Chapter 7

LAND USE ELEMENT

INTRODUCTION

Information regarding adopted land use plans and regulations, historic and existing land use and land use development patterns is essential to any sound comprehensive planning effort. This chapter presents the findings of the land use inventories and analyses conducted in support of the preparation of the Comprehensive Development Plan for Waukesha County. Specifically, this chapter describes adopted land use plans and regulations; historic urban growth within the County; the existing land use base and changes in that base; and presents detailed analyses of the planned land uses within the County. During the plan preparation process, data and planning standards and objectives from previous chapters were used to prepare the land use element.

STRENGTHS, WEAKNESSES, AND CONCERNS

The Waukesha County Comprehensive Development Plan Land Use, Housing and Transportation Element subcommittee expressed the following land use strengths, concerns, and weaknesses.

Land Use Strengths

- A long history of advanced land use planning in the county and region
- An existing land use pattern that has given consideration to compatible uses
- A strong commitment to preserving environmentally sensitive lands
- An increase in the use of conservation or cluster design development
- A growing interest in intergovernmental discussions on land use
- Many municipalities have a strong sense of place (ie. lakes, downtown)

Land Use Concerns and Weaknesses

- Continued pressure for development on poor soil conditions
- A need for increased intergovernmental discussions on land use
- A lack of stable community boundaries
- A lack of commitment to previously defined or developed commercial locations
- A lack of consideration of how regulatory expectations impact the cost of projects and housing
- A lack of willingness by municipalities to re-evaluate existing land use and zoning
- Waukesha County's water supply is finite. The trends show that ground water supply and quality is declining.

LAND USE PLAN DESIGN PROCESS

The process used in preparing the Comprehensive Development Plan for Waukesha County was heavily influenced by statutory requirements with respect to the treatment of locally adopted land use plans. Under the Wisconsin Statutes, counties are required to incorporate into the county development plan all master plans that have been duly adopted by incorporated cities and villages under the State of Wisconsin city planning enabling act. The Statutes do not, however, explicitly prescribe the treatment of plans adopted by towns acting under village powers, nor do the Statutes provide direction in the case of conflicts between any county adopted land use objectives and local master plans. The Statutes do not specifically require that city and village plans for their extraterritorial areas be included in a County comprehensive plan. Therefore, situations in which city or village

extraterritorial planning overlays town planning further complicate the preparation of a County development plan. Owing to the considerable number of local master plans adopted to date by the Cities, Villages, and Towns within Waukesha County, the manner in which such plans are taken into account in the preparation of the County development plan is of paramount importance.

In an effort to adhere to both the requirements of the Wisconsin Statutes governing the preparation of county development plans and to sound planning practice, the Waukesha County Comprehensive Plan Advisory Committee determined that the following approach should be utilized in the preparation of the Comprehensive Development Plan for Waukesha County:

1. All duly adopted local land use plans, whether prepared by incorporated cities and villages or by towns, would be reviewed for consistency with the County development objectives and standards approved by the Advisory Committee, as presented in Chapter 2 of this Plan. All inconsistencies would be identified and described.

2. Although State law is ambiguous in terms of incorporating city and village plans for extraterritorial areas into a county comprehensive plan, the consistency requirement in Section 66.1001(3) of the comprehensive planning law clearly states that any local government that engages in official mapping, general or shoreland zoning, or subdivision regulation must carry out those actions in a way that is consistent with "that local governmental unit's comprehensive plan." This requirement applies most directly to the land use element, and the land use plan map, of local comprehensive plans. Because the Statutes require the regulatory decisions of a local government to be consistent with the local government's comprehensive plan, the Advisory Committee at its October 25, 2007 meeting, recommended that the County would not accept extraterritorial plans without extraterritorial zoning or inter-municipal agreements being in place unless the municipalities involved have accepted the designated land use through formal action or resolution. Although subdivision and official mapping ordinances can also regulate the use of land, zoning is the primary regulatory tool used by county and local governments to determine and control land use.

   Further, the Advisory Committee recommended that the Waukesha County staff develop a planning conflict resolution process to assist in the preparation of the County comprehensive plan. The issue resolution process should involve the County and SEWRPC staff working with affected municipalities to reach agreement.

3. Municipalities will prepare preliminary land use plans in a manner consistent with the Advisory Committee-approved development objectives and standards. Following review of local land use plans, inconsistencies with the development objectives were identified for the municipalities and adjustments were requested. In areas where no duly adopted or preliminary local land use plan exists, a recommended land use pattern was prepared in accordance with the development objectives. Statistical summaries of population, household, and employment levels under planned conditions were prepared through this planning process. Municipal land use plans were compared to the projected population, household, and employment levels contained in this Plan.

4. The compiled preliminary County land use plan would be provided to all cities, villages, and towns in the County for review and comment. Where city or village extraterritorial plans were submitted as part of this planning process, conflicts were identified and were addressed through intergovernmental meetings coordinated by the County and SEWRPC staff. In addressing such conflicts, efforts were made to arrive at consensus resolutions of the identified conflicts, in cooperation with the concerned community or communities, using planning standards as a point of departure for the deliberations. Ideally, plan conflict resolution meetings would provide the foundation for intermunicipal or border agreements. If consensus resolutions were not reached, the extraterritorial plans would not be included in the plan as detailed in number 2 above.

ADOPTED LAND USE PLANS AND LAND USE REGULATIONS

The Comprehensive Development Plan for Waukesha County is intended to refine and detail the regional land use plan, taking into account and integrating, as appropriate, existing County and local development objectives. An understanding of both regional development objectives and County and local development objectives is therefore essential to the preparation of a sound County comprehensive development plan. Accordingly, this chapter provides a brief description of the regional land use plan and various supporting functional plan elements that have been prepared to date as they pertain to Waukesha County. In addition, this chapter describes land use plans and land use regulations, which have been adopted by the County and the cities, villages, and towns within the County, which provide an expression of County and local development objectives.

Regional and Area Wide Plans

Since its creation in 1960, the Southeastern Wisconsin Regional Planning Commission (SEWRPC), the official area wide planning agency for the seven-county Southeastern Wisconsin Region, which includes Waukesha County, has, in accordance with its statutory charge, pursued the preparation of an advisory comprehensive plan for the physical development of the Region. This has been achieved through the systematic formulation of those elements of such a plan most important to the developmental and environmental problems faced by the units and agencies of government operating in the Region. The regional land use plan, complemented by various functional plans for transportation, parks and open space, water quality management, flood control, airports, and housing, is intended to serve as an overall guide to the physical development of the Region. The findings and recommendations of these regional comprehensive plan elements have important implications for the Comprehensive Development Plan for Waukesha County.

Regional Land Use Plan

The regional land use plan, set forth in SEWRPC Planning Report No. 48, *A Regional Land Use Plan for Southeastern Wisconsin: 2035*, and related amendments thereto, is intended to serve as a guide for land use development and redevelopment within the Region. The plan provides for the attainment of specific area wide land use development objectives formulated in cooperation with the local, State, and Federal units and agencies of government concerned and sets forth recommendations regarding the amount and spatial distribution of the various land uses necessary to serve the needs of the existing and probable future resident population and economic activity levels in the Region through the year 2035.

Regional Transportation System Plan

The regional transportation system plan, as set forth in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*, describes how the regional land use plan can best be served by highway and transit facilities. The multimodal plan consists of five principal elements: public transit, transportation systems management, travel demand management, bicycle and pedestrian facilities, and arterial streets and highways. Designed to serve and support the regional land use plan, the Regional Transportation System Plan recommends a functional and jurisdictional system of arterial streets and highways to serve the Region through the design year 2035 as well as a functional network of various types of transit lines. The regional transportation system plan was developed on the basis of careful quantitative analyses of existing and probable future traffic movements and of existing highway and transit system capacity and use.

Development Plan for the Interstate Highway (IH) 94 West Freeway Corridor

In 1990, the Wisconsin Department of Transportation requested that the Regional Planning Commission undertake a land use and transportation study of the IH 94 West Freeway Corridor from the CTH T interchange in the City of Waukesha westward to the Jefferson-Waukesha County line. The study was initiated in response to concerns that land use changes were occurring rapidly in the corridor, that such changes were contributing to increased traffic congestion and related problems in the corridor, that cooperative agreement among Waukesha County and the local governments concerned was needed to formulate a future land use pattern for the IH 94 West Freeway Corridor, and to identify needed supporting transportation improvements. Completed in

1994 and documented in SEWRPC Community Assistance Planning Report No. 201, *A Land Use and Transportation System Plan for the IH 94 West Freeway Corridor: 2010*, the corridor plan represents a refinement and amendment of the regional land use plan for that area, which encompasses about 60 square miles of Waukesha County.

Regional Park and Open Space Plan

The adopted regional park and open space plan, described in SEWRPC Planning Report No. 27, *A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000*, identifies existing and probable future park and open space needs in the Region and recommends a system of large regional resource-oriented parks, recreational corridors, and smaller urban parks, together with associated recreational facilities, to meet such needs. That portion of the regional plan that applies to Waukesha County was revised and updated in 1989 and was adopted by both the Waukesha County Board of Supervisors and the Regional Planning Commission in 1990, is documented in SEWRPC Community Assistance Planning Report No. 137, *A Park and Open Space Plan for Waukesha County.* Subsequent amendments to the Park and Open Space Plan were incorporated into Community Assistance Planning Report No. 209, *A Development Plan for Waukesha County Wisconsin* in 1996 and later amended in 1998.

Regional Water Quality Management Plan

The findings and recommendations of the water quality management planning program for Southeastern Wisconsin are described in SEWRPC Planning Report No. 30, *A Regional Water Quality Management Plan for Southeastern Wisconsin: 1979,* and have been periodically amended through 2008. The plan has five basic elements: 1) a land use element, consisting of recommendations for the location of new urban development in the Region and for the preservation of primary environmental corridors and prime agricultural lands, this element being the adopted regional land use plan, 2) a point source pollution abatement element, including recommendations concerning the location and extent of sanitary sewer service areas; the location, type, and capacity of, and the level of treatment to be provided at, sewage treatment facilities; the location and configuration of intercommunity trunk sewers; and the abatement of pollution from sewerage system overflows and from industrial wastewater discharges, 3) a nonpoint source pollution abatement element, consisting of recommendations for the control of pollutant runoff from rural and urban lands, 4) a sludge management element, consisting of recommendations for the handling and disposal of sludges from sewage treatment facilities, and 5) recommendations for the establishment of continuing water quality monitoring efforts in the Region.

Of particular importance to the preparation of a Comprehensive Development Plan for Waukesha County are the sanitary sewer service area recommendations of the water quality management plan. The adopted regional water quality management plan recommended generalized sanitary sewer service areas attendant to each of the existing and proposed sewage treatment facilities within the Region. That plan also recommended that these areas be refined and detailed through the cooperative efforts of the local units and agencies of government concerned so that the service areas ultimately reflect local, as well as area wide, development objectives. Sewer service area refinement plans continue to be completed for areas in Waukesha County. A more complete discussion of sewer service areas are presented in Chapter 4 of this Plan.

Regional Water Supply Plan

The Southeastern Wisconsin Regional Planning Commission is conducting a regional water supply study for the Southeastern Wisconsin Region. The regional water supply plan together with the abovementioned groundwater inventories and a groundwater simulation model will form the SEWRPC regional water supply management plan. The preparation of these three elements includes interagency partnerships with the U.S. Geological Survey, the Wisconsin Geological and Natural History Survey, the University of Wisconsin-Milwaukee, the Wisconsin Department of Natural Resources, and many of the area's water supply utilities.

The regional water supply plan will include the following major components:

- Water supply service areas and forecast demand for water use.
- Recommendations for water conservation efforts to reduce water demand.

- Evaluation of alternative sources of supply, recommended sources of supply, and recommendations for development of the basic infrastructure required to deliver that supply.
- Identification of groundwater recharge areas to be protected from incompatible development.
- Specification of new institutional structures necessary to carry out plan recommendations.
- Identification of constraints to development levels in subareas of the Region due to water supply sustainability concerns.

[Note: Information from the regional water supply plan will be incorporated into this comprehensive plan as it becomes available. The plan is expected to be completed in early 2009.]

Previous County Development Plan

The Waukesha County development plan set forth in SEWRPC Community Assistance Planning Report No. 209, *A Development Plan for Waukesha County Wisconsin,* was adopted by the Waukesha County Board in 1996. The plan was prepared in accordance with Section 59.97(3) of the Wisconsin Statutes, under which Wisconsin counties are authorized to prepare comprehensive county development plans addressing a wide range of physical development concerns. It represented the first plan of this kind completed in Wisconsin. The Plan contains a discussion of many of the required elements contained in Wisconsin's comprehensive planning law ("Smart Growth"), under Section 66.1001 Wisconsin Statutes enacted by the Wisconsin Legislature in 1999.

Municipal Plan Refinements

Occasionally municipalities will refine regional land use plans, county development plans or municipal land use plans through a more detailed planning process. These plan refinements may be completed for purposes such as redevelopment areas, business improvement districts or neighborhood planning. Table VII-1 presents local plan refinements developed by municipalities in Waukesha County since 1990.

Redevelopment Areas

Cities and villages are authorized under Section 66.1333 of the Wisconsin Statutes to create redevelopment authorities for the purposes of carrying out renewal programs. Such authorities have the power to prepare and administer redevelopment plans and renewal projects within the corporate limits of the community.

Business Improvement Districts

Section 66.1109 of the Wisconsin Statutes authorizes cities, villages, and towns to create one or more business improvement districts to allow businesses in those districts to undertake activities to develop, redevelop, manage and promote the districts, and, importantly to establish an assessment method to fund such activities. An operating plan for the district must be prepared at the time the district is established.

Table VII-1

NEIGHBORHOOD, SUB AREA AND REDEVELOPMENT AREA PLANS COMPLETED BY WAUKESHA COUNTY MUNICIPALITIES SINCE 1990

Municipality	Plan Title	Year Adopted
Town of Brookfield	Redevelopment Plan for the Bluemound Road Corridor	2008
Village of Hartland	A Hartland and Merton Cluster Development Plan	2004
	Business Improvement District	2007
	Hartland Village Center Revitalization Plan	2007
Village of Menomonee Falls	Village Centre Menomonee River Parkway Master Plan	1993
	Village Center Business Improvement District	1993
	Village Centre Redevelopment Plan	1996
	North Hills Neighborhood Plan	2002
	Northeast Area Plan	2005
	Main Street Redevelopment Plan	2005
City of Brookfield	Capitol Drive Corridor Study- Land Use Plan #2	1999
	Brookfield Road and Capitol Drive Neighborhood Plan	1999
	Calhoun Road and Capitol Drive Neighborhood Plan	2000
	Moorland Road Plan	2000
	Calhoun Road South Neighborhood Plan	2001
	Lilly Road and Capitol Drive Neighborhood Plan	2001
	Brookfield Square Neighborhood Development Strategy	2002
	124th Street and Capitol Drive Neighborhood Plan	2004
	Tax Increment District #3 Project Plan	2004
	Village Area Neighborhood Plan	2006
	124th Street and Bluemound Road Neighborhood Plan	2007
	124th Street and Lisbon Road Neighborhood Plan	2007
	Northwest Gateway Neighborhood Plan	2008
City of Muskego	Redevelopment District #1 Plan	2003
	Redevelopment District #2 Plan	2003
City of Oconomowoc	Peripheral Area Plan	1996
	Downtown Revitalization Plan and Market Analysis	2004
	Comprehensive Plan of Redevelopment: St. Paul – East Wisconsin Avenue	2004
	Southwest Summit Avenue Land Use Plan	2007
	Comprehensive Downtown / Central City Plan	1998
	Redevelopment District # 3 Plan	1999
City of Waukesha	Redevelopment District # 5 Plan	2001
	Redevelopment District # 6 Plan	2006
	Redevelopment District # 7 Plan	2007
	Redevelopment District # 8 Plan	2007

Source: Municipal Data

Municipal Boundary Agreements and Consolidations

The Wisconsin Statutes provide several options for neighboring cities, villages, and towns to cooperatively determine common boundaries. Section 66.0307 of the Wisconsin Statutes allows any combination of cities, villages, and towns to determine the boundary lines between themselves under a cooperative plan. Section 66.0307 envisions the cooperative preparation of a comprehensive plan for the affected area by the concerned local units of government and prescribes in detail the contents of the cooperative plan. Importantly, the cooperative plan must identify any boundary change and any existing boundary that may not be changed during

the planning period; identify any conditions that must be met before a boundary change may occur; include a schedule of the period during which a boundary change shall or may occur; and specify arrangements for the provision of urban services to the territory covered by the plan. A boundary agreement can also be achieved under Section 66.0225, which allows two abutting communities that are parties to a court action to enter into a written stipulation determining a common boundary. In addition, communities can agree upon common boundaries under Section 66.0301, the "intergovernmental cooperation" statute.

In 2007, the Wisconsin Legislature enacted Act 43 that clarified the determination of common municipal (city, village and town) boundaries by agreement and the use of alternative dispute resolution in annexation and other boundary disputes.

Communities in the County, which have entered into municipal boundary agreements under any of the aforementioned Statutes as of 2007, are listed in Table VII-2.

Occasionally, municipalities will agree to transfer properties between jurisdictions. Such transfers may be made in an effort to reorganize or more clearly define municipal boundaries.

Under Wisconsin Statutes, adjacent municipalities can pursue consolidation of jurisdictions for the purpose of creating efficiencies and effectiveness in the delivery of services or for the homogeneity of communities. To date, consolidation studies have been undertaken between the City and Village of Pewaukee, the City and Town of Brookfield (the Town did not participate in the study) and the Village of Big Bend and Town of Vernon.

Table VII-2
BOUNDARY AGREEMENTS IN WAUKESHA COUNTY: 2007

Communities With Boundary Agreements	Year Agreement Signed	Statute
Village of Pewaukee/Former Town of Pewaukee	1989	66.0225
City of Delafield/Village of Hartland/Town of Delafield	1998	66.0227
City of Waukesha/Former Town of Pewaukee	1998	66.0307
City of Oconomowoc/Town of Summit	1999 Amended 2007	66.0307
Village of North Prairie/Town of Genesee	1999	66.0225
Village of Oconomowoc Lake/Town of Summit	2000	66.0301 66.0225
Village of Mukwonago/Town of Mukwonago	2000	66.0225
Village of Wales/Town of Genesee	2000	66.0225
Village of North Prairie/Town of Mukwonago	2000	66.0225
Village of Sussex/Town of Lisbon	2001	66.0227
Village of Merton/Town of Lisbon	2002	66.0301 66.0225
Village of Wales/Town of Delafield	2002	66.0225
Village of Dousman/Town of Ottawa	2004	66.0225
Village of North Prairie/Town of Ottawa	2004	66.0225

Source: SEWRPC and Waukesha County

Note: Additional information regarding the boundary agreements are available on the Wisconsin Department of Administration website at http://www.doa.state.wi.us/category.asp?linkcatid=735&linkid=132&locid=9.

LAND USE REGULATIONS

The preparation of a land use plan for Waukesha County also requires consideration of existing land use regulations, including general zoning ordinances and special purpose floodplain and shoreland zoning ordinances, land division ordinances, and official maps. Each of these regulatory tools, as currently applied in Waukesha County, is described in this section. For ease of reference, a tabular summary of the status of these regulations is presented in Table VII-3 for the Cities, Villages and Towns in Waukesha County.

Table VII-3

LAND USE REGULATIONS IN WAUKESHA COUNTY BY MUNICIPALITY: 2007

Community	Type of Ordinance				
	General Zoning	Floodplain Zoning	Shoreland or Shoreland-Wetland Zoning	Subdivision Control	Official Map
Cities					
Brookfield	Adopted	Adopted	Adopted & DNR approved	Adopted	Adopted
Delafield	Adopted	Adopted	Adopted	Adopted	Adopted
Muskego	Adopted	Adopted	Adopted & DNR approved	Adopted	County map in force
New Berlin	Adopted	Adopted	Adopted & DNR approved	Adopted	Adopted
Oconomowoc	Adopted	Adopted	Adopted & DNR approved	Adopted	Adopted
Pewaukee	Adopted	Adopted	Adopted	Adopted	County map in force
Waukesha	Adopted	Adopted	Adopted & DNR approved	Adopted	Adopted
Villages					
Big Bend	Adopted	Adopted	Adopted & DNR approved	Adopted	Adopted
Butler	Adopted	Adopted	Adopted	Adopted	County map in force
Chenequa	Adopted	None[a]	Adopted	None	None
Dousman	Adopted	Adopted	Adopted & DNR approved	Adopted	County map in force
Eagle	Adopted	None[a]	Not required	Adopted	County map in force
Elm Grove	Adopted	Adopted	Adopted	None	Adopted
Hartland	Adopted	Adopted	Adopted	Adopted	Adopted
Lac La Belle	Adopted	Adopted	Adopted	Adopted	Adopted
Lannon	Adopted	Adopted	None	Adopted	None
Menomonee Falls	Adopted	Adopted	Adopted & DNR approved	Adopted	None
Merton	Adopted	Adopted	Adopted	Adopted	Adopted
Mukwonago	Adopted	Adopted	Adopted	Adopted	None
Nashotah	Adopted	None[a]	Adopted & DNR approved	Adopted	County map in force
North Prairie	Adopted	None [b]	Not required	Adopted	County map in force
Oconomowoc Lake	Adopted	Adopted	Adopted & DNR approved	Adopted	County map in force
Pewaukee	Adopted	Adopted	None	Adopted	Adopted
Sussex	Adopted	Adopted	Adopted & DNR approved	Adopted	County map in force
Wales	Adopted	None [a]	Not required	Adopted	None
Towns					
Brookfield	Adopted	County ordinance	County ordinance	Adopted	County map in force
Delafield	Adopted	County ordinance	County ordinance	Adopted	County map in force
Eagle	Adopted	County ordinance	County ordinance	Adopted	County map in force
Genesee	County ordinance	County ordinance	County ordinance	Adopted	County map in force
Lisbon	Adopted	County ordinance	County ordinance	Adopted	Adopted
Merton	Adopted	County ordinance	County ordinance	Adopted	County map in force
Mukwonago	Adopted	County ordinance	County ordinance	Adopted	Adopted
Oconomowoc	County ordinance	County ordinance	County ordinance	Adopted	County map in force
Ottawa	County ordinance	County ordinance	County ordinance	Adopted	County map in force
Summit	Adopted	County ordinance	County ordinance	Adopted	County map in force
Vernon	County ordinance	County ordinance	County ordinance	Adopted	Adopted
Waukesha	Adopted	County ordinance	County ordinance	Adopted	County map in force
Waukesha County	Adopted	Adopted	Adopted & DNR approved	Floodland and shoreland only	County highway width map

[a]Flood hazard areas have been identified or mapped on year 2007 proposed FEMA floodplain maps.
[b]No flood hazard areas have been identified or mapped.

Source: SEWRPC, FEMA and municipalities

Local Zoning Regulations

A zoning ordinance is a public law which regulates and restricts the use of property in order to advance the public health, safety, and welfare. A zoning ordinance divides a community into districts for the purpose of regulating the use of land and structures; the height, size, shape, and placement of structures; and the density of population. Zoning seeks to confine certain land uses to areas of the community, which are particularly well suited to those uses, thereby encouraging the most appropriate use of land throughout the community. Zoning seeks to assure adequate light, air, and open space for each building; to reduce fire hazard; and to prevent the overcrowding of

land, traffic congestion, and the overloading of the utility systems. Zoning also provides an important means for protecting and preserving the natural resource base.

Local zoning regulations include general, or comprehensive, zoning regulations and special-purpose regulations governing floodland and shoreland areas. General zoning and special-purpose zoning regulations may be adopted as a single ordinance or as separate ordinances; they may or may not be contained in the same document. Any analysis of locally proposed land use must take into consideration the provisions of both general and special-purpose zoning.

It should be noted that, in addition to general zoning and special-purpose floodland and shoreland zoning, any county, city, village, or town in Wisconsin that owns Federal- or State-approved airport facilities has the authority under Section 114.136 of the Wisconsin Statutes to adopt a special-purpose height zoning ordinance in the vicinity of the airport to protect aerial approaches to the site. The only airport in Waukesha County subject to special regulations is Waukesha County-Crites Field. The Waukesha County Board of Supervisors adopted a height limitation zoning ordinance in 1964. That ordinance establishes height restrictions for structures in areas within three miles of the airport.

General Zoning

Cities in Wisconsin are granted comprehensive, or general, zoning powers under Section 62.23 of the Wisconsin Statutes. The same powers are granted to villages under Section 61.35 of the Statutes. Counties are granted general zoning powers within their unincorporated areas under Section 59.97 of the Statutes. However, a county zoning ordinance becomes effective only in those towns which ratify the county ordinance. Towns which have not adopted a county zoning ordinance may adopt village powers and subsequently utilize the city and village zoning authority conferred in Section 62.23 subject, however, to county board approval where a general purpose county zoning ordinance exists.

General zoning was in effect in all communities in Waukesha County in 2007. Four Towns in the County, Towns of Genesee, Oconomowoc, Ottawa, and Vernon, were under the jurisdiction of the County zoning ordinance, while the remaining eight towns have adopted their own zoning ordinances under village powers.

Floodplain Zoning

Section 87.30 of the Wisconsin Statutes requires that cities, villages, and counties, with respect to their unincorporated areas, adopt floodplain zoning to preserve the floodwater conveyance and storage capacity of floodplain areas and to prevent the location of new flood damage-prone development in flood hazard areas. The minimum standards, which such ordinances must meet, are set forth in Chapter NR 116 of the Wisconsin Administrative Code. The required regulations govern filling and development within a regulatory floodplain, which is defined as the area subject to inundation by the 100-year recurrence interval flood event, the event which has a one percent probability of occurring in any given year. Under Chapter NR 116, local floodplain zoning regulations must prohibit nearly all forms of development within the floodway, which is that portion of the flood-plain required to convey the 100-year recurrence peak flood flow. Local regulations must also restrict filling and development within the flood fringe, which is that portion of the floodplain located outside of the floodway that would be covered by floodwater during the 100-year recurrence flood. Permitting the filling and development of the flood fringe area reduces the floodwater storage capacity of the natural floodplain, and may thereby increase downstream flood flows and stages. It should be noted that towns in Waukesha County may enact floodplain zoning regulations which may be more restrictive than those in the Waukesha County Shoreland and Floodland Protection Zoning Ordinance.

In 2007, floodplain ordinances were in effect in most parts of Waukesha County where flood hazard areas have been identified. The Villages of Chenequa, Eagle, Nashotah, North Prairie and Wales, do not have floodland ordinances. The Federal Emergency Management Agency (FEMA) and the Wisconsin Department of Natural Resources (DNR), in 2007, released preliminary drafts of new Flood Insurance Rate Maps (FIRMs) for Waukesha County. These maps not only serve to identify properties eligible for FEMA's Flood Insurance program, but also serve as the basis for county and municipal floodplain zoning ordinances. Based on the proposed FEMA

floodplain maps, the Villages of Chenequa, Nashotah and Wales have certain areas within their boundaries which do have flood hazard areas.

Shoreland and Shoreland Wetland Zoning

Under Section 59.971 of the Wisconsin Statutes, counties in Wisconsin are required to adopt zoning regulations within statutorily defined shoreland areas. Shoreland areas are those lands within 1,000 feet of a navigable lake, pond, or flowage; or 300 feet of a navigable stream, or to the landward side of the floodplain, whichever distance is greater. Minimum standards for county shoreland zoning ordinances are set forth in Chapter NR 115 of the Wisconsin Administrative Code. Chapter NR 115 sets forth minimum requirements regarding lot sizes and building setbacks; restrictions on cutting of trees and shrubbery; and restrictions on filling, grading, lagooning, dredging, ditching, and excavating that must be incorporated into county shoreland zoning regulations.

In addition, Chapter NR 115 for Cities and Villages and Chapter NR 117 for Counties, requires that all wetlands five acres or larger within the statutory shoreland zoning jurisdiction area be placed into a wetland conservancy zoning district to ensure their preservation after completion of appropriate wetland inventories by the Wisconsin Department of Natural Resources. In 1982, the State Legislature extended shoreland-wetland zoning requirements to cities and villages in Wisconsin. Under Sections 62.231 and 61.351, respectively, of the Wisconsin Statutes, cities and villages in Wisconsin are required to place wetlands five acres or larger and located in statutory shorelands into a shoreland-wetland conservancy zoning district to ensure their preservation. Minimum standards for city and village shoreland-wetland zoning ordinances are set forth in Chapter NR 117 of the Wisconsin Administrative Code.

In 2007, the Waukesha County Shoreland and Floodland Protection Ordinance was in effect in all unincorporated areas of the County. Table VII-3 indicates 21 of the 25 Cities and Villages in the County had adopted shoreland-wetland zoning ordinances. Of the remaining four Villages, two, the Villages of Eagle and North Prairie, did not contain shoreland-wetlands and were thus not required to adopt such ordinances; two, the Villages of Lannon and Pewaukee, had not yet adopted such ordinances. The Waukesha County Shoreland and Floodland Protection Ordinance and 11 of the 19 local shoreland-wetland zoning ordinances have been approved by the Wisconsin Department of Natural Resources.

Land Division Regulations

Chapter 236 of the Wisconsin Statutes requires the preparation of a subdivision plat whenever five or more lots of 1.5 acres or less in area are created either at one time or by successive divisions within a period of five years. The Statutes set forth requirements for surveying lots and streets, for plat review and approval by State and local agencies, and for recording approved plats. Section 236.45 of the Statutes allows any city, village, town, or county that has established a planning agency to adopt a land division ordinance, provided the local ordinance is at least as restrictive as the State platting requirements. Local land division ordinances may include the review of other land divisions not defined as "subdivisions" under Chapter 236, such as when fewer than five lots are created or when lots larger than 1.5 acres are created.

The subdivision regulatory powers of Towns are confined to their respective unincorporated areas. City and village subdivision control ordinances may be applied to extraterritorial areas as well as to their respective incorporated areas. In accordance with Chapter 236 Wisconsin Statutes, counties have subdivision regulatory authority in Towns, Cities and Villages. The County has approval authority in Towns but is limited to objection authority in cities and villages. It is possible for both a county and a town to have concurrent jurisdiction over land divisions in unincorporated areas, or for a city or village to have concurrent jurisdiction with a town or county in the city or village extraterritorial plat approval area. In the case of overlapping jurisdiction, Chapter 66.0105 Wisconsin Statutes states the jurisdiction over the overlapping area shall be divided on a line all points of which are equidistant from the boundaries of each municipality concerned so that not more than one municipality shall exercise power over any area. Furthermore, a municipality may waive their extraterritorial review authority. Table VII-3 indicates communities that have adopted land division ordinances.

Official Mapping and Highway Width Maps
Official mapping powers, granted to local units of government under Section 62.23(6) of the Wisconsin Statutes, are an important but historically under-utilized plan implementation tool. An official map prepared under Section 62.23(6) can be used to identify precisely, the location and width of existing and proposed streets, highways, historic districts, parkways, railroad rights-of-way, waterways, public transit facilities, airports, and the location and extent of parks and playgrounds. The official map prohibits the construction of buildings and associated improvements on lands that are for future public use identified on the map.

Under Section 80.64 of the Statutes, counties may adopt highway-width maps showing the location and width of proposed new highways and the widths of any highways proposed to be expanded. Such maps serve a function similar to local official maps, but with jurisdiction limited to streets and highways. By statute, a county highway-width map is in effect only in those municipalities, which act to approve it. Table VII-3 identifies "county map in force" where the municipality has adopted the Waukesha County Street and Highway width map in place of a complete official map.

Extraterritorial Zoning Regulations
The Statutes authorize cities and villages to adopt extraterritorial zoning regulations for adjacent unincorporated areas, in cooperation with the adjacent town, within three miles of a city of the first, second, or third class, and within 1.5 miles of a city of the fourth class or a village. A city or village can initiate preparation of an extraterritorial zoning ordinance and map at any time. Initiation of the extraterritorial zoning ordinance freezes existing zoning in the extraterritorial (town) area for two years, while the city or village and affected town or towns jointly develop an extraterritorial zoning ordinance and map. A joint committee made up of three representatives from the city or village and three representatives from each affected town is formed to develop the ordinance. The time period can be extended for one additional year at the end of the two-year period.

POPULATION, HOUSEHOLD AND EMPLOYMENT PROJECTIONS

Under the previous year 2020 regional land use plan and county development plan, three projections—low, intermediate, and high growth scenarios—were prepared for population, households, and employment in the Region and County. The intermediate projection was considered the most likely to be achieved and constituted the forecast which was used as the basis for the preparation of the year 2020 regional land use plan and county development plan. The high and low projections were intended to provide an indication of population, household, and employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios.

Review of Previous County Development Plan Projections
The Waukesha County development plan presented in SEWRPC Community Assistance Planning Report No. 209, A Development Plan for Waukesha County, Wisconsin, dated August 1996, set forth population, household, and employment levels anticipated under buildout conditions (about the year 2050) and as envisioned under a 2010 plan stage. The 2010 plan stage envisioned that the County population would increase from 304,700 persons in 1990 to 384,800 persons in 2010; that the number of households would increase from 106,000 in 1990 to 143,400 in 2010; and that the number of jobs would increase from 172,300 in 1990 to 248,800 jobs in 2010. Based upon straight-line interpolation of the anticipated change between 1990 and 2010, the County development plan envisioned 356,800 persons, 130,300 households, and 222,000 jobs in the County in 2003.

The estimated County population of 371,200 persons in 2003 from the Wisconsin Department of Administration exceeded the population of 356,800 persons envisioned under the County development plan by 14,400 persons, or 4 percent. The estimated number of households in the County in 2003 (142,300) from the Wisconsin Department of Administration exceeded the number of households envisioned under the County plan (130,300) by 12,000 households, or 9 percent. The estimated number of jobs in the County in 2003 (266,400) from the U.S. Bureau of Economic Analysis exceeded the number of jobs envisioned under the County plan (222,000) by 44,400 jobs, or 20 percent.

Year 2035 Projections
Chapter 2 of this Plan provides a more detailed description of the trends associated with population, household and employment change in the County. The methodology and assumptions that underlie the new population, household, and employment projections, along with the projections themselves are fully documented in SEWRPC Technical Report No. 10 (4th Edition), *The Economy of Southeastern Wisconsin* and in SEWRPC Technical Report No. 11 (4th Edition), *The Population of Southeastern Wisconsin*. These two reports were prepared in tandem to ensure consistency between the Commission's long-range population, household, and employment projections.

As indicated in Chapter 2, based on the methodology and assumptions presented in the afore-referenced technical reports, the intermediate growth scenario for population, households and employment will be used to make projections to the plan design year of 2035.

Population Projections
The intermediate projection envisions that the County population would increase by 86,000 persons, or 24 percent, from about 360,800 persons in 2000 to 446,800 persons in 2035. The high projection indicates that the population of the County could be as high as 504,900 persons in 2035, an increase of about 144,100 persons, or 40 percent, over the 2000 level. Conversely, the low projection indicates that the County population could be as low as 411,000 persons in 2035, an increase of 50,200 persons, or 14 percent, over the 2000 level. The SEWRPC-adopted year 2035 regional land use plan and this plan reflect the intermediate population projection of 446,800 persons for Waukesha County in 2035.

Household Projections
The intermediate projection envisions that the number of households in the County would increase by 38,900, or 29 percent, from 135,200 households in 2000 to 174,100 households in 2035, the same projection envisioned under the SEWRPC adopted year 2035 Regional Land Use Plan. The high projection indicates that the number of households in the County could be as high as 196,700 in 2035, an increase of 61,500 households, or 45 percent, over the 2000 level. The low projection indicates that the number of households could be as low as 160,100 in 2035, an increase of 24,900 households, or 18 percent, over the 2000 level. The intermediate projections envision a significant increase in the number of households, however as detailed in Chapter 2, the household sizes are projected to continue to decline from an average of 2.63 persons per household in 2000 to 2.50 persons per household in 2035.

Employment Projections
The intermediate projection envisions total employment of 347,200 jobs in the County in 2035, an increase of 76,400 jobs, or 28 percent, over the 2000 level of 270,800 jobs. The high projection indicates that employment in the County could be as high as 383,100 jobs in 2035, an increase of about 112,300 jobs, or 41 percent, over the 2000 level. The low projection indicates that employment in the County could be as low as 321,600 jobs in 2035, about 50,800 jobs, or 19 percent, over the 2000 level. The SEWRPC adopted year 2035 Regional Land Use Plan, envisions a total of 333,700 jobs in the County in the year 2035, rather than the year 2035 intermediate projection of 347,200 jobs. The slightly lower job level in the regional plan reflects community land use plans in place at the time the regional plan was prepared.

HISTORIC LAND USE GROWTH AND LAND USE TRENDS ANALYSIS

The SEWRPC land use inventory is intended to serve as a relatively precise record of land use at selected points in time. The land use classification system used in the inventory consists of nine major categories which are divisible into 66 sub-categories, making the inventory suitable for both land use and transportation planning; adaptable to storm water drainage, public utility, and community facility planning; and compatible with other land use classification systems. Aerial photographs serve as the primary basis for identifying existing land use, augmented by field surveys as appropriate. The first regional land use inventory was prepared by SEWRPC in 1963 and has been updated periodically following the preparation of new aerial photography, with the most recent inventory prepared using aerial photographs taken in spring of 2000. As part of the year 2000 land use inventory,

the delineation of existing land use was referenced to real property boundary information not available in prior inventories. This change increases the precision of the land use inventory and makes it more useable to public agencies and private interests. As a result of this change, however, year 2000 land use inventory data are not strictly comparable with data from the 1990 and prior inventories. The data remains suitable for denoting general land use trends. The results of the year 2000 land use inventory are presented along with the results of prior land use inventories in Table VII-4 and Map II-1.

Table VII-4
CHANGE IN LAND USE ACRES IN WAUKESHA COUNTY: 1963-2000

Land Use Category	1963	1970	1980	1990	2000
Urban					
Residential	28,148	35,476	50,745	59,247	75,221
Commercial	1,197	1,831	2,754	3,827	5,351
Industrial	924	1,758	2,747	3,802	5,525
Transportation, Communication, and Utilities	16,079	18,545	21,867	22,805	30,001
Governmental and Institutional	2,550	3,587	4,037	4,215	4,887
Recreational	3,311	4,605	5,756	6,465	8,253
Unused Urban Land	8,509	8,516	8,017	7,025	7,806
Subtotal Urban	**60,718**	**74,318**	**95,923**	**107,386**	**137,044**
Non-urban					
Natural Areas					
Surface Water	16,076	16,461	16,753	16,878	16,891
Wetlands	52,588	51,660	51,233	51,978	52,661
Woodlands	31,181	30,818	29,472	29,584	28,931
Subtotal Natural Areas	**99,845**	**98,939**	**97,458**	**98,440**	**98,483**
Agricultural	200,241	184,390	161,558	142,428	112,611
Unused Rural and Other Open Lands	10,786	13,943	16,651	23,336	23,397
Subtotal Nonurban	**310,872**	**297,272**	**275,667**	**264,204**	**234,491**
Total	371,590	371,590	371,590	371,590	371,535

Source: SEWRPC

Residential development was responsible for the most significant land use change within Waukesha County since 1963. Over 47,000 acres of land was converted to residential use as the County gained over 100,000 households between 1960 and 2000. Agricultural lands experienced the greatest loss of any land use within the County between 1963 and 2000. Nearly 88,000 acres of agricultural lands were converted to other land uses.

Urban Land Uses

In 1990, urban land uses, consisting of residential, commercial, industrial, recreational, governmental, institutional, transportation, communication, and utility uses, encompassed about 107,386 acres, equivalent to 160 square miles, or about 28 percent of the County. Residential land comprised the largest urban land use category in the County in 1990, encompassing about 59,247 acres, or about 55 percent of all urban land and 16 percent of the total area of the County. Commercial and industrial lands each encompassed about 7,629 acres, about seven (7) percent of all urban land use and about two (2) percent of the total County area. Land used for governmental and institutional purposes encompassed about 4,200 acres, or about four (4) percent of all urban uses and about one (1) percent of the total area of the County. Lands devoted to intensive recreational uses encompassed about 6,500 acres, some six (6) percent of all urban uses and about two (2) percent of the County. Lands devoted to transportation, communication, and utility uses, including areas used for streets and highways, railways, airports, and utility and communication facilities, totaled about 22,900 acres, or about 22 percent of all urban uses and about six (6) percent of the total County area.

Between 1963 and 1990, urban land uses in the County increased from about 60,718 acres to about 107,386 acres, an increase of about 46,668 acres or about 77 percent. Each of the major urban land use categories increased significantly during this time. The residential land area approximately doubled, the commercial land area approximately tripled, and the industrial land area quadrupled. The transportation, governmental-institutional, and recreational land use categories also increased significantly, by 42 percent, 65 percent, and 86 percent, respectively.

Existing urban land use for cities, villages, and towns in the County is summarized in Table VII-5.

Nonurban Land Uses

In 1990, nonurban lands, consisting of agricultural lands, wetlands, woodlands, and surface water, quarries, landfill sites, and other open lands, comprised about 264,204 acres, the equivalent of 421 square miles, or about 72 percent of the total area of the County. Agricultural land comprised the largest nonurban land use category, encompassing about 142,400 acres, or about 53 percent of all nonurban land and 38 percent of the total area of the County. Wetlands, woodlands, and surface water, in combination, encompassed about 98,400 acres, representing about 37 percent of all nonurban lands and about 27 percent of the County. Quarries and landfill sites, taken together, encompassed about 4,000 acres, representing about two (2) percent of all nonurban lands and about one (1) percent of the total area of the County. Unused lands, consisting of open lands other than wetlands and woodlands and agricultural lands, encompassed about 23,300 acres, representing about nine (9) percent of all nonurban lands and about seven (7) percent of the total area of the County. Unused lands include extractive uses and landfills.

Nonurban lands in the County decreased by about 46,668 acres, or about 15 percent between 1963 and 1990. Most of this loss resulted from the conversion of agricultural land to urban use. Modest losses in wetlands and woodlands also occurred during this time. The wetland acreage declined by about 600 acres, or about one (1) percent, between 1963 and 1990, while the woodland acreage declined by about 1,600 acres, or five (5) percent.

It should be noted that the change in wetland and woodland acreages between 1963 and 1990, like the change in all land use categories, represents the net change within the County. In this respect, the change in the wetland acreage reported between two inventory years is the net result of decreases in certain areas of the County, due, for example, to drainage or filling activity, and increases in other areas, due, for example, to the abandonment of agricultural drainage systems or to planned wetland restoration efforts. Similarly, the change in the woodland acreage between two inventory years reflects the net effect of the clearing of woodlands in certain areas and the reforestation of other areas.

Nonurban land use for cities, villages, and towns in the County is summarized in Table VII-5.

Table VII-5

LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 1990

Community	Urban													
	Residential		Commercial		Industrial		Transportation, Communication, and Utilities		Governmental and Institutional		Recreational		Subtotal	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	23,186	27.2	2,163	2.5	1,739	2.0	7,955	9.3	2,087	2.5	2,078	2.4	39,208	45.9
Brookfield	7,533	44.5	894	5.3	230	1.4	2,144	12.6	646	3.8	398	2.3	11,845	69.9
Delafield	1,256	18.3	71	1.0	33	0.5	536	7.8	122	1.8	235	3.4	2,253	32.8
Milwaukee	0	0.0	0	0.0	0	0.0	1	1.9	0	0.0	0	0.0	1	1.9
Muskego	3,324	14.4	143	0.6	87	0.4	1,002	4.4	193	0.8	406	1.8	5,155	22.4
New Berlin	6,227	26.4	364	1.5	586	2.5	2,061	8.7	422	1.8	384	1.6	10,044	42.6
Oconomowoc	1,049	26.3	135	3.4	83	2.1	428	10.7	153	3.8	280	7.0	2,128	53.3
Waukesha	3,797	34.8	556	5.1	720	6.6	1,783	16.3	551	5.0	375	3.4	7,782	71.2
Villages (Subtotal)	11,245	24.1	873	1.9	1,335	2.9	4,078	8.7	1,165	2.5	1,378	3.0	20,074	43.1
Big Bend	198	41.4	22	4.6	38	7.9	54	11.4	13	2.7	14	2.9	339	70.9
Butler	135	26.6	40	7.9	111	21.9	86	17.0	11	2.2	24	4.7	407	80.3
Chenequa	480	16.2	0	0.0	0	0.0	129	4.4	3	0.1	80	2.7	699	23.4
Dousman	126	15.5	14	1.7	22	2.7	51	6.3	61	7.6	19	2.3	293	36.1
Eagle	222	32.0	5	0.7	6	0.9	74	10.7	24	3.5	30	4.3	361	52.1
Elm Grove	1,354	64.4	68	3.2	13	0.6	377	17.9	129	6.1	58	2.8	1,999	95.0
Hartland	574	27.6	63	3.0	72	3.5	279	13.4	68	3.3	47	2.3	1,103	53.1
Lac La Belle	91	32.2	0	0.0	0	0.0	18	6.4	0	0.0	24	8.5	133	47.1
Lannon	194	12.2	24	1.5	32	2.0	82	5.1	24	1.5	41	2.6	397	24.9
Menomonee Falls	4,539	21.3	402	1.9	728	3.4	1,674	7.9	331	1.6	787	3.7	8,461	39.8
Merton	270	18.7	7	0.5	13	0.9	76	5.3	25	1.7	10	0.7	401	27.8
Mukwonago	431	26.3	65	4.0	35	2.1	196	12.0	124	7.6	54	3.3	905	55.3
Nashotah	186	17.0	9	0.8	10	0.9	123	11.2	5	0.5	4	0.4	337	30.8
North Prairie	332	38.6	18	2.1	25	2.9	84	9.7	11	1.3	11	1.3	481	55.9
Oconomowoc Lake	375	18.9	30	1.5	2	0.1	92	4.6	3	0.2	2	0.1	504	25.4
Pewaukee	427	15.4	51	1.8	85	3.1	288	10.4	203	7.3	37	1.3	1,091	39.3
Sussex	569	22.9	45	1.8	134	5.4	255	10.3	47	1.9	104	4.2	1,154	46.5
Wales	738	51.0	10	0.7	9	0.6	137	9.5	83	5.7	32	2.2	1,009	69.7
Towns (Subtotal)	26,794	11.2	804	0.3	732	0.3	10,831	4.5	963	0.4	3,009	1.3	43,133	18.0
Brookfield	932	23.3	221	5.5	94	2.4	444	11.1	56	1.4	30	0.8	1,777	44.5
Delafield	1,944	14.0	15	0.1	4	0.0	661	4.8	100	0.7	335	2.4	3,059	22.1
Eagle	1,021	4.5	18	0.1	12	0.1	569	2.5	9	0.0	200	0.9	1,829	8.1
Genesee	2,919	14.1	38	0.2	51	0.2	780	3.8	50	0.2	157	0.8	3,995	19.3
Lisbon	2,511	12.1	25	0.1	38	0.2	906	4.4	132	0.6	90	0.4	3,702	17.8
Merton	2,066	11.2	42	0.2	25	0.1	813	4.4	156	0.9	214	1.2	3,309	18.0
Mukwonago	2,198	10.0	35	0.2	6	0.0	771	3.5	34	0.1	371	1.7	3,415	15.5
Oconomowoc	1,879	8.8	57	0.2	37	0.2	852	4.0	52	0.2	296	1.4	3,173	14.8
Ottawa	1,608	7.0	8	0.0	11	0.0	495	2.2	38	0.2	326	1.4	2,486	10.8
Pewaukee	2,526	15.5	215	1.3	378	2.3	1,810	11.1	126	0.8	261	1.6	5,316	32.6
Summit	1,503	8.1	25	0.1	23	0.1	847	4.6	84	0.5	190	1.0	2,672	14.4
Vernon	2,827	12.9	54	0.3	20	0.1	1,106	5.0	69	0.3	269	1.2	4,345	19.8
Waukesha	2,864	17.4	51	0.3	33	0.2	780	4.8	57	0.4	270	1.6	4,055	24.7
Waukesha County	61,225	16.5	3,840	1.0	3,806	1.0	22,864	6.2	4,215	1.1	6,465	1.8	102,415	27.6

Table VII-5 (Continued)

LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 1990

Community	Nonurban													
	Agricultural		Wetlands		Woodlands		Surface Water		Other[a]		Subtotal		Total Area	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	20,516	24.0	8,434	9.9	3,942	4.6	4,523	5.3	8,760	10.3	46,175	54.1	85,383	100.0
Brookfield	852	5.0	1,976	11.7	416	2.4	129	0.8	1,722	10.2	5,095	30.1	16,940	100.0
Delafield	1,804	26.2	265	3.9	902	13.1	997	14.5	651	9.5	4,619	67.2	6,872	100.0
Milwaukee	42	79.2	6	11.3	4	7.5	0	0.0	0	0.0	52	98.1	53	100.0
Muskego	9,596	41.7	2,806	12.2	1,140	4.9	2,802	12.2	1,519	6.6	17,863	77.6	23,018	100.0
New Berlin	6,817	28.9	2,323	9.8	1,283	5.4	128	0.6	2,997	12.7	13,548	57.4	23,592	100.0
Oconomowoc	805	20.2	277	6.9	90	2.3	369	9.2	322	8.1	1,863	46.7	3,991	100.0
Waukesha	600	5.5	781	7.2	107	1.0	98	0.9	1,549	14.2	3,135	28.8	10,917	100.0
Villages (Subtotal)	12,817	27.5	4,478	9.6	2,510	5.4	2,045	4.4	4,663	10.0	26,513	56.9	46,560	100.0
Big Bend	34	7.1	35	7.3	2	0.4	18	3.8	50	10.5	139	29.1	478	100.0
Butler	0	0.0	21	4.1	5	1.0	3	0.6	71	14.0	100	19.7	507	100.0
Chenequa	586	19.8	36	1.2	748	25.2	739	24.9	162	5.5	2,291	76.6	2,963	100.0
Dousman	283	34.9	122	15.0	56	7.0	32	3.9	25	3.1	518	63.9	811	100.0
Eagle	292	42.1	1	0.1	3	0.4	0	0.0	37	5.3	333	47.9	694	100.0
Elm Grove	0	0.0	37	1.8	8	0.4	8	0.4	51	2.4	104	5.0	2,103	100.0
Hartland	203	9.8	195	9.4	125	6.0	4	0.2	447	21.5	974	46.9	2,077	100.0
Lac La Belle	35	12.4	74	26.1	6	2.1	0	0.0	35	12.3	150	52.9	283	100.0
Lannon	461	28.9	187	11.7	71	4.5	5	0.3	473	29.7	1,197	75.1	1,594	100.0
Menomonee Falls	7,255	34.0	2,865	13.4	784	3.7	91	0.4	1,863	8.7	12,858	60.2	21,319	100.0
Merton	886	61.4	42	2.9	67	4.6	17	1.2	31	2.1	1,043	72.2	1,444	100.0
Mukwonago	284	17.4	124	7.6	98	6.0	43	2.6	182	11.1	731	44.7	1,636	100.0
Nashotah	420	38.3	43	3.9	98	8.9	55	5.0	143	13.1	759	69.2	1,096	100.0
North Prairie	186	21.6	16	1.9	21	2.4	0	0.0	157	18.2	380	44.1	861	100.0
Oconomowoc Lake	221	11.1	126	6.4	211	10.6	813	40.9	111	5.6	1,482	74.6	1,986	100.0
Pewaukee	806	29.0	351	12.6	53	1.9	214	7.7	263	9.5	1,687	60.7	2,778	100.0
Sussex	740	29.8	176	7.1	64	2.6	2	0.1	346	13.9	1,328	53.5	2,482	100.0
Wales	105	7.3	27	1.8	90	6.2	1	0.1	216	14.9	439	30.3	1,448	100.0
Towns (Subtotal)	109,096	45.5	39,066	16.3	23,132	9.7	10,310	4.3	14,884	6.2	196,488	82.0	239,648	100.0
Brookfield	322	8.1	1,206	30.1	56	1.4	60	1.5	576	14.4	2,220	55.5	3,997	100.0
Delafield	5,235	37.8	1,023	7.4	1,982	14.3	1,378	10.0	1,165	8.4	10,783	77.9	13,842	100.0
Eagle	11,053	49.1	4,243	18.9	4,073	18.1	322	1.4	982	4.4	20,673	91.9	22,502	100.0
Genesee	9,065	43.6	3,272	15.8	1,832	8.8	106	0.5	2,499	12.0	16,774	80.7	20,769	100.0
Lisbon	11,287	54.4	2,612	12.6	1,138	5.5	76	0.4	1,922	9.3	17,035	82.2	20,737	100.0
Merton	9,134	49.6	1,228	6.7	1,966	10.7	1,611	8.8	1,142	6.2	15,061	82.0	18,397	100.0
Mukwonago	10,793	49.1	4,048	18.4	2,355	10.7	672	3.1	694	3.2	18,562	84.5	21,977	100.0
Oconomowoc	11,909	55.6	2,890	13.5	656	3.0	2,225	10.4	576	2.7	18,256	85.2	21,429	100.0
Ottawa	9,422	41.3	5,075	22.2	4,355	19.1	471	2.1	1,032	4.5	20,355	89.2	22,841	100.0
Pewaukee	5,501	33.7	1,990	12.2	687	4.2	1,040	6.4	1,768	10.9	10,986	67.4	16,302	100.0
Summit	8,193	44.4	3,721	20.1	1,378	7.5	1,838	10.0	658	3.6	15,788	85.6	18,460	100.0
Vernon	10,613	48.3	4,495	20.5	1,481	6.7	395	1.8	643	2.9	17,627	80.2	21,972	100.0
Waukesha	6,589	40.1	3,263	19.9	1,173	7.1	116	0.7	1,227	7.5	12,368	75.3	16,423	100.0
Waukesha County	142,429	38.3	51,978	14.0	29,584	8.0	16,878	4.5	28,307	7.6	269,176	72.4	371,591	100.0

Note: Data for urban land uses includes related off-street parking areas of more than 10 spaces.

[a]Includes extractive, landfill and unused land.

Source: SEWRPC

EXISTING LAND USE INVENTORY

While the previous section of this chapter provides an overview of the historic growth and trends of Waukesha County, this section provides a more detailed description and analysis of the existing land use of the County. For the purposes of this Plan, existing land use is based upon year 2000 data, the most recent detailed inventory of land use completed by SEWRPC. The pattern of land use that existed within the County in 2000, including formal land use amendments approved by Waukesha County through year 2008, is shown on Map VII-1.

Urban Land Uses

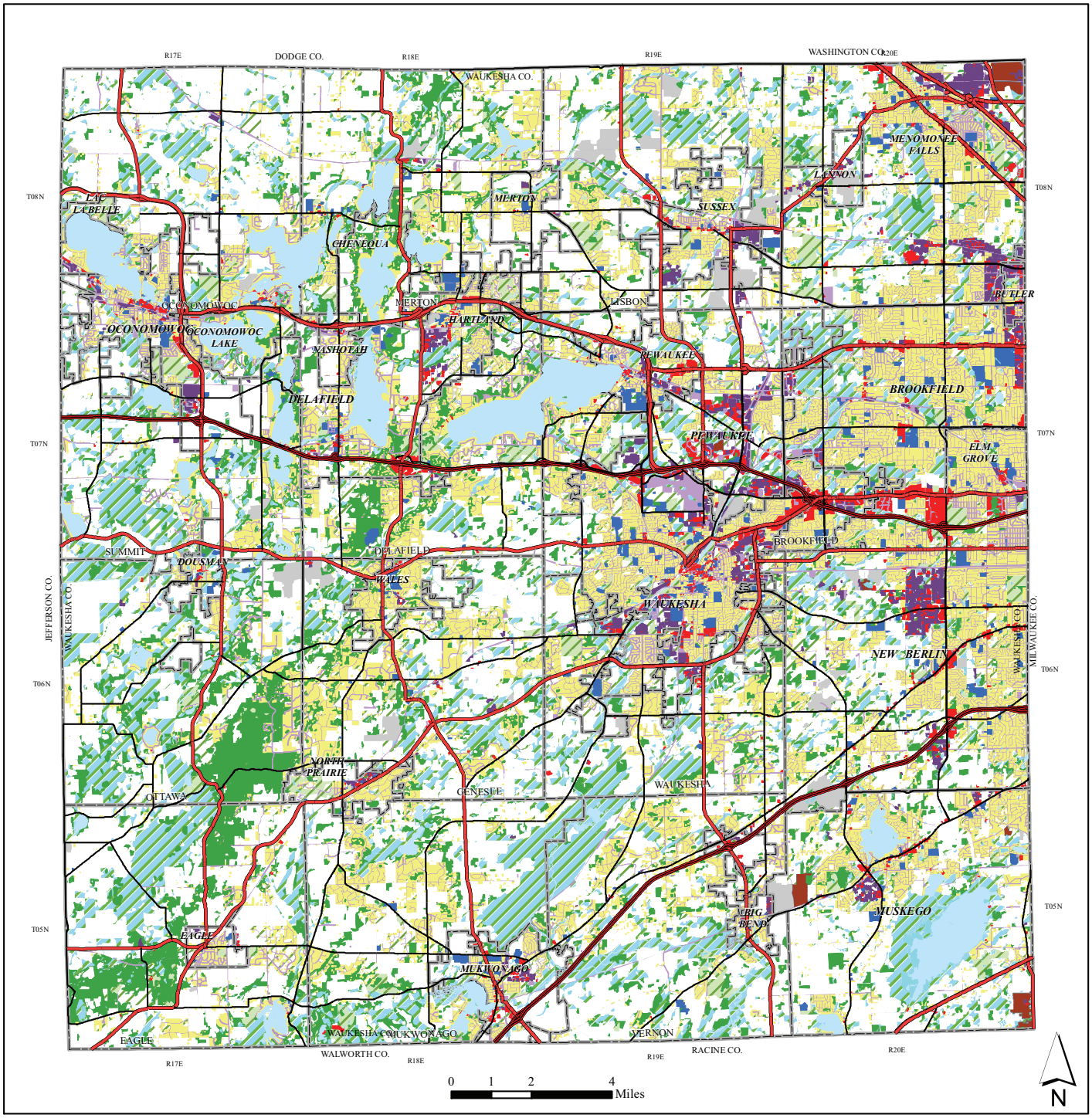
As indicated in Table VII-6, urban land uses, consisting of residential, commercial, industrial, recreational, governmental, institutional, and transportation, communication, and utility uses, encompassed about 130,425 acres, equivalent to about 35 percent of the County, in 2000. Residential land comprised the largest urban land use category in the County in 2000, encompassing about 76,075 acres, or about 59 percent of all urban land and 20 percent of the total area of the County. Commercial and industrial lands each encompassed about 5,500 acres, about four (4) percent of all urban land use and about two (2) percent of the total County area. Land used for governmental and institutional purposes encompassed about 4,900 acres, or about four (4) percent of all urban uses and about one (1) percent of the total area of the County. Lands devoted to intensive recreational uses encompassed about 8,416 acres, or about six (6) percent of all urban uses and about two (2) percent of the County. Lands devoted to transportation, communication, and utility uses, including areas used for streets and highways, railways, airports, and utility and communication facilities, totaled about 30,045 acres, or about 26 percent of all urban uses and about eight (8) percent of the total County area.

Nonurban Land Uses

Nonurban lands, consisting of agricultural lands, wetlands, woodlands, and surface water, quarries, landfill sites, and other open lands, comprised about 241,112 acres, the equivalent of about 65 percent of the total area of the County, in 2000. Agricultural land comprised the largest nonurban land use category, encompassing about 112,620 acres, or about 47 percent of all nonurban land and 30 percent of the total area of the County. Wetlands, woodlands, and surface water, in combination, encompassed about 98,400 acres, representing about 41 percent of all nonurban lands and about 27 percent of the County. Other lands consisting of quarries, landfill sites, and unused lands, consisting of open lands other than wetlands and woodlands and agricultural lands, encompassed about 30,017 acres, representing about 12 percent of all nonurban lands and about 8 percent of the total area of the County.

Map VII-1

EXISTING LAND USE IN WAUKESHA COUNTY: 2000



Legend

- *Interstate*
- *US*
- *State*
- *County*
- *Civil Division Boundary*
- Landfills & Dumps
- Transportation, Communication & Utilities
- Commercial
- Government & Institutional
- Residential
- Industrial
- Extractive
- Woodlands
- Water
- Wetlands
- Recreational
- Unused or Open Lands
- Agricultural

Source: SEWRPC
Civil Divisions as of 11/30/07
Prepared by Waukesha Co.
Dept. of Parks and Land Use

Table VII-6
Existing Land Use in Waukesha County by Municipality: 2000

Community	Urban													
	Residential		Commercial		Industrial		Transportation, Communication and Utilities		Governmental and Institutional		Recreational		Subtotal	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	28,968	27.4	3,343	3.2	3,097	2.9	13,007	12.3	2,644	2.5	2,721	2.6	53,781	50.9
Brookfield	7,760	44.5	1,082	6.2	322	1.8	2,768	15.9	689	3.9	540	3.1	13,160	75.4
Delafield	1,655	23.6	172	2.4	32	0.5	714	10.2	182	2.6	223	3.2	2,978	42.5
Milwaukee	0	0.0	0	0.0	32	65.1	3	7.0	0	0.0	0	0.0	36	72.1
Muskego	4,121	17.9	168	0.7	140	0.6	1,521	6.6	222	1.0	459	2.0	6,632	28.8
New Berlin	6,863	29.1	505	2.1	764	3.2	2,681	11.4	473	2.0	494	2.1	11,779	49.9
Oconomowoc	1,209	21.2	180	3.1	239	4.2	693	12.1	175	3.1	274	4.8	2,769	48.5
Pewaukee	2,826	18.9	467	3.1	647	4.3	1,921	12.9	146	1.0	232	1.6	6,239	41.8
Waukesha	4,535	32.5	770	5.5	921	6.6	2,705	19.4	756	5.4	500	3.6	10,188	73.1
Villages (Subtotal)	13,805	26.3	1,337	2.5	2,002	3.8	5,947	11.3	1,327	2.5	2,193	4.2	26,612	50.7
Big Bend	223	16.4	60	4.4	68	5.0	159	11.7	14	1.0	22	1.6	546	40.3
Butler	123	24.2	49	9.6	155	30.4	108	21.2	10	2.0	22	4.3	467	91.7
Chenequa	470	15.9	0	0.0	0	0.0	135	4.6	2	0.1	82	2.8	688	23.3
Dousman	161	17.2	14	1.5	25	2.6	71	7.6	74	7.9	21	2.2	365	39.2
Eagle	289	37.2	5	0.6	23	3.0	110	14.2	30	3.9	31	4.1	488	62.9
Elm Grove	1,309	62.1	60	2.8	14	0.7	441	20.9	126	6.0	57	2.7	2,007	95.3
Hartland	766	26.4	118	4.1	131	4.5	466	16.1	115	4.0	232	8.0	1,827	63.0
Lac La Belle	120	28.5	0	0.0	0	0.0	15	3.5	0	0.0	142	33.5	277	65.5
Lannon	201	12.6	35	2.2	86	5.4	94	5.9	23	1.5	40	2.5	479	30.1
Menomonee Falls	5,250	24.6	596	2.8	969	4.5	2,259	10.6	344	1.6	991	4.6	10,409	48.8
Merton	555	35.3	6	0.4	18	1.1	114	7.2	39	2.5	13	0.8	744	47.4
Mukwonago	599	18.8	114	3.6	69	2.2	461	14.4	136	4.3	89	2.8	1,469	46.0
Nashotah	349	32.0	10	0.9	12	1.1	155	14.2	6	0.5	11	1.0	543	49.8
North Prairie	481	31.7	22	1.4	39	2.5	160	10.6	11	0.7	225	14.8	938	61.7
Oconomowoc Lake	448	22.0	24	1.2	6	0.3	117	5.7	2	0.1	3	0.1	599	29.4
Pewaukee	644	22.3	125	4.3	83	2.9	437	15.1	213	7.4	41	1.4	1,543	53.5
Sussex	1,008	26.6	84	2.2	296	7.8	467	12.3	83	2.2	145	3.8	2,083	55.0
Wales	809	52.8	16	1.1	10	0.7	178	11.7	99	6.5	27	1.7	1,140	74.4
Towns (Subtotal)	33,301	15.6	763	0.4	447	0.2	11,091	5.2	929	0.4	3,502	1.6	50,033	23.5
Brookfield	1,049	29.7	309	8.7	119	3.4	512	14.5	69	1.9	51	1.4	2,110	59.7
Delafield	3,034	22.8	28	0.2	5	0.0	974	7.3	108	0.8	360	2.7	4,508	33.9
Eagle	1,757	7.8	21	0.1	19	0.1	776	3.5	8	0.0	250	1.1	2,832	12.6
Genesee	4,326	21.2	58	0.3	53	0.3	1,071	5.2	57	0.3	197	1.0	5,761	28.2
Lisbon	3,376	17.5	59	0.3	73	0.4	1,181	6.1	135	0.7	512	2.7	5,335	27.6
Merton	3,271	18.2	40	0.2	25	0.1	1,000	5.6	209	1.2	324	1.8	4,869	27.0
Mukwonago	3,156	15.5	37	0.2	5	0.0	839	4.1	39	0.2	385	1.9	4,460	21.9
Oconomowoc	2,266	10.8	60	0.3	59	0.3	1,010	4.8	53	0.3	199	1.0	3,647	17.4
Ottawa	2,277	10.1	9	0.0	14	0.1	612	2.7	35	0.2	390	1.7	3,337	14.9
Summit	2,161	12.7	24	0.1	19	0.1	896	5.3	83	0.5	189	1.1	3,373	19.8
Vernon	3,306	15.7	39	0.2	17	0.1	1,265	6.0	76	0.4	383	1.8	5,085	24.2
Waukesha	3,323	22.8	79	0.5	39	0.3	956	6.6	57	0.4	261	1.8	4,715	32.3
Waukesha County	76,075	20.5	5,443	1.5	5,546	1.5	30,045	8.1	4,900	1.3	8,416	2.3	130,425	35.1

Table VII-6 (Continued)
Existing Land Use in Waukesha County by Municipality: 2000

Community	Nonurban													
	Agricultural		Wetlands		Woodlands		Surface Water		Other		Subtotal		Total Area	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	20,316	19.2	11,330	10.7	4,266	4.0	5,677	5.4	10,336	9.8	51,924	49.1	105,704	100.0
Brookfield	405	2.3	2,291	13.1	312	1.8	154	0.9	1,131	6.5	4,293	24.6	17,453	100.0
Delafield	1,277	18.2	257	3.7	903	12.9	997	14.2	599	8.5	4,034	57.5	7,012	100.0
Milwaukee	0	0.0	6	12.0	1	1.6	3	5.3	4	9.0	14	27.9	50	100.0
Muskego	7,974	34.6	2,922	12.7	1,008	4.4	2,851	12.4	1,633	7.1	16,388	71.2	23,020	100.0
New Berlin	5,124	21.7	2,301	9.8	1,154	4.9	112	0.5	3,124	13.2	11,814	50.1	23,594	100.0
Oconomowoc	1,424	24.9	461	8.1	122	2.1	384	6.7	548	9.6	2,939	51.5	5,708	100.0
Pewaukee	3,552	23.8	1,925	12.9	601	4.0	1,052	7.0	1,567	10.5	8,697	58.2	14,936	100.0
Waukesha	560	4.0	1,167	8.4	165	1.2	124	0.9	1,729	12.4	3,745	26.9	13,933	100.0
Villages (Subtotal)	10,483	20.0	5,105	9.7	2,647	5.0	2,147	4.1	5,486	10.5	25,869	49.3	52,480	100.0
Big Bend	653	48.2	57	4.2	22	1.6	21	1.6	56	4.2	809	59.7	1,355	100.0
Butler	0	0.0	21	4.2	4	0.8	2	0.5	14	2.8	42	8.3	509	100.0
Chenequa	521	17.6	38	1.3	771	26.1	741	25.1	192	6.5	2,263	76.7	2,952	100.0
Dousman	326	35.0	133	14.3	50	5.3	28	3.0	31	3.3	568	60.8	933	100.0
Eagle	186	23.9	1	0.2	4	0.5	0	0.0	96	12.4	287	37.1	775	100.0
Elm Grove	0	0.0	43	2.0	12	0.6	7	0.3	38	1.8	99	4.7	2,106	100.0
Hartland	51	1.7	229	7.9	162	5.6	8	0.3	622	21.5	1,071	37.0	2,899	100.0
Lac La Belle	30	7.2	84	19.9	6	1.5	2	0.5	23	5.4	146	34.5	422	100.0
Lannon	397	24.9	202	12.7	63	4.0	5	0.3	447	28.1	1,114	69.9	1,593	100.0
Menomonee Falls	5,151	24.2	2,950	13.8	778	3.6	131	0.6	1,906	8.9	10,916	51.2	21,325	100.0
Merton	639	40.7	36	2.3	92	5.8	17	1.1	43	2.8	827	52.6	1,571	100.0
Mukwonago	760	23.8	399	12.5	100	3.1	87	2.7	376	11.8	1,722	54.0	3,190	100.0
Nashotah	258	23.6	43	3.9	91	8.3	56	5.1	101	9.2	547	50.2	1,091	100.0
North Prairie	202	13.3	19	1.2	66	4.4	9	0.6	285	18.8	581	38.3	1,519	100.0
Oconomowoc Lake	119	5.8	154	7.6	206	10.1	815	39.9	147	7.2	1,440	70.6	2,040	100.0
Pewaukee	307	10.6	406	14.1	37	1.3	204	7.1	388	13.4	1,341	46.5	2,884	100.0
Sussex	757	20.0	266	7.0	112	3.0	16	0.4	551	14.6	1,702	45.0	3,785	100.0
Wales	126	8.2	23	1.5	72	4.7	1	0.1	170	11.1	392	25.6	1,532	100.0
Towns (Subtotal)	81,822	38.4	36,216	17.0	22,019	10.3	9,068	4.3	14,195	6.7	163,319	76.5	213,352	100.0
Brookfield	169	4.8	911	25.8	39	1.1	37	1.1	268	7.6	1,426	40.3	3,536	100.0
Delafield	3,235	24.4	1,039	7.8	2,046	15.4	1,387	10.4	1,064	8.0	8,772	66.1	13,280	100.0
Eagle	9,463	42.2	4,194	18.7	4,173	18.6	313	1.4	1,426	6.4	19,570	87.4	22,402	100.0
Genesee	7,226	35.4	3,298	16.1	1,752	8.6	112	0.5	2,287	11.2	14,675	71.8	20,436	100.0
Lisbon	8,162	42.3	2,603	13.5	944	4.9	82	0.4	2,175	11.3	13,966	72.4	19,301	100.0
Merton	6,896	38.3	1,265	7.0	1,987	11.0	1,613	9.0	1,381	7.7	13,143	73.0	18,013	100.0
Mukwonago	8,288	40.7	3,879	19.0	2,185	10.7	635	3.1	931	4.6	15,918	78.1	20,378	100.0
Oconomowoc	10,685	51.1	2,880	13.8	691	3.3	2,199	10.5	828	4.0	17,284	82.6	20,931	100.0
Ottawa	8,058	35.9	5,028	22.4	4,516	20.1	496	2.2	1,011	4.5	19,110	85.1	22,447	100.0
Summit	6,025	35.4	3,642	21.4	1,315	7.7	1,780	10.5	891	5.2	13,653	80.2	17,026	100.0
Vernon	8,855	42.1	4,474	21.3	1,340	6.4	336	1.6	928	4.4	15,934	75.8	21,019	100.0
Waukesha	4,758	32.6	3,001	20.6	1,030	7.1	76	0.5	1,002	6.9	9,868	67.7	14,584	100.0
Waukesha County	112,620	30.3	52,651	14.2	28,932	7.8	16,892	4.5	30,017	8.1	241,112	64.9	371,537	100.0

Note: In 1999, the Town of Pewaukee incorporated as a City.
Source: SEWRPC

RECOMMENDED LAND USE PLAN

The year 2035 county land use plan was developed to meet the established planning objectives and standards presented in Chapter 2 of this Plan insofar as practicable, using the information and plan design concepts set forth in the previous sections of this Chapter. The plan was designed to accommodate the intermediate population, household and employment projections for the County. Map VII –2 presents the recommended land use plan for Waukesha County for the year 2035. The map shows urban areas in the County as envisioned under the plan including suburban areas, which are neither truly urban or rural in character; primary environmental corridors—i.e., areas containing concentrations of the best remaining elements of the natural resource base—which are recommended for preservation in essentially natural open uses; and rural areas consisting of prime agricultural land, other agricultural land, rural-density residential land, and other open lands. The various components of the land use plan, as depicted on Map VII-2, are described in this section. Table VII-8 presents the planned land uses by municipality for year 2035.

Basic Definitions

Urban Land and Urban Development

For purposes of the 2035 recommended land use plan, "urban land" or "urban development" is defined as intensively developed areas devoted to urban-density residential, commercial, industrial, governmental and institutional, recreational, mixed use, transportation and utility and communication uses, that are serviced by public infrastructure such as sewer, water and public transit.

"Commercial and/or Office Park" development is defined as land devoted to retail, office, service activities, general business activities, and/or research and development and related off-street parking.

"Governmental and Institutional" development is defined as areas for government and public and private institutional buildings, facilities and grounds such as schools, churches, libraries, cultural facilities, nonprofit charitable organizations, hospitals, and police and fire stations, that have a direct bearing on the quality of life and on public safety.

"Highway and Railway Rights-of-Way" are federal, state and county highways, railroad rights-of-way, and parking associated with transportation systems.

"Industrial" development is defined as land devoted to manufacturing, wholesaling, storage activities, attendant offices and related off-street parking and may include office uses or take the form of a business park.

"Mixed Use" development is defined as development that may contain residential and could contain a combination of public, institutional, office, retail, service, light industrial, research and development, and/or other commercial uses, including off street parking and may take the form of a business park.

"Recreational" land use is defined as area devoted to public and private general use recreation including golf, baseball, swimming, tennis, ice skating. In addition, recreational lands include natural resource-based education and self-actualized recreational activities such as hiking, camping, picnicking, skiing and horseback riding.

"Suburban Density" residential development is defined as residential development at a densities ranging from 1.5 to 4.9 acres of area per dwelling unit. Such development is neither truly urban nor rural in character. Development at these densities generally precludes the provision of centralized sewer and water supply service and other urban amenities. While such development occurs and accordingly must be accommodated in the land use plan, it is only recommended while maintaining an overall residential density of 5 acres in "rural development" areas. "Suburban I Density" is residential development at 1.5 to 2.9 acres per dwelling unit. "Suburban II Density" is residential development at 3.0 to 4.9 acres per dwelling unit.

"Transportation, Communication and Utilities" land uses include areas used for airports, and utility and communication facilities.

"Urban Density Residential Development" includes the following density ranges: "high density" (less than 6,000 square feet of area per dwelling unit); "medium-density" (6,000 – 19,999 square feet of area per dwelling unit); and "low-density" (20,000 square feet to 1.4 acres of area per dwelling unit). The term "urban service area" refers to areas that are intended to accommodate urban development insofar as they are served by basic urban services and facilities, including public sanitary sewer service, public water supply service and a local park, school, and shopping area.

Rural Land and Rural Development

For the purposes of the land use plan, "rural land" or "rural development" is defined as sparsely developed areas where land is used primarily for farming, resource extraction, landfills, very low density residential uses (no more than one dwelling unit per five acres), or other open spaces uses, and includes environmental corridors and isolated natural resource areas.

"Extractive" land use is defined as area devoted primarily to the extraction of sand, gravel and stone and related activities. Mineral extraction is recognized as an interim land use. Future land use following the extraction activity will be subject to future plan amendments consistent with the planning standards and objectives contained in Chapter 2 and adjoining land uses.

"Isolated Natural Resource Areas" are smaller pockets of natural resource elements that are isolated from primary and secondary environmental corridors, and have environmental value in the areas in which they are located and are more specifically defined in SEWRPC Technical Record Vol. 4, No. 2, March 1981.

"Landfill" development is area devoted to licensed waste disposal operations.

"Other Open Lands to be Preserved" are defined as lands usually adjacent to, but outside, identified primary and secondary environmental corridors and isolated natural resource areas, including lands within the 100-year recurrence interval floodplain, open lands within existing County or State park and open space sites, and other lands covered by soils with a high water table, poorly drained soils, or organic soils.

"Prime Agricultural" are lands in agricultural use, unused/open lands, and primary/secondary environmental corridor or isolated natural areas and are within a five (5) square mile contiguous area (including adjacent counties) that meet all of the following criteria: 1) is outside of any planned sewer service area boundary; 2) 75% is agricultural or open/unused land use; 3) 50% is Class I or Class II soils which meet Natural Resources Conservation Service standards; and 4) 75% consists of land ownership parcels of 35 acres or more. A description of the origin of this definition is presented in Chapter 2. Residential development can occur on prime agricultural lands at a density of no more than one dwelling unit per 35 acres.

"Primary Environmental Corridors" are areas of woodlands, wetlands, prairies, surface water, and wildlife habitat that represent a composite of the best remaining elements of the natural resource base and are more specifically defined in SEWRPC Technical Record Vol. 4, No. 2, March 1981.

"Rural Density and Other Agricultural Land" consist primarily of farm and related open lands which do not meet the criteria for classification as prime agricultural lands, but which are nonetheless proposed to be retained in rural land uses. Rural land uses include continuation of existing farming activity; creation of smaller farms, including hobby farms, horse farms, or other specialty farms; and rural density residential development. Rural density residential development occurs at a density of no more than one dwelling unit per five acres (5 to 34.9 acres of area per dwelling unit or equivalent density). When accommodated through conservation subdivision designs, only a fraction of the total site area is intensively developed as homesites, the balance being retained in permanent open space use, achieving the overall rural density.

"Secondary Environmental Corridors" are areas containing a variety of natural resource elements, often remnant resources from primary environmental corridors, which have been developed for intensive urban or agricultural purposes, creating these smaller, yet significant corridors and are more specifically defined in SEWRPC Technical Record Vol. 4, No. 2, March 1981.

Planned Land Use

The pattern of land use recommended under the Comprehensive Development Plan for Waukesha County is shown graphically on Map VII-2 and presented by municipality in Table VII-8. A description of the various urban and nonurban land uses in the County, as envisioned under the plan, follows.

Urban Land Use

The recommended land use plan envisions a substantial increase in urban land use within the County. Urban land uses, consisting of lands devoted to residential, commercial, industrial, governmental and institutional, recreational, landfill highway and railway rights-of-way and transportation, communication, and utility uses, encompassed about 130,425 acres and comprised about 35 percent of the total area of the County in 2000. Under the plan, the area devoted to urban uses would increase to about 190,978 acres, or about 51 percent of the County by the plan design year 2035. Table VII-7 presents the change in residential, commercial and industrial lands from the year 2000 to 2035, including the five (5) year increment.

Recreational Land

Under the recommended land use plan, recreational land use would increase from 8416 acres in 2000 to 15,548 acres by the year 2035.

Residential Land

Under the recommended land use plan, urban residential land use would increase by about 70 percent, from 76,075 acres in 2000 to about 129,346 acres by the year 2035. Under the plan, the proportion of the County devoted to urban residential use would increase from 21 percent to 35 percent.

Of the total planned urban residential land, about 44 percent (57,416 acres) would occur at low density (20,000 square feet to 1.4 acres of area per dwelling unit), 12 percent (14,918 acres) at suburban density I (1.5 to 2.9 acres per dwelling unit), and 13 percent (17,418 acres) at suburban density II (3.0 to 4.9 acres per dwelling unit). About 28 percent (36,275 acres) of the urban residential land would occur at medium density with 6,000 to 19,999 square feet of lot area per dwelling unit. The remaining three (3) percent (3,316 acres) of the additional urban residential land would occur at high density, with less than 6,000 square feet of lot area per dwelling unit.

Commercial, Industrial and Mixed Use

The recommended land use plan also envisions a substantial increase in economic activity areas, as represented by the commercial and industrial uses on Map VII-2. Under the plan, commercial business and office park land uses, which includes areas proposed to be utilized for retail, office, service activities, general business activities, and/or research and development and related off-street parking, individually or in various combinations would increase to about 8,897 acres by the year 2035 from 5,443 acres in 2000. The proportion of the total County area devoted to commercial and office park use would accordingly increase from 1.5 percent to 2.4 percent.

Under the plan, industrial land use would increase by from about 5,546 acres in 2000 to 13,038 by the year 2035. The proportion of the total County area devoted to industrial use would accordingly increase from 1.5 percent to 3.5 percent.

Under the plan, mixed use development, which may contain residential and could contain a combination of public, institutional, office, retail, service, light industrial, research and development, and/or other commercial uses, and may take the form of a business park would represent 1,962 acres, or less than 1 percent of the land

uses, by year 2035. Since this is a new land use category in this comprehensive development plan, no comparison can be made to year 2000 conditions.

Governmental and Institutional

Governmental and institutional lands represent areas for government and public and private institutional buildings, facilities and grounds such as schools, churches, libraries, cultural facilities, nonprofit charitable organizations, hospitals, and police and fire stations, that have a direct bearing on the quality of life and on public safety. The recommended land use plan identifies governmental and institutional lands would increase from 4,900 acres in year 2000 to 8,354 acres in year 2035.

Other Urban Land

Increases in other urban land uses, including governmental and institutional; recreational; highway and railway rights-of-way and transportation, communication, and utility lands, are also envisioned under the recommended land use plan.

Under the plan, the transportation, communication, and utility land use category, which includes areas used for airports, and utility and communication facilities, would represent 12,850 acres, or 3.5 percent of the county wide land use. Of this acreage, 11,754 acres are identified as highway right-of-ways. Map VII-2 depicts the highway right-of-ways separate from other transportation, communication and utility lands.

Table VII-7
INCREMENTAL LAND USE PROJECTIONS FOR SPECIFIC URBAN LAND USES: 2000-2035

Land Use Category	Existing Land Uses: 2000		Future Land Uses: 2035		Change 2000 - 2035		5-Year Increment (acres)
	Acres	Percent of County	Acres	Percent of County	Acres	Percent Change	
Residential	76,075	20.5	129,346	34.8	53,271	70	7,610
Commercial	5,443	1.5	8,897	2.4	3,454	63	493
Industrial	5,546	1.5	13,038	3.5	7,492	135	1,070

Nonurban Land Uses

Under the recommended land use plan, nonurban land uses, consisting of environmentally sensitive lands, other open lands to be preserved, landfills, extractive uses, prime agricultural lands and rural density residential and other agricultural lands, would comprise about 180,567 acres, or about 49 percent of the total area of the County. Owing to the amount of urban development envisioned under the plan, the area dedicated to nonurban land uses would decrease from about 241,112 acres in 2000 to the planned 180,567 acres by the year 2035.

Environmentally Sensitive Lands

The most important remaining elements of the natural resource base are concentrated within areas identified on the recommended land use plan map as primary environmental corridors, secondary environmental corridors, and isolated natural resource areas. The environmental corridor concept and the pattern of existing environmental corridors and isolated natural resource areas in the County are described in Chapter 3 of this Plan.

Primary environmental corridors are linear areas in the landscape that contain concentrations of high-value elements of the natural resource base, including almost all of the best remaining floodlands, woodlands, wetlands, and wildlife habitat areas. By definition, these corridors are at least 400 acres in area, two miles long, and 200 feet

in width. The plan proposes the preservation of all remaining primary environmental corridors in essentially natural, open uses. Under the plan, development within these corridors would be limited to that needed to accommodate required transportation and utility facilities, compatible outdoor recreation facilities, and, on a limited basis, carefully sited rural-density residential use. The plan further envisions that certain adjacent floodlands within planned sewer service areas that are currently in agricultural or other open uses will over time be allowed to revert to a natural condition, becoming part of the environmental corridor network as urbanization of abutting upland areas proceeds. Under the recommended land use plan, the primary environmental corridor area in the County would consist of about 73,024 acres, or about 19 percent of the total land area in the year 2035.

Secondary environmental corridors also contain a variety of resource elements, often being remnants of primary corridors that have been partially converted to intensive urban use or agricultural use. By definition, secondary environmental corridors are at least one mile long and 100 acres in area. The County land use plan recommends that secondary environmental corridors be considered for preservation in natural, open uses or incorporated as drainage ways or local parks within developing areas. Such areas may, at the discretion of local units of government, also accommodate intensive urban uses. Caution must be exercised when considering development within such areas, however, since Federal, State, or local natural resource protection regulations concerning wetlands, floodplains, shorelands, storm water management, and erosion control, among others, may effectively preclude development within lowland portions of such corridor areas. Under the recommended land use plan, the secondary environmental corridor area would consist of about 6,759 acres, or about 2 percent of the total land area in the year 2035.

Isolated natural resource areas consist of smaller pockets of wetlands, woodlands, or surface water that are isolated from the primary and secondary environmental corridors. By definition, isolated natural resource areas are at least five acres in size. The land use plan recommends that these areas be preserved in natural, open uses insofar as is practicable, recognizing that such areas are often well suited for use as public or private parks and open space reservation. Such areas may, at the discretion of local units of government, also accommodate intensive urban uses. Caution must be exercised when considering development within such areas, however, since Federal, State, or local natural resource protection regulations concerning wetlands, floodplains, shorelands, storm water management, and erosion control, among others, may effectively preclude development within lowland portions of isolated natural resource areas. Under the recommended land use plan, the isolated natural resource areas would consist of about 7,688 acres, or about 2 percent of the total land area in the year 2035.

As indicated in Chapter 3 of this Plan, the preservation of these environmentally sensitive areas, particularly the primary environmental corridors, is essential to the maintenance of the overall quality of the environment. Moreover, because these areas are typically unsuitable for urban development, their preservation in natural, open uses can help to prevent such new developmental problems as failing foundations for pavement and structures, wet basements, excessive clear water infiltration into sanitary sewerage systems, and poor drainage.

Extractive

As noted in Chapter 3, Waukesha County contains an abundance of nonmetallic mineral resources, the mining of which may be necessary to provide the sand, gravel, and dimensional stone needed in support of the continued development of the area. This recommended land use plan recognizes that while the County contains an abundance of such resources, efforts to extract sand and gravel or dimensional stone are increasingly constrained by the continued urbanization of the County. The plan seeks to preserve and protect lands for mineral extraction purposes before the lands are developed for urban use or effectively precluded from extractive use by further urban development of adjacent areas.

For this aspect of the plan, input from the Aggregate Producers of Waukesha County, an association of mineral extraction operators in the County was sought. Members of that association provided information regarding the extent of lands now owned or leased for mineral extraction purposes as well as adjacent lands having the potential for mining activity. The areas so identified are shown on the recommended County land use plan (Map VII-2). In incorporating these areas into the land use plan, adjustments were made as necessary to ensure that the proposed activity would not encroach upon environmental corridors or isolated natural resource areas.

The areas identified for extractive use under the recommended plan encompass about 1.3 percent of the total area of the County. It should be recognized in this respect that mineral extractive activity is an interim use, and further, that mining activity at any given site usually proceeds in phases, with early phases undergoing restoration while later phases are being mined. Accordingly, the total area of the County being actively mined at any point in time may be expected to be significantly less than 4,930 acres.

Landfill

The recommended land use plan envisions the continued operation of existing sanitary landfill sites in the Village of Menomonee Falls and City of Muskego with modest expansions of each of the sites. The sanitary landfill sites shown on the land use plan map together encompass about 1,091 acres or less than one (1) percent of the total area of the County.

Other Open Lands to Be Preserved

Other open lands to be preserved under the recommended land use plan are lands usually adjacent to, but outside, identified primary and secondary environmental corridors and isolated natural resource areas, including lands within the 100-year recurrence interval floodplain, open lands within existing County or State park and open space sites, small wetlands less than five acres in size, and other lands covered by soils with a high water table, poorly drained soils, or organic soils. Such lands, which should be considered unsuitable for development of any kind, amount to about 16,018 acres, or about 4.3 percent of the total area of the County under the year 2035 plan conditions.

Prime Agricultural

The recommended land use plan envisions, to the extent still practicable, the preservation of the best remaining prime agricultural lands in agricultural use. As shown on Map VII-2, prime agricultural lands envisioned under the recommended plan are located primarily in the northwest and southwest areas of the County. Under the plan, these areas would be developed at a minimum of a 35-acre density in order to preserve workable farm units and to prevent the intrusion of incompatible urban development. Structures would be limited to those consistent with agricultural use, with residences limited to homes for the farmer, farm laborers, or parents or children of the farmer.

Under the recommended land use plan, prime agricultural lands in the County would amount to about 10,341 acres, or about 2.8 percent of the total area of the County under year 2035 plan conditions. Anticipated losses in prime agricultural lands would occur as a result of planned additional urban development, primarily around expanding urban service areas, and as a result these prime agricultural lands have been reclassified to rural-density residential and other agricultural lands, or to other open lands to be preserved. Such areas would be reclassified because they no longer meet the criteria for designation as prime agricultural lands, owing to the intrusion of residential development that disrupts the extensive blocks of farmland, which once occurred throughout the County.

Rural Density and Other Agricultural Land

Areas shown in white on the recommended land use plan map consist primarily of farm and related open lands which do not meet the criteria for classification as prime agricultural lands, but which are nonetheless proposed to be retained in rural land uses. Rural land uses envisioned under the plan for these areas include continuation of existing farming activity; creation of smaller farms, including hobby farms, horse farms, or other specialty farms; and rural-density residential development.

Rural-density residential development is defined for the purpose of the land use plan as residential development at a gross density of no more than one dwelling unit per five acres of land. It is envisioned that agricultural uses would be encouraged to continue in the rural-residential and other agricultural areas delineated on the plan map to the greatest extent possible, and that rural residential development be allowed to occur in those areas only at such

time as the agricultural uses are discontinued. The determination of permitted gross residential density in such areas could be calculated on an area wide basis and would include in the calculation rural-density residential and other agricultural lands, primary or secondary environmental corridors, isolated natural resource areas, and other open lands to be preserved and major public land holdings, as designated under the recommended plan, and excluding major lakes.

Rural-density residential development could take the form of large lots for single-family dwelling units, with each lot being five acres or more in area, or could use density transfer, planned unit development, or cluster development design techniques to achieve the recommended overall gross residential density. Dwelling units could be concentrated on carefully located groupings of smaller lots, possibly as small as one acre in size, on a portion of a site to be developed, while retaining the balance of the site in agricultural or other open uses. The clusters of residential lots should be sited to preserve the rural appearance of the landscape, to facilitate the provision of sewage disposal and water supply, and to avoid the creation of problems such as poor drainage and foundation failures. This development option could include transfer of development rights between parcels of land throughout the community or adjacent to each other, resulting in higher densities of dwelling units at the development site while maintaining large areas of the landscape in open uses. Many options exist with respect to the use and ownership of the preserved open areas of a rural development, as well as for the design of the portion of the site where dwelling units are to be clustered. These options and the manner in which they are implemented are considered later in this chapter.

Under the recommended land use plan, the rural-density residential and other agricultural land use category would amount to about 44,273 acres, or about 12 percent of the total area of the County under the year 2035 plan conditions. As shown on Map VII-2, lands in this category would be widely distributed in the outlying areas of the County.

Map VII-2
RECOMMENDED LAND USE PLAN FOR WAUKESHA COUNTY: 2035

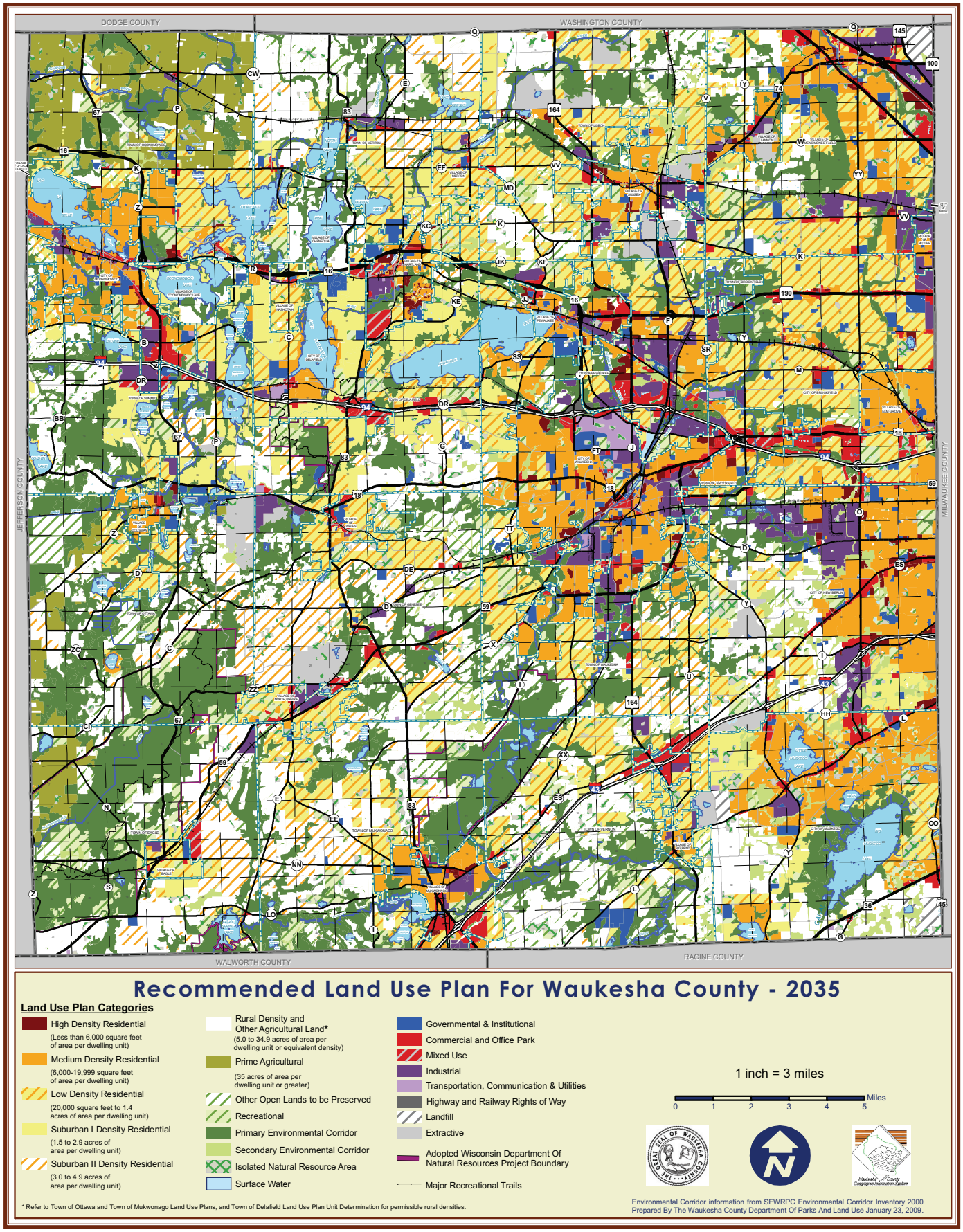


Table VII-8
PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035

Community	Urban									
	Commercial and Office Park		Governmental and Institutional		Highway Rights of Way		Industrial		Landfill	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	4,695	4.3	3,945	3.7	0	0.0	7,040	6.5	629	0.6
Brookfield	1,243	7.0	793	4.5	0	0.0	504	2.9	0	0.0
Delafield	144	2.0	524	7.4	0	0.0	60	0.8	0	0.0
Milwaukee	0	0.0	0	0.0	0	0.0	37	72.5	0	0.0
Muskego	570	2.5	336	1.5	0	0.0	276	1.2	629	2.7
New Berlin	640	2.7	616	2.6	0	0.0	2,138	9.1	0	0.0
Oconomowoc	516	7.3	331	4.7	0	0.0	643	9.1	0	0.0
Pewaukee	623	4.6	273	2.0	0	0.0	1,439	10.6	0	0.0
Waukesha	958	6.0	1,072	6.7	0	0.0	1,943	12.1	0	0.0
Villages (Subtotal)	2,754	4.8	2,203	3.9	0	0.0	3,919	6.9	462	0.8
Big Bend	351	21.2	24	1.5	0	0.0	133	8.0	0	0.0
Butler	13	2.6	6	1.2	0	0.0	251	49.3	0	0.0
Chenequa	0	0.0	5	0.2	0	0.0	0	0.0	0	0.0
Dousman	31	1.9	94	5.8	0	0.0	134	8.3	0	0.0
Eagle	41	4.6	71	8.0	0	0.0	65	7.3	0	0.0
Elm Grove	78	3.7	130	6.2	0	0.0	25	1.2	0	0.0
Hartland	54	1.6	240	7.2	0	0.0	441	5.5	0	0.0
Lac La Belle	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Lannon	76	4.8	36	2.3	0	0.0	161	10.1	0	0.0
Menomonee Falls	878	4.1	797	3.7	0	0.0	1,724	8.1	462	2.2
Merton	14	0.7	54	2.8	0	0.0	32	1.6	0	0.0
Mukwonago	515	12.9	146	3.7	0	0.0	285	7.1	0	0.0
Nashotah	28	2.7	16	1.5	0	0.0	15	1.4	0	0.0
North Prairie	44	2.5	22	1.2	0	0.0	176	10.0	0	0.0
Oconomowoc Lake	35	1.7	51	2.5	0	0.0	5	0.2	0	0.0
Pewaukee	266	9.2	298	10.3	0	0.0	198	6.8	0	0.0
Sussex	226	4.8	106	2.2	0	0.0	524	11.1	0	0.0
Wales	104	5.1	107	5.2	0	0.0	10	0.5	0	0.0
Towns (Subtotal)	1,427	0.7	2,215	1.1	0	0.0	1,800	0.9	0	0.0
Brookfield	340	10.2	74	2.2	0	0.0	98	2.9	0	0.0
Delafield	163	1.2	221	1.7	0	0.0	0	0.0	0	0.0
Eagle	11	0.0	52	0.2	0	0.0	124	0.6	0	0.0
Genesee	181	0.9	100	0.5	0	0.0	504	2.6	0	0.0
Lisbon	170	0.9	247	1.4	0	0.0	318	1.8	0	0.0
Merton	58	0.3	269	1.5	0	0.0	140	0.8	0	0.0
Mukwonago	63	0.3	52	0.3	0	0.0	2	0.0	0	0.0
Oconomowoc	137	0.7	148	0.7	0	0.0	92	0.5	0	0.0
Ottawa	11	0.1	193	0.9	0	0.0	6	0.0	0	0.0
Summit	4	0.0	273	1.7	0	0.0	231	1.4	0	0.0
Vernon	127	0.6	421	2.1	0	0.0	126	0.6	0	0.0
Waukesha	162	1.2	165	1.2	0	0.0	159	1.2	0	0.0
Waukesha County	8,876	2.4	8,351	2.2	0	0.0	12,759	3.4	1,091	0.3

Table VII-8 (Continued)
PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035

Community	Urban									
	Mixed Use		Recreational		Residential		Transportation, Communication and Utilities		Subtotal	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	490	0.5	4,480	4.1	48,803	45.2	5,123	4.7	75,206	69.6
Brookfield	105	0.6	590	3.3	10,276	58.2	818	4.6	14,329	81.2
Delafield	358	5.1	484	6.8	3,886	54.9	419	5.9	5,875	83.1
Milwaukee	0	0.0	0	0.0	0	0.0	0	0.0	37	72.5
Muskego	0	0.0	807	3.5	8,533	37.1	421	1.8	11,573	50.3
New Berlin	0	0.0	1,056	4.5	9,080	38.5	924	3.9	14,454	61.3
Oconomowoc	27	0.4	438	6.2	3,440	48.9	217	3.1	5,613	79.8
Pewaukee	0	0.0	446	3.3	5,609	41.2	1,017	7.5	9,407	69.1
Waukesha	0	0.0	659	4.1	7,979	49.8	1,307	8.2	13,919	86.8
Villages (Subtotal)	719	1.3	2,878	5.1	25,440	44.7	2,336	4.1	40,711	71.5
Big Bend	19	1.1	9	0.5	851	51.4	102	6.2	1,489	90.0
Butler	0	0.0	12	2.4	159	31.2	24	4.7	465	91.4
Chenequa	0	0.0	84	2.8	57	1.9	96	3.2	242	8.1
Dousman	0	0.0	23	1.4	956	59.4	31	1.9	1,269	78.9
Eagle	0	0.0	33	3.7	624	70.1	45	5.1	879	98.8
Elm Grove	10	0.5	62	2.9	1,624	77.1	80	3.8	2,009	95.3
Hartland	348	10.5	225	6.8	1,418	42.7	207	6.2	2,673	80.5
Lac La Belle	0	0.0	108	25.5	201	47.5	0	0.0	309	73.0
Lannon	0	0.0	82	5.1	627	39.3	57	3.6	1,039	65.2
Menomonee Falls	144	0.7	952	4.5	9,133	42.8	769	3.6	14,859	69.7
Merton	48	2.5	106	5.4	1,410	72.3	39	2.0	1,703	87.3
Mukwonago	0	0.0	179	4.5	1,782	44.6	262	6.6	3,169	79.4
Nashotah	4	0.4	40	3.8	622	59.4	98	9.4	823	78.6
North Prairie	105	6.0	263	14.9	984	55.8	49	2.8	1,643	93.2
Oconomowoc Lake	0	0.0	0	0.0	415	20.2	29	1.4	535	26.0
Pewaukee	0	0.0	53	1.8	1,102	38.1	188	6.5	2,105	72.7
Sussex	0	0.0	401	8.5	2,265	47.8	217	4.6	3,739	78.9
Wales	41	2.0	246	12.0	1,210	58.9	43	2.1	1,761	85.7
Towns (Subtotal)	1,082	0.5	8,190	4.0	55,110	26.7	5,391	2.6	75,215	36.4
Brookfield	116	3.5	64	1.9	1,316	39.4	231	6.9	2,239	67.1
Delafield	67	0.5	646	4.9	5,151	38.8	430	3.2	6,678	50.3
Eagle	196	0.9	1,792	8.0	3,349	15.0	471	2.1	5,995	26.9
Genesee	159	0.8	298	1.5	6,672	33.8	475	2.4	8,389	42.5
Lisbon	0	0.0	647	3.6	6,023	33.5	475	2.6	7,880	43.9
Merton	65	0.4	639	3.6	5,892	33.6	384	2.2	7,447	42.4
Mukwonago	21	0.1	918	4.6	5,396	27.1	314	1.6	6,766	33.9
Oconomowoc	29	0.1	556	2.7	3,404	16.8	708	3.5	5,074	25.0
Ottawa	0	0.0	862	4.0	3,129	14.4	290	1.3	4,491	20.6
Summit	187	1.1	363	2.2	4,664	28.6	549	3.4	6,271	38.4
Vernon	151	0.7	909	4.5	4,173	20.5	602	3.0	6,509	32.0
Waukesha	96	0.7	496	3.6	5,941	43.1	462	3.3	7,481	54.2
Waukesha County	2,291	0.6	15,548	4.2	129,353	34.8	12,850	3.5	191,132	51.4

Table VII-8 (Continued)
PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035

Community	Non-Urban							
	Extractive		Other Open Lands to be Preserved		Primary and Secondary Environmental Corridor and Isolated Natural Resource Areas		Prime Agricultural	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	1,019	0.9	1,445	1.3	16,609	15.4	0	0.0
Brookfield	0	0.0	226	1.3	2,736	15.5	0	0.0
Delafield	0	0.0	17	0.2	152	2.1	0	0.0
Milwaukee	0	0.0	0	0.0	11	21.6	0	0.0
Muskego	319	1.4	0	0.0	4,448	19.3	0	0.0
New Berlin	700	3.0	583	2.5	3,993	16.9	0	0.0
Oconomowoc	0	0.0	0	0.0	809	11.5	0	0.0
Pewaukee	0	0.0	434	3.2	2,655	19.5	0	0.0
Waukesha	0	0.0	185	1.2	1,805	11.3	0	0.0
Villages (Subtotal)	452	0.8	697	1.2	9,097	16.0	0	0.0
Big Bend	0	0.0	8	0.5	137	8.3	0	0.0
Butler	0	0.0	0	0.0	42	8.3	0	0.0
Chenequa	0	0.0	0	0.0	967	32.4	0	0.0
Dousman	0	0.0	0	0.0	289	18.0	0	0.0
Eagle	0	0.0	0	0.0	9	1.0	0	0.0
Elm Grove	0	0.0	0	0.0	91	4.3	0	0.0
Hartland	0	0.0	199	6.0	347	10.5	0	0.0
Lac La Belle	0	0.0	0	0.0	112	26.5	0	0.0
Lannon	268	16.8	0	0.0	282	17.7	0	0.0
Menomonee Falls	0	0.0	85	0.4	4,071	19.1	0	0.0
Merton	0	0.0	0	0.0	212	10.9	0	0.0
Mukwonago	0	0.0	1,102	5.5	582	14.6	0	0.0
Nashotah	0	0.0	46	4.4	139	13.3	0	0.0
North Prairie	0	0.0	0	0.0	103	5.8	0	0.0
Oconomowoc Lake	0	0.0	0	0.0	402	19.6	0	0.0
Pewaukee	0	0.0	119	4.1	468	16.2	0	0.0
Sussex	184	3.9	25	0.5	611	12.9	0	0.0
Wales	0	0.0	59	2.9	233	11.3	0	0.0
Towns (Subtotal)	3,459	1.7	13,758	6.7	61,737	29.9	10,341	5.0
Brookfield	0	0.0	118	3.5	954	28.6	0	0.0
Delafield	0	0.0	95	0.7	3,251	24.5	0	0.0
Eagle	0	0.0	788	3.5	9,475	42.5	1,445	6.5
Genesee	898	4.5	2,276	11.5	5,651	28.6	0	0.0
Lisbon	1,611	9.0	1,766	9.8	3,659	20.4	0	0.0
Merton	150	0.9	612	3.5	3,428	19.5	0	0.0
Mukwonago	0	0.0	1,097	5.5	6,470	32.5	0	0.0
Oconomowoc	0	0.0	205	1.0	3,670	18.1	7,778	38.4
Ottawa	720	3.3	1,836	8.4	9,939	45.6	1,118	5.1
Summit	80	0.5	1,044	6.4	4,896	30.0	0	0.0
Vernon	0	0.0	2,727	13.4	6,181	30.4	0	0.0
Waukesha	0	0.0	1,194	8.7	4,163	30.2	0	0.0
Waukesha County	4,930	1.3	15,900	4.3	87,443	23.5	10,341	2.8

Table VII-8 (Continued)
PLANNED LAND USE IN WAUKESHA COUNTY BY MUNICIPALITY: 2035

Community	Non-Urban							
	Rural Density and Other Agricultural Land		Surface Water		Subtotal		Total Area	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Cities (Subtotal)	7,871	7.3	5,927	5.5	32,871	30.4	108,077	100.0
Brookfield	0	0.0	363	2.1	3,325	18.8	17,654	100.0
Delafield	0	0.0	1,029	14.5	1,198	16.9	7,073	100.0
Milwaukee	0	0.0	3	5.9	14	27.5	51	100.0
Muskego	3,879	16.8	2,802	12.2	11,448	49.7	23,021	100.0
New Berlin	3,783	16.0	82	0.3	9,141	38.7	23,595	100.0
Oconomowoc	209	3.0	405	5.8	1,423	20.2	7,036	100.0
Pewaukee	0	0.0	1,118	8.2	4,207	30.9	13,614	100.0
Waukesha	0	0.0	125	0.8	2,115	13.2	16,034	100.0
Villages (Subtotal)	3,691	6.5	2,262	4.0	16,190	28.5	56,910	100.0
Big Bend	0	0.0	21	1.3	166	10.0	1,655	100.0
Butler	0	0.0	2	0.4	44	8.6	509	100.0
Chenequa	1,032	34.6	741	24.8	2,740	91.9	2,982	100.0
Dousman	0	0.0	51	3.2	340	21.1	1,609	100.0
Eagle	0	0.0	2	0.2	11	1.2	890	100.0
Elm Grove	0	0.0	7	0.3	98	4.7	2,107	100.0
Hartland	0	0.0	100	3.0	646	19.5	3,319	100.0
Lac La Belle	0	0.0	2	0.5	114	27.0	423	100.0
Lannon	0	0.0	5	0.3	555	34.8	1,594	100.0
Menomonee Falls	2,180	10.2	131	0.6	6,467	30.3	21,326	100.0
Merton	0	0.0	35	1.8	247	12.7	1,950	100.0
Mukwonago	0	0.0	86	2.2	824	20.6	3,993	100.0
Nashotah	21	2.0	18	1.7	224	21.4	1,047	100.0
North Prairie	0	0.0	17	1.0	120	6.8	1,763	100.0
Oconomowoc Lake	295	14.4	822	40.0	1,519	74.0	2,054	100.0
Pewaukee	0	0.0	204	7.0	791	27.3	2,896	100.0
Sussex	163	3.4	17	0.4	1,000	21.1	4,739	100.0
Wales	0	0.0	1	0.0	293	14.3	2,054	100.0
Towns (Subtotal)	32,696	15.8	9,347	4.5	131,338	63.6	206,553	100.0
Brookfield	0	0.0	26	0.8	1,098	32.9	3,337	100.0
Delafield	1,853	14.0	1,387	10.5	6,586	49.7	13,264	100.0
Eagle	4,269	19.2	315	1.4	16,292	73.1	22,287	100.0
Genesee	2,407	12.2	119	0.6	11,351	57.5	19,740	100.0
Lisbon	2,992	16.7	60	0.3	10,088	56.1	17,968	100.0
Merton	4,306	24.5	1,615	9.2	10,111	57.6	17,558	100.0
Mukwonago	4,889	24.6	690	3.5	13,146	66.1	19,913	100.0
Oconomowoc	1,219	6.0	2,327	11.5	15,199	75.0	20,273	100.0
Ottawa	3,211	14.7	482	2.2	17,306	79.4	21,797	100.0
Summit	2,099	12.9	1,925	11.8	10,044	61.6	16,315	100.0
Vernon	4,572	22.5	325	1.6	13,805	68.0	20,314	100.0
Waukesha	879	6.4	76	0.6	6,312	45.8	13,793	100.0
Waukesha County	44,258	11.9	17,536	4.7	180,408	48.6	371,540	100.0

Source: SEWRPC, Waukesha County and municipalities

IMPLEMENTATION RECOMMENDATIONS

The recommended land use plan presented in this chapter provides a design for the attainment of the urban and rural development and open space preservation objectives contained in the comprehensive development plan. The implementation recommendations pertaining to the urban development areas, rural development areas, environmentally sensitive areas and other land use plan implementation measures are summarized below.

Implementation Recommendations for Urban Development Areas

One of the initial steps recommended for implementation of the County land use plan as it pertains to the proposed urban development areas is the preparation of detailed development and redevelopment plans for the residential neighborhoods and special-purpose districts which comprise the proposed urban service areas.

Within the context of community-level plans, detailed neighborhood development plans should be prepared for each residential neighborhood or special district where significant growth is expected. While such plans may also vary in format and level of detail, they should generally do the following:

- Designate future collector and land access street locations and alignments, pedestrian paths and bicycle ways, and, as appropriate, the configuration of individual blocks and lots.
- Further classify residential areas as to structure type and density, with the mix of housing structure types and lot sizes resulting in an overall density for the neighborhood consistent with that recommended in the community-level and county plan.
- Identify specific sites for neighborhood parks, schools, and retail and service centers which are recommended on a general-site-location basis in the community-level plan.
- Identify environmentally significant areas to be preserved consistent with the community-level plan and county and regional plans.
- Indicate areas to be reserved for storm water management and utility easements.
- The neighborhood planning process should make full use of the many design concepts that can enhance the living environment and increase efficiency in the provision of urban services and facilities and in travel patterns. Among these design concepts are the following:

1. *Mixed-Used Development*: Residential development in mixed-use settings can provide a desirable environment for a variety of household types seeking the benefits of proximity to places of employment as well as civic, cultural, commercial, and other urban amenities. Examples of mixed-use settings include dwellings above the ground floor of commercial uses and residential structures intermixed with, or located adjacent to, compatible commercial, institutional, or other civic uses.
2. *Traditional Neighborhood Development*: The term "traditional neighborhood development" refers to very compact, pedestrian-oriented, mixed-use neighborhoods typically characterized by a grid like street system and street-oriented setbacks and building designs. The overall design, including the layout of streets and sidewalks, encourages walking and bicycling as alternatives to automobile transportation within the neighborhood.
3. *Transit-Oriented Development*: The term "transit-oriented development" refers to compact, mixed-use development whose internal design is intended to maximize access to a transit stop located within or adjacent to the development. Within the development, commercial uses and higher-density residential uses are located near the transit stop. The layout of streets and sidewalks provides convenient walking and bicycling access to the transit stop.
4. *Residential Cluster Development:* A residential development pattern characterized by a unified site design for a number of housing units, clustering buildings and providing common open space, potential density increases, and a mix of building types. It permits the planning of a project and the calculation of densities over the entire development, rather than on an individual lot-by-lot basis.

In addition to plans for developing neighborhoods, detailed plans should also be prepared for mature neighborhoods or special-purpose districts showing signs of land use instability or deterioration. Such plans

should identify areas recommended for redevelopment to a different use, areas recommended for rehabilitation, any local street realignments or improvements, and other public utility and facility improvements. Special consideration should be given in such planning to overcoming contamination problems at, and reuse of, brownfields. Redevelopment plans should seek to preserve those historic, cultural, and natural features and features of the urban landscape which provide for neighborhood identity within the larger urban complex. Such plans should maximize opportunities for the provision of living arrangements and amenities that are unique to older cities in the County, such as "downtown" housing development.

Although "suburban density" development, as described previously in this chapter, is not consistent with many of the planning standards and objectives, it is recognized that a community may desire infill between existing subdivision plats consistent with adjacent developments and, also, in growth areas adjacent to incorporated municipalities, where services may be available in the future, without utilizing the cluster design concept, which may not be compatible with adjacent existing developments. In addition, for municipalities to maintain an overall residential density of no more than one dwelling unit per five (5) acres in "rural development" areas, suburban densities may be planned.

In addition, in order to support open space or conservation design developments and to preserve rural character, it would be appropriate to permit lands in the Rural Density and Other Agricultural Land category to develop at an overall density of 3.5 acres per dwelling unit, rather than no more than five (5) acres per dwelling unit, if said lands will be developed as Planned Unit Developments (PUD) or conservation design developments utilizing conservation design standards. The standard density bonus option is not applicable in the Towns of Mukwonago and Delafield, as both Towns achieve five-acre rural density using local PUD provisions. The Town of Mukwonago Land Use Plan and the Town of Delafield Land Use Plan Unit Determination Chart are referenced accordingly by Table VII-10 and Figure VII-2. The idea is that a slight increase in density in otherwise rural areas is a reasonable trade-off in order to achieve more sustainable development design that conserves natural features, creates more open space within developments, protects the rural atmosphere and causes less need for infrastructure, such as roads and storm water management facilities. In order for a development to qualify for the 3.5 acre Rural Density option, the following criteria must be met.

1. The development plan for a given site must incorporate an absolute minimum of 40 percent of the site in open space owned by the property owners or recreational use or public open space. In calculating open space, not more than 20 percent of the required open areas may be floodplain or wetland (80 percent of open space must be upland).
2. The community in which the development is located must create and map an Upland Environmental Corridor District for all upland primary and secondary environmental corridors, which allows for development at a density not greater than one unit per five acres. It is recommended that communities also include isolated natural resource areas within the Upland Environmental Corridor District.
3. Individual development projects must be developed as Planned Unit Developments or conservation design developments, which allows the community an opportunity to properly analyze project design. Communities must adopt Planned Unit Development standards within their zoning and subdivision ordinances.
4. Primary environmental corridors, secondary environmental corridors, isolated natural resource areas, wetlands and floodplains must be protected to the greatest extent possible and shall be incorporated into protected open space. If any portion of the above resources will be located on a private lot, said resource must be protected with a protective covenant or restriction. Sites that do not contain significant natural features may be conducive to prairie or wetland restorations or may be enhanced with the establishment of landscaped open spaces.
5. Where open space is mentioned as part of a conservation design residential planned unit development, said open space shall be protected as green or natural open space and no more than five (5) percent of said open space area shall be allowed to have impervious surfaces.

Conservation design development can be equally valuable within any of the residential land use categories. As detailed above, the Rural Density and Other Agricultural Land category allows for a 30 percent increase (3.5 acres per dwelling unit vs. five (5) acres per dwelling unit) in density if certain conservation design criteria are met. In order to promote conservation design in the urban and suburban residential categories, it is recommended that a 30 percent density bonus also be made available to development projects that conform with development standards #1-4 above. The following list details the resultant maximum densities that could be offered when utilizing a 30 percent density bonus for conservation designs:

Suburban II Density	2.1 acres per dwelling unit (DU)	(3.0-4.9 conventional)
Suburban I Density	1.05 acres per DU	(1.5-2.9 conventional)
Low-Density Residential	14,000 sq. ft. per DU	(20,000 s.f.-1.4 acres conventional)
Medium-Density Residential	4,200 sq. ft. per DU	(6,000-19,999 s.f. conventional)
High-Density Residential	< 4,200 sq. ft. per DU	(<6,000 s.f. conventional)

Zoning regulations should be reviewed and adjusted, as necessary, to ensure the proper staging of development over time. In this respect, the application of urban zoning districts should proceed incrementally. The **premature zoning of lands for urban use should be avoided** so as to prevent inefficient use of public infrastructures, the creation of additional isolated urban enclaves and incomplete neighborhoods. Accordingly, the **areas concerned should be placed in zoning districts consistent with their existing use and should be rezoned into appropriate urban districts only when development has been proposed and approved and essential facilities and services can be efficiently readily provided.**

Implementation Recommendations for Rural Development Areas

As defined previously in this Chapter, rural development areas are *sparsely developed areas where land is used primarily for farming, resource extraction, landfills, very low density residential uses (one unit per five acres or less), or other open spaces uses, and includes environmental corridors and isolated natural resource areas*. Rural development areas exist in several cities, villages and towns in Waukesha County. Planning and Zoning should be carried out in such a manner as to preserve rural character. First, new residential development should be limited to an overall density of no more than one dwelling unit per five acres of open land within the planning area unless a density bonus is allowed as a result of utilizing the open space or cluster design concept as discussed earlier. This density is intended to provide a basis for determining the maximum number of additional dwelling units, which could be accommodated. Table VII-9 presents a methodology for calculating the overall density within rural development areas. The overall density is calculated by dividing by five the total acreage within the rural development area currently in open use, including primary and secondary environmental corridors, isolated natural resource areas, and other open lands to be preserved and major public land holdings, but excluding major water bodies 50 acres or more in size. Table VII-10 presents the overall density within rural development areas using the aforementioned methodology for year 1996 and year 2000 conditions.

Second, to the maximum extent possible, the dwelling units, which may be accommodated in accordance with the overall five-acre density, should be developed by using residential cluster designs, in which dwelling units are grouped together on a relatively small portion of the site. The residential clusters should be limited in size, surrounded by open space, and, as may be necessary, contain open space. The clustered lots should be no larger than necessary to accommodate the residential structures, driveways, and desired yards, including, as necessary, space for an onsite soil-absorption sewage-disposal system and replacement system area. This can usually be accomplished on lots no greater than one acre in size.

Third, to the extent possible, residential clusters should be located in areas which are visually screened from public roadways, so that existing rural vistas are maintained; should be carefully adjusted to topographic and other natural features, taking full advantage of the settings provided by those features without causing undue disturbance; and should be buffered from nearby agricultural and mineral extraction lands, as appropriate, so as to minimize conflicts between farming or mining and residential uses.

Fourth, other intensive land uses should be limited to uses which are consistent with the rural character of the area or otherwise essential to the area, including, among others, animal hospitals and veterinary clinics, riding stables, and plant nurseries. In general, office, commercial, industrial, and storage uses and the types of retail and service uses that are provided as a matter of convenience and necessity in urban residential neighborhoods should not be considered appropriate within rural development areas.

Fifth, lands within the rural development areas, which are not designated for residential or other compatible intensive use, should be retained in general agricultural and other open space use. Potential agricultural uses include traditional farming, hobby farms, and community supported agriculture. Land not used for farming should be kept free of development, except for recreational trail facilities and access facilities for the benefit of those who own an interest in the land.

It should be noted that, in many cases, it will be necessary to revise zoning and subdivision control ordinances to accommodate the recommended residential cluster development designs. Clustering may be accommodated in rural areas through a variety of zoning approaches. Clustering may be permitted by conditional use or by right in a basic district or through an overlay district. In addition, when the concept of the transfer of development rights is used, residential clustering principles can be used on a community wide basis to achieve better site designs and preserve open space. Subdivision regulations regarding street improvement standards, sewer and water facilities, storm water management, landscaping, and open space preservation may also need revision to adequately promote and regulate cluster development. Residential cluster zoning provisions should require the use of legal restrictions to ensure the preservation of lands, which are to be permanently preserved in agricultural or other open space use.

Because density bonus' are increasing densities from 3.5 to 5 residential acres per unit, the density increase may outpace projected population and projected housing needs in the municipality. Therefore, the municipalities should consider additional growth management tools, such as an allotment system.

Implementation Recommendations for Environmentally Sensitive Lands

Areas identified as primary environmental corridors, secondary environmental corridors, and isolated natural resource areas occur within both urban and rural development areas and within prime agricultural areas. Environmental corridors and isolated natural resource areas should be placed in one of several zoning districts, depending upon the type and character of the natural resource features to be preserved and protected. All lakes, rivers, streams, and wetlands should be placed in lowland conservancy or floodplain protection districts. Undeveloped floodplains and shorelands should be protected in accordance the shoreland and floodplain zoning ordinances. Upland woodlands and areas of steep slopes should generally be placed in appropriate upland conservancy, rural-density residential, or park and recreation districts. Through proper zoning, residential development should be confined to upland portions of environmental corridors, excluding areas of steep slopes, and should be limited to a density of no more than one dwelling unit per five acres, with provisions made as may be appropriate for clustering. Zoning applied to the environmental corridors should, however, accommodate necessary public facilities, such as crossings by streets and highways, utility lines, and engineered flood control facilities, but should require that the location, design, and development of the facilities concerned be sensitive to the protection of the existing resource features, and require that, to the extent possible following construction, disturbed areas be restored to preconstruction conditions.

Table VII-9

METHODOLOGY FOR CALCULATING THE NUMBER OF DWELLING UNITS ALLOWED IN RURAL DEVELOPMENT AREAS

Target for Rural Development Area 5 Acre Density Standard	Total Rural Development Area (acres)	minus	Water Bodies Exceeding 50 Acres in Size	minus	Existing and Planned Urban Development (Evaluate Border Agreements containing a land use component and Sewer Service Areas)	equals	Area Used to Determine Number of Dwelling Units (acres)	divided by five	equals	Number of Dwelling Units Allowed Under the County Development Plan (not counting any zoning)		
Planned Conditions	Total Rural Development Area (acres)	minus	Water Bodies Exceeding 50 Acres in Size	minus	Existing and Planned Urban Development (Evaluate Border Agreements containing a land use component and Sewer Service Areas)	equals	Area Used to Determine Number of Dwelling Units (acres)	divided	by	Planned 2035 land use categories (See note per assumptions)	equals	Number of Dwelling Units To Be Accommodated at Planned 2035 land use categories

How Actual Density of 2035 Town Land Use Categories is Determined

Acres of Rural Development Area Under 2035 County Development Plan	divided by	Number of Dwelling Units Allowed Under Proposed Land Use Categories (need to consider impact of offering density bonuses)	Equals	Density of Proposed Land Use Categories

Assumptions

1. Lot sizes are calculated under current zoning where conventional subdivisions are permitted. When calculating land use categories, public road right-of-ways were taken into account (1.23 acre for 1 acre zoning, 3.6 acres for 3 acre zoning, 5.7 acres for 5 acre zoning, and 10 acres at 10 acre zoning).
2. The "Total Rural Development Area" includes primary and secondary environmental corridors, isolated natural resource areas, and other open lands to be preserved and major public land holdings.
3. For the Town of Oconomowoc, the majority is in Ag Preservation or Urban Land Use categories.
4. Where development is only allowed as conservation design or planned unit development/open space development, the density allowed under the development plan was used.
5. For Suburban Density I (1.4-2.9 AC/DU), a 2.5 AC density shall be used. For Suburban Density II (3-4.9 AC/DU), a 3.6 AC density shall be used.

Table VII-10

EVALUATION OF RURAL DEVELOPMENT AREA WITH AN OVERALL 5-ACRE DENSITY STANDARD

Rural Development Area	Area Including Public Lands, Rural Density Lands and Environmental Corridors (Acres)	Year 1996 County Development Plan Density (Acres/Dwelling Unit)[a]	Year 2000 Conditions Density (Acres/Dwelling Unit)	Year 2035 Maximum Permissible New Rural Area Lots
Delafield[b]	4,435	4.8	4.5	887
Eagle	16,289	5.6	7.0	2,964
Genesee	10,740	6.9	5.1	1,865
Lisbon	9,066	2.2	1.3	1,439
Merton	9,099	3.4	2.9	1,566
Mukwonago[c]	7,476	4.8	4.5	1,931
Oconomowoc[d]				
Ottawa	16,089	6.8	11.2	2,939
Summit	8,777	5.7	3.8	1,493
Vernon	14,375	11.3	8.9	2,526
Waukesha	6,751	13.1	6.6	1,185
Total	103,097	6.5	5.6	18,741

Source: Waukesha County

[a] Based on Zoning in effect at the time.
[b] Town of Delafield Rural Area calculations include lands in Sections 25-36 only.
[c] Town of Mukwonago calculations derived from Town of Mukwonago Land Use Plan.
[d] The majority of the Town of Oconomowoc is in the Agricultural Preservation or Urban Use categories.

Implementation Measures for Other Open Lands to be Preserved

Areas which have been identified in the Other Open Lands to be Preserved category are being mapped in both Urban and Rural areas. Lands identified in this category are mapped in part due to severe to very severe limitations for development of structures from high seasonal groundwater conditions, unstable soils, hydric or organic soil conditions or are generally poorly drained. For planning purposes, soil data available through the Soil Survey of Milwaukee and Waukesha Counties from the United States Department of Agriculture – Natural Resources Conservation Service was used.

Since the soil survey data is generalized, additional site-specific soil data analysis is necessary for individual development project review. It is recommended that the County and municipalities, through regulatory processes, provide a procedure to allow infield detailed investigation and soils analysis using the COMM 85 procedures, established in the Wisconsin Administrative Code, to assist in determining actual on-site soil conditions. Such procedures should identify and document whether or not seasonal high groundwater, soil instability, hydric or organic conditions exist. Where site-specific soil analysis indicates that soil conditions are suitable to accommodate development, an adjustment to the land use category or associated development density may be warranted and would not require a formal amendment request to an adjacent upland development land use category through the annual amendment process outlined in Chapter 9. The land use category which should be used for adjustment from the Other Lands to be Preserved category should be the adjacent upland land use category mapped on the Proposed Land Use Plan. For example, the land being adjusted from the Other Open Lands to be Preserved category are surrounded by lands in the Suburban I category and are found to be acceptable for development, not having the hydric soil conditions and high groundwater table conditions, the subject Open Lands category could be modified to the Suburban I category. There would, however, have to be a recognition and documentation of such change and the information used to justify the change so that appropriate measures are taken to incorporate the changes on the land use maps being maintained by the County and the affected municipality. A record of the documentation and information used to justify the change shall be filed with the County and the community, and an appropriate notation or identification on the Land Use Plan maps made with a reference to the location of the documentation shown on the map should be provided. It should also be noted that the new land use category, which has been modified, from the Other Lands to be Preserved category, can utilize similar densities as used for this new category as if the land were originally all designated in the new land use category.

Lands with soil conditions determined to be unsuitable for development, consistent with the planning standards detailed in Chapter 2 of this Plan, should be retained in open space uses, but can be included within lot boundaries. In addition, these lands may also be included in calculation for density standards as set forth in the Planned Unit Development or Cluster Development standards identified above. It is recommended that the County and municipalities establish, through regulatory processes, a density credit for retaining these lands in open space use. For years, the County used 20 percent of the acreage of lands in this category when calculating densities for proposed developments in the attached or adjoining upland areas. It would be appropriate that a range of 20 percent to 40 percent be used for these lands, subject to specific local community regulations. Further, it may be appropriate to grant a density of one (1) unit per five (5) acres for those lands in the Other Open Lands to be Preserved category.

Regulatory Implementation Measures

Land use regulatory ordinances are an important tool available to county and local units of government to shape growth and development in accordance with adopted land use objectives. Under the State comprehensive planning law (S.66.1001 of the Wisconsin Statutes), "beginning on January 1, 2010, if a local governmental unit engages in official mapping, subdivision regulation, zoning ordinance enacted or amended and zoning of shorelands or wetlands in shorelands, those actions shall be consistent with that local governmental unit's comprehensive plan". Accordingly, upon adoption of their comprehensive plans, the county, cities, villages, and towns should review the text of their ordinances and adjust as necessary to carry out the various implementation recommendations contained in this Plan. Such changes should include rezoning to use districts consistent with present uses so as

not to prezone, consider allotment system to evaluate and grade proposed developments which carry out the recommendations in this Plan and review of proposed developments for consistency with the recommendations of this Plan.

Zoning in Urban Areas

Zoning in urban areas should be administered in accordance with county and local comprehensive plans which refine the urban-area recommendations of the regional land use plan. The application of zoning districts that accommodate residential, commercial, industrial, and other urban development should be done in a manner that is consistent with any recommendations in the local comprehensive plan regarding the staging of development over the course of the plan period. Where the local comprehensive plan includes staging provisions, the application of zoning districts that accommodate the planned urban uses should be done incrementally in accordance with the timeframe set forth in the comprehensive plan. Lands should be placed in zoning districts consistent with their existing use, or, alternatively, placed in an urban land holding district or transition district. This approach allows municipalities to determine whether the proposed development is consistent with the Comprehensive Development Plan for Waukesha County or its goals, standards and objectives at the time a project is proposed. Specifically, a development plan needs to be periodically amended to adjust to changing conditions and updated data such as population and economic projections. Prezoning lands to match a particular land use plan, can limit a municipality's ability to respond to changing conditions and should be avoided wherever possible. Evaluations of new project developments should be reviewed and recommended on the basis of the recommendations contained in this and the local communities plan and allow development to occur where it is consistent with the recommendations contained herein.

Zoning in Rural Areas

Zoning in rural areas should be administered in accordance with county and local comprehensive plans which refine the rural-area recommendations of this Comprehensive Development Plan for Waukesha County. The following is recommended:

- Prime agricultural lands identified in county and local comprehensive plans should be placed into an exclusive agricultural zoning district, which essentially permits only agricultural and agriculture-related uses. Such a district should provide for a residential density of no more than one dwelling unit per 35 acres and should prohibit incompatible urban development.

- Other areas identified for continued agricultural use in county and local comprehensive plans should be placed into exclusive agricultural districts as defined above or into general agricultural districts with smaller minimum parcel sizes as may be appropriate for smaller agricultural operations, such as hobby farms or other specialty farms.

- Areas recommended in county and local comprehensive plans for rural residential development should be placed into a rural residential zoning district that limits development to no more than one dwelling unit per five acres and that encourages, or even requires, the use of conservation subdivision designs to accommodate the permitted development.

- Non-farmed wetlands should be placed in a lowland conservancy or shoreland-wetland zoning district, as appropriate. Farmed wetlands should remain in an agricultural zoning district as long as the parcel remains in agricultural use; with consideration given to placing a conservancy overlay zone on the wetland. Wetlands identified as farmed wetlands should be placed in a lowland conservancy district at the time farming activities on the wetland parcel cease and an application for residential or other urban development of the upland portion of the parcel is approved by the unit of government having zoning authority. Floodplains should be placed in the appropriate floodplain zoning district (floodway, floodfringe, flood storage, or general floodplain). Primary environmental corridors should be placed, and other natural resource areas, including secondary environmental corridors and isolated natural resource areas, may be placed, in a conservancy or other appropriate zoning district (such as a park or rural residential zoning district).

Official Mapping

Adoption of local official maps can contribute significantly to the implementation of the recommended County land use plan. Local units of government should prepare and adopt local official maps pursuant to Section 62.23(6) of the Wisconsin Statutes, showing thereon lands needed for future public use as streets, highways, transit ways, parkways, drainage ways, parks and playgrounds. The official map should be amended from time to time to incorporate the additional street and other public land requirements identified in detailed neighborhood unit development plans or rural area development plans, as those plans are prepared over time.

Land Division Ordinances

Land division ordinances should be adopted by the County and local units of government as a basis for the review and approval of subdivision plats and certified survey maps. Any proposed departure from adopted land use plans should be carefully considered and approved only if such departures are found to be in the public interest and the land use plan map is amended to a category that would allow the proposed subdivision. It should be noted that the existing Waukesha County subdivision control ordinance applies only to the statutory shorelands within the unincorporated areas of the County.

In 1999, Waukesha County created a Land Development Workgroup to analyze and address issues created by land division and development processes being used at that time. The Workgroup recommended:

1. The County should modify existing county transportation related ordinances to require pre-review of potential access points prior to recording of certified survey maps and subdivision plats.

2. Municipalities and the County should uniformly apply a development review checklist prepared by the Workgroup. The intent of the checklist is to set forth consistent standards for the review of development proposals by county municipalities, and to clearly express to development sponsors what should be contained in a proper development proposal. The Workgroup further recommended that each municipality in the County amend appropriate local codes incorporating and adhering to the checklist or a more stringent version in development reviews.

3. Another issue raised by the Workgroup was the variety of subdivision definitions used by Waukesha County municipalities. The variety in definitions has led to larger scale residential developments proceeding as certified surveys as opposed to a platted subdivision.

   To address this issue, the Workgroup developed a minimum definition of a subdivision to be applied in Waukesha County. The definition reads "<u>A subdivision is the division of land by the owner, subdivider, or his successor in title, for the purpose of transfer of ownership or building development where the division creates more than four (4) residential lots less than 1.5 acres in five (5) years or where the division creates more than six (6) residential parcels or building sites of any size within five (5) years.</u>" A remnant parcel in excess of 10 acres in size may be excluded from the plat by action of the municipality upon application by the owner. Upon receipt of an application, the municipality will notify the County.

4. County staff should continue to host training workshops on land use planning and development review topics for local officials.

5. The County should define a Development Review Team process to enhance communication between the County, Towns, Cities, Villages and developers regarding land development projects and issues.

6. The County should evaluate the existing County Storm Water Management Ordinance and Program to identify opportunities for addressing watershed based storm water issues.

7. The County should engage in a process to comprehensively update the Street and Highway Width Map and Jurisdictional System Plan.

This Plan recommends that municipalities and the County continue to follow the recommendations made by the Land Development Workgroup.

Regulation of Public Sanitary Sewerage Systems

In Wisconsin, the comprehensive water quality management planning program has led to the development of State regulations which have the effect of requiring the preparation of sanitary sewer service area plans for each public sewage treatment plant. In the Region, these plans are prepared cooperatively by the concerned local unit of government and the Regional Planning Commission, with ultimate approval authority resting with the Wisconsin Department of Natural Resources. Sewer service area plans have now been prepared for nearly all of the public sanitary sewerage systems in the Region. These plans define sewer service limits and delineate environmentally sensitive lands within those service limits to which service should not be provided. Chapter NR 110 and Chapter Comm 82 of the *Wisconsin Administrative Code* require that the Wisconsin Department of Natural Resources, with respect to public sanitary sewers, and the Wisconsin Department of Commerce, with respect to private sanitary sewers, make a finding that all proposed sanitary sewer extensions are in conformance with adopted area wide water quality management plans and the sanitary sewer service areas identified in such plans before approving such extensions.

Under Chapter NR 121, sewer service areas must be sized in a manner that is consistent with long-range population projections. As a practical matter, this requirement is considered to be met if the buildout population of the sewer service area—that is, the population that could be accommodated if the sewer service area were completely developed at locally planned residential densities—is within the projection range envisioned under the regional land use plan. In sizing their sewer service areas, many communities choose to plan for the high end of the projected population range in order to retain flexibility in terms of the location of future urban growth.

Historically, communities in the Region, with the assistance of SEWRPC, have amended their sewer service area plans from time to time in response to changing needs and conditions. This may be expected to continue in the years ahead, particularly as communities complete their required local comprehensive plans.

As noted above, sanitary sewer service area plans are an important part of the basis for State agency review and approval of proposed sewer extensions. Policies adhered to by the Wisconsin Department of Natural Resources and Department of Commerce prohibit or otherwise limit the extension of sanitary sewers to serve development in certain environmentally significant lands identified in local sewer service area plans. The following restrictions were in effect in 2007:

- The extension of sanitary sewers to serve new development in primary environmental corridors is confined to limited recreational and institutional uses and rural-density residential development (maximum of one dwelling unit per five acres) in areas other than wetlands, floodplain, shorelands, and steep slope (12 percent or greater).

- The extension of sanitary sewers to serve development in portions of secondary environmental corridors and isolated natural resource areas comprised of wetlands, floodplains, shorelands, or steep slopes is not permitted.

Park and Open Space Plan Implementation

Achievement of the outdoor park and recreation and open space preservation objectives of the land use plan requires continued public interest acquisition of land for outdoor recreation and open space uses. The county park and open space plan recommends public interest acquisition (that is, acquisition by local, county, State and Federal government and by private conservancy interests) of land for recreation and resource protection purposes. The regional natural areas and critical species habitat protection and management plan also includes recommendations for public interest acquisition for most of the natural areas and critical species habitat sites identified in that plan. Moreover, cities, villages, and towns may acquire other lands for park and open space purposes as recommended in local comprehensive or park and open space plans. Each of the concerned units and

agencies of government should continue or begin land acquisition programs in accordance with such plans. Private conservancy organizations are encouraged to supplement public open space acquisition efforts, as appropriate, to ensure the preservation of important natural areas. The detailed County Park and Open Space Plan is presented in Appendix A of this Plan.

Transfer of Development Rights

Under transfer-of-development-rights programs, or "TDR" programs, the right to develop a specified number of dwelling units under existing zoning may be transferred from one parcel, which would be maintained in open space use, to a different parcel, where the number of dwelling units permitted would be correspondingly increased. When the parcels are held by the same owner, the development rights are, in effect, simply transferred from one parcel to the other by the owner; when the parcels are held by different landowners, the transfer of development rights involves a sale of rights from one owner to another, at fair market value. In either case, the result is a shift in density away from areas proposed to be maintained in farming or other open use toward areas recommended for development. The transfer of development rights may be permanent or may be for a specific period of time or set of conditions.

The transfer of development rights may be implemented only if authorized under county or local zoning. To enable the transfer of development rights, the zoning ordinance must establish procedures by which the TDR technique will be administered, including the formula for calculating the number of residential dwelling units which may be transferred from the "sending" area to the "receiving" area. The zoning district map must identify the sending and receiving areas, or at least identify the districts within which development rights can be transferred from one parcel to another. As of 2007, the Waukesha County Zoning Code contains provisions for the transfer of development rights.

Municipal Boundary and Utility Extension Agreements

The recommendations of the land use plan concerning the location and density of new urban development are formulated without regard to the location of city, village, and town boundaries. Rather, those plan recommendations are based upon a consideration of such factors as the location of existing utility infrastructure, including public sanitary sewer and water supply systems; the location of environmentally sensitive lands; and the availability of lands considered to be suitable for urban development. Where cities and villages own and operate essential public utilities not provided by adjacent towns, the plan assumes that cities and villages will either annex unincorporated territory recommended in the plan for urban development and provide extensions of essential utility services to serve such development, or that the cities and villages will reach agreement with adjacent unincorporated towns on the extension of those essential services without the need for annexation and municipal boundary change.

The *Wisconsin Statutes* establish a number of arrangements for cooperation among communities with regard to sharing of municipal services and cooperatively determining community boundaries, as indicated below:

- Section 66.0301: This section of the Statutes provides broad authority for intergovernmental cooperation among local units of government with respect to the provision and receipt of services and the joint exercise of their powers and duties.

- Section 66.0307: This section of the Statutes allows any combination of cities, villages, and towns to determine the boundary lines between themselves under a cooperative plan, subject to oversight by the Wisconsin Department of Administration. Section 66.0307 envisions the cooperative preparation of a comprehensive plan for the affected area by the concerned local units of government and prescribes in detail the contents of the cooperative plan. Importantly, the cooperative plan must identify any boundary change and any existing boundary that may not be changed during the planning period; identify any conditions that must be met before a boundary change may occur; include a schedule of the period during which a boundary change shall or may occur; and specify arrangements for the provision of urban services to the territory covered by the plan.

- Section 66.0225: This section of the Statutes allows two abutting communities that are parties to a court action regarding an annexation, incorporation, consolidation, or detachment, to enter into a written stipulation compromising and settling the litigation and determining a common boundary between the communities.

Cooperative approaches to the identification of future corporate limits and the extension of urban services can contribute significantly to attainment of the compact, centralized urban growth recommended in the land use plan. Conversely, failure of neighboring civil divisions to reach agreement on boundary and service extension matters may result in development at variance with the plan—for example, by causing new development to leap past logical urban growth areas where corporate limits are contested, to outlying areas where sewer and water supply service are not available. Accordingly, it is recommended that neighboring incorporated and unincorporated communities cooperatively plan for future land use, civil division boundaries, and the provision of urban services, as provided for under the *Wisconsin Statutes*, within the framework of the land use plan.

Municipal Revenue Sharing

Additional opportunity for intergovernmental cooperation is provided under Section 66.0305 of the *Wisconsin Statutes*, entitled "Municipal Revenue Sharing." Under this statute, two or more cities, villages, and towns may enter into revenue sharing agreements, providing for the sharing of revenues derived from taxes and special charges. The agreements may address matters other than revenue sharing, including municipal services and municipal boundaries. Municipal revenue sharing can provide for a more equitable distribution of the property tax revenue generated from new commercial and industrial development within urban areas and help reduce tax-base competition among communities, competition that can work against the best interests of the area as a whole.

A good example of municipal revenue sharing under this statute is the revenue sharing agreement included in the Racine Area Intergovernmental Sanitary Sewer Service, Revenue Sharing, Cooperation and Settlement Agreement entered into by the City of Racine and neighboring communities in 2002. Under this agreement, the City of Racine receives shared revenue payments from neighboring communities for use in renovating older residential areas, redeveloping brownfield sites, and supporting regional facilities like the City zoo, fine arts museum, and library. In return, the City of Racine agreed to support the incorporation of the adjacent Towns of Caledonia and Mt. Pleasant; refrain from annexations without the consent of the Towns; refrain from using extraterritorial zoning and plat review powers; and move ahead with sewerage system improvements that will accommodate growth in the Towns. It should be noted that the Towns of Mt. Pleasant and Caledonia were incorporated as villages in 2003 and 2005, respectively.

Brownfield Redevelopment

Factors contributing to the abandonment or underutilization of older commercial and industrial sites vary from site to site, but often include structures which are obsolete in terms of accommodating current manufacturing, warehousing, and office needs; inadequate site access to the freeway system; and insufficient site area for horizontally-oriented structures, contemporary parking and loading requirements, and possible future plant expansion needs.

Once abandoned, the re-use of former commercial and industrial sites is frequently constrained by contamination problems created by past industrial and commercial activities, giving rise to the term "brownfields"—sites which are underutilized or abandoned due to known or suspected environmental contamination. While brownfields tend to be concentrated in older areas, they also occur in outlying areas. Redevelopment of brownfields is often hindered by high cleanup costs, and, even where contamination is only suspected, the potential for high cleanup costs tends to dampen private-sector interest in redevelopment.

In order to maintain the viability of existing urban areas, special efforts to promote the reuse of brownfields are required. Local units of government should include the cleanup and re-use of brownfields as a key element in their planning for the revitalization of urban areas and promote such re-use through such tools as tax-incremental financing. Limited State and Federal financial assistance has been made available in support of the cleanup and re-use of contaminated sites. Local units of government should make full use of, and assist private developers in securing, available State and Federal financial assistance.

The re-use of brownfield sites need not be limited to industrial use, but may include a mix of residential, commercial, recreational, and other development, in accordance with local development objectives. Properly carried out, the cleanup and re-use of brownfields has many potential benefits in addition to the underlying environmental benefits: elimination of blight, increase in the property-tax base, expansion of the housing stock, provision of jobs in close proximity to concentrations of the labor force, and increased use of existing public infrastructure.

Storm Water System Planning

Storm water runoff pollution performance standards for new development, existing urban areas, and transportation facilities are set forth in Chapters NR 151 and NR 216 of the *Wisconsin Administrative Code*. The County should coordinate with municipalities to develop a storm water management plan to coordinate the management of storm water within defined watersheds which often transcend municipal boundaries. Storm water management practices appropriate for each urban area can best be developed through the preparation of a system management plan. These practices should be developed in a manner that integrates development needs and environmental protection, including integrated water resources protection. Such practices should reflect both storm water runoff quantity and quality considerations, as well as groundwater quantity and quality protection. Practices that are designed to maintain the natural hydrology should be encouraged.