four categories: 1) Air Carrier/Cargo, 2) Transport/Corporate, 3) General Utility, 4) Basic Utility.

Figure 5.11: Palmyra Municipal Airport



There are two public airports serving Jefferson County with hard-surface runways (Watertown and Fort Atkinson) and seven other private and turf-surfaced runways, including Palmyra Municipal Airport. Palmyra Municipal Airport lies just outside the municipal boundaries and is owned by the Town of Palmyra. The airport encompasses approximately 79 acres and has zoning for height limitations within three miles of the airport. The airport has one 2,800' x 200' turf runway. The WisDOT does not anticipate Palmyra Municipal Airport will change in classification from Basic Utility by year 2020. The WisDOT *5-Year Airport Improvement Program*

lists projects for year 2007, 2008, and 2010. Plans for 2007 & 2008 include building and apron upgrades. Plans for year 2010 include construction of a crosswind runway on the west end of the property. Listing of projects in the *5-Year Airport Improvement Program* does not guarantee funding for the completion of projects. In addition, the Palmyra Municipal airport does not own the land needed for the new runway.

The Federal Aviation Administration (FAA) lists Palmyra Municipal Airport among Wisconsin airports included in the National Plan of Integrated Airport Systems (NPIAS). To be eligible for federal funds, an airport must be included in the NPIAS, which is published by the FAA every two years. The NPIAS *Five Year Plan (2007-2011)* anticipates that Palmyra Municipal Airport will have approximately 60 locally owned aircraft hangered or based at the airport by 2011.

### 5.3.3.6 Trucking

The trend toward less freight movement by rail and air has led to an increase in the trucking industry. According to a 2006 publication “Freight Facts and Figures,” trucking accounted for 82% of the total domestic U.S. freight moved in year 2002 and 95% of the total value. Projections for the freight shipping industry for the year 2035 predict a 98% increase in the volume of freight moved by truck and a 168% increase in the value of truck freight shipments. Freight is trucked through the Village of Palmyra using STH 59 & 106, and CTH E & H.

### 5.3.3.7 Water Transportation

The Village of Palmyra does not have its own access to water transportation but is less than 50 miles from port access to Lake Michigan in Milwaukee.

## 5.3.5 Maintenance & Improvements

The responsibility for maintaining and improving roads should ordinarily be assigned based upon the functional classification of the roads. Arterials should fall under state jurisdiction, collectors under county jurisdiction, and local roads should be a local responsibility.

The WisDOT has developed the *State Highway Plan 2020*, a 21-year strategic plan which considers the highways system’s current condition, analyzes future uses, assesses financial constraints and outlines strategies to address Wisconsin’s preservation, traffic movement, and safety needs. The plan is updated every six years (*Six Year Improvement Plan*) to reflect changing transportation technologies, travel demand, and economic conditions in Wisconsin.

The WisDOT *Six Year Improvement Plan (2006-2011)* for Jefferson County lists two project located in the Planning Area. State Highway 59 is scheduled for asphalt resurfacing from Whitewater to Industrial Blvd. A second project involves a total reconstruction of the highway from Industrial Blvd to Second St. The purpose of the project is to upgrade the roadway to current design and safety standards, improve drainage, and replace the existing deteriorated pavement. Curb and gutters will also be installed, eliminating large ditches. Work is expected to begin in the spring of 2009. The Jefferson County Highway Department maintains a five-year improvements plan. The only project listed in the Planning Area was a resurfacing of State Highway 59 from Waukesha County to the Village limits.

### 5.3.5.1 Pavement Surface Evaluation & Rating

Every two years, municipalities and counties are required to provide WisDOT with a pavement rating for the physical condition of each roadway under their jurisdiction. The rating system is intended to assist the Village in planning for roadway improvements and to better allocate its financial resources for these improvements. During the inventory, roadways in the Village are evaluated and rated in terms of their surface condition, drainage, and road crown. Paved roads are rated from 1 to 10 (10 being the best), and gravel roads are rated from 1 to 5 (5 being the best).

## 5.3.6 State & Regional Transportation Plans

A number of resources were consulted while completing this comprehensive plan. Most of these resources were WisDOT plans resulting from Translink 21, Wisconsin’s multi-modal plan for the 21<sup>st</sup> Century. Currently the WisDOT is in the process of replacing Translink 21 with a new plan called Connections 2030. Similar to Translink 21, Connections 2030 will address all forms of transportation. However, unlike Translink 21, Connections 2030 will be a policy-based plan instead of a needs based plan. The policies will be

tied to “tiers” of potential financing levels. One set of policy recommendations will focus on priorities that can be accomplished under current funding levels. Another will identify policy priorities that can be achieved if funding levels increase or decrease.

**Figure 5.12: Transportation Plans & Resources**

- Jefferson County Bikeway & Pedestrianway Plan, 1996
- Bike Jefferson County, 1999
- WSOR 3-5-7 Year Plan, 2002
- WisDOT Rail Issues and Opportunities Report, 2004
- WisDOT 5-Year Airport Improvement Program, 2007-2011
- FAA, National Plan of Integrated Airport Systems (NPIAS) Five Year Plan, 2007-2011
- WisDOT Translink 21
- WisDOT State Highway Plan 2020
- WisDOT 6-Year Highway Improvement Plan
- WisDOT State Transit Plan 2020
- WisDOT Access Management Plan 2020
- WisDOT State Airport System Plan 2020
- WisDOT State Rail Plan 2020
- WisDOT Bicycle Transportation Plan 2020
- WisDOT Pedestrian Plan 2020



## 5.4 AGRICULTURAL, NATURAL & CULTURAL RESOURCES

This element provides a baseline assessment of the Village of Palmyra agricultural, natural, & cultural resources and covers all of the information required under SS66.1001. Information includes: productive agricultural areas, a natural resource inventory, and a cultural resource inventory. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development and maintenance of agricultural, natural, & cultural resources in the Village of Palmyra.

### 5.4.1 Agricultural Resource Inventory

The following section details some of the important agricultural resources in the Planning Area and Jefferson County. The information comes from a variety of resources including the U.S. Census, U.S. Census of Agriculture, and the Jefferson County Land & Water Conservation Department. Several other relevant plans exist and should be consulted for additional information:

- Jefferson County Land and Water Resource Management Plan, 2000-2005
- Soil Survey of Jefferson County, 1979

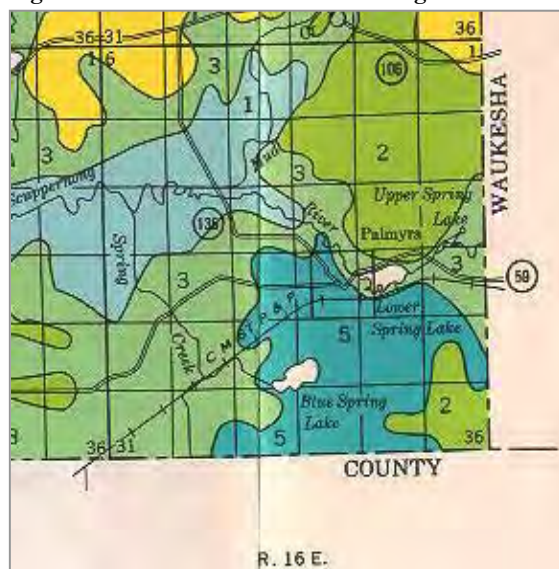
#### 5.4.1.1 Geology and Topography

The surface features of Planning Area are characteristic of the glaciated region. A pronounced topographic feature is the Kettle Moraine, which crosses the southeastern corner of the Planning Area. It covers approximately six square miles and attains an elevation of 1,040 feet. The moraine was created when the Green Bay Lobe of the glacier, on the west, collided with the Lake Michigan Lobe of the glacier, on the east, depositing sediment. The moraine is dotted with kettles caused by buried glacial ice that subsequently melted. This process left depressions ranging from small ponds to large lakes and enclosed valleys. The average elevation of the County is between 800 and 900 feet. The ridgetop elevations range from about 1,350 feet to about 1,450 feet. The valleys are short, have mostly very steep sides and are underlain by sandstone. The valleys are from 300 feet to 400 feet below the ridgetops. Elevations in the Planning Area range 778 to 1,060 feet. (Source: Jefferson County Land and Water Resource Management Plan)

#### 5.4.1.2 Soils

Soils of the Planning Area are described in the *Soil Survey of Jefferson County*. The portion of the County where the Planning Area is located is described as a large glacial lake basin. Due to these origins, there is a great deal of sand and gravel present in the soils. Figure 5.13 provides a general soils map of the Planning Area. Soils in the Planning Area are assembled into one of four soil groupings.

Figure 5.13: General Soils of the Planning Area



1. Houghton-Adrian: Very poorly drained, nearly level organic soils that are more than 51 inches thick or are underlain by sandy material within a depth of 51 inches.
2. Fox-Casco-Matherton: Somewhat poorly drained, well drained, and somewhat excessively drained, nearly level to very steep soils that have a loamy subsoil and are underlain by sand and gravel.
3. Palm-Keowns-Milford: Very poorly drained and poorly drained, nearly level soils that are organic or have a loamy or clayey subsoil and are underlain by silty, sandy, or clayey material.
5. Rodman – Moundville-Casco: Excessively drained to moderately well drained, nearly level to very steep soils that have a loamy or sandy subsoil and are underlain by sand or sand and gravel.

There are up to 46 different soils types that exist the Planning Area (Refer to the Soil Survey of Jefferson County). The Village of Palmyra Productive Agricultural Soils Map depicts the location of prime farmland in the Planning Area as well as those farmers that have land enrolled in the Jefferson County Farmland Preservation Program. The “prime farmland” designation indicates Class I or II soils, and some Class III soils. These class designations refer to the quality of soils for growing crops and are based on Natural Resource Conservation Service (NRCS) classifications. It should be noted that not all prime farm soils are used for farming; some have been developed with residential or other uses, it is also possible to have a productive farm on soils that are not designated as “prime.” The “prime farmland” designation simply indicates that these soils are generally good for productive farming.

### 5.4.1.3 Farming Trends

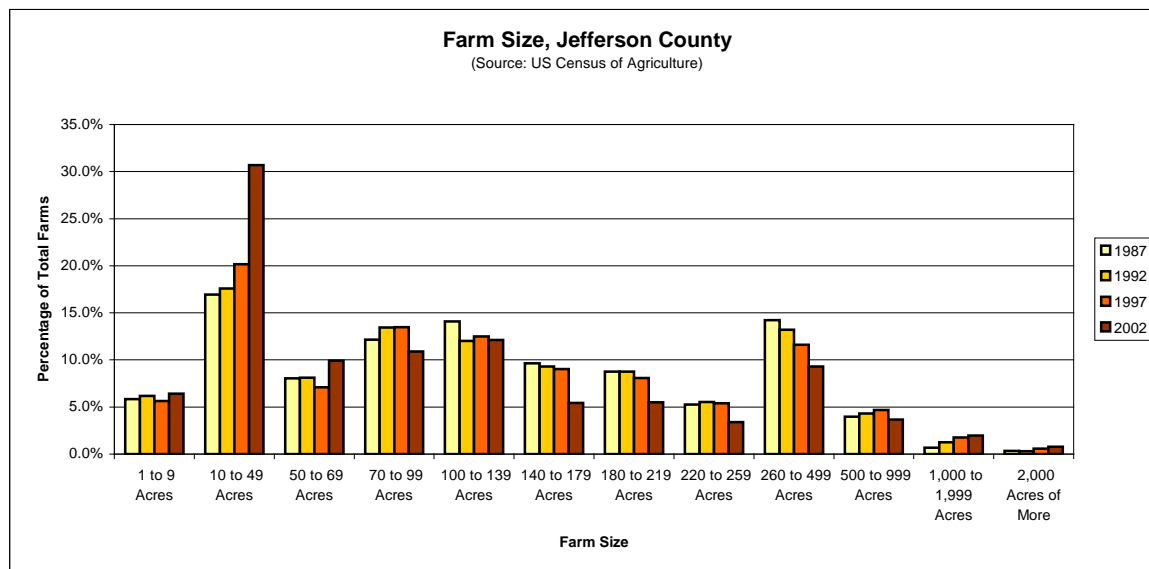
Most farming data is not collected at the township level. However, assumptions can be made based on data collected at the County level. Table 5.15 and Figure 5.14 provide information on the number and size of farms in Jefferson County from 1987 to 2002. The total number of farms in Jefferson County has decreased by 1.3% from 1987 to 2002. The Agricultural Census defines a farm as any place from which \$1,000 or more of agricultural products were produced, and sold, during a year. Today many “farms” or “farmettes” qualify under this definition but few are actually the traditional farms that people think of, 80 plus acres with cattle or dairy cows. These farmettes are typically less than 40 acres, serve niche markets, and produce modest agricultural goods or revenue. Figure 5.14 illustrates how the number of 10-49 acre farms has risen since 1987.

Table 5.15: Farms and Land in Farms 1987-2002

Farms and Land in Farms	Jefferson County 1987	Jefferson County 1992	Jefferson County 1997	Jefferson County 2002	Percent Change 1987-2002
Number of Farms	1,440	1,280	1,240	1,421	-1.3%
Land in Farms (acres)	256,282	232,591	242,301	247,914	-3.3%
Average Size of Farms (acres)	178	182	195	174	-2.2%
<b>Market Value of Land and Buildings</b>					
Average per Farm	\$193,831	\$207,741	\$374,852	\$555,490	186.6%
Average per Acre	\$1,034	\$1,174	\$1,917	\$3,087	198.5%

Source: US Census of Agriculture, Jefferson County

Figure 5.14: Farm Size 1987-2002, Jefferson County



On the opposite end, the number of large farms has also increased since 1987. Since 1987 the number of farms 1,000 acres or more has steadily increased. This has occurred due to older traditional farms having to continually expand in order to stay a float in the agricultural economy. The increase in the number of farmettes and large farms has resulted in the replacement of the typical bell shaped graph, with most farms occurring equally around the mean, with a bimodal shaped graph, which has two peaks at either end of the data. (See Figure 5.14) These same trends can be expected for the Planning Area. Regardless of size, all farms are important to the local agricultural economy.

Table 5.16 displays the number of farms by NAICS (North American Industrial Classification System) for Jefferson County and Wisconsin, as reported for the 2002 Census of Agriculture. The largest percentage of farms in Jefferson County is in the Oilseed & Grain category. The percentage of farms by category is consistent with the percentages for the State, with the exception of the Oilseed & Grain and Dairy Cattle categories.

**Table 5.16: Number of Farms by NAICS**

Types of Farms by NAICS	Jefferson County		Wisconsin	
	Number of Farms 2002	Percentage of Farms 2002	Number of Farms 2002	Percentage of Farms 2002
Oilseed and grain (1111)	449	31.6%	12,542	16.3%
Vegetable and melon (1112)	25	1.8%	1,317	1.7%
Fruit and tree nut (1113)	10	0.7%	1,027	1.3%
Greenhouse, nursery, and floriculture (1114)	36	2.5%	2,284	3.0%
Tobacco (11191)	6	0.4%	188	0.2%
Cotton (11192)	0	0.0%	0	0.0%
Sugarcane, hay, and all other (11193, 11194, 11199)	329	23.2%	20,943	27.2%
Beef cattle ranching (112111)	96	6.8%	9,852	12.8%
Cattle feedlots (112112)	68	4.8%	3,749	4.9%
Dairy cattle and milk production (11212)	182	12.8%	16,096	20.9%
Hog and pig (1122)	25	1.8%	759	1.0%
Poultry and egg production (1123)	33	2.3%	910	1.2%
Sheep and goat (1124)	24	1.7%	1,117	1.4%
Animal aquaculture and other animal (1125, 1129)	138	9.7%	6,347	8.2%
<b>Total</b>	<b>1,421</b>	<b>100.0%</b>	<b>77,131</b>	<b>100.0%</b>

Source: US Census of Agriculture

## 5.4.2 Natural Resource Inventory

The following section details some of the important natural resources in the Planning Area and Jefferson County. The information comes from a variety of resources including the Wisconsin Department of Natural Resources and the Jefferson County Land & Water Conservation Department. Information on local and regional parks is explored in the Utilities and Community Facilities Element. Several other relevant plans exist and should be consulted for additional information:

- Jefferson County Land and Water Resource Management Plan, 2006-2010
- Rock River Basin Report, 2002
- Lower Rock River Quality Management Plan, 2001
- An Aquatic Plan Management Plan for Lower Spring Lake, 2005
- Wisconsin DNR Legacy Report, 2002

The *Jefferson County Land and Water Resource Management Plan* identifies goals, objectives and actions to implement through year 2010. Nine goals were identified and are listed below:

- 1) Achieve measurable progress on protecting the resources in Jefferson County through implementation of conservation practices and conservation plan development
- 2) Ensure compliance with the Agricultural Performance Standards and Prohibitions
- 3) Adequately address the water resource issues facing Jefferson County
- 4) Reduce the transport of sediment, nutrients, and pollutants to agricultural ditches and surface water
- 5) Protect and restore identified natural areas
- 6) Effectively manage shared land and water resources with other counties
- 7) Reduce the delivery of sediment, nutrients, and other pollutants to surface water from rural and urban development
- 8) Reclaim all active non-metallic mining sites
- 9) Work with the WIDNR to implement various wildlife programs.

Jefferson County is located within the South Central Region of the WIDNR. The Regional Office is located in Madison, with the nearest Service Center location in Waukesha, and the nearest Field Station in the City of Lake Mills.

In an effort to put potential future conservation needs into context, the Natural Resources Board directed the Department of Natural Resources (DNR) to identify places critical to meet Wisconsin's conservation and outdoor recreation needs over the next 50 years. In 2002, after a three-year period of public input, the WIDNR completed the Legacy Report. The final report identifies 228 Legacy Places and 8 Statewide Needs and Resources. The Report identifies nine criteria that were used in order to identifying the types or characteristics of places critical to meeting Wisconsin's conservation and outdoor recreation needs. The nine criteria were:

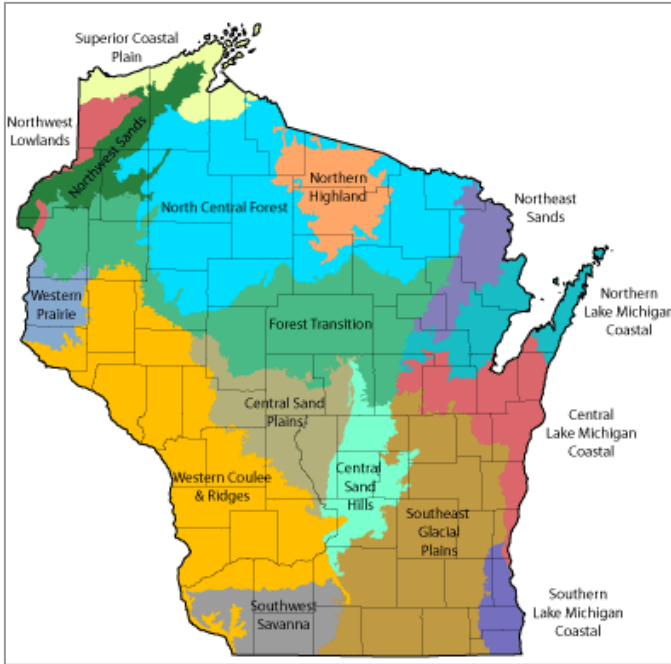
1. **Protect the Pearls** (protect the last remaining high quality and unique natural areas).
2. **Protect Functioning Ecosystems in Each Part of the State** (protect representative, functional natural landscapes that help keep common species common).
3. **Maintain Accessibility and Usability of Public Lands** (protect land close to where people live and establish buffers that ensure these lands remain useable and enjoyable).
4. **Think Big** (protect large blocks of land).
5. **Ensure Abundant Recreation Opportunities** (provide a wide range of outdoor recreation opportunities).
6. **Connect the Dots** (link public and private conservation lands through a network of corridors).
7. **Protect Water Resources** (protect undeveloped or lightly developed shorelands, protect water quality and quantity, and protect wetlands).
8. **Promote Partnerships** (leverage state money and effort through partnerships with other agencies and organizations).
9. **Diversify Protection Strategies** (where feasible, utilize options other than outright purchase to accomplish conservation and recreation goals).

Figure 5.15: WIDNR Regions





Figure 5.16: WIDNR Ecological Landscapes



The 228 Legacy Places range in size and their relative conservation and recreation strengths. They also vary in the amount of formal protection that has been initiated and how much potentially remains. The Legacy Places are organized in the report by 16 ecological landscapes, shown in Figure 5.16 (ecological landscapes are based on soil, topography, vegetation, and other attributes). All of Jefferson County is located within the Southeast Glacial Plain ecological landscape. There are five Legacy Places identified in Jefferson County. Two of the Legacy Places are near the Planning Area. Bark and Scuppernon Rivers Legacy Place, which includes Prince's Point Wildlife Area, partially in the Town of Palmyra. The goal of this Legacy Place is to maintain an open space corridor between the Southern Kettle Moraine, Prince's Point, and the Rock River. Kettle Moraine State Forest Legacy Place. The goal of this Legacy Place is to

expand and buffer existing public properties. Refer to the report for specific information. (Source: WIDNR Legacy Report)

Figure 5.17: Jefferson County Legacy Places



#### 5.4.2.1 Groundwater

Groundwater is the only source of drinking water in the Planning Area. It is a critical resource, not only because it is used by residents as their source of water, but also because rivers, streams, and other surface water depends on it for recharge. Groundwater contamination is most likely to occur where fractured bedrock is near ground surface, or where only a thin layer of soil separates the ground surface from the water table. According to the WIDNR Susceptibility to Groundwater Contamination Map (not pictured), the Planning Area generally ranks medium to high for susceptibility to groundwater contamination. Susceptibility to groundwater contamination is determined based on five physical resource characteristics: Bedrock Depth, Bedrock Type, Soil Characteristics, Superficial Deposits, Water Table Depth.

Groundwater can be contaminated through both point and non-point source pollution (NPS). The Environmental Protection Agency defines NPS as:

“Pollution which occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.” And point source pollution as: “Sources of pollution that can be traced back to a single point, such as a municipal or industrial wastewater treatment plant discharge pipe.”

According to the EPA, NPS pollution remains the Nation's largest source of water quality problems and is the main reason why 40% of waterways are not clean enough to meet basic uses such as fishing or swimming. The most common NPS pollutants are sediment (erosion, construction) and nutrients (farming, lawn care). Areas that are most susceptible to contaminating groundwater by NPS pollution include:

- An area within 250ft of a private well or 1000ft of a municipal well
- An area within the Shoreland Zone (300ft from streams, 1000ft from rivers and lakes)
- An area within a delineated wetland or floodplain
- An area where the soil depth to groundwater or bedrock is less than 2 feet

#### 5.4.2.2 Stream Corridors

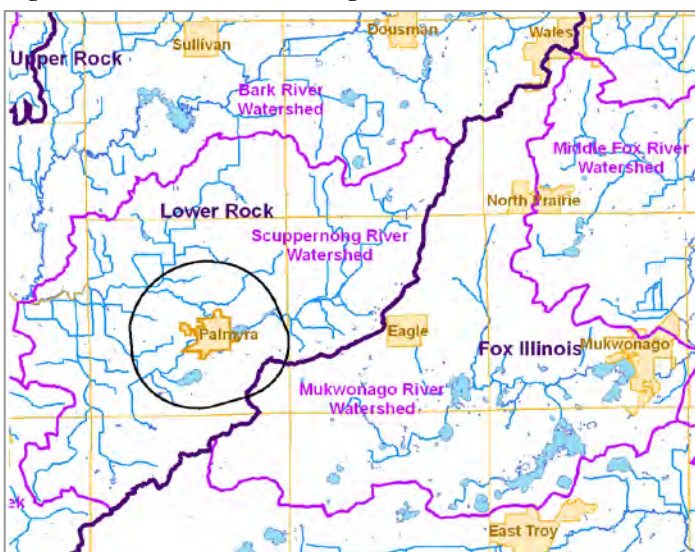
Figure 5.18: WIDNR River Basins & Water Management Units



Wisconsin is divided into three major River Basins each identified by the primary waterbody into which the basin drains (Figure 5.18). All of Jefferson County is located within the Mississippi River Basin. The three basins are further subdivided into 24 Water Management Units (Figure 5.18). Jefferson County is located within three WMUs, the Upper Rock WMU & Lower Rock WMU, and the Fox River Illinois WMU. The Planning Area is located almost entirely within the Lower Rock WMU, with a small portion located within the Fox River Illinois WMU. Each WMU is further subdivided into one or more of Wisconsin's 334 Watersheds. A watershed can be defined as an interconnected area of land draining from surrounding ridge tops to a common point such as a lake or stream confluence with a neighboring watershed. The Lower Rock WMU consists of 15 watersheds, and the Fox River Illinois WMU consists of seven watersheds. The

Planning Area is located within the Scuppernong River Watershed (Lower Rock WMU) and the Mukwonago River Watershed (Fox River Illinois WMU). (Figure 5.19) The Department of Natural Resources ranked most of the 13 watersheds to assist the Land and Water Conservation Board in identifying priority watershed projects. The Scuppernong River Watershed ranked low for Nonpoint source program selection, while the Mukwonago River Watershed ranked medium. (Source: Jefferson County Land and Water Resource Management Plan)

Figure 5.19: WIDNR Water Management Units & Watersheds



Most of the Planning Area is within the Lower Rock WMU & Scuppernong River Watershed. In 2002, the WIDNR released the first State of the Rock River Basin Report. The goal of the report is to inform basin residents and decision-makers about the status of their resource base so that they can make informed, thoughtful decisions that will protect and improve the future state of the Rock River Basin (Upper & Lower). The report indicates the most serious challenges facing the Basin are:



- Water quality impacts and increased runoff quantity from agriculture and urban land uses,
- Loss of agricultural lands,
- Loss of critical, sensitive habitat and connection between habitats,
- Significant groundwater contamination,
- Lower groundwater levels.

### 5.4.2.3 Surface Water

Surface water resources, consisting of rivers and streams together with associated floodplains, form an integral element of the natural resource base of the Planning Area. Surface water resources influence the physical development of an area, provide recreational opportunities, and enhance the aesthetic quality of the area. Rivers and streams constitute focal points of water related recreational activities; provide an attractive setting for properly planned residential development; and, when viewed in context of the total landscape, greatly enhance the aesthetic quality of the environment. Rivers and streams are susceptible to degradation through improper rural and urban land use development and management. Water quality can be degraded by excessive pollutant loads, including nutrient loads, that result from malfunctioning and improperly located onsite sewage disposal systems; urban runoff; runoff from construction sites; and careless agricultural practices. The water quality of streams and ground water may also be adversely affected by the excessive development of river areas combined with the filling of peripheral wetlands (which if left in a natural state serve to entrap and remove plant nutrients occurring in runoff, thus reducing the rate of nutrient enrichment of surface waters that results in weed and algae growth).

Perennial streams are defined as watercourses that maintain, at a minimum, a small continuous flow throughout the year except under unusual drought conditions. The perennial streams in the Village of Palmyra are shown on the Development Limitations Map. Perennial streams in the Planning Area include the Scuppernong River, Mud Creek, and Spring Creek. The Scuppernong River is a tributary of the Bark River and is a Class III trout stream. Mud Creek is a low-gradient tributary to Scuppernong River with extensively ditched headwaters. Spring Creek originates from Blue Spring Lake and is a tributary to the Scuppernong River. It has also been extensively ditched and straightened. (Source: Lower Rock River Water Quality Management Plan)

There are two lakes within the Planning Area, the Lower Spring Lake (104 acres) and Blue Spring Lake (136 acres). Both lakes have a maximum depth of 11-12 feet. Lower Spring Lake has developed an *Aquatic Management Plan* to obtain funding for a plant harvester via the Waterways Commission. The lake has a heavy invasion of Eurasian water milfoil. Eurasian water milfoil is one of eight milfoil species found in Wisconsin and the only one known to be exotic or nonnative. The Eurasian water milfoil has few natural enemies and displaces native plant species, interfering with aesthetic and recreational use of waterbodies. The plan recommends continued use of the plant harvester as the primary aquatic plant management measure. (Source: Aquatic Management Plan for Lower Spring Lake)

Blue Spring Lake is also designated as a Lake Management District. *An Inventory of Blue Spring Lake* reports that the excessive growth of aquatic plants and the poor water clarity are the two most critical problems in the lake. In a typical year, approximately 1,600 tons of nuisance plants are harvested from the lake. Nuisance plants such as Eurasian water milfoil and curlyleaf pondweed crowd out other more desirable plants, resulting in a loss of biodiversity. The poor water clarity in the lake is thought to be due to resuspended sediment rather than algal growth. This resuspended sediment contains high concentrations of phosphorus, which perpetuates the problem of nuisance plants in the lake. (Source: Jefferson County Land and Water Resource Management Plan)

### **Outstanding & Exceptional Waters**

Wisconsin has classified many of the State's highest quality waters as Outstanding Resource Waters (ORWs) or Exceptional Resource Waters (ERWs). Waters designated as ORW or ERW are surface waters that provide outstanding recreational opportunities, support valuable fisheries, have unique hydrologic or geologic

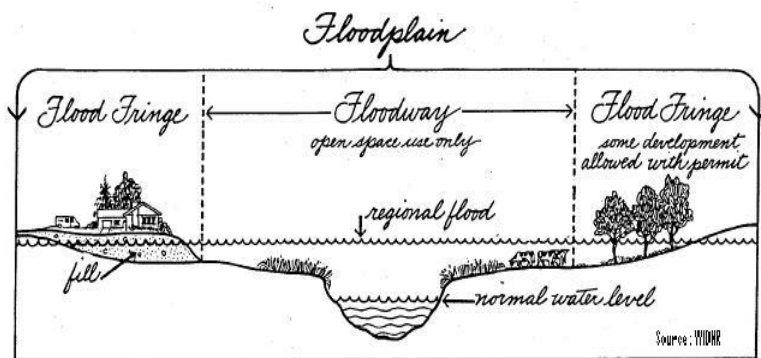
features, have unique environmental settings, and are not significantly impacted by human activities. The primary difference between the two is that ORW's typically do not have any direct point sources (e.g., industrial or municipal sewage treatment plant, etc.) discharging pollutants directly to the water. An ORW or ERW designation does not include water quality criteria like a use designation. Instead, it is a label that identifies waters the State has identified that warrant additional protection from the effects of pollution. These designations are intended to meet federal Clean Water Act obligations requiring Wisconsin to adopt an "antidegradation" policy that is designed to prevent any lowering of water quality. There are no ORWs or ERWs in the Planning Area. (Source: WIDNR)

### Impaired Waters

Section 303(d) of the federal Clean Water Act requires states to develop a list of impaired waters, commonly referred to as the "303(d) list." This list identifies waters that are not meeting water quality standards, including both water quality criteria for specific substances or the designated uses, and is used as the basis for development of Total Maximum Daily Loads (TMDLs). States are required to submit a list of impaired waters to EPA for approval every two years. These waters are listed within Wisconsin's 303(d) Waterbody Program and are managed by the WDNR's Bureau of Watershed Management. Included in the list is Spring Creek due to sedimentation and phosphorus pollution.

#### 5.4.2.4 Floodplains

Figure 5.20: Diagram of a Floodplain



Floods are the nations and Wisconsin's most common natural disaster and therefore require sound land use plans to minimize their effects. Benefits of floodplain management are the reduction and filtration of sediments into area surface waters, storage of floodwaters during regional storms, habitat for fish and wildlife, and reductions in direct and indirect costs due to floods.

#### Direct Costs:

- Rescue and Relief Efforts
- Clean-up Operations
- Rebuilding Public Utilities & Facilities
- Rebuilding Uninsured Homes and Businesses
- Temporary Housing Costs for Flood Victims
- Business Interruptions (lost wages, sales, production)

#### Indirect Costs:

- Construction & Operation of Flood Control Structures
- Cost of Loans for Reconstructing Damaged Facilities
- Declining Tax Base in Flood Blight Areas
- Subsidies for Flood Insurance

The Development Limitations Map displays the floodplain areas in the Planning Area. These floodplains encompass an area of about 1,438 acres (13.3% of the Planning Area). The Federal Emergency Management Agency (FEMA) designates floodplain areas. A flood is defined as a general and temporary condition of partial or complete inundation of normally dry land areas. The area inundated during a flood event is called the floodplain. The floodplain includes the floodway, the floodfringe, and other flood-affected areas. The floodway is the channel of a river and the adjoining land needed to carry the 100-year flood discharge. Because the floodway is characterized by rapidly moving and treacherous water, development is severely restricted in a floodway. The floodfringe, which is landward of the floodway, stores excess floodwater until it

can be infiltrated or discharged back into the channel. During a regional flood event, also known as the 100-year, one-percent, or base flood, the entire floodplain or Special Flood Hazard Area (SFHA) is inundated to a height called the regional flood elevation (RFE). (Source: WIDNR Floodplain & Shoreland Zoning Guidebook)

Floodplain areas generally contain important elements of the natural resource base such as woodlands, wetlands, and wildlife habitat; therefore, they constitute prime locations necessary for park, recreation, and open space areas. Every effort should be made to discourage incompatible urban development of floodplains and to encourage compatible park, recreation, and open space uses.

Floodplain zoning applies to counties, cities and villages. Section 87.30, Wis. Stats., requires that each county, village and city shall zone, by ordinance, all lands subject to flooding. Chapter NR 116, Wis. Admin. Code requires all communities to adopt reasonable and effective floodplain zoning ordinances within their respective jurisdictions to regulate all floodplains where serious flood damage may occur within one year after hydraulic and engineering data adequate to formulate the ordinance becomes available. Refer to the Village of Palmyra Floodplain Ordinance. (Source: WIDNR Floodplain & Shoreland Zoning Guidebook)

### 5.4.2.5 Wetlands

Wetlands are areas in which water is at, near, or above the land surface and which are characterized by both hydric soils and by the hydrophytic plants such as sedges, cattails, and other vegetation that grow in an aquatic or very wet environment. Wetlands generally occur in low-lying areas and near the bottom of slopes, particularly along lakeshores and stream banks, and on large land areas that are poorly drained. Under certain conditions wetlands may also occur in upland areas. Wetlands accomplish important natural functions, including:

- Stabilization of lake levels and stream flows,
- Entrapment and storage of plant nutrients in runoff (thus reducing the rate of nutrient enrichment of surface waters and associated weed and algae growth),
- Contribution to the atmospheric oxygen and water supplies,
- Reduction in stormwater runoff (by providing areas for floodwater impoundment and storage),
- Protection of shorelines from erosion,
- Entrapment of soil particles suspended in stormwater runoff (reducing stream sedimentation),
- Provision of groundwater recharge and discharge areas,
- Provision of habitat for a wide variety of plants and animals, and
- Provision of educational and recreational activities.

The Wisconsin Wetland Inventory (WWI) was completed in 1985. Pre-European settlement wetland figures estimate the state had about 10 million acres of wetlands. Based on aerial photography from 1978-79, the WWI shows approximately 5.3 million acres of wetlands remaining in the state representing a loss of about 50% of original wetland acreage. This figure does not include wetlands less than 2 or 5 acres in size (minimum mapping unit varies by county); and because the original WWI utilized aerial photographs taken in the summer, some wetlands were missed. In addition, wetlands that were farmed as of the date of photography used and then later abandoned due to wet conditions were not captured as part of the WWI.

As is the case statewide and nationally, Jefferson County has experienced a decline in the number and quality of wetlands. The 1986 DNR wetlands inventory map for Jefferson County shows 59,280 acres of wetlands (16.6% of the land area). The latest Jefferson County Land and Water Resource Plan identifies 55,372 acres of wetlands (14.8% of the land area) in the County. The Existing Land Use Map displays the wetland areas in the Planning Area. These wetlands encompass an area of about 1,284 acres (11.8% of the Planning Area).

Wetlands are not conducive to residential, commercial, and industrial development. Generally, these limitations are due to the erosive character, high compressibility and instability, low bearing capacity, and high shrink-swell potential of wetland soils, as well as the associated high water table. If ignored in land use planning and development, those limitations may result in flooding, wet basements, unstable foundations,

failing pavement, and excessive infiltration of clear water into sanitary sewers. In addition, there are significant onsite preparation and maintenance costs associated with the development of wetland soils, particularly as related to roads, foundations, and public utilities. Recognizing the important natural functions of wetlands, continued efforts should be made to protect these areas by discouraging costly, both in monetary and environmental terms, wetland draining, filling, and urbanization. The Wisconsin DNR and the US Army Corp of Engineers require mitigation when natural wetland sites are destroyed.

#### 5.4.2.6 Threatened or Endangered Species

While the conservation of plants, animals and their habitat should be considered for all species, this is particularly important for rare or declining species. The presence of one or more rare species and natural communities in an area can be an indication of an area's ecological importance and should prompt attention to conservation and restoration needs. Protection of such species is a valuable and vital component of sustaining biodiversity.

Both the state and federal governments prepare their own separate lists of such plant and animal species but do so working in cooperation with one another. The WI-DNR's Endangered Resources Bureau monitors endangered, threatened, and special concern species and maintains the state's Natural Heritage Inventory (NHI) database. The NHI maintains data on the locations and status of rare species in Wisconsin and these data are exempt from the open records law due to their sensitive nature. According to the Wisconsin Endangered Species Law it is illegal to:

1. Take, transport, possess, process or sell any wild animal that is included on the Wisconsin Endangered and Threatened Species List;
2. Process or sell any wild plant that is a listed species;
3. Cut, root up, sever, injure, destroy, remove, transport or carry away a listed plant on public lands or lands a person does not own, lease, or have the permission of the landowner.

There are exemptions to the plant protection on public lands for forestry, agriculture and utility activities. In some cases, a person can conduct the above activities if permitted under a Department permit (i.e. "Scientific Take" Permit or an "Incidental Take" Permit).

Table 5.17 list those elements contained in the NHI inventory for the Village & Town of Palmyra. These elements represent "known" occurrence and additional rare species and their habitat may occur in other locations but are not recorded within the NHI database. For a full list of elements known to occur in Jefferson County & Wisconsin visit the WIDNR's Endangered Resources Bureau.

- Endangered Species - one whose continued existence is in jeopardy and may become extinct.
- Threatened Species - one that is likely, within the foreseeable future, to become endangered.
- Special Concern Species - one about which some problem of abundance or distribution is suspected but not proven.

Table 5.17: Natural Heritage Inventory

Group	Scientific Name	Common Name	State Status	Date Listed
Bird	Tyto Alba	Barn Owl	END	1981
Bird	Dendroica cerulea	Cerulean Warbler	THR	1992
Bird	Oporornis formosus	Kentucky Warbler	THR	1999
Bird	Wilsonia citrina	Hooded Warbler	THR	1992
Bird	Empidonax virens	Acadian Flycatcher	THR	1992
Community	Wet-mesic prairie	Wet-Mesic Prairie	NA	1984
Community	Dry prairie	Dry Prairie	NA	1984
Community	Oak Opening	Oak Opening	NA	1992

Group	Scientific Name	Common Name	State Status	Date Listed
Community	Springs and spring runs, hard	Springs and Spring Runs, Hard	NA	1984
Community	Shrub-carr	Shrub-carr	NA	1984
Community	Calcareous fen	Calcareous Fen	NA	1984
Community	Dry prairie	Dry Prairie	NA	2005
Fish	Erimyzon sucetta	Lake Chubsucker	SC/N	1981
Fish	Acipenser fulvescens	Lake Sturgeon	SC/H	1979
Frog	Acris crepitans blanchardi	Blanchard's Cricket Frog	END	1969
Leafhopper	Aflexia rubranura	Red-tailed Prairie Leafhopper	END	2003
Moth	Papaipema silphii	Silphium Borer Moth	END	2002
Moth	Papaipema beeriana	Liatris Borer Moth	SC/N	2002
Plant	Cypripedium parviflorum var. makasin	Northern Yellow Lady's-slipper	SC	1979
Plant	Gentiana alba	Yellow Gentian	THR	1993
Plant	Nuphar advena	Yellow Water Lily	SC	1943
Plant	Besseyia bullii	Kitten Tails	THR	2003
Plant	Asclepias sullivantii	Prairie Milkweed	THR	1996
Plant	Calylophus serrulatus	Yellow Evening Primrose	SC	1942
Plant	Cacalia tuberosa	Prairie Indian Plantain	THR	2001
Plant	Solidago ohioensis	Ohio Goldenrod	SC	2000
Plant	Agrimonia parviflora	Swamp Agrimony	SC	2000
Plant	Cypripedium candidum	Small white Lady's-slipper	THR	2001
Plant	Carex richardsonii	Richardson Sedge	SC	2001
Turtle	Emydoidea blandingii	Blanding's Turtle	THR	1996

Source: WIDNR NHI, Village & Town of Palmyra

NOTE: END = Endangered; THR = Threatened; SC = Special Concern; NA\* = Not applicable, SC/N = Regularly occurring, usually migratory and typically non-breeding species for which no significant or effective habitat conservation measures can be taken in Wisconsin, SC/H = Of historical occurrence in Wisconsin, perhaps having not been verified in the past 20 years, and suspected to be still extant. Naturally, an element would become SH without such a 20-year delay if the only known occurrence were destroyed or if it had been extensively and unsuccessfully looked for.

The Federal Endangered Species Act (1973) also protects animals and plants that are considered endangered or threatened at a national level. The law prohibits the direct killing, taking, or other activities that may be detrimental to the species, including habitat modification or degradation, for all federally listed animals and designated critical habitat. Federally listed plants are also protected but only on federal lands.

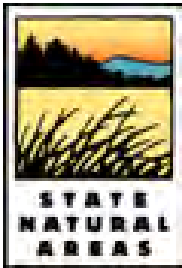
#### 5.4.2.7 Forests & Woodlands

Under good management forests, or woodlands, can serve a variety of beneficial functions. In addition to contributing to clean air and water and regulating surface water runoff, the woodlands contribute to the maintenance of a diversity of plant and animal life in association with human life. Unfortunately, woodlands, which require a century or more to develop, can be destroyed through mismanagement in a comparatively short time. The destruction of woodlands, particularly on hillsides, can contribute to stormwater runoff, the siltation of lakes and streams, and the destruction of wildlife habitat. Woodlands can and should be maintained for their total values; for scenery, wildlife habitat, open space, education, recreation, and air and water quality protection.

The Existing Land Use Map displays those lands that are wooded in the Planning Area. Approximately 3,075 acres (28%) are forested, a majority within the Southern Kettle Moraine State Forest. According to the Jefferson County Land and Water Resource Management Plan, approximately 26,114 acres (7%) of Jefferson County is wooded. The major cover type in the County is oak-hickory.

#### 5.4.2.8 Environmentally Sensitive Areas & Wildlife Habitat

Taken together, surface waters, wetlands, floodplains, woodlands, steep slopes, and parks represent environmentally sensitive areas that deserve special consideration in local planning. Individually all of these resources are important areas, or “rooms,” of natural resource activity. They become even more functional when they can be linked together by environmental corridors, or “hallways.” Wildlife, plants, and water all depend on the ability to move freely within the environment from room to room. Future planning should maintain and promote contiguous environmental corridors in order to maintain the quantity and quality of the natural ecosystem.



The WIDNR maintains other significant environmental areas through its State Natural Areas (SNA) program. State Natural Areas protect outstanding examples of Wisconsin's native landscape of natural communities, significant geological formations and archeological sites. Wisconsin's 552 State Natural Areas are valuable for research and educational use, the preservation of genetic and biological diversity, and for providing benchmarks for determining the impact of use on managed lands. They also provide some of the last refuges for rare plants and animals. In fact, more than 90% of the plants and 75% of the animals on Wisconsin's list of endangered and threatened species are protected on SNAs. Site protection is accomplished by several means, including land acquisition from willing sellers, donations, conservation easements, and cooperative agreements. Areas owned by other government agencies, educational institutions, and private conservation organizations are brought into the natural area system by formal agreements between the DNR and the landowner. The SNA Program owes much of its success to agreements with partners like The Nature Conservancy, USDA Forest Service, local Wisconsin land trusts, and county governments. (Source: WIDNR)

There are two SNA's near the Planning Area and nine total within Jefferson County. The two SNA's near the Planning Area include Number 229 Kettle Moraine Oak Opening (659 acres) and Number 230 Clifford E. Messinger Dry Prairie & Savanna Preserve (246 acres). Both are within the boundaries of the Kettle Moraine State Forest. Most SNA's are open to the public; however, these sites usually have limited parking and signage. Visit the WIDNR Bureau of Endangered Resources for more information each location.

#### 5.4.2.9 Metallic & Non-Metallic Mineral Resources

Mineral resources are divided into two categories, metallic and non-metallic resources. Metallic resources include lead and zinc. Nonmetallic resources include sand, gravel, and limestone. In June of 2001, all Wisconsin counties were obliged to adopt an ordinance for nonmetallic mine reclamation. (Refer to Jefferson County Department of Zoning) The purpose of the ordinance is to achieve acceptable final site reclamation to an approved post-mining land use in compliance with uniform reclamation standards. Uniform reclamation standards address environmental protection measures including topsoil salvage and storage, surface and groundwater protection, and concurrent reclamation to minimize acreage exposed to wind and water erosion. After reclamation many quarries become possible sites for small lakes or landfills. Identification of quarry operations is necessary in order to minimize nuisance complaints by neighboring uses and to identify areas that may have additional transportation needs related to trucking. There is one quarry presently located in the Planning Area on County E.

#### 5.4.3 Cultural Resource Inventory

The following section details some of the important cultural resources in the Village of Palmyra and Jefferson County. Cultural resources, programs, and special events are very effective methods of bringing people of a community together to celebrate their cultural history. Not only do these special events build community spirit, but they can also be important to the local economy. Unfortunately, there are many threats to the cultural resources of a community. Whether it is development pressure, rehabilitation and maintenance costs, or simply the effects of time, it is often difficult to preserve the cultural resources in a community. Future planning within the community should minimize the effects on important cultural resources in order to preserve the character of the community.



The following text was taken from the 1994 Village of Palmyra Land Use Plan. Contact either the Jefferson County Historical Society in Sparta, or the Palmyra Area Historical Society ([www.palmyrahistoric.org](http://www.palmyrahistoric.org)), for more information on the local history of Jefferson County and the Village of Palmyra.

“Forty years ago, the echoes of Cyrus Norton’s ax broke the stillness of Nature’s surroundings in Section 22, Town 5, Range 16 east, and the tempestuous din of progress has ever since continued to ring out upon the life-laden atmosphere of the Scuppernong Vally.” This description of the early origins of the settlement of the Village of Palmyra, written in the History of Jefferson County, Western Historical Society, Chicago, Illinois, 1879, captures the qualities that would facilitate the growth and development that marked Palmyra’s first 75 years.

After Mr. Norton’s arrival in 1839, settlement activity began to blossom in earnest with the opening on Christmas Day 1842 of the sawmill built by David J. and Samuel R. Powers. The following spring brought the construction of Palmyra’s first frame building, by Cyrus Norton, and the initial nucleus of community with the establishment of the first store and tavern by Levi Powers and William Mulks, respectively. The population began to grow and in the fall of 1843, John Fish surveyed and laid out the village in lots and blocks.

The first Town meeting was held in 1846. The railroad arrived in the fall of 1852, and by 1860 the settlement had reached a population of approximately 1,000 residents. On April 4, 1866 Palmyra officially incorporated as a Village. Due to an error in the act of incorporation, the original charter was dissolved in 1872. A new charter was granted May 5, 1874. After a period of population fluctuation that dropped to an 1890 census total of 567, the Village has shown steady growth since the end of World War II.

A unique and important part of Palmyra’s past involves the period dominated by the development of the village’s mineral springs. In 1871 a man named Victor Loewe discovered a spring on his property just south of the Village proper, the waters of which he believed helped relieve a stomach disorder that he had been troubled with. Along with several other nearby property owners, Mr. Loewe uncovered a number of additional springs and began to advertise and market their medicinal value. Loewe, himself, had seven springs, each supposedly with a different temperature and mineral content for the treatment of various ailments. At this time in history, society maintained a strong belief in the healing properties of springs and minerals. This popular philosophy of mineral springs and natural cures led to the arrival of Mr. Ira Bidwell of Saint Paul Minnesota. A frequenter of springs, Mr. Bidwell had heard of the waters in Palmyra and came to investigate. His findings convinced him to invest in the development of the springs and led him to construct a facility that would become the focal point of the Palmyra mineral springs industry. He purchased land containing several springs and in 1874 built the Bidwell House.

This four-story building, along with its six springs and lake frontage, served as one of the main destinations for Palmyra’s water cures industry for much of the next 50 years. Through time, the facility operated under many different ownerships and was used alternately as a sanitarium and hotel; from clinic to health spa to vacation resort and back again.

At the height of its popularity, the Village’s various mineral springs drew patrons from all over the country. By the 1920’s, however, interest in the waters had waned. The Bidwell House itself, by then known simply as “The Sanitarium,” eventually fell into disrepair and was razed. While this major link to Palmyra’s past is gone, many structures from the early days remain intact. Throughout it’s history the Village of Palmyra has had an awareness and appreciation of it’s own past. This sense of history is manifest in the Old Settlers Day celebration, the first of which was held in June of 1885. The importance of local history is also represented in the Village funding for building restoration in the Main Street area. In late 1992, Palmyra received \$76,000 in federal grant money to use as a revolving loan fund for the restoration of building facades in its historic downtown district. The community understands that the key to its future is held in the preservation of its past.

### 5.4.3.1 Historical Resources

Wisconsin Historical Markers identify, commemorate and honor the important people, places, and events that have contributed to the state’s heritage. The WI Historical Society’s Division of Historic Preservation administers the Historical Markers program. There is only one registered historical marker in the Planning Area:

- Black Hawk War Encampment, Southern Kettle Moraine State Forest at Bald Bluff Overlook, Co Trunk Hwy H, 1.5 mi S of Palmyra

The Architecture and History Inventory (AHI) is a collection of information on historic buildings, structures, sites, objects, and historic districts throughout Wisconsin. The AHI is comprised of written text and photographs of each property, which document the property's architecture and history. Most properties became part of the Inventory as a result of a systematic architectural and historical survey beginning in 1970s. Caution should be used as the list is not comprehensive and much of the information is dated, as some properties may be altered or no longer exist. Due to funding cutbacks, the Historical Society has not been able to properly maintain the database. In addition, many of the properties in the inventory are privately owned and are not open to the public. Inclusion of a property conveys no special status, rights or benefits to the owners. There are 63 AHI records listed for the Village of Palmyra. Contact the State Historical Society for information on each record.

The Archaeological Site Inventory (ASI) is a collection of archaeological sites, mounds, unmarked cemeteries, marked cemeteries, and cultural sites throughout Wisconsin. Similar to the AHI, the ASI is not a comprehensive or complete list; it only includes sites reported to the Historical Society and some listed sites may be altered or no longer exist. The Historical Society estimates that less than 1% of the archaeological sites in the state have been identified. Wisconsin law protects Native American burial mounds, unmarked burials, and all marked and unmarked cemeteries from intentional disturbance. There are 23 ASI records listed for the Planning Area (2 sites in Section 11, 3 in Section 13, 1 in Section 15, 4 in Section 17, 2 in Section 19, 3 in Section 20, 1 in Section 21, 3 in Section 22, 3 in Section 23, 1 in Section 24, 1 in Section 33, and 1 in Section 36). Contact the State Historical Society for information on each record.

Some resources are deemed so significant that they are listed as part of the State and National Register of Historic Places. The National Register is the official national list of historic properties in American worthy of preservation, maintained by the National Park Service. The State Register is Wisconsin's official listing of state properties determined to be significant to Wisconsin's heritage and is maintained by the Wisconsin Historical Society Division of Historic Preservation. Both listings include sites, buildings, structures, objects, and districts that are significant in national, state, or locally history.

**Table 5.18: State Register of Historic Places, Village of Palmyra**

Reference #	Historic Name	Municipality	Location
75000068	Enterprise Building	V of Palmyra	125 W. Main St.
85001360	McKenzie, Monroe, House	V of Palmyra	226 Main St.

Source: WI Historical Society

The establishment of a historical preservation ordinance and commission is one of the most proactive methods a community can take to preserve cultural resources. A historical preservation ordinance typically contains criteria for the designation of historic structures, districts, or places, and procedures for the nomination process. The ordinance further regulates the construction, alteration and demolition of a designated historic site or structure. A community with a historic preservation ordinance may apply for Certified Local Government (CLG) status, with the Wisconsin State Historical Society. Once a community is certified, they become eligible for:

- Matching sub-grants from the federal Historic Preservation Fund,
- Use of Wisconsin Historic Building Code,
- Reviewing National Register of Historic Places nominations allocated to the state.

In August of 2004, the Village of Palmyra became a CLG community.

## 5.5 UTILITIES & COMMUNITY FACILITIES

This element provides a baseline assessment of the Village of Palmyra utilities & community facilities and covers all of the information required under SS66.1001. Information includes: forecasted utilities & community facilities needs, and existing utilities & community facility conditions. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future development and maintenance of utilities & community facilities in the Village of Palmyra.

### 5.5.1 Existing Utilities & Community Facilities Conditions

#### 5.5.1.1 Sanitary Sewer System

The Village of Palmyra owns and operates an aerated lagoon wastewater treatment facility (WWTF) that was constructed in 1982 (See Existing Land Use Map). The Village sanitary sewer system also contains five lift stations to convey the wastewater to the WWTF. The WWTF serves the entire Village, and through an agreement, the Blue Spring Lake District. Historically, the facility has been operated responsibly and is well maintained. As a result, treated effluent discharged from the facility has for the most part complied with the limitation set forth in the WPDES Permit issued by the WDNR. Following treatment, the effluent is discharged to the Scuppernong River, approximately 9.5 miles upstream from the confluence of the Scuppernong and Bark Rivers. The 25-year-old aerated lagoon treatment facility is currently meeting its effluent limits.

Historically, the Village has scored well in their Compliance Maintenance Annual Report (CMAR) and is not under a compliance schedule mandated by WDNR. However, in light of recent changes to regulations concerning effluent ammonia and the likelihood that the future WPDES Permit will contain stricter effluent ammonia limits, the Village elected to conduct an Operating and Needs Review (ONR) of their sewerage facilities. Because the ONR would be dependent on the effluent limits included with the new WPDES Permit, the WDNR was requested to provide new effluent limits for incorporation into the ONR. In September 2005, the Village completed their ONR for the WWTF.

From year 2002-2005 the average wastewater flow to the WWTF was approximately 174,000 gallons per day (gpd). This includes approximately 22,500 gpd received from the Blue Spring Lake Sanitary District and 27,000 gpd from Standard Process (a vitamin manufacturing facility which owns and operates a pre-treatment facility that reduces the strength of all process/high-strength wastewater to that of normal municipal wastewater prior to discharge into the Village's collection system). The facility is presently operating at 76% of its average daily design flow of 230,000 gpd. If the BSLSD and Standard Process' wastewater flows are subtracted from the observed average flow to the WWTF, then the average per capita wastewater flow for the Village is 70 gpd. This is typical for communities with populations less than 5,000 people.

The WIDOA population projections were combined with the average current per capita wastewater flow and loadings (including industrial flow increase projected to occur in the near future) to estimate the wastewater treatment capacity needed for the year 2025. If the current per capita wastewater flow of 70 gallons is assumed to continue into the future, and the flow from the Blue Spring Lake Sanitary District remains consistent, then the 2025 residential wastewater flow is estimated to be 170,000 gallons per day. Combined with an estimated 64,000 gpd of flow from Standard Process, the 20 year projected flow is 234,000 gallons per day. This is slightly more than the design capacity of 230,000 gpd; however, due to uncertainties inherent to the projection of population and future wastewater flow, the future wastewater flow is considered equivalent to the design capacity.

The calculations indicate that the existing aerated lagoons have the hydraulic and organic capacity necessary, but will not be able to meet the new ammonia limits that will be imposed in the future without an upgrade to the system. Since the Village is in general compliance with the requirements set forth in its current WPDES Permit, the Village will be eligible to request a variance from compliance with the new ammonia limits for a time period that includes one permit cycle (5 years) plus a period of time outlined in a compliance schedule

issued by the WDNR. At the end of the 5-year permit cycle, a compliance schedule (2 or 3 years) would be included with the re-issuance of the WPDES Permit. Based on the estimated timeline provided above, the Village should plan to comply with the new ammonia limits no later than October 1, 2014. The recommended option for compliance with the new ammonia limits is to upgrade the lagoon system to achieve nitrification (ammonia removal). This would involve the construction of a new complete-mix lagoon cell upstream of the existing primary lagoon and the addition of new blowers, aeration equipment and controls in roughly the spring of 2013. The ONR suggested the Village should implement a plan to increase the current sewer rates by approximately 45% over the next 9 years (5% per year) to meet the costs of upgrading the existing aerated lagoons to comply with the future ammonia limits.

Outside of the Village limits, the Jefferson County Sanitary Ordinance regulates the location, design, construction, alteration, and maintenance of all private waste disposal systems in the county.

### 5.5.1.2 Storm Water Management

Stormwater management involves providing controlled release rates of runoff to receiving systems, typically through detention and/or retention facilities. A stormwater management system can be very simple – a series of natural drainage ways – or a complex system of culverts, pipes, and drains. Either way, the purpose of the system is to store and channel water to specific areas, diminishing the impact of non-point source pollution. The Village of Palmyra maintains an erosion and stormwater runoff control ordinance. The ordinance applies to land disturbing and land developing activities on lands within the boundaries and jurisdiction of the Village of Palmyra and, if applicable, public and private lands subject to extraterritorial review under ch. 236, stats.

### 5.5.1.3 Water Supply

The Village of Palmyra owns and operates a public potable water supply system that serves virtually all residential, commercial, and industrial development within the community. The Village's water system consists of two operating wells, a 200,000-gallon elevated storage tower, approximately 12.19 miles of water main, and 118 fire hydrants. Water mains range in size from 4 inches to 12 inches. The system serves 766 customers.

In year 1923, the first well was drilled in Palmyra near what is now the Jefferson Street and Taft Street intersection. This well (well # 1) together with well #2, which was located at the public works garage, served the needs of the Village until 1981 when an additional well (well #3) and an elevated steel water tower were installed. At that same time, well # 2 was taken out of service and subsequently abandoned due to its lack of production. The addition of the third well an elevated storage served to introduce added capacity and to provide more constant and stable pressure throughout the system. Additionally, the storage facility allowed the means for effective maintenance with minimal service loss to residents. This looped water system distributes potable water to customers through 12.19 miles of 12", 8", 6", and 4" water mains. The water storage tower is located within the Village Park southwest of the Eighth Street and Wilson Street intersection. This tower is 150 feet high and has a storage capacity of 200,000 gallons.

In year 2006, the average water usage was approximately 230,000 gallons per day, with a one day high of 374,000 gallons. The total design capacity for the two pumps serving the Village water system is 1.54 million gallons (rated) or 1.26 millions gallons (actual) per day. Assuming no future water intensive industrial development, the water system capacity appears more than satisfactory to accommodate the existing and future development needs of the community.

Table 5.19: Water Well Statistics

Well	Location	Depth (ft)	Well Diameter (in)	Yield Per Day (g)	Currently in Service	Year Installed
1	Jefferson St	172	8	547,000	Yes	1923
3	Jefferson St	90	12	648,000	Yes	1981

Source: WI Pubic Service Commission, 2006 Annual Report

Homes outside of the Village limits rely on private wells for water needs. Wells are safe, dependable sources of water if sited wisely and built correctly. Wisconsin has had well regulations since 1936. NR 812 (formerly NR 112), Wisconsin's Administrative Code for Well Construction and Pump Installation, is administered by the DNR. The Well Code is based on the premise that if a well and water system is properly located, constructed, installed, and maintained, the well should provide safe water continuously without a need for treatment. Refer to the WI DNR, the Jefferson County Department of Zoning and Sanitation for more information on water quality and well regulations.

### **5.5.1.4 Solid Waste Disposal & Recycling Facilities**

Solid waste and recycling services are contracted through a private vendor.

### **5.5.1.5 Parks, Open Spaces & Recreational Resources**

Parks and recreational resources are important components of a community's public facilities. These resources provide residents with areas to exercise, socialize, enjoy wildlife viewing or provide opportunities for environmental education for adults and children. Increasingly, parks and recreational resources can contribute to a community's local economy through eco-tourism. In addition, these resources are important for wildlife habitat and movement. Taken together, it is clear that the protection, enhancement, and creation of parks and recreational resources are important to the quality of life and character of a community.

Three public parks are maintained by the Village of Palmyra: Village Park is a 12-acre, multi-purpose recreational facility providing softball and baseball fields with bleacher seating, tennis/basketball courts, volleyball court, horseshoe pits, playground equipment, picnic tables, a covered picnic shelter, concession stand and restrooms. Lions Park is a one-acre park with 150 feet of sandy beach on Lower Spring Lake. It has a diving raft, lifeguard station, beach house with changing areas and restrooms, picnic shelter and tables, volleyball court, play equipment and a shaded lawn area. A downtown mini-park with shade trees, picnic tables and parking lot is conveniently located one block south of Main St., at the corner of Wilson and Second. Recreational facilities on Palmyra school grounds are also used for organized youth sports, including a nature trail at the High School.

In addition, nearly 20,000 acres of outdoor recreational opportunities are located adjacent to the Village, in the southern unit of the Kettle Moraine State Forest. Outstanding mountain biking, cross country skiing, horse riding, camping, fishing, hunting and hiking, including a 30-mile segment of the Ice Age National Scenic Trail, are within minutes of Palmyra's doorstep. Lower Spring Lake is also enjoyed for recreational boating and fishing, including ice fishing during the winter. A Wisconsin DNR boat ramp and parking area is located just east of the village limits, off State Highway 59.

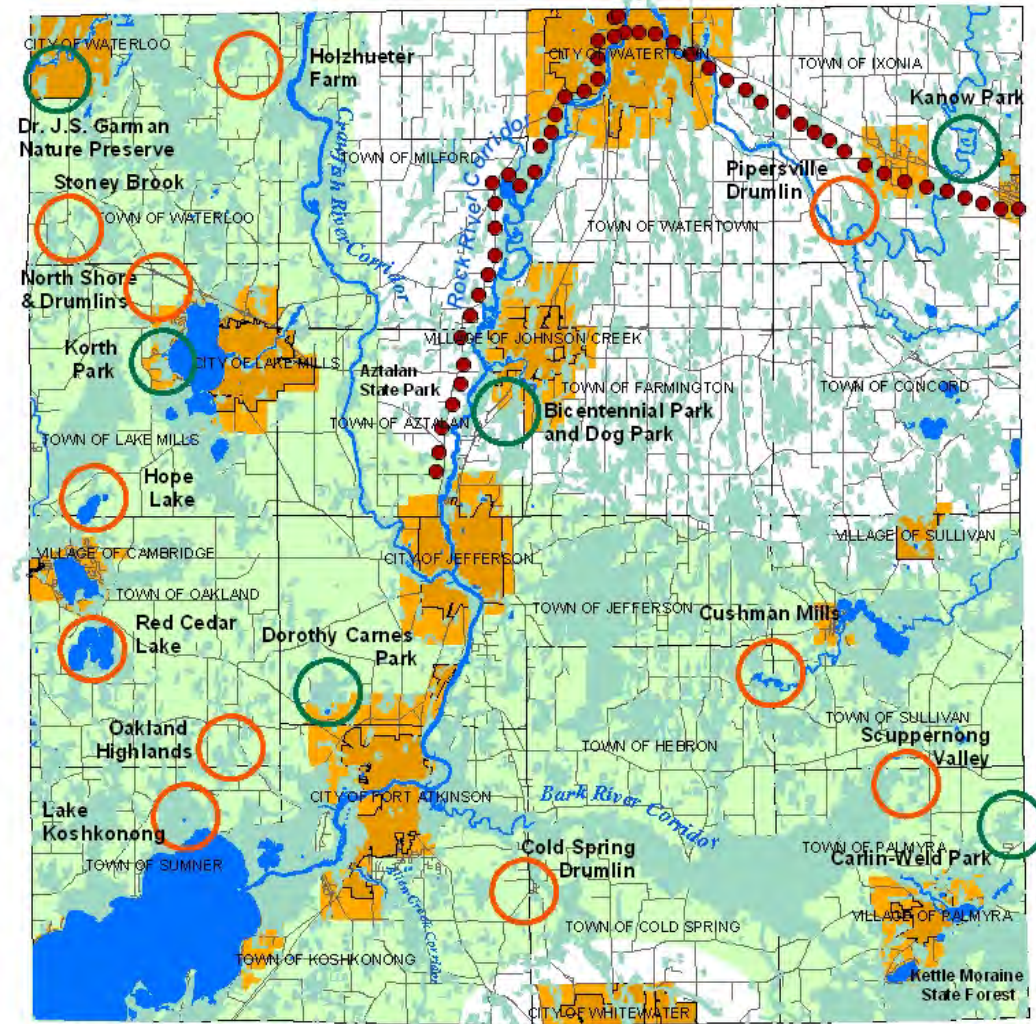
The National Recreation and Park Association recommends six to twelve total acres of parks or recreation space per 1,000 people within a community. Not including the school facilities or Kettle Moraine State Forest, the Village of Palmyra has approximately 20 acres of parkland. Based on the year 2005 population estimate, the Village's level of service was 11.3 acres of parkland per 1000 residents. The Village of Palmyra will need to add an additional 5 acres of parkland to accommodate the WIDOA 2025 projected population of 2,055 residents (this assumes a level of service of 12 acres per 1,000 residents).

In addition to the park facilities already mentioned, Jefferson County maintains one park, which lies just outside of the Planning Area. The Carlin-Weld Park features the rugged topography of the Kettle Moraine area with uplands, steep kettles, a man-made pond, and lowlands with an ephemeral stream. The park is used for picnics, hiking, nature study, sledding, fishing, ice fishing, ice skating, horseback riding, model aircraft flying, and relaxing. It is adjacent to a rural subdivision and is used often by the residents.



The 2005-2010 Jefferson County Parks, Recreation, and Open Space Plan (JCPROSP) established a level of service of 12 acres per 1000 people. In year 2005, Jefferson County's level of service was 7.1 acres of parkland per 1000 residents, about 59% of the recommended standard of 12 acres/1000 residents. The 2005-2010 JCPROSP did not identify any new potential park sites within the Planning Area. However, it did identify the Scuppernong Valley as a potential site in the Town of Palmyra. (See Figure 5.21) Scuppernong Valley is an extensive natural area with high quality wetlands, upland and lowland woods, remnant prairie, and wildlife. All park acquisitions by Jefferson County are between a willing seller and a willing buyer.

Figure 5.21: Jefferson County Park Expansion and Priority Acquisition Areas



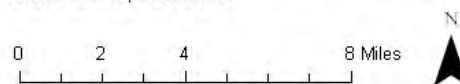
### Jefferson County Park Expansion and Priority Acquisition Areas

2/7/2005

#### Legend

- Lakes and Rivers
- Urban Service Area
- Glacial Moraine Belt
- Environmental Corridors
- Potential Park Sites
- Existing Parks
- Proposed New Bike/Ped Trails

The **Glacial Moraine Belt** is a region in Jefferson County where glacially formed moraines dominate the landscape. These somewhat parallel hills arc in a U-shaped pattern from the western through southern parts of the County. Moraines indicate where the Wisconsin glacier stopped as it receded, dropping soil particles, gravel, and stones. The Glacial Moraine Belt has a concentration of lakes, rivers, wetlands, and high topography, which makes it a desirable area for parks and trails.



Data by Jefferson County Land Information Department



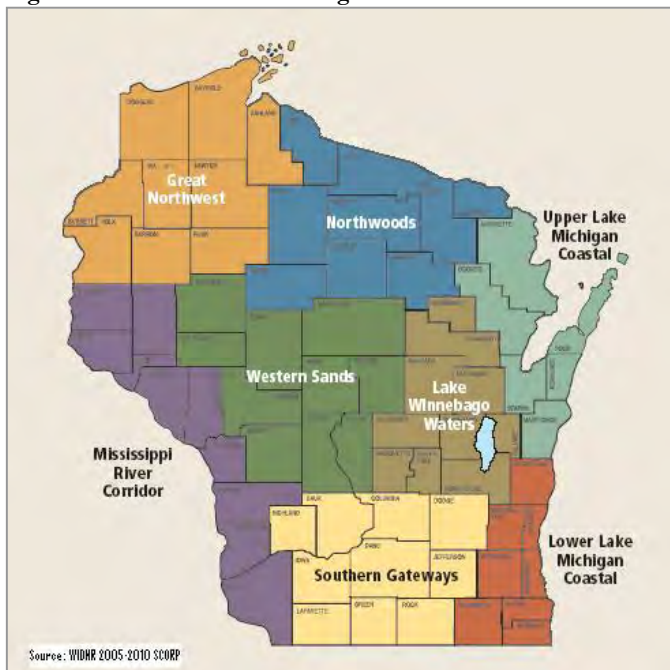
As part of the development of the 2005-2010 JCPROSP participants were asked to rate the relative importance or need for various activities in Jefferson County. Activities that ranked as important or very important included:

- Bike Trails/Routes
- Bird Watching
- Cross-Country Ski Trails
- Hiking Trails
- Historical/Cultural Resources – Preservation and Interpretation
- Natural Resource Areas – Preservation, Interpretation, and Improve Natural Vegetation
- Picnic Areas
- Picnic Shelters
- Restrooms
- Volunteer Opportunities

The 2005-2010 Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP) provides information on statewide and regional recreation, including recreation supply and demand, participation rates and trends, and recreation goals and actions. Since passage of the Federal Land and Water Conservation Fund (LWCF) Act of 1965, preparation of a statewide outdoor recreation plan has been required for states to be eligible for LWCF acquisition and development assistance. The LWCF is administered by the WIDNR and provides grants for outdoor recreation projects by both state and local governments. The following are a few highlights of the plan:

- Walking for Pleasure is rated as the activity with the most participation.
- Backpacking, Downhill Skiing, Golf, Hunting, Mountain Biking, Snowmobile, and Team Sports are decreasing in demand.
- ATVing, Birdwatching, Canoeing, Gardening, Geocaching, Paintball Games, Road Biking, RV Camping, Hiking, Water Parks, Wildlife Viewing, and Photography are increasing in demand.
- The Warren Knowles-Gaylord Nelson Stewardship Program (Stewardship 2000) provides \$60 million annually through FY 2010 for outdoor recreation purposes.

Figure 5.22: WIDNR SCORP Regions



The Wisconsin SCORP divides the state into eight planning regions based on geographic size, demographic trends, tourism influences, and environmental types. Together these influences shape each region's recreational profile, describing which activities are popular, which facilities need further development, and which issues are hindering outdoor recreation. Jefferson County is a part of the *Southern Gateways Region* (Columbia, Dane, Dodge, Green, Iowa, Jefferson, Richland, Rock, and Sauk Counties). The most common issues and needs for the region identified by the plan include:

### Issues:

- Budget constraints on park and recreation programs
- Increased competition for natural resources
- Increasing ATV usage and associated impacts
- Increasing multiple-use recreation conflicts
- Lack of maintenance on parks and recreation areas
- Lack of park and recreation staff
- Overcrowding
- Poor water quality
- Protecting silent sport areas

### Needs:

- More ATV usage opportunities
  - More biking trails
  - More camping opportunities
  - More canoeing opportunities
- More cross-country skiing opportunities
  - More hiking trails
  - More horse trails

### **5.5.3.6 Telecommunication Facilities**

CenturyTel provides telephone service for the Village. They maintain a building on Wilson St. In addition, there are antennas co-located on the water tower, which provide cell phone coverage to the Village.

### **5.5.3.7 Power Plants & Transmission Lines**

Wisconsin Electric Power Company provides utility service for the Village. There is a distribution substation located near the corner of Blue Spring Lake Dr. and CTH H, just outside of the Village limits. The American Transmission Company (ATC) owns the electric transmission lines in the region. There are no high voltage transmission lines in the Planning Area. However, one runs from Whitewater to Mukwonago along the County Line. ATC's 10-Year Assessment does not list any projects planned for the Palmyra area.

### **5.5.3.8 Cemeteries**

There are two cemeteries located within the Village, Hillside Cemetery on S. Fourth St and St. Mary's Cemetery on STH 106. Hillside Cemetery is the larger of the two and much of its land on the east side of Fourth St. is still vacant. The St. Mary's location also appears to have vacant space available. The Village of Palmyra does not initiate the development or expansion of cemeteries; however, they are regulated through the Village Zoning Code.

### **5.5.3.9 Health Care Facilities**

There are no hospitals located in the Village of Palmyra. Nearby facilities, include Countryside Home and Hospital, Fort Atkinson Health Care Center, and Fort Atkinson Memorial Hospital in Fort Atkinson, as well as Saint Mary's Hospital in Watertown. UW Health does have a clinic located on mill road. The Village of Palmyra does not initiate the development or expansion of health care facilities; however, they are regulated through the Village Zoning Code.

### **5.5.3.10 Child Care Facilities**

Under Wisconsin law, no person may for compensation provide care and supervision for 4 or more children under the age of 7 for less than 24 hours a day unless that person obtains a license to operate a child care center from the Department of Health and Family Services. There are two different categories of state licensed child care; they depend upon the number of children in care. Licensed Family Child Care Centers provide care for up to eight children. This care is usually in the provider's home, but it is not required to be located in a residence. Licensed Group Child Care Centers provide for nine or more children.

There are two licensed child care facilities in the Village of Palmyra. Jessica's Nest (1053 Carriage Ct.) is a family child care center with a capacity of eight children. UMOS (122 N. 5<sup>th</sup> St.) is a group child care center with a capacity of 60 children. In year 2003, Standard Process opened Vita-Kids, a day care center in the industrial park for the children of employees. The Village of Palmyra does not initiate the development or expansion of child care facilities; however, they are regulated through the Village Zoning Code.

### **5.5.3.11 Police & Emergency Services**

Palmyra has a Chief of Police and four full-time officers at the Police Station, which is located in the Village Hall at 100 Taft St. The Jefferson County Sheriff's Department assists with dispatch on evenings and weekends. The Palmyra Fire Protection District was established jointly by the Village of Palmyra and the Town of Palmyra, and has nearly 30 active volunteers. The Fire Station, located at 126 First St., was expanded and remodeled in 1997.

### **5.5.3.12 Libraries**

Powers Memorial Library is located downtown at 115 Main St. In 2006, the library had a circulation of over 36,000 items and served 3,337 clients (1,860 residents and 1,477 non-residents). With approximately 5,700 sq. ft. of space, the library has many services including children's programs, computers, and audiovisual materials.

The library is now part of a five-county automated interlibrary loan system, and has van service daily to circulate requested materials among Walworth, Racine, Dodge, Jefferson, and Washington Counties.

Jefferson County is part of the Mid-Wisconsin Federated Library System. In 1971, the Wisconsin State Legislature passed a law creating seventeen Library Systems in Wisconsin. The purpose of the library systems is to provide free and equitable access to public libraries for all residents in Wisconsin even if their community has no library. The library systems also serve to take on projects too costly or complex for individual community libraries. The funding for the Public Library Systems comes from a set percentage of the budgets of all the public libraries in Wisconsin. The Mid-Wisconsin Federated Library System is headquartered in Horicon and serves libraries in Dodge, Jefferson, and Washington Counties. For more information, visit the Library's website, <http://www.mwfls.org>

### **5.5.3.13 Schools**

The Village of Palmyra is served by the Palmyra-Eagle Area School District. The District operates two elementary schools, a middle school, and a high school, serving a total of approximately 1,200 students. Prior to 1971, Palmyra operated its own K-12 school system. In 1971, the Village system reorganized and merged with the Eagle School system. The Palmyra-Eagle School District encompasses over 80 square miles and serves portions of Jefferson, Walworth, and Waukesha Counties. The School District maintains two elementary schools (one in Palmyra) along with one middle school and one high school, both located in Palmyra. The district's administration office is housed in a separate building. Enrollment averages over 1,200 students yearly, or roughly 100 students per grade level. Personnel employment in the district number 173 including administrative, faculty, special, and support staff.

According to the District Superintendent, the middle & high school facilities should be adequate to meet the foreseeable demand. However, the Superintendent noted that the elementary school in Palmyra was falling in disrepair and needs many updates including plumbing, energy, and equipment. The Superintendent believes that in the next five years the District may have to make a decision regarding the long-term viability of this school. Two options currently exist. The first would be to rehabilitate the existing elementary school to fix the deficiencies. The second option would be to construct a new elementary school. The Superintendent noted that option two would probably involve closing the elementary school in Eagle and building a new joint elementary school somewhere between the two Villages.

In 2001, over 50 community members and educators joined to develop a roadmap for the future of the School District. The result was the district's Strategic Plan, which expressed a mission, vision, values, and goals for the future. For more information visit the School District's website, <http://www.palmyra.k12.wi.us/>

Jefferson County is served by the Madison Area Technical College (MATC), which is headquartered in Madison but has sites in Watertown and Fort Atkinson. MATC as a system offers 126 programs of study leading to various degrees and certificates. Sixteen programs are offered at the Watertown location, and 14 at the Fort Atkinson location. The nearest four-year university is UW-Whitewater, with approximately 50 academic majors for undergraduates and 14 programs leading to graduate degrees.

### **5.5.3.14 Other Government Facilities**

The Village Hall is located 100 Taft St. and is used for Village administration and for official Village meetings.

## 5.6 ECONOMIC DEVELOPMENT

This element provides a baseline assessment of the Village of Palmyra economic development and covers all of the information required under §§66.1001. Information includes: labor market statistics, economic base statistics, new businesses desired, strength & weaknesses for economic development, analysis of business & industry parks, and environmentally contaminated sites. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future economic development activities in the Village of Palmyra.

### 5.6.1 Economic Development Existing Conditions

#### 5.6.1.1 Labor Market

Table 5.20 details the employment status of workers in the Village of Palmyra as compared to Jefferson County and the State. At the time of the 1990 U.S. Decennial Census unemployment for the Village was considerably higher than for Jefferson County and the State. By year 2000, the unemployment rate for the Village returned to a similar rate to that of the County and State. Unemployment rates for small villages are only collected during the U.S. Decennial Census; therefore, 2006 data was not available.

**Table 5.20: Employment Status of Civilians 16 Years or Older**

<b>Employment Status, Civilians 16 Years or Older</b>	<b>Village of Palmyra</b>	<b>Jefferson County</b>	<b>Wisconsin</b>
In Labor Force (1990)	793	36,664	2,598,898
Unemployment Rate	7.6%	3.8%	4.3%
In Labor Force (2000)	935	41,594	2,996,091
Unemployment Rate	3.3%	3.0%	3.4%
In Labor Force (2006)	NA	43,159	3,062,932
Unemployment Rate	NA	4.5%	4.7%

Source: US Census and WI Department of Workforce Development

Table 5.21 indicates the percentage of workers by class for the Village of Palmyra, Jefferson County and the State, in year 2000. The Village of Palmyra has a considerable higher percentage of residents employed in government jobs than Jefferson County and the State.

**Table 5.21: Class of Worker**

<b>Class of Worker</b>	<b>Village of Palmyra</b>	<b>Jefferson County</b>	<b>Wisconsin</b>
Private Wage & Salary	65.7%	68.8%	81.1%
Government Worker	25.9%	19.6%	12.5%
Self-Employed	8.4%	10.8%	6.1%
Unpaid Family Worker	0.0%	0.8%	0.3%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: US Census

Table 5.22 and Figure 5.23 describe the workforce by occupation within the Village, County and State in year 2000. Occupation refers to what job a person holds. The highest percentage of occupations of employed Palmyra residents is in the Production, Transportation, & Material Moving category. This category also ranks highest for Jefferson County.

Table 5.22: Employment by Occupation

Employment by Occupation, Civilians 16 Years & Older	Village of Palmyra Number	Village of Palmyra Percent	Jefferson County Number	Jefferson County Percent	Wisconsin Number	Wisconsin Percent
Prod, Trans & Mat. Moving	306	34.3%	10,507	26.4%	540,930	19.8%
Const, Extraction & Maint.	114	12.8%	3,668	9.2%	237,086	8.7%
Farm, Fishing & Forestry	14	1.6%	386	1.0%	25,725	0.9%
Sales & Office	142	15.9%	9,313	23.4%	690,360	25.2%
Services	123	13.8%	5,564	14.0%	383,619	14.0%
Mgmt, Prof & Related	192	21.5%	10,394	26.1%	857,205	31.3%
<b>Total</b>	<b>891</b>	<b>100%</b>	<b>39,832</b>	<b>100%</b>	<b>2,734,925</b>	<b>100%</b>

Source: US Census

Figure 5.23: Employment by Occupation

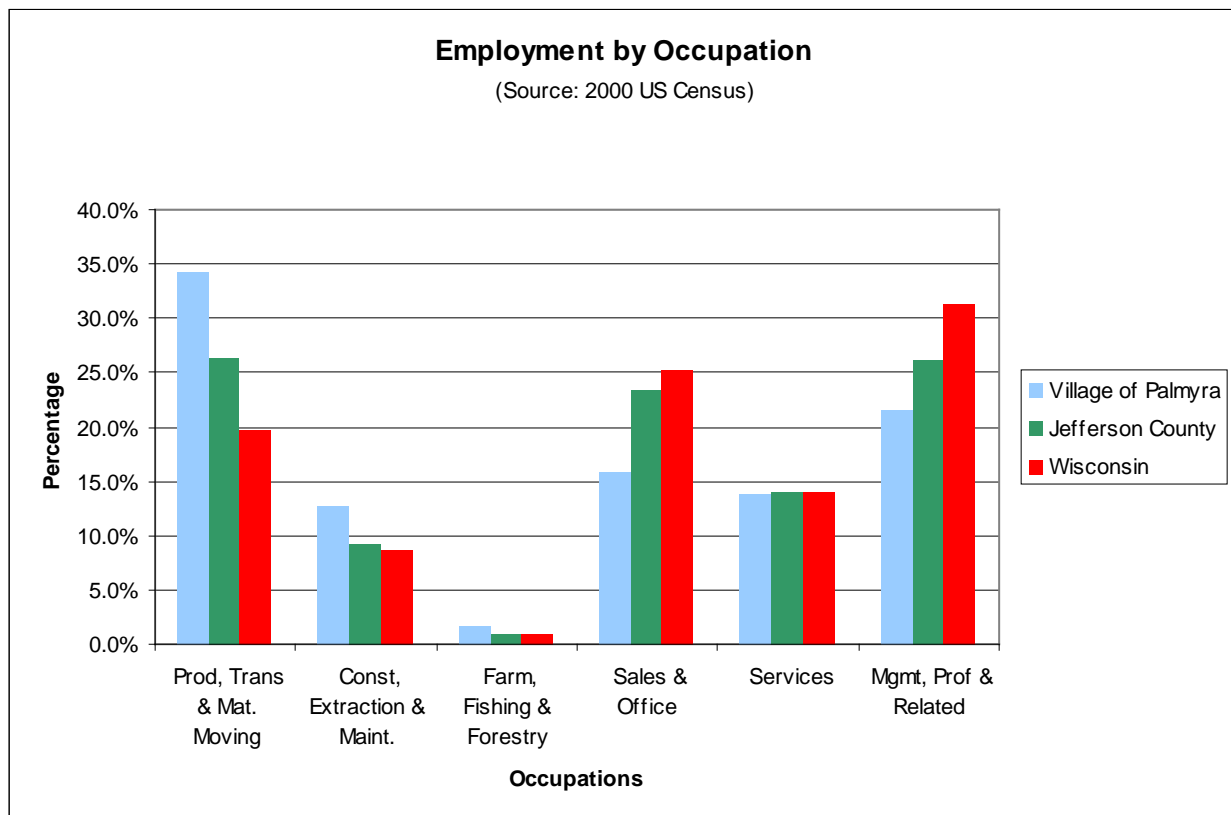


Table 5.23 and Figure 5.24 show the earnings for workers within the Village, County and State, in years 1989 & 1999. Earning figures are reported in three forms: per capita income (total income divided by total population), median family income (based on units of occupancy with individuals related by blood), and median family income (based on every unit of occupancy with one or more unrelated individuals). For all three-income indicators, the Village of Palmyra ranks lower than the average for both Jefferson County and the State. Percent growth of income also lagged significantly behind the average for Jefferson County and the State from year 1989 to 1999.

Another troubling indicator is the percent growth in individuals who were below poverty status from 1989 to 1999. This income indicator grew by .5%% while both the County and State experienced a decline in total percentage. It should be acknowledge that actual percentage of individuals below poverty status for the Village was similar to the County percentage for year 1999.



Table 5.23: Income

Income	Village of Palmyra 1989	Village of Palmyra 1999	Percent Change 89-99	Jefferson County 1989	Jefferson County 1999	Percent Change 89-99	Wisconsin 1989	Wisconsin 1999	Percent Change 89-99
Per Capita Income	\$12,770	\$19,849	55.4%	\$11,173	\$21,236	90.1%	\$13,276	\$21,271	60.2%
Median Family Income	\$35,751	\$50,192	40.4%	\$32,986	\$53,953	63.6%	\$35,082	\$52,911	50.8%
Median Household Income	\$30,749	\$45,521	48.0%	\$28,667	\$46,901	63.6%	\$29,442	\$43,791	48.7%
Individuals Below Poverty <sup>1</sup>	4.9%	5.4%	0.5%	7.2%	5.7%	-1.5%	10.4%	8.7%	-1.7%

Source: US Census

1. The Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

Figure 5.24: Income, Year 1999

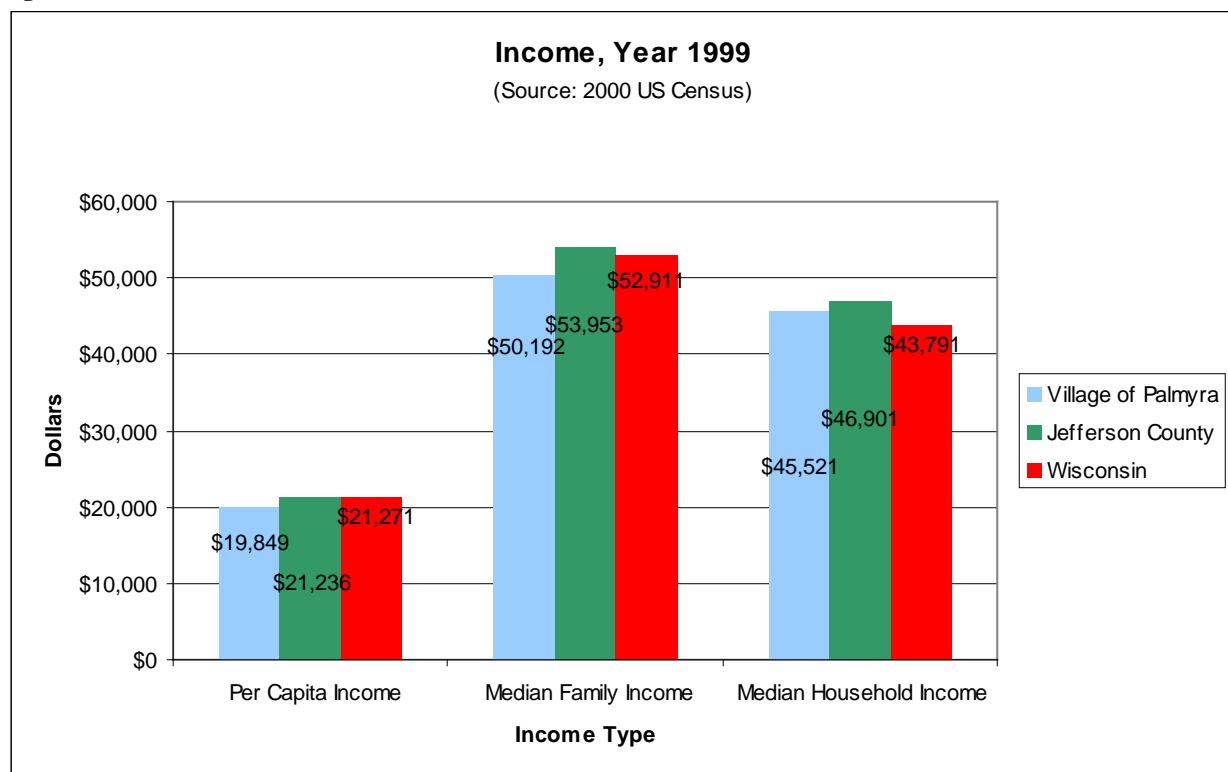


Table 5.24 details the educational attainment of Village of Palmyra, Jefferson County, and State residents 25 years and older according to the 1990 & 2000 U.S. Census. In year 2000, 82% of Village of Palmyra residents 25 years or older, have at least a high school diploma. This figure is higher than the average for Jefferson County (77%). However, the Villages lags behind both the County and State in residents with bachelors and graduate/professional degrees. Presumably, this accounts for the lower income of Village residents verses the average for the County and State. In 2004, a survey of Jefferson County executives reported that most difficult positions to recruit for were professional/technical (Source: Jefferson County Business Retention & Expansion Study, 2004)

Table 5.24: Educational Attainment Person 25 Years &amp; Over

Educational Attainment Person 25 Years and Over	Village of Palmyra 1990	Village of Palmyra 2000	Jefferson County 1990	Jefferson County 2000	Wisconsin 1990	Wisconsin 2000
Less than 9th Grade	10.5%	6.1%	10.8%	6.1%	9.5%	5.4%
9th to 12th No Diploma	18.8%	11.9%	12.2%	9.3%	11.9%	9.6%
HS Grad	37.8%	43.3%	39.8%	38.5%	37.1%	34.6%
Some College	16.1%	21.9%	15.0%	21.3%	16.7%	20.6%
Associate Degree	5.8%	7.4%	7.0%	7.5%	7.1%	7.5%
Bachelor's Degree	6.8%	7.1%	10.4%	12.3%	12.1%	15.3%
Graduate/Prof. Degree	4.2%	2.4%	4.7%	5.1%	5.6%	7.2%
<b>Percent High School Grad or Higher</b>	<b>70.7%</b>	<b>82.0%</b>	<b>77.0%</b>	<b>84.7%</b>	<b>78.6%</b>	<b>85.2%</b>

Source: US Census

### 5.6.1.2 Economic Base

Table 5.25 lists the top 25 employers in Jefferson County as reported by the Wisconsin Department of Workforce Development, in year 2005. The Fort Healthcare is the largest employer for Jefferson County. No Palmyra businesses currently employ enough people to crack the top 25 list. The largest employers in the Village are:

- Standard Process, a vitamin and whole supplement manufacturer, which moved to Palmyra in 1988.
- A-1 Creative Packaging Corp, a packaging corporation established in 1980
- Palmyra-Eagle School District

Table 5.25: Top 25 Employers in Jefferson County

Rank	Employer	Industry Type	Number of Employees
1	Fort Healthcare Inc	General Medical & Surgical Hospitals	500-999
2	Trek	Motorcycle, Bicycle, and Parts Manufacturing	500-999
3	County of Jefferson	Executive and Legislative Offices, Combined	500-999
4	Briggs & Stratton Power Products	Motor and Generator Manufacturing	500-999
5	Bethesda Lutheran Homes & Services	Residential Mental Retardation Facilities	500-999
6	Generac Power Systems, Inc	Motor and Generator Manufacturing	500-999
7	Terra Resource Group	Professional Employer Organizations	500-999
8	Nasco Div	Plastic Product Manufacturing & Wholesale	250-499
9	Watertown Unified School District	Elementary and Secondary Schools	250-499
10	Wal-Mart	Discount Department Stores	250-499
11	Spacesaver	Office Furniture Manufacturing	250-499
12	Fort Atkinson Public Schools	Elementary and Secondary Schools	250-499
13	Tyson Prepared Foods Inc.	Meat Processed from Carcasses	250-499
14	St Coletta of Wisconsin Inc.	Residential Mental Retardation Facilities	250-499
15	Redi-Serve Division	Frozen Specialty Food Manufacturing	250-499
16	City of Watertown	Executive and Legislative Offices, Combined	250-499
17	School District of Jefferson	Elementary and Secondary Schools	250-499
18	Jones Dairy Farm	Meat Processed from Carcasses	250-499
19	McCain USA	Frozen Specialty Food Manufacturing	250-499
20	The Fireside Inc	Theater Companies and Dinner Theaters	250-499
21	Wisco Farm Coop	Dairy Product	250-499
22	Western Ind	Metal Stamping	100-249
23	Cygnus Business Media Inc.	Periodical Publishers	100-249
24	City of Fort Atkinson	Executive and Legislative Offices, Combined	100-249
25	Lake Mills Public Schools	Elementary and Secondary Schools	100-249

Source: WI Department of Workforce Development, Jefferson County

Table 5.26 and Figure 5.24 describe the workforce by industry within the Village, County and State in year 2000. Whereas occupations refer to what job a person holds, industry refers to the type of work performed by a workers employer. Therefore, an industry usually employs workers of varying occupations. (i.e. a “wholesale trade” industry may have employees whose occupations include “management” and “sales”)

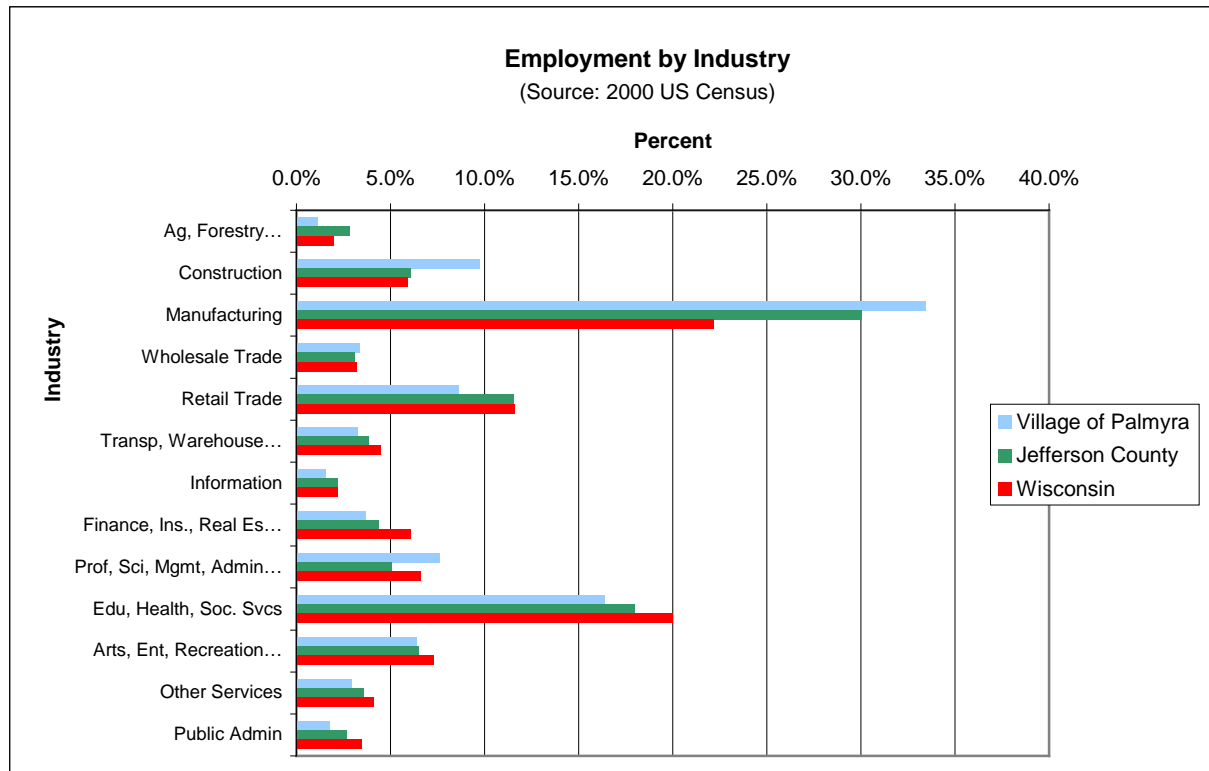
Historical, Wisconsin has had a high concentration of industries in agricultural and manufacturing sectors of the economy. Manufacturing has remained a leading employment sector compared to other industries within the State; however, State and National economic changes have led to a decrease in total manufacturing employment. It is expected that this trend will continue while employment in service, information, and health care industries will increase.

The highest percentage of employment by industry for Palmyra residents is in the Manufacturing category. This corresponds with the largest employer, Standard Process. This category is also the highest industry of employment for Jefferson County and the State.

**Table 5.26: Employment by Industry**

<b>Employment by Industry, Civilians 16 Years &amp; Older</b>	<b>Village of Palmyra Number</b>	<b>Village of Palmyra Percent</b>	<b>Jefferson County Number</b>	<b>Jefferson County Percent</b>	<b>Wisconsin Number</b>	<b>Wisconsin Percent</b>
Ag, Forestry, Fishing, Hunting & Mining	10	1.1%	1,129	2.8%	75,418	2.0%
Construction	87	9.8%	2,432	6.1%	161,625	5.9%
Manufacturing	298	33.4%	11,963	30.0%	606,845	22.2%
Wholesale Trade	30	3.4%	1,236	3.1%	87,979	3.2%
Retail Trade	77	8.6%	4,605	11.6%	317,881	11.6%
Transp, Warehousing & Utilities	29	3.3%	1,545	3.9%	123,657	4.5%
Information	14	1.6%	876	2.2%	60,142	2.2%
Finance, Insurance, Real Estate, Rental & Leasing	33	3.7%	1,757	4.4%	168,060	6.1%
Prof, Scientific, Mgmt, Administrative & Waste Mgmt	68	7.6%	2,024	5.1%	179,503	6.6%
Educational, Health & Social Services	146	16.4%	7,164	18.0%	548,111	20.0%
Arts, Entertainment, Recreation, Accommodation & Food Services	57	6.4%	2,596	6.5%	198,528	7.3%
Other Services	26	2.9%	1,435	3.6%	111,028	4.1%
Public Administration	16	1.8%	1,070	2.7%	96,148	3.5%
<b>Total</b>	<b>891</b>	<b>100%</b>	<b>39,832</b>	<b>100%</b>	<b>2,734,925</b>	<b>100%</b>

Figure 5.25: Employment by Industry



Within each industry, the Wisconsin Department of Workforce Development collects statistics on the average wage of employees at the County and State levels. Table 5.27 details average employee wages for industries. In Jefferson County, employees working in Public Administration earn the highest average wage, while employees working in Leisure & Hospitality earn the lowest average wage. The average wage per industry in all categories, except Natural Resources & Mining, is lower for Jefferson County workers compared to State averages for the same industries. Statistics on wages by industry are not available for the Village of Palmyra.

Table 5.27: Wage by Industry

NAICS Code	Industries	Jefferson County Average Annual Wage 2005	Wisconsin Average Annual Wage 2005	Jefferson County as a Percentage of Wisconsin
21, 1133	Natural Resources & Mining	\$32,923	\$27,765	118.6%
	Public Administration	\$36,791	\$37,244	98.8%
81	Other Services	\$19,080	\$20,604	92.6%
42, 44, 48, 22	Trade, Transportation, Utilities	\$28,103	\$31,088	90.4%
61-62	Educational & Health Services	\$33,156	\$37,228	89.1%
71-72	Leisure & Hospitality	\$10,110	\$12,468	81.1%
23	Construction	\$32,266	\$42,891	75.2%
54-56	Professional & Business Services	\$29,743	\$40,462	73.5%
31-33	Manufacturing	\$30,358	\$44,430	68.3%
52-53	Financial Activities	\$28,758	\$46,267	62.2%
51	Information	NA	\$43,439	
	Unclassified	NA	\$27,296	
	<b>All Industries</b>	<b>\$28,822</b>	<b>\$35,503</b>	<b>81.2%</b>

Source: WI Department of Workforce Development

### 5.6.2 Employment Projections

The Wisconsin Department of Workforce Development collects data and projects occupation and industry growth for the State. Table 5.28 identifies which occupations are expected to experience the most growth over a ten-year period from year 2004 to 2014. According to the DWD, occupations in Healthcare Support, Healthcare Practitioners, and Computers are expected to have the highest growth rate. Occupations in Production, Office Administration, and Sales are expected to have the lowest growth rate.

**Table 5.28: Fastest Growing Occupations 2004-2014**

<b>SOC Code</b>	<b>Occupational Title</b>	<b>WI Employment 2004</b>	<b>WI Employment 2014</b>	<b>Percent Change 2004-2014</b>	<b>2005 Average Annual Salary</b>
29-1071	Physician Assistants	1,310	1,990	51.9%	NA
31-1011	Home Health Aides	13,730	20,790	51.4%	\$20,162
15-1081	Network Systems and Data Communication Analysts	4,220	6,240	47.9%	\$56,789
31-9092	Medical Assistants	5,890	8,640	46.7%	\$27,441
15-1031	Computer Software Engineers, Applications	7,960	11,610	45.9%	\$70,386
15-1032	Computer Software Engineers, Systems Software	2,740	3,890	42.0%	\$76,324
39-9021	Personal and Home Care Aides	21,260	29,460	38.6%	\$19,200
29-2021	Dental Hygienists	4,390	6,050	37.8%	\$54,203
31-9091	Dental Assistants	5,050	6,950	37.6%	\$28,602
29-2032	Diagnostic Medical Sonographers	840	1,140	35.7%	\$66,410
15-1072	Network and Computer systems Administrators	5,300	7,190	35.7%	\$56,246
29-2055	Surgical Technologists	2,120	2,860	34.9%	\$40,055
15-1061	Database Administrators	1,550	2,090	34.8%	\$61,299
29-2071	Medical Records and Health Information Technicians	3,540	4,770	34.7%	\$28,976
29-1126	Respiratory Therapists	1,460	1,960	34.2%	\$47,309
29-1111	Registered Nurses	48,410	64,420	33.1%	\$55,060
31-2021	Physical Therapist Assistants	1,220	1,620	32.8%	\$38,342
29-2034	Radiologic Technologists and Technicians	4,130	5,440	31.7%	\$46,916
29-1124	Radiation Therapists	390	510	30.8%	\$65,931
45-2021	Animal Breeders	490	640	30.6%	\$37,339
29-9091	Athletic Trainers	460	600	30.4%	\$40,162
31-2022	Physical Therapists Aids	690	900	30.4%	\$23,632
13-1071	Employment, Recruitment, and Placement Specialists	3,520	4,590	30.4%	\$46,133
29-2031	Cardiovascular Technologists and Technicians	660	860	30.3%	\$42,569
19-1042	Medical Scientists, Except Epidemiologists	1700	2210	30.0%	\$51,920
29-1123	Physical Therapists Aids	3550	4610	29.9%	\$62,582
29-1122	Occupational Therapists	3,040	3,940	29.6%	\$52,248
13-2052	Personal Financial Advisors	3,350	4,340	29.6%	\$77,792
25-2011	Preschool Teachers, Except Special Education	8,540	11,060	29.5%	\$24,027
29-2056	Veterinary Technologists and Technicians	1,280	1,650	28.9%	\$27,233

Source: WI Department of Workforce Development

Table 5.29 identifies which industries are expected to experience the most growth over a ten-year period from year 2004 to 2014. According to the DWD, industries in Professional & Business Services, Educational & Health Services, and Construction categories are expected to have the highest growth rate. Industries in Natural Resources & Mining and Manufacturing categories are expected to have the lowest growth rate.

Since the DWD does not collect data on employment projections for the Village of Palmyra or Jefferson County, it is assumed that local trends will be consistent with statewide projections. It is important to note that unanticipated events may affect the accuracy of these projections.

Table 5.29: Fastest Growing Industries 2004-2014

NAICS Code	Industries	WI Employment 2004	WI Employment 2014	Percent Change 2004-2014
487	Scenic and Sightseeing Transportation	370	510	37.8%
621	Ambulatory Health Care Services	99,480	135,700	36.4%
624	Social Assistance	60,400	79,300	31.3%
518	Internet Service Providers	8,480	10,760	26.9%
493	Warehousing and Storage	11,060	14,030	26.9%
561	Administrative and Support Services	118,130	149,690	26.7%
562	Waste Management and Remediation Services	5,070	6,310	24.5%
485	Transit and Ground Passenger Transport	13,740	16,960	23.4%
623	Nursing and Residential Care Facilities	68,870	84,800	23.1%
622	Hospitals	108,570	133,200	22.7%
523	Securities, Commodity Contracts	9,210	11,210	21.7%
541	Professional, Scientific, and Technical Services	89,500	108,000	20.7%
454	Nonstore Retailers	22,950	27,630	20.4%
238	Specialty Trade Contractors	81,660	98,000	20.0%
531	Real Estate	18,360	21,420	16.7%
721	Accommodation	30,720	35,800	16.5%
236	Construction of Buildings	31,520	36,700	16.4%
722	Food Services and Drinking Places	185,410	215,000	16.0%
443	Electronics and Appliance Stores	8,580	9,890	15.3%
511	Publishing Industries	19,120	22,020	15.2%
237	Heavy and Civil Engineering Construction	13,560	15,600	15.0%
425	Wholesale Electronic Markets	5,520	6,350	15.0%
551	Management of Companies	39,830	45,800	15.0%
525	Funds, Trusts, & Other Financial Vehicles	1,170	1,340	14.5%
611	Educational Services	260,670	297,700	14.2%
453	Miscellaneous Store Retailers	17,330	19,790	14.2%
488	Support Activities for Transportation	4,540	5,170	13.9%
446	Health and Personal Care Stores	16,430	18,620	13.3%
423	Merchant Wholesalers, Durable Goods	64,210	72,490	12.9%
451	Sporting Goods, Hobby, Book, and Music Stores	12,960	14,610	12.7%

Source: WI Department of Workforce Development

### 5.6.3 Analysis of Business & Industry Parks

The Village of Palmyra has one industrial park located off of STH 59 on the west side of the town. The park is approximately 45 acres and does not have any vacant lots for sale. The Palmyra Municipal Airport owns the northern six acres of the industrial park. Table 5.30 lists information on all of the industrial parks located in Jefferson County. Approximately 54% of the known total acreage is available for sale.



Table 5.30: Jefferson County Business &amp; Industry Parks

Community	Name of Site	Owner	Total Acres	Acres Sold	Acres for Sale
City of Fort Atkinson	Robert F. Kelment Business Park	City	138	43	95
Town of Ixonia	Ixonia Industrial Park	Town	NA	NA	NA
City of Jefferson	Jefferson Industrial Park South	City	41	35.9	5.1
City of Jefferson	Jefferson Industrial Park North	City	173	33	140
Village of Johnson Creek	Crossroads Business Park	Private	48	0	48
City of Lake Mills	Lake Mills Business Park	City	150	50	100
<b>Village of Palmyra</b>	<b>Palmyra Industrial Park</b>	<b>Village</b>	<b>45</b>	<b>45</b>	<b>0</b>
City of Waterloo	City Industrial Park	City	19	9	10
City of Watertown	West Street Industrial Lands	City	70	0	70
City of Watertown	Industrial/Retail Park Loeb Corporation	Private	NA	NA	NA
City of Whitewater	Whitewater Industrial Park	City	550	350	200
		<b>Total</b>	<b>1,234</b>	<b>566</b>	<b>668</b>

Source: Mississippi River RPC 2005 CEDS, Jefferson County Business &amp; Industrial Parks

### 5.6.4 Environmentally Contaminated Sites

The Bureau of Remediation and Redevelopment within the Wisconsin Department of Natural Resources oversees the investigation and cleanup of environmental contamination and the redevelopment of contaminated properties. The Remediation and Redevelopment Tracking System (BRRTS) provides access to information on incidents (“Activities”) that contaminated soil or groundwater. These activities include spills, leaks, other cleanups and sites where no action was needed. Table 5.31 provides BRRTS data for sites that are still “Open” within the Planning Area. Open sites are those in need of clean up or where clean up is underway. The BRRTS also maintains a list of sites which were contaminated at one point but have since been cleaned up. Contact the Bureau for more information on these sites.

Table 5.31: BRRTS Sites

DNR Activity Number	Activity Type	Site Name	Address	Status
02-28-000943	ERP	Jonget Jes LF	Tower Rd	Open
04-28-543196	NAR	Epic Resins	600 Industrial Blvd	Open

Source: WIDNR, BRRTS, Village of Palmyra

Abandoned Container (AC), an abandoned container with potentially hazardous contents has been inspected and recovered. No known discharge to the environment has occurred. Leaking Underground Storage Tank (LUST), a LUST site has contaminated soil and/or groundwater with petroleum, which includes toxic and cancer causing substances. Environmental Repair (ERP), ERP sites are sites other than LUSTs that have contaminated soil and/or groundwater. Spills, a discharge of a hazardous substance that may adversely impact, or threaten to impact public health, welfare or the environment. Spills are usually cleaned up quickly. General Property Information (GP), this activity type consists of records of various milestones related to liability exemptions, liability clarifications, and cleanup agreements that have been approved by NDR to clarify the legal status of the property. Liability Exemption (VPLE), VPLEs are an elective process in which a property conducts an environmental investigation and cleanup of an entire property and then receives limits on future liability for that contamination under s. 292.15. No Action Required by RR Program (NAR), There was, or may have been, a discharge to the environment and, based on the known information, DNR has determined that the responsible party does not need to undertake an investigation or cleanup in response to that discharge.

### 5.6.5 New Businesses Desired

When asked what types of nonresidential development would be best for Palmyra, respondents listed neighborhood commercial and office use and tourism related businesses as their two priorities. Specifically a bigger grocery store and a pharmacy were listed most frequently as needed businesses. (See Appendix B: Community Survey, Question 16 & 17).

### 5.6.6 Strengths & Weaknesses for Economic Development

The following lists some of the strengths and weaknesses for economic development within the Village of Palmyra.

Strengths:

- Well kept historic downtown.
- Industrial Park with a large anchor employer
- Proximity to the UW-Whitewater
- Excellent public school system
- Excellent natural resources – scenic landscape
- Excellent quality of life – low crime, friendly, neighborly
- Excellent transportation system, including rail and air
- Variety of home sizes and types (except senior living)
- Railroad access
- Jefferson County Economic Development Consortium (JCEDC), provides economic development assistance & education for Jefferson County

Weaknesses:

- Retention of college educated residents (brain drain) – many graduates do not return to the area after college
- Lower percentage of residents with advanced college degrees (compared to County & State)
- Lower percentage of knowledge based businesses (compared to County & State)
- Industrial Park is built out
- Aging workforce
- Lack of entrepreneur activity

## 5.7 INTERGOVERNMENTAL COOPERATION

With over 2,500 units of government and special purpose districts Wisconsin ranks 13<sup>th</sup> nationwide in total number of governmental units and 3<sup>rd</sup> nationwide in governmental units per capita. (Source: WIDOA Intergovernmental Cooperation Guide) While this many government units provide more local representation it does stress the need for greater intergovernmental cooperation. This element provides a baseline assessment of the Village of Palmyra intergovernmental relationships and covers all of the information required under SS66.1001. Information includes: existing & potential areas of cooperation, and existing & potential areas of intergovernmental conflict. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future intergovernmental cooperation activities in the Village of Palmyra.

### 5.7.1 Existing and Potential Areas of Cooperation

Table 5.32 lists the Village of Palmyra existing and potential areas of cooperation as identified by the Citizen Advisory Committee.

Table 5.32: Existing & Potential Areas of Cooperation

Existing areas of cooperation with other local units of government.	
Local Unit of Government	Existing Cooperation Efforts
Town of Palmyra	Emergency services, planning within the ETZ
Blue Spring Lake Sanitary District	Sanitary sewer for lake residences
Jefferson County	Emergency services, public health services, planning within the ETZ
Palmyra-Eagle School District	School facilities, including recreational facilities and a community room in the high school
Potential areas of cooperation with other local units of government.	
Local Unit of Government	Potential Cooperation Efforts
	<i>None listed at this time</i>

The Intergovernmental Cooperation Element Guide published by the Wisconsin Department of Administration provides several ideas for cooperation including the following listed below.

**Voluntary Assistance:** Your community, or another, could voluntarily agree to provide a service to your neighbors because doing so makes economic sense and improves service levels.

**Trading Services:** Your community and another could agree to exchange services. You could exchange the use of different pieces of equipment, equipment for labor, or labor for labor.

**Renting Equipment:** Your community could rent equipment to, or from, neighboring communities and other governmental units. Renting equipment can make sense for both communities – the community renting gets the use of equipment without having to buy it, and the community renting out the equipment earns income from the equipment rather than having it sit idle.

**Contracting:** Your community could contract with another community or jurisdiction to provide a service. For example, you could contract with an adjacent town or village to provide police and fire protection, or you could contract with the county for a service in addition to that already routinely provided by the county sheriff's department.

**Routine County Services:** Some services are already paid for through taxes and fees. Examples are police protection services from the county sheriff's department, county zoning, county public health services, and county parks. Your Intergovernmental Cooperation Element could identify areas where improvements are needed and could recommend ways to cooperatively address them.

**Sharing Municipal Staff:** Your community could share staff with neighboring communities and other jurisdictions – both municipal employees and independently contracted professionals. You could share a building inspector, assessor, planner, engineer, zoning administrator, clerk, etc.

**Consolidating Services:** Your community could agree with one or more other communities or governmental units to provide a service together. Consolidation could also include the process of joining the Town and Village to form one jurisdiction.

**Joint Use of a Facility:** Your community could use a public facility along with other jurisdictions. The facility could be jointly owned or one jurisdiction could rent space from another.

**Special Purpose Districts:** Special purpose districts are created to provide a particular service, unlike municipalities that provide many different types of services. Like municipalities, special purpose districts are separate and legally independent entities.

**Joint Purchase and Ownership of Equipment:** Your community could agree with other jurisdictions to jointly purchase and own equipment such as pothole patching machines, mowers, rollers, snowplows, street sweepers, etc.

**Cooperative Purchasing:** Cooperative purchasing, or procurement, is where jurisdictions purchase supplies and equipment together to gain more favorable prices.

### **Consolidation**

Consolidation is the process by which a town, village, or city joins together with another town, village, or city to form one jurisdiction. More detailed information on incorporation can be obtained from Wisconsin State Statute Section 66.0229.

### **Extraterritorial Planning**

Cities and villages have the right to include land within their extraterritorial jurisdiction (ETJ), the area within 1 ½ mile of the municipal boundaries, in their planning documents. The inclusion of this land within planning documents allows for greater transparency and coordination with neighboring municipalities.

### **Extraterritorial Subdivision “Plat” Review**

Extraterritorial subdivision review allows a city or village to exercise its extraterritorial plat review authority in the same geographic area as defined within the extraterritorial zoning statute. However, whereas extraterritorial zoning requires town approval of the zoning ordinance, extraterritorial plat approval applies automatically if the city or village adopts a subdivision ordinance or official map. The town does not approve the subdivision ordinance for the city or village. The city or village may waive its extraterritorial plat approval authority if it does not wish to use it. More detailed information can be obtained from Wisconsin State Statute 236.10.

### **Extraterritorial Zoning**

Extraterritorial Zoning allows a first, second or third class city to adopt zoning in town territory, 3 miles beyond a city's corporate limits. A fourth class city or village may adopt zoning 1.5 miles beyond its corporate limits. Under extraterritorial zoning authority a city or village may enact an interim-zoning ordinance that freezes existing zoning (or if there is no zoning existing uses). A joint extraterritorial zoning committee is established to develop a plan and regulations for the area. The joint committee is comprised of three member from the affected town and three members from the city or village. Zoning requests within

the area must be approved by a majority of the committee. More detailed information can be obtained from Wisconsin State Statute 66.23.

### Intergovernmental Agreements

Intergovernmental Agreements can be proactive or reactive. There are three types of intergovernmental agreements that can be formed including general agreements, cooperative boundary agreements, and stipulations and orders.

1. General Agreements – This is the type of intergovernmental agreement that is most commonly used for services. These agreements grant municipalities with authority to cooperate on a very broad range of subjects. Specifically, Wis. Stats 66.0301 authorizes municipalities to cooperate together for the receipt of furnishing of services or the joint exercise of any power or duty required or authorized by law. The only limitation is that municipalities with varying powers can only act with respect to the limit of their powers. This means that a general agreement cannot confer upon your community more powers than it already has.
2. Cooperative Boundary Agreements – This type of agreement is proactive and is used to resolve boundary conflicts. Cooperative boundary plans or agreements involve decisions regarding the maintenance or change of municipal boundaries for a period of 10 years or more. The cooperative agreement must include a plan for the physical development of the territory covered by the plan; a schedule for changes to the boundary; plans for the delivery of services; an evaluation of environmental features and a description of any adverse environmental consequences that may result from the implementation of the plan. It must also address the need for safe and affordable housing. Using a cooperative boundary agreement a community could agree to exchange revenue for territory, revenue for services, or any number of other arrangements. More detailed information can be obtained from Wisconsin State Statute 66.0307.
3. Stipulation and Orders – This type of agreement is reactive because it is used for resolving boundary conflicts that are locked in a lawsuit. The statute provides the litigants a chance to settle their lawsuit by entering into a written stipulation and order, subject to approval by a judge. Using a stipulation and order a community could agree to exchange revenue for territory in resolving their boundary conflict. Stipulation and orders are subject to a binding referendum. More detailed information can be obtained from Wisconsin State Statute 66.0225.

(Source: WIDOA Intergovernmental Cooperation Element Guide)

## 5.7.2 Analysis of Intergovernmental Relationships

Table 5.33 provides a brief description of the quality of the Village of Palmyra relationship to other units of government according to the Citizen Advisory Committee. Neither Jefferson County nor the Village of Palmyra is within a designated Wisconsin Regional Planning Commission.

Table 5.33: Analysis of Intergovernmental Relationships

Adjacent Units of Governments	Satisfactory (5), Neutral (3), or Unsatisfactory (1)	Comments
Jefferson County	5	
Town of Palmyra	5	
<b>School Districts</b>		
Palmyra-Eagle School District	5	
<b>Other</b>		
State	5	

### 5.7.3 Existing & Potential Conflicts & Potential Solutions

Table 5.34 provides a brief description of the existing and potential conflicts facing the Village of Palmyra according to the Citizen Advisory Committee.

Table 5.34: Existing & Potential Conflicts & Potential Solutions

<b>Existing &amp; potential conflicts with other local units of government.</b>	
<b>Local Unit of Government</b>	<b>Existing &amp; Potential Conflicts</b>
Town of Palmyra	The CAC noted that land use conflicts could develop between the Village and the Town in the future. No specific problems were identified at this time.
<b>Solutions appropriate to resolve these conflicts.</b>	
<p>Develop a future land use plan for the rural areas of the Planning Area that is fairly consistent with the Jefferson County Agricultural Preservation and Land Use plan.</p> <p>Maintain open communication between the Village, Town and County. When changes are made to this Comprehensive Plan request feedback for the Town and County officials.</p>	



## 5.8 LAND USE

This element provides a baseline assessment of the Village of Palmyra land use and covers all of the information required under SS66.1001. Information includes: existing land uses, existing & potential land use conflicts, natural limitations for building site development, and land use trends. This information provides a basis for creating goals, objectives, policies, maps, and actions to guide the future land use activities in the Village of Palmyra.

### 5.8.1 Existing Land Use

All the land in the Village of Palmyra is categorized according to its primary use. Those categories are described in the following list and illustrated on Map 5 & 5a, Existing Land Use.

**Dwelling Unit:** A building or a portion thereof designed exclusively for residential occupancy and containing provisions for living, sleeping, eating, cooking and sanitation for not more than one family.

- Agricultural – land used for the production of food or fiber
- Farmstead – a residential structure associated with agricultural land and typically without urban services (public water or sewer)
- Single Family Residential – a structure that only contains one dwelling unit (as defined above).
- Duplex Residential – a structure that contains two dwelling units.
- Multi-Family Residential – a structure that contains more than two dwelling units.
- Mobile Home Park – a contiguous parcel developed for the placement of manufactured homes.
- Commercial/Office – a location where retail goods and/or services are sold or where office activities take place.
- Industrial – a property where goods and products are manufactured, produced, or stored.
- Quarry – a property where the extraction of metallic or nonmetallic minerals or materials takes place.
- Public/Institutional – properties owned and/or used by governmental bodies, non-governmental organizations, and community organizations. These can include the Village Hall, public works buildings, County, State, and Federal structures, schools, churches, and others.
- Park & Recreation – a property where recreation is the primary activity and where there is typically no commercial or residential use. The Village, County, or State usually owns these properties.
- Woodland – land which is primarily forested and without structures.
- Wetlands - areas in which water is at, near, or above the land surface and which are characterized by both hydric soils and by the hydrophytic plants such as sedges, cattails, and other vegetation that grow in an aquatic or very wet environment.
- Open Space – land that is without structures and is neither forested nor used for agricultural purposes.
- Vacant – land that has been platted for development but remains unused.
- Airport – land dedicated solely for the purpose of air transportation.

Table 5.35 approximates the existing land uses in the Planning Area and Village as of year 2006. The Village of Palmyra's existing land use pattern is indicative of a generally small rural Wisconsin village. The dominant land use within the Village is residential, and within the Planning Area agricultural. The most prominent feature of the Planning Area is the presence of the Kettle Moraine State Forest. Refer to Map 5 & 5a, Existing Land Use.

Table 5.35: Existing Land Use

Existing Land Use Planning Area	Acres	Percentage	Existing Land Use Village Inset	Acres	Percentage
Agricultural	3,738.1	34.45%	Agricultural	46.4	5.83%
Farmstead	165.3	1.52%	Farmstead	2.2	0.28%
Residential-SF	834.4	7.69%	Residential-SF	214.5	26.95%
Residential-Duplex	6.6	0.06%	Residential-Duplex	6.6	0.83%
Residential-MF	6.2	0.06%	Residential-MF	6.2	0.78%
Mobile Home Park	6.1	0.06%	Mobile Home Park	6.1	0.76%
Commercial/Office	98.6	0.91%	Commercial/Office	28.0	3.52%
Industrial	37.8	0.35%	Industrial	37.8	4.75%
Quarry	4.1	0.04%	Quarry	0.0	0.00%
Public/Institutional	126.8	1.17%	Public/Institutional	125.7	15.79%
Parks & Recreational	31.9	0.29%	Parks & Recreational	15.7	1.97%
Woodland	3,075.3	28.34%	Woodland	73.3	9.21%
Wetlands	1,297.9	11.96%	Wetlands	56.7	7.12%
Water	218.9	2.02%	Water	23.9	3.00%
Open Space	817.4	7.53%	Open Space	33.5	4.21%
Vacant	18.6	0.17%	Vacant	9.4	1.19%
Airport	50.5	0.47%	Airport	0.0	0.00%
Road ROW	315.3	2.91%	Road ROW	110.6	13.88%
<b>Total</b>	<b>10,850</b>	<b>100.0%</b>	<b>Total</b>	<b>797</b>	<b>100.0%</b>

Source: MSA GIS, Village of Palmyra

### 5.8.1.1 Existing & Potential Conflicts

The most notable potential land use conflict in the Planning Area is between the Palmyra Municipal Airport and the surrounding urban land uses. Since the airport is adjacent to the Village boundaries, potential expansion of the Village for residential, commercial, or industrial development is constrained by the height limitations surrounding the airport. Any future expansion of the airport will further restrict the potential expansion of the Village to the northeast. Other existing or potential land use conflicts stem from natural limitations to development (wetlands, floodplains, and steep slopes).

### 5.8.1.2 Limitations for Building Site Development

All land does not hold the same development potential. Development should only take place in suitable areas, which is determined by a number of criteria, including:

- A community's comprehensive plan
- Compatibility with surrounding uses
- Special requirements of a proposed development
- Ability to provide utility and community services to the area
- Cultural resource constraints
- Ability to safely access the area
- Various physical constraints (soils, wetlands, floodplains, steep slopes, etc.)

The United States Soil Conservation Service (SCS), the predecessor agency to the United States Natural Resources Conservation Service (NRCS), completed a detailed operational soil survey of Jefferson County. The findings of this survey are documented in the report entitled "Soil Survey of Jefferson County, Wisconsin", published in 1979 by the United States Department of Agriculture, Soil Conservation Service. The soil survey provided useful information regarding the suitability of the soils for various urban and rural land uses. Utilization of the soil survey involves determining the kinds and degrees of limitations that the soil properties are likely to impose on various uses and activities, and evaluating the appropriateness of a particular land use with respect to the soil limitations.

Topography is an important determinant of the land uses practicable in a given area. Lands with steep slopes (20 % or greater) are generally poorly suited for urban development and for most agricultural purposes and, therefore, should be maintained in natural cover for water quality protection, wildlife habitat, and erosion control purposes. Lands with less severe slopes (12%-20%) may be suitable for certain agricultural uses, such as pasture, and for certain urban uses, such as carefully designed low-density residential use, with appropriate erosion control measures. Lands that are gently sloping or nearly level are generally suitable for agricultural production or for urban uses.

Another important determinant of land suitability for development is the presence of water and an area's susceptibility to flooding. Lands that are classified as wetlands, have a high water table, or are in designated floodplains are rarely suitable for rural or urban development.

The Development Limitations Map (See Appendix E) indicates those areas within the Village of Palmyra that are unfavorable for development due to steep slopes, wetlands, and floodplains.

## **5.8.2 Land Use Trends**

### **5.8.2.1 Land Supply**

In year 2006, there were 10,850 acres of land within the Planning Area, including 797 acres within the Village of Palmyra. It is anticipated that the land supply in Palmyra will increase as the Village has the ability to continue to annex land within the Town into the Village if petitioned by landowners and approved by the Village Board. Table 5.36 indicates that over 54% of the land within the Planning Area has some sort of development limitation either due to water, wetlands, floodplains, or steep slopes. There are approximately 3,329 acres of developable land within the Planning Area, including 9.4 acres of vacant land within the current Village limits. Caution should be given, as this number does not include other factors that determine land suitability for development such as transportation access or utility access.

**Table 5.36: Land Supply, Planning Area**

<b>Land Use Categories</b>	<b>Acres</b>	<b>Percentage</b>
Developed	1,679	15.5%
Development Limitations	5,841	53.8%
Developable	3,329	30.7%
Total	10,850	100.0%

Source: MSA GIS, Village of Palmyra

1. Developed lands include all intensive land uses (residential, commercial, industrial, public, recreation)
2. Development Limitation land includes water, wetlands, floodplains, and steep slopes >20%
3. Developable lands include all lands not categorized as developed or undevelopable.

### 5.8.3.2 Land Demand

Table 5.37: Building Permits 2001-2006

Year	New Home Permits Issued
2001	8
2002	4
2003	2
2004	6
2005	1
2006	5
<b>Total</b>	<b>26</b>

Source: Village of Palmyra

According to the U.S. Census, the Village of Palmyra gained 122 households between years 1990 to 2000. This represents an increase of 21.5%, which was more aggressive than the housing growth of the Town of Palmyra (4.3%) and Jefferson County (17.4%). The WIDOA projects that the Village will add an additional 158 homes between years 2000 and 2025. This represents a growth of 22.9%, compared to 11% for the Town of Palmyra and 28.4% for Jefferson County. Table 5.37 indicates that the Village of Palmyra has issued 26 building permits from year 2001 to 2006. (Note: These were new home permits) This recent growth is much slower than what was anticipated by the WIDOA in year 2002.

Table 5.38 reports the estimated total acreage that will be utilized by agricultural, residential, commercial, and industrial land uses for five-year increments throughout the planning period. Projected residential acreage is calculated by using the WIDOA household projections and a lot size of 14,375 sq.ft. (average size of a residential lot in the Village). It is estimated that an additional 49 acres will be needed for new homes by year 2030. Caution should be given, as this number is probably an overestimate since the WIDOA population projections for the Village are aggressive. It is assumed that commercial and industrial acreage will maintain the same proportion to residential acreage as in year 2007 (1 acre commercial per 8.4 acres of residential and 1 acre industrial per 6.2 acres of residential).

Table 5.38: Projected Land Use Needs

Projected Land Use	2007	2010	2015	2020	2025	2030	23 Year Change
Agricultural (acres)*	4,556	4,549	4,536	4,524	4,512	4,502	-61.8
Residential (acres)	236	248	258	267	276	285	49.4
Commercial (acres)	28	29	31	32	33	34	5.9
Industrial (acres)	38	40	41	43	44	44	6.5

Source: MSA, Village of Palmyra

\*Agricultural land use includes agricultural land, pasture, and open space

### 5.8.3.3 Land Prices

Agricultural and forestlands generally sell for a higher price when sold for uses other than continued agriculture or forestry. The U.S. Census of Agriculture tracks land sale transactions involving agricultural and forestry land at the county level. From year 1997 to 2005, Jefferson County has averaged 12 transactions per year where agricultural land was diverted to other uses. The average price per acre for those transactions grew by 355%, from \$2,728 to \$12,415. During that same period, Jefferson County averaged 29 transactions per year where agricultural land continued in agricultural use. The average price per acre for those transactions grew by 250%, from \$1,624 to \$5,688. Similar trends in land prices can be expected for undeveloped land within the Planning Area.

Table 5.39: Agricultural Land Sale Transactions

Year	Ag Land Continuing in Ag Use			Ag Land Diverted to Other Uses		
	Number of Transactions	Acres Sold	Dollars per Acre	Number of Transactions	Acres Sold	Dollars per Acre
1997	22	1,431	\$1,624	10	480	\$2,728
1998	30	2,311	\$2,425	25	1,062	\$2,954
1999	27	1,888	\$2,817	13	573	\$4,644
2000	36	2,130	\$3,034	10	341	\$5,190
2001	27	1,762	\$3,542	12	656	\$3,368
2002	20	1,680	\$3,251	9	356	\$3,932
2003	40	2,510	\$4,313	6	250	\$9,214
2004	30	2,897	\$3,619	16	820	\$5,797
2005	30	1,859	\$5,688	7	242	\$12,415
<b>Total</b>	292	20,792	x	115	5,254	x

Source: US Census of Agriculture, Jefferson County

Information regarding the number of forestland sale transactions is not as well known and what data is available appears in Table 5.40. From year 1997 to 2005, Jefferson County has averaged 6 transactions per year, where forestland was diverted to other uses. The average price per acre for those transactions was \$3,873. Similar trends in land prices can be expected for undeveloped land within the Planning Area.

Table 5.40: Forest Land Sale Transactions

Year	Forest Land Continuing in Forest Use			Forest Land Diverted to Other Uses		
	Number of Transactions	Acres Sold	Dollars per Acre	Number of Transactions	Acres Sold	Dollars per Acre
1997	NA	NA	NA	NA	NA	NA
1998	13	118	\$782	10	86	\$1,576
1999	15	135	\$1,344	5	34	\$1,800
2000	8	84	\$1,032	6	84	\$2,221
2001	14	138	\$2,120	4	43	\$1,497
2002	NA	NA	NA	NA	NA	NA
2003	NA	NA	NA	NA	NA	NA
2004	NA	NA	NA	NA	NA	NA
2005	4	34	\$1,805	3	10	\$12,273
<b>Total</b>	54	509	x	28	257	x

Source: US Census of Agriculture, Jefferson County

Trends in land prices can also be derived using the tax assessment data. Table 5.41 displays the aggregate assessed value for various land use categories for year 2002 and 2006. In year 2006, the average equalized asset value (land and improvements) for residential parcels in the Village of Palmyra was \$146,222, \$260,670 for commercial parcels, and \$1,439,975 for manufacturing (industrial) parcels. The information is from the WI Department of Revenue and caution should be given as the WIDOR has periodically switched the way that they have reported or assessed certain land classifications over the years (i.e. use value assessment of agricultural land).

Table 5.41: Village of Palmyra Land Use Assessment Statistics

Land Use	2002				2006				
	Parcels	Acres	Aggregate Assessed Value	Equalized Value	Parcels	Acres	Aggregate Assessed Value	Equalized Value	Equalized Value per Parcel
Residential	583	236	\$48,219,100	\$62,153,000	587	259	\$81,198,900	\$85,832,300	\$146,222
Commercial	76	62	\$8,379,100	\$11,667,100	74	78	\$14,318,300	\$15,293,600	\$206,670
Manufacturing	8	29	\$7,360,500	\$9,596,600	8	29	\$10,875,600	\$11,519,800	\$1,439,975
Agricultural	11	179	\$10,500	\$36,400	2	27	\$4,500	\$2,400	\$1,200
Undeveloped	0	0	\$0	\$0	14	120	\$446,300	\$117,500	\$8,393
AG Forest	0	0	\$0	\$0	0	0	\$0	\$0	NA
Forest	0	0	\$0	\$0	0	0	\$0	\$0	NA
Other	4	4	\$224,800	\$321,200	1	2	\$143,200	\$226,000	\$226,000
Personal Property	x	x	\$3,117,900	\$4,094,700	x	x	\$3,835,600	\$4,023,900	NA
<b>Total</b>	<b>682</b>	<b>510</b>	<b>\$67,311,900</b>	<b>\$87,869,000</b>	<b>686</b>	<b>515</b>	<b>\$110,822,400</b>	<b>\$117,015,500</b>	<b>\$170,577</b>

Source: WI Dept Revenue, Village of Palmyra

**1. Aggregate Asset Value** – This is the *dollar amount* assigned to taxable real and personal property by the local assessor for the purpose of taxation. Assessed value is called a primary assessment because a levy is applied directly against it to determine the tax due. Accurate assessed values ensure fairness between properties within the taxing jurisdiction. The law allows each municipality to be within 10% of market value (equalized value), provided there is equity between the taxpayers of the municipality. (Source: 2006 Guide for Property Owners, WI DOR)

**2. Equalized Value Assessment** – This is the *estimated value* of all taxable real and personal property in each taxation district. The value represents market value (most probable selling price), except for agricultural property, which is based on its use (ability to generate agricultural income) and agricultural forest and undeveloped lands, which are based on 50% of their full, fair market value. Since assessors in different taxing districts value property at different percentages of market value, equalized values ensure fairness between municipalities. The equalized values are used for apportioning county property taxes, public school taxes, vocational school taxes, and for distributing property tax relief. In summary, equalized values are not only used to distribute the state levy among the counties, but also the equalized values distribute each county's levy among the municipalities in that county. The WI-DOR determines the equalized value. (Source: 2006 Guide for Property Owners, WI-DOR)

### 5.8.4 Redevelopment Opportunities

It is difficult to predict how much of the 62 acres of new development needed to support the projected population will have to come from land outside of the current Village limits. Table 5.38 assumes that demand for residential, commercial, and industrial land will be supplied by converting existing agricultural or open space land. Currently there are 163 combined acres of undeveloped land within the Village (either agricultural, open space, vacant parcels, or woodland). One could assume that these 163 acres could more than meet the demands for new residential, commercial, or industrial development; however, most of this land is undevelopable due to accessibility or environmental constraints.

*Residential* - There are a few vacant lots (approx. 8) scattered throughout the Village, which could be developed. There are also some larger existing residential lots near the Village Park, and south of the railroad, which could be split to add an additional home site. However, neither of these redevelopment opportunities would provide enough land to meet the population projections. Other than the agricultural land southeast of the WWTF, and some undeveloped woodlands along Little Prairie Rd., there are no other areas within the Village that offer large areas suitable for new residential subdivisions. Therefore, unless existing single-family residential lots are redeveloped into multi-family residences the Village should plan for some additional residential use outside of its current boundaries.



*Commercial/Office* – Two vacant parcels in the Village are currently zoned for commercial development. One is on Hwy 59 in front of the clinic and the other is at the corner of Wilson St. and Second St. Both of these sites could be developed for commercial or office use. In addition, there are a number of empty commercial buildings along Main St., which could be used by new businesses. Another area for potential redevelopment is the area near Wilson St. and the railroad. There are a number of vacant and dilapidated commercial buildings in this area, which could be redeveloped or raised to create new commercial businesses. In conclusion, some properties within the current downtown area are vacant and could be used by small businesses. However, most of these parcels are too small to accommodate the needs of larger commercial and office businesses. Therefore, the Village may need to plan for some additional commercial and office use outside of its current boundaries.

*Industrial* – There are two industrial areas within the Village. One is the area adjacent to the railroad, which contains some smaller industrial businesses typical of an older urban railroad corridor, such as a lumberyard. The other area is the Palmyra Industrial Park on Hwy 59, which contains Palmyra's larger and newer industrial businesses. Currently the industrial areas do not have any vacant parcels; therefore, the Village may need to plan for some additional industrial areas outside of its current boundaries in order to meet projected demand.