



REGIONAL LAND USE PLAN IMPLEMENTATION IN SOUTHEASTERN WISCONSIN: STATUS AND NEEDS

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**MEMORANDUM REPORT
NUMBER 68**

**REGIONAL LAND USE PLAN IMPLEMENTATION
IN SOUTHEASTERN WISCONSIN: STATUS AND NEEDS**

Prepared by the
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Chapter I

INTRODUCTION

BACKGROUND

In the fall of 1990, two studies were completed which raised questions and concerns about the extent to which the adopted regional land use plan was being implemented. The first was a study completed by the Governor's Metro 2020 Policy Board, a group of public and private leaders from throughout southeastern Wisconsin appointed by the Governor to develop support for the construction of needed major transportation system improvements in southeastern Wisconsin.¹ The second was a study completed by the Regional Transportation Authority Study Committee, a group created by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) at the request of the County and City of Milwaukee to examine the feasibility of creating a regional transportation authority for southeastern Wisconsin.²

In examining the transportation needs of the seven-county Southeastern Wisconsin Region as set forth in the adopted regional transportation system plan, both the Metro 2020 Policy Board and the Regional Transportation Authority Study Committee concluded that since the regional transportation system plan was based upon the regional land use plan, urban development at variance with the land use plan could significantly and adversely affect the development and operation of the regional transportation system. Accordingly, both groups concluded that a review of the implementation status of the adopted regional land use plan was warranted. The Metro 2020 Policy Board further recommended to the Governor that the State of

Wisconsin fund two land use-related studies, one a state-level study by the Wisconsin Department of Transportation of land use-transportation interrelationships and the other a study by the SEWRPC of the status of implementation of the adopted regional land use plan and of the means by which implementation of that plan could be strengthened.

In 1991, the Wisconsin Department of Transportation sought legislative authorization to follow up on the recommendations of the Metro 2020 Policy Board, including the proposed SEWRPC land use plan implementation study. As a part of that initiative, the Department requested that the Regional Planning Commission include the land use plan implementation study in its work program for 1992. On December 4, 1991, the Commission approved the request of the Department, endorsing a 1992 work program that included a study relating to implementation of the adopted regional land use plan. This report is intended to document the findings and recommendations of that study.

STUDY PURPOSE

The basic purpose of the regional land use plan implementation study is to examine the extent to which development in the Region has occurred in conformance with, or at variance to, the adopted regional land use plan and, as may be found necessary or desirable, to recommend means by which plan implementation might be strengthened. More specifically, the study is to:

1. Describe briefly the adopted regional land use plan.
2. Quantify, to the extent possible, the status of plan implementation, identifying the extent to which the Region has developed in accordance with, or at variance to, the plan recommendations.
3. Describe the tools and techniques that are available to federal and state agencies and county and local units of government to promote regional land use plan implementation.

¹See Metro 2020 Final Report: Transportation Strategies for Milwaukee and Southeast Wisconsin, June 1991.

²See SEWRPC Memorandum Report No. 38, A Regional Transportation Authority Feasibility Study for Southeastern Wisconsin, November 1990, and the minutes of Advisory Committee meeting of May 2, 1991, on file in SEWRPC offices.

If the study concludes that there is a significant amount of development occurring at variance with the adopted regional land use plan, then it is intended that potential actions be identified which would strengthen plan implementation.

STUDY ORGANIZATION

In authorizing the undertaking of this regional land use plan implementation study, the Regional Planning Commission, following its historic practice, created an Advisory Committee to guide the conduct of the study. The Commission appointed Mr. Richard W. Cutler, an Attorney and former Regional Planning Commissioner from Milwaukee County, as Committee Chairman. The Commission also directly appointed to the Committee eight representatives of the following interests: land development, economic development, environmental preservation, public works, municipal law, local government finance, and central cities. The Commission also asked that each county in the Region appoint two individuals to the Committee, suggesting that they be either county or local elected or appointed officials with substantial experience in the fields of agriculture, land use development, public service and infrastructure development, or public finance. The Wisconsin Department of Transportation was also represented on the Advisory Committee by its Southeastern District Director. The Executive Director of the Regional Planning Commission served as the ex-officio, nonvoting Secretary of the Committee. The membership roster is reproduced on the inside front cover of this report.

The Commission directed that the land use plan implementation study be carried out by its own staff. In accordance with the Metro 2020 Policy Board recommendation, the study was funded entirely by the Wisconsin Department of Transportation.

RELATIONSHIP TO CONCURRENT STATE LEVEL LAND USE STUDY

As already noted, the Metro 2020 Policy Board also recommended that the Wisconsin Department of Transportation (WisDOT) establish a Statewide Land Use Task Force to address transportation-related land use and urban design issues. More specifically, the Metro 2020 Policy Board was interested in having the

WisDOT identify land use development strategies that might tend to reduce traffic congestion and improve air quality. In this respect, the Board expressed concern over the adverse impacts of land use decentralization on those objectives. The Board was also interested in identifying procedures whereby the transportation impacts of major land development projects could be determined and made known prior to land use development project approval.

The Governor and the Wisconsin Legislature specifically directed that the WisDOT proceed with the establishment of a Statewide Land Use Task Force and the conduct of the land use policy study envisioned by the Metro 2020 Policy Board. This state-level study was to be undertaken concurrently with the SEWRPC regional land use plan implementation study, with recognition on the part of all parties concerned of the need to coordinate the two studies. An initial meeting of the chairmen and staffs of the two committees to effect coordination of the two studies was held on March 3, 1992. It was agreed at that meeting that the SEWRPC study would have as its focus the seven-county Region and the regional land use plan; the WisDOT study would have a statewide geographic focus and concentrate on specific land use-transportation policies and problems. It was agreed that the two studies would be coordinated through periodic meetings between the chairmen and staffs of the two committees, and perhaps through overlapping committee membership. Subsequent events resulted in Waukesha County Executive Daniel M. Finley being appointed to both the Statewide Land Use Task Force and the SEWRPC Advisory Committee. Given these measures then, it should be possible to coordinate the two studies, and to achieve mutually consistent and reinforcing findings and recommendations.

REPORT ORGANIZATION

Following this introductory chapter, the results of the regional land use plan implementation study are presented in seven additional chapters. Chapter II provides a brief description of the adopted regional land use plan. Chapter III identifies and, to the extent possible, quantifies the status of regional land use plan implementation. Chapter IV describes the tools and techniques that are currently available at the federal, state, county, and local governmental levels to bring about plan implementation.

Drawing upon the conclusions reached in Chapters III and IV, Chapter V sets forth a series of interrelated preliminary recommendations designed to bring about actions that would help strengthen regional land use plan implementation in southeastern Wisconsin. Chapter VI summarizes the study findings, conclusions, and

preliminary recommendations made by the Advisory Committee. Finally, Chapter VII sets forth the Advisory Committee's final recommendations, such recommendations reflecting reactions to the preliminary recommendations derived primarily through an extensive series of meetings with key State agencies.

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Chapter II

REGIONAL LAND USE PLAN

INTRODUCTION

This chapter describes the adopted regional land use plan for the Southeastern Wisconsin Region. To provide a proper context for this description, the chapter provides certain background information, including an overview of the need for regional planning, a discussion of the importance of the plan design function, a description of the focus of the regional land use plan, a reiteration of the basic land use planning principles and concepts underlying the plan, and a description of the land use planning process followed by the Commission.

BACKGROUND

Need for Regional Planning

Areawide, or regional, planning has become increasingly accepted as a necessary governmental function in the large metropolitan areas of the United States. This acceptance is based, in part, on a growing awareness that problems of physical and economic development and of environmental deterioration transcend the geographic limits and fiscal capabilities of local units of government and that sound resolution of these problems requires the cooperation of all units and agencies of government and of private interests as well.

As used by the Southeastern Wisconsin Regional Planning Commission (SEWRPC), the term "region" means an area larger than a county but smaller than a state, united by economic interests, geography, and common developmental and environmental problems. A regional basis is necessary to provide a meaningful technical approach to the proper planning and design of such systems of public works as highway and transit, sewerage and water supply, and park and open space facilities. A regional basis is also essential to provide a sound approach to the resolution of such environmental problems as flooding; air and water pollution; natural resource base deterioration, including the destruction of woodlands, wetlands, and wildlife habitat areas and the loss of prime agricultural lands; and changing land use.

Private as well as public interests are vitally affected by these kinds of areawide problems and by proposed solutions to these problems, whether planned or unplanned. It appears neither desirable nor possible for any one level or agency of government to impose the decisions required to resolve these kinds of problems. Such decisions can better come from consensus among the public and private interests concerned, based on the common interest in the welfare of the entire Region. Regional data collection and planning is necessary to promote this consensus and the necessary cooperation between urban and rural; local, state, and federal; and public and private interests. In this light, regional planning is not a substitute for federal, state, special district, or local public planning, or for private planning. Rather, regional planning is a vital supplement to such planning.

According to the Wisconsin Statutes, the work of the Regional Planning Commission is entirely advisory in nature. Therefore, the regional planning program in southeastern Wisconsin has emphasized the promotion of close cooperation among the various governmental agencies concerned with land use development and with the development and operation of supporting public works facilities. The Commission believes that the highest form of areawide planning combines accurate data and competent technical work with the active participation of knowledgeable and concerned public officials and private citizens in the formulation of plans that address clearly identified problems. Such planning is intended to lead not only to a more efficient regional development pattern, but also to a more desirable environment in which to live and work.

Plan Design Function

The Commission is charged by law with the function and duty of "making and adopting a master plan for the physical development of the Region."¹ The permissible scope and content of this plan extends to all phases of regional development, implicitly emphasizing, however,

¹ See Section 66.945 of the Wisconsin Statutes.

the preparation of alternative spatial designs for the use of land and for supporting transportation and utility facilities. The scope and complexity of areawide development problems prohibit the making and adopting of an entire comprehensive development plan at one point in time. The Commission has, therefore, determined to proceed with the preparation of individual plan elements which together can comprise the required comprehensive plan. Each element is intended to deal with an identified areawide developmental or environmental problem. The individual elements are coordinated by being related to an areawide land use plan. Thus, the land use plan comprises the most basic regional plan element, an element on which all other elements are based. The Commission believes the importance of securing agreement upon areawide development plans through the formal adoption of such plans, not only by the Commission, but also by county and local units of government and state agencies cannot be overemphasized.

The Commission has placed great emphasis upon the preparation of a comprehensive plan for the physical development of the Region in the belief that such a plan is essential if land use development is to be properly coordinated with the development of supporting transportation, utility, and community facility systems; if the development of each of these individual function systems is to be coordinated with the development of the other; if serious and costly environmental and developmental problems are to be minimized; and if a more healthful, attractive, and efficient regional settlement pattern is to be evolved. Under the Commission's approach, the preparation, adoption, and use of the comprehensive plan are considered to be the primary objectives of the planning process; all planning and plan implementation techniques are based upon, or related to, the comprehensive plan.

The validity of the concept of the comprehensive plan has been questioned in recent years and its application opposed by some segments of the planning profession. The Commission believes, however, that the comprehensive plan remains a viable and valid concept, a concept essential to coping with the developmental and environmental problems generated by areawide urbanization. The comprehensive plan not only provides the necessary framework for coordinating and guiding growth and development within

a multi-jurisdictional urbanizing region having essentially a single community of interest, but provides the best conceptual basis available for the application of systems engineering skills to the growing problems of such a region. This is because systems engineering basically must focus upon the design of physical systems. It seeks to achieve good design by setting good objectives, determining the ability of alternative plans to meet these objectives through quantitative analyses, cultivating interdisciplinary team activity, and considering all the relationships involved both within the system being designed and between the system and its environment.

The questioning of the validity of the comprehensive plan concept came about in the late 1960s and early 1970s during a time of much social unrest in the United States, including unrest on the college and university communities. That unrest was reflected in a questioning of many aspects of American life, including the processes and practices of traditional public planning. Some planning academicians advanced arguments that traditional publicly prepared end-state plans were irrelevant to the resolution of the social and political problems then facing American society. These arguments were coupled with calls for the substitution of policy planning for traditional public system planning. A further dimension of this movement involved the introduction of what became known as "advocacy planning," with the aim of reforming the traditional public planning processes to meet the perceived needs of disadvantaged and disenfranchised groups of individuals.

For a period of time, traditional public planning processes, which produced end-state plans were deemphasized in favor of alternate approaches to planning in the public sector. More recently, however, both the body of public planning literature and public planning practice have returned to support of the traditional public planning processes, including the production of end-state plans.

While comprehensive end-state planning is, then, again in favor, an interest in pursuing policy planning, particularly with respect to achieving certain environmental objectives, remains. The essential difference between comprehensive physical systems planning and policy planning is perhaps best understood by examining the different ways in which the concepts are applied to given problems. For

example, policy planning continues to be promoted in the field of stormwater management. Under a comprehensive physical systems planning approach to stormwater management, an attempt is made to develop for a given drainage basin the most cost-effective system of stormwater storage and conveyance facilities to serve a planned future land use pattern while meeting comprehensively defined objectives and supporting standards. If a comprehensive stormwater drainage plan prepared in this manner is implemented, it is possible to predict with some accuracy the future performance of the drainage system in terms of stormwater flows and stages, as well as in terms of water quality impacts.

In contrast, under a policy approach to stormwater management, a governing body by ordinance requires individual property owners, upon development of their land, to ensure by the provision of onsite storage that rates of urban stormwater runoff from their land under post-development conditions do not exceed those under pre-development conditions. In contrast to the comprehensive systems planning approach, the policy planning approach is relatively quick and simple to apply. A policy planning approach, however, does nothing to resolve existing upstream or downstream drainage and flooding problems, nor does it ensure that when the entire drainage area is developed the resulting system of storage and conveyance facilities will be the most cost-effective one to indefinitely maintain. Furthermore, because downstream flows are dependent in part upon the location of storage facilities and the timing of the release of upstream stored waters, it is not possible to predict future downstream flows and stages with any degree of precision, because the ultimate location and design of storage facilities in the watershed is left to the response of the private land market to land development conditions and to the definition at the time of development of the ownership parcel to which the policy is applied. Indeed, the program of decentralized storage facilities in the absence of a system plan may actually increase downstream flows and stages as well as change the flow regimen in other ways.

A second example relates to the environmental objectives of preserving wetlands. Under a policy planning approach, a legislative body simply declares it to be in the public interest that all wetlands over a certain minimum size, e.g.,

five acres, or located in certain areas, e.g., shorelands, are worthy of protection and preservation irrespective of other developmental and environmental objectives, and mandates the imposition of land use regulations to effect such preservation. A comprehensive physical systems planning approach would consider the need to preserve and protect wetlands within the comprehensive context of many other developmental and environmental objectives, some of which may be competing and conflicting in nature. The process would result in the design of a comprehensive plan which in part would call for the preservation and protection of wetlands, depending upon their location and their relationship to other resources and other environmental and developmental objectives. Not all wetlands over five acres in area may, under the comprehensive planning approach, be recommended for protection. On the other hand, it is also possible that certain wetlands under five acres in area would be found worthy of protection and preservation. The Commission believes that the preparation of end-state plans represents a far better approach to addressing environmental and developmental problems than policy planning, and for that basic reason has steadfastly pursued the preparation, adoption, and implementation of such plans.

Basic Focus of the Regional Land Use Plan

Land use is one of the principal areas of public policy determination facing public officials, citizen leaders, and technicians in the Region. Although much new land use development is financed by private capital, each new increment of development, planned or unplanned, be it a subdivision, shopping center, industrial plant, or institutional building, inevitably creates a demand for new public facilities and services and requires the investment of public capital in new or improved transportation facilities, utilities, and community facilities and requires the expenditure of public funds for their operation and maintenance. Such development cumulatively may also have attendant significant environmental impacts. Moreover, the unit of government facing these new public investments and increased public expenditures and affected by the environmental impacts may not always be the same as the unit experiencing the growth.

While many land use decisions are primarily of local concern and properly subject to local planning and control, the aggregate effects of

changing land use activities are of areawide concern, not only interacting strongly with the need for regional utility, storm water drainage and flood control, recreation, and transportation facilities, but also exerting a heavy demand on a limited natural resource base. The wise and judicious use of this resource base, together with the strength of the functional relationships existing between land use and the demand for regional utility, recreation, and transportation facilities, must be the major guidelines for the determination of which land uses are regional in character or influence and, therefore, these factors must be included in a regional land use plan.

Within the context of regional planning, the term "land use" is defined as the human activities which, grouped together, form the overall generalized pattern of urban and rural development considered at a regional scale. These include large land-consuming, or land-occupying, uses, such as agriculture, regional parks and open space reserves, major woodlands and wetlands, and major surface water bodies together with their associated shorelands and floodlands. These large land-consuming uses all have important implications for the preservation and protection of the natural resource base. Uses of regional importance also include major areas of residential use; major concentrations of commercial, industrial, and institutional use; and certain transportation terminal facilities, such as airports, all of which exert a heavy demand on areawide public works facilities, including major trafficways, sanitary trunk sewers, and major stormwater drainage channels.

All other land uses, such as minor commercial and service uses; local institutional and governmental uses, including elementary and secondary schools, churches, libraries, and police and fire stations; and local park and recreational areas, need be considered in the regional land use planning process only in regard to the aggregate area they require, their approximate densities, and their spatial distribution. These minor uses are incorporated implicitly in the regional land use plan as integral components of urban neighborhood units. In other words, while the regional land use plan does not explicitly identify proposed locations for such minor land uses, the quantitative data underlying the

regional land use plan explicitly accounts for lands that may be expected to be developed for such purposes within the neighborhood units.

Basic Regional Land Use Planning Concepts

The Commission views the process of planning for the physical development of the Region as cyclical in nature, alternating between systems, or areawide, planning and project, or local, planning. Under this concept as applied to land use planning, an overall regional land use plan design is initially advanced at the areawide, or systems, level of planning, and then an attempt is made to implement the plan recommendations through county and local land use planning. If, for whatever reasons, a particular feature of the plan advanced at the systems planning level cannot be implemented at the county and local level, that determination is taken into account in the next phase of systems level planning.

The Commission's initial regional land use plan was adopted in 1966.² That initial plan had as a base year, i.e., the year of inventory of data on which the plan was based, of 1963 and a plan design year of 1990. A second-generation regional land use plan was adopted in 1977.³ That plan had as a base year 1970, with a plan design year of 2000. While the regional land use plan is an evolving plan, the basic concepts expressed within the plan have remained essen-

²See SEWRPC Planning Report No. 7, *The Regional Land Use-Transportation Study, Volume One, Inventory Findings—1963, May 1965; Volume Two, Forecasts and Alternative Plans—1990, October 1966; and Volume Three, Recommended Regional Land Use Transportation Plans—1990, November 1966.*

³See SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000, Volume 1, Inventory Findings and Forecast, October 1976; and Volume 2, Alternative and Recommended Plans, May 1978.*

tially the same since 1966. A description of the historical development of those concepts follows.⁴

Initial Regional Land Use Plan

In the initial regional land use planning work, a concerted effort was made to prepare and present for public evaluation the full range of alternatives that were practically available to the Region with respect to land use development. The following alternative land use plans were accordingly developed and evaluated:

- Controlled Existing Trend Plan

A controlled existing trend plan was prepared which envisioned a return to the historic development trends within the Region most evident prior to the late 1950s, with urban development continuing to occur largely in concentric rings along the full periphery of, and outward from, existing urban centers within the Region (see Map 1A).

- Corridor Plan

A corridor plan was prepared which represented an attempt to concentrate new urban development within the Region in radial corridors centered on major transportation routes emanating from the existing major urban centers within the Region (see Map 1B). Under this plan, radial corridors of urban development would alternate with wedges of agricultural land and other open land.

- Satellite City Plan

A satellite city plan was prepared which represented an attempt to concentrate new urban development in the Region in outly-

ing communities relatively independent of commercial and industrial development in the larger central cities and separated from those cities by large areas of open space. The resulting development pattern would be discontinuous, both radially and circumferentially (see Map 1C).

In addition, a fourth alternative development pattern was explored, that of continuation of existing development trends in the absence of any attempt to guide development on an area-wide basis in the public interest (see Map 1D). This last alternative was developed, not as a plan, but as a forecast of unplanned development. It was intended to serve, not as a potential recommendation, but as a standard of comparison for the evaluation of the other land use plan alternatives directed toward the attainment of regional development objectives.

Technical evaluations by staff and by technical and intergovernmental advisory committees indicated that the controlled existing trend plan was the best of the alternatives considered, and that alternative was the one most favorably received by public officials and citizens of the Region at the extensive public hearings held on the alternative plans. Accordingly, the controlled existing trend plan was adopted by the Commission in 1966 as the recommended regional land use plan for the plan design year 1990.

The adopted plan was intended to be used as a flexible guide, and not a rigid design, to the making of decisions by the responsible public officials concerning the placement and intensity of new urban development in the Region. As such, the plan placed heavy emphasis on the continued effect of the urban land market in determining the location, intensity, and character of future urban development. The plan, however, recommended that existing development trends be modified through public intervention in the following three significant ways in order to achieve a more healthful and attractive, as well as more efficient, regional settlement pattern:

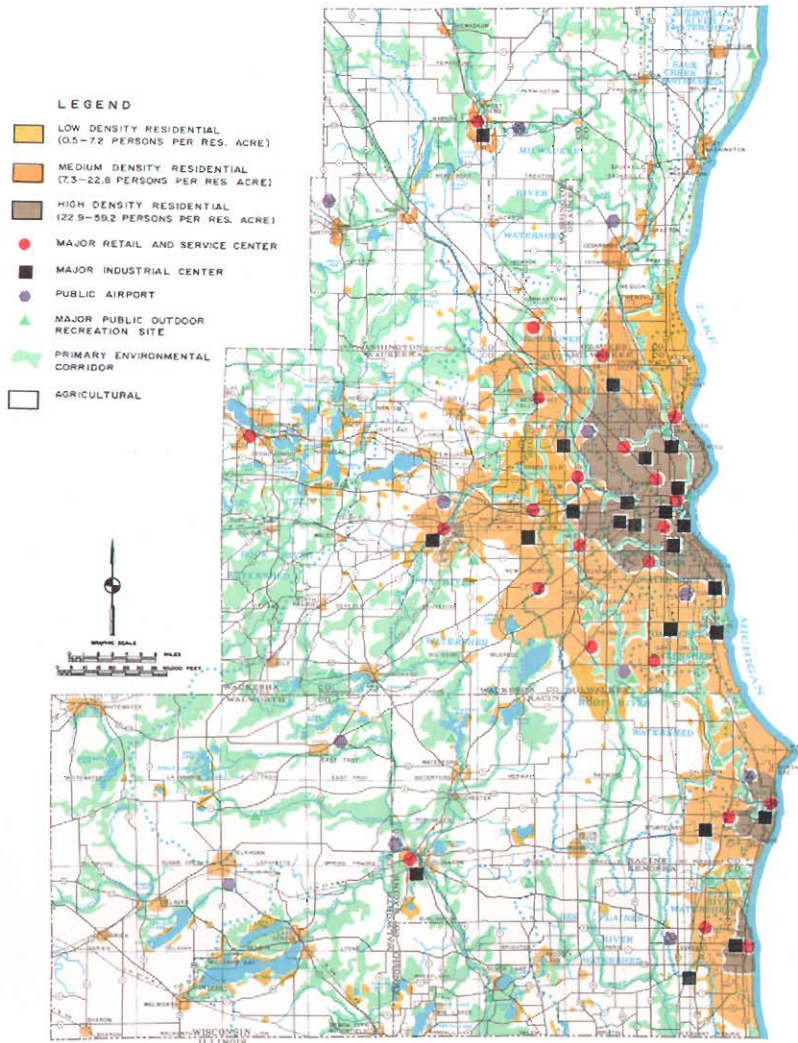
- First, the plan recommended that development trends be altered by encouraging intensive urban development only in those areas of the Region which are covered by soils suitable for such development, which are not subject to special hazards such as flooding and shoreline erosion, and which

⁴As the present regional plan implementation study was being conducted, a third-generation regional land use plan was nearing completion and under public review and consideration for adoption by the Commission. That third-generation plan is set forth in SEWRPC Planning Report No. 40, A Regional Land Use Plan for Southeastern Wisconsin—2010. The recommended third-generation regional land use plan had as a base year 1985 and a design year 2010, and is conceptually identical to the first- and second-generation regional land use plans.

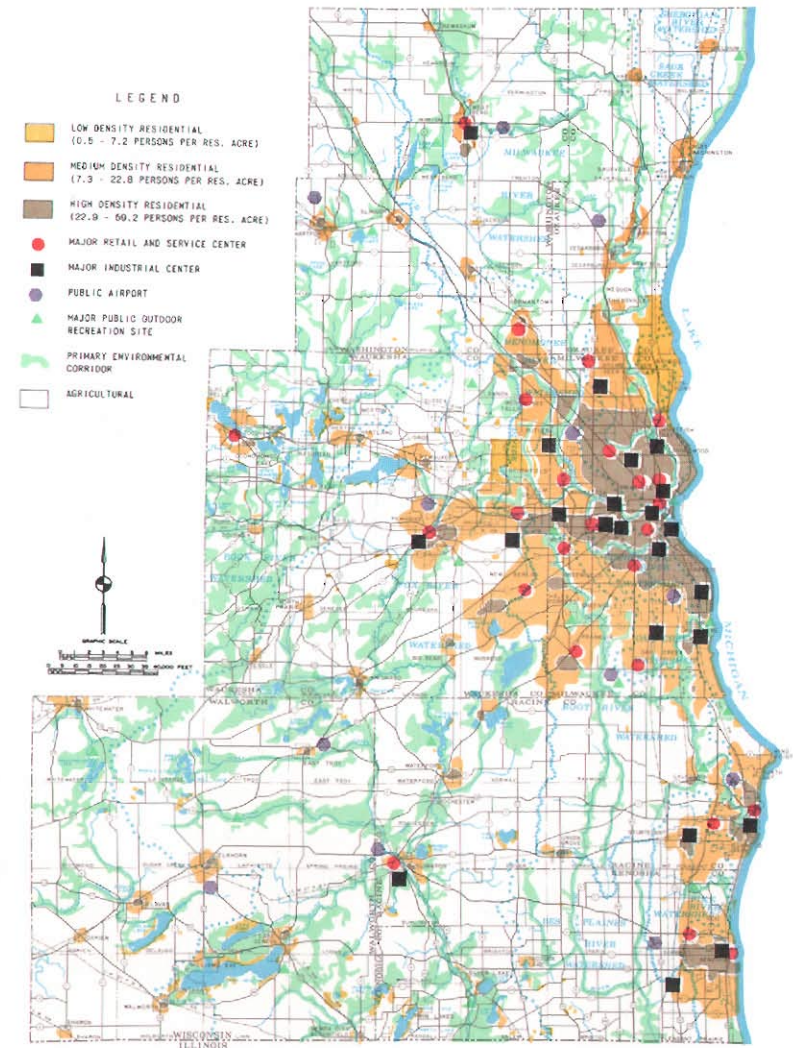
Map 1

ALTERNATIVE REGIONAL LAND USE PLAN DESIGNS CONSIDERED
UNDER THE FIRST REGIONAL LAND USE PLANNING EFFORT

1A: CONTROLLED EXISTING TREND PLAN: 1990

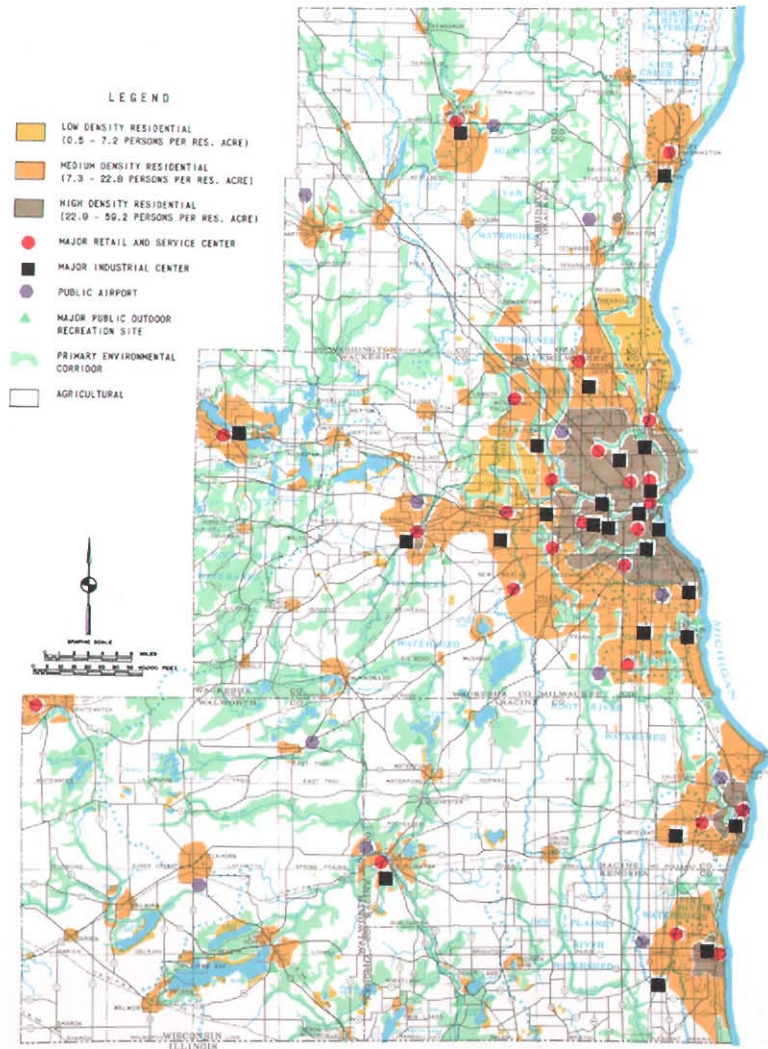


1B: CORRIDOR PLAN: 1990

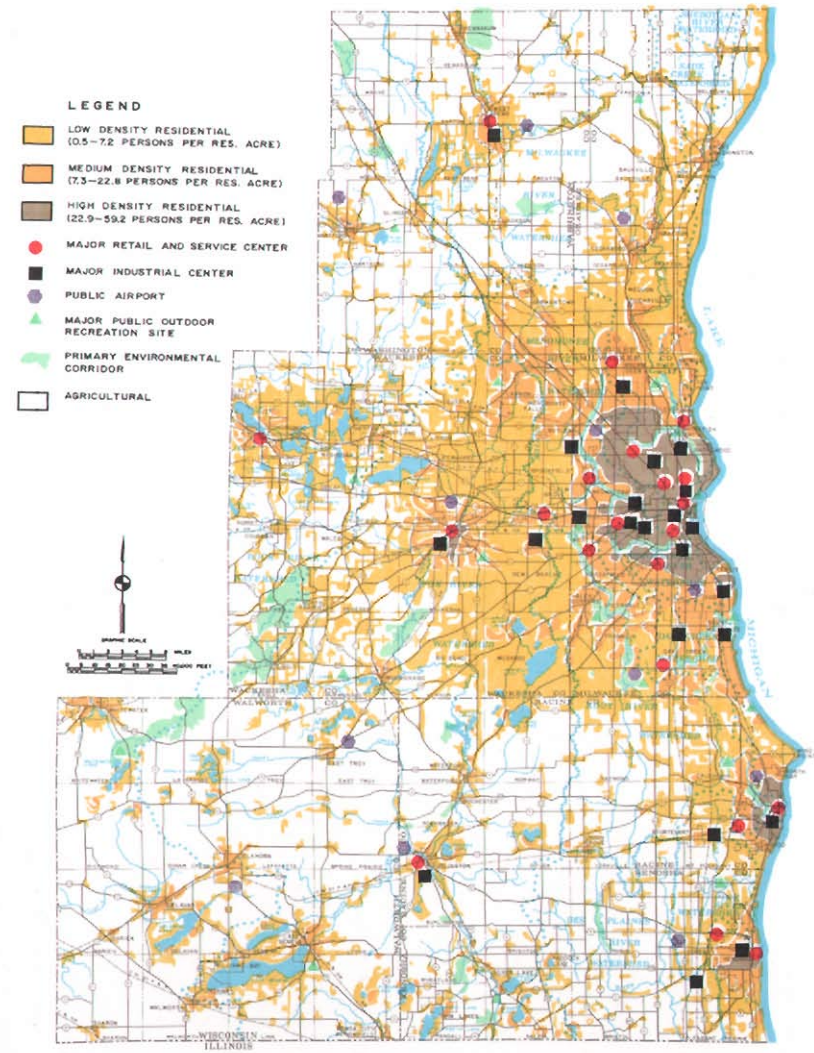


Map 1 (continued)

1C: SATELLITE CITY PLAN: 1990



1D: UNPLANNED LAND USE ALTERNATIVE: 1990



Source: SEWRPC.

can be readily served by essential municipal facilities and services, including centralized public sanitary sewerage and water supply and mass transit systems.

- Second, the plan recommended that existing development trends be altered by preserving in essentially natural, open uses the identified primary environmental corridors, that is, the linear areas in the landscape that encompass the best remaining elements of the natural resource base, including lakes, rivers, and streams and the associated floodlands and shorelands; wetlands; woodlands; prairies; wildlife habitat areas; rugged terrain and high-relief topography; areas of groundwater recharge and discharge; and areas of organic soils. The corridors are poorly suited to urban uses and the intrusion of such uses into the corridors may be expected to result in costly problems such as flooding, water pollution, failing foundations for buildings and pavements, wet basements, and excessive clear water inflow and infiltration into sanitary sewers.
- Third, the plan recommended that existing development trends be altered by retaining in essentially agricultural use almost all of the remaining prime agricultural lands comprising the most productive farm lands in the Region.

Second-Generation Regional Land Use Plan

In the second-generation land use plan preparation, efforts were centered on needed revisions of, and refinements to, the basic controlled existing trend plan adopted as the first-generation plan. The second-generation plan is shown in graphic summary form on Map 2A. In addition, a potential major modification to that plan was considered in the form of a more decentralized plan, with more emphasis placed on lower density and more highly diffused urban development and greater reliance on private onsite soil absorption sewage disposal systems and individual water-supply wells (see Map 2B). This alternative was prepared at the specific request of local and state officials and private individuals who perceived a need, even within the broad concept of a controlled existing trend land use plan, to accommodate low-density, unsewered urban development.

After careful review and evaluation, including public hearings, of the two land use plan alternatives, the controlled centralization plan

was selected for adoption as the recommended year 2000 regional land use plan. Thus, the basic concepts of the initial regional land use plan adopted by the Commission in 1966, including, importantly, the location of new urban development in areas contiguous to existing development, covered by soils suitable for such development, not subject to special hazards, and which could be readily provided with essential urban services and facilities; the preservation of primary environmental corridors; and the preservation of prime agricultural lands, were reaffirmed and carried forward into the second-generation regional land use plan for the plan design year 2000.

Land Use Planning Process

The Commission has utilized the following seven-step planning process in the preparation of the regional land use plans:

1. Study Design

The study design is intended to specify the content and procedures of the major steps in the planning process in order that those individual steps may be carried out efficiently and the overall planning process properly coordinated. Over the years, this requirement has been met through the preparation of prospectuses, formal study designs, annual overall work programs, and staff memoranda.

2. Formulation of Objectives and Standards

In its most basic sense, planning is a rational process for establishing and meeting objectives. The formulation of objectives is, therefore, an essential task to be undertaken before plans can be prepared. The objectives chosen guide the preparation of plans and, when converted to standards, provide the criteria for plan evaluation. It is important to recognize that, because the formulation of objectives involves a formal definition of a desirable physical system by listing, in effect, the broad needs which the system aims to satisfy, the objectives implicitly reflect an underlying value system.

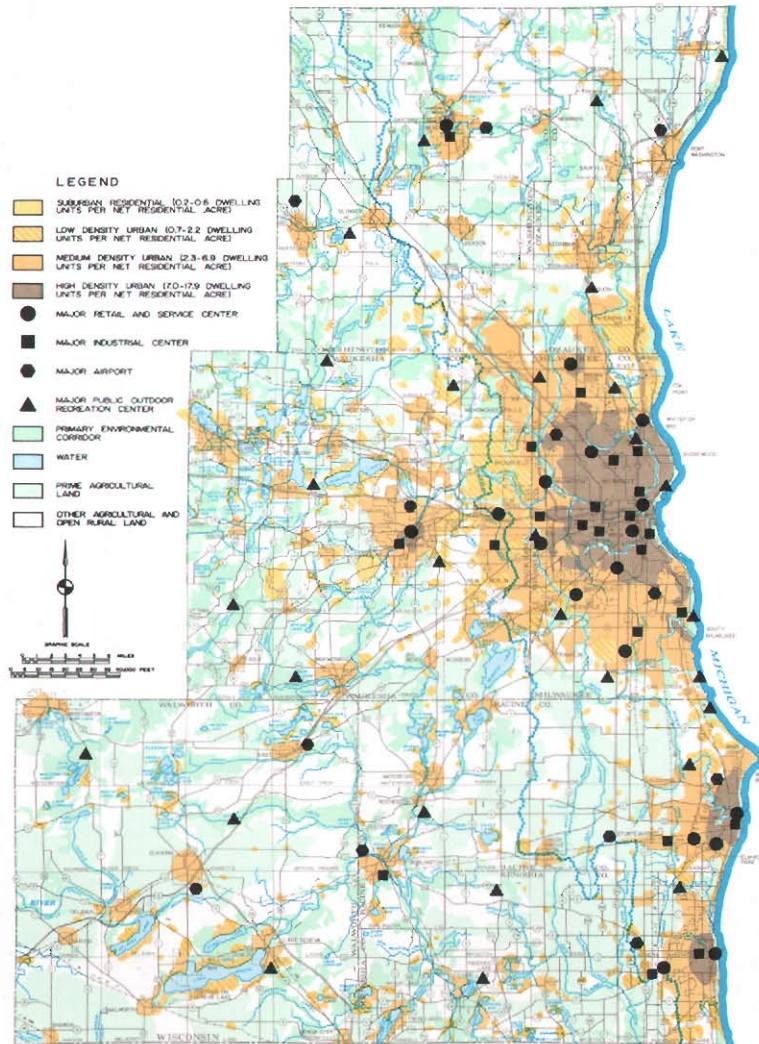
3. Data Collection or Inventory

Reliable basic planning and engineering data, collected on a uniform, areawide basis, are essential to the formulation of workable development plans. The crucial nature of factual information in the plan-

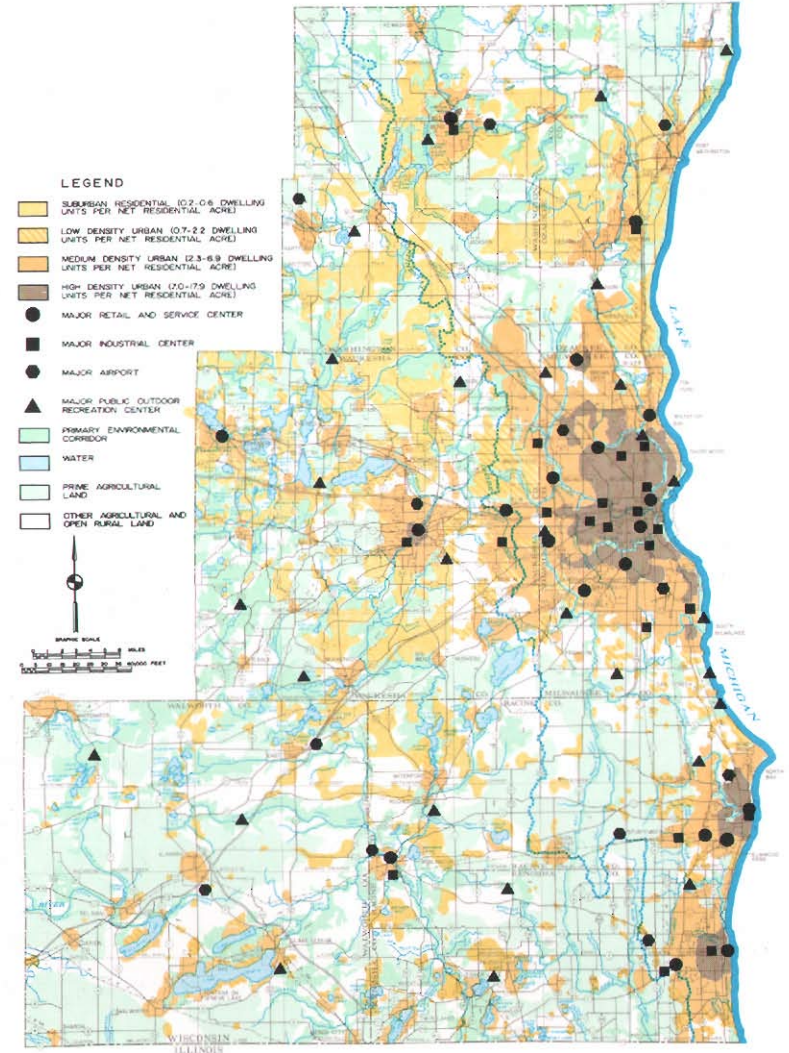
Map 2

ALTERNATIVE REGIONAL LAND USE PLAN DESIGNS CONSIDERED UNDER THE SECOND REGIONAL LAND USE PLANNING EFFORT

2A: CONTROLLED CENTRALIZATION PLAN: 2000



2B: CONTROLLED DECENTRALIZATION PLAN: 2000



Source: SEWRPC.

ning process should be evident, since no intelligent forecasts can be made or course of action selected without knowledge of the current state of the system being planned. The sound formulation of a regional land use plan requires that factual data be developed on the existing land use pattern, on the potential demand for each of the various major land use categories, on the major determinants of these demands, and on existing local development objectives and constraints, as well as on the underlying natural resource and public utility base and its ability to support land use development.

4. Analyses and Forecasts

Inventories provide factual information about the present situation, but analyses and forecasts are necessary to provide estimates of future needs for land and resources. Analyses of the information provided by the inventories are required to provide an understanding of the existing situation, the future trends of change in that situation, and the factors influencing these trends. Particularly important among the analytical relationships established are those which link population and economic activity levels to the demand for various categories of land use.

5. Plan Design

Plan synthesis, or plan design, forms the heart of the planning process. The most well-conceived objectives; the most sophisticated data collection, processing, and analysis operations; and the most accurate forecasts are of little value if they do not ultimately result in sound plans to meet the objectives in light of forecast needs. The outputs of each of the aforementioned planning operations, formulation of objectives and standards, inventory, and forecast, become inputs to the design problem of plan synthesis.

The land use plan design problem consists essentially of determining the allocation of a scarce resource, land, between competing and often conflicting demands. This allocation must be accomplished so as to satisfy the aggregate needs for each land use and comply with the design standards derived from the plan objectives.

The task of designing a land use plan for a large, urbanizing area is a complex and difficult problem. The land use pattern must enable people to live in close cooperation and yet freely pursue an enormous variety of interests. It must minimize conflicts between population growth and limited land and water resources; maintain an ecological balance of human, animal, and plant life; and minimize social and public health problems.

6. Plan Evaluation

The plan evaluation step in the overall planning process is particularly important in that as it provides the basis for selecting, from among the alternatives being considered, one design which can serve as the recommended plan. The focus of the plan evaluation process is the degree to which the various alternative plans meet the regional land use development objectives and supporting standards.

7. Plan Adoption by Commission and Concerned Governments

In order for the regional land use plan to gain widespread acceptance, the process followed in developing that plan must actively involve the various governmental bodies, technical agencies, and private-interest groups concerned with regional development. That involvement has come about historically in the development of the regional land use plan through participation of key local, county, state, federal, and private-sector representatives on advisory committees; through public informational meetings; and through formal public hearings. As appropriate, the Commission has developed summary informational materials for use as a basis for conducting the informational meetings and public hearings. After refinement as warranted by the review process, the plan is considered for adoption by the Regional Planning Commission. Upon adoption by the Commission, the plan is certified to the concerned units and agencies of government for adoption and implementation.

Although a step beyond the foregoing planning process, plan implementation is considered throughout the process so that realization of the plans may be fostered. Each of the recommended regional land use plans includes a specific set of

actions recommended to be taken by the units and agencies of government concerned in implementing the various elements of the regional land use plan.

LAND USE PLAN DESCRIPTION

Overview

It was determined that the Commission's second-generation regional land use plan, the current plan of record, would be used as the basis for measuring plan implementation. That land use plan is shown on Map 3 as it was initially adopted in 1977, prior to amendments which refined and detailed the plan over a period of years. The plan had a base year of 1970 and a plan design year of 2000.

As noted earlier, the conceptual framework of the second-generation regional land use plan is identical to the Commission's first-generation land use plan. In both cases, the plans were "controlled existing trend" in nature, placing heavy emphasis on the effect of the urban land market in determining the location, intensity, and character of future urban development. The public land acquisition and regulatory actions recommended in each of the two plans seek primarily to avoid the most potentially damaging effects on the natural environment in southeastern Wisconsin of the unconstrained operation of the urban land market.

Objectives

The objectives which the plans are intended to achieve were formulated with the assistance of advisory committees. Two basic types of objectives were formulated. The first are general development objectives, often referred to as "goals." By their very nature, this type of objective is qualitative and therefore difficult to relate directly to development plans. The following are the nine general objectives used in preparation of the second-generation regional land use plan:

- Economic growth at a rate consistent with regional resources, including land, labor, and capital, and primary dependence on free enterprise in order to provide needed employment opportunities for the expanding labor force of the Region.
- A wide range of employment opportunities through a broad, diversified economic base.

- Conservation and protection of desirable existing residential, commercial, industrial, and agricultural development in order to maintain desirable social and economic values; renewal of obsolete and deteriorating residential, commercial, and industrial areas in the rural as well as in the urban areas of the Region; and prevention of slums and blight.
- A broad range of choice among housing designs, sizes, types, and costs, recognizing changing trends in age-group composition, income, and family living habits.
- An adequate, flexible, and balanced level of community services and facilities.
- An efficient and equitable allocation of fiscal resources within the public sector of the economy.
- An attractive and healthful physical and social environment with ample opportunities for high-quality education, cultural activities, and outdoor recreation.
- Protection, wise use, and enhancement of the natural resource base.
- Development of communities having distinctive individual character, based on physical conditions, historical factors, and local desires.

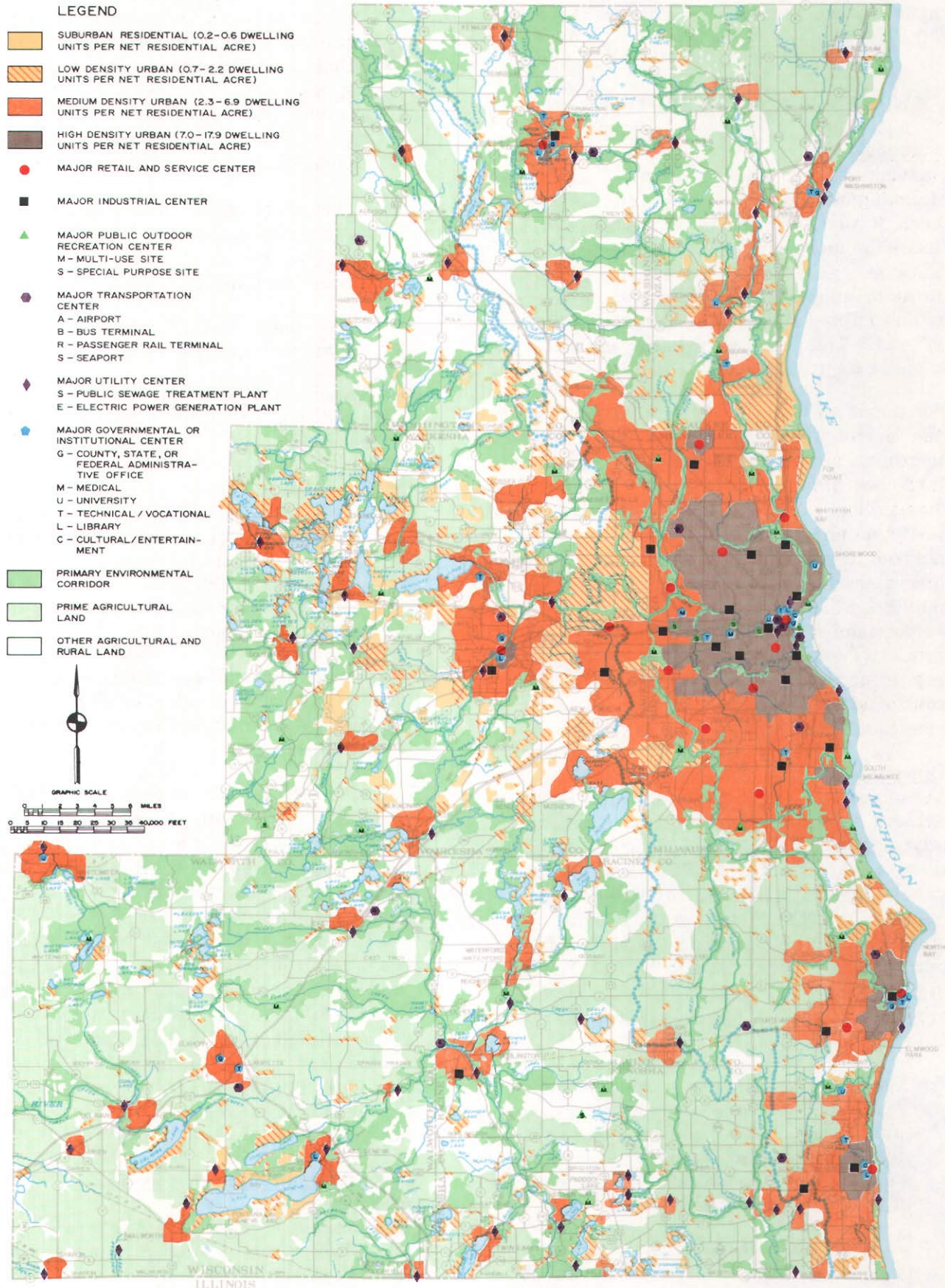
Within the framework established by the foregoing general objectives, the advisory committee postulated a secondary set of more specific land use development objectives. These objectives are directly relatable to physical development plans and can be at least crudely quantified. The quantification is facilitated by complementing each specific objective with a set of planning standards. Each standard, in turn, is directly relatable to a planning principle which supports the chosen objective. The eight specific land use development objectives and their supporting principles and standards used in preparing the second-generation regional land use plan are reproduced in Table 1.

Forecast Population, Household, and Employment Levels

The forecasts of future growth and change underlying the second-generation regional land use plan reflect, in part, long-term trends in the

Map 3

ADOPTED REGIONAL LAND USE PLAN FOR SOUTHEASTERN WISCONSIN: 2000



Source: SEWRPC.

Table 1

REGIONAL LAND USE DEVELOPMENT OBJECTIVES, PRINCIPLES, AND STANDARDS USED IN PREPARATION OF THE SECOND-GENERATION REGIONAL LAND USE PLAN

OBJECTIVE NO. 1—LAND USE ALLOCATION

A balanced allocation of space to the various land use categories which meets the social, physical, and economic needs of the regional population.

PRINCIPLE

The planned supply of land set aside for any given use should approximate the known and anticipated demand for that use.

STANDARDS

1. For each additional 100 dwelling units to be accommodated within the Region at each residential density, the following minimum amounts of residential land should be set aside:

No.	Residential Density Category	Net Area ^a (acres/100 dwelling units)*	Gross Area ^b (acres/100 dwelling units)*
1a	High-Density Urban ^c	8	13
1b	Medium-Density Urban ^c	23	32
1c	Low-Density Urban ^c	83	109
1d	Suburban ^d	167	204
1e	Rural ^d	500	588

*NOTE: In order to convert dwelling units to resident population, factors ranging from a minimum of 2.6 persons per dwelling unit in Milwaukee County to a maximum of 3.5 persons per dwelling unit in Waukesha and Ozaukee Counties were used. This represents an average of 2.9 persons per dwelling unit for the Region as a whole.

2. For each additional 1,000 persons to be accommodated within the Region, the following minimum amounts of public park and recreation land should be set aside:

No.	Public Park and Recreation Land Category ^e	Net Area ^a (acres/1,000 persons)	Gross Area ^f (acres/1,000 persons)
2a	Major	4	5
2b	Other	8	9

3. For each additional 100 industrial employees to be accommodated within the Region, the following minimum amounts of industrial land should be set aside:

No.	Industrial Land Category	Net Area ^a (acres/100 employees)	Gross Area ^g (acres/100 employees)
3a	Major and Other	7	9

4. For each additional 100 commercial employees to be accommodated within the Region, the following minimum amounts of commercial land should be set aside:

No.	Commercial Land Category	Net Area ^a (acres/100 employees)	Gross Area ^g (acres/100 employees)
4a	Major	1	3
4b	Other	2	6

5. For each additional 1,000 persons to be accommodated within the Region, the following minimum amounts of governmental and institutional land should be set aside:

No.	Governmental and Institutional Land Category	Net Area ^a (acres/100 persons)	Gross Area ^h (acres/100 persons)
5a	Major and Other	9	12

Table 1 (continued)

OBJECTIVE NO. 2—COMPATIBLE ARRANGEMENT OF LAND USES

A spatial distribution of the various land uses which will result in a compatible arrangement of land uses.

PRINCIPLE

The proper allocation of uses to land can avoid or minimize hazards and dangers to health, safety, and welfare and maximize amenity and convenience in terms of accessibility to supporting land uses.

STANDARDS

1. Urban high-, medium, and low-density residential uses should be located within planning units which are served with centralized public sanitary sewerage and water supply facilities and contain, within a reasonable walking distance, necessary supporting local service uses, such as neighborhood park, local commercial, and elementary school facilities, and should have reasonable access through the appropriate component of the transportation system to employment, commercial, cultural, and governmental centers and secondary school and higher educational facilities.
2. Rural- and suburban-density residential uses should have reasonable access through the appropriate component of the transportation system to local service uses; employment, commercial, cultural, and governmental centers; and secondary school and higher educational facilities.
3. Industrial uses should be located to have direct access to arterial street and highway facilities and reasonable access through an appropriate component of the transportation system to residential areas and to railway, seaport, and airport facilities and should not be intermixed with commercial, residential, governmental, recreational, or institutional land uses.
4. Regional commercial uses should be located in centers of concentrated activity on only one side of an arterial street and should be afforded direct access¹ to the arterial street system.

OBJECTIVE NO. 3—PROTECTION OF NATURAL RESOURCES

A spatial distribution of the various land uses which will result in the protection and wise use of the natural resources of the Region, including its soils, inland lakes and streams, wetlands, woodlands, and wildlife.

PRINCIPLE

The proper allocation of uses to land can assist in maintaining an ecological balance between the activities of man and the natural environment which supports him.

A. Soils

Principle

The proper relation of urban and rural land use development to soils type and distribution can serve to avoid many environmental problems, aid in the establishment of better regional settlement patterns, and promote the wise use of an irreplaceable resource.

Standards

1. Sewered urban development, particularly for residential use, should not be located in areas covered by soils identified in the regional detailed operational soil survey as having severe or very severe limitations for such development.
2. Unsewered suburban residential development should not be located in areas covered by soils identified in the regional detailed operational soil survey as having severe or very severe limitations for such development.
3. Rural development, including agricultural and rural residential development, should not be located in areas covered by soils identified in the regional detailed operational soil survey as having severe or very severe limitations for such uses.

B. Inland Lakes and Streams

Principle

Inland lakes and streams contribute to the atmospheric water supply through evaporation; provide a suitable environment for desirable and sometimes unique plant and animal life; provide the population with opportunities for certain scientific, cultural, and educational

Table 1 (continued)

pursuits; constitute prime recreational areas; provide a desirable aesthetic setting for certain types of land use development; serve to store and convey flood waters; and provide certain water withdrawal requirements.

Standards

1. A minimum of 25 percent of the perimeter or shoreline frontage of lakes having a surface area in excess of 50 acres should be maintained in a natural state.
2. Not more than 50 percent of the length of the shoreline of inland lakes having a surface area in excess of 50 acres should be allocated to urban development, except for park and outdoor recreational uses.
3. A minimum of 10 percent of the shoreline of each inland lake having a surface area in excess of 50 acres should be maintained for public uses, such as beach area, pleasure craft marina, or park.
4. It is desirable that 25 percent of the shoreline of each inland lake having a surface area less than 50 acres should be maintained in either a natural state or some low-intensity public use, such as parkland.
5. A minimum of 25 percent of both banks of all perennial streams should be maintained in a natural state.
6. Not more than 50 percent of the length of perennial streams should be allocated to urban development, except for park and outdoor recreational uses.
7. Floodlands^j should not be allocated to any urban development^k which would cause or be subject to flood damage.
8. No unauthorized structure or fill should be allowed to encroach upon and obstruct the flow of water in the perennial stream channels^l and floodways.^m

C. Wetlands

Principle

Wetlands support a wide variety of desirable and sometimes unique plant and animal life; assist in the stabilization of lake levels and streamflows; trap and store plant nutrients in runoff, thus reducing the rate of enrichment of surface waters and obnoxious weed and algae growth; contribute to the atmospheric oxygen supply; contribute to the atmospheric water supply; reduce stormwater runoff by providing area for floodwater impoundment and storage; trap soil particles suspended in runoff and thus reduce stream sedimentation; and provide the population with opportunities for certain scientific, educational, and recreational pursuits.

Standard

All wetland areasⁿ adjacent to streams or lakes, all wetlands within areas having special wildlife and other natural values, and all wetlands having an area in excess of 50 acres should not be allocated to any urban development except limited recreation and should not be drained or filled. Adjacent surrounding areas should be kept in open-space use, such as agriculture or limited recreation.

D. Woodlands^o

Principle

Woodlands assist in maintaining unique natural relationships between plants and animals; reduce stormwater runoff; contribute to the atmospheric oxygen supply; contribute to the atmospheric water supply through transpiration; aid in reducing soil erosion and stream sedimentation; provide the resource base for the forest product industries; provide the population with opportunities for certain scientific, educational, and recreational pursuits; and provide a desirable aesthetic setting for certain types of land use development.

Standards

1. A minimum of 10 percent of the land area of each watershed^p within the Region should be devoted to woodlands.
2. For demonstration and educational purposes, the woodland cover within each county should include a minimum of 40 acres devoted to each major forest type: oak-hickory, northern hardwood, pine, and lowland forest. In addition, remaining examples of the native forest vegetation types representative of the pre-settlement vegetation should be maintained in a natural condition and be made available for research and educational use.
3. A minimum regional aggregate of five acres of woodland per 1,000 population should be maintained for recreational pursuits.

Table 1 (continued)

E. Wildlife^a

Principle

Wildlife, when provided with a suitable habitat, will supply the population with opportunities for certain scientific, educational, and recreational pursuits; comprises an integral component of the life systems which are vital to beneficial natural processes, including the control of harmful insects and other noxious pests and the promotion of plant pollination; provides a food source; offers an economic resource for the recreation industries; and serves as an indicator of environmental health.

The most suitable habitat for wildlife—that is, the area wherein fish and game can best be fed, sheltered, and reproduced—is a natural habitat. Since the natural habitat for fish and game can best be achieved by preserving or maintaining in a wholesome state other resources such as soil, air, water, wetlands, and woodlands, the standards for each of these other resources, if met, would ensure the preservation of a suitable wildlife habitat and population.

OBJECTIVE NO. 4—RELATIONSHIP TO PUBLIC SERVICES AND FACILITIES

A spatial distribution of the various land uses which is properly related to the supporting transportation, utility, and public facility systems in order to assure the economical provision of transportation, utility, and public facility services.

PRINCIPLE

The transportation and public utility facilities and the land use pattern which these facilities serve and support are mutually interdependent in that the land use pattern determines the demand for, and loadings upon, transportation and utility facilities; and these facilities, in turn, are essential to, and form a basic framework for, land use development.

STANDARDS

1. Urban development should be located so as to maximize the use of existing transportation and utility systems.
2. The transportation system should be located and designed to provide access not only to all land presently devoted to urban development but to land proposed to be used for such urban development.
3. All land developed or proposed to be developed for urban high-, medium-, and low-density residential use should be located in areas serviceable by an existing or proposed public sanitary sewerage system and preferably within the gravity drainage area tributary to such systems.
4. All land developed or proposed to be developed for urban high-, medium-, and low-density residential use should be located in areas serviceable by an existing or proposed public water supply system.
5. All land developed or proposed to be developed for urban high- and medium-density residential use should be located in areas serviceable by an existing or proposed primary, secondary, and tertiary mass transit facilities.
6. The transportation system should be located and designed to minimize the penetration of existing and proposed residential neighborhood units by through traffic.
7. Transportation terminal facilities, such as off-street parking, off-street truck loading, and mass transit loading facilities, should be located in close proximity to the principal land uses to which they are necessary.

OBJECTIVE NO. 5—RESIDENTIAL DEVELOPMENT

The development and conservation of residential areas within a physical environment that is healthy, safe, convenient, and attractive.

PRINCIPLE

Residential areas developed in designed neighborhood units can assist in stabilizing community property values, preserving residential amenities, and promoting efficiency in the provision of public and community service facilities; can best provide a desirable environment for family life; and can supply the population with improved levels of safety and convenience.

1. Urban high-, medium-, and low-density residential development should be located in neighborhood units which are physically self-contained with clearly defined and relatively permanent isolating boundaries, such as arterial streets and highways, major park and open space reservations, or significant natural features, such as rivers, streams, or hills.

Table 1 (continued)

2. Urban residential neighborhood units should contain enough area to provide: housing for the population served by one elementary school and one neighborhood park; and internal street system which discourages penetration of the unit by through traffic; and all of the community and commercial facilities necessary to meet the day-to-day living requirements of the family within the immediate vicinity of its dwelling unit.

3. Suburban- and rural-density residential development should be located in areas where onsite soil absorption sewage disposal system and private wells can be accommodated and access to other services and facilities can be provided through appropriate components of the transportation system at the community or regional level, thereby properly relating such development to a rural environment.

To meet the foregoing standards, land should be allocated in each urban and rural development category as follows:

Land Use Category	Percent of Area in Land Development Category					
	Urban High-Density (7.0-17.9 dwelling units per net residential acre)	Urban Medium-Density (2.3-6.9 dwelling units per net residential acre)	Urban Low-Density (0.7-2.2 dwelling units per net residential acre)	Suburban-Density (0.2-0.6 dwelling units per net residential acre)	Rural-Density (0.1-0.2 dwelling units per net residential acre)	Agricultural (<0.2 dwelling units per net residential acre)
Residential	66.0	71.0	76.5	82.0	85.0	6.0
Streets and Utilities	25.0	23.0	20.0	18.0	15.0	4.0
Parks and Playgrounds	3.5	2.5	1.5	--	--	--
Public Elementary Schools	2.5	1.5	0.5	--	--	--
Other Governmental and Institutional	1.5	1.0	1.0	--	--	--
Retail and Service	1.5	1.0	0.5	--	--	--
Nonurban	--	--	--	--	--	90.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

OBJECTIVE NO. 6—INDUSTRIAL AND COMMERCIAL DEVELOPMENT

The preservation, development, and redevelopment of a variety of suitable industrial and commercial sites both in terms of physical characteristics and location.

PRINCIPLE

The production and sale of goods and services are among the principal determinants of the level of economic vitality in any society, and the important activities related to these functions require areas and locations suitable to their purpose.

STANDARDS

1. Regional industrial development should be located in planned industrial districts which meet the following standards:

- a. Minimum gross site area of 320 acres or a minimum employment of 3,500 persons.
- b. Direct access to the arterial street and highway system and access within two miles to the freeway system.
- c. Direct access to railroad facilities.
- d. Direct access to primary, secondary, and tertiary mass transit service.
- e. Access to a basic transport airport within a maximum travel time of 30 minutes and access to seaport facilities within a maximum travel time of 60 minutes.
- f. Available adequate water supply.
- g. Available adequate public sanitary sewer service.
- h. Available adequate stormwater drainage facilities.

Table 1 (continued)

- i. Available adequate power supply.
 - j. Site should be covered by soils identified in the regional soils survey as having very slight, slight, or moderate limitations for industrial development.
2. Regional commercial development, which would include activities primarily associated with the sale of shopper's goods, should be concentrated in regional commercial centers which meet the following minimum standards:
- a. Accessibility to a population of between 75,000 and 150,000 persons located within either a 20-minute one-way travel period or a 10-mile radius.
 - b. A minimum gross site area of 60 acres.
 - c. At least two general sales and service department stores offering a full range of commodities and price levels.
 - d. Direct access to the arterial street system.
 - e. Direct access to primary, secondary, and tertiary mass transit service.
 - f. Available adequate water supply.
 - g. Available adequate sanitary sewer service.
 - h. Available adequate stormwater drainage facilities.
 - i. Available adequate power supply.
 - j. Site should be covered by soils identified in the regional soils survey as having very slight, slight, or moderate limitations for commercial development.

In addition to the above minimum standards, the following site development standards are desirable:

- k. Provision of off-street parking for at least 5,000 cars.
 - l. Provision of adequate off-street loading facilities.
 - m. Provision of well-located points of ingress and egress which are controlled to prevent traffic congestion on adjacent arterial streets.
 - n. Provision of adequate screening to serve as a buffer between the commercial use and adjacent noncommercial uses.
 - o. Provision of adequate building setbacks from major streets.
3. Local industrial development should be located in planned industrial districts which meet the following standards:
- a. Direct access to the arterial street and highway system.
 - b. Direct access to mass transit facilities.
 - c. Available adequate water supply.
 - d. Available adequate public sanitary sewer service.
 - e. Available adequate stormwater drainage facilities.
 - f. Available adequate power supply.
 - g. Site should be covered by soils identified in the regional soils survey as having very slight, slight, or moderate limitations for industrial development.
4. Local commercial development, which includes activities primarily associated with the sale of convenience goods and services, should be contained within the residential planning units, the total area devoted to the commercial use varying with the residential density:

Table 1 (continued)

- a. In urban low-density areas, land devoted to local commercial centers should comprise at least 0.5 percent of the total gross neighborhood area, or about 3.2 acres per square mile of gross neighborhood area.
- b. In urban medium-density areas, land devoted to local commercial centers should comprise at least 1.0 percent of the total gross neighborhood area, or about 6.4 acres per square mile of gross neighborhood area.
- c. In urban high-density areas, land devoted to local commercial centers should comprise at least 1.5 percent of the total gross neighborhood area, or about 9.6 acres per square mile of gross neighborhood area.

OBJECTIVE NO. 7—PARKS AND OPEN SPACE

The preservation and provision of open space^f to enhance the total quality of the regional environment, maximize essential natural resource availability, give form and structure to urban development, and facilitate the ultimate attainment of a balanced year-round outdoor recreational program providing a full range of facilities for all age groups.

PRINCIPLE

Open space is the fundamental element required for the preservation, wise use, and development of such natural resources as soil, water, woodlands, wetlands, native vegetation, and wildlife; it provides the opportunity to add to the physical, intellectual, and spiritual growth of the population; it enhances the economic and aesthetic value of certain types of development; and it is essential to outdoor recreational pursuits.

STANDARDS^g

1. Major or regional park and recreation sites should be provided with a 10-mile service radius of every dwelling unit in the Region, and should have a minimum gross site area of 250 acres.
2. Local park and recreation sites should be provided with a maximum service radius of one mile of every dwelling unit in an urban area and should have a minimum gross site area of five acres.
3. Areas having unique scientific, cultural, scenic, or educational value should not be allocated to any urban or agricultural land uses; adjacent surrounding areas should be retained in open space use, such as agriculture or limited recreation.

OBJECTIVE NO. 8—AGRICULTURAL USE

The preservation of land areas for agricultural uses in order to provide for certain special types of agriculture, provide a reserve or holding zone for future needs, and ensure the preservation of those unique rural areas which provide wildlife habitat and which are essential to shape and order urban development.

PRINCIPLE

Agricultural areas, in addition to providing food and fiber, can supply significant wildlife habitat; contribute to maintaining an ecological balance between plants and animals; offer locations proximal to urban centers for the production of certain food commodities which may require nearby population concentrations for an efficient production-distribution relationship; support the agricultural-related economy of the Region; and provide open spaces which give form and structure to urban development.

STANDARDS

1. All prime agricultural areas^h should be preserved.
2. All agricultural lands surrounding adjacent high-value scientific, educational, or recreational resources should be preserved.

In addition to the above, attempts should be made to preserve agricultural areas which are covered by soils rated in the regional detailed operational soil survey as having moderate limitations if these soils: a) generally occur in concentrations greater than five square miles and surround or lie adjacent to areas which qualify under either of the above standards, or b) occur in areas which may be designated as desirable open spaces for shaping urban development.

^aNet land use area is defined as the actual site area devoted to a given use, and consists of the ground floor site area occupied by any buildings plus the required yards and open spaces.

^bGross residential land use area is defined as the net area devoted to this use plus the area devoted to all supporting land uses, including streets, neighborhood parks and playgrounds, elementary schools, and neighborhood institutional and commercial uses, but not including

Table 1 (continued)

freeways and expressways and other community and areawide uses.

^c*Areas served, proposed to be served, or required to be served by public sanitary sewerage and water supply facilities; require neighborhood facilities.*

^d*Areas not served, not proposed to be served, nor required to be served by public sanitary sewerage and water supply facilities; do not require neighborhood facilities.*

^e*These categories do not include large open-space areas not developed for active recreational use or school playgrounds.*

^f*Gross public park and recreation area is defined as the net area devoted to active or intensive recreational use plus the adjacent "back-up" lands and lands devoted to other supporting land uses such as roads and parking areas.*

^g*Gross commercial and industrial area is defined as the net area devoted to these uses plus the area devoted to supporting land uses, including streets and off-street parking.*

^h*Gross governmental and institutional area is defined as the net area devoted to governmental and institutional use plus the area devoted to supporting land uses, including streets and onsite parking.*

ⁱ*Direct access implies adjacency or immediate proximity.*

^j*Floodlands are herein defined as those lands inundated by a flood having a recurrence interval of 100 years where hydrologic and hydraulic engineering data are available, and those lands inundated by the maximum flood of record where such data are not available.*

^k*Urban development, as used herein, refers to all land uses except agricultural, water, woodlands, wetlands, open lands, and quarries.*

^l*A stream channel is herein defined as that area of the floodplain lying either within legally established bulkhead lines or within sharp and pronounced banks marked by an identifiable change in flora and normally occupied by the stream under average annual high-flow conditions.*

^m*Floodway lands are herein defined as those designated portions of the floodlands that will safely convey the 100-year recurrence interval flood discharge with small, acceptable upstream and downstream stage increases.*

ⁿ*Wetland areas, as used herein, are defined as those lands which are partially covered by marshland flora and generally covered with shallow standing water, open lands intermittently covered with water, or lands which are wet and spongy due to a high water table or character of the soil and encompassing an area of one acre or more.*

^o*The term woodlands, as used herein, is defined as a dense, concentrated stand of trees and underbrush encompassing an area of one acre or more.*

^p*A watershed, as used herein, is defined as a portion of the surface of the earth occupied by a surface drainage system discharging all surface water runoff to a common outlet and an area 25 square miles or larger in size.*

^q*Includes all fish and game.*

^r*Open space is defined as land or water areas which are generally undeveloped for urban residential, commercial, or industrial uses and are or can be considered relatively permanent in character. It includes areas devoted to park and recreation uses and to large land-consuming institutional uses, as well as areas devoted to agricultural use and to resource conservation, whether publicly or privately owned.*

^s*It was deemed impractical to establish spatial distribution standards for open space per se. Open spaces which are not included in the spatial distribution standards are: forest preserves and arboreta; major river valleys; lakes; zoological and botanical gardens; stadia; woodland, wetland, and wildlife areas; scientific areas; and agricultural lands whose location must be related to, and determined by, the natural resource base. It is intended that the park and open space standards set forth herein be supplemented by the more detailed park and open space standards set forth in SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin.*

^t*Prime agricultural areas are defined as those areas which have been designated as exceptionally good for agricultural production by agricultural specialists and which a) contain soils rated in the regional detailed operational soil survey as very good or good for agricultural and b) occur in concentrated areas over five square miles in extent.*

NOTE: This table excerpted from SEWRPC Planning Report No. 25, Vol. 2, pages 13-21.

Source: SEWRPC.

decentralization of urban development in the Region. Tables 2, 3, and 4 reproduce the forecast year 2000 population, households, and employment in the Region by county, as developed in 1972 for use in the preparation of the second-generation regional land use plan. The data in the tables report base year 1970 conditions, the forecast year 1985 stage conditions, and the forecast plan design year 2000 conditions.

While the plan sought to contain, to the extent possible, the diffusion of urban development throughout the Region, the plan was realistic in the sense that market forces driving land use decentralization were not ignored. As shown on Table 2, for example, the population of Milwaukee County was expected to remain relatively stable over the 30-year design period; nevertheless, the proportion of the total regional population residing in Milwaukee County was expected to decrease from about 60 percent in 1970, to about 47 percent in the year 2000. As shown in Table 3, the number of households in Milwaukee County was expected to substantially increase over the 30-year period; yet, the proportion of total regional households located in Milwaukee County was expected to decrease from about 63 percent in 1970 to about 53 percent in the year 2000. Finally, while Milwaukee County was expected to be the location of increased numbers of jobs over the 30-year period, the County's proportion of regional employment was expected to decrease from about 67 percent in 1970 to about 58 percent in the year 2000.

Urban Development Location, Densities, and Services

As already noted, the regional land use plan recommends that urban development occur only in those areas of the Region which are covered by soils suitable for such development; which are not subject to special hazards, such as flooding and shoreline erosion; and which can readily be served by essential municipal facilities and services, particularly including centralized public sanitary sewerage, water supply, and mass transit services. Overall, the plan seeks to moderate the declining trend in urban population density occurring in the Region since 1920. Under the plan, the overall density of the developed urban areas of the Region, which stood at about 11,300 persons per square mile in 1920, and which had declined to about 5,800 persons per square mile by 1963, when the Commission undertook its first regional land use

planning effort, would approximate 4,100 persons per square mile by the plan stage year 1985 and 3,800 persons per square mile by the plan design year 2000.⁵

The general locations of the proposed new urban development are shown on Map 3. New urban growth would be encouraged to occur largely in concentric rings along the full periphery of, and outward from, existing urban centers within the Region. In total, new urban development within the Region over the period 1970 through the year 2000 would encompass a total of approximately 163 square miles of land. Of that total, about 91 square miles of new development was expected to occur by the plan stage year 1985.

About two-thirds of the new urban development envisioned in the second-generation regional land use plan would be lands converted to residential use. The remaining one-third would consist of lands converted to nonresidential urban land uses, e.g., streets and highways, commercial and industrial centers, institutions, and communications uses. As shown on Map 3, the plan allocates new residential land use development in four density categories: high, medium, low, and suburban. These density categories are defined in Table 5.

The great majority of residential development in the Region is recommended to occur in the

⁵The overall urban population density figures are based upon an analysis of historic urban growth in the Region. This "growth ring" type of analysis takes into account not only lands developed for urban purposes of all types that are contiguous, but also encompasses environmentally sensitive lands within urban areas that are not suitable for urban development. On this basis there were in 1970 about 338 square miles of urban development in the Region. The second-generation regional land use plan envisioned that there would be an additional 133 square miles of such urban development by the plan stage year 1985 and an additional 105 square miles of such urban development by the plan design year 2000. Thus, by 1985 the total urban development in the Region as measured in the "growth ring" analysis would approximate 471 square miles and by the year 2000 would approximate 576 square miles.

Table 2

POPULATION IN THE REGION BY COUNTY: EXISTING 1970 AND FORECAST 1985 AND 2000

County	Existing 1970		Forecast 1985			Forecast 2000		
	Total	Percent of Region	Increment 1970-1985	Total	Percent of Region	Increment 1970-2000	Total	Percent of Region
Kenosha	117,900	6.7	31,900	149,800	7.7	56,900	174,800	7.9
Milwaukee . . .	1,054,300	60.1	-39,300	1,015,000	52.0	-4,700	1,049,600	47.3
Ozaukee	54,500	3.1	32,300	86,800	4.4	59,500	114,000	5.1
Racine	170,800	9.7	24,700	195,500	10.0	46,900	217,700	9.8
Walworth	63,500	3.6	17,000	80,500	4.1	36,100	99,600	4.5
Washington . . .	63,800	3.6	40,100	103,900	5.3	79,200	143,000	6.4
Waukesha	231,300	13.2	91,300	322,600	16.5	189,300	420,600	19.0
Region	1,756,100	100.0	198,000	1,954,100	100.0	463,200	2,219,300	100.0

Source: SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000*, Volume Two, *Alternative and Recommended Plans*.

Table 3

HOUSEHOLDS IN THE REGION BY COUNTY: EXISTING 1970 AND FORECAST 1985 AND 2000

County	Existing 1970		Forecast 1985			Forecast 2000		
	Total	Percent of Region	Increment 1970-1985	Total	Percent of Region	Increment 1970-2000	Total	Percent of Region
Kenosha	35,500	6.6	10,700	46,200	7.3	20,900	56,400	7.6
Milwaukee	338,600	63.1	22,500	361,100	57.1	54,100	392,700	53.1
Ozaukee	14,800	2.8	9,600	24,400	3.9	17,700	32,500	4.4
Racine	49,800	9.3	8,600	58,400	9.2	18,000	67,800	9.2
Walworth	18,500	3.5	5,300	23,800	3.8	11,400	29,900	4.0
Washington	17,400	3.2	11,900	29,300	4.6	24,800	42,200	5.7
Waukesha	61,900	11.5	27,100	89,000	14.1	56,000	117,900	16.0
Region	536,500	100.0	95,700	632,200	100.0	202,900	739,400	100.0

Source: SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000*, Volume Two, *Alternative and Recommended Plans*.

Table 4

EMPLOYMENT IN THE REGION BY COUNTY: EXISTING 1970 AND FORECAST 1985 AND 2000

County	Existing 1970		Forecast 1985			Forecast 2000		
	Total	Percent of Region	Increment 1970-1985	Total	Percent of Region	Increment 1970-2000	Total	Percent of Region
Kenosha	40,000	5.3	6,700	46,700	5.3	14,300	54,300	5.4
Milwaukee	507,100	67.3	45,100	552,200	62.8	86,500	593,600	58.4
Ozaukee	19,800	2.6	8,200	28,000	3.2	18,200	38,000	3.7
Racine	62,700	8.3	16,000	78,700	9.0	32,800	95,500	9.4
Walworth	24,500	3.3	8,200	32,700	3.7	16,700	41,200	4.1
Washington	23,100	3.1	5,100	28,200	3.2	12,900	36,000	3.5
Waukesha	76,500	10.1	35,800	112,300	12.8	80,900	157,400	15.5
Region	753,700	100.0	125,100	878,800	100.0	262,300	1,016,000	100.0

Source: SEWRPC Planning Report No. 25, *A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000*, Volume Two, *Alternative and Recommended Plans*.

Table 5

**URBAN RESIDENTIAL DENSITY CATEGORIES USED IN
PREPARATION OF THE SECOND-GENERATION REGIONAL LAND USE PLAN**

Urban Residential Density Category	Total Dwelling Units per Net Residential Acre		Dwelling Units per Net Residential Acre by Structure Type (average)		Typical Single-Family Lot Area
	Range	Average	Single-Family	Multi-Family	
High	7.0-17.9	12.0	5.9	62.3	7,200 square feet
Medium	2.3-6.9	4.4	3.9	9.2	11,000 square feet
Low	0.7-2.2	1.2	1.2	0.0	0.8 acre
Suburban	0.2-0.6	0.5	0.5	0.0	2.0 acres

Source: SEWRPC.

Table 6

**RESIDENTIAL LAND USE IN THE REGION BY DENSITY
CATEGORY: EXISTING 1970 AND PLANNED 1985 AND 2000**

Residential Land Use Density Category	Existing 1970		Planned Increment 1970-1985		Planned 1985		Planned Increment 1970-2000		Planned 2000	
	Square Miles	Percent of Total	Square Miles	Percent Change	Square Miles	Percent of Total	Square Miles	Percent Change	Square Miles	Percent of Total
High	42.1	18.9	0.9	2.1	43.0	15.3	1.4	3.3	43.5	13.3
Medium	67.9	30.4	31.7	46.7	99.6	35.4	70.4	103.7	138.3	42.3
Low	106.5	47.8	11.5	10.8	118.0	42.0	17.7	16.6	124.2	38.0
Suburban ...	6.5	2.9	14.1	216.9	20.6	7.3	14.2	218.5	20.7	6.4
Total	223.0	100.0	58.2	26.1	281.2	100.0	103.7	46.5	326.7	100.0

Source: SEWRPC.

medium-density category. Of the approximately 104 square miles of planned new residential development, about 70 square miles, or about 67 percent, is proposed to occur in planned neighborhood units in the medium-density category (see Table 6). Of the nearly 203,000 proposed new housing units in the Region, nearly 172,000, or about 85 percent, would be located in areas planned for medium densities (see Table 7). Medium-density residential development would range from about 2.3 to about 6.9 dwelling units per acre over an entire square-mile neighborhood, with an average of about 4.4 dwelling units per acre. A typical single-family lot area in the medium-density category would approximate 11,000 square feet in area.

The regional land use plan also recommends that new urban development be served by public sanitary sewer and water supply and that existing developed areas not yet served be retrofitted with such services. As shown on Table 8, in 1970 nearly 73 percent of the developed urban area in the Region, which houses nearly 85 percent of the regional population, was provided with public sanitary sewer service. With respect to public water supply, nearly 63 percent of the developed urban area and about 79 percent of the regional population was served. If the regional land use plan recommendations would be carried out, by the year 2000 about 92 percent of the developed urban area would be provided with both public sanitary

Table 7

HOUSING UNITS IN THE REGION BY DENSITY CATEGORY: EXISTING 1970 AND PLANNED 1985 AND 2000

Residential Land Use Density Category	Existing 1970		Planned Increment 1970-1985		Planned 1985		Planned Increment 1970-2000		Planned 2000	
	Number	Percent of Total	Number	Percent Change	Number	Percent of Total	Number	Percent Change	Number	Percent of Total
High	319,930	59.6	6,070	1.9	326,000	51.6	9,440	3.0	329,370	44.6
Medium	139,490	26.0	73,090	52.4	212,580	33.6	171,900	123.2	311,390	42.1
Low	74,770	14.0	9,160	12.3	83,930	13.3	14,100	18.9	88,870	12.0
Suburban	2,300	0.4	7,390	321.3	9,690	1.5	7,440	323.5	9,740	1.3
Total	536,490	100.0	95,710	17.8	632,200	100.0	202,880	37.8	739,370	100.0

Source: SEWRPC.

Table 8

DEVELOPED AREA AND POPULATION SERVED BY PUBLIC SANITARY SEWER AND
WATER SUPPLY SERVICES IN THE REGION: EXISTING 1970 AND PLANNED 2000

Area and Population	Existing Service 1970		Planned Service Increment		Total Service 2000	
	Public Sanitary Sewer	Public Water Supply	Public Sanitary Sewer	Public Water Supply	Public Sanitary Sewer	Public Water Supply
Developed Urban Area						
Total Square Miles	337.6	337.6	238.4	238.4	576.0	576.0
Square Miles Served	244.6	211.3	287.0	321.5	531.6	532.8
Percent of Total Served	72.5	62.6	--	--	92.3	92.5
Population						
Total Population	1,756,100	1,756,100	463,200	463,200	2,219,300	2,219,300
Population Served	1,488,700	1,390,500	571,100	670,100	2,059,800	2,060,600
Percent of Total Served	84.8	79.2	--	--	92.8	92.8

Source: SEWRPC.

sewer and water supply services. That area would house about 93 percent of the anticipated regional population.

Major Regional Centers

As previously noted, the scope of the regional land use planning process has been defined and structured so as to give explicit attention to the location and size of certain major regional centers of activity. More particularly, explicit attention in the regional land use plan is to be given to major commercial, industrial, and public outdoor recreational centers, with the land use plan to identify the existing sets of such centers and to recommend changes to those sets in order to meet anticipated needs.

Other regional centers are also accounted for in the regional land planning process, including major transportation centers, major utility centers, and major governmental or institutional centers. With respect to these types of major centers, the regional land use plan incorporates recommendations from other regional plan elements, e.g., the regional airport system plan for airports and the regional water quality management plan for public sewage treatment plants. In other cases, the plan incorporates facility recommendations made by others, e.g., the "advance" plans filed by the electric power utilities operating in the Region. With respect to major governmental or institutional centers, the regional land use plan simply recognizes exist-

Table 9

CRITERIA USED TO IDENTIFY MAJOR CENTERS IN THE SECOND-GENERATION REGIONAL LAND USE PLAN

Type of Major Center	Criteria
Commercial	<p>Retail and service lands within designated central business districts, strip shopping districts, and shopping centers which meet at least five of the following six criteria:</p> <ol style="list-style-type: none"> 1. Two department stores 2. Ten additional retail and service establishments 3. Combined average annual sales totaling \$30 million or more 4. Combined net site area, not including parking and landscaped areas, totaling 20 acres or more 5. Able to attract at least 3,000 shopping trips daily 6. Accessible to a population of at least 100,000 in a radius of 10 miles or 20 minutes one way travel time
Industrial	<p>Selected contiguous U. S. Public Land Survey quarter sections having 250 acres or more of net industrial land, not including parking and landscaped areas, or a minimum of 3,500 industrial employees</p>
Major Public Recreational	<p>Public multi-use outdoor recreation sites 250 acres or greater in area</p>

Source: SEWRPC.

ing facilities, including governmental centers, medical centers, and educational centers.

The following comments pertain to the three major types of regional centers explicitly addressed in the regional land use plan. Table 9 identifies the criteria used in the second-generation regional land use planning work effort to identify these major centers.

1. Commercial Centers

Major commercial centers are comprised of aggregations of retail and service lands, including central business districts, strip shopping districts, and integrated shopping centers. Such large centers must serve a population of at least 100,000 within a 20-minute travel time, and are large trip generators, attracting at least 3,000 shopping trips daily. As shown on Map 4, the second-generation regional land use plan recommended that 16 major commercial centers be provided to serve the Region by the year 2000. Of these 16 centers, 10 existed in 1963, the base year for the Commission's first-generation regional land use plan. Three additional centers, Brookfield Square, Southridge, and West Allis, were recommended in the first-generation plan and were built and placed in operation by 1970, the base year of the second-generation plan. The second-

generation plan recommended three additional commercial centers, in the Granville area of the City of Milwaukee, in the City of Oak Creek, and in the Racine area.

2. Industrial Centers

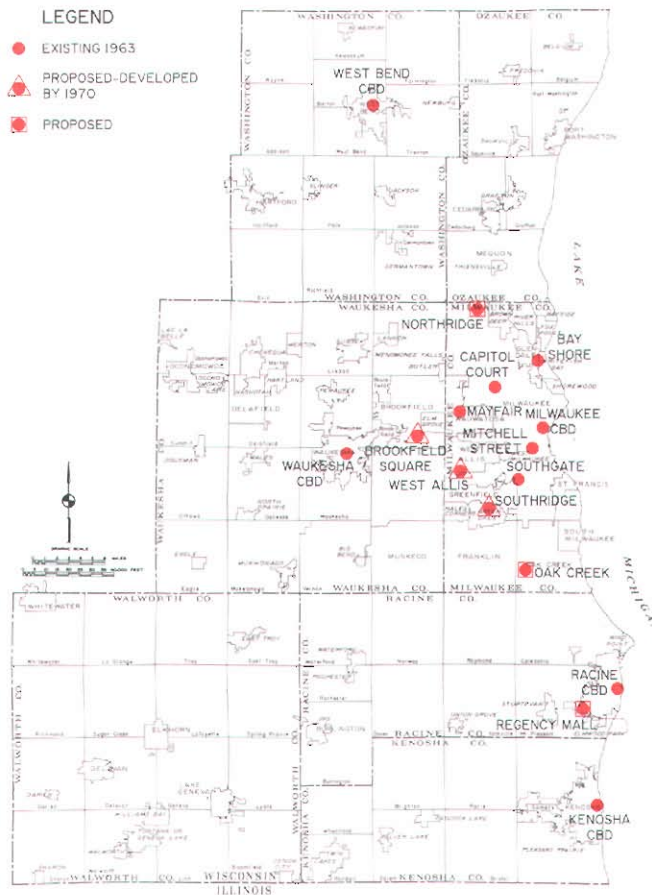
Major industrial centers are comprised of aggregations of industrial and office land uses. At a minimum, such industrial centers must be the location of 3,500 jobs. As shown on Map 5, the second-generation regional land use plan recommended that 22 major industrial centers be provided to serve the Region by the year 2000. Of these 22 centers, 15 existed in 1963, the base year for the Commission's first-generation regional land use plan. Two additional centers, New Berlin and Mt. Pleasant, were recommended in the first-generation plan and were built and placed in operation by 1970, the base year of the second-generation plan. The second-generation plan recommended five additional industrial centers, in the Granville area of the City of Milwaukee; in the Cities of Waukesha, Oak Creek, and Burlington; and in the Kenosha area.

3. Public Recreational Centers

Major public outdoor recreational centers, or regional parks, are multi-use outdoor recreation areas of at least 250 acres in

Map 4

MAJOR COMMERCIAL CENTERS RECOMMENDED IN THE SECOND-GENERATION REGIONAL LAND USE PLAN

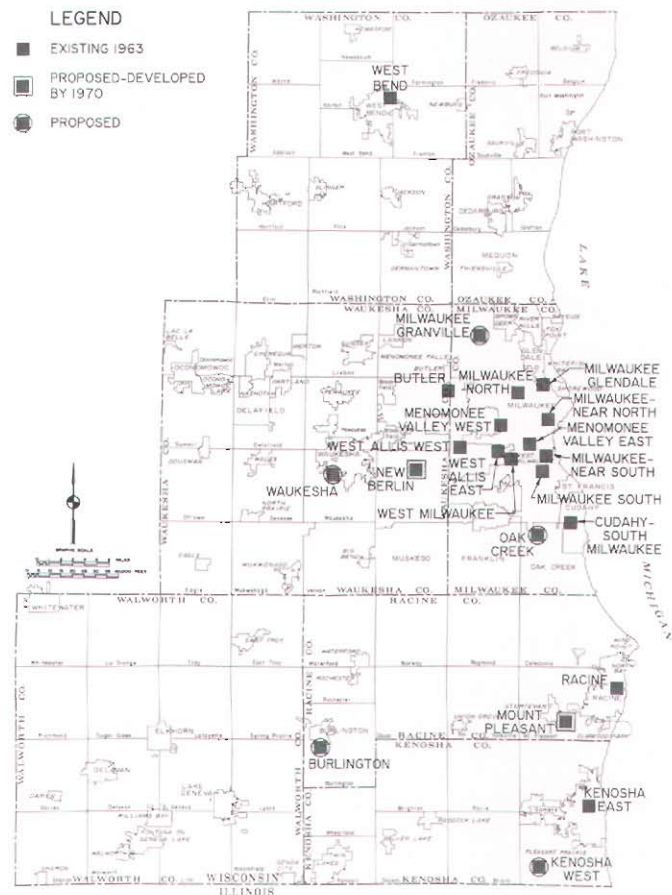


Source: SEWRPC.

size. As shown on Map 6, the second-generation regional land use plan recommended that 29 major outdoor recreation centers be provided to serve the Region by the year 2000. Of these 29 centers, 12 existed in 1963, the base year for the Commission's first regional land use plan. Seven additional centers, Hawthorne Hills Park in Ozaukee County, Oakwood and Dretzka Parks in Milwaukee County, Ottawa Lake and Minooka Parks in Waukesha County, Brighton Dale Park in Kenosha County, and Whitewater Lake Park in Walworth County, were recommended in the first-generation plan and were acquired and developed by 1970, the base year of the second-generation plan. Eight additional centers were also recommended in the first-generation plan and

Map 5

MAJOR INDUSTRIAL CENTERS RECOMMENDED IN THE SECOND-GENERATION REGIONAL LAND USE PLAN



Source: SEWRPC.

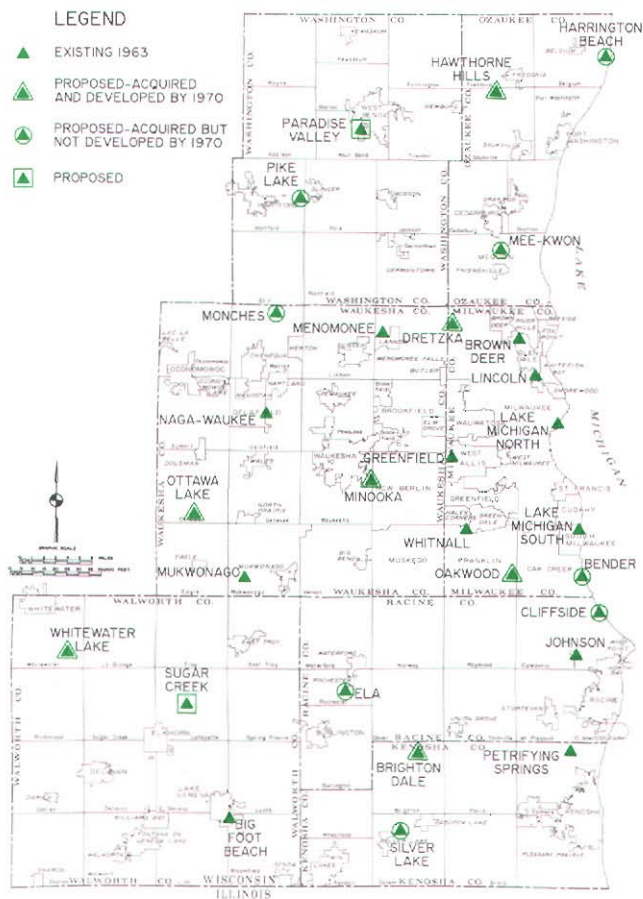
were acquired by 1970 but had not been developed at that time, Harrington Beach and Mee-Kwon Parks in Ozaukee County, Pike Lake Park in Washington County, Bender Park in Milwaukee County, Monches Park in Waukesha County, Cliffside and Ela Parks in Racine County, and Silver Lake Park in Kenosha County. Like the first plan, the second-generation plan recommends two additional major outdoor recreation centers, Paradise Valley in Washington County and Sugar Creek in Walworth County.

Primary Environmental Corridors

Like the first-generation plan, the second-generation plan recommends the protection of all of the remaining primary environmental corridors of the Region from intrusion of incompatible

Map 6

**MAJOR PUBLIC OUTDOOR
RECREATION CENTERS RECOMMENDED IN THE
SECOND-GENERATION REGIONAL LAND USE PLAN**



Source: SEWRPC.

urban development. The preservation of these corridors in essentially natural, open use to form an integrated system of open spaces within the Region is perhaps the singularly most important recommendation contained in the plan. These corridors, which are shown on Map 7, encompass about 476 square miles, or about 18 percent of the total area of the Region. The corridors contain, however, almost all of the best remaining elements of the natural resource base, encompassing all of the major lakes and streams and most of the associated shorelands and wetlands; most of the best remaining woodlands, wetlands, and wildlife habitat areas; areas with rough topography and significant geologic formations; most of the best remaining sites having scenic, historic, and scientific value; groundwater recharge and discharge areas; and many existing park sites and most of the best remaining potential park

sites. As already noted, these corridors are also poorly suited for urban development and the intrusion of such development into the corridors may be expected to create costly environmental and developmental problems.

The specific criteria for identifying and delineating primary environmental corridors are summarized in Table 10. In addition, that table sets forth criteria for identifying areas of lesser environmental sensitivity from a regional perspective. These areas are termed secondary environmental corridors and isolated natural areas. The regional land use plan recommends that county and local governments consider the importance of also preserving the natural resources found in these types of areas.

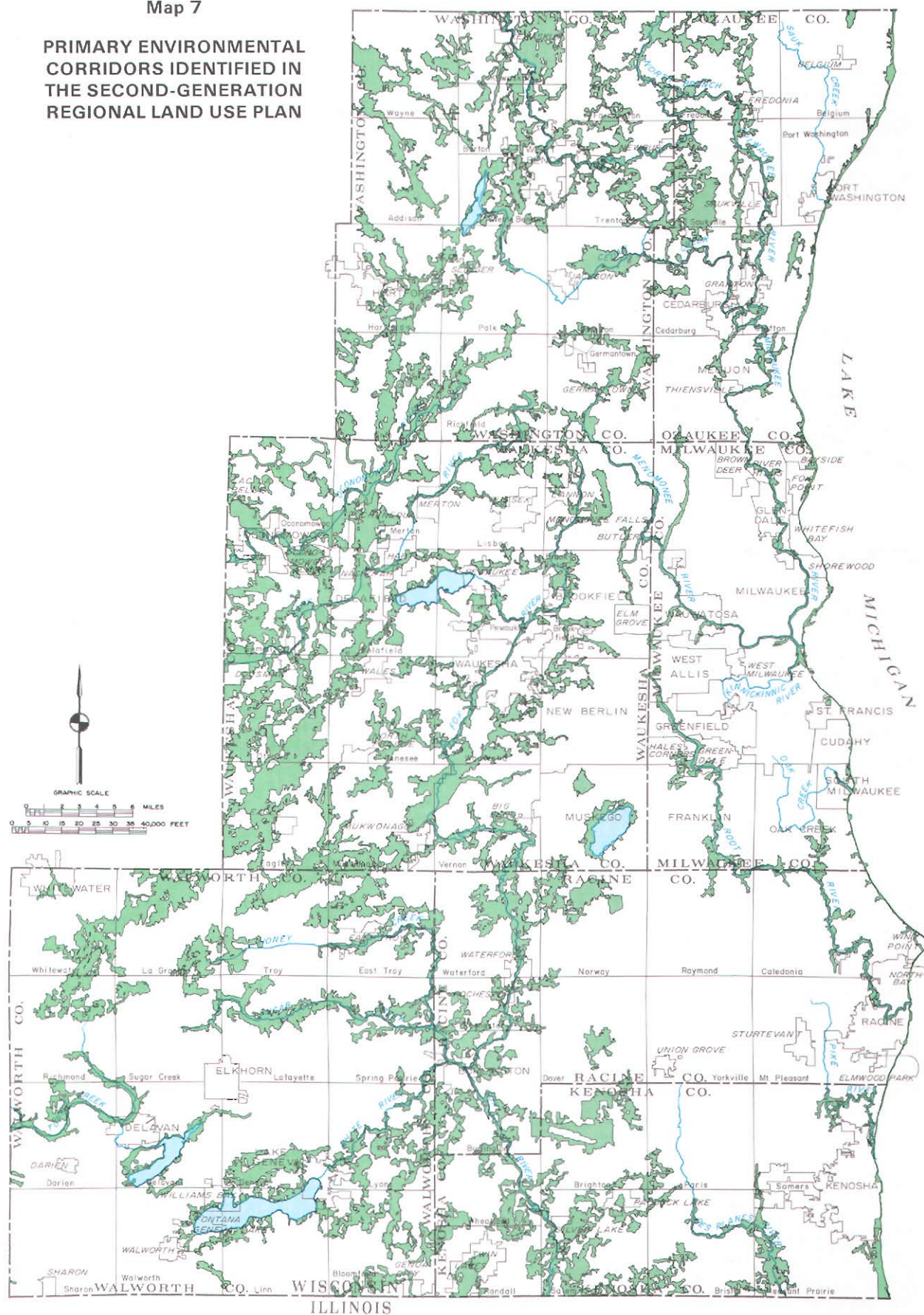
Within the urban areas of the Region, the second-generation plan recommends that county and local governments ultimately acquire all primary environmental corridor lands. In the rural areas of the Region, environmental corridor preservation objectives would be met through a combination of public land acquisition, e.g., expansion of the Kettle Moraine State Forest, and public land use regulation. In some cases, the plan recognizes that environmental corridors may be suitable as sites for truly rural residential development. In those cases, the plan recommends that the corridor lands be regulated so as not to permit more than one single-family home site per five acres of corridor land.

Prime Agricultural Lands

The second-generation regional land use plan recommends the retention in agricultural use of most of the remaining prime agricultural lands in the Region, the most productive farm lands and farm units remaining in the Region. The specific criteria for identifying and delineating such lands are summarized in Table 11. The plan recommends protection and preservation of such lands not only for economic reasons, but also to assure the wholesomeness of the future regional environment and to contribute to the preservation of the cultural heritage of the Region and its natural beauty.

The prime agricultural lands identified in the Region are shown on Map 8. These lands total about 1,139 square miles, or about 42 percent of the area of the Region. The plan recognizes that some of these lands will necessarily be needed to accommodate new urban development; the plan proposes, however, that such conversion be

PRIMARY ENVIRONMENTAL CORRIDORS IDENTIFIED IN THE SECOND-GENERATION REGIONAL LAND USE PLAN



Source: SEWRPC.

Table 10

**CRITERIA FOR IDENTIFYING ENVIRONMENTALLY SENSITIVE
LANDS IN THE SECOND-GENERATION REGIONAL LAND USE PLAN**

Environmentally Sensitive Land Category	Minimum Area	Minimum Length	Minimum Width	Typical Locations in the Region
Primary Environmental Corridor	400 acres	2 miles	200 feet	Along Lake Michigan shoreline, around major lakes, along major rivers, and in Kettle Moraine area
Secondary Environmental Corridor	100 acres	1 mile	--	Along other rivers and streams tributary to major rivers
Isolated Natural Area	5 acres	--	200 feet	Woodlands and wetlands isolated from environmental corridors by urban development or agricultural lands

NOTE: In addition to meeting the minimum area, length, and width criteria noted above, the lands concerned must be found to have significant concentrations of natural resources, including lakes, rivers, and streams, and associated floodlands and shorelands; wetlands; woodlands; wildlife habitat; and areas of steep slope and rough topography. The specific methodology for identifying these resources and delineating environmental corridors and natural areas is described in the Vol. 4, No. 2 issue of the SEWRPC Technical Record, March 1981.

Source: SEWRPC.

Table 11

**CRITERIA USED IN THE IDENTIFICATION OF PRIME AGRICULTURAL
LANDS FOR THE SECOND-GENERATION REGIONAL LAND USE PLAN**

Item	Criteria
Size of Farm Unit	The farm unit must be at least 35 acres in size ^a
Size of the Farming Area	The farm unit must occur in relatively homogeneous concentrations of similar farms, the areas of concentration being at least 100 acres in size
Soil Suitability	At least 50 percent of the farm unit must be covered by soils meeting U. S. Soil Conservation Service criteria for national prime farmland or farmland of statewide importance

^aParcels less than 35 acres in area may be included if they are part of a farm having at least one parcel of at least 35 acres.

Source: SEWRPC.

minimized. Over the 30-year plan implementation period, the plan recommends that only about 31 square miles, or three percent of all prime agricultural lands in the Region, be converted to urban use. Prime agricultural land preservation and protection would be accomplished through a combination of public land use regulation providing for minimum farm sizes of 35 acres, and public tax policies to provide substantial property tax relief to farmers.

Other Rural Development

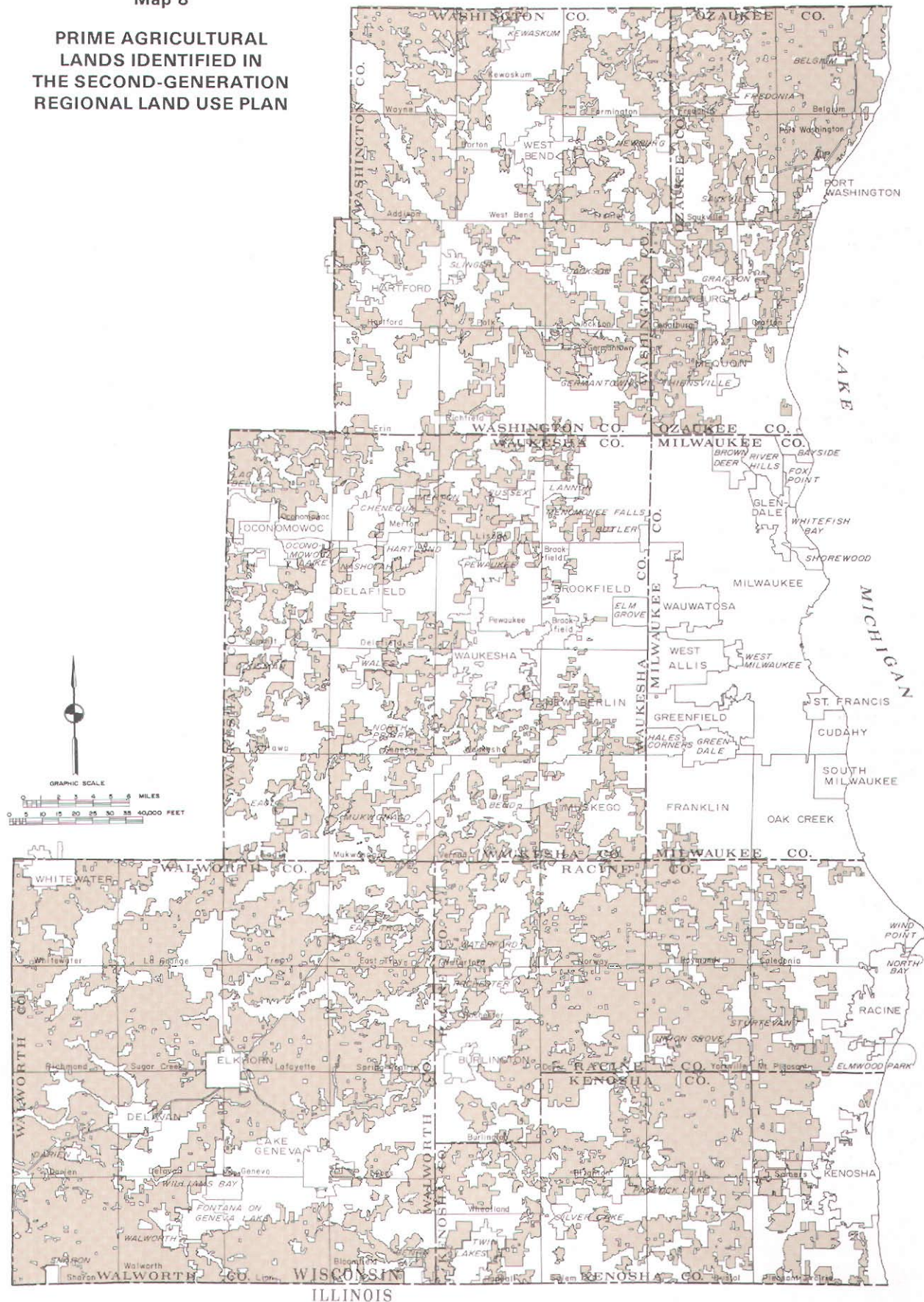
As shown on Map 3, there are certain lands in the Region that do not meet the criteria for designation as either primary environmental

corridor or prime agricultural land. In addition, these lands were not found in the plan design process to be needed to accommodate anticipated future urban development. These residual lands are shown in white on Map 3. The regional land use plan recommends that such residual lands continue to be used for agricultural and rural residential purposes, providing, however, that lot sizes in these areas be no less than five acres.

SUMMARY

This chapter has described the adopted regional land use plan for southeastern Wisconsin. The

**PRIME AGRICULTURAL
LANDS IDENTIFIED IN
THE SECOND-GENERATION
REGIONAL LAND USE PLAN**



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following summarizes the information provided in the chapter:

1. Regional planning has become increasingly accepted as a necessary governmental function in large metropolitan areas of the United States. Problems of physical and economic development and of environmental deterioration transcend the geographic limits and fiscal capabilities of local units of government. The sound resolution of these problems requires the cooperation of all units and agencies of government and of private interests. A regional basis is necessary to provide a meaningful technical approach to the proper planning and design of large systems of public works and to the resolution of widespread environmental problems. The decisions required to resolve these kinds of problems can best come from a consensus among the various levels and units of government concerned and among the private interests affected. Regional planning is necessary to promote this consensus.
2. The regional land use plan provides the basis for coordinating all the individual elements of a comprehensive regional plan designed to deal with areawide developmental and environmental problems. The land use plan is the most basic regional plan element, one on which all of the other elements, highway, transit, and airport facilities; sanitary sewerage and water supply facilities; park and open space facilities; and drainage and flood control facilities, among others, are based.
3. While many land use decisions are primarily of local concern, the aggregate effects of changing land use activities are of areawide concern. Those aggregate affects not only interact strongly with the need for regional utility, stormwater drainage and flood control, recreation, and transportation facilities, but also exert a heavy demand on the limited natural resource base. At the regional scale of planning, the term "land use" is defined as the human activities which, when grouped together, form the overall generalized pattern of urban and rural development. These include large land-consuming uses, such as agriculture, regional parks and open space reserves; major woodlands, wetlands, and wildlife habitat areas; and major surface water bodies, including shorelands and floodlands. Other uses of regional import include major areas of residential use; major concentrations of commercial, industrial, and institutional use; and certain transportation terminal facilities, all of which exert a heavy demand on public works facilities such as major trafficways, sanitary trunk sewers, and major stormwater drainage channels. All other land uses are classified as minor in nature and are incorporated implicitly in the regional land use plan as integral components of urban neighborhood units.
4. The Southeastern Wisconsin Regional Planning Commission adopted an initial regional land use plan in 1966. That plan had a base of year of 1963 and a plan design year of 1990. The initial regional plan was based upon a "controlled existing trend" concept, and its selection followed consideration of other development concepts, including a corridor plan, a satellite city plan, and an unplanned alternative. The second-generation regional land use plan, adopted in 1977, with a base year of 1970 and a plan design year of 2000, was also based upon a controlled existing trend concept, and served to refine, detail, and extend the first-generation regional land use plan.
5. The adopted regional land use plan places heavy emphasis on the continued effect of the urban land market in determining the location, intensity, and character of future urban development. The plan recommends that the existing development trends be modified through public intervention in three important ways. First, the plan recommends that intensive urban development be located only in those areas of the Region which are covered by soils suitable for such development; which are not subject to special hazards such as flooding and shoreline erosion; and which can be readily served by essential municipal facilities and services, including particularly sanitary sewerage, public water supply, and mass transit. Second, the plan recommends that what have been termed

"primary environmental corridors" be preserved in essentially natural, open uses, such corridors containing the best remaining elements of the natural resource base. Third, the plan recommends that almost all of the remaining prime agricultural lands that comprise the most productive farmlands in the Region be preserved in essentially agricultural land uses.

6. The regional land use plan seeks to achieve goals and objectives. Eight specific land use development objectives were formulated as the basis for evaluating the design of the plan. Each of these development objectives is supported by a planning principle and a set of quantifiable planning standards.
7. Based upon forecasts of future growth and change in the Region which reflect market forces decentralization of urban development in the Region would continue. By the plan design year 2000, it is envisioned in the regional land use plan that resident population of Milwaukee County, the central county of the Region, would remain relatively stable, although the number of households and jobs in Milwaukee County would increase; however, the proportions of total regional population, households, and jobs in Milwaukee County would continue to decline.
8. The regional land use plan seeks to moderate the declining trend in urban population densities and the attendant continued diffusion of urban development throughout the Region. Since 1920, when the overall density of the developed urban areas of the Region stood at about 11,300 persons per square mile, the densities have declined steadily to about 5,800 persons per square mile by 1963. Under the regional land use plan, that overall density would approximate 4,100 persons per square mile by 1985, and 3,800 persons by 2000.
9. The plan envisions that over the 30-year period 1970 through 2000, about 163 square miles of new urban land will be needed to accommodate urban growth and change. About two-thirds of that new urban development would be lands converted to residential use. About two-thirds of that residential land use is proposed to occur in planned neighborhood units in a medium-density category with an average of 4.4 dwelling units per net residential acre and a typical single-family lot size of 11,000 square feet.
10. Under the regional land use plan all new urban development would be served by public sanitary sewer and water supply, and existing developed areas not yet served would be retrofitted with such services. If the plan recommendations are carried out, by the year 2000 over 90 percent of the developed urban area and of the regional population would be provided with both public sanitary sewer and water supply services.
11. The plan recommends that 16 major commercial centers serve the Region by the year 2000. In 1970, the base year of the Commission's second-generation regional land use plan, 13 of those centers existed, three of which were provided in locations recommended in the first-generation land use plan. The second-generation land use plan recommends three additional commercial centers, in the Granville area of the City of Milwaukee, in the City of Oak Creek, and in the Racine area.
12. The plan recommends that 22 major industrial centers serve the Region by the year 2000. Of these 22 centers, 15 existed in 1963; two additional centers, New Berlin and Mt. Pleasant, were recommended in the first-generation plan and were built and placed into operation by 1970. The second-generation plan recommends five additional industrial centers, in the Granville area of Milwaukee; in the Cities of Oak Creek, Waukesha, and Burlington; and in the Kenosha area.
13. The plan recommends that 29 major outdoor recreation centers serve the Region by the year 2000. Of these 29 centers, 12 existed in 1963. Fifteen additional centers recommended in the Commission's first regional land use plan had been created by 1970, although not all of those 15 centers had been fully developed. The second-generation plan recommends two additional outdoor recreation centers, Paradise Valley in Washington County and Sugar Creek in Walworth County.

14. The regional plan recommends the protection and preservation in essentially natural, open uses of about 476 square miles of primary environmental corridor representing about 18 percent of the total area of the Region. These corridors contain almost all of the best remaining elements of the Region's natural resource base. Environmental corridor preservation objectives would be met through a combination of public land acquisition and public land regulation.
15. The plan recommends that to the extent practicable, the Region's prime agricultural lands be protected and preserved and remain in agricultural use. Such lands total about 1,139 square miles, or about 42 percent of the Region. Protection and preservation of prime agricultural land would be accomplished through a combination of public land use regulation and public tax policies that would provide substantial property tax relief to farmers.

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Chapter III

STATUS OF PLAN IMPLEMENTATION

INTRODUCTION

Implementation of the regional land use plan is difficult to monitor because of the broad scope and complexity of the plan itself; the dynamic nature of regional development; and the diffusion of decision-making authority concerning land use development that exists within the Region. In the monitoring process, therefore, care must be taken not to become lost in details, the effects of which may be meaningless at the regional scale. Rather, the focus of the monitoring process must be on the most important and essential elements of the plan and those areas of action which may be expected to have the greatest impact on guiding and shaping development in accordance with the major plan recommendations. Accordingly, the following two criteria have been advanced for use in determining which land use plan elements are truly regional in character and, thus, most important to the attainment of the regional land use development objectives: 1) the importance of the plan elements to the wise and judicious use of the underlying and sustaining natural resource base; and 2) the importance of the plan elements to the functional relationships existing between land use and the demand for the major utility, recreational, and transportation facilities.

On the basis of these two criteria, it has been concluded that the regional land use plan would be largely achieved if the following conditions are met:

1. The primary environmental corridors of the Region are protected from incompatible urban development as called for in the plan;
2. The prime agricultural lands of the Region are preserved in agricultural use as called for in the plan;
3. The major regional outdoor recreation centers are acquired, although not necessarily developed, for public use as called for in the plan;
4. The residential development pattern within the Region approximates the density and spatial distribution patterns recommended

in the plan, such development being provided with at least public sanitary sewer and water supply services; and

5. The major commercial and industrial centers approximate the general scale and spatial location recommended in the plan.

With the foregoing criteria in mind, this chapter describes the status of implementation of the regional land use plan. The chapter begins with a report on the status of plan adoption by the units and agencies of government concerned. That report is followed by a comparison of the forecast levels of resident population, households, and employment underlying the plan with actual levels. The actual pattern of land use development within the Region is then compared to the planned pattern with respect to: 1) the extent, location, and density of urban development and the provision of public sanitary sewer and water supply services, 2) the location and size of major commercial, industrial, and outdoor recreational centers, 3) the preservation of the primary environmental corridors, and 4) the preservation of prime agricultural lands. As appropriate, the analyses take into account the status of local plans and zoning in the Region.

The current regional land use plan of record which, as noted in the preceding chapter, is a second-generation plan, had a base year of 1970, a design year of 2000, and, accordingly, a 30-year design period. The plan was prepared with a 1985 stage, a stage halfway through the planning period. Accordingly, all measurements related to the status of plan implementation presented in this chapter are based upon Commission surveillance and monitoring activities with respect to regional land use development and land use regulatory patterns as of 1985. In that year, the Commission obtained aerial photography of the entire seven-county Region, and on the basis of that aerial photography determined the type and extent of new urban development that occurred since the 1970 base year of the plan. In addition, the Commission prepared estimates of actual population, household, and employment levels in that monitoring year. Information was also collected from county and local governments as to the status of local

land use planning and zoning and the location and extent of public sanitary sewer and water supply services. This body of data assembled by the Commission provides the basis for the findings concerning the status of plan implementation herein reported. As appropriate, however, key monitoring data obtained since the 1985 base monitoring year are reported to aid in the analyses.

PLAN ADOPTION

Within the framework of the regional planning effort described in the preceding chapter, the Commission has set forth a regional land use plan with the hope and intent of building a broad consensus, over time, among the various governments concerned on a desirable pattern of land use development within the seven-county Region. The Commission recommends that the units and agencies of government operating within the Region act to formally adopt the regional land use plan as a guide to the making of development decisions within the Region, thus providing evidence of the desired consensus. Such adoption is intended to signify basic agreement among the adopting units and agencies of government on the recommendations set forth in the plan, as those recommendations apply jurisdictionally to the adopting unit or agency of government. Such adoption is intended to signify that the plan recommendations will be consulted and used in the making of land use development decisions by the unit or agency of government concerned. For example, in considering a proposed rezoning, the local plan commission and governing body concerned would be provided with a finding as to the relationship of the proposed rezoning to the regional plan recommendations as part of the information developed by local planning staff as a basis for the consideration of the proposed rezoning. This is not to say that the local plan commission and governing body will, or even should, always make the decision in a manner fully consistent with the adopted regional land use plan; rather, it is to say that the plan recommendations will be duly considered in the public decision-making process.

Plan adoption begins, of course, with the formal adoption of the regional land use plan by the Commission itself. Following Commission action on the plan, the plan document is certified pursuant to Section 66.945(12)(a) of the Wiscon-



sin Statutes to the seven counties, 28 cities, 65 villages, and 54 towns in the Region; to any affected special-purpose units and agencies of government; and to the concerned state and federal agencies. The formal certification of the plan is accompanied by a request that the unit or agency of government concerned formally act to adopt or endorse the plan and notify the Commission of such action.

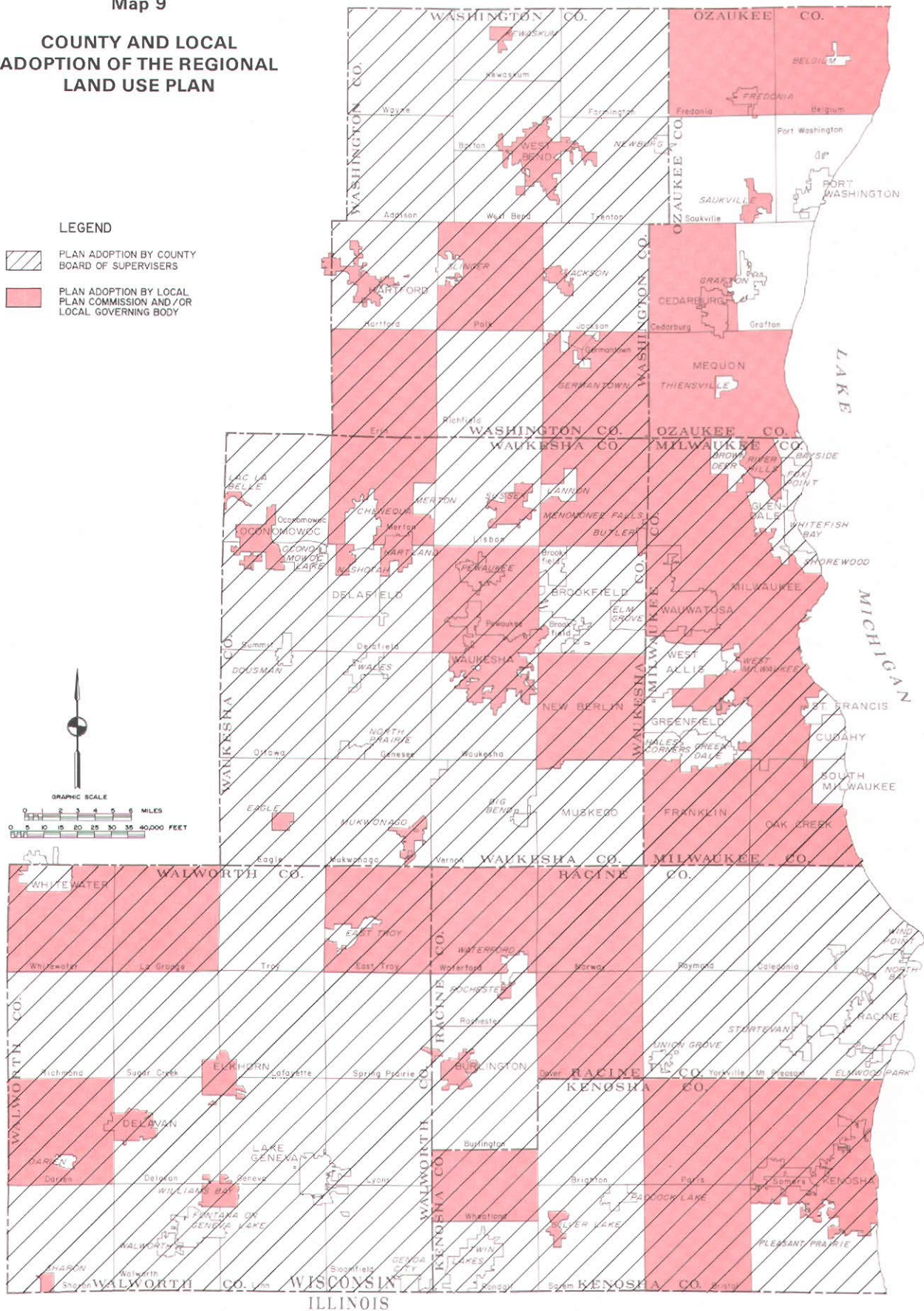
Many levels of government have acted to formally adopt the regional land use plan. At the county level of government, the plan has been formally adopted by six of the seven counties concerned, excepting only Ozaukee County. Ozaukee County did not, however, reject the plan; rather, Ozaukee County has taken the position that the County as a unit of government should not become involved in land use decision-making, such matters, in the opinion of that County Board, being better left to the cities, villages, and towns within the County. As evidence of that position, Ozaukee County has never adopted a general-purpose zoning ordinance. Ozaukee County has adopted a limited-purpose floodland and shoreland zoning ordinance, but only because such zoning was mandated by the State.

At the municipal level of government, the regional land use plan has been formally adopted by the local plan commissions and/or the local governing bodies of 15 cities, 20 villages, and 18 towns, thus reinforcing the actions of the county boards. The distribution of such formal adoptions in the Region is shown on Map 9. It should be noted that the adopting actions reflected on the map include not only those instances where the local plan commission and/or governing body formally adopted the certified regional land use plan, but also those instances where the local plan commission and/or governing body, in lieu of such adoption, prepared in cooperation with the Commission and adopted a community-level land use plan which refined and detailed the regional plan. For example, over the years, the Commission has worked in this manner with the Cities of Elkhorn and New Berlin; the Villages of Eagle, Fredonia, Hartland, Jackson, Menomonee Falls, and Pewaukee; and the Towns of Fredonia, LaGrange, and Pewaukee in securing local adoption of community land use plans that are in conformance with the adopted regional land use plan.

Map 9

**COUNTY AND LOCAL
ADOPTION OF THE REGIONAL
LAND USE PLAN**

- LEGEND**
-  PLAN ADOPTION BY COUNTY BOARD OF SUPERVISORS
 -  PLAN ADOPTION BY LOCAL PLAN COMMISSION AND/OR LOCAL GOVERNING BODY



Source: SEWRPC.

The county-level plan adoptions apply to about 91 percent of the area of the Region; city, village, and town plan adoptions together apply to about 38 percent of the area of the Region. Plan adoption actions at the county level are deserving of further comment because, depending upon the particular county, the adoption action has somewhat different meaning. The special case of Ozaukee County has already been noted. While the Ozaukee County Board has never adopted the regional land use plan, it has adopted other important regional plan elements which, like the regional transportation system plan, are based on the regional land use plan or which serve to refine and detail the regional land use plan. For example, Ozaukee County has adopted a farmland preservation plan which seeks to help carry out the prime agricultural land preservation recommendations included in the regional land use plan. Ozaukee County has also adopted the regional transportation system plan and a county jurisdictional highway system plan based on the regional land use and transportation system plans and a park and open space plan which refines and details the outdoor recreation and environmental corridor preservation recommendations of the regional land use plan.

Milwaukee County's case, in this respect, is unique in that all of the area of Milwaukee County lies within 19 incorporated cities and villages, and therefore the County under Wisconsin Statutes has no basic responsibilities for land use regulation. Nevertheless, adoption of the regional land use plan by Milwaukee County signifies that the County Board subscribes to the recommendations included in the plan; thus the plan can be used with confidence in making other regional plan elements, the implementation of which does depend upon County actions, particularly including the regional transportation, park and open space, and regional floodland management system plans.

In the remaining five counties of the Region, plan adoption carries significance also for basic land use regulation because of joint county-town zoning which is applicable under Wisconsin law in unincorporated areas, although since 1985 Washington County has made a policy decision to leave general zoning matters entirely to the towns within the County. Like Ozaukee County, then, Washington County now administers only a special-purpose floodland and shoreland zon-

ing ordinance. At the local governmental level, each of the cities, villages, and towns concerned has direct responsibility for land use zoning regulation. Hence, adoption of the plan by the town plan commissions and town boards in Ozaukee and Washington Counties is particularly significant.

The regional land use plan has also been widely endorsed by state and federal agencies. Over the years, endorsement actions have been taken by the Wisconsin Departments of Natural Resources and Transportation; the Wisconsin Board of Soil and Water Conservation Districts (now the Wisconsin Land Conservation Board); the U. S. Department of Transportation, Federal Highway and Urban Mass Transit Administrations (the latter now the Federal Transit Administration); the U. S. Environmental Protection Agency; the U. S. Department of Housing and Urban Development; the U. S. Department of the Interior; and the U. S. Department of Agriculture, Soil Conservation Service. A particularly important endorsement action taken in this respect was the formal approval of the second-generation regional land use plan by the Wisconsin Natural Resources Board as an element of the federally mandated regional and state water quality management plans. Such formal action by the Board under the Wisconsin Statutes has important regulatory ramifications, committing the Wisconsin Department of Natural Resources to use the plan as a basis for certain important land use-related decisions. The relationship between the regional land use plan and water quality-related state regulatory actions is described in Chapter IV.

FORECAST AND ESTIMATED POPULATION AND ECONOMIC ACTIVITY LEVELS: 1985

The second-generation regional land use plan was prepared to meet forecasts of future growth and change in the Region expressed in terms of anticipated future levels of resident population, households, and employment in the Region. Those forecasts were prepared for both the plan design year 2000 and for anticipated 1985 stage conditions. An initial step in the evaluation of the status of regional land use plan implementation involves a determination of the extent to which the actual levels and distribution of population and economic activity within the Region either conform to, or depart from, the levels and distribution originally forecast. The

determination was made by comparing the actual 1985 conditions with the anticipated 1985 stage forecast conditions. Thus, the comparison is for the midpoint of the 30-year plan design period.

The basic purpose in making a comparison between forecast and actual conditions with respect to the levels and distribution of population and economic activity is to determine the extent to which the scale of urban development in the Region approximates the scale that was forecast. Should it be found that the overall scale of urban development is greatly different than that forecast, then the basic validity of the plan may be brought into question. This would be true whether the observed difference in the scale of development were smaller or larger than forecast. For example, should the scale of urban development in the Region be found to significantly exceed the forecast in terms of the population size, the number of jobs, and the number of households, then it should be expected that the number and location of major commercial and industrial centers would be affected and that the amount of land required to be converted to urban use would be similarly affected. Such a change in the scale of regional development would not, however, affect other regional plan recommendations, particularly those relating to the protection and preservation of primary environmental corridors. In that case, the plan recommendations for the preservation of those corridors, which are defined on the basis of the natural resource base, would be the same regardless of the overall scale of regional development.

The Commission socioeconomic forecasts recognize the market forces that have driven land use decentralization in the Region since the early part of the twentieth century. The forecast population and employment levels were adjusted at the county level, however, in an attempt to design a land use plan with a more centralized distribution of population, employment, and related land use development with the Region than an extrapolation of existing trends would permit. This is why the second-generation regional land use plan was initially termed a "controlled centralization" land use plan. Thus, there is a normative aspect to the Commission socioeconomic forecasts at the county level, with the forecasts as well as the land use plan based in part on those forecasts seeking to moderate the decentralization trends in the Region in an

effort to bring about a more compact, centralized regional settlement pattern. The promotion of such a pattern would serve to better protect the underlying and sustaining natural resource base; help avoid developmental and environmental problems attendant to urban sprawl; facilitate the efficient and economic provision of urban services and facilities, including mass transit, to developing urban areas; maximize the use of existing infrastructure; and promote the conservation and renewal of existing residential, commercial, and industrial areas. The normative nature of the socioeconomic forecasts, then, meant that more resident population was allocated to Milwaukee County than would be expected if the observed decentralization trends were simply projected to continue. This normative aspect of the forecasts should be kept in mind in any review of the monitoring data.

In addition, with respect to forecast accuracy requirements, it should be understood that it is not currently possible to establish levels of reliability for forecasts in either statistical or probabilistic terms. Consequently, lacking objective tests for determining forecast reliability, forecast accuracy requirements are largely a function of the use to which the forecasts are to be put. As applied to land use and supporting public works planning, the critical question in this respect is, "What affect will any inaccuracy in the forecasts have on the basic structure of the plans to be produced?" It is important to keep the forecast tolerances within that range wherein only the timing and not the basic structure of the plans will be affected. It is the opinion of the professionals involved in this respect that forecast accuracies on the order of plus or minus 10 percent per decade would be good and that certainly no greater level of accuracy should be anticipated. It is also believed that variances from the forecast within this tolerance would not significantly affect the structure of the plans prepared upon such forecasts.

The surveillance activities undertaken by the Commission with respect to population and economic activity in the Region over the period 1970 through 1985 resulted in the following basic findings:

1. Population

The population forecast underlying the regional land use plan envisioned an increase in regional population of about 198,000 persons, or about 11 percent, by

Table 12

POPULATION IN THE REGION BY COUNTY: 1970, 1985, AND 1990

County	Existing 1970 ^a		Forecast 1985				Actual 1985 ^b				Difference between Actual and Forecast 1985 Population Levels		Actual 1990	
	Total	Percent of Region	Change 1970-1985		Total		Change 1970-1985		Total				Total	Percent of Region
			Number	Percent	Number	Percent of Region	Number	Percent	Number	Percent of Region	Number	Percent		
Kenosha	117,900	6.7	31,900	27.1	149,800	7.7	3,200	2.7	121,100	7.0	-28,700	-19.2	128,100	7.1
Milwaukee . . .	1,054,300	60.1	-39,300	-3.7	1,015,000	52.0	-114,700	-10.9	939,600	53.9	-75,400	-7.4	959,300	53.0
Ozaukee	54,500	3.1	32,300	59.3	86,800	4.4	13,000	23.9	67,500	3.9	-19,300	-22.2	72,800	4.0
Racine	170,800	9.7	24,700	14.5	195,500	10.0	-1,600	-0.9	169,200	9.7	-26,300	-13.5	175,100	9.7
Walworth	63,500	3.6	17,000	26.8	80,500	4.1	8,700	13.7	72,200	4.1	-8,300	-10.3	75,000	4.1
Washington . . .	63,800	3.6	40,100	62.9	103,900	5.3	23,400	36.7	87,200	5.0	-16,700	-16.1	95,300	5.3
Waukesha	231,300	13.2	91,300	39.5	322,600	16.5	54,600	23.6	285,900	16.4	-36,700	-11.4	304,700	16.8
Region	1,756,100	100.0	198,000	11.3	1,954,100	100.0	-13,400	-0.8	1,742,700	100.0	-211,400	-10.8	1,810,300	100.0

^a 1970 U. S. Census of Population and Housing.

^b Wisconsin Department of Administration estimate.

Source: U. S. Bureau of the Census, Wisconsin Department of Administration, and SEWRPC.

1985 (see Table 12 and Figure 1). By 1985, the estimated population in the Region had changed very little from the base year 1970 population, actually exhibiting a slight decrease of about 13,400 persons. Thus, the estimated 1985 regional population was lower than the 1985 forecast population by about 211,000 persons, or by nearly 11 percent. Evaluation of the factors that determine population levels—births, deaths, and migration—indicated that the variance between the estimated and forecast levels was primarily the result of a rate of population out-migration in excess of the rate assumed in the population forecast. This excessive out-migration may be attributed to the severe economic recession which occurred in the Region in the early 1980s.

At the county level, Ozaukee, Walworth, Washington, and Waukesha Counties all experienced population increases over the 15-year period. The population levels of Kenosha and Racine Counties remained relatively stable during that time, while the population of Milwaukee County decreased by nearly 11 percent. For each county, however, the estimated 1985 population level was lower than the forecast level, with the variance ranging from 7 percent in Milwaukee County to 22 percent in Ozaukee County.

While the overall regional population level by 1985 was less than forecast, the relative distribution of the population in the Region was remarkably close to the fore-

cast distribution. For example, under the population forecast the proportion of the regional population residing in Milwaukee County, which was 60 percent in 1970, was forecast to decrease to 52 percent in 1985. Milwaukee County's proportion of the regional population in 1985 was estimated at 54 percent. In relatively fast-growing Waukesha County, where 13 percent of the regional population resided in 1970, the monitoring revealed a 16 percent share of the regional population by 1985. This may be compared with a forecast share of 16 percent.

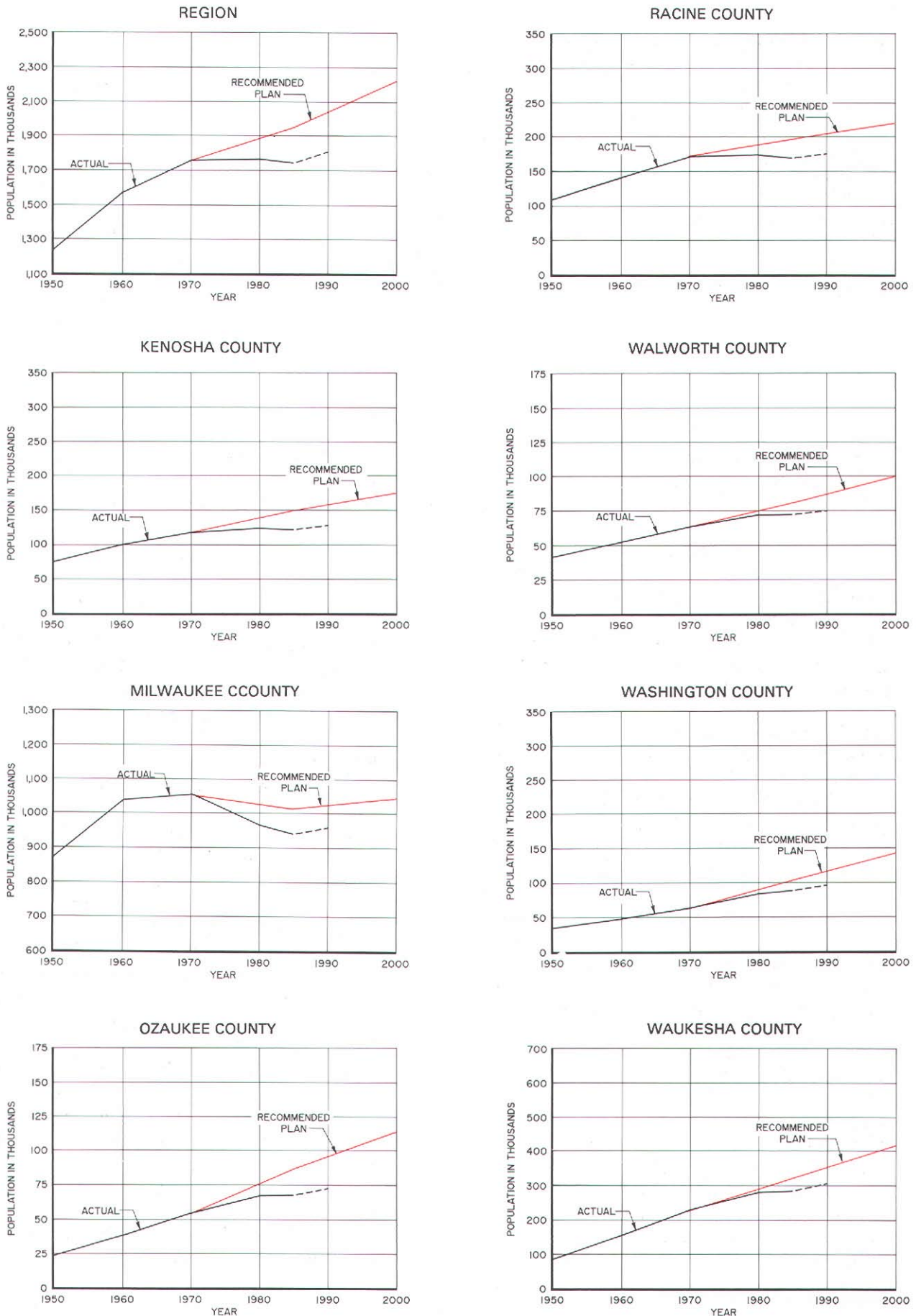
Monitoring data since 1985 indicate that the Region's population has again begun to increase, however modestly. The 1990 enumeration by the U. S. Census Bureau indicated that the population of the Region had reached a level of 1.81 million persons, an increase of 54,200 over the 1970 level. As shown in Table 12, every county in the Region increased over that 20-year period except Milwaukee County, which decreased by less than 100,000 persons.

2. Households

The household forecast underlying the regional land use plan had envisioned an increase in the number of households in the Region of 95,700, or nearly 18 percent, by 1985 (see Table 13 and Figure 2). By 1985, the estimated number of households in the Region had increased over the 1970 base year by about 107,300, a 20 percent increase. Thus, at the regional level, the

Figure 1

REGIONAL AND COUNTY POPULATION: ACTUAL 1950-1980 AND RECOMMENDED PLAN 2000



Source: U. S. Bureau of the Census, Wisconsin Department of Administration, and SEWRPC.

Table 13

HOUSEHOLDS IN THE REGION BY COUNTY: 1970, 1985, AND 1990

County	Existing 1970 ^a		Forecast 1985				Actual 1985 ^b				Difference between Actual and Forecast 1985 Population Levels		Actual 1990	
	Total	Percent of Region	Change 1970-1985		Total		Change 1970-1985		Total				Total	Percent of Region
			Number	Percent	Number	Percent of Region	Number	Percent	Number	Percent of Region				
Kenosha	35,500	6.6	10,700	30.1	46,200	7.3	8,700	24.5	44,200	6.9	-2,000	-4.3	47,000	6.9
Milwaukee	338,600	63.1	22,500	6.6	361,100	57.1	29,600	8.7	368,200	57.2	7,100	2.0	373,100	55.2
Ozaukee	14,800	2.8	9,600	64.9	24,400	3.9	8,100	54.7	22,900	3.5	-1,500	-6.1	25,700	3.8
Racine	49,800	9.3	8,600	17.3	58,400	9.2	11,400	22.9	61,200	9.5	2,800	4.8	63,700	9.4
Walworth	18,500	3.5	5,300	28.6	23,800	3.8	7,100	38.4	25,600	4.0	1,800	7.6	27,600	4.1
Washington . . .	17,400	3.2	11,900	68.4	29,300	4.6	11,100	63.8	28,500	4.4	-800	-2.7	33,000	4.9
Waukesha	61,900	11.5	27,100	43.8	89,000	14.1	31,300	50.6	93,200	14.5	4,200	4.7	106,000	15.7
Region	536,500	100.0	95,700	17.8	632,200	100.0	107,300	20.0	643,800	100.0	11,600	1.8	676,100	100.0

^a 1970 U. S. Census of Population and Housing.^b Estimate.

Source: U. S. Bureau of the Census and SEWRPC.

household forecast was below the estimated 1985 level by about 11,600, or 1.8 percent. Coupled with a relatively stable population level during that same 15-year period, the result was a significant decrease in the average household size, a larger decrease than had been forecast. Indeed, the number of persons per household, which stood at about 3.20 in 1970, had decreased to about 2.64 by 1985, as compared to the 1985 forecast of about 3.02.

At the county level, the monitoring indicated that each county in the Region had experienced an increase in the number of households over the 1970 through 1985 period. Actual household levels in 1985 were slightly higher than forecast in Milwaukee, Racine, Walworth, and Waukesha Counties, and slightly lower than forecast in Kenosha, Ozaukee, and Washington Counties. The differences between actual and forecast household levels ranged from about 2 percent in Milwaukee County to nearly 8 percent in Walworth County.

Review of the data in Table 13 indicates that the relative distribution of the number of households in the Region, like population, was remarkably close to the forecast distribution. Milwaukee County's share of all regional households, which stood at 63 percent in 1970, was forecast to decrease to 57 percent by 1985. Monitoring data showed that the estimated proportion in 1985 was 57 percent. Similarly, Waukesha

County's share of regional households, which stood at 12 percent in 1970, was forecast to increase to 14 percent by 1985. Monitoring data showed that the estimated level in 1985 was 14 percent.

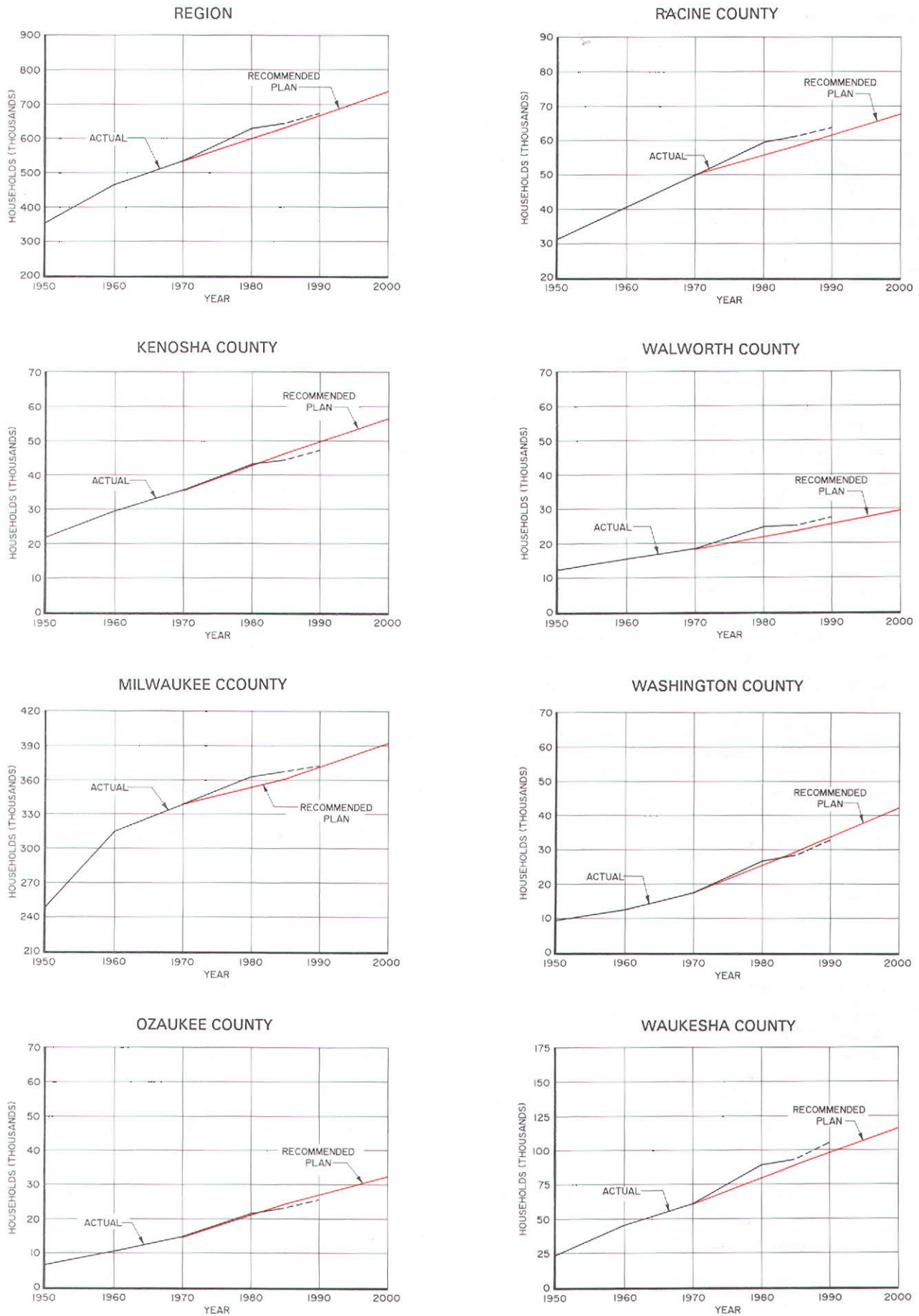
Monitoring data since 1985 indicate that the number of households in the Region continued to increase after 1985, reaching an estimated level of 676,100 by 1990. By 1990, the number of persons per household had decreased to about 2.62.

3. Employment

The employment forecast underlying the regional land use plan had envisioned an increase in the number of jobs in the Region of about 125,100, or nearly 17 percent, by 1985 (see Table 14 and Figure 3). By 1985, and despite a severe economic recession within the Region over the period 1979 through 1983, the estimated number of jobs in the Region had increased over the 1970 base year by about 118,200, a nearly 16 percent increase. Thus, at the regional level, the employment forecast was above the estimated 1985 level only by about 6,900 jobs, a deviation of less than 1 percent on the total base employment level. Given a relatively stable regional population, the increase in regional employment reflects an increasing participation rate of the total population, particularly of the female segment of that population, in the labor force.

Figure 2

REGIONAL AND COUNTY HOUSEHOLDS: ACTUAL 1950-1980 AND RECOMMENDED PLAN 2000



Source: U. S. Bureau of the Census and SEWRPC.

Table 14

EMPLOYMENT IN THE REGION BY COUNTY: 1970, 1985, AND 1990

County	Existing 1970		Forecast 1985				Actual 1985				Difference between Actual and Forecast 1985 Population Levels		Actual 1990	
	Total	Percent of Region	Change 1970-1985		Total		Change 1970-1985		Total				Total	Percent of Region
			Number	Percent	Number	Percent of Region	Number	Percent	Number	Percent of Region				
Kenosha	40,000	5.3	6,700	16.8	46,700	5.3	2,500	6.3	42,500	4.9	-4,200	-9.0	46,500	4.7
Milwaukee	507,100	67.3	45,100	8.9	552,200	62.8	20,200	4.0	527,300	60.5	-24,900	-4.5	578,200	58.4
Ozaukee	19,800	2.6	8,200	41.4	28,000	3.2	7,100	35.9	26,900	3.1	-1,100	-3.9	32,200	3.3
Racine	62,700	8.3	16,000	25.5	78,700	9.0	11,800	18.8	74,500	8.5	-4,200	-5.3	82,200	8.3
Walworth	24,500	3.3	8,200	33.5	32,700	3.7	3,600	14.7	28,100	3.2	-4,600	-14.1	37,100	3.7
Washington	23,100	3.1	5,100	22.1	28,200	3.2	8,200	35.5	31,300	3.6	3,100	11.0	41,800	4.2
Waukesha	76,500	10.1	35,800	46.8	112,300	12.8	64,800	84.7	141,300	16.2	29,000	25.8	172,300	17.4
Region	753,700	100.0	125,100	16.6	878,800	100.0	118,200	15.7	871,900	100.0	-6,900	-0.8	990,300	100.0

Source: U. S. Bureau of Economic Analysis; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

At the county level, the monitoring indicated that each county in the Region had experienced an increase in total employment over the 1970 through 1985 period (see Table 14). The largest relative increases occurred in Ozaukee, Washington, and Waukesha Counties, marking a continuation of decentralization of economic activity within the Region. The rates of increase in employment among the counties between 1970 and 1985 varied somewhat from the forecast rates. Actual employment increased substantially faster than forecast in Waukesha County and slightly faster than forecast in Washington County. In Kenosha, Milwaukee, Ozaukee, Racine, and Walworth Counties, employment increased somewhat slower than forecast, with actual 1985 employment levels in these counties of 4 to 14 percent less than forecast.

The differences in employment levels at the county level between forecast and actual levels in 1985 are reflected in the relative distribution of regional employment. For example, Milwaukee County's share of all regional employment, which stood at 67 percent in 1970, was forecast to decrease to 63 percent by 1985. Monitoring data showed that the County's estimated proportion had declined to 60 percent. By contrast, Waukesha County's share of regional employment, which stood at 10 percent in 1970, was forecast to increase to 13 percent by 1985. Monitoring data showed that the estimated level in 1985 had reached 16 percent.

Monitoring data since 1985 indicates employment in the Region has grown rapidly since the recession in the early 1980s, and has now exceeded the forecast level (see Figure 2). All of the seven counties have shared in this job growth.

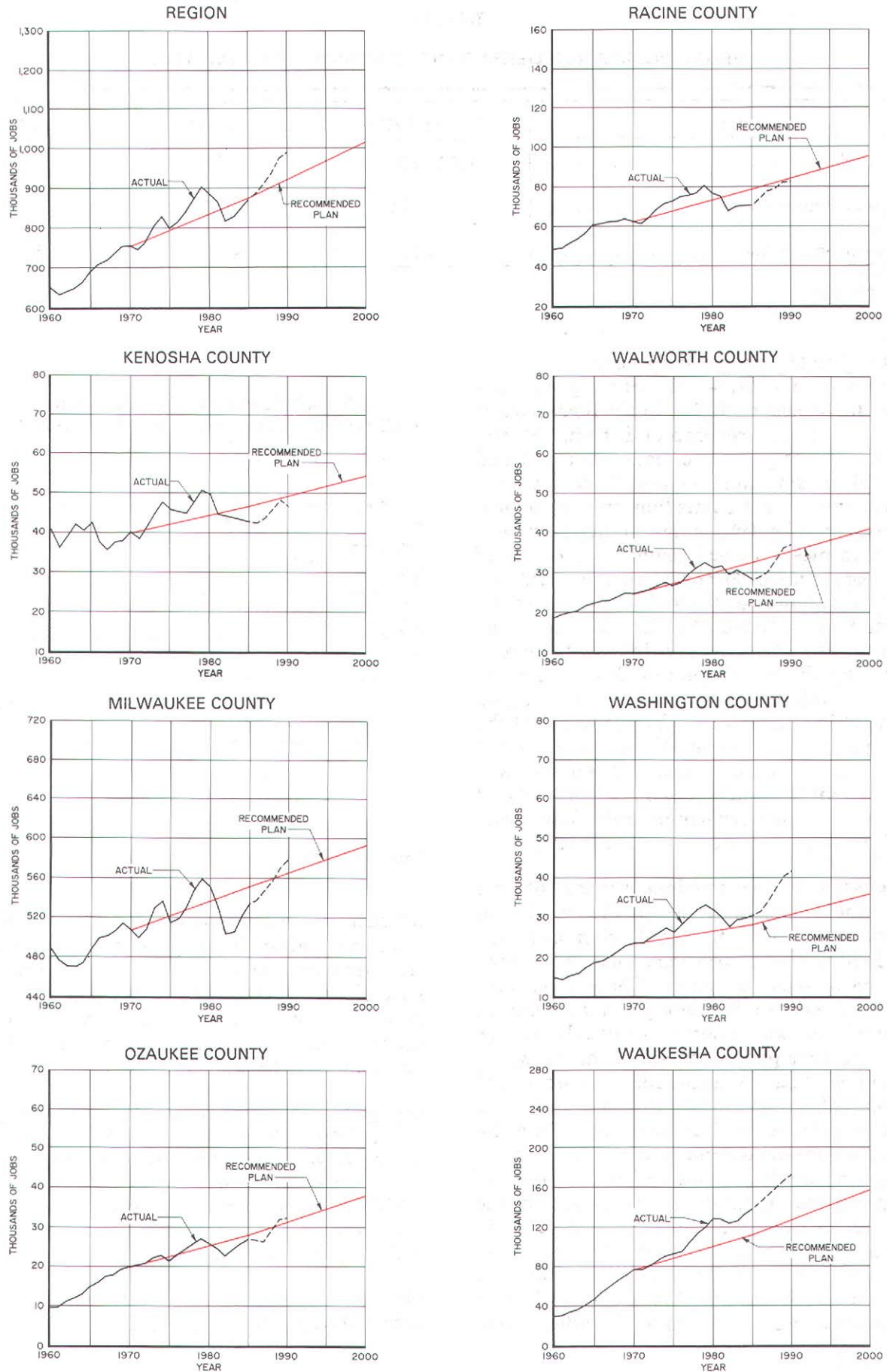
The foregoing overview of economic and demographic base data indicates that, while the population of the Region has not increased as forecast, with the variation at about the limit of the expected 10 percent level of accuracy, two other determinants of the general scale of land use development, the number of households and the number of jobs, have increased substantially as forecast and well within accuracy tolerances. The conformity between the actual and forecast number households is particularly significant, and outweighs any deviation in the population forecast, since the household represents a basic consuming unit which generates much of the demand for urban land. Furthermore, the household is an important component in the generation of the demand for transportation and many other types of urban facilities and services.

URBAN DEVELOPMENT ACTIVITY: 1970-1985

As described in Chapter II, the regional land use plan made certain recommendations regarding the location and density of new urban development and the provision of essential sanitary sewerage and water supply services. The following reports the results of the monitoring of land use development activity in the Region over the period 1970 through 1985 with respect to these key regional plan recommendations.

Figure 3

REGIONAL AND COUNTY EMPLOYMENT: ACTUAL 1960-1990 AND RECOMMENDED PLAN 2000



Source: U. S. Bureau of Economic Analysis; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

Table 15

URBAN POPULATION DENSITY IN THE REGION: 1970 AND 1985

Item	Existing 1970	Planned 1985	Actual 1985
Urban Population	1,728,900	1,931,000	1,730,500
Urban Area (square miles)	338	471	477
Persons per Square Mile	5,115	4,100	3,628

Source: SEWRPC.

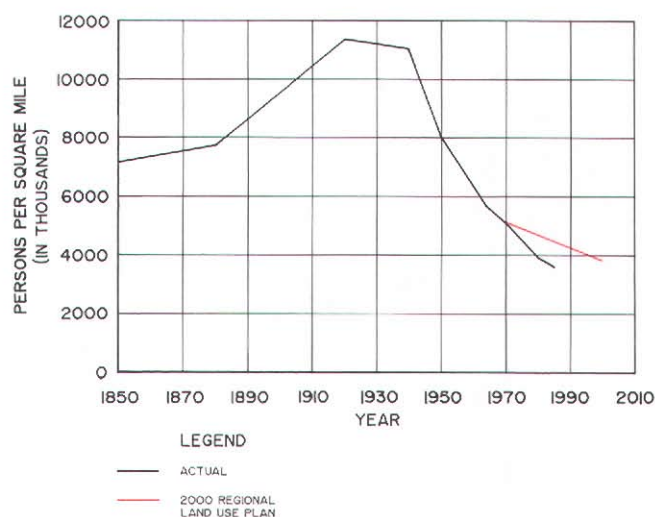
Overall Urban Development Density

As discussed in Chapter II, urban population densities have been declining in the Region since 1920. One of the recommendations of the regional land use plan is to moderate that trend by providing for more compact, contiguous, efficient development at medium urban residential densities. The 1985 stage of the plan was prepared to meet forecast regional increases of 198,000 persons, 95,700 households, and 125,100 jobs. To accommodate these forecast increases, the plan recommended that by 1985 the area devoted to urban land uses within the Region be expanded by about 133 square miles, from about 338 square miles in 1970 to about 471 square miles in 1985. This planned change would, if the forecast population, household, and employment forecasts materialized, result in an average overall urban population density in 1985 of about 4,100 persons per square mile, down from about 5,100 persons per square mile in 1970.

As discussed in the previous section of this chapter, the actual increases in the number of households and jobs in the Region over the period 1970 through 1985 very closely approximated the forecast increases. There was, however, no increase in resident population during that period, the population was virtually stable. Over the 15-year period concerned, as shown in Table 15 and Figure 4, about 139 square miles of land were urbanized, about six square miles, or about 5 percent, more than planned. While the increase in households and jobs over the 15-year period, then, exerted an urban land demand of the approximate magnitude envisioned in the plan, because there was no population growth during that same period the actual urban population density in 1985 of about 3,600 persons per square mile fell below the planned level of about 4,100 persons per square mile. In effect then,

Figure 4

URBAN POPULATION DENSITY IN THE REGION: ACTUAL 1850-1985 AND PLANNED 2000



Source: SEWRPC.

because of lower household sizes, more jobs, and a higher labor force participation rate, all reflecting certain basic changes in lifestyles, a substantial area of land was converted from rural to urban use over the 15-year period to serve essentially the same population level as existed within the Region in 1970.

Location of Incremental Urban Development

Using Commission urban development data, an analysis was undertaken of the location of the incremental urban development that took place within the Region from 1970 through 1985. The results of that analysis are summarized in Table 16 and on Map 10.

Of the nearly 139 square miles of incremental urban development that took place within the

Table 16

INCREMENTAL URBAN DEVELOPMENT IN THE REGION BY COUNTY: 1970-1985

County	Extent of Urban Development 1970 (square miles)	Incremental Urban Development 1970-1985 (square miles)					Extent of Urban Development 1985 (square miles)
		Located in Areas Recommended for Urban Development in the Regional Land Use Plan		Located in Areas Not Recommended for Urban Development in the Regional Land Use Plan		Total	
		Amount	Percent of Total	Amount	Percent of Total		
Kenosha	26.4	5.4	66	2.9	34	8.3	34.7
Milwaukee . . .	149.8	17.2	99	0.1	1	17.3	167.1
Ozaukee	19.0	6.5	61	4.2	39	10.7	29.7
Racine	33.9	6.5	59	4.6	41	11.1	45.0
Walworth	22.1	3.6	34	7.1	66	10.7	32.8
Washington . . .	14.1	5.8	26	16.7	74	22.5	36.6
Waukesha	72.3	27.4	47	30.9	53	58.3	130.6
Region	337.6	72.4	52	66.5	48	138.9	476.5

Source: SEWRPC.

Region during that period, about 72 square miles, or 52 percent, were located within urban service areas as recommended in the regional land use plan. These areas are shown in green on Map 10, and represent new urban development located in accordance with the regional plan. These are areas that can be, and usually are, readily provided with essential public services. The remaining approximately 66 square miles of incremental urban development, representing about 48 percent of the total, took place in a scattered fashion over much of southeastern Wisconsin, with particularly heavy concentrations of such development occurring in Waukesha and Washington Counties. All this development took place without the benefit of public sanitary sewer and water supply facilities, although efforts are now underway in some cases to provide extensions of these utility facilities to the now existing urban development.

A supplemental analysis was made of the actual conversion of land in the Region from rural to urban use during the same 15-year period. The results of the analysis are summarized in Table 17. To accommodate planned new urban development by 1985, the regional land use plan envisioned the conversion of nearly 91 square miles of land from rural to urban use. Actual land conversion during the 15-year period totaled




about 105 square miles, or about 14 square miles and 15 percent more than envisioned.

A more detailed examination was made of the amount and location of residential land conversion in the Region over the 15-year period. Under the regional land use plan, about 58 square miles of land were planned to be converted from rural to residential use by 1985. Monitoring data indicated that during the 15-year period concerned, about 65 square miles of land were actually converted for residential purposes, about seven square miles, or 12 percent, more than envisioned. Furthermore, much of the new residential development took place not in the medium-density residential development category as recommended in the plan, but rather in the low-density development category to an extent significantly greater than recommended in the plan. As shown in Table 18, the plan envisioned that nearly 32 square miles of rural land would be converted to medium-density residential development by 1985. Yet, less than 17 square miles were actually so converted. By contrast, the plan recommended that less than 12 square miles of land be converted to low-density residential use. The monitoring data showed that 41 square miles were actually so converted. As shown on Map 11, these development trends were most pronounced and had

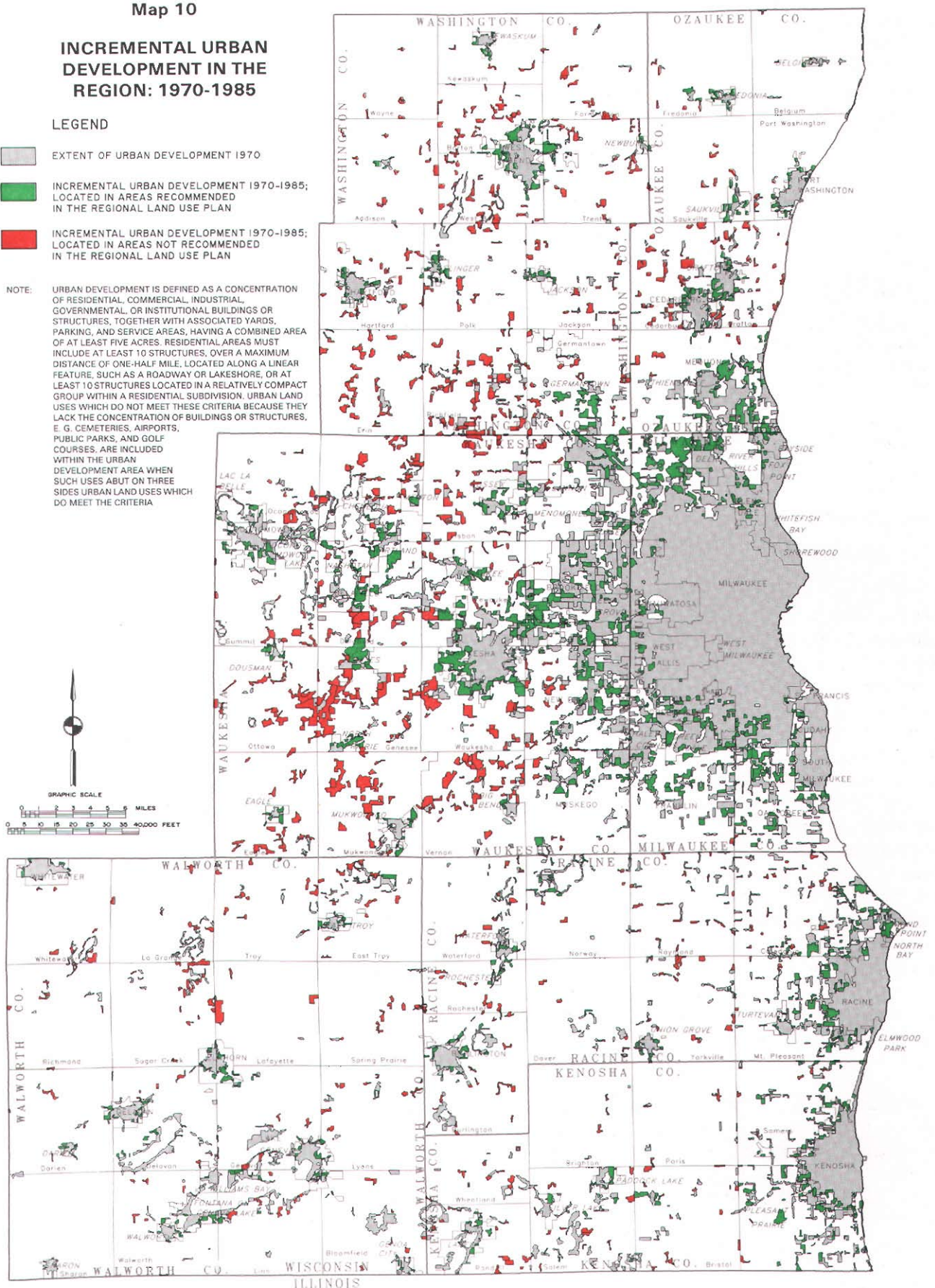
Map 10

INCREMENTAL URBAN DEVELOPMENT IN THE REGION: 1970-1985

LEGEND

-  EXTENT OF URBAN DEVELOPMENT 1970
-  INCREMENTAL URBAN DEVELOPMENT 1970-1985;
LOCATED IN AREAS RECOMMENDED
IN THE REGIONAL LAND USE PLAN
-  INCREMENTAL URBAN DEVELOPMENT 1970-1985;
LOCATED IN AREAS NOT RECOMMENDED
IN THE REGIONAL LAND USE PLAN

NOTE: URBAN DEVELOPMENT IS DEFINED AS A CONCENTRATION OF RESIDENTIAL, COMMERCIAL, INDUSTRIAL, GOVERNMENTAL, OR INSTITUTIONAL BUILDINGS OR STRUCTURES, TOGETHER WITH ASSOCIATED YARDS, PARKING, AND SERVICE AREAS, HAVING A COMBINED AREA OF AT LEAST FIVE ACRES. RESIDENTIAL AREAS MUST INCLUDE AT LEAST 10 STRUCTURES, OVER A MAXIMUM DISTANCE OF ONE-HALF MILE, LOCATED ALONG A LINEAR FEATURE, SUCH AS A ROADWAY OR LAKESHORE, OR AT LEAST 10 STRUCTURES LOCATED IN A RELATIVELY COMPACT GROUP WITHIN A RESIDENTIAL SUBDIVISION. URBAN LAND USES WHICH DO NOT MEET THESE CRITERIA BECAUSE THEY LACK THE CONCENTRATION OF BUILDINGS OR STRUCTURES, E. G. CEMETERIES, AIRPORTS, PUBLIC PARKS, AND GOLF COURSES, ARE INCLUDED WITHIN THE URBAN DEVELOPMENT AREA WHEN SUCH USES ABUT ON THREE SIDES URBAN LAND USES WHICH DO MEET THE CRITERIA



Source: SEWRPC.

Table 17

URBAN LAND CONVERSION IN THE REGION: 1970-1985

Urban Land Category	Actual 1970		Planned 1985				Actual 1985				Difference between Actual and Planned Urban Land Area	
	Square Miles	Percent of Total or Subtotal	Change 1970-1985		Total		Change 1970-1985		Total			
			Square Miles	Percent	Square Miles	Percent of Total or Subtotal	Square Miles	Percent	Square Miles	Percent of Total or Subtotal		
											Square Miles	Percent
Nonresidential ^a	228.1	50.6	32.3	14.2	260.4	48.1	39.5	17.3	267.6	48.1	7.2	2.8
Residential												
High-Density	42.1	18.9	0.9	2.1	43.0	15.3	1.3	3.1	43.4	15.0	0.4	0.9
Medium-Density	67.9	30.4	31.7	46.7	99.6	35.4	16.7	24.6	84.6	29.3	-15.0	-15.1
Low-Density	106.5	47.8	11.5	10.8	118.0	42.0	41.4	38.9	147.9	51.3	29.9	25.3
Suburban-Density	6.5	2.9	14.1	216.9	20.6	7.3	6.1	93.8	12.6	4.4	-8.0	-38.8
Subtotal	223.0	49.4	58.2	26.1	281.2	51.9	65.5	29.4	288.5	51.9	7.3	2.6
Total	451.1	100.0	90.5	20.1	541.6	100.0	105.0	23.3	556.1	100.0	14.5	2.7

^aIncludes those urban land use categories, other than residential, for which planned increments were identified under the year 2000 regional land use plan, namely: commercial, industrial, governmental and institutional, public recreational, and transportation, communication, and utilities. Private recreation lands and unused urban lands are not reflected in this table. Private recreation lands and unused urban land together encompassed 54.3 square miles in 1970 and 49.7 square miles in 1985.

Source: SEWRPC.

their greatest areal impact in Waukesha and Washington Counties.

Finally, as shown in Table 19, the analysis also examined the change in the number of housing units in the Region over the 15-year period 1970 through 1985. This analysis indicates a similar shortfall in the provision of housing units in the medium-density residential land use category, coupled with a greater than anticipated increase in the number of housing units provided in the low-density land use category. Consistent with the aforementioned decline in household sizes, the housing unit change analysis indicated that more housing units were provided in the Region over the 15-year period than planned, although the total housing stock in the Region in 1985 was less than 2 percent greater than planned.

Provision of Sanitary Sewer and Water Supply Services

In general, the regional land use plan recommended that new urban development be served by public sanitary sewer and water supply, with existing developed areas not yet thus served retrofitted with such services. Over the 30-year planning period from 1970 to 2000, the plan would increase the proportion of the developed urban area served by public sanitary sewers from about 72 percent to about 92 percent, and increase the proportion of total population served by sanitary sewers from nearly 85 percent to nearly 93 percent. Similarly, if the

regional plan recommendations were fully carried out, the proportion of the developed urban area provided with public water supply services would be increased from nearly 63 percent in 1970 to nearly 93 percent by the year 2000. The proportion of the total regional population provided with water supply services would be increased from about 79 percent in 1970 to nearly 93 percent in the year 2000.

The results of plan implementation monitoring with respect to provision of these two essential public services are summarized in Table 20 with respect to the developed urban area and populations served; on Map 12 with respect to the areal extent of the provision of public sanitary sewer service; and on Map 13 with respect to the areal extent of the provision of public water supply services. During the 15-year period 1970 through 1985, urban development in the Region increased by nearly 139 square miles. Of that total, nearly 63 square miles, or about 45 percent, shown in green on Map 12, was provided with public sanitary sewer service as recommended in the plan. The remaining 76 square miles, or 55 percent, shown in red on Map 12, was not provided with such service. Also during the 15-year period, nearly 30 square miles of existing urban development were retrofitted with public sanitary sewers, leaving about 63 square miles of urban development that existed in 1970 unsewered. These areas are shown in a green stripe pattern on Map 12. The net result of these

Table 18

RESIDENTIAL LAND CONVERSION IN THE REGION BY COUNTY: 1970-1985

County	Actual 1970		Planned 1985				Actual 1985				Difference between Actual and Planned Urban Land Area	
	Square Miles	Percent of Total or Subtotal	Change 1970-1985		Total		Change 1970-1985		Total			
			Square Miles	Percent	Square Miles	Percent of Total or Subtotal	Square Miles	Percent	Square Miles	Percent of Total or Subtotal		
Kenosha												
High-Density	2.5	13.0	0.0	0.0	2.5	10.0	0.0	0.0	2.5	10.5	0.0	0.0
Medium-Density	8.8	45.8	4.0	45.5	12.8	51.4	1.6	18.2	10.4	43.5	-2.4	-18.8
Low-Density	7.7	40.1	1.2	15.6	8.9	35.8	2.8	36.4	10.5	43.9	1.6	18.0
Suburban-Density	0.2	1.1	0.5	250.0	0.7	2.8	0.3	150.0	0.5	2.1	-0.2	-28.6
Subtotal	19.2	8.6	5.7	29.7	24.9	8.8	4.7	24.5	23.9	8.3	-1.0	-4.0
Milwaukee												
High-Density	34.6	50.4	0.8	2.3	35.4	46.5	1.0	2.9	35.6	47.3	0.2	0.6
Medium-Density	21.2	30.8	7.8	36.8	29.0	38.1	4.0	18.9	25.2	33.5	-3.8	-13.1
Low-Density	11.8	17.2	-1.3	-11.0	10.5	13.8	1.2	10.2	13.0	17.3	2.5	23.8
Suburban-Density	1.1	1.6	0.1	9.1	1.2	1.6	0.3	27.3	1.4	1.9	0.2	16.7
Subtotal	68.7	30.8	7.4	10.8	76.1	27.1	6.5	9.5	75.2	26.1	-0.9	-1.2
Ozaukee												
High-Density	0.0	0.0	0.0	--	0.0	0.0	0.0	--	0.0	0.0	0.0	--
Medium-Density	4.4	28.2	2.7	61.4	7.1	30.5	1.3	29.5	5.7	26.6	-1.4	-19.7
Low-Density	10.1	64.7	3.7	36.6	13.8	59.2	4.0	39.6	14.1	65.9	0.3	2.2
Suburban-Density	1.1	7.1	1.3	118.2	2.4	10.3	0.5	45.5	1.6	7.5	-0.8	-33.3
Subtotal	15.6	7.0	7.7	49.4	23.3	8.3	5.8	37.2	21.4	7.4	-1.9	-8.2
Racine												
High-Density	3.7	14.9	0.1	2.7	3.8	12.9	0.1	2.7	3.8	12.5	0.0	0.0
Medium-Density	8.9	35.7	3.5	39.3	12.4	42.2	1.9	21.3	10.8	35.5	-1.6	-12.9
Low-Density	12.3	49.4	0.7	5.7	13.0	44.2	3.4	27.6	15.7	51.7	2.7	20.8
Suburban-Density	0.0	0.0	0.2	--	0.2	0.7	0.1	--	0.1	0.3	-0.1	-50.0
Subtotal	24.9	11.2	4.5	18.1	29.4	10.5	5.5	22.1	30.4	10.5	1.0	3.4
Walworth												
High-Density	0.0	0.0	0.0	--	0.0	0.0	0.0	--	0.0	0.0	0.0	--
Medium-Density	7.4	36.6	1.8	24.3	9.2	38.2	1.1	14.9	8.5	33.1	-0.7	-7.6
Low-Density	12.4	61.4	1.1	8.9	13.5	56.0	4.2	33.9	16.6	64.6	3.1	23.0
Suburban-Density	0.4	2.0	1.0	250.0	1.4	5.8	0.2	50.0	0.6	2.3	-0.8	-57.1
Subtotal	20.2	9.0	3.9	19.3	24.1	8.6	5.5	27.2	25.7	8.9	1.6	6.6
Washington												
High-Density	0.4	2.6	0.0	0.0	0.4	1.7	0.0	0.0	0.4	1.6	0.0	0.0
Medium-Density	3.6	23.1	3.5	97.2	7.1	30.6	1.5	41.7	5.1	20.3	-2.0	-28.2
Low-Density	11.3	72.4	2.1	18.6	13.4	57.8	7.5	66.4	18.8	74.9	5.4	40.3
Suburban-Density	0.3	1.9	2.0	666.7	2.3	9.9	0.5	166.7	0.8	3.2	-1.5	-65.2
Subtotal	15.6	7.0	7.6	48.7	23.2	8.2	9.5	60.9	25.1	8.7	1.9	8.2
Waukesha												
High-Density	0.9	1.5	0.0	0.0	0.9	1.1	0.2	22.0	1.1	1.3	0.2	22.2
Medium-Density	13.6	23.1	8.4	61.8	22.0	27.4	5.3	44.7	18.9	21.8	-3.1	-14.1
Low-Density	40.9	69.6	4.0	9.8	44.9	56.0	18.3	123.5	59.2	68.2	14.3	31.8
Suburban-Density	3.4	5.8	9.0	264.7	12.4	15.5	4.2	47.6	7.6	8.7	-4.8	-38.7
Subtotal	58.8	26.4	21.4	36.4	80.2	28.5	28.0	47.6	86.8	30.1	6.6	8.2
Region												
High-Density	42.1	18.9	0.9	2.1	43.0	15.3	1.3	3.1	43.4	15.0	0.4	0.9
Medium-Density	67.9	30.4	31.7	46.7	99.6	35.4	16.7	24.6	84.6	29.3	-15.0	-15.1
Low-Density	106.5	47.8	11.5	10.8	118.0	42.0	41.4	38.9	147.9	51.3	29.9	25.3
Suburban-Density	6.5	2.9	14.1	216.9	20.6	7.3	6.1	93.8	12.6	4.4	-8.0	-38.8
Total	223.0	100.0	58.2	26.1	281.2	100.0	65.5	29.4	288.5	100.0	7.3	2.6

Source: SEWRPC.

Table 19

HOUSING UNIT CHANGE IN THE REGION: 1970-1985





Residential Land Use Category	Existing 1970		Planned 1985				Actual 1985				Difference between Actual and Planned 1985 Housing Units	
	Number	Percent of Total	Change 1970-1985		Total		Change 1970-1985		Total			
			Number	Percent	Number	Percent of Total	Number	Percent	Number	Percent of Total		
High-Density	319,930	59.6	6,070	1.9	326,000	51.6	8,080	2.5	328,010	51.0	2,010	0.6
Medium-Density	139,490	26.0	73,090	52.4	212,580	33.6	68,780	49.3	208,250	32.3	-4,330	-2.0
Low-Density	74,770	14.0	9,160	12.3	83,930	13.3	28,850	38.6	103,620	16.1	19,690	23.5
Suburban-Density	2,300	0.4	7,390	321.3	9,690	1.5	1,650	71.7	3,950	0.6	-5,740	-59.2
Total	536,490	100.0	95,710	17.8	632,200	100.0	107,340	20.0	643,830	100.0	11,630	1.8

Source: SEWRPC.

Map 11
GENERAL LOCATION OF
NEW RESIDENTIAL DEVELOPMENT
IN THE REGION BY DENSITY
CATEGORY: 1970-1985

LEGEND

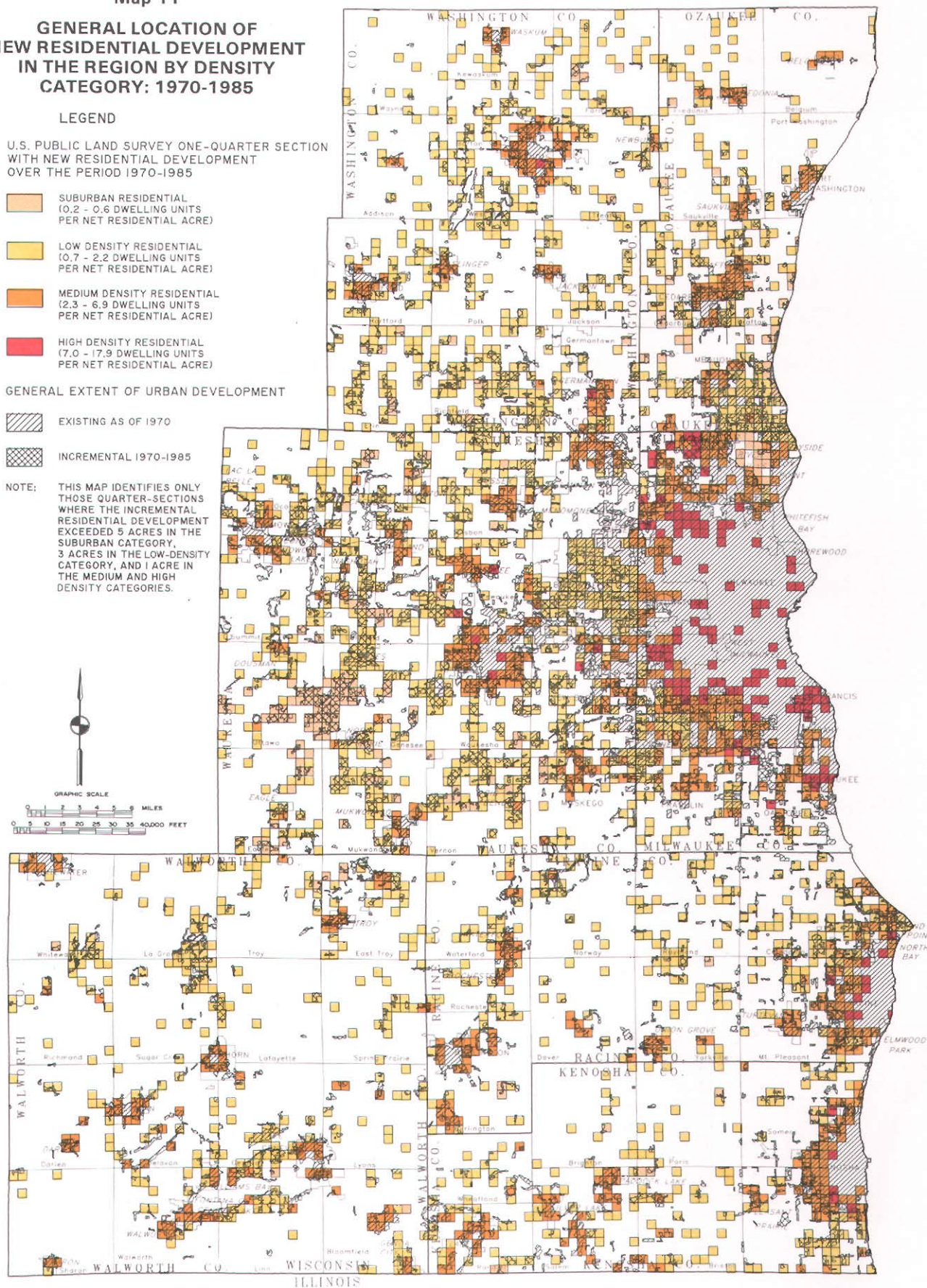
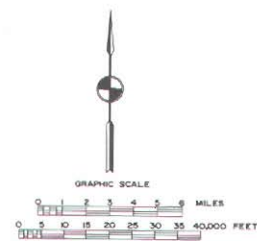
U.S. PUBLIC LAND SURVEY ONE-QUARTER SECTION
 WITH NEW RESIDENTIAL DEVELOPMENT
 OVER THE PERIOD 1970-1985

-  SUBURBAN RESIDENTIAL
(0.2 - 0.6 DWELLING UNITS
PER NET RESIDENTIAL ACRE)
-  LOW DENSITY RESIDENTIAL
(0.7 - 2.2 DWELLING UNITS
PER NET RESIDENTIAL ACRE)
-  MEDIUM DENSITY RESIDENTIAL
(2.3 - 6.9 DWELLING UNITS
PER NET RESIDENTIAL ACRE)
-  HIGH DENSITY RESIDENTIAL
(7.0 - 17.9 DWELLING UNITS
PER NET RESIDENTIAL ACRE)

GENERAL EXTENT OF URBAN DEVELOPMENT

-  EXISTING AS OF 1970
-  INCREMENTAL 1970-1985

NOTE: THIS MAP IDENTIFIES ONLY
 THOSE QUARTER-SECTIONS
 WHERE THE INCREMENTAL
 RESIDENTIAL DEVELOPMENT
 EXCEEDED 5 ACRES IN THE
 SUBURBAN CATEGORY,
 3 ACRES IN THE LOW-DENSITY
 CATEGORY, AND 1 ACRE IN
 THE MEDIUM AND HIGH
 DENSITY CATEGORIES.



Source: SEWRPC.

Table 20

**DEVELOPED AREA AND POPULATION SERVED BY PUBLIC SANITARY SEWER
AND WATER SUPPLY SERVICES IN THE REGION BY COUNTY: 1970 AND 1985**

County	Area and Population	Existing Public Sanitary Sewer Service		Existing Public Water Supply Service	
		1970	1985	1970	1985
Kenosha	Developed Urban Area				
	Total square miles	26.4	34.7	26.4	34.7
	Square miles served	17.5	25.1	14.2	18.0
	Percent of total served	66.3	72.3	53.8	51.9
	Population				
	Total population	117,900	121,100	117,900	121,100
Milwaukee	Developed Urban Area				
	Total square miles	149.8	167.1	149.8	167.1
	Square miles served	143.1	164.2	137.4	156.6
	Percent of total served	95.5	98.3	91.7	93.7
	Population				
	Total population	1,054,300	939,600	1,054,300	939,600
Ozaukee	Developed Urban Area				
	Total square miles	19.0	29.7	19.0	29.7
	Square miles served	12.2	20.3	5.9	8.7
	Percent of total served	64.2	68.4	31.1	29.3
	Population				
	Total population	54,500	67,500	54,500	67,500
Racine	Developed Urban Area				
	Total square miles	33.9	45.0	33.9	45.0
	Square miles served	25.2	33.9	20.6	25.6
	Percent of total served	74.3	75.3	60.8	56.9
	Population				
	Total population	170,800	169,200	170,800	169,200
Walworth	Developed Urban Area				
	Total square miles	22.1	32.8	22.1	32.8
	Square miles served	10.1	15.9	9.6	13.2
	Percent of total served	45.7	48.5	43.4	40.2
	Population				
	Total population	63,500	72,200	63,500	72,200
Washington	Developed Urban Area				
	Total square miles	14.1	36.6	14.1	36.6
	Square miles served	6.6	12.8	5.9	11.6
	Percent of total served	46.8	35.0	41.8	31.7
	Population				
	Total population	63,800	87,200	63,800	87,200

Table 20 (continued)

County	Area and Population	Existing Public Sanitary Sewer Service		Existing Public Water Supply Service	
		1970	1985	1970	1985
Waukesha	Developed Urban Area				
	Total square miles	72.3	130.6	72.3	130.6
	Square miles served	29.9	65.2	17.7	39.5
	Percent of total served	41.4	49.9	24.5	30.2
	Population				
	Total population	231,300	285,900	231,300	285,900
Region	Population served	122,100	191,300	84,400	146,700
	Percent of total served	52.8	66.9	36.5	51.3
	Developed Urban Area				
	Total square miles	337.6	476.5	337.6	476.5
	Square miles served	244.6	337.4	211.3	273.2
	Percent of total served	72.5	70.8	62.6	57.3
	Population				
	Total population	1,756,100	1,742,700	1,756,100	1,742,700
	Population served	1,488,700	1,507,800	1,390,500	1,389,700
	Percent of total served	84.8	86.5	79.2	79.7

Source: SEWRPC.

developments and changes over the 15-year period is to slightly decrease the percent of total developed urban area provided with sanitary sewers from nearly 73 percent in 1970 to nearly 71 percent in 1985, and to slightly increase the percent of the total population served from nearly 85 percent in 1970 to nearly 87 percent by 1985.

Of the total urban development which occurred during the 15-year period, about 48 square miles, or 35 percent, shown in green on Map 13, was provided with public water supply service in the manner recommended in the plan. The remaining 91 square miles, or 65 percent, shown in red on Map 13, was not provided with such service. Also during the 15-year period, nearly 14 square miles of existing urban development was retrofitted with public water supply service, leaving about 113 square miles of urban development that existed in 1970 without this service. These areas are shown in a green stripe pattern on Map 13. The net result of these developments and changes over the 15-year period is to decrease the percent of total developed urban area provided with water supply service from nearly 63 percent in 1970 to about 57 percent in 1985, and to slightly increase the percent of the

total population served from about 79 percent in 1970 to 80 percent by 1985.

MAJOR REGIONAL CENTERS: 1985

The regional land use plan was designed to include explicit recommendations concerning the location and size of three types of major regional centers of activity: industrial, commercial, and outdoor recreational centers. The actual development of each of these sets of major centers over the period 1970 through 1985 is described below, with additional comments based upon supplemental monitoring since 1985.

Industrial Centers

Major industrial centers are defined in the adopted regional land use plan as concentrations of employment having at least 3,500 "industrial" jobs, with the term "industrial" encompassing the manufacturing, wholesaling, and construction sectors.¹ The regional land use

¹While this definition is used for regional land use planning purposes, for regional transportation planning purposes the Commission also takes into account total jobs at each major industrial center. Table 21 reports the employment status at each major center in terms of both industrial and total jobs.

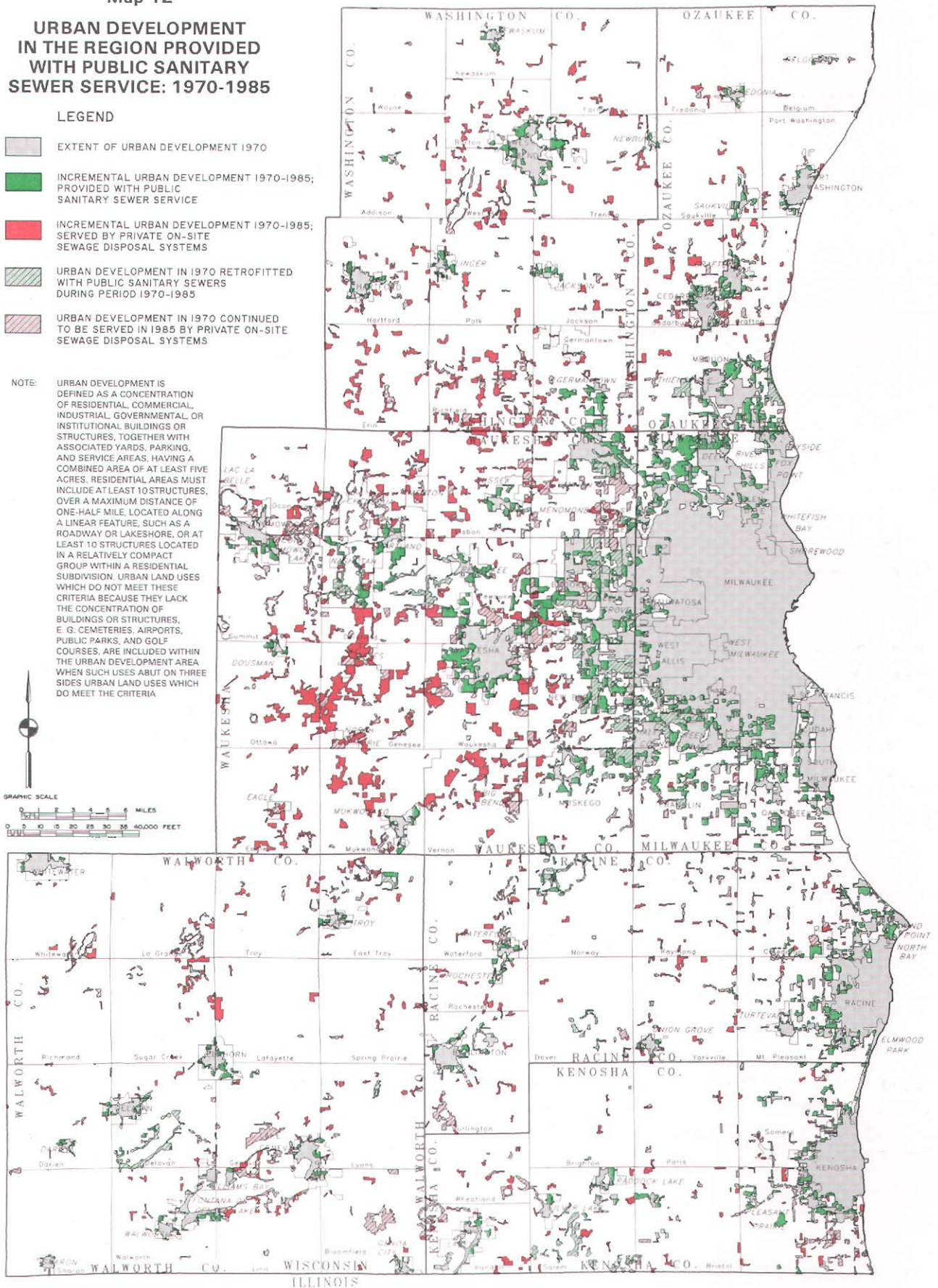
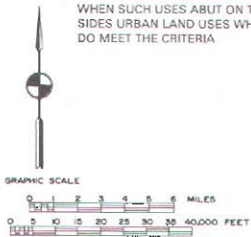
Map 12

**URBAN DEVELOPMENT
IN THE REGION PROVIDED
WITH PUBLIC SANITARY
SEWER SERVICE: 1970-1985**

LEGEND

- EXTENT OF URBAN DEVELOPMENT 1970
- INCREMENTAL URBAN DEVELOPMENT 1970-1985;
PROVIDED WITH PUBLIC
SANITARY SEWER SERVICE
- INCREMENTAL URBAN DEVELOPMENT 1970-1985;
SERVED BY PRIVATE ON-SITE
SEWAGE DISPOSAL SYSTEMS
- URBAN DEVELOPMENT IN 1970 RETROFITTED
WITH PUBLIC SANITARY SEWERS
DURING PERIOD 1970-1985
- URBAN DEVELOPMENT IN 1970 CONTINUED
TO BE SERVED IN 1985 BY PRIVATE ON-SITE
SEWAGE DISPOSAL SYSTEMS

NOTE: URBAN DEVELOPMENT IS
DEFINED AS A CONCENTRATION
OF RESIDENTIAL, COMMERCIAL,
INDUSTRIAL, GOVERNMENTAL, OR
INSTITUTIONAL BUILDINGS OR
STRUCTURES, TOGETHER WITH
ASSOCIATED YARDS, PARKING,
AND SERVICE AREAS, HAVING A
COMBINED AREA OF AT LEAST FIVE
ACRES. RESIDENTIAL AREAS MUST
INCLUDE AT LEAST 10 STRUCTURES,
OVER A MAXIMUM DISTANCE OF
ONE-HALF MILE, LOCATED ALONG
A LINEAR FEATURE, SUCH AS A
ROADWAY OR LAKESHORE, OR AT
LEAST 10 STRUCTURES LOCATED
IN A RELATIVELY COMPACT
GROUP WITHIN A RESIDENTIAL
SUBDIVISION. URBAN LAND USES
WHICH DO NOT MEET THESE
CRITERIA BECAUSE THEY LACK
THE CONCENTRATION OF
BUILDINGS OR STRUCTURES,
E. G. CEMETERIES, AIRPORTS,
PUBLIC PARKS, AND GOLF
COURSES, ARE INCLUDED WITHIN
THE URBAN DEVELOPMENT AREA
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DO MEET THE CRITERIA



Source: SEWRPC.

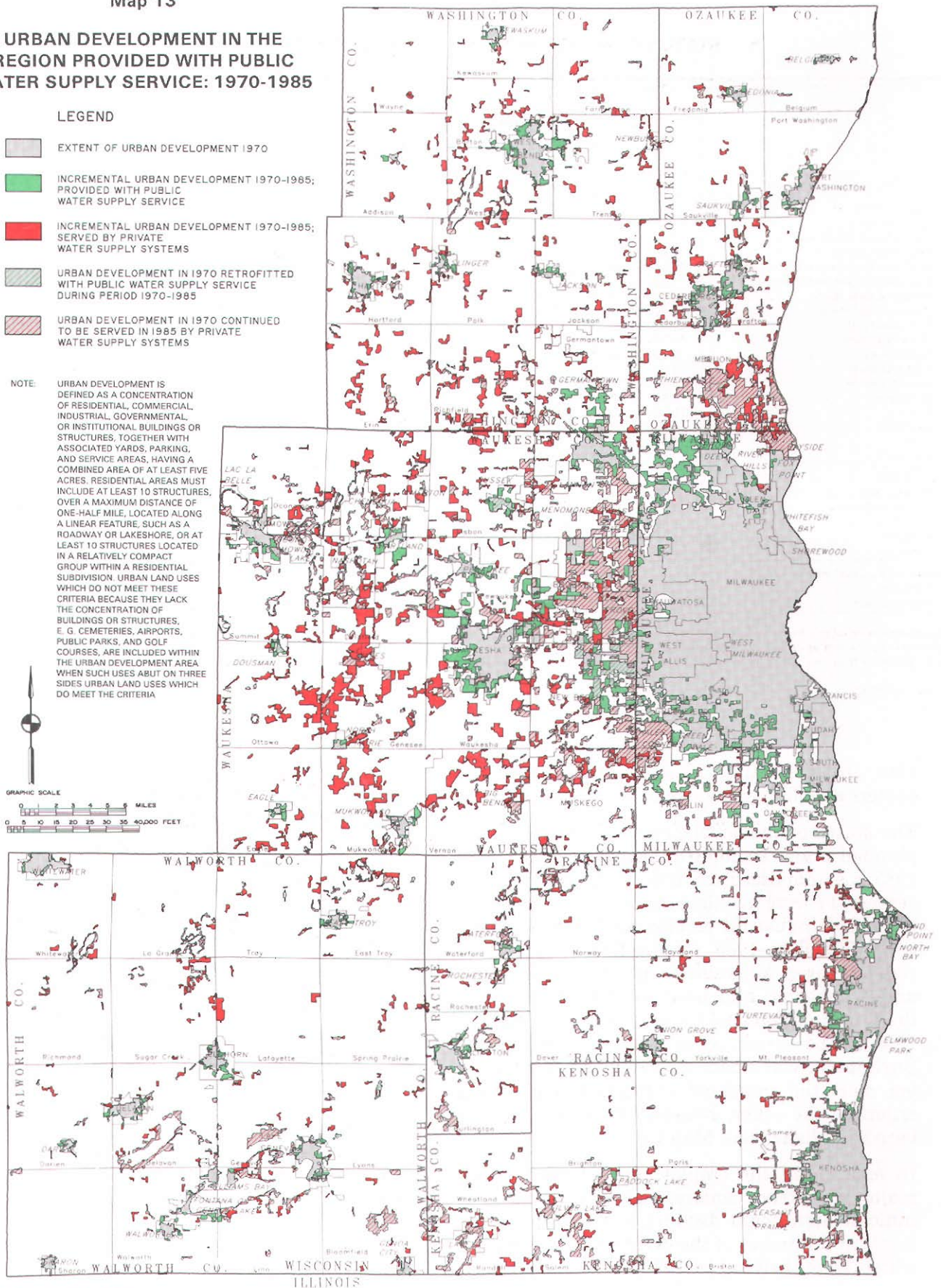
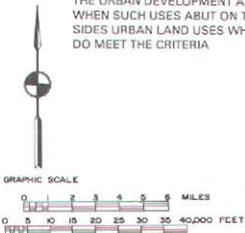
Map 13

**URBAN DEVELOPMENT IN THE
REGION PROVIDED WITH PUBLIC
WATER SUPPLY SERVICE: 1970-1985**

LEGEND

- EXTENT OF URBAN DEVELOPMENT 1970
- INCREMENTAL URBAN DEVELOPMENT 1970-1985;
PROVIDED WITH PUBLIC
WATER SUPPLY SERVICE
- INCREMENTAL URBAN DEVELOPMENT 1970-1985;
SERVED BY PRIVATE
WATER SUPPLY SYSTEMS
- URBAN DEVELOPMENT IN 1970 RETROFITTED
WITH PUBLIC WATER SUPPLY SERVICE
DURING PERIOD 1970-1985
- URBAN DEVELOPMENT IN 1970 CONTINUED
TO BE SERVED IN 1985 BY PRIVATE
WATER SUPPLY SYSTEMS

NOTE: URBAN DEVELOPMENT IS
DEFINED AS A CONCENTRATION
OF RESIDENTIAL, COMMERCIAL,
INDUSTRIAL, GOVERNMENTAL,
OR INSTITUTIONAL BUILDINGS OR
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AND SERVICE AREAS, HAVING A
COMBINED AREA OF AT LEAST FIVE
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INCLUDE AT LEAST 10 STRUCTURES,
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THE URBAN DEVELOPMENT AREA
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DO MEET THE CRITERIA



Source: SEWRPC.

Table 21

STATUS OF MAJOR INDUSTRIAL CENTERS IN THE REGION: 1985

Major Industrial Center ^a	Industrial Employment						Total Employment				
	Existing 1972	Planned 2000	Estimated 1985		Meets Criterion for Designation As a Major Center in 1985 ^a	Estimated 1990	Existing 1972	Planned 2000	Estimated 1985		Estimated 1990
			Number	Percent Change from 1972					Number	Percent Change from 1972	
Existing in 1970											
Kenosha-East	11,600	11,600	6,200	-47	Yes	4,800	14,600	15,300	8,600	-41	7,100
Cudahy-South Milwaukee	7,300	8,400	6,900	-5	Yes	5,100	9,800	11,800	10,200	4	8,900
Milwaukee-Glendale	17,800	18,200	8,300	-53	Yes	8,500	22,700	23,700	12,900	-43	13,700
Milwaukee-Menomonee Valley East	18,600	19,000	10,100	-46	Yes	9,400	23,500	24,600	18,400	-22	17,000
Milwaukee-Menomonee Valley West	5,300	5,400	5,700	8	Yes	6,400	8,200	8,600	8,600	5	9,500
Milwaukee-Near North	15,000	15,300	6,100	-59	Yes	6,200	17,300	18,000	9,300	-46	9,600
Milwaukee-Near South	12,600	12,900	10,900	-13	Yes	9,900	14,700	15,500	13,000	-12	12,300
Milwaukee-North	20,800	21,200	14,100	-32	Yes	13,100	25,300	26,200	17,500	-31	16,400
Milwaukee-South	4,100	4,200	4,200	2	Yes	4,500	5,400	5,600	6,200	15	6,100
West Allis-East	9,300	9,500	4,200	-55	Yes	3,100	13,700	14,400	8,200	-40	8,300
West Allis-West	3,600	3,700	5,200	44	Yes	5,700	7,800	8,200	9,100	17	10,800
West Milwaukee	15,400	15,700	6,700	-56	Yes	6,300	18,800	19,500	8,900	-53	8,700
Mt. Pleasant	3,500	9,400	5,100	46	Yes	4,700	3,500	9,600	5,200	49	4,800
Racine	12,500	12,800	10,300	-18	Yes	9,700	15,500	16,600	12,300	-21	11,900
West Bend	3,800	7,100	4,600	21	Yes	5,200	3,900	7,200	4,600	18	5,400
Butler	14,600	14,900	18,700	28	Yes	21,100	17,200	19,800	25,500	48	28,600
New Berlin	3,500	8,500	8,800	151	Yes	10,400	4,000	9,500	11,200	180	13,800
Planned 2000											
Kenosha-West	--	4,500	--	--	No	600	--	4,800	--	--	900
Milwaukee-Granville	1,500	15,500	8,900	493	Yes	13,400	1,800	16,000	12,700	606	18,600
Oak Creek	800	8,800	8,300	938	Yes	9,300	1,100	9,200	9,300	745	11,500
Burlington	1,200	4,700	2,400	100	No	2,500	2,700	7,000	4,600	70	4,700
Waukesha	3,000	8,000	5,000	67	Yes	5,500	4,200	10,100	7,000	67	7,900
Unplanned but Developed by 1985											
Pewaukee	--	--	4,200	--	Yes	6,200	--	--	4,900	--	7,800
Waukesha-North	--	--	5,000	--	Yes	4,900	--	--	6,300	--	5,900

^a The criterion selected as a basis for determining the status of major industrial centers is a minimum of 3,500 "industrial" jobs. The term "industrial" encompasses the manufacturing, wholesaling, and construction sectors as defined in the *Standard Industrial Classification Manual* of the U. S. Office of Management and Budget. The table above reports both industrial and total employment at the designated centers. For data collection and analysis purposes, each major center is defined as encompassing a select group of contiguous U. S. Public Land Survey one-quarter sections.

Source: SEWRPC.

plan envisions that 22 such major industrial centers should be provided to serve the Region.

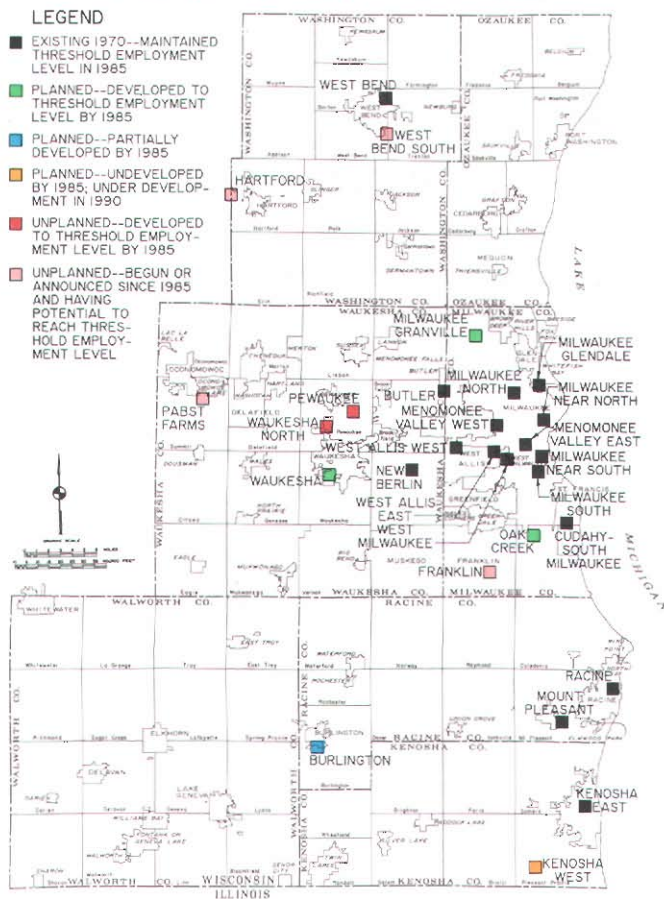
The status of the development of each of the 22 planned major regional industrial centers as of 1985 is summarized in Table 21. Of the 22 major centers, 17 were in existence in 1970 and met the threshold industrial employment criterion both in 1970 and in 1985. Of the five planned new centers, three, Milwaukee-Granville, Oak Creek, and Waukesha, had been established and met the threshold industrial employment criterion by 1985. Of the remaining two planned centers, one, Burlington, was under development, but did not yet meet the threshold industrial employment criterion; the other, Kenosha-West, had not yet been established (see Map 14).

In examining the employment at each of the major industrial centers, the monitoring data indicate significant declines in the employment levels at a number of the older industrial centers which were thriving in 1970. Even though each

of these older centers continued to meet the major center industrial employment threshold criterion in 1985, significant decreases in total employment at some of these older centers were evident. Particularly noticeable in this respect were the older existing centers of Kenosha-East, Milwaukee-North, West Allis-East, and West Milwaukee. The significant declines in employment activity at these centers may be attributed in large part to the overall loss of manufacturing jobs experienced within the Region during the severe economic recession of 1979 to 1983. During this four-year period, about 80,000 industrial jobs were lost within the Region. Monitoring data since 1985 provides further evidence that employment at the Kenosha-East, Milwaukee-Menomonee Valley East, and Milwaukee-North centers have continued to decline through 1990. At the West Allis-East center, industrial employment fell below the major center industrial employment threshold by 1990.

Map 14

**STATUS OF MAJOR INDUSTRIAL CENTERS
RECOMMENDED IN THE SECOND-GENERATION
REGIONAL LAND USE PLAN: 1985**



Source: SEWRPC.

The monitoring data also indicated that employment at one of the centers existing in 1970—the Butler Center located not only in the Village of Butler but also in adjacent areas in the Cities of Brookfield, Milwaukee, and Wauwatosa and the Village of Menomonee Falls—increased significantly to a level well beyond that called for in the plan. With about 21,000 industrial and about 29,000 total jobs, the Butler center represents the singularly largest industrial employment center in the Region. The monitoring data also indicated that two new major industrial centers had been developed by 1985 in areas that were not called for in the regional land use plan. These two centers are the Waukesha-North center and the Pewaukee center. The former is anchored by the General Electric manufacturing facility in

the City of Waukesha, while the latter is anchored by the QuadGraphics printing facility in the Town of Pewaukee. In both cases, the new centers met the threshold industrial employment criterion for designation as major centers in 1985.

Monitoring data since 1985 also indicate that the long-planned Kenosha-West industrial center is now under development. That center is being developed as the LakeView Corporate Center by the WISPARK Corporation, a subsidiary of the Wisconsin Energy Corporation. In addition, monitoring information since 1985 indicates that four additional major industrial centers may emerge at sites not previously planned. Three of these four new centers are under development, one each in the Cities of Franklin, West Bend, and Hartford. A fourth potential new industrial center has not begun nor received the required local governmental approvals. The fourth center, which was recently announced by the landowner concerned, would be located on the Pabst Farms along IH 94 in the Oconomowoc area of Waukesha County.²

In general, then, the monitoring of land use development and employment activities indicates the following with respect to major industrial centers:

1. Substantial declines in employment activity at many of the Region's older industrial centers.
2. The development of five new major industrial centers in accordance with the regional plan recommendations.
3. The development by 1985 of two additional major industrial centers at locations not recommended in the regional plan.
4. The emergence since 1985 of four additional unplanned sites that have the potential to become major industrial employment centers.

²The industrial center at Hartford has been included as a planned major industrial center in the third-generation regional land use plan. See SEWRPC Planning Report No. 40, *A Regional Land Use Plan for Southeastern Wisconsin—2010*.

Commercial Centers

As discussed in Chapter II, major commercial centers are defined in the adopted regional land use plan as aggregations of retail and service lands large enough to serve a resident population of at least 100,000 people within a 20-minute travel time, that had a full range of retail shopping stores, and that could be expected to attract at least 3,000 shopping trips daily. The emphasis in that set of criteria, then, was on retail shopping activity. On that basis, the plan envisioned that 16 major commercial centers would be provided to serve the Region, of which 13 existed in 1970 and three were envisioned as new centers.

Since the preparation of the second-generation regional land use plan, two trends have emerged which have caused the Commission to redefine major commercial centers in the third-generation regional land use plan. These trends are:

1. The breakdown of the classical organization of shopping centers, first classified in the early part of the century into regional, community, and neighborhood centers, as evidenced by the emergence of other forms of retail activity centers, including the super-regional discount and factory outlet centers, and the establishment of "mega-stores" in such retailing areas as consumer electronics. An example of this trend in the Region is the larger manufacturers' outlet mall located in the Town of Bristol, Kenosha County.
2. The emergence of commercial office centers, sometimes linked with retail centers but at other times independent of retail centers. An example in the Region of this trend is the Park Place office center on the northwest side of the City of Milwaukee.

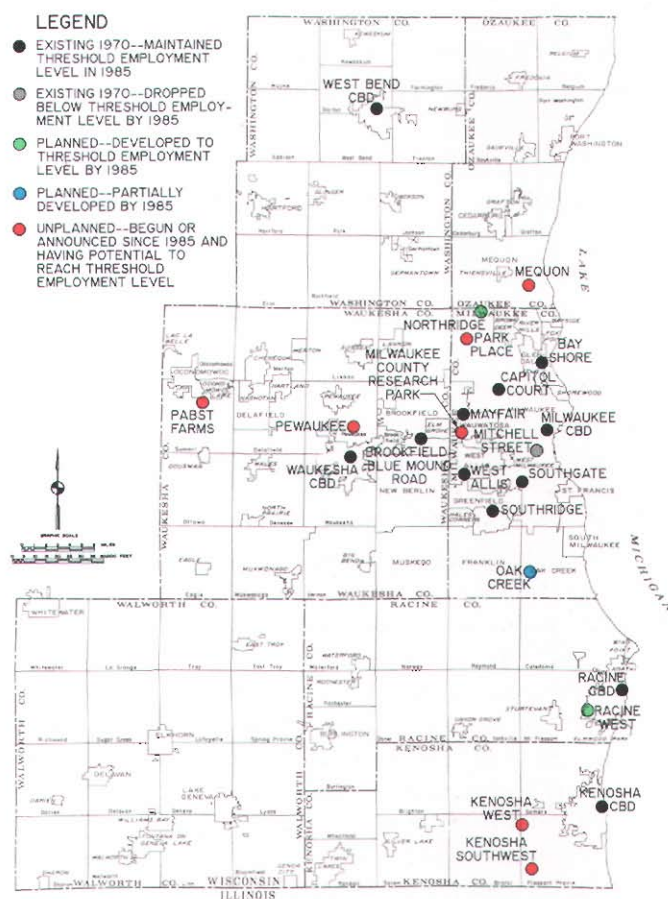
These trends may have had an impact on commercial real estate activity in the Region before 1985. Accordingly, it was determined for the purposes of this study to apply, albeit retroactively, the new definitions used in the preparation of the third-generation regional land use plan with respect to major commercial centers. Under the new definitions, major commercial centers are classified into two types, retail centers and office centers, recognizing, however, that a single center may be one or the other, or both, if both employment criteria described below are met. Major retail centers are

defined as concentrations of employment having at least 2,000 jobs in the retail trade sector. Major office centers are defined as concentrations of employment having at least 3,500 jobs in the "office and service" sectors, sectors which encompass the finance, insurance, real estate, and service industries, except government service. Special account is taken of jobs in the government and utility sectors only in the four older central business districts, those in Kenosha, Racine, Waukesha, and West Bend, given their unique historic character.

Given these changes in definitions, the status of the actual development of each of the 16 planned major commercial centers as of the year 1985 is summarized in Table 22 and on Map 15. In 1985, 12 of the 13 existing major commercial centers, excepting only Mitchell Street, met one or both of the commercial center criteria. In the case of

Map 15

STATUS OF MAJOR COMMERCIAL CENTERS RECOMMENDED IN THE SECOND-GENERATION REGIONAL LAND USE PLAN: 1985



Source: SEWRPC.

Table 22

STATUS OF MAJOR COMMERCIAL CENTERS IN THE REGION: 1985

Major Commercial Center	Center Type		Retail Trade Employment						Office and Service Employment						Total Employment				
	Retail	Office	Existing 1972	Planned 2000	Estimated 1985		Meets Criterion for Designation as a Major Retail Center in 1985 ^a	Estimated 1990	Existing 1972	Planned 2000	Estimated 1985		Meets Criterion for Designation as a Major Office Center in 1985 ^a	Estimated 1990	Existing 1972	Planned 2000	Estimated 1985		Estimated 1990
					Number	Percent Change from 1972					Number	Percent Change from 1972					Number	Percent Change from 1972	
Existing in 1970	--	X	N/A	N/A	N/A	N/A	N/A	N/A	3,000	3,300	3,700	23	Yes	3,700	4,500	4,800	4,600	2	4,600
Kenosha CBD	X	--	2,300	2,300	2,700	17	Yes	2,400	N/A	N/A	N/A	N/A	N/A	N/A	4,500	4,600	4,000	-11	3,900
Bay Shore	X	--	2,200	2,300	2,600	18	Yes	3,300	N/A	N/A	N/A	N/A	N/A	N/A	3,300	3,400	3,400	3	3,900
Capitol Court	X	X	3,500	3,600	5,100	46	Yes	5,100	3,100	5,100	6,800	119	Yes	7,200	8,100	10,200	13,200	63	13,600
Mayfair	X	X	11,100	11,100	7,100	-36	Yes	5,200	54,900	55,000	50,800	-7	Yes	65,900	88,900	91,000	82,500	-7	91,400
Milwaukee CBD	X	--	3,200	3,300	1,100	-66	No	1,100	N/A	N/A	N/A	N/A	N/A	N/A	5,500	5,800	3,900	-29	4,100
Mitchell Street	X	--	2,000	2,000	2,400	20	Yes	2,400	N/A	N/A	N/A	N/A	N/A	N/A	2,600	2,700	3,400	31	3,700
Southgate-Point Loomis	X	--	2,600	2,600	4,000	54	Yes	3,700	N/A	N/A	N/A	N/A	N/A	N/A	2,800	4,600	4,900	75	4,700
Southridge	X	--	1,000	1,500	2,300	130	Yes	2,800	N/A	N/A	N/A	N/A	N/A	N/A	1,700	2,300	4,900	188	6,300
West Allis	--	X	N/A	N/A	N/A	N/A	N/A	N/A	5,700	7,100	3,500	-39	Yes	4,100	7,100	18,600	4,700	-34	5,200
Racine CBD	--	X	N/A	N/A	N/A	N/A	N/A	N/A	2,500	3,800	3,700	48	Yes	3,800	5,300	6,900	5,100	-4	6,100
West Bend CBD	--	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Brookfield-Blue	X	X	1,600	1,800	5,100	219	Yes	6,700	300	4,300	6,200	1,967	Yes	13,600	2,200	6,400	17,500	695	24,900
Mound Road	--	X	N/A	N/A	N/A	N/A	N/A	N/A	5,300	7,500	4,600	-13	Yes	5,000	7,500	10,100	5,600	-25	6,200
Waukesha CBD	--	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Planned 2000	X	--	--	3,800	5,100	--	Yes	5,000	N/A	N/A	N/A	N/A	N/A	N/A	--	4,600	6,100	--	6,500
Northridge	X	--	--	2,900	--	--	No	300	N/A	N/A	N/A	N/A	N/A	N/A	--	3,000	700	--	1,100
Oak Creek	X	--	--	3,300	2,900	--	Yes	3,500	N/A	N/A	N/A	N/A	N/A	N/A	--	5,600	4,400	--	5,700
Racine-West	X	--	--	3,300	2,900	--	Yes	3,500	N/A	N/A	N/A	N/A	N/A	N/A	--	5,600	4,400	--	5,700

NOTE: N/A indicates not applicable.

^a Major commercial centers have been classified into two types, retail centers and office centers. The criterion selected as a basis for determining the status of major retail centers is a minimum of 2,000 jobs in the "retail trade" sector as defined in the Standard Industrial Classification Manual of the U. S. Office of Management and Budget. The criterion selected as a basis for determining the status of major office centers, except as noted below, is a minimum of 3,500 "office and service" jobs. The term "office and service" encompasses the finance, insurance, and real estate sector and the services sector, excluding educational services, as defined in the Standard Industrial Classification Manual. The four older, smaller central business districts in the Region, the Kenosha CBD, Racine CBD, Waukesha CBD, and West Bend CBD, are identified as major office centers based upon the 3,500 minimum job level, taking into account government and utility sector jobs together with office and service jobs. The above table reports retail trade employment and total employment for retail centers and office and service employment and total employment for office centers. Some centers meet both the retail and office criteria. For data collection and analysis purposes, each major center is defined as encompassing a select group of contiguous U. S. Public Land Survey one-quarter sections.

Source: SEWRPC.

Mitchell Street, which never was an office center, retail employment fell below the 2,000 threshold level. Accordingly, by 1985 the Mitchell Street shopping district no longer could be classified as a major regional commercial center.

Of the three planned new commercial centers, two, Northridge and Racine-West, had been established by 1985 and met the threshold employment levels for classification as major retail commercial centers. In both cases, new shopping centers had been built as recommended in the plan. In the case of the third new commercial center, Oak Creek, a relatively minor development had been completed at the envisioned location by 1985. Employment at that center in 1985, however, did not meet the levels needed for classification as either a major retail center or a major office center.

In examining the employment at each of the commercial centers, the monitoring data indicated that in most cases the estimated 1985 total employment approximated what was planned for the center in the regional land use plan. In three cases, however, there were substantial deviations. In the case of the Milwaukee central business district, estimated total employment declined between 1970 and 1985, as opposed to the increase called for in the plan. The 1985 employment level at this center was about 9 percent, or about 8,500 jobs, below the planned level. Monitoring data since 1985, however, indicate that by 1990 total employment at that center recovered to levels anticipated under the plan. Similarly, but on a lesser scale, total employment in the Waukesha central business district was only about 55 percent of that envisioned in the plan. By contrast, office and retail employment at the Brookfield-Blue Mound Road center, which began as a retail center but which over the 15-year monitoring period became both a retail and office center, was substantially above the planned level and continuing to grow.

Monitoring data since 1985 indicate that seven additional major commercial centers may emerge at sites not previously planned. At five of these sites, Mequon, Milwaukee-Park Place, Pewaukee, Kenosha-West, and Kenosha-Southwest, development of commercial office and/or retail centers was underway by 1990. At the sixth site, Milwaukee County Research Park in Wauwatosa, development plans have been announced and the lands committed by Milwaukee County for an

office park. At the seventh site, the Pabst Farms in the Oconomowoc area, development plans have recently been announced, but have not yet received required public approvals.³

In general, then, the monitoring of land use development and employment activities indicates the following with respect to major commercial centers:

1. All the old commercial centers in the Region but one continue to meet the definition of a major center; the exception is the Mitchell Street shopping district in Milwaukee.
2. The development of two, and the beginning of a third, new major commercial center in accordance with regional plan recommendations.
3. The emergence of a new type of commercial center, focusing largely on office as opposed to retail employment.
4. The emergence since 1985 of seven unplanned sites with the potential of becoming major commercial employment centers.

Outdoor Recreation Centers

Major public outdoor recreation centers, or regional parks, are defined in the adopted regional land use plan as multi-use outdoor recreation areas having a minimum site of 250 acres. The regional land use plan recommended that 29 regional parks be provided to serve the Region by the year 2000 (see Table 23 and Map 16). Of that total, 21 park sites were fully acquired in 1970, the base year of the plan. An additional six sites had been partially acquired in 1970. Of those six sites, four, Silver Lake in Kenosha County, Bender in Milwaukee County, Big Foot Beach in Walworth County, and Pike

³*The commercial centers at Mequon, Milwaukee-Park Place, Pewaukee, Kenosha West, and Milwaukee County Research Park, have been included as planned major commercial centers in the third-generation regional land use plan. See SEWRPC Planning Report No. 40, A Regional Land Use Plan for Southeastern Wisconsin—2010.*

Table 23

STATUS OF MAJOR OUTDOOR RECREATION CENTERS IN THE REGION: 1985

Major Regional Park	Site Area			Meets Site Area Criterion for Designation As a Major Park in 1985 ^a
	Existing 1970	Planned 2000	Estimated 1985	
Fully Acquired in 1970				
Brighton Dale	360	360	360	Yes
Petrifying Springs	360	360	360	Yes
Harrington Beach	640	640	640	Yes
Hawthorne Hills	290	290	290	Yes
Mee-Kwon	240	240	240	Yes
Ela	240	240	240	Yes
Johnson	360	360	360	Yes
Brown Deer	370	370	370	Yes
Dretzka	330	330	330	Yes
Greenfield	300	300	300	Yes
Lake Michigan-North	420	420	420	Yes
Lake Michigan-South	840	840	840	Yes
Lincoln	310	310	310	Yes
Oakwood	280	280	280	Yes
Whitnall	640	640	640	Yes
Whitewater Lake	250	250	250	Yes
Menomonee	400	400	400	Yes
Minooka	300	300	300	Yes
Mukwonago	220	220	220	Yes
Naga-Waukee	420	420	420	Yes
Ottawa Lake	220	220	220	Yes
Planned 2000, Partially Acquired in 1970				
Silver Lake				
Bender	260	360	260	Yes
Cliffside	310	440	310	Yes
Big Foot Beach	220	540	220	No
Pike Lake	270	330	270	Yes
Monches	680	740	680	Yes
	190	440	190	No
Planned 2000, Not Acquired by 1985				
Sugar Creek				
Paradise Valley	--	310	--	No
	--	450	--	No
Unplanned, Acquired by 1985				
Brookfield-Mitchell	--	--	260	Yes

^aA major regional park is defined as a publicly owned site of at least 250 acres that provides opportunities for a variety of resource-oriented outdoor recreational activities, such as camping, beach swimming, and golf. In the plan implementation study, attention was focused on the status of public land acquisition to accommodate the proposed parks, recognizing that facility development at the proposed sites could proceed at a later date. It should be noted that the Ela, Mee-Kwon, Mukwonago, and Ottawa Lake sites abut existing parkway lands or lands recommended for parkway acquisition. The area of the site proper in conjunction with such associated existing or proposed parkway lands exceeds 250 acres.

Source: SEWRPC.

Lake in Washington County, had sufficient area acquired in 1970 so that major status had been achieved, although the recommended plan called for additional site acquisition at each of those four sites. None of that additional recommended acquisition had taken place by 1985. At the two remaining sites, Cliffside in Racine County and Monches in Waukesha County, additional acquisition was required to bring the park sites up to the threshold 250-acre size; by 1985, neither of these two sites had yet met that criterion.

The remaining two planned regional park sites, Sugar Creek in Walworth County and Paradise Valley in Washington County, remained proposed sites in 1985. In neither case have the park agencies concerned taken action to begin land acquisition. In neither case, however, has the site been lost to intensive urban use. Thus, these two sites remain privately owned but potentially available for public acquisition.

Finally, the monitoring effort showed that one additional major park site had been acquired by 1985, but not included in the regional land use plan. That site, which in 1985 approximated 260 acres, is the Mitchell Park site acquired by the City of Brookfield and planned for major park status. It includes an abandoned sand and gravel quarry that will provide a basis for swimming and boating activities.⁴

In summary, then, significant progress has been made in establishing the basis for building major regional parks in the manner recommended in the adopted plan. The two park sites not yet acquired remain available for public purchase in the sense that they have not been converted to intensive urban use. Only one new park site has been established in a manner not recommended in the plan.

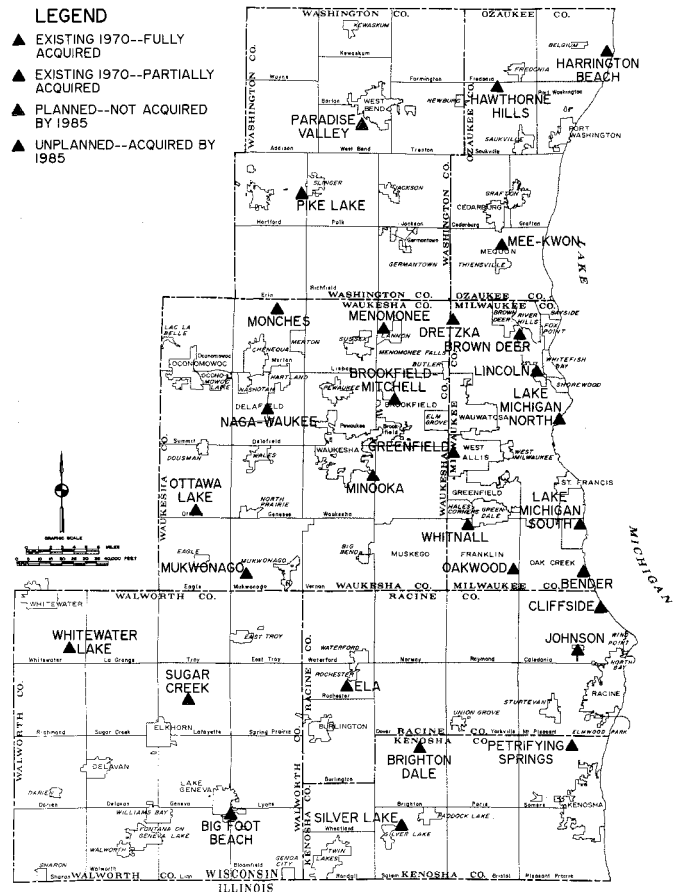
PRIMARY ENVIRONMENTAL CORRIDORS: 1985

The regional land use plan recommends that the primary environmental corridors of the Region, as defined and delineated in the plan, be pro-

⁴Mitchell Park has been included as a planned major outdoor recreation center in the third-generation regional land use plan. See SEWRPC Planning Report No. 40, *A Regional Land Use Plan for Southeastern Wisconsin—2010*.

Map 16

STATUS OF MAJOR OUTDOOR RECREATION CENTERS RECOMMENDED IN THE SECOND-GENERATION REGIONAL LAND USE PLAN: 1985



Source: SEWRPC.

tected from the intrusion of incompatible urban development. Through public land regulation, accompanied by some public land acquisition, the plan recommends that the corridors be preserved in essentially natural, open uses to form an integrated system of open spaces in the Region. Under the plan recommendations regarding regulation, the upland portions of environmental corridors could, depending upon local development objectives, be found suitable for truly rural residential development; i.e. development at a density of not more than one single-family home per five acres of corridor land.

The change in primary environmental corridor lands in the Region over the period 1970 through 1985 is identified in Table 24. Primary environ-

Table 24

CHANGES IN PRIMARY ENVIRONMENTAL CORRIDOR LANDS IN THE REGION BY COUNTY: 1970-1985

County	Primary Environmental Corridor Area					
	1970 (square miles)	Gains 1970-1985 (square miles)	Losses 1970-1985 (square miles)	1985 (square miles)	Net Change 1970-1985	
					Square Miles	Percent
Kenosha	46.3	1.4	3.0	44.7	-1.6	-3.5
Milwaukee	15.2	0.7	0.6	15.3	0.1	0.7
Ozaukee	30.9	0.7	0.6	31.0	0.1	0.3
Racine	37.8	0.8	1.7	36.9	-0.9	-2.4
Walworth	105.1	1.2	4.4	101.9	-3.2	-3.0
Washington	93.7	4.4	3.9	94.2	0.5	0.5
Waukesha	146.6	3.3	5.8	144.1	-2.5	-1.7
Region	475.6	12.5	20.0	468.1	-7.5	-1.6

Source: SEWRPC.

mental corridor lands, including surface water, totaled nearly 476 square miles in 1970, or nearly 18 percent of the total area of the Region. Monitoring over the 15-year period indicates that there were both gains and losses in primary environmental corridor area. About 12.5 square miles of new corridor land were identified in 1985. These gains came about largely through reforestation efforts in rural areas, particularly including the Kettle Moraine State Forest, and because some lands that hydrologically support wetland plant communities but which were actively farmed in 1970 were left fallow by 1985 with the emergence of wetland vegetation. Losses to primary environmental corridor over that same 15-year period totaled 20.0 square miles. These losses occurred in both urban and rural areas and consisted of the filling of wetlands for urban development purposes, largely prior to the advent of state, federal, and local conservancy regulations; the conversion of wetlands in rural areas to agricultural use; and the intensive development of upland wooded areas for residential purposes. Some of the latter occurred in urban areas before the 1980 state regulations to at least partially abate the loss of environmental corridors through sewer extension oversight, and some occurred in the rural areas of the Region where local zoning permitted urban residential development served by onsite sewage-disposal systems.

The net change, then, in primary environmental corridor areas over the 15-year period 1970 through 1985 was a loss of about 7.5 square miles of corridor land, a decrease of nearly 2 percent. Had there been no gains in corridor area in the more rural portions of the Region, however, the loss in corridor land would have reached a total of 20.0 square miles, or about 4 percent. Moreover, many of the losses were unnecessary and due to urban development which could have been located elsewhere in the vicinity of the corridors but not in the corridors themselves.

Despite corridor losses over the monitoring period, many important actions have been taken toward achieving the environmental corridor preservation objectives set forth in the plan (see Table 25 and Map 17). By 1985, about 147 square miles of primary environmental corridor lands, including 71 square miles of inland lake surface area, and 31 percent of the total corridor area, was publicly owned and thereby considered to be permanently protected against inappropriate development. An additional 177 square miles, or 38 percent, had been effectively protected from inappropriate development through joint state-local floodplain and shoreland-wetland zoning and federal wetland regulation. Furthermore, state administrative rules governing sanitary sewer extensions helped to protect upland corridors within planned sanitary sewer service

Table 25

PROTECTION OF PRIMARY ENVIRONMENTAL CORRIDORS IN THE REGION BY COUNTY: 1985

County	Primary Environmental Corridors Protected										Primary Environmental Corridors Not Protected		Total Primary Environmental Corridors	
	Area Protected through Public Ownership				Additional Area Protected through Land Use Regulation ^a									
	Surface Water		Public Park and Open Space Land		Wetlands Protected by Floodplain Zoning, Shoreland-Wetland Zoning, and Federal Wetland Regulations		Upland Areas Protected by State Administrative Rules Governing Sewer Extensions ^b		Subtotal					
Square Miles	Percent	Square Miles	Percent	Square Miles	Percent	Square Miles	Percent	Square Miles	Percent	Square Miles	Percent	Square Miles	Percent	
Kenosha	7.1	15.9	9.8	21.9	15.6	34.9	1.7	3.8	34.2	76.5	10.5	23.5	44.7	100.0
Milwaukee	1.6	10.5	9.0	58.8	0.8	5.2	1.5	9.8	12.9	84.3	2.4	15.7	15.3	100.0
Ozaukee	2.5	8.1	3.1	10.0	15.2	49.0	2.0	6.5	22.8	73.6	8.2	26.4	31.0	100.0
Racine	7.2	19.5	5.5	14.9	11.2	30.4	2.0	5.4	25.9	70.2	11.0	29.8	36.9	100.0
Walworth	21.3	20.9	12.5	12.3	27.7	27.2	5.8	5.7	67.3	66.1	34.6	33.9	101.9	100.0
Washington	6.2	6.6	12.5	13.3	46.5	49.4	2.4	2.5	67.6	71.8	26.6	28.2	94.2	100.0
Waukesha	25.4	17.6	23.6	16.4	59.5	41.3	10.3	7.1	118.8	82.4	25.3	17.6	144.1	100.0
Region	71.3	15.2	76.0	16.2	176.5	37.7	25.7	5.5	349.5	74.6	118.6	25.4	468.1	100.0

^aExcludes lands within public park and open space sites.

^bThe protection of upland corridors within planned sewer service areas is limited insofar as the statutory basis for state objection to urban encroachment into these corridors relates only to potential adverse water quality impacts.

Source: SEWRPC.

areas, areas encompassing an additional 26 square miles, or 6 percent of all corridor lands, although the statutory basis for this protection is relatively narrow, relating to potential adverse water quality impacts. In total, then, nearly 350 square miles of primary environmental corridor lands, or about 75 percent of all such lands in the Region, were fully or substantially protected by 1985. Map 17 identifies the general location of such corridors, as well as those corridor lands considered to be substantially unprotected and, therefore, available for inappropriate urban development.

PRIME AGRICULTURAL LANDS: 1985

The regional land use plan recommended that the remaining prime agricultural lands within the Region be maintained in agricultural use. It was recognized in the adopted plan that certain prime agricultural lands, in particular, those immediately adjacent to existing urban development, would of necessity be required to accommodate planned urban growth. In addition, the plan recognized that transportation facility construction in the Region would also result in the loss of some prime agricultural land. In total, as shown in Table 26, the plan envisioned that, over the 15-year period 1970 through 1985, prime agricultural lands lost to planned development

would be some 17 square miles, or about 1.5 percent of the total prime agricultural land in the Region as of 1970.

The monitoring data indicate that the actual loss of prime agricultural land over the 15-year period concerned totaled about 92 square miles, or about 8 percent of the remaining stock of prime agricultural land within the Region. Particularly large losses of such lands occurred in Washington and Waukesha Counties. In Waukesha County, for example, where the plan envisioned a loss of about seven square miles of prime agricultural land, the actual loss totaled about 37 square miles. Most of that loss may be attributed to the historic zoning in nearly all of rural Waukesha County, which permits urban residential development to take place in areas nominally zoned for agricultural use. In total, then, about 75 square miles more prime agricultural land in the Region than planned were converted in the 15-year period.

At least in some portions of the Region significant progress was made over the 15-year monitoring period in changing zoning regulations to prohibit the "automatic" conversion of farmland to urban residential use, i.e., the development of residential subdivisions without a zoning change and an attendant public hearing. Even before the advent of the State of Wisconsin

Map 17

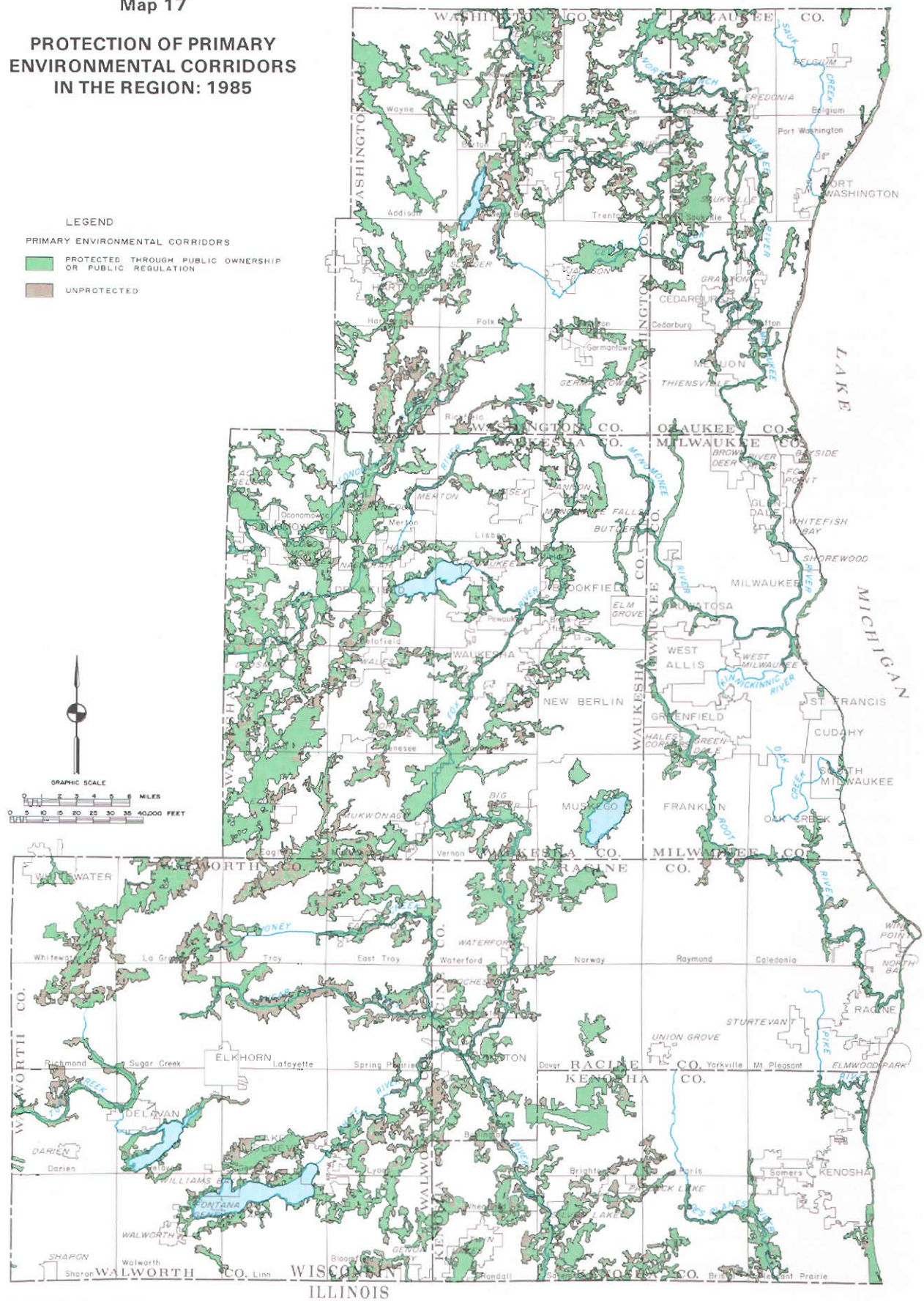
**PROTECTION OF PRIMARY
ENVIRONMENTAL CORRIDORS
IN THE REGION: 1985**

LEGEND

PRIMARY ENVIRONMENTAL CORRIDORS

PROTECTED THROUGH PUBLIC OWNERSHIP
OR PUBLIC REGULATION

UNPROTECTED



Source: SEWRPC.

Table 26

CHANGES IN PRIME AGRICULTURAL LANDS IN THE REGION BY COUNTY: 1970-1985

County	Prime Agricultural Land Area								
	1970 (square miles)	Planned 1985			Actual 1985			Difference between Actual and Planned Conditions	
		Loss 1970-1985		Square Miles	Loss 1970-1985		Square Miles	Square Miles	Percent
		Square Miles	Percent Change		Square Miles	Percent Change			
Kenosha	128.3	-1.2	-0.9	127.1	-8.8	-6.9	119.5	-7.6	-6.0
Milwaukee.	3.1	-1.0	-32.3	2.1	-1.1	-35.5	2.0	-0.1	-4.8
Ozaukee	122.2	-1.9	-1.6	120.3	-7.6	-6.2	114.6	-5.7	-4.7
Racine	161.9	-1.5	-0.9	160.4	-7.8	-4.8	154.1	-6.3	-3.9
Walworth	337.8	-2.7	-0.8	335.1	-11.3	-3.3	326.5	-8.6	-2.6
Washington	187.7	-1.4	-0.7	186.3	-18.5	-9.9	169.2	-17.1	-9.2
Waukesha	198.2	-7.4	-3.7	190.8	-37.1	-18.7	161.1	-29.7	-15.6
Region	1,139.2	-17.1	-1.5	1,122.1	-92.2	-8.1	1,047.0	-75.1	-6.7

Source: SEWRPC.

Table 27

PROTECTION OF PRIME AGRICULTURAL LANDS IN THE REGION BY COUNTY: 1985

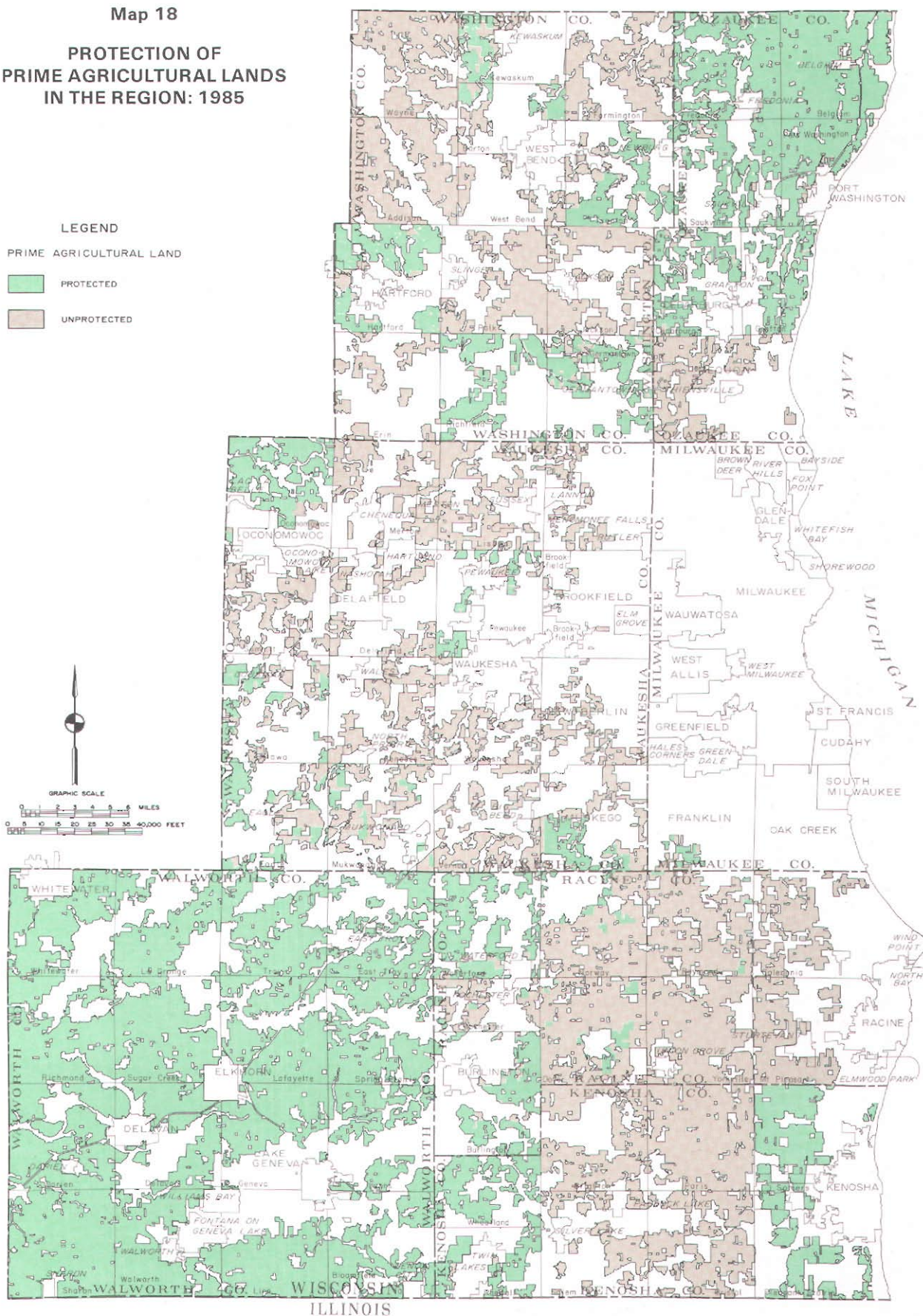
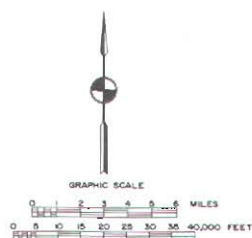
County	Prime Agricultural Land					
	Protected through Zoning		Not Protected through Zoning		Total	
	Square Miles	Percent of Total	Square Miles	Percent of Total	Square Miles	Percent of Total
Kenosha	43.4	36.3	76.1	63.7	119.5	100.0
Milwaukee	1.0	50.0	1.0	50.0	2.0	100.0
Ozaukee	94.4	82.4	20.2	17.6	114.6	100.0
Racine	30.8	20.0	123.3	80.0	154.1	100.0
Walworth	326.5	100.0	0.0	0.0	326.5	100.0
Washington	51.2	30.3	118.0	69.7	169.2	100.0
Waukesha	38.0	23.6	123.1	76.4	161.1	100.0
Region	585.3	55.9	461.7	44.1	1,047.0	100.0

Source: SEWRPC.

income tax credit program which was designed in part to provide a measure of property tax relief to farmers, pioneering downzoning efforts had been completed in accordance with recommendations in the adopted first-generation regional land use plan, first in the Town of Belgium, Ozaukee County, and then throughout the entirety of Walworth County. The recommended zoning regulations prohibit urban development in areas zoned for agricultural use, that is, such regulations provide for exclusive-use agricultural zoning districts. The ordinances

generally prohibit the division of prime farmland into parcels less than 35 acres in area. The status of such exclusive agricultural zoning in the Region in 1985 is shown on Map 18 and is summarized in Table 27. In total, about 585 square miles of prime agricultural land representing nearly 56 percent of all such land in the Region was in properly designed exclusive agricultural zoning districts in 1985. The proportion of the prime agricultural lands so zoned ranged from 100 percent in Walworth County to 20 percent in Racine County.

PROTECTION OF PRIME AGRICULTURAL LANDS IN THE REGION: 1985



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SUMMARY AND CONCLUSIONS

This chapter has described the status of implementation of the second-generation regional land use plan for southeastern Wisconsin. The following, together with Table 28, summarizes that status:

1. In monitoring implementation of the regional land use plan, the focus must be on the most important and essential elements of the plan. Two criteria have been advanced to determine which plan elements are truly regional in character and which, therefore, are most critical to the attainment of the regional land use objectives: 1) the importance of the plan elements to the wise and judicious use of the natural resource base; and 2) the importance of the plan elements to the functional relationships that exist between land use and the demand for major utility, transportation, and recreational facilities. Using these two criteria, it may be concluded that the regional land use plan may be considered to be substantially implemented if the following conditions are met: 1) protection of the primary environmental corridors identified in the plan from incompatible urban development, 2) preservation of the prime agricultural lands identified in the plan, 3) acquisition for public use of the recommended regional parks, 4) location of new residential development in such a way as to approximate the densities and spatial patterns recommended in the plan, and the provision of both public sanitary sewer and water supply services to that development, and 5) location of major commercial and industrial centers at approximately the general scale and in approximately the spatial locations recommended in the plan. In this respect, it must be recognized that, given the importance of the urban land market in shaping land use development within the Region, the plan must be regarded as a flexible guide, not a rigid design, to the making of decisions by the responsible public officials concerning the placement and intensity of new urban development.
2. The regional land use plan has been widely adopted and endorsed by the units and agencies of government concerned with land use development in the Region.

Adoption actions are intended to signify that the plan recommendations will be consulted and used as a point of departure in making day-to-day land use development decisions. The regional land use plan has been formally adopted by six of the seven counties in the Region, excepting only Ozaukee County, which is of the opinion that land use decisions are better left to the municipalities in the County; by the plan commissions and/or governing bodies of 15 of the 28 cities, 20 of the 55 villages, and 18 of the 64 towns; and by many state and federal agencies, importantly including the Wisconsin Departments of Natural Resources and Transportation and the U. S. Department of Transportation, Federal Highway and Transit Administrations.

3. The second-generation regional land use plan had a base year of 1970, a design year of 2000, and, accordingly, a 30-year design period. For the purposes of this regional land use plan implementation study, all measurements related to the status of plan implementation were based upon Commission surveillance and monitoring activities of actual regional land use development and land use regulatory patterns as of 1985. That year corresponds with the 1985 stage of the plan, a stage halfway through the planning period. As appropriate, any monitoring data obtained since 1985 are reported to aid in the analyses and in drawing conclusions thereupon.
4. The regional land use plan was based upon forecasts of population, households, and employment growth and change within the Region. More specifically, the 1985 stage of the plan was based upon forecast increases in population of 198,000 persons; in households of 95,700 units; and in employment of 125,100 jobs. Monitoring indicated that the regional population remained virtually unchanged from 1970 to 1985; that households had increased by 107,300, or slightly more than forecast; and that jobs had increased by 118,200, slightly less than forecast. Forecast accuracy expectations should approximate 10 percent per decade. Accordingly, while the population of the Region has not increased as forecast, the variation being at about the limit of the

Table 28

SUMMARY OF STATUS OF REGIONAL LAND USE PLAN IMPLEMENTATION

Plan Category	Specific Item	Plan Basis or Recommendation	Monitoring Finding
Forecasts of Growth and Change	Population	Increase of 198,000 persons by 1985	Population loss of 13,000 by 1985
	Households	Increase of 95,700 households by 1985	Household increase of 107,300 by 1985
	Employment	Increase of 125,100 jobs by 1985	Job increase of 118,200 by 1985
Location and Amount of New Urban Development	Urban development area	Expand urban development area by 133 square miles by 1985	Urban development area expanded by 139 square miles by 1985
	Urban development density	Achieve density of 4,100 persons per square mile by 1985	Density of 3,600 persons per square mile by 1985
	Urban development location	Place all new urban development in areas so as to provide for a compact, contiguous, efficient urban pattern	Of 139 square miles of new urban development by 1985, 72 square miles, or 52 percent, were located in plan-recommended areas; 66 square miles, or 48 percent, were located in scattered, outlying areas contrary to plan
Amount and Density of New Residential Development	Conversion of land from rural to residential use	Convert 58 square miles of land by 1985	Residential land conversion totaled 65 square miles by 1985
	Provision of new medium-density residential land (4.4 units per net acre)	Provide 32 square miles of new medium-density residential land by 1985	Medium-density residential land provision totaled 17 square miles
	Provision of new low-density residential land (1.2 units per net acre)	Provide 12 square miles of new low-density residential land by 1985	Low-density residential land provision totaled 41 square miles
Essential Public Utility Services	Provision of public sanitary sewer service	Provide public sanitary sewer service to all new urban development	Public sanitary sewer service was provided to 63 square miles, or about 45 percent, of the 139 square miles of new urban development
		Retrofit existing unsewered urban development with public sanitary sewers	About 30 square miles of unsewered existing urban development was provided with sanitary sewer service by 1985; 63 square miles of 1970 existing development remains unsewered
		Achieve by the year 2000 the goals of providing public sanitary sewer service to 92 percent of the developed urban area and 93 percent of the regional population	By 1985, sanitary sewer service was provided to 71 percent of the developed urban area, down from 73 percent in 1970; and to 87 percent of the regional population, up from 85 percent in 1970
	Provision of public water supply service	Provide public water supply service to all new urban development	Public water supply service was provided to 48 square miles, or about 35 percent, of the 139 square miles of new urban development
		Retrofit existing unwatered urban development with public water supply	About 14 square miles of unwatered existing urban development was provided with public water supply service by 1985; 113 square miles of 1970 existing development remains unwatered

Table 28 (continued)

Plan Category	Specific Item	Plan Basis or Recommendation	Monitoring Finding
Essential Public Utility Services (continued)	Provision of public water supply service (continued)	Achieve by the year 2000 the goals of providing public water supply service to 93 percent of the developed urban area and 93 percent of the regional population	By 1985, public water supply service was provided to 57 percent of the developed urban area, down from 63 percent in 1970; and to 80 percent of the regional population, up from 79 percent in 1970
Major Regional Centers	Major industrial centers (at least 3,500 industrial jobs)	Provide 22 major industrial centers at specified locations; 17 existed in 1970 and five were newly proposed	Sixteen of the 17 existing centers continue to meet the industrial employment threshold in 1990, although substantial declines in employment at many of the older centers is evident; one older center, West Allis-East, no longer met employment criterion in 1990. The five proposed new centers are under development in accordance with plan recommendations. Two centers, Waukesha North and Pewaukee, have been developed in areas not recommended in plan. Four additional potential major centers have been either begun or announced for areas not recommended in plan.
	Major commercial centers (at least 2,000 retail jobs or 3,500 office and service jobs)	Provide 16 major commercial centers at specific locations; 13 existed in 1970 and three were newly proposed	Twelve of the 13 existing centers continue to meet either the retail or the office employment thresholds, or both, in 1990; one center, Mitchell Street, fell below the retail employment threshold. Two of the three proposed new centers have been developed in accordance with plan recommendations; some initial development at the third new center has taken place. Seven additional potential major centers have been either begun or announced for areas not recommended in plan.
	Major outdoor recreation centers (at least 250 acres with multi-use potential)	Provide 29 major regional parks at specified locations; 27 existed in 1970 and two were newly proposed	Twenty-seven of the 29 centers have been acquired, with further acquisition planned for six of those sites. Two sites have not yet been acquired, although no development has taken place to remove the potential for public acquisition. One site has been acquired in a location not recommended in plan.

expected 10 percent of accuracy, the number of households and the number of jobs have increased substantially as forecast and well within accuracy tolerances. The conformity between the actual and forecast

number of households is particularly significant, and outweighs any deviation in the population forecast, since the household is the basic consuming unit and generates much of the demand for urban

Table 28 (continued)

Plan Category	Specific Item	Plan Basis or Recommendation	Monitoring Finding
Natural Resource Protection and Preservation	Primary environmental corridors	Preserve and protect through public acquisition and regulation about 476 square miles of primary environmental corridor lands which encompass about 18 percent of the area of the Region	Both corridor gains (12.5 square miles) and losses (20.0 square miles) were observed in the monitoring; net change is a loss of 7.5 square miles, or nearly 2 percent. About 147 square miles of corridor land, or 31 percent, are publicly owned and permanently protected; an additional 177 square miles, or 38 percent, are fully and properly regulated against urban development; and an additional 26 square miles, or 6 percent, are at least partially regulated. Thus, about 350 square miles, or 75 percent, of the corridor lands are fully or substantially protected
	Prime agricultural lands	Preserve and protect through public regulation by 1985, 1,122 square miles of prime farmland; convert 17 square miles to urban use	Actual loss of prime farmland by 1985 totalled 92 square miles, or 75 square miles more than planned. About 585 square miles of prime farmland, or 56 percent, has been properly zoned to prohibit urban development

Source: SEWRPC.

land, as well as constitutes an important component in the generation of the demand for transportation and other urban facilities and services.

5. The regional land use plan seeks to provide for a more compact, contiguous, and efficient urban development pattern, stemming a trend toward ever-lower urban population densities. Under the plan, the urbanized area of the Region would be expanded by 133 square miles by 1985. Monitoring of urban development over the 15-year period indicated that about 139 square miles of land were actually urbanized, about six square miles, or about 5 percent, more than planned. Because there was no population growth during the 15-year period, however, the resultant urban population density of about 3,600 persons per square mile fell below the planned level of about 4,100 persons per square mile. Of the 139 square miles of new urban development that had occurred by 1985, 72 square miles, or 52 percent, were located in areas recommended in the
- regional plan; while the remaining 66 square miles, or 48 percent, were located in scattered, outlying areas contrary to plan recommendations.
6. The regional land use plan recommends that most of the new residential development in the Region occur in the medium-density category, averaging about 4.4 dwelling units per net acre. In terms of total residential use, the plan envisioned the conversion of 58 square miles of land from rural to urban residential use by 1985. Monitoring data indicate that total residential land conversion during the 15-year period was 65 square miles, about seven square miles, or 12 percent, more than envisioned. Furthermore, much of the new residential development took place not in the medium-density category as recommended, but rather in the low-density category. The plan envisioned that from 1970 to 1985, 32 square miles of new medium-density residential development would occur within the Region. By 1985 only about 17 square miles of such devel-

opment were actually provided. The plan envisioned that about 12 square miles of new low-density residential development would occur within the Region by 1985. In fact, monitoring data indicated that about 41 square miles of such development actually occurred.

7. The regional land use plan recommends that new urban development be provided with public sanitary sewer and water supply services. Over the 15-year monitoring period, public sanitary sewer service was provided to 63 square miles, or about 45 percent, of the 139 square miles of new urban development which took place within the Region. Public water supply service was provided to 48 square miles, or about 35 percent, of the 139 square miles of new urban development. During that same period, about 30 square miles of unsewered existing urban development was provided with sanitary sewer service, while about 14 square miles of existing urban development without public water supply was provided with public water supply service. By 1985, then, sanitary sewer service was provided to 71 percent of the developed urban area, down from 73 percent in 1970, and to 87 percent of the regional population, up from 85 percent in 1970. Also by 1985, public water supply service was provided to 57 percent of the developed urban area, down from 63 percent in 1970, and to 80 percent of the regional population, up from 79 percent in 1970. The regional plan goals are to provide public water and water supply services to about 93 percent of the developed urban area and resident population.
8. The regional land use plan recommends that 22 major industrial centers serve the Region, each providing a minimum of 3,500 industrial jobs. Of this total, 17 existed in 1970 and five were newly proposed. Monitoring data indicates that 16 of the 17 existing centers continued to meet the industrial employment threshold in 1990, although substantial declines in employment at many of the older centers is evident. One of the older centers, West Allis-East, no longer met the employment criterion by 1990. All five proposed new centers are under development in accordance with the plan recommendations. Two additional centers, however, Waukesha-North and Pewaukee, have been developed in areas not recommended in the plan. In addition, four other potential major industrial centers have been either begun or announced for areas not recommended in the plan.
9. The regional land use plan recommends that 16 major commercial centers serve the Region, each providing a minimum of either 2,000 retail jobs or 3,500 office and service jobs, or both, depending upon the location. Of this total, 13 existed in 1970 and three were newly proposed. Monitoring data indicate that 12 of the 13 existing centers continued to meet the requisite employment threshold in 1990. One of the older existing centers, Mitchell Street, fell below the retail employment threshold by 1990. Two of the three proposed new centers have been developed in accordance with the plan recommendations; some initial development has taken place at the third proposed new center. In addition, seven other potential major commercial centers of both the office and retail types have been either begun or announced for areas not recommended in the plan.
10. The regional land use plan recommends that 29 major regional parks serve the Region. Each park would have a minimum site area of 250 acres and provide for a variety of resource-based outdoor recreation activities. Of this total, 27 existed in 1970 and two were proposed. Of the 27 parks existing in 1970, 12 existed in 1963, when the Commission first began its regional land use planning, and 15 were established between 1963 and 1970 in accordance with Commission plan recommendations in the first-generation regional land use plan. Monitoring data indicate that development on the 27 existing sites has continued. With respect to the two new sites, no action has been taken to date to publicly acquire and preserve the sites for future park development. The monitoring data also indicate, however, that no intensive urban development had taken place to remove the potential of public

acquisition of those two sites. One new major park site was acquired in a location not recommended in the plan.

11. The regional land use plan recommends that the primary environmental corridors identified in the planning process be preserved and protected through a combination of public acquisition and public land regulation. These corridors total about 476 square miles, or about 18 percent of the area of the Region. The monitoring data indicate that over the 15-year period both gains in primary environmental corridor lands totaling about 12.5 square miles, and losses in corridor lands totaling about 20.0 square miles occurred. Most gains occurred in the rural portions of the Region, while losses occurred in both the rural and urban portions of the Region. The net change over the monitoring period was a loss of about 7.5 square miles of corridor land, or about 2 percent. The monitoring also revealed that about 350 square miles of corridor lands, or about 75 percent, were fully or substantially protected through public land ownership or public land use regulation. The remaining 25 percent of the unprotected corridor lands consisted largely of upland corridors in the rural portions of the Region.

12. The regional land use plan recommends that nearly all of the prime agricultural lands of the Region be preserved in agricultural use. The plan envisioned that by 1985 only about 17 square miles of prime agricultural lands located adjacent to urban areas would be required to be converted to urban use. The monitoring data indicate that the actual loss of prime agricultural lands by 1985 totaled 92 square miles, or 75 square miles more than planned. The monitoring data also indicated that about 585 square miles of prime farm land, or 56 percent of the total, had been properly zoned to reduce the likelihood of conversion of the lands to urban uses.

Given the foregoing basic findings with respect to the status of implementation of the regional land use plan, the following conclusions may be drawn:

1. Protection of Primary Environmental Corridors from Incompatible Urban Development

There is a need to strengthen efforts to implement the plan recommendation dealing with the protection and preservation of primary environmental corridors. The findings indicate that, while substantial progress has been made both with respect to the public acquisition and with respect to the exercise of public land use control regulations to protect the corridor lands, about one-fourth of the corridor lands are still vulnerable to loss through inappropriate development. That vulnerability is focused on the upland portions of the primary environmental corridors. It will not be enough to simply preserve the floodplain and wetland portions of the corridors. Considerations of ecology dictate that the upland portions of the corridors be protected and preserved as well. Accordingly, a need exists to strengthen the present efforts to preserve and fully protect the primary environmental corridor lands of the Region as recommended in the regional land use plan. The preservation of these corridors is the most important single recommendation of the adopted land use plan.

2. Preservation of Prime Agricultural Lands

There is a need to strengthen efforts to implement the plan recommendation dealing with the preservation of prime agricultural lands. The findings indicate that there have been substantial losses of prime farmlands in excess of the minimal losses envisioned in the adopted regional land use plan. Moreover, efforts to date have led to the protection through exclusive agricultural zoning of only about one-half of the total stock of prime farmland in the Region. Thus, the other one-half of that stock remains vulnerable to inappropriate urban development. This situation has come about despite efforts to indirectly provide property tax relief to farmers through income tax credits. Consequently, a need exists to strengthen the present efforts to preserve the remaining prime agricultural lands of the Region as recommended in the regional land use plan.

3. Acquisition for Public Use of the Recommended Regional Parks

The efforts of the state, county, and local park agencies concerned have implemented to a significant degree the regional land use plan recommendations attendant to the provision of regional parks. Only two proposed regional parks have yet to be acquired. Those sites should continue to be available for future public acquisition as monies become available. Accordingly, no need exists to change the way in which the regional park element of the regional land use plan is being carried out.

4. Location and Density of New Residential Development

There is a significant need to strengthen efforts to implement the plan recommendation dealing with the location and density of new residential development and the provision of such development with both public sanitary sewer and water supply services. The findings indicate that, while the amount of land converted to urban use approximates that called for in the regional land use plan, only about one-half of the new urban residential development is taking place in the areas recommended in the regional plan so as to provide a more compact, contiguous, and efficient urban development pattern. Moreover, the findings indicate that much of the new residential development is occurring at low density, rather than in the recommended medium density where essential sewer and water supply, and, potentially, mass transit services can be efficiently and effectively provided. The findings also indicate that less than one-half of the new urban development is being provided with public sanitary sewer and water supply services. Together, these findings indicate that about half of the new urban development in the Region is being located in a highly diffused fashion and not being provided with essential urban utility services. Con-

sequently, a need exists to strengthen the present efforts to direct new urban development into those areas of the Region where the regional land use plan recommends that such development be placed and to thereby significantly abate the continued diffusion of residential development throughout much of the Region.

5. Location of Major Industrial and Commercial Centers

There is a need to abate a significant trend toward the decentralization of job locations in the Region. The findings related to the proposed major industrial and commercial centers, which represent the locations of most of the jobs in the Region, indicate that, while all of the major industrial and commercial centers recommended in the regional land use plan have come about, or are coming about, as planned, employment at many of the older and more centrally located major industrial and commercial centers is declining below plan envisioned levels. The findings also show that more new major industrial and commercial centers are being proposed at locations not recommended in the regional land use plan. Taken together, these findings indicate a strong trend toward the decentralization of jobs in the Region contrary to the objectives of the regional land use plan. The continuation of this trend will probably exacerbate the trend toward residential decentralization, under an assumption that there will be market pressures generated to provide household locations near job locations. Accordingly, a need exists to strengthen the present efforts to revitalize the older major industrial and commercial centers of the Region, promoting those centers as the proper location for job creation activity in the Region while placing less emphasis on the development of additional remote major industrial and commercial centers in the Region.

Chapter IV

CURRENTLY AVAILABLE PLAN IMPLEMENTATION MEASURES

INTRODUCTION

The regional land use plan as described in Chapter II includes a series of plan implementation recommendations directed at local and county governments and state and federal agencies. These plan implementation recommendations call for the use by the units and agencies of government concerned of traditionally available, generally well-accepted land use control measures and public utility extension procedures to implement the adopted regional plan. Given agreement on the plan and a political will to exercise the discretionary authorities that are available to the county and local governments and to state and federal agencies, it should be possible to implement effectively the regional land use plan without any change in the land use control structure in Wisconsin.

This chapter is intended to constitute a compendium of the land use plan implementation measures that are currently available for use in Wisconsin. These measures range from educational efforts, through land use regulations and public tax policies, to utility extension policies and public land acquisition. The chapter briefly describes each of the currently available land use plan implementation measures and, when appropriate, comments on the extent to which those measures have been used in southeastern Wisconsin to help implement the regional land use plan.

DATA PROVISION

One of the most important plan implementation measures available to the Regional Planning Commission is the extension of the data available in its files to public and private agencies operating within the Region. To a considerable extent, areawide development can be guided and shaped in the public interest simply through the task of collecting, analyzing, and disseminating sound planning and engineering data on a uniform, areawide basis. If the areawide inventory function of the Commission is properly carried out, experience has shown that the resulting information is used and acted upon by federal, state, and local units and agencies of

government and by private investors. Definitive data on, for example, topography, soils, flood hazard, shoreline erosion and recession, wetlands, water quality, utility service, and traffic congestion are all sought and used by private developers as well as by public land use regulatory agencies. If that information is also properly used to prepare regional plans, such as the regional land use plan, then public development and regulatory decisions based upon those plans and private development decisions based upon the data on which those plans are based will be mutually reinforcing and contribute in a significant way toward the shaping of development in accordance with the regional plans.

The Commission provides each year, on request, a vast amount of information to both public and private agencies. For example, in 1990, not an atypical year, the Commission distributed a total of over 33,000 copies of Commission publications, over 6,500 aerial photographs, 74 soils maps, 257 topographic maps, 767 control survey station dossiers, 278 control survey summary diagrams, and 340 special maps from the Commission's map series. The Commission conducted 170 field investigations to delineate precisely the location of environmental corridor and related wetland and floodland areas to aid developers and public regulatory agencies. The Commission, on request, extended pertinent data from its files to numerous consulting engineers and planners for use in the conduct of local planning programs and in the preparation of facilities plans, preliminary engineering studies, and environmental assessments for major sewerage and sewage treatment, highway, airport, and transit facilities and services.

ADVISORY AND REVIEW SERVICES

Through its community assistance program, the Commission provides to county and local governments a range of advisory services directed at helping those governments implement the regional land use plan. These advisory services include the preparation of base maps, zoning ordinances and zoning district maps, land subdivision control ordinances, and official maps and extend to include the preparation of local

land use plans, park and open space plans, wetland management plans, sewer and water system plans, and stormwater drainage and flood control plans. The Commission has prepared, or is preparing, local comprehensive plans, consistent with adopted regional plans, for such communities as the Cities of Cedarburg, Elkhorn, Kenosha, New Berlin, Racine, Wauke-
sha, and West Bend; the Villages of Eagle, Darien, Fredonia, Jackson, Germantown, Hartford, Kewaskum, Menomonee Falls, Pewaukee, and Slinger; and the Towns of Eagle, Erin, Fredonia, Pewaukee, and LaGrange. In addition, the Commission has prepared detailed platting layouts, or neighborhood plans, for the Cities of Brookfield, Burlington, Cedarburg, Franklin, Kenosha, and West Bend and the Village of Germantown.

Regional land use plan implementation is also fostered through review services provided by the Commission to county and local governments. For example, the Commission frequently provides review comments on draft local land use plans, draft zoning ordinances and zoning district maps, preliminary land subdivision plats, proposed certified survey maps, proposed rezonings, and proposed local land acquisitions. Those comments relate the local proposals to the regional land use plan.

The Commission reviews and comments on state and federal activities, including, for example, master plans for state acquisition of environmentally sensitive lands and applications for federal wetland permits. The Commission also reviews and comments on many applications for federal grants-in-aid, relating Commission review comments to the recommendations of regional plans, including the regional land use plan. In 1990, the Commission provided review comments on 155 applications for federal or state grants, loans, or mortgage insurance guarantees requesting in the aggregate more than \$295 million in federal and state financial assistance. These applications related to housing projects, transportation facilities and services, sewerage and water supply facilities, and other types of projects. Federal and state funds will not be forthcoming if negative review comments are filed relating to a conflict with the regional plan.

Similarly, the Commission provides review comments on all proposals in the Region to construct public and private sanitary sewers. During 1990, such review comments were pro-

vided on 276 public sanitary sewer extensions and 325 private main sewers or building sewers proposed throughout the Region. The state agencies concerned will not approve the proposed sewer extensions unless those agencies can make a finding of conformance with the regional plans.

EDUCATIONAL EFFORTS

As an advisory planning body, the Regional Planning Commission seeks regional land use plan implementation through a number of efforts which may best be described as educational, as follows:

1. Public Presentations

Both during and after their development, Commission plans undergo extensive public presentation and review, including formal public hearings. Through these informational meetings and hearings, and through subsequent public presentations to public bodies such as local plan commissions and to private groups such as civic clubs, key citizen leaders and public officials become better informed about the plan recommendations and about implementation recommendations.

2. Classroom Presentations

As part of its educational mission, the Commission frequently makes presentations in the classrooms ranging from elementary school through junior and high school to college-level classes. The presentations are geared to the audience, most frequently involving land use and land use-related topics. A great deal of interest, for example, is found in these presentations about the environmental corridor recommendations.

3. Planning Guides

The Commission has prepared and distributed to county and local governments within the Region a series of local planning guides. These guides are intended as manuals of planning practice and are intended to educate local elected officials, plan commissioners, and planners on the ways in which communities can implement regional and local land use plans. To date, such guides have been produced with respect to the organization of planning

agencies, official mapping, land subdivision control, zoning, floodland and shoreland development, and the use of soils data in planning practice. Using the guides as a point of departure, zoning ordinances based on the SEWRPC model have been prepared and adopted for 22 cities and villages, nine towns, and four counties exercising general zoning jurisdiction over 37 towns as of 1985 (see Map 19).

4. Conferences and Workshops

The Commission also sponsors conferences and workshops relating to planning and plan implementation issues. Such conferences and workshops are periodically called to disseminate information on regional land use planning and plan implementation activities and to enable local officials to exchange comments on such matters. These conferences are well attended; the most recent such conference on land use planning held in 1992 was attended by 450 persons.

5. Newsletters

The Commission prepares and distributes to about 1,500 public officials and interested citizens a bimonthly newsletter discussing Commission planning programs and related activities. From time to time, the newsletter is also used to present summary versions of regional plan elements, including the regional land use plan and subregional plan elements that refine and detail that plan.

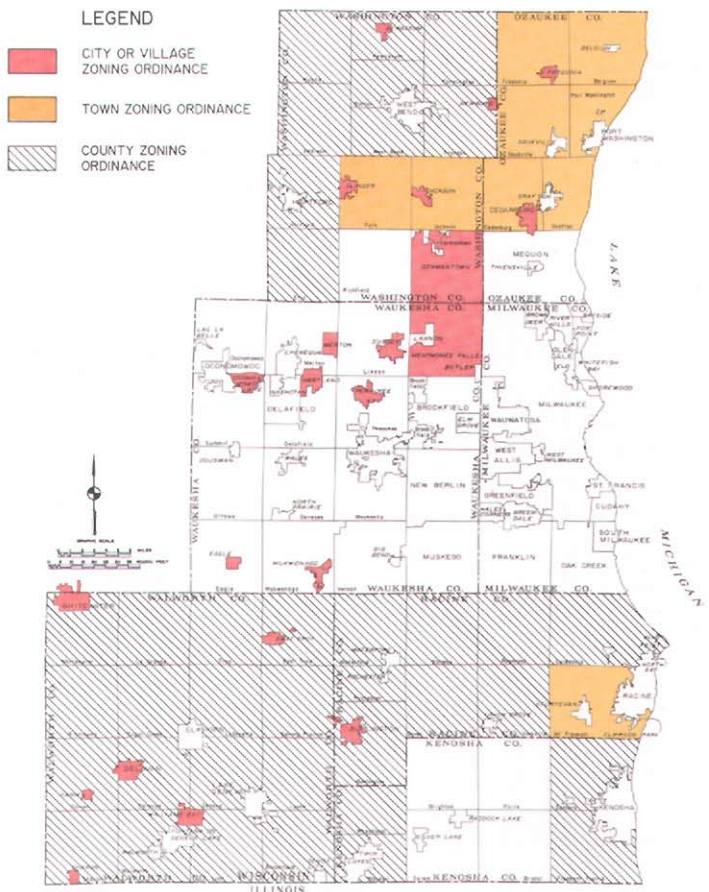
6. Annual Reports

The Commission is required by law to prepare and distribute an annual report on its work activities to the Governor, the Wisconsin Legislature, and the legislative bodies of the local units of government in the Region. Each report provides state, county, and local public officials and interested citizens with a comprehensive overview of current and proposed Commission activities. Data with respect to the land use plan and to land use development monitoring activities are included in these reports.

7. News Releases

As part of its educational effort, the Commission prepares news releases on various aspects of its work program. While these

Map 19
GENERAL ZONING ORDINANCES IN
THE REGION BASED UPON THE SEWRPC
MODEL ZONING ORDINANCE: 1985



Source: SEWRPC.

news releases are frequently intended to announce forthcoming public meetings or hearings, they contain substantive information on such topics as land use planning and, thus, when published, particularly in the weekly newspapers of the Region, provide a substantive basis for educating the general public.

8. University of Wisconsin-Extension Relationship

Over the years, the Commission has looked to the University of Wisconsin-Extension Service to assist it in the needed educational efforts. That relationship has included soliciting the help of county agents on specific plan implementation matters, e.g., the comprehensive rezoning of an entire county; the assignment of a

full-time extension agent to work directly with the Commission staff on activities relating to plan implementation; and cosponsorship of meetings, workshops, and conferences. To the greatest extent possible, the Commission seeks to use the resources of the University of Wisconsin in carrying out educational efforts designed to help implement the regional land use plan.

PLAN REFINEMENT AND DETAILING

The Commission has recommended as a desirable first step toward regional plan implementation that county and local governments carry the regional land use plan into greater depth and detail. Preparing more detailed land use plans within the framework of the regional land use plan for subareas of the Region focuses attention on the recommendations of the regional land use plan within the context of a planning effort that involves one or a small group of local units of government and, accordingly, a relatively large number of local elected and appointed officials and citizens within a small subarea of the Region. These planning efforts refine the regional plan proposals while taking into account detailed local planning concerns that cannot be reflected at the areawide systems level of planning. Such planning efforts include the following:

1. Freeway Corridor Plans

The Commission has worked with the local governments concerned in the preparation of more detailed land use plans for freeway corridors. Plans have been completed to date for the Blue Mound Road/IH 94 Corridor from the Zoo Interchange west to Waukesha County CTH T and for the IH 94 South Corridor from General Mitchell International Airport south to the Illinois state line. A corridor plan is currently under preparation for the IH 94 West corridor in Waukesha County.

2. County Development Plans

Counties are enabled under Section 59.97 of the Wisconsin Statutes to prepare county development plans, including land use elements. The plans are intended to apply to the unincorporated area of the county. The county plan must incorporate any master plan or official map adopted by

cities and villages under Section 62.23 of the Wisconsin Statutes if the cities and villages concerned so request. This enabling legislation would apply to all counties in the Region except Milwaukee County, where all of the territory is incorporated. To date, no county in the Region has completed and adopted such a development plan, although Kenosha County has initiated the preparation of such a plan.

3. County Park and Open Space Plans

Counties are enabled under Section 27.04 of the Wisconsin Statutes to prepare county park, parkway, and open space plans. Such plans, which are intended to be countywide in geographic extent, can serve to refine and detail the major park and environmental corridor elements of the regional land use plan and serve as the basis for county actions to implement those elements of the plan. The Commission has worked with all seven counties in the Region to prepare and maintain current such county park and open space plans.

4. County Farmland Preservation Plans

Counties are enabled under Section 91.51 of the Wisconsin Statutes to prepare county farmland preservation plans. Such plans enable farmowners participating in the Wisconsin Farmland Preservation Program to obtain the maximum level of property tax relief for which they are eligible under that program. That program is discussed separately later in this chapter under the category of public tax policy measures. Six of the seven counties in southeastern Wisconsin, excepting only heavily urbanized Milwaukee County, have prepared and adopted such farmland preservation plans. Of these six county plans, the Commission has prepared three. All these plans serve to implement the prime agricultural land preservation element of the regional land use plan, refining and detailing that element on a county-by-county basis.

5. Urban District Plans

Urban planning districts are delineated by the Commission on the basis of particularly intensive urban development and common development problems involving several contiguous communities. The Com-

mission, for example, has, at the request of the local governments concerned, prepared detailed development plans for both the Kenosha and Racine urban planning districts. Those districts comprise all of the land in their respective counties lying east of IH 94. In addition, a land use plan was prepared jointly for the Village and Town of Pewaukee.

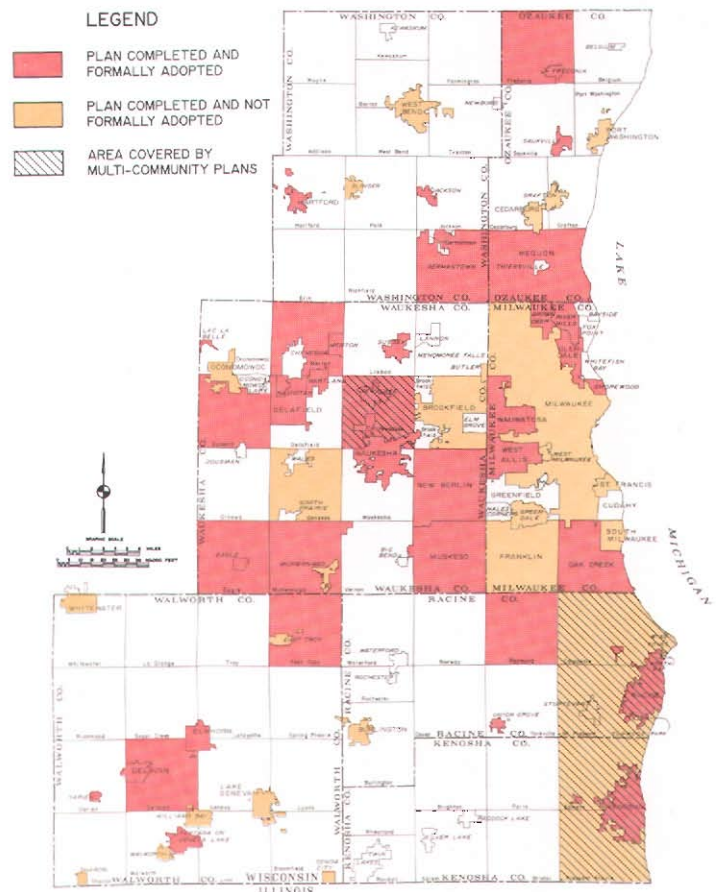
6. Local Land Use Plans

Section 66.23 of the Wisconsin Statutes enables cities to prepare and adopt comprehensive plans, including land use elements. Through other statutory sections, villages and towns are enabled to operate under the city planning statute. Thus, all three types of local general-purpose government in Wisconsin may prepare and adopt land use plans which would serve to refine and detail the regional plan. Over the years, many local governments in southeastern Wisconsin have prepared and adopted such plans. In many cases, those plans serve to refine and detail the regional plan. In some cases, the Commission has been directly involved in working with the local community concerned in preparing the plan. The status of such planning in 1985 is summarized on Map 20. The recently completed plan for the City of West Bend and its environs, shown on Map 21, is representative of such local land use plans which are consistent with adopted regional plans.

7. Local Park and Open Space Plans

Cities, villages, and towns frequently prepare local park and open space plans, at times doing so as an element of a comprehensive or master plan. Like county park and open space plans, local park and open space plans can serve to refine and detail the park and environmental corridor preservation recommendations set forth in the regional land use plan. In those cases, for example, where the regional plan recommends public acquisition of primary environmental corridors as park and open space sites, local park and open space plans can be used to identify acquisition boundaries and thus serve as a first step toward plan implementation. The park and open space plan for the City of Brookfield, shown on Map 22, is representative of such

Map 20
COMPLETED AND ADOPTED LOCAL COMPREHENSIVE PLANS INCLUDING LAND USE ELEMENT IN THE REGION: 1985



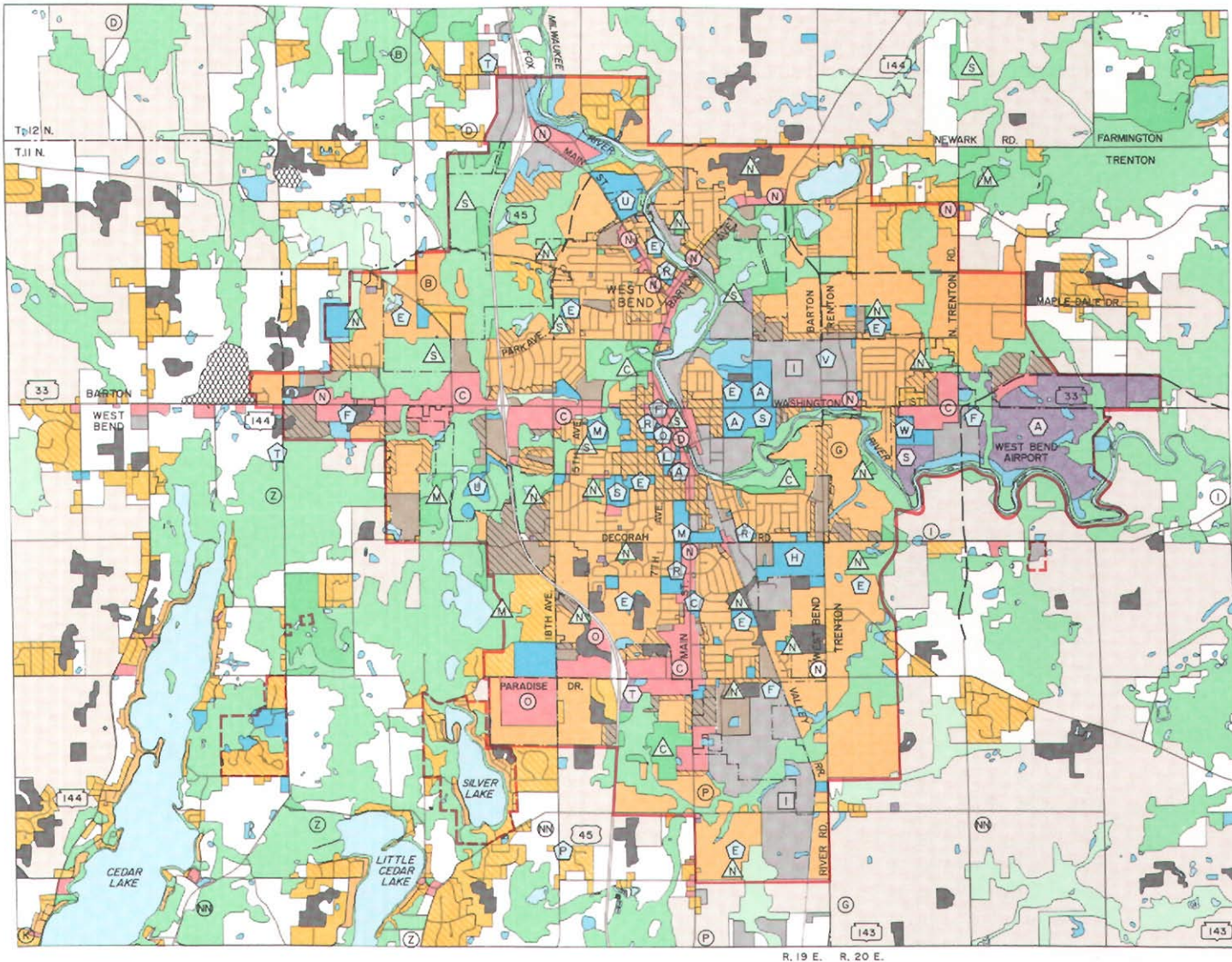
Source: SEWRPC.

local park plans which are consistent with, and serve to refine and detail, the regional land use plan.

8. Neighborhood Plans

The ultimate refinement of the regional land use plan is represented by the detailed neighborhood unit development plan. Such plans would constitute, in effect, preliminary platting layouts for areas recommended to be urbanized, identifying in precise detail areas recommended for single-family residential use, multi-family residential use, neighborhood commercial use, institutional use, and park and open space use. A typical neighborhood development plan is shown on Map 23.

RECOMMENDED LAND USE PLAN FOR THE CITY OF WEST BEND AND ENVIRONS: 2010



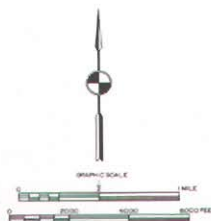
LEGEND

- URBAN SERVICE AREA BOUNDARY
- - - SPECIAL SANITARY SEWER SERVICE AREAS
- - - PROPOSED ARTERIAL STREET
- Single-family suburban residential (1.5 to 4.9 acre lots)
- Single-family low density residential (20,000- to 65,399- square-foot lots)
- Single-family medium density residential (7,200- to 19,999- square-foot lots)
- Two-family residential development (6 to 10.9 dwelling units per net residential acre)
- Multi-family medium-high density residential (6 to 10.9 dwelling units per net residential acre)
- Multi-family high density residential (11.0 to 15.0 dwelling units per net residential acre)
- Commercial development
 - D CENTRAL BUSINESS DISTRICT
 - C COMMUNITY RETAIL AND SERVICE CENTER
 - N NEIGHBORHOOD RETAIL AND SERVICE CENTER
 - O OFFICE CENTER
- Quarrying and extractive development
- Industrial development
 - I INDUSTRIAL PARK

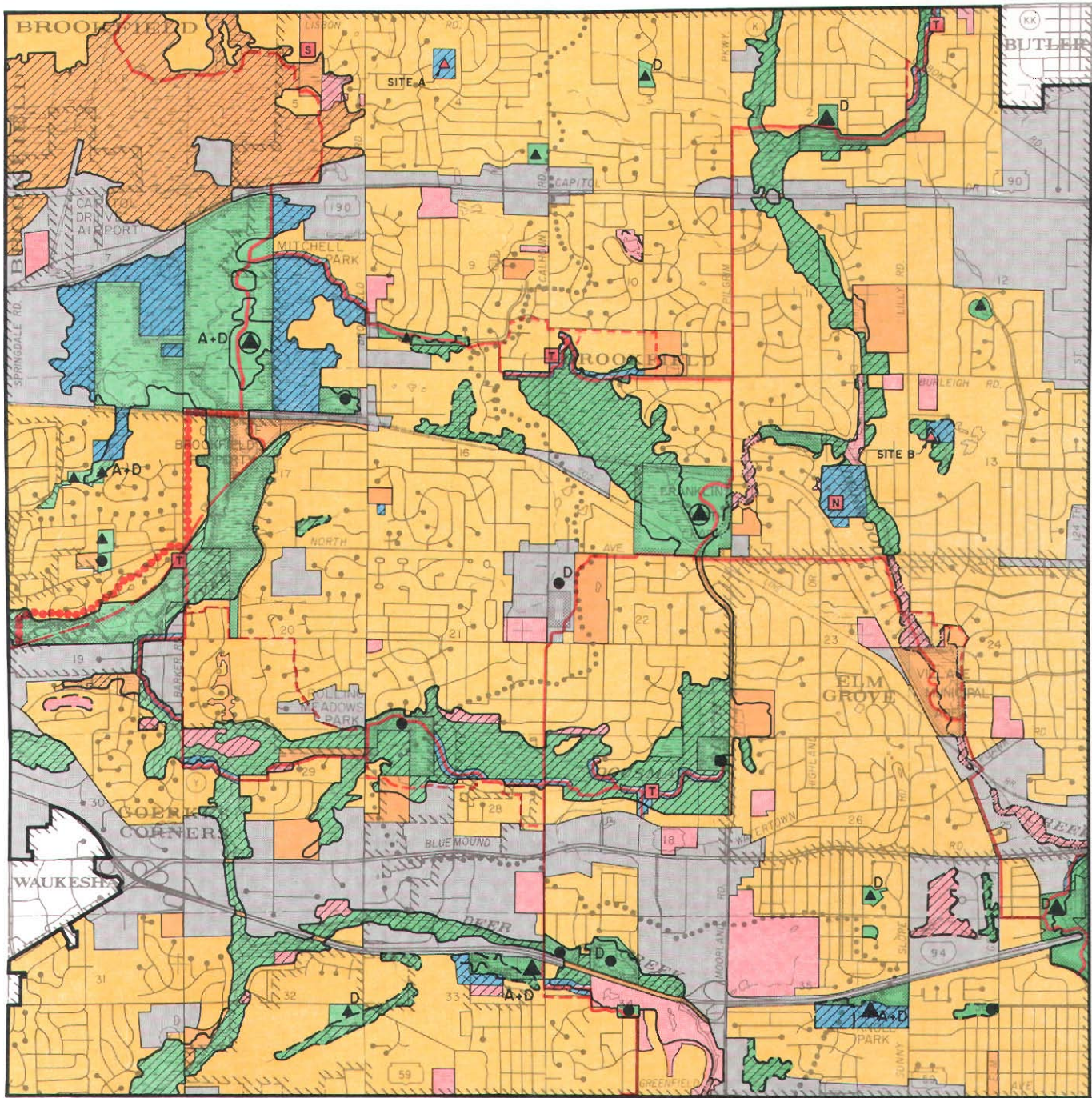
- TRANSPORTATION, COMMUNICATIONS, AND UTILITIES
 - A AIRPORT
 - T TRANSIT STATION
 - S SEWAGE TREATMENT PLANT
- GOVERNMENTAL AND INSTITUTIONAL
 - C CITY HALL AND POLICE DEPARTMENT
 - A COUNTY ADMINISTRATIVE OFFICES
 - T TOWN HALL
 - L LIBRARY
 - F FIRE STATION
 - W PUBLIC WORK FACILITIES
 - V VEHICLE EMISSIONS TESTING STATION
 - O POST OFFICE
 - S HOSPITAL
 - P PUBLIC PRE-SCHOOL
 - E PUBLIC ELEMENTARY SCHOOL
 - M PUBLIC MIDDLE SCHOOL
 - H PUBLIC HIGH SCHOOL
 - R PRIVATE SCHOOL
 - U COLLEGE
- PARKS AND RECREATION
 - M MAJOR PARK
 - C COMMUNITY PARK
 - N NEIGHBORHOOD PARK
 - S SPECIAL OUTDOOR RECREATION AND OTHER OPEN SPACE SITES

- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL AREA
- OTHER OPEN LANDS TO BE PRESERVED
- PRIME AGRICULTURAL LANDS
- RURAL ESTATE AND OTHER AGRICULTURAL AND OPEN LANDS
- WATER

Source: SEWRPC.



RECOMMENDED PARK AND OPEN SPACE PLAN FOR THE CITY OF BROOKFIELD

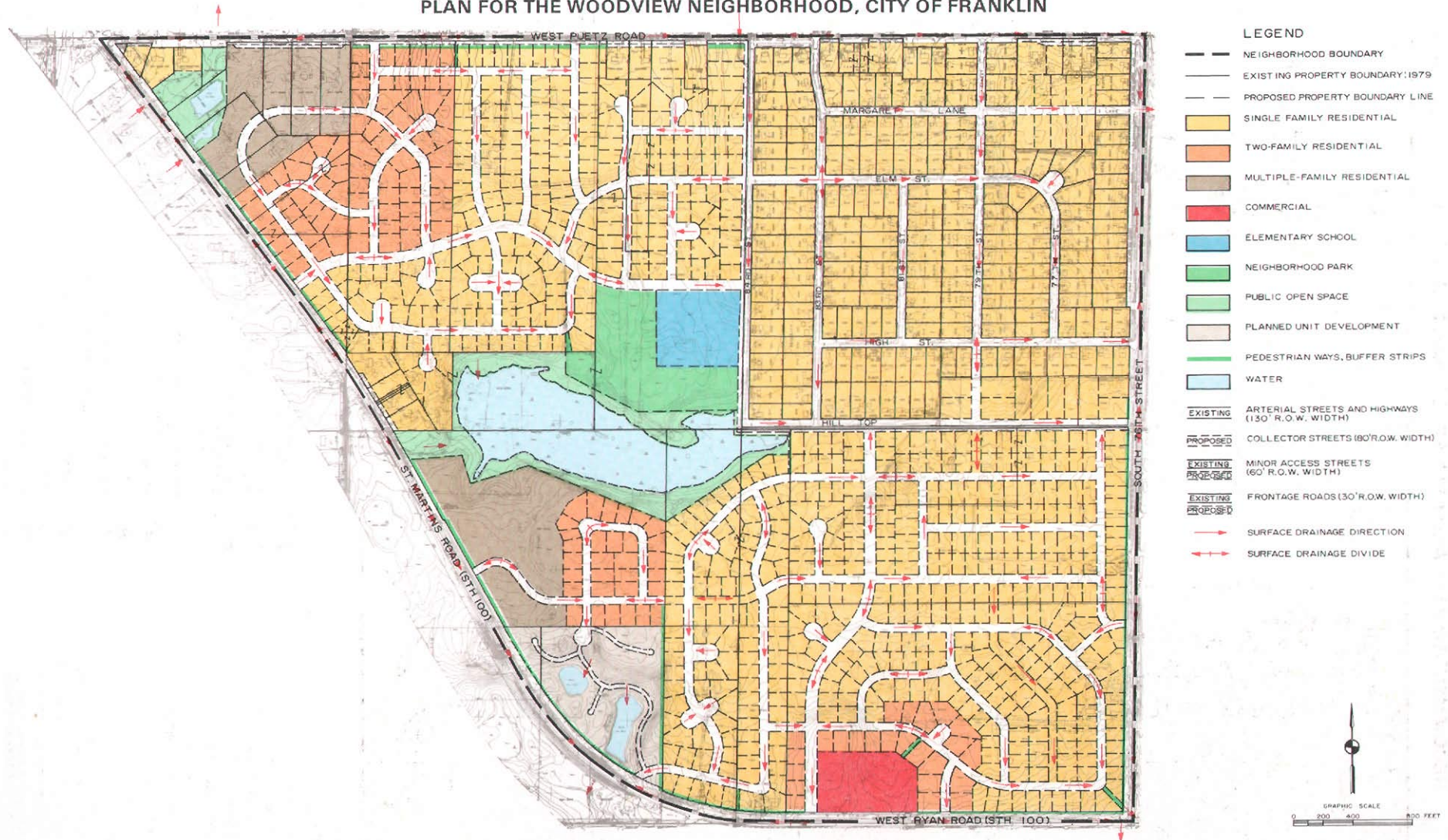


LEGEND

- | | | |
|--|--|---|
| <p>URBAN DEVELOPMENT</p> <ul style="list-style-type: none"> RESIDENTIAL DEVELOPMENT NONRESIDENTIAL DEVELOPMENT <p>PARK AND OPEN SPACE PLAN</p> <p>OPEN SPACE PRESERVATION ELEMENT</p> <p>NATURAL RESOURCE FEATURES</p> <ul style="list-style-type: none"> PRIMARY ENVIRONMENTAL CORRIDOR SECONDARY ENVIRONMENTAL CORRIDOR ISOLATED NATURAL AREA <p>OWNERSHIP</p> <ul style="list-style-type: none"> EXISTING CITY OWNERSHIP: OPEN SPACE PRESERVATION OR OUTDOOR RECREATION USE PROPOSED CITY OWNERSHIP: OPEN SPACE PRESERVATION PROPOSED CITY OWNERSHIP: OUTDOOR RECREATION USE EXISTING OTHER PUBLIC OWNERSHIP: OPEN SPACE PRESERVATION OR OUTDOOR RECREATION USE | <ul style="list-style-type: none"> PROPOSED OTHER PUBLIC OWNERSHIP: OPEN SPACE PRESERVATION OR OUTDOOR RECREATION USE PROPOSED PRIVATE OWNERSHIP: OPEN SPACE PRESERVATION THROUGH PUBLIC LAND USE REGULATION EXISTING PRIVATE OWNERSHIP: PARK OR OUTDOOR RECREATION USE <p>OUTDOOR RECREATION ELEMENT</p> <p>PARK OR OUTDOOR RECREATION SITE</p> <ul style="list-style-type: none"> EXISTING CITY OWNERSHIP: MULTI-COMMUNITY OR COMMUNITY PARK EXISTING CITY OWNERSHIP: DISTRICT PARK EXISTING CITY OWNERSHIP: NEIGHBORHOOD PARK PROPOSED CITY OWNERSHIP: NEIGHBORHOOD PARK EXISTING CITY OWNERSHIP: SPECIAL PARK PROPOSED CITY OWNERSHIP: NATURE CENTER PROPOSED CITY OWNERSHIP: SOCCER PARK A ADDITIONAL ACQUISITION D ADDITIONAL DEVELOPMENT | <p>RECREATION TRAIL</p> <ul style="list-style-type: none"> PROPOSED CITY TRAIL INTERIM OR ALTERNATE CITY TRAIL ROUTE PROPOSED CITY TRAIL ACCESS SITE PROPOSED COUNTY TRAIL (FOX RIVER RECREATION CORRIDOR) INTERIM OR ALTERNATIVE COUNTY TRAIL ROUTE |
|--|--|---|

Map 23

PLAN FOR THE WOODVIEW NEIGHBORHOOD, CITY OF FRANKLIN



Source: SEWRPC.

9. Sewer Service Area Plans

Important locally focused planning efforts serving to refine and detail the regional land use plan are the sewer service area plans prepared to meet the requirements of Chapter NR 121 of the Wisconsin Administrative Code. These plans are prepared jointly by the Regional Planning Commission and the communities concerned and serve as the basis for state regulatory decision making attendant to sanitary sewer extensions. That particular responsibility of oversight is discussed in greater detail later in this Chapter. A typical sanitary sewer service area plan is shown on Map 24. The plans identify in detail the outer boundaries of the planned sanitary sewer service areas and, within those boundaries, the location and extent of the primary environmental corridors and other environmentally sensitive lands in the community. Sanitary sewer service is not to be extended into the primary environmental corridors. The plan also identifies an urban growth boundary beyond which sewers are not to be extended. That urban growth boundary must reasonably reflect the anticipated growth and change in the community concerned set forth in the regional land use plan. Map 25 summarizes the status of such planning in the Region as of 1990.

10. Project Area Plans

An important planning effort related to implementation of the regional plan recommendations regarding environmental corridor protection and preservation and to major park provision is represented by the master plan efforts undertaken by the Wisconsin Department of Natural Resources concerning existing and proposed state park and open space facilities. Drawing in part upon the regional plan recommendations, the Department prepares and the Natural Resources Board formally adopts master plans which establish the project boundaries and ultimate acquisition areas attendant to such facilities. As an example, Map 26 sets forth a project plan prepared by the Commission for the Chiwaukee Prairie in Kenosha County. On the basis of this plan, the Wisconsin Department of Natural Resources is acquiring the lands in the area identified for preservation.

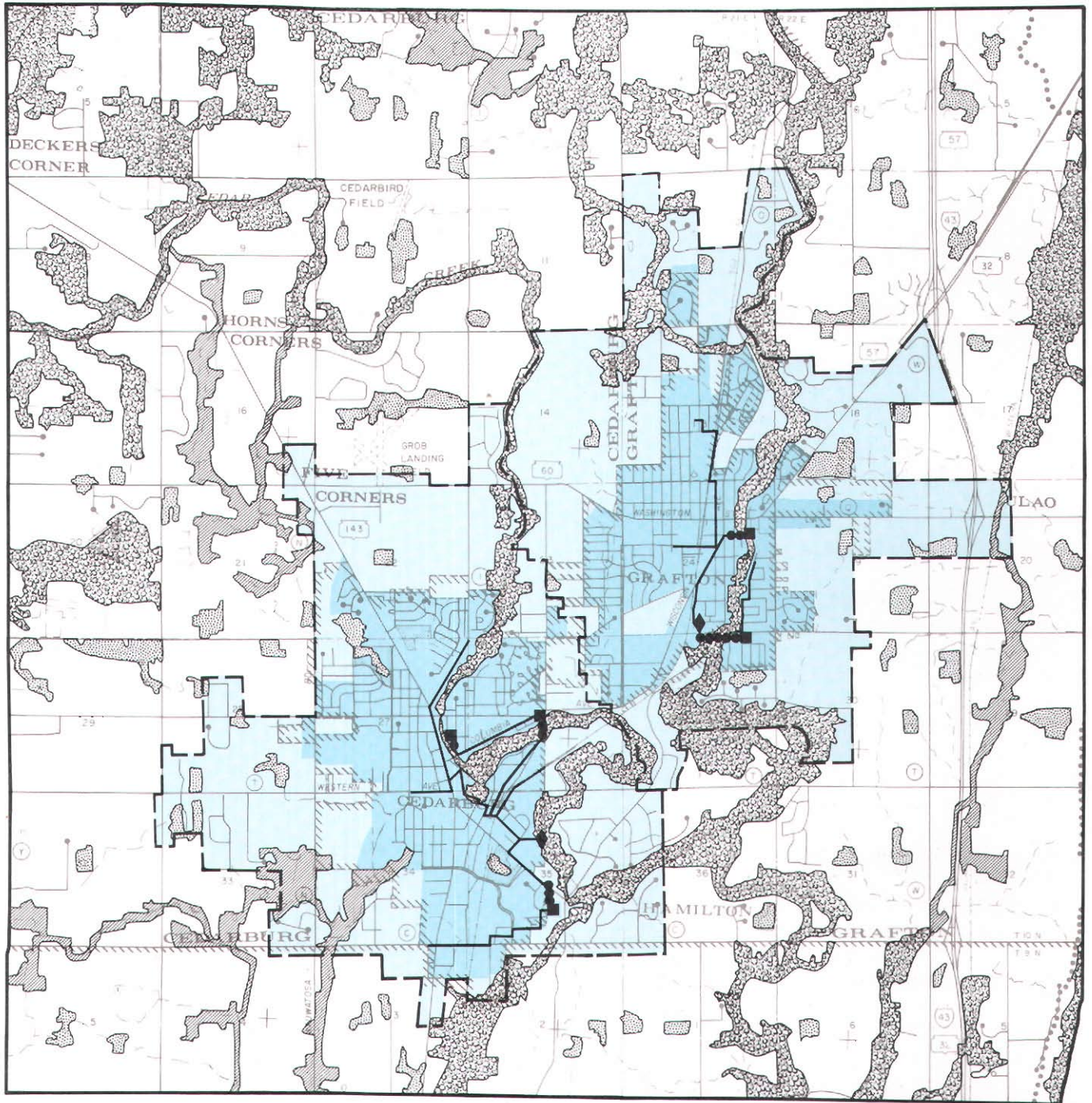
LAND ACQUISITION

Public acquisition of land is a plan implementation measure that is recommended for use in connection with those aspects of the regional land use plan pertaining to regional park development and the preservation and protection of primary environmental corridor and other open space lands. The acquisition technique is recommended to be applied on a limited basis in recognition of the limited public fiscal resources available for this purpose and in recognition of a cultural bias which exists within the Region favoring private land ownership.

With respect to the system of 29 regional parks, the plan recommends that the state and county park agencies concerned make detailed park site acquisition plans and then move to acquire the necessary lands over time for permanent public use and development. As an example of such an activity, Map 27 reflects the detailed park site acquisition plan prepared by the Waukesha County Park and Planning Commission for the recommended Monches regional park site in the Town of Merton. Waukesha County has been gradually acquiring parcels within the proposed ultimate park site boundary as they become available.

With respect to the preservation of primary environmental corridor lands, the regional plan recommends that county and local governments undertake studies to determine which of those lands within their jurisdictional area can be adequately protected through land use regulations and which of those lands should be publicly acquired either because public land regulation to protect the resources concerned would not be practical or legally defensible or because the local community concerned desires to obtain a public benefit through the use of such lands, as for example, acquiring the lands for a local park, nature center, or recreational trail. Map 22 reproduces a typical local park plan where a local community has made more detailed recommendations that reflect an intent to acquire certain of the primary environmental corridor lands and to protect the remainder of the lands through public land use regulation. Examples of efforts to acquire primary environmental corridor lands are represented by the long-term efforts of Milwaukee, Racine, and Waukesha Counties to acquire floodplains and adjacent corridor lands along perennial streams. These efforts implement the recommendation

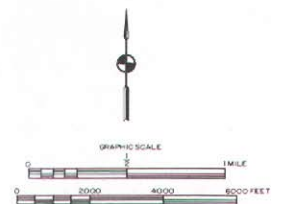
ADOPTED SANITARY SEWER SERVICE AREA FOR THE CITY OF CEDARBURG AND THE VILLAGE OF GRAFTON



LEGEND

- | | | | |
|--|--|--|--|
| | PRIMARY ENVIRONMENTAL CORRIDOR | | GROSS SANITARY SEWER SERVICE AREA BOUNDARY |
| | SECONDARY ENVIRONMENTAL CORRIDOR | | EXISTING PUBLIC SEWAGE TREATMENT FACILITY |
| | ISOLATED NATURAL AREA | | EXISTING LIFT STATION |
| | NET SANITARY SEWER SERVICE AREA (EXISTING) | | EXISTING TRUNK SEWER |
| | NET SANITARY SEWER SERVICE AREA (2000) | | EXISTING FORCE MAIN |

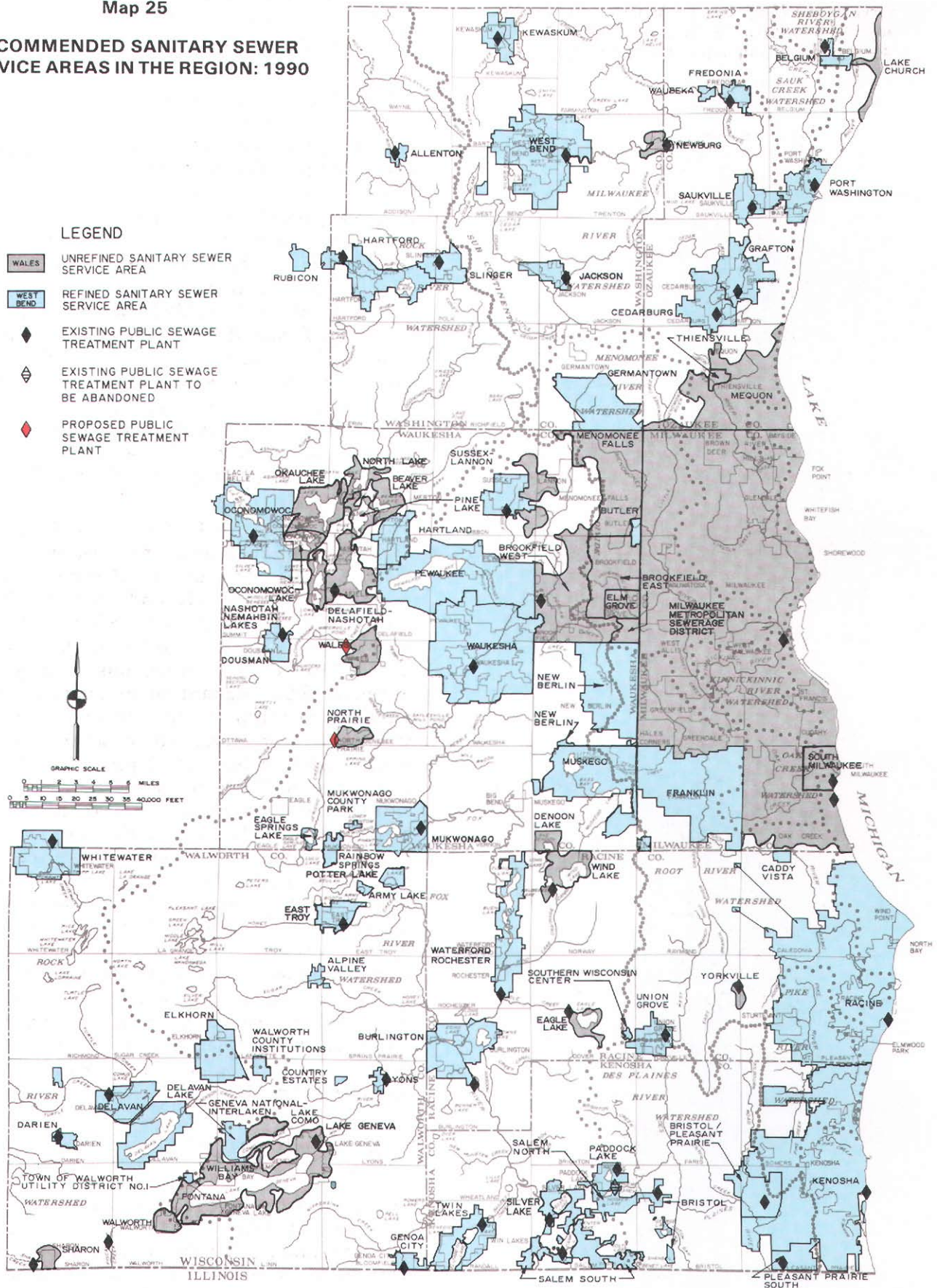
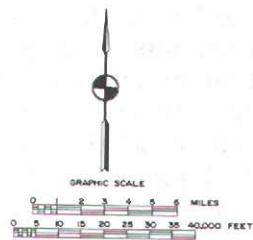
Source: SEWRPC.



Map 25

RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 1990

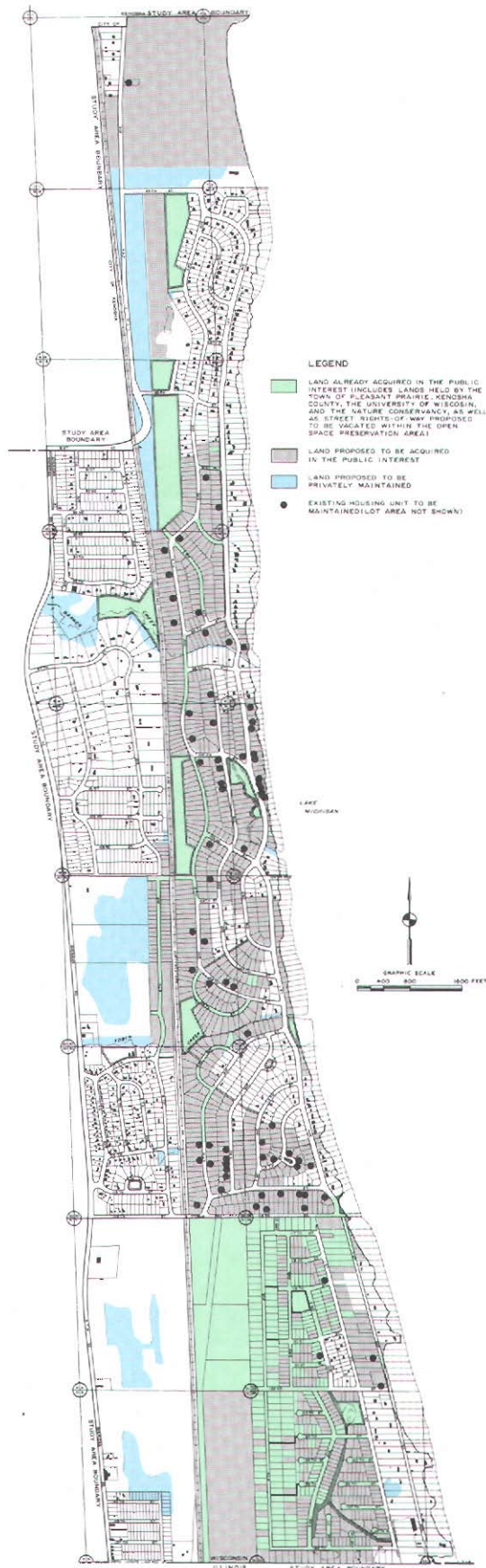
- LEGEND**
- UNREFINED SANITARY SEWER SERVICE AREA
 - REFINED SANITARY SEWER SERVICE AREA
 - EXISTING PUBLIC SEWAGE TREATMENT PLANT
 - EXISTING PUBLIC SEWAGE TREATMENT PLANT TO BE ABANDONED
 - PROPOSED PUBLIC SEWAGE TREATMENT PLANT



Source: SEWRPC.

Map 26

**RECOMMENDED STATE ACQUISITION AREA
IN THE CHIWAUKEE PRAIRIE-CAROL BEACH
PORTION OF THE VILLAGE OF PLEASANT PRAIRIE**



contained in the Commission regional land use and watershed plans to protect riverine areas from development through public acquisition of environmentally sensitive lands.

While public land acquisition by the state, county, or local governments concerned is frequently recommended in order to carry out the resource protection recommendations contained in the regional land use plan, from time to time it is also possible to implement the plan through land acquisition by private nonprofit corporations. This is the case, for example, in the Chiwaukee Prairie-Carol Beach area of the Region along the Lake Michigan shoreline in the Village of Pleasant Prairie, Kenosha County. In that particular instance, a detailed plan implementation study recommended that the lands containing sensitive environmental resources be acquired in part by the Wisconsin Department of Natural Resources and in part by The Nature Conservancy, a private nonprofit organization.

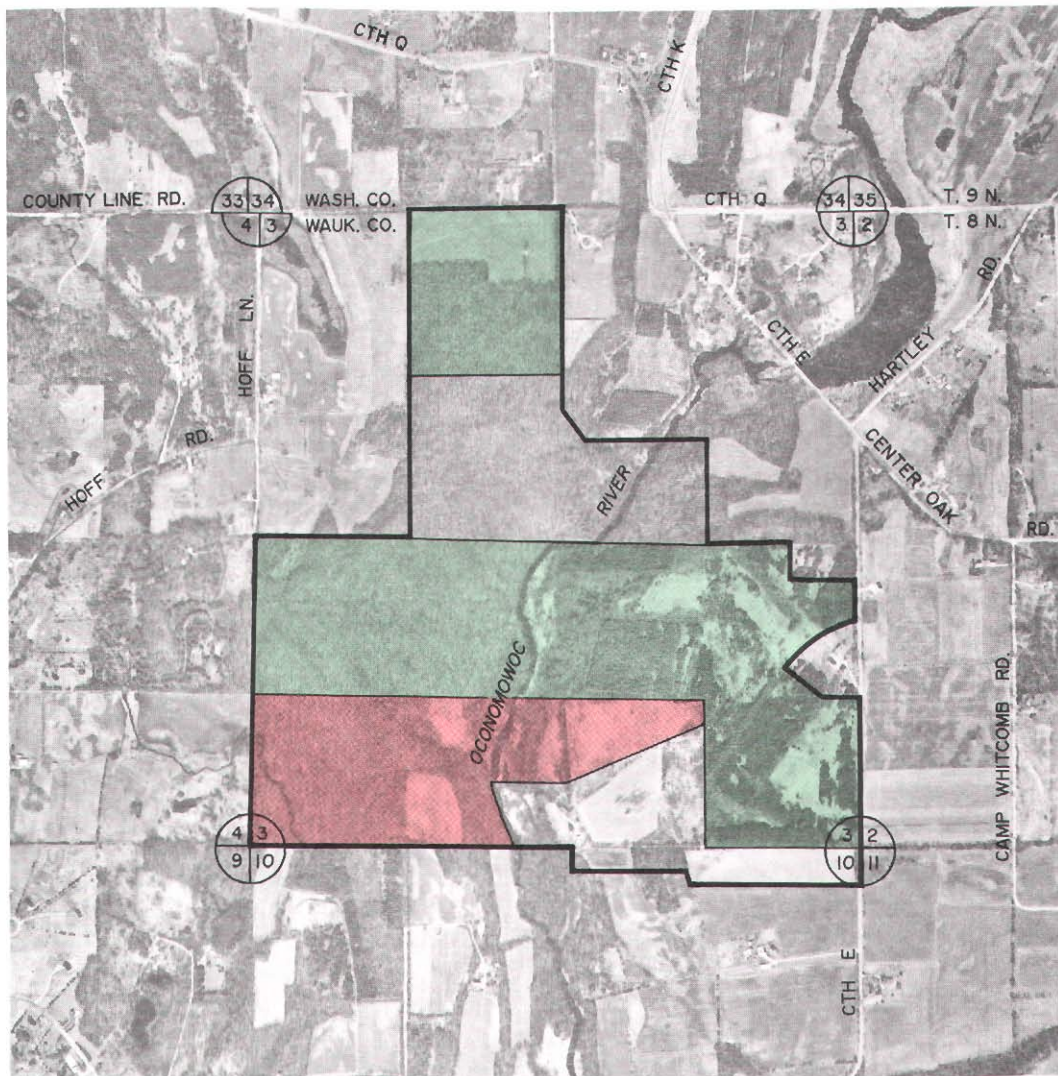
Public acquisition of primary environmental corridor lands represents the most sure way in which to preserve and protect such lands. As reported in Chapter III and, in particular, in Table 25, about 76 square miles of primary environmental corridor land, or about 16 percent of the total corridor area, has been publicly acquired. This amount is in addition to the public ownership of the surface water area within the corridors, which totals about 71 square miles, or another 15 percent of the total corridor area. While public acquisition is typically viewed as acquisition in fee simple, whereby the public acquires all rights to the use and occupation of the land concerned, public acquisition of less than fee simple interests represents a potential plan implementation measure. For example, while not generally used in southeastern Wisconsin, the acquisition of scenic easements represents a land acquisition technique which can be used to implement regional land use plan recommendations at a lower cost than acquisition of fee simple interests, while at the same time keeping lands in private ownership.

LAND USE REGULATION

Public regulation of land use is one of the most important means of regional land use plan implementation. The following sections briefly describe the various ways in which public land use regulation is recommended to be used to help implement the plan.

Map 27

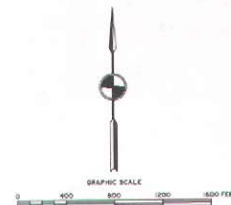
PROPOSED EXTENT OF MONCHES REGIONAL PARK, WAUKESHA COUNTY: 1992



LEGEND

- RECOMMENDED MONCHES REGIONAL PARK SITE (442 ACRES)
- LANDS ACQUIRED BY WAUKESHA COUNTY PRIOR TO 1991 (234 ACRES)
- LANDS CURRENTLY BEING ACQUIRED (90 ACRES)
- LANDS REMAINING TO BE ACQUIRED (118 ACRES)

Source: SEWRPC.



General Zoning

Zoning ordinances are public laws which regulate and restrict the use of private property in the public interest. The basic function of a zoning ordinance and zoning district map is to implement a land use plan. Zoning ordinances divide a community into districts for the purpose of regulating the use of land, water, and structures;

the height, size, shape, and placement of structures; and the density of population. Historically, zoning districts have been directly related to real property boundaries; more recently, the emphasis on environmental protection and preservation has led to the creation of zoning districts that are related to certain natural features or to certain natural phenomena.

In Wisconsin, cities are granted comprehensive, or general, zoning powers under Section 62.23 of the Wisconsin Statutes. Villages are granted the same powers under Section 61.35 of the Statutes. Counties are granted general zoning powers within unincorporated areas under Section 59.97 of the Statutes. However, a county zoning ordinance becomes effective only in those towns which ratify the ordinance. Towns which have not adopted a county zoning ordinance may adopt village powers and subsequently use the city and village zoning authority described above subject, however, to county board approval where a general-purpose county zoning ordinance exists. Where a general-purpose county zoning ordinance does not exist, a town may adopt a zoning ordinance under Section 60.61 of the Wisconsin Statutes, but only after the county board fails to adopt a county zoning ordinance upon the petition of the town board concerned.

At the present time, comprehensive zoning is in effect in all 147 municipalities in the Region (see Map 28). Each of the 28 cities and 55 villages in the Region has adopted comprehensive municipal zoning ordinances. All 64 towns in the Region currently have zoning. Of that total, 19 towns in Ozaukee and Washington Counties have town zoning ordinances independent of county board approval, since those two counties do not have general-purpose county zoning. In the remaining four counties of the Region with unincorporated territory, nine towns have town-county zoning ordinances, i.e., ordinances adopted and administered by the town, with the ordinance and any changes thereto requiring county board ratification. Some 36 towns have county-town zoning ordinances, i.e., ordinances which the county adopts and administers but which the town board must ratify along with any changes.

The regional land use plan recommends that local governments implement the plan through the application of a broad variety of zoning regulations. In those areas where the plan envisions the accommodation of new urban development, it is recommended that the local communities provide an appropriate array of residential, commercial, industrial, institutional, and related urban zoning districts consistent with the overall land use density recommendations made in the plan. The specific application of these urban zoning districts is recommended to be based upon more detailed land use plans

prepared and adopted by the community. Furthermore, the application of these zoning districts should take into account the timing, as well as the placement, of new urban development, avoiding the premature commitment to urban development of lands that may not be needed for such development for a number of years.

In order to implement the primary environmental corridor preservation element of the plan, the following two types of zoning districts are recommended to be created and appropriately applied:

1. Lowland Conservancy District

The plan recommends that lakes, rivers, streams, wetlands, undeveloped floodlands, and lowland wildlife habitat generally be placed in some type of lowland conservancy or floodland protection zoning district. Such a district would prohibit filling and draining of the lands concerned and the placement of most types of structures. In essence, the district would constrain the landowner to keep the land in essentially its natural open use and thereby avoid the public harm that would be caused through destruction of the natural resources in the area.

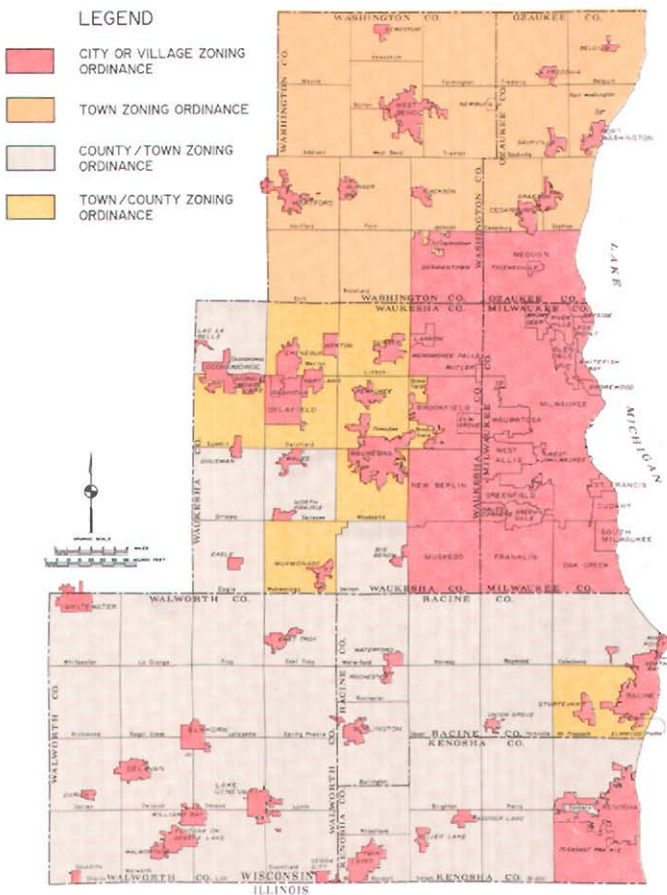
2. Upland Conservancy District

Portions of the environmental corridor are comprised of upland wooded areas of steep slopes that are also frequently significant wildlife habitat. The plan recommends that these portions of the corridors be placed in upland conservancy, park and recreational, and rural-density residential districts, if appropriate. Such districts would also seek to protect and preserve the natural resource base through cutting and filling regulations, but usually would also permit a low-density rural residential development pattern that would not destroy the resource base. At a minimum, the plan recommends that such zoning districts be limited to a density no greater than one dwelling unit per five acres of corridor land.

To implement the prime agricultural land preservation element of the regional plan, the plan recommends that the local governments concerned place such lands into exclusive-use agricultural districts which recognize that the farming activity is the principal use, with homes for farmers and farm help considered accessory

Map 28

GENERAL ZONING ORDINANCES IN THE REGION: 1992



Source: SEWRPC.

to the principal use. Such exclusive-use agricultural zoning districts would require a 35-acre minimum farm size, thereby prohibiting the inappropriate division of prime farmlands into ever smaller parcels. These exclusive use agricultural zoning districts are intended to replace the more traditional agricultural zoning districts which have no minimum farm size and which historically were structured to permit not only farming activities, but also residential development of farmlands, with typical lot sizes of approximately one acre, development truly urban in character and which results in a highly mixed urban-rural environment. The imposition of the 35-acre minimum farm size has the effect of prohibiting a long-standing practice of allowing a farmer to sell off small parcels for urban residential use to supplement farm-derived income. As reported in Chapter III and, in

particular, in Table 27, about 585 square miles of prime agricultural land, representing nearly 56 percent of the total, has been placed into exclusive agricultural zoning districts with a 35-acre minimum farm size.

To implement the remaining major element of the regional plan, the preservation in rural land uses of lands that are not prime agricultural in nature and not needed to accommodate proposed urban development, the plan recommends that local governments place such lands into zoning districts that permit small farms and other agriculture-related activities or that permit truly rural residential development. In either case, the zoning districts concerned should have a minimum lot size of five acres, and perhaps even larger, depending upon the specific character of the land concerned.

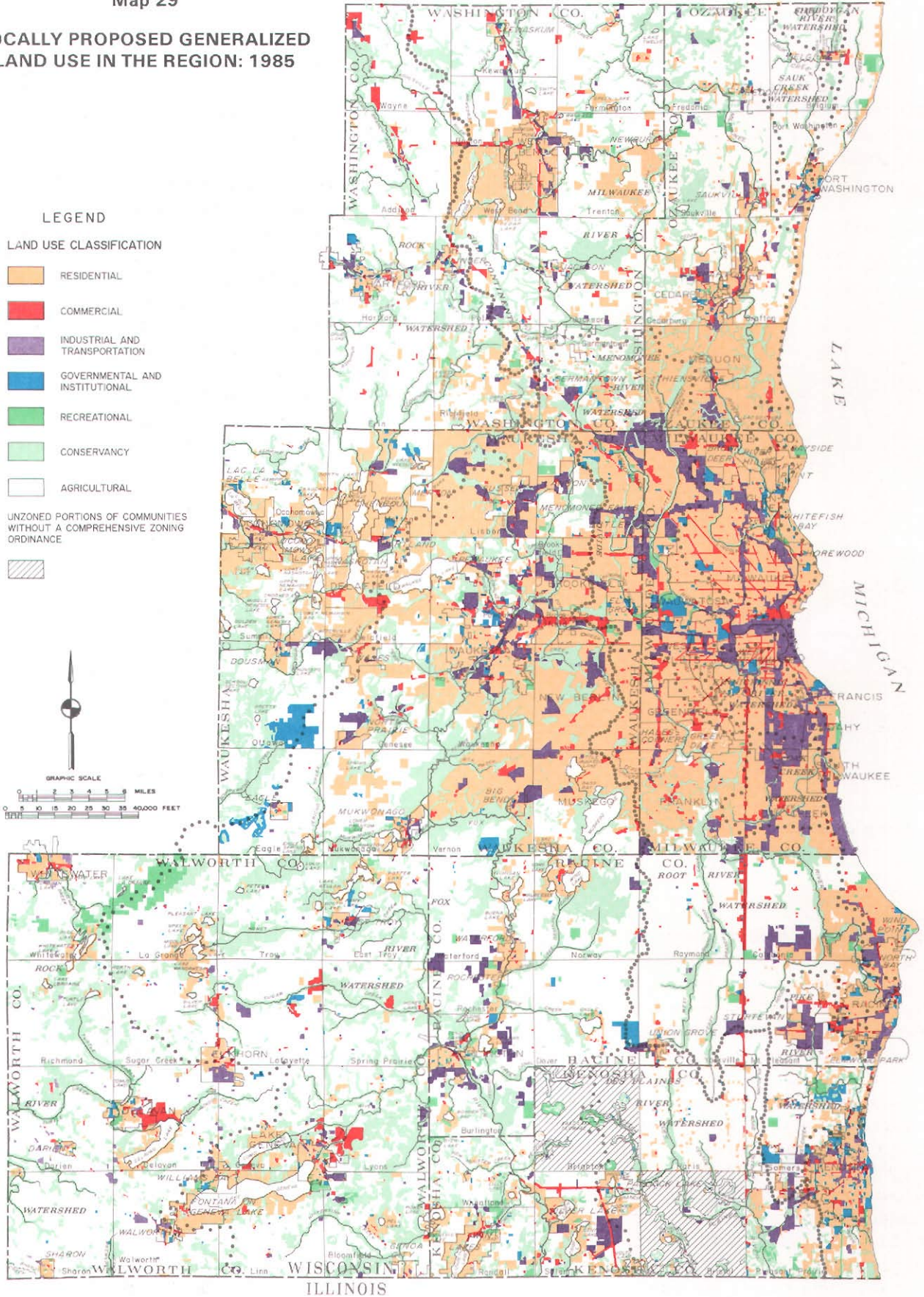
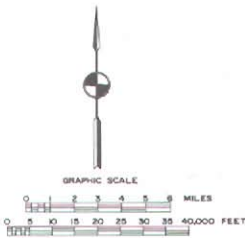
From time to time, the Commission inventories existing zoning in the Region and produces what in effect is a composite zoning district map. Since many communities, contrary to good planning practice, view their zoning ordinances and zoning district maps as the best single expression of their community's long-range land use development objectives, this composite zoning map provides a comprehensive view of locally proposed land use in the Region. The last such inventory conducted by the Commission for the Region was in 1985; the resultant composite zoning map is reproduced as Map 29.

Floodland Zoning

The regional land use plan recommends that local units of government adopt special floodland zoning regulations to preserve the floodwater conveyance and storage capacity of floodplain areas and to avoid the location of new flood damage-prone urban development in flood hazard areas. Recognizing the importance of floodland protection, Section 87.30 of the Wisconsin Statutes mandates that cities and villages, as well as counties with respect to unincorporated areas, adopt appropriate floodland zoning regulations, basing such regulations on the hydrologic, hydraulic, and other engineering data required to appropriately define flood hazard areas. Minimum standards which county, city, and village ordinances must meet with respect to floodplain protection are set forth in Chapter NR 116 of the Wisconsin Administrative Code. All such regulations must govern filling and development activities within the entire 100-year recurrence interval floodplain, i.e., the area

Map 29

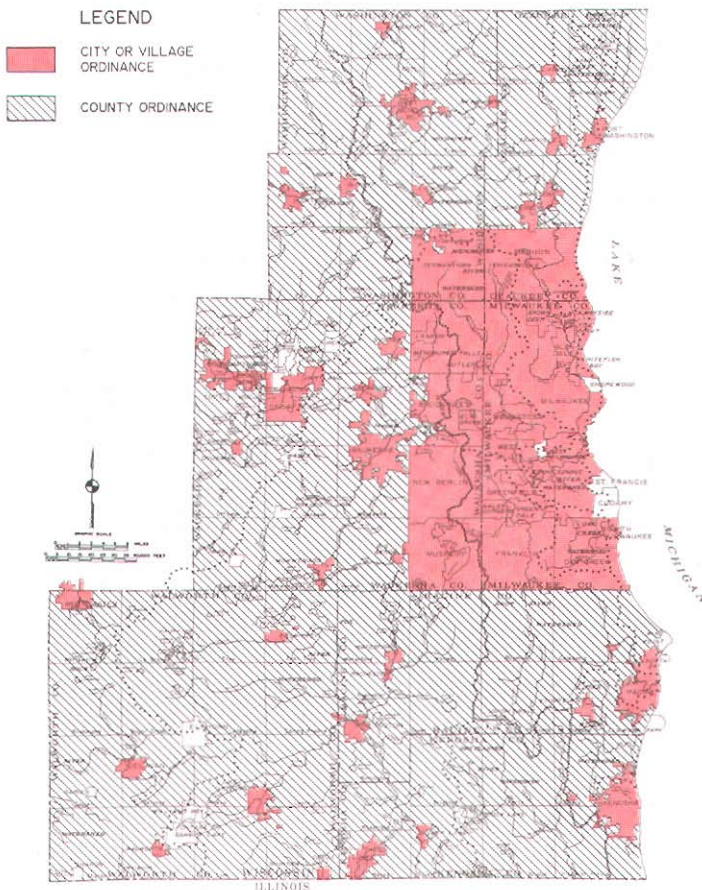
LOCALLY PROPOSED GENERALIZED LAND USE IN THE REGION: 1985



Source: SEWRPC.

Map 30

FLOODLAND ZONING ORDINANCES IN THE REGION: 1985



Source: SEWRPC.

subject to inundation during a 100-year recurrence interval flood event. Under minimum state requirements, local floodland zoning regulations must prohibit nearly all forms of development within the floodway, i.e., that area of the floodplain required to convey the 100-year recurrence interval peak flood flow. Local regulations must also restrict filling and development within the flood fringe, which consists of the portion of the floodplain located outside of the floodway that would be covered by floodwaters during a 100-year recurrence flood event.

As shown on Map 30, floodland ordinances have been nearly universally adopted throughout southeastern Wisconsin. Such ordinances are in effect in all six of the counties with unincorporated territory, as well as in 61 cities and

villages. The relatively few incorporated communities for which floodland ordinances have not been adopted represent situations where no significant flood hazard areas have been identified.

On the basis of Commission plan recommendations, many local units of government in the Region have adopted floodland zoning regulations that exceed the minimum standards set forth in Chapter NR 116 by prohibiting nearly all forms of development within flood fringe areas, as well as in the floodway, thereby affording a high level of protection for the entire floodplain area. In some cases, this has been accomplished by placing the entire floodplain area into a single, relatively simple, flood protection district which prohibits all filling and development. In other cases where past practices have allowed urban development in flood fringe lands, the Commission recommendations have been accomplished through a more complex approach to the zoning of the floodplain involving the creation of three zoning districts: a basic floodway zoning district, which prohibits filling and development in the floodway; a basic floodplain conservancy zoning district, which prohibits filling and development in those flood fringe areas that have not been previously developed or committed for development; and a flood fringe overlay district, which recognizes existing and committed development in flood fringe areas and seeks to mitigate damages to development in such areas through filling and floodproofing requirements.

Shoreland Zoning

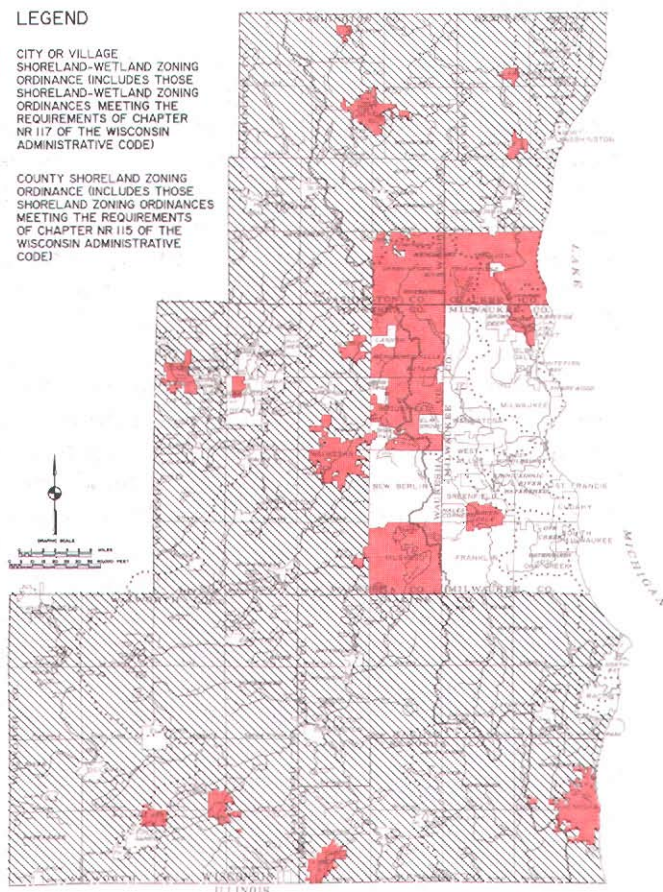
The regional land use plan recommends that local units of government adopt special shoreland zoning regulations designed to ensure the protection and proper development of shoreland areas. Such areas frequently include primary environmental corridor lands. Section 59.971 of the Wisconsin Statutes requires counties in Wisconsin to adopt such regulations within their unincorporated areas. By statutory definition, shoreland areas are those lands within 1,000 feet of a navigable lake, pond, or flowage, or within 300 feet of a navigable stream or to the landward side of the floodplain, whichever distance is greater. Minimum standards for county shoreland regulations as set forth in Chapter NR 115 of the Wisconsin Administrative Code. Shoreland regulations include minimum requirements

Map 31

SHORELAND ZONING IN THE REGION: 1989

LEGEND

- CITY OR VILLAGE SHORELAND-WETLAND ZONING ORDINANCE (INCLUDES THOSE SHORELAND-WETLAND ZONING ORDINANCES MEETING THE REQUIREMENTS OF CHAPTER NR 117 OF THE WISCONSIN ADMINISTRATIVE CODE)
- COUNTY SHORELAND ZONING ORDINANCE (INCLUDES THOSE SHORELAND ZONING ORDINANCES MEETING THE REQUIREMENTS OF CHAPTER NR 115 OF THE WISCONSIN ADMINISTRATIVE CODE)



Source: SEWRPC.

for lot sizes and building setbacks, as well as building restrictions on the cutting of trees and shrubbery. In addition, the state regulations require that counties place all wetlands at least five acres in size lying in shoreland areas into a protective conservancy zoning district. Under Sections 62.231 and 61.351, respectively, of the Wisconsin Statutes, cities and villages in Wisconsin are also required to enact regulations that would protect wetlands five acres in size lying in shoreland areas. Administrative rules pertaining to city and village shoreland-wetland zoning are set forth in Chapter NR 117 of the Wisconsin Administrative Code. Together, these state shoreland zoning requirements help to preserve and protect, in particular, environmentally sensitive lands lying in shoreland and riverine areas in the Region.

The status of shoreland zoning in the Region as of 1989 is shown on Map 31. All six counties in the Region with unincorporated territory have adopted the recommended shoreland zoning regulations, including the relatively newly mandated shoreland-wetland zoning protection. In addition, by the end of 1989, 20 cities and villages in the Region have adopted shoreland-wetland zoning regulations that meet minimum state requirements.

Land Subdivision Regulations

Under Section 236.45 of the Wisconsin Statutes, cities, villages, towns, and counties are authorized to adopt land subdivision control ordinances regulating the manner in which land is subdivided and prepared for development. These ordinances can be an important land use control in terms of ensuring that the minimum lot and farm size requirements and minimum density recommendations contained in the regional land use plan and reflected in zoning ordinances are carried out as land is divided and developed in the Region. The regional land use plan recommends that local units of government regulate all divisions of land so as to ensure, for example, that rural landowners do not convey parcels of prime agricultural land less than 35 acres in area to others.

Under Wisconsin law, there may be overlapping jurisdictions with respect to the regulation of land subdivisions. Within incorporated cities and villages, for example, counties are designated as an objecting authority and, if a county has a planning agency, is permitted to object to the approval of land subdivision plats by cities and villages in cases in which a proposed land subdivision conflicts with planned county public works improvements, including parks, parkways, arterial highways, airports, drainage channels, schools, or other planned public development. If a county does not have a planning agency, the basis of objection is narrowed to conflicts with county park and parkway development. Counties and towns are empowered to enact subdivision control ordinances applicable in rural areas, resulting in an overlap in jurisdiction. In addition, cities and villages may choose to exercise extraterritorial jurisdiction with respect to subdivision control. While the exercise of such jurisdiction will never cause an overlap in the extraterritorial jurisdiction of the municipalities, it can create an additional overlap in unincorporated territory,

so that an area could be subject to three subdivision control ordinances—county, town, and municipal extraterritorial ordinances. The extraterritorial jurisdiction of cities and villages has been limited through case law decisions to enabling incorporated municipalities to withhold approval of plats only in those cases where the plat would conflict with, for example, a planned extension of a street from an incorporated municipality; they are not empowered to withhold approval on the basis of failure, for example, to provide municipal improvements. Generally, however, where plat approval jurisdictions overlap, the more restrictive requirements control.

The adopted regional land use plan recommends that counties, cities, villages, and towns in the Region use their subdivision control ordinances to assist in the preservation and protection of recommended regional park sites and primary environmental corridor lands by incorporating parkland dedication and/or reservation requirements, as may be appropriate. The status of subdivision control ordinances in the Region as of 1985 is shown on Map 32. Such ordinances have been adopted by 80 cities and villages, 39 towns, and all six counties with unincorporated territory. The subdivision control regulations adopted by Ozaukee and Waukesha Counties apply only to statutorily defined shoreland areas.

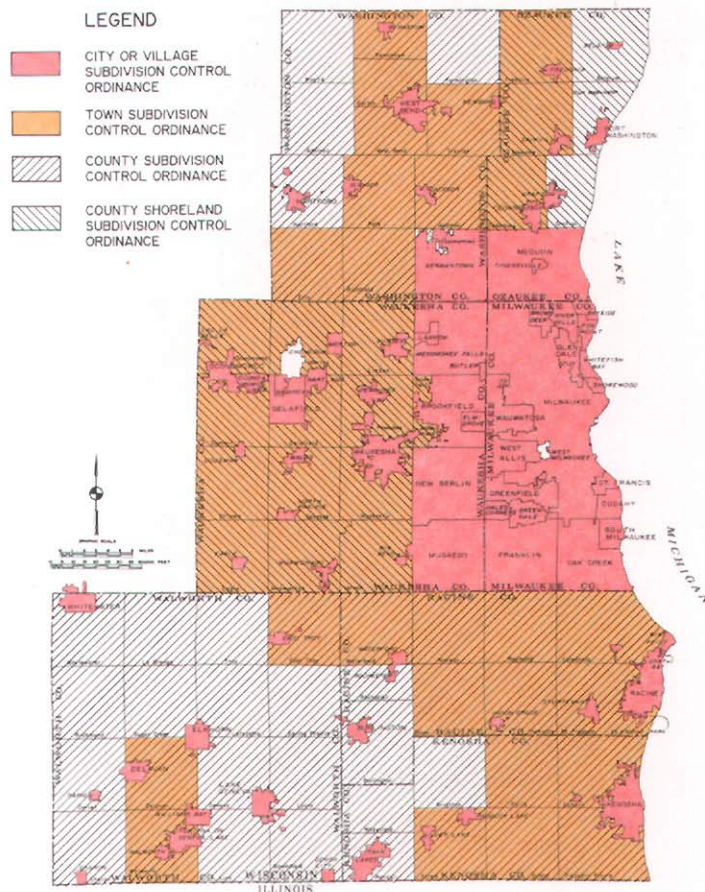
Many of the subdivision control ordinances in effect in the Region are based upon, or are very similar to, the Commission model land division ordinance. As shown on Map 33, five county subdivision control ordinances, as well as the subdivision control ordinances of 26 cities, villages, and towns, have been based upon that model. Together, these ordinances apply to about 1,835 square miles, or about 68 percent of the total area of the Region.

Official Mapping

The regional land use plan recommends that local units of government in the Region prepare and adopt official maps pursuant to Section 62.23(6) of the Wisconsin Statutes. The basic purpose of an official map is to prohibit the construction of buildings or structures and their associated improvements on land that has been designated for current or future public uses, including streets, highways, drainageways, parkways, parks, and playgrounds. Thus, official maps can be used to help implement the park and corridor preservation elements of the

Map 32

SUBDIVISION CONTROL ORDINANCES IN THE REGION: 1985



Source: SEWRPC.

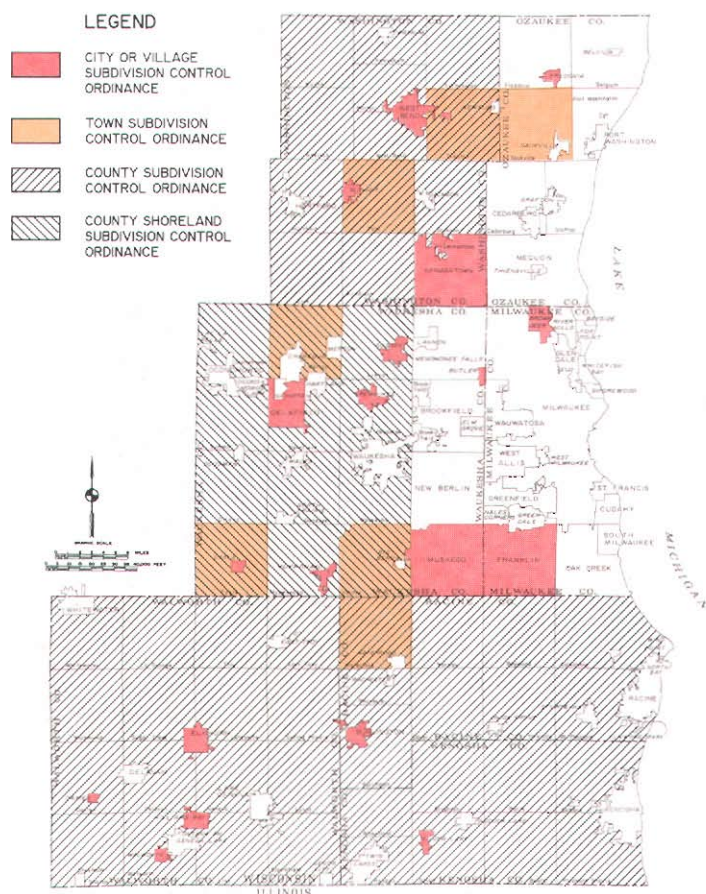
regional land use plan. As shown on Map 34, by 1985 a total of 45 cities, villages, and towns in the Region reported having such an official map. Together, these maps, along with highway street-width maps in Milwaukee and Waukesha Counties, apply to about 827 square miles, or 31 percent, of the total area of the Region.

State Wetland Preservation, Protection, and Management Policies

In addition to overseeing the state-mandated county and local government zoning program regarding the protection of wetlands in statutorily defined shoreland areas, the Wisconsin Department of Natural Resources, under Chapters NR 1.95 and NR 103 of the Wisconsin Administrative Code, pursues wetland preservation, protection, and management policies which

Map 33

SUBDIVISION CONTROL ORDINANCES IN THE REGION BASED UPON THE SEWRPC MODEL LAND SUBDIVISION ORDINANCE: 1985

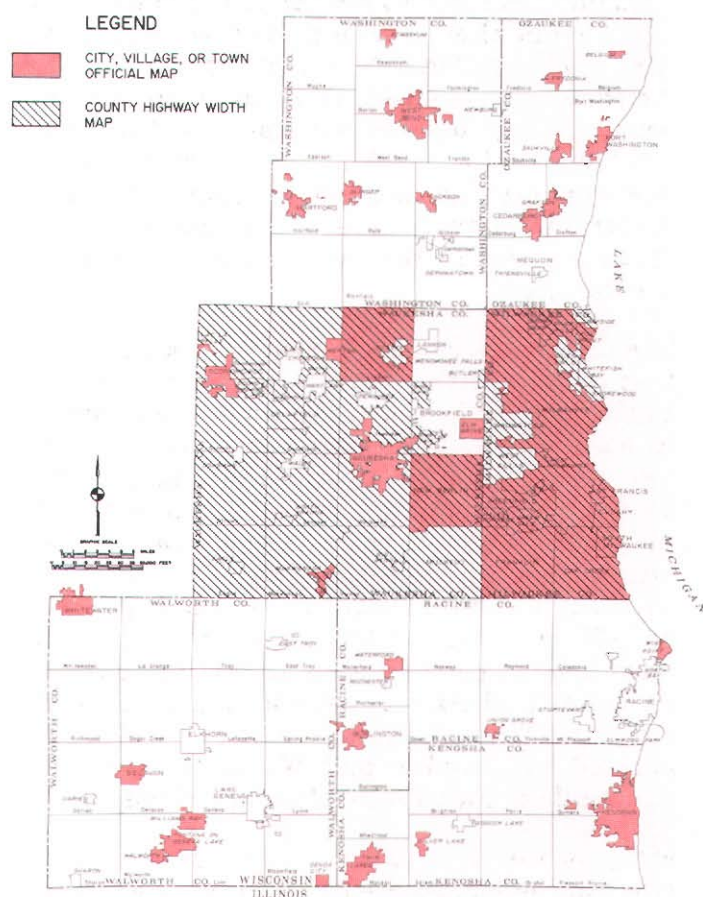


Source: SEWRPC.

help to carry out the environmental corridor protection recommendations set forth in the regional land use plan. Under Chapter NR 1.95, the Department is required to evaluate all reasonable alternatives, including the alternative of no action, in making regulatory decisions concerning such matters as sanitary sewer extensions, dredging and filling, the construction of dams and bridges, and stream course alterations in those cases where adverse impacts to wetlands may occur as a result of such activities. In addition, the Department's land acquisition programs are to emphasize the acquisition of high-value wetlands; the Department's enforcement activities regarding unlawfully altered wetlands are, to the maximum extent practical, to require restoration; and the Department is required to avoid or only minim-

Map 34

OFFICIAL MAPS IN THE REGION: 1985



Source: SEWRPC.

ally intrude upon wetlands in any liaison activities undertaken with federal, state, and local units and agencies of government.

Chapter NR 103 of the Wisconsin Administrative Code establishes specific water quality standards for wetlands. These standards are to be applied in making decisions under existing state authorities and in the review of federally required wetland-related permits. Under the standards, the Department is held responsible for protecting the functions of wetlands as it makes its regulatory decisions. Such functions include stormwater and floodwater storage and retention and the moderation of extreme water level fluctuations; hydrologic functional values, such as maintenance of dry season streamflow, the discharge and recharge of groundwater, and the

maintenance of groundwater flow; filtration or storage of sediments, nutrients, or toxic substances which might otherwise adversely affect other waters of the stream; shoreline protection against erosion; habitat for aquatic organisms; habitat for resident and transient wildlife; and other recreational, cultural, educational, scientific, aesthetic, and natural values. In making all of its regulatory decisions, the Department is required to take into account these various functions by evaluating the wetland dependencies of the proposed use, the available alternative locations for the proposed use, and the key impacts on the waters of the State of proposed uses. In effect, then, the State's policy is to place a substantial burden on anyone seeking to destroy or alter a wetland in connection with any activity that is regulated by the State. The exercise of discretionary authority by the Department of Natural Resources with respect to the wetland-related rules may operate, depending upon the specific decision concerned, to strengthen or to weaken regional land use plan implementation, particularly with respect to the preservation of primary environmental corridors.

Federal Wetland Regulatory Program

Under Section 404 of the Clean Water Act as amended, the U. S. Congress has provided for the regulation of most of the wetlands of the Nation. That Statute requires the U. S. Army Corps of Engineers, working in cooperation with the U. S. Environmental Protection Agency, to regulate the discharge of dredged and fill materials into the waters of the United States, including lakes, rivers, and wetlands. In carrying out this responsibility, the Corps of Engineers identifies waters of the United States, including wetlands, and determines when permits are required for the discharge of dredged and fill materials. This program represents another important measure in terms of protecting and preserving the wetlands in the primary environmental corridors.

The federal law also provides for the involvement of states in the Section 404 program. Under procedures set forth in Chapter NR 299 of the Wisconsin Administrative Code, the Wisconsin Department of Natural Resources may deny or grant what is termed "certification" of any proposed discharge of dredged or fill material into a wetland. In making its certification determination, the Department applies the wetland preservation policies and principles set

forth in Chapter NR 1.95 and Chapter NR 203 of the Wisconsin Administrative Code as discussed above. If the State denies certification, then the federal law requires that the U. S. Army Corps of Engineers deny the requested Section 404 permit.

Concluding Remarks: Land Use Regulation

The foregoing discussion of the various land use regulatory authorities available at the local, state, and federal levels of government indicates that there are many authorities in place which, if properly exercised and managed, could be used to effectively implement the regional land use plan. It should be kept in mind, however, in this respect, that it is not enough for a local unit of government, or a state or federal agency, to simply enact land use control regulations or impose land use control-related rules. The regulations must be consistent with the regional plan recommendations. There must also be a commitment to provide an adequate level of administrative staffing to ensure that the regulatory measures are understood and complied with. In addition, there must be a commitment to provide the legal resources necessary to enforce the ordinance provisions and to respond to challenges to their legality.

Finally, it should be noted that all regulations require some procedure for relief from the impact of regulations so that the regulations do not cause undue hardship and create the potential for an unconstitutional taking of land without just compensation. With respect to zoning, for example, county boards of adjustments and municipal zoning boards and zoning appeals boards are envisioned as agencies to which appeal can be made for appropriate relief to unduly burdensome land use regulations. It is important, however, that the discretionary authority lodged in such bodies not be abused to the point where the thrust of the substance of the land use regulation is ignored and plan implementation efforts thereby frustrated. Abuse by such appellate bodies occurs when cases are decided not on "hardship" grounds as legally defined, but rather on legally irrelevant grounds, e.g., the notoriety of the petitioner or the economic gain that might be achieved by the petitioner if the variance is granted. Experience has shown that some appellate bodies, acting without the proper guidance from experienced staff, are apt to define "hardship" improperly as any loss of economic gain to the applicant. In

this way, those bodies undermine the land use regulations intended to apply uniformly to all similarly situated landowners. By properly interpreting the regulations and by granting appropriate relief only where true hardships exist, such bodies can help strengthen plan implementation efforts. If these bodies abuse their discretionary authority, however, plan implementation efforts will be weakened.

PUBLIC UTILITY AND RELATED REGULATIONS

The public regulation of essential utilities, particularly including public sanitary sewer service and the public regulation of private onsite waste disposal systems, represents another important measure under which regional land use plan implementation can be fostered. The following two sections briefly describe the extent to which such regulations in Wisconsin are currently being used to help, or in one case hinder, implementation of the regional land use plan.

State Oversight of Sanitary Sewer Extensions

Federal and state water quality management legislation have operated within Wisconsin to provide an important and significant technique by which regional land use plan implementation can be fostered. Under Section 208 of the federal Clean Water Act, water quality management plans for large urbanized areas are required to be prepared to serve as the basis for subsequent state level water quality-related decision making. An important element of those plans is a land use element, one which results in the determination of planned sanitary sewer service areas.

Chapter NR 121 of the Wisconsin Administrative Code sets forth the basic framework for water quality management planning, including the determination of sanitary sewer service areas. As the designated water quality management agency for southeastern Wisconsin, the Commission has implemented the requirements of Chapter NR 121 of the Wisconsin Administrative Code by including the regional land use plan as an element of the regional water quality management plan. Upon adoption of the regional water quality management plan by the Wisconsin Natural Resources Board, which occurred in 1979, that plan became the legal framework within which subsequent decisions

by the Wisconsin Department of Natural Resources concerning the approval of sanitary sewer extensions are made.

More specifically, Chapter NR 121 of the Wisconsin Administrative Code requires that the water quality management plan specifically identify for each public sewage plant a planned sanitary sewer service area. In its areal extent, that sewer service area must be reasonably related to forecasts of growth and change in the area concerned, taking into account appropriate urban land development density recommendations included in the land use element of the regional water quality management plan. Working with each public sewage treatment plant operator, then, the Commission has over the years developed detailed sanitary sewer service area plans for each of the public sewage treatment plants in the Region. In effect, those detailed sewer service area plans refine and detail the regional land use plan and become urban growth boundaries for the urbanizing areas of the Region. Those growth boundaries take into account the forecasts of future growth and change reflected in the regional land use plan, as well as the spatial recommendations contained in that plan attendant to the location of new urban development.

Chapter NR 121 of the Administrative Code also requires that environmentally sensitive lands within the planned urban service areas, into which urban development should not intrude because it would have an adverse environmental impact, be defined. The Commission has carried out this responsibility by designating the primary environmental corridors identified in the regional land use plan as the environmentally sensitive lands to be protected and preserved. Such sewer service area plans, which identify both the perimeter of proposed urban growth and the environmentally sensitive lands within that perimeter into which sewer urban development should not intrude, are formally prepared and adopted, including approval by the Secretary of the Wisconsin Department of Natural Resources.

Once approved, the detailed sanitary sewer service area plans become the basis for day-to-day regulatory decision-making at the state level in terms of sanitary sewer extensions. In order to receive state approval, all proposed sewer extensions must first be found to be in conformance

with the recommendations of the regional water quality management plan as amended by the detailed sanitary sewer service area plans. More specifically, Section NR 110.08(4) and Section ILHR 82.20(4) of the Wisconsin Administrative Code require that the Wisconsin Department of Natural Resources, in its regulation of public sanitary sewers, and the Wisconsin Department of Industry, Labor and Human Relations, in its regulation of private sanitary sewers, make a finding that all proposed sanitary sewer extensions are in conformance with the adopted regional water quality management plans. If a locally proposed sanitary sewer extension is designed to serve areas not recommended for sewer service in such a plan, including areas beyond the growth limit identified in the plan or environmentally sensitive lands within the growth limit, the state agencies concerned must deny approval of the sewer extension.

It should be noted that one basic exception to the foregoing rule exists. Private sewer laterals designed to serve buildings with less than 54 drainage fixture units, i.e., 54 plumbing connections providing for the drainage of wastewater into the sanitary sewer system, currently are exempt from the requirement of conformance with the regional water quality management plan. As a practical matter, this means that one- and two-family homes, as well as certain types of commercial and industrial structures, are exempt from the broad provisions of plan conformance.

Map 25 identifies the status of the detailed sanitary sewer service area planning in the Region as of the end of 1990. A typical sanitary sewer service area plan is reproduced as Map 24.

State Oversight of Private Onsite Sewage Disposal Systems

The regional land use plan recommends that counties adopt ordinances to prevent the installation of onsite soil absorption sewage disposal systems in areas that are generally poorly suited for such systems. Under Sections 59.065 and 145.01 of the Wisconsin Statutes, all counties in Wisconsin except Milwaukee County are required to adopt and enforce a comprehensive private sewage system ordinance which governs the installation and maintenance of conventional septic tank sewage disposal systems, the newer "mound" sewage disposal systems, and sewage holding tanks. Within Milwaukee

County, such regulatory responsibility is assigned directly to the cities and villages. Under the state law, the county and local ordinances cannot be more restrictive than the state plumbing code requirements.

In the late 1960s and throughout the 1970s, such regulations were effectively used to help bring about the recommendations of the regional land use plan, and, in particular, those recommendations relating to the avoidance of new urban residential subdivisions in rural areas served by onsite sewage disposal systems. This was true because large portions of the Region have soil types and water tables which are inherently poorly suited for the safe and effective operation of private onsite systems.

Throughout the 1980s, however, owing to state policies which have worked to help ensure that onsite sewage disposal regulation is not a constraint on the spread of urban land uses across the landscape, local and county regulation of onsite sewage disposal systems have ceased to be an effective measure by which the regional land use plan can be implemented. These state policies are reflected in two basic ways: first, a requirement that county and local government regulation of onsite sewage disposal systems not be more stringent than the state requirements; and, second, the development by the State through the University of Wisconsin System of nonconventional, alternative onsite sewage disposal systems that involve, in effect, the construction of engineered soil absorption waste disposal systems on the surface of the ground—the mound systems. Given the current state policies and regulations, onsite sewage disposal system regulations are no longer a significant or important regional plan implementation device. Indeed, just the opposite may be concluded; namely, that state oversight of the regulation of private sewage disposal systems works against implementation of the regional land use plan.

In addition, in recent years the use of sewage holding tanks and the conveyance of sewage from those tanks to sewage treatment plants has become more common and accepted in the marketplace. Historically, sewage holding tanks were permitted by counties only as a last resort in those cases where existing onsite septic tank sewage disposal systems failed and where a new onsite system of either the conventional or

mound type could not be installed. More recently, some counties have as a matter of policy allowed sewage holding tanks in connection with new nonresidential land use development. In some cases, counties have taken steps to permit the installation of sewage holding tanks to support new residential development. The costs associated with operating sewage holding tanks no longer appear to be an inhibiting factor in their use. This change in how sewage holding tanks are regulated and used represents, then, another factor working against implementation of the regional land use plan.

IMPACT FEES AND EXACTIONS

Impact fees and exactions represent plan implementation measures insofar as they can be used to help preserve and protect primary environmental corridor lands. In the land development process, local subdivision control and other ordinances can be used to exact from developers concessions that would help implement the plan. For example, as a condition of subdivision plat approval, a local unit of government may exact from the developer a commitment to dedicate primary environmental corridor lands to the public as the land development process proceeds. Similarly, formal impact fee ordinances represent a type of exaction that requires developers to pay money as a condition of development approval, which monies are then used by the local government concerned for a number of purposes, including buying and thereby preserving primary environmental corridor lands. In either case, the costs are largely, if not entirely, borne by the purchaser of the lot, presuming that the developer reflects such costs in the price of the parcels concerned. Required dedications of environmentally sensitive lands have proven to be an important way in which local governments in the Region acquire such lands for protection and preservation purposes. More recently, local governments in the Region are beginning to impose impact fees for that same purpose, although the use of such fees for environmentally sensitive land acquisition is not yet widespread in the Region.

While impact fees and exactions can be used effectively by local governments to bring about recommendations contained in the regional land use plan, such measures are narrowly directed at distributing the cost burden and would not necessarily affect land use development location decisions positively, in a manner consistent with

the regional land use plan. For example, if communities identified in the regional land use plan as the proper locations for new urban development chose to impose heavy exactions and large impact fees, while more outlying communities where development is to be discouraged in the regional land use plan chose not to impose such exactions and fees, then the use of this plan implementation measure could actually work against the centralization recommendations contained in the plan. Moreover, it is important to note that impact fees by their nature relate only to the initial capital costs associated with urban development, and do not address continued operational costs. Consequently, while exactions and impact fees represent a plan implementation measure, care should be taken to ensure that the imposition of such measures work toward implementation of the plan and not against such implementation.

DEVELOPMENT MORATORIUMS

The imposition of development moratoriums by local governments represents a temporary measure. There are no statutory criteria governing the imposition of urban development moratoriums. By implication, local units of government may enact development moratoriums of a reasonable length upon a finding of critical need. If, for example, a local government were suddenly to experience significant urban growth pressures, and if that local government believed that it needed a limited and definite period of time within which to take steps, for example, to enact a proper set of land use control regulations to respond to those pressures, then a development moratorium could be imposed. It is problematic that the use of such moratoriums would have a significant effect on regional land use plan implementation. State-imposed moratoriums on sanitary sewer extensions associated with inadequate conveyance and treatment capacity, however, do have a potential to undermine regional land use plan implementation by displacing development that the plan envisioned to be located in the sewer service area concerned.

HIGHWAY ACCESS CONTROLS

The control of access to arterial highways represents a limited and indirect measure of helping to bring about implementation of the regional land use plan. The basic purpose of access control is to protect the capacity of highway transportation facilities and to

enhance the safety of those facilities, and not to control the location and type of land use development. The ultimate in highway access control is represented by freeways, on which, by design, there is no private driveway or local street access to the freeway facility; such access is gained only at interchanges with selected arterial facilities. The elimination of access to freeway facilities does help discourage certain types of urban development in the more rural areas of the Region. Access control on standard state trunk, county trunk, and local arterial highways is far less effective a measure, since the basis for exercising the access control relates, not to land use development considerations, but rather to ensuring safety and proper operation of highway facilities by locating access points at specified spacings. If the spacing specifications are met, access control regulations would normally result in access being provided. Consequently, highway access controls are not an effective plan implementation measure in terms of inhibiting scattered urban development.

PUBLIC TAX POLICIES

There are three basic public tax-related measures in Wisconsin that can help implement the recommendations of the regional land use plan. These three measures are as follows:

1. Farmland Preservation Tax Credits

The Wisconsin Farmland Preservation Program provides property tax relief in the form of state income tax credits to eligible participating owners of farmland. Owners of farmland in "urban" counties, including all counties in southeastern Wisconsin, are eligible to participate in the program if their land has been placed in a state-certified exclusive agricultural zoning district and if certain other program eligibility requirements are met. For example, the farm must be at least 35 acres in size and must have produced a value of farm product of at least \$6,000 in the last year or \$18,000 in the past three years. Over a three-year period from July 1, 1988, through June 30, 1991, farmers in urban counties were also eligible to participate on the basis of individual long-term agreements limiting the use of their land to agriculture regardless of the zoning on the land. Relatively few farmers in southeastern Wisconsin chose to take advantage of

this additional opportunity to participate in this program. In addition, all participants in the farmland preservation program are required to adhere to sound soil conservation practices. A farmland owner who claims a farmland preservation tax credit on the basis of exclusive agricultural zoning must include with his state income tax return a certificate from the local zoning administrator verifying that his land is located within an exclusive agricultural zoning district.

Under the Farmland Preservation Program, the level of income tax credit for which a farmland owner is eligible is determined in part by a formula which takes into account the owner's household income and the property tax on his farm. In general, the higher the property tax and the lower the household income, the higher the income tax credit. The level of tax relief for which a farmland owner is eligible is also dependent upon planning and zoning actions taken by county and local units of government to preserve agricultural lands. The highest tax credits are available where a county has prepared and adopted a farmland preservation plan and implemented that plan through the application of exclusive agricultural zoning. According to tax year 1990 data, a total of 1,345 farms encompassing 182,768 acres were enrolled under the program. Among the seven counties in the Region, Walworth County had the highest level of participation, 715 farms encompassing 100,581 acres. Also in tax year 1990, the average tax credit for participating landowners in the Region was \$1,227, or 27 percent of the average property tax of \$4,582. By individual county, the average tax credits are as follows:

County	Average Property Tax	Average Tax Credit	
		Amount	Percent of Property Tax
Kenosha	\$4,572	\$1,437	31.4
Milwaukee	2,630	474	18.0
Ozaukee	4,591	1,054	23.0
Racine	5,102	1,614	31.6
Walworth	4,546	1,277	28.1
Washington	4,754	1,138	23.9
Waukesha	4,810	1,404	29.2
Region	\$4,582	\$1,227	26.8

2. Tax Incremental Financing Districts

Tax incremental financing is a method by which cities and villages in Wisconsin can obtain property tax revenue to promote economic development and urban redevelopment. The basic intent of the law is not to promote residential development, but rather to promote commercial and industrial development associated with the creation of new jobs. Consequently, tax incremental financing represents a measure of regional plan implementation significance, particularly insofar as the development and redevelopment of industrial areas are concerned. Using the tax incremental financing law, cities and villages are able to designate an area as a tax incremental financing district, invest in improvements in that area, and then retain all property taxes levied upon the increase in property value that occurred, including those levied for school districts, counties, and vocational, technical, and adult education districts, until costs have been recovered. For example, the Village of Pleasant Prairie recently used tax incremental financing techniques to fund infrastructure improvements needed to provide sanitary sewer and water supply services to the LakeView Corporate Park, a major industrial park recommended in the adopted regional land use plan.

3. Development Zones

Under the Wisconsin Development Zone Program, the Wisconsin Legislature makes available temporary business tax benefits in the form of tax rebates and tax credits to assist businesses that locate in a designated development zone. The primary emphasis of the development zone program is on job creation. Two zones have been created to date in the Region, one in Milwaukee and one in Racine. The zones have an initial seven-year life with potential annual extensions for three years. The development zone technique represents another measure which can be used to help implement the regional land use plan, particularly with respect to redevelopment of aging industrial areas.

4. Urban Renewal Plans

Under Wisconsin's urban redevelopment, urban renewal, and blighted area laws set

forth in Chapter 66 of the Wisconsin Statutes, cities are empowered to designate urban redevelopment, urban renewal, and blighted areas and to make and adopt plans for the redevelopment and renewal of such areas. These land use plan implementation measures by their very nature have limited geographic scope, essentially confined to the oldest portions of the oldest cities in the Region. Nevertheless, such measures can represent an important way in which the Region's central cities can bring about many of the objectives underlying the regional land use plan, particularly with respect to the renewal and redevelopment of aging industrial, commercial, and residential areas.

MUNICIPAL BOUNDARY ADJUSTMENT TECHNIQUES

The recommendations set forth in the regional land use plan concerning the location and density of new urban development are formulated without regard to the location of jurisdictional limits of civil divisions. Rather, those plan recommendations relate to such factors as the location of existing utility infrastructure, including public sanitary sewer and water supply systems; the location of environmentally sensitive lands; the location of areas subject to special hazard, such as flooding or shoreline erosion; and the availability of lands considered to be suitable for urban development. This means that the spatial pattern of proposed new urban development identified in the plan is not constrained by municipal boundaries. The regional land use plan does not have a jurisdictional element whereby future corporate limits are recommended. Rather, it is an underlying presumption of the regional land use plan that cities and villages which own and operate essential public sanitary sewerage systems will either annex unincorporated territory recommended in the plan for urban development and thereupon 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.

It is possible under Wisconsin law for the regional land use plan to be implemented either through annexation and attendant municipal

boundary changes or through boundary and municipal service agreements between adjacent incorporated and unincorporated municipalities. It is recognized that, to the extent neighboring municipalities fail to reach agreement on boundary and service extension matters, development may be encouraged to occur at variance with the plan recommendations. Over the last decade, for example, the failure to reach agreement on municipal boundaries and utility extensions in the Waukesha area has resulted in urban land development in portions of the Town of Waukesha not recommended for such development and without the benefit of essential public sanitary sewer and water supply services. Had there been a municipal boundary and service agreement in place between the City and Town of Waukesha, it would have been possible to channel urban land market activity in a geographic sense to locations recommended for development in the regional land use plan.

There is broad authority in Section 66.30 of the Wisconsin Statutes for intergovernmental cooperative agreements that would enable neighboring incorporated and unincorporated municipalities to reach agreement on the extension of public utilities with or without related annexation. In addition, under Section 66.027 of the Wisconsin Statutes, procedures exist whereby neighboring incorporated and unincorporated municipalities can reach municipal service agreements with a specific approach to boundary adjustments, such boundary adjustments being subject, however, to ratification via referendum procedures by the property owners concerned. This latter statute, with at least one notable exception in the Region, has had limited applicability in Wisconsin namely, an agreement in recent years whereby the City of Kenosha and the Town of Pleasant Prairie came to terms on boundary adjustments and the extension of utility services which eventually enabled the Town to incorporate as a village. Political tensions related to territorial considerations have, however, normally made these agreements of limited usefulness in resolving boundary and utility provision problems.

Recent state legislation repealed the boundary adjustment statute in Section 66.027, providing a new and more complicated procedure including state oversight and approval of negotiated boundary and municipal service agreements

between neighboring municipalities. Whether or not this new approach to boundary resolution will prove more successful than the old approach remains to be seen. The requirement that a state agency must approve boundary change proposals based upon statutory criteria may make it more difficult for neighboring municipalities to reach boundary adjustment and utility service extension agreements. The ability to reach such agreements, however, under whatever techniques are available, remains important to regional land use plan implementation.

SUMMARY AND CONCLUSIONS

This chapter has briefly described the land use plan implementation measures that are currently available for use in Wisconsin and that are being used to varying degrees to help implement the regional land use plan. These measures may be summarized as follows:

1. The extension of data available in the Commission files to public and private agencies operating in the Region. To a considerable extent, development in the Region can be guided and shaped in the public interest simply through the task of collecting, analyzing, and disseminating sound planning and engineering data on a uniform, areawide basis.
2. The provision by the Commission of a broad range of advisory and review services to county and local governments, such services aimed at helping those governments to implement the regional land use plan. The advisory services include the preparation of base maps, zoning ordinances and zoning district maps, and land subdivision control ordinances and extend to include the preparation of local plans. The review services include comment on locally prepared plans and plan implementation ordinances, proposed land subdivision plats and certified survey maps, and proposed rezonings.
3. Plan implementation is promoted through a variety of educational efforts, including public and classroom presentations on the regional land use plan, the preparation and dissemination of planning guides, the holding of conferences and workshops, the

preparation and distribution of newsletters, news releases and annual reports, and working with the University of Wisconsin-Extension in a variety of ways to promote regional land use plan implementation.

4. Regional plan implementation is fostered through plan refinement and detailing efforts by county and local governments. Such efforts include the preparation of freeway corridor plans, county development plans, county park and open space plans, county farmland preservation plans, urban district plans, local land use plans, neighborhood plans, sewer service area plans, and project area plans. Each of these focused planning efforts refines and details the regional land use plan as a desirable first step toward plan implementation.
5. Public acquisition of land represents a plan implementation measure that is recommended for use in connection with those aspects of regional plan implementation relating to regional park development and the preservation and protection of primary environmental corridor lands. Land acquisition to implement the regional land use plan is carried out by state, county, and local governments and by private nonprofit corporations such as The Nature Conservancy. Public land acquisition has resulted in about 76 square miles of primary environmental corridor land, or about 16 percent of the total corridor area, being permanently protected and preserved.
6. Public regulation of the use of land is one of the most important means for implementing the adopted regional land use plan. Of particular importance in this respect are general zoning ordinances, including the creation and application of special zoning districts to preserve and protect primary environmental corridors and prime agricultural lands, floodland zoning ordinances, shoreland zoning ordinances, subdivision regulations, and official mapping. A particularly important zoning measure involves the creation and application of exclusive use agricultural zoning districts. Such districts have been created and applied to about 585 square miles of prime agricultural land, or about

56 percent of the total such land. In addition, there are state and federal wetland preservation and protection policies and regulatory programs which supplement local regulation and which aid, in particular, in carrying out the preservation recommendations attendant to primary environmental corridor lands.

7. The regulation of utilities and, in particular, sanitary sewer extensions, as well as the regulation of private onsite sewage disposal systems, also represent ways in which public agencies can operate to help implement the regional land use plan. In Wisconsin, the comprehensive program of 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. Those plans are integrated with the regional land use plan, and serve to promote the implementation of that plan by defining urban service limits and by delineating environmentally sensitive lands within those service limits to which service should not be provided. While state oversight of sanitary sewer extensions, then, represents a particularly effective regional land use plan implementation measure, state oversight of the regulation by counties of the installation and maintenance of private onsite sewage disposal systems has actually worked to eliminate such regulations as an important regional plan implementation measure. By mandating uniform statewide regulation of onsite sewage disposal systems, and by sponsoring the development of highly engineered onsite, above-ground sewage disposal systems, the State of Wisconsin has effectively made it possible to permit urban development to occur in widely scattered fashion across the landscape since the natural soil limitations relating to the safe operation of conventional septic tank systems no longer represent a constraint on development. Moreover, sewage holding tanks, which historically were permitted and used only in remedial situations when onsite septic tank sewage disposal systems failed, are now being increasingly used to support new urban development.

8. Impact fees and exactions through the land development process represent a relatively minor regional land use plan implementation measure. Exactions can be used to secure public ownership of certain portions of primary environmental corridor lands. Furthermore, impact fees can be used to help county and local governments acquire primary environmental corridor lands and thus contribute to the preservation objective.
9. Highway access controls constitute a relatively minor regional land use plan implementation measure. In most cases, access controls can be used to constrain the frequency and location of new local streets and private driveways accessing the arterial street system; however, such access controls have not proved effective in terms of inhibiting urban development in locations where the regional land use plan does not recommend such development to take place.
10. There are three public tax policies that operate in Wisconsin to provide measures that can help in implementing the regional land use plan. These include the Wisconsin Farmland Preservation Program, an income tax credit program geared to providing a measure of property tax relief to eligible farmers. On average, such relief represents a reduction in the property tax bill of the participating farmers in the amount of about 27 percent. Such relief is believed to be helpful in terms of making it possible for farmers to continue farming and thus contribute to the preservation of prime agricultural lands. Tax incremental financing districts represent another public tax policy that can be used to help implement the regional land use plan and, in particular, the industrial center element of that plan. Business tax credits available through development zones in Wisconsin also represent a potential public tax policy measure which can be used to help implement the regional land use plan and, in particular, that element of the plan dealing with the revitalization of aging urban industrial centers.

mentation measures that are currently available, the following conclusions may be drawn:

1. Importance of Data Development and Dissemination
The continuing development and dissemination of sound planning and engineering data on a uniform, areawide basis represents a very effective way in which the regional land use plan recommendations can be implemented and the objectives underlying those recommendations achieved. Experience has shown that data on such important considerations as existing land use, soil suitability, topography, wetlands, flood and erosion hazards, sewer and water availability, and traffic conditions, when properly developed and disseminated to private individuals and public officials, will be used and acted upon, typically influencing development decisions positively in the public interest in the manner recommended in the adopted regional land use plan.
2. Importance of Plan Refinement and Detailing
The general, areawide nature of the regional land use plan makes it imperative that all county and local governments undertake planning efforts to refine and detail that plan, thereby giving the regional plan more specific meaning and greater understanding and acceptance at the county and local levels of government. By way of example, in transportation planning it has been found that the preparation of jurisdictional highway system plans, which refine and detail the regional transportation system plan, have resulted in good understanding and a high degree of political acceptance of the regional plan. In part, this is because the planning process is highly participatory, actively involving elected and appointed officials and citizen leaders drawn from the county and from each local unit of government in the county, as well as representatives of the United States and Wisconsin Departments of Transportation. Under Wisconsin law, jurisdictional transfers require agreement among all parties concerned, at both the state and county and local levels of government. Using the regional planning process to bring all parties together tends

In considering the foregoing findings with respect to the range of land use plan imple-

to lead to better planning and more effective plan implementation.

With respect to land use, a greater commitment to the cooperative preparation of county and local land use plans and of local sewer service area plans is needed so that the regional land use plan recommendations can be carried into the greater depth and detail needed to effectively apply such implementation tools as zoning, land subdivision control, and public land acquisition. The process of carrying out such focused planning efforts at the county and local levels of government would help to build a broader base of understanding of the regional land use plan, and, like the jurisdictional highway system plans, can create a sense of "ownership" of the regional land use plan at the county and local level. Undertaking these focused localized planning efforts, then, and maintaining the resultant plans current is of critical importance to regional land use plan implementation.

3. Importance of Review and Comment Process

Experience has shown that in those cases where county and local governments choose to seek review comments on development proposals from the Regional Planning Commission, those comments are carefully considered in the decision-making process. Such comments relate a particular development proposal to the recommendations of the regional land use plan. While local officials should not be expected to always concur in the findings and recommendations made by the Commission in this respect, the existence of a process by which the review comments are sought ensures that local officials concerned take regional plan considerations into account when making development decisions. At the present time, and with respect to such matters as certified survey maps, land subdivisions, and rezoning proposals, review comments are provided on an ad hoc, on request basis. There is no requirement that county and local governments seek such review comments before making decisions.

4. Effectiveness of Public Land Ownership

Public ownership of land represents the most effective way in which to bring about those elements of the regional land use plan dealing with the protection and preservation of the natural resource base. Ideally, the primary environmental corridors in the Region would be publicly owned and managed for permanent preservation in open space and recreation land uses. The reality, however, is that funding for purchase of all corridor lands is unlikely to be available. Nevertheless, public acquisition is an important technique for plan implementation and should continue to be pursued. To maximize the effective use of the available funds, attention should be given to acquisition techniques that involve less than fee simple purchase. For example, consideration could be given to acquisition techniques that involve the public acquisition of whatever development rights may be found to exist in a given parcel of land, with the owner given the ability to continue to "own" and use the land as it is currently being used on an indefinite basis. Another variant of this technique would involve the public acquisition of only a portion of the development rights of a particular parcel, in effect "buying down" the density to that which is recommended in the regional land use plan for that parcel. The acquisition of such development rights has potential not only for preserving the primary environmental corridors but also for potentially preserving prime agricultural lands in key locations. With the development rights sold and the development potential removed permanently, farmland could be assessed at its intrinsic value for farming and not at its value as a potential site for urban development.

5. Effectiveness of Zoning

Assuming that there is broad general public and public official understanding of the recommendations of the regional land use plan and of the reasons underlying those recommendations, and further assuming that such understanding results in the development of a political will to fully exercise the discretionary zoning

authority made available under Wisconsin law, zoning by county and local governments can be a highly effective, indeed, one of the most effective, measures available for regional land use plan implementation. Experience has also shown that when zoning is undertaken jointly by two governmental entities, as, for example, joint county-town zoning, joint state-county zoning, and joint state-local zoning, zoning becomes an even more effective plan implementation measure than when zoning is accomplished at a single level of government. Much of the general-purpose zoning in effect in the Region that applies to unincorporated territory represents the joint exercise of zoning powers by counties and towns. In addition, there is state oversight of the special purpose zoning attendant to floodland and shoreland areas, including the protection of wetlands within shorelands. However, to date there has not been any attempt to provide state oversight of general zoning. The joint exercise of zoning, particularly the joint state-county and state-local exercise of zoning, enhances the long-term stability of the zoning regulation, since neither state nor county nor local public officials can act unilaterally to change the zoning.

While zoning can be a highly effective plan implementation measure, the proper application of that measure to regional plan implementation requires the understanding, concurrence in, and support of, the regional land use plan by the zoning authorities concerned. It also requires a commitment by the zoning authorities concerned to the provision of the staff and legal support needed to properly administer the zoning regulations. In addition, the effectiveness of state-county and state-local zoning requires a commitment on the part of the State to properly oversee through performance audits the exercise of the joint zoning powers at the county and local levels of government.

6. Effectiveness of Integration of Regional and State Plans

By incorporating the regional land use plan as an element of the federally- and

state-required areawide water quality management plan; by incorporating the areawide water quality management plan into the state water quality management plan approved by the Wisconsin Natural Resources Board; and by making regulatory decisions at the state level in a manner consistent with those plans, a very effective regional land use plan implementation measure has been created, although limited to state oversight of sanitary sewer service extension. In effect, the process of integrating regional and state water quality management plans has created a partnership between state and local governments whereby communities desiring to provide public sanitary sewer service must define reasonable urban growth limits, and within those limits firmly commit to the protection and preservation of environmentally sensitive lands.

By way of contrast, there has been no comparable integration of the areawide water quality management plan recommendations with the regulatory process attendant to private onsite sewage disposal systems that is the responsibility of the Wisconsin Department of Industry, Labor and Human Relations. Consequently, not only has state oversight of private onsite sewage disposal systems not been adapted to assist in implementation of the areawide water quality management plan, and thereby the adopted regional land use plan, but to the contrary that oversight has worked to undermine significantly the implementation of those plans. The Wisconsin Department of Industry, Labor and Human Relations has acted to remove virtually any significant constraints on the use of onsite sewage disposal systems which might discourage urban development at variance with the plans concerned. Moreover, there is little effective state oversight of the disposal of septage and holding tank wastes, resulting in abuse in the way in which such wastes are disposed of on the landscape. Consequently, the lack of any attempt to integrate state-level regulatory decision making with the areawide water quality management plan adopted by a separate state agency stands in stark contrast to

the way in which the Wisconsin Natural Resources Board has integrated its regulatory decision making with respect to sanitary sewers and sewage treatment plants with the areawide water quality management plan and, therefore, the regional land use plan.

7. Importance of Resolution of Boundary Disputes

The ability of neighboring municipalities, and in particular neighboring municipalities that are incorporated and unincorporated under Wisconsin law, to reach agreements on municipal boundary changes and utility service agreements is an important factor in regional land use plan implementation. The extent to which neighboring communities fail to reach an accord on boundary and service extension matters can work against regional plan implementation, at times resulting in the channeling of urban land market activity to locations in variance with the plan recommendations and beyond the economical reach of sanitary sewerage, public water supply, and mass transit services. While communities under Wisconsin law have historically had the legal ability to reach boundary and service agreements, political and legal considerations related to such authorities have to date resulted in very few such agreements being consummated. A recent state law creating a new procedure for boundary and service agreements has the potential to change this situation, but the institution of significant state oversight in the process, including state approval of such agreements, makes it problematic that the new procedure will enable neighboring communities to more readily reach such

agreements. It remains important to regional plan implementation efforts that such agreements be sought so that intergovernmental disputes do not constitute an impediment to plan implementation.

8. Importance of Land Subdivision Control Regulations

Land subdivision control regulations can provide an effective means to implement certain detailed aspects of the regional land use plan. In this respect, land subdivision control regulation is meant to include not only land subdivision plats, but also certified survey maps. Land subdivision regulations can effectively assist in protection of the environmental corridor areas where the land subdivision plats and certified survey maps include portions of such corridor areas. Land subdivision regulations can require the dedication or reservation of the environmentally sensitive lands so that such lands are or can be brought into public or quasi-public ownership. Land subdivision regulations are also of importance to regional plan implementation insofar as the detailed design of the land subdivision is concerned, with particular respect to highway access control and recognition of the need to make the resulting development amenable to transit service and use. It is through the effective operation of land subdivision control regulations that marginal access to arterial highways is properly controlled. In addition, land subdivision regulations can be effectively used to orient the location of buildings and the design of access roads and parking lots so as to make new development more "transit- and pedestrian-friendly."

Chapter V

PRELIMINARY RECOMMENDED ACTIONS TO STRENGTHEN REGIONAL LAND USE PLAN IMPLEMENTATION

INTRODUCTION

On the basis of its analyses of the status of implementation of the regional land use plan, the Advisory Committee, in Chapter III, drew certain conclusions as to the need to strengthen efforts to implement that plan. After examining the available techniques for helping to achieve regional land use plan implementation, the Advisory Committee drew further conclusions, in Chapter IV, as to the effectiveness of those techniques in actually bringing about plan implementation. Building upon those sets of conclusions, this chapter sets forth the Advisory Committee preliminary recommendations as to how best to begin to take steps to strengthen regional land use plan implementation over time in southeastern Wisconsin.

Although it is recognized that there are interrelationships between various categories of plan implementation needs and the potential actions to meet those needs, for convenience in presentation, this chapter summarizes the Advisory Committee proposals regarding four recommendations contained in the regional land use plan: 1) the preservation of prime agricultural lands, 2) the more effective curtailment of highly diffused, low-density residential development, often termed "urban sprawl," 3) the protection and preservation of primary environmental corridors, with particular focus on the preservation of the upland portions of those corridors, and 4) the abatement of the decentralization of employment and the revitalization of the older industrial centers of the Region. Plan implementation techniques that would address implementation needs but which were rejected by the Advisory Committee are also briefly noted. The chapter concludes with a summary of preliminary recommended actions.

GEOGRAPHIC LOCATION OF PLAN IMPLEMENTATION PROBLEMS

In considering the regional land use plan implementation problems noted above, the Advisory Committee believed it useful to provide a geographic perspective as to the location and

amount of land that might be affected by any remedies suggested to resolve the problems. By including such information, state and local government decision makers could better understand the location and amount of land that would be affected if any or all of the suggested remedies were to be implemented.

The problems associated with regional land use plan implementation occur in both the rural and urban portions of the Region. The Region encompasses a total of 2,689 square miles. Based upon the 1985 stage of the second-generation regional land use plan, the urban service area would extend over about 402 square miles, or about 15 percent of the Region. The rural portion of the Region totals about 1,811 square miles, of which 1,122 square miles, or about 42 percent of the Region, constitutes prime agricultural land and 689 square miles, or 26 percent of the Region, constitutes the remainder of the rural area. The remaining 476 square miles, or about 18 percent of the Region, is comprised of primary environmental corridors throughout the entire Region.¹

Two of the four major plan implementation problems occur entirely within the rural area. Problems associated with scattered, diffused urban development occur over the entire 1,811 square miles of rural area. Problems associated with preserving and protecting prime agricultural lands occur within the approximately 1,122 square miles of prime agricultural area.

¹Based upon the third-generation regional land use plan, the planned urban service area would extend over about 555 square miles, or about 21 percent of the Region; the rural portion of the Region would total about 1,660 square miles, of which 1,031 square miles, or about 38 percent of the Region, constitute prime agricultural land and 629 square miles, or 23 percent of the Region, constitute the remainder of the rural area; with the remaining 474 square miles, or about 18 percent of the Region, comprised of primary environmental corridors.

Plan implementation problems associated with the protection and preservation of the upland portions of primary environmental corridors occur throughout the Region. The upland portions of the corridors total about 168 square miles, or about 35 percent of the total corridor area.

The fourth major plan implementation problem, which relates to the decentralization of industrial employment and the difficulties associated with revitalization of the older industrial centers of the Region, is confined to the urban portion of the Region.

PRESERVATION OF PRIME AGRICULTURAL LANDS

Statement of the Problem

The regional land use plan recommends that the great majority of the prime agricultural lands of the Region be preserved in agricultural uses. In part, this plan recommendation is directed at avoiding unnecessary destruction of an invaluable natural resource: the soil resource. In part, this plan recommendation is directed at preserving an important element of the economic base of the Region. This plan recommendation also recognizes that only a relatively small amount of land will be needed to accommodate anticipated incremental urban development within the Region in the foreseeable future.

To achieve the objective of preserving prime agricultural lands, the regional land use plan recommends that such lands be placed in an exclusive agricultural zoning district with a minimum farm size of 35 acres and that property tax relief be provided to those land owners in an effort to help farmers maintain the land in a productive agricultural use for an indefinite period. Despite these recommendations, over the period 1970 to 1985 the loss of prime agricultural lands to urban development has been about five times the amount envisioned in the plan; moreover, even with the institution of a property tax program largely related to zoning, only about one-half of the prime farmlands have been properly zoned to reduce the likelihood of conversion of more such lands to urban uses.

The problem, then, consists of the unnecessary destruction of the productive soil resource combined with a pattern of urban development which is typically highly diffused and very low-density in nature, which occurs in scattered

fashion across the landscape, not in response to any plan to accommodate such development, but rather in response to the particular needs and desires of individual landowners and developers. Such scattered urban development makes it more difficult in a number of ways for remaining landowners to continue farming. Farming may be impeded by conflicts between farm operations and urban residential lifestyles. A reduction in the number of farms and total area farmed may eventually result in fewer, less accessible agribusiness-support operations, such as feed mills and implement dealers. Urban development tends to raise land values, resulting in an increase in the assessed value of, and property tax burden on, the remaining undeveloped farmland. Rising local government costs, attendant to the provision of services to scattered urban development, further increase the farmer's tax burden.

Major Factors Believed to Be Contributing to the Problem

After considering this matter, the Advisory Committee concluded that a number of factors appear to be contributing to the problem of preserving prime agricultural land. The following summarizes the Committee's discussion on this matter, recognizing, however, that in some cases the Committee dealt in perceptions which have yet to be properly supported by factual analysis. Accordingly, these factors should be viewed with the understanding that the Advisory Committee acknowledges, as set forth below in their recommendations, the need for additional factual information as suggested policy directions are pursued. These major factors are:

1. Agricultural Economics

Economic issues, which tend to be immediate in nature and thereby overshadow broader environmental issues, can significantly affect the ability of individual farmers to continue to pursue farming as an economic enterprise in southeastern Wisconsin. There are a number of such issues over which the individual farmer has little or no control. These include low commodity prices, commodity oversupply, government subsidy programs, international markets, and the individual cost-price considerations related to a given farm, such as farm debt, interest rates, taxes, and, related to the latter, the assessed valuation of the land. Some of

these economic issues result in attempts by farmers to improve their efficiency by increasing the scale and productivity of their farming operation. On the other hand, some farmers may respond to economic issues by pursuing a more environmentally benign form of agriculture that consists of smaller-scale, ecology-based, sustainable production. In the latter case, the commodities produced most likely would be marketed locally to that segment of the population which desires fresh, organically developed products. Since farming is a business, however, the farm operations in all cases will at least have to "break even" for farming to continue and for the land thus to be preserved in agricultural use. Failure to break even means that over a period of time the land will either be converted to another use, assuming a market demand and permissive zoning regulations, or will lie fallow and perhaps diminish in market value.

2. Urban Land-Market Demand

There continues to exist a strong urban land-market demand for relatively low-cost residential lots "in the country." Many urbanites desire to live in residential clusters within predominantly agricultural areas. This market demand is supported by the fact that transportation by private automobile is very convenient and exacts a relatively low cost, particularly with respect to the cost of motor fuel. The existence of such a market demand makes it possible for farmers in southeastern Wisconsin to sell their land for a nonagricultural use at a price per unit of land believed frequently to exceed that which agriculture is able to sustain.

3. Lack of Comprehensive State Policy Relating to Urban Development Location

While, as discussed in point No. 4 below, the State of Wisconsin has a program designed to help preserve prime agricultural lands through a coordinated set of planning, zoning, and tax-relief measures, there is no companion state policy to buttress the agricultural land preservation policy by promoting compact, contiguous, and efficient urban development patterns and to distinguish clearly between sound urban and sound rural development. While

the absence of such a state urban development policy and any state-sponsored actions to implement that policy continues to have negative effects on state functions, such as the provision of state trunk highways and the management of air and water quality, there has not yet emerged at the state level a consensus that such an urban development policy is needed. Accordingly, decisions regarding the location of new urban development and the relationship of that development to rural development continue to be made at the county and local governmental level without broad state guidance and oversight. In some cases, county and local governments in southeastern Wisconsin have chosen to enact zoning regulations designed to encourage urban land development in locations recommended in the regional land use plan, thereby reinforcing agricultural land preservation efforts; in other cases, the local zoning jurisdictions have not chosen to implement the plan, thereby allowing the urban land market to work in what at times appears to be random fashion over large geographic areas.

4. Structural and Operational Weaknesses of the Agricultural Land Preservation Program

The current Wisconsin agricultural land preservation program, comprised of a set of planning, zoning, and tax-relief measures, is hampered in a number of ways relating to the basic structure and operational character of the program. Overall, these structural and operational weaknesses represent less than a full commitment by the State to a policy of aggressively pursuing preservation in agricultural use of the remaining prime agricultural areas. These weaknesses may be summarized as follows:

- a. The program relies in its entirety on the voluntary participation either of individual county and local governments, in the case of counties that are classified as urban, or of individual landowners, in the case of counties that are classified as rural. Because of its voluntary nature, it should be expected that the results of the program will be uneven and incomplete across the Region and the State.

b. While the program in urban counties, including all seven counties in southeastern Wisconsin, calls for county-level farmland preservation plans and zoning consistent with those plans, the operation of the program appears to reflect a lack of commitment to a structured planning process that is continuous in nature and to an implementation requirement that plans and zoning be fully consistent. There is no recognition in the program, for example, of the need to update and recertify plans.² There is a need for greater commitment in the program to ensure that the exclusive agricultural zoning districts are applied in a manner fully consistent with the plan recommendations.³ While the program requires that the State be notified of zoning changes with respect to exclusive agricultural zoning districts, there is no true state-local partnership, as there is in floodland zoning, to ensure that rezonings do not cumulatively emasculate the intent of the plan. Under the current state structure, the State has only an implicit statutory option of total decertification of a zoning jurisdiction, an option that is difficult for the State to exercise except in extreme circumstances because decertification would deny tax credits to all participating farmers in the zoning jurisdiction concerned. The apparent lack of full commitment to planning and zoning is also reflected from time to time in legislative changes. Such changes brought, for example, a "window of opportunity" for individual farmers in urban counties to obtain tax

credits through individual agreements even without applying exclusive agricultural zoning to the land.

c. While the statutory intent of the program is to provide property tax relief to farmers, the program has been structured in such a way as to grant that relief through the vehicle of income tax credits. Moreover, the amount of credit granted is related to a farmer's income. In many cases only a minimum credit, calculated as 10 percent of the farmer's property tax, but not to exceed \$600, is allowed. That minimum credit is viewed by many farmers as inadequate, given the attendant constraints on the potential development of the land. Even when a full credit is available to a farmer, the perceived value of this credit is believed to be diminished because the credit is not received at the time of the payment of the property tax bill, but rather is set forth as a line item in a complex income-tax accounting form prepared at a later date. The choice by the Wisconsin Legislature of an income tax credit approach to provide property tax relief, thus, has certain drawbacks and reflects more a commitment to target tax relief to low-income farmers than a commitment to preserve land in agricultural use.⁴

²In the Southeastern Wisconsin Region, the six counties with significant agricultural areas, Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha, completed farmland preservation plans between 1977 and 1984. None of these plans has been reevaluated and updated.

³For example, under the Town of Mukwonago Zoning Ordinance as certified by the State, less than one-third of the farming areas recommended for preservation in the Waukesha County Farmland Preservation Plan were placed in an exclusive agricultural zoning district.

⁴The structuring of the state program to provide indirect property tax relief through a progressive income tax credit has led some local officials to conclude that the state program tends to attract primarily owners of economically marginal farm operations. Other local officials have indicated that while the progressive income tax-related nature of the program may effectively exclude many farmers from relatively large property tax credits, other factors are significant in determining the extent to which individual farmers in a given area chooses to participate in the State's program. These factors include the extent to which local elected officials exhibit leadership in terms of participating in and promoting the program and the extent to which those same political leaders and others in the area concerned perceive that there is a good potential for converting land from rural to urban use because of market demand.

d. The level of tax credit provided under the program has not kept pace with the level of property taxes paid. The structure of the program provides for a maximum credit of \$4,200, which was established in 1979. Given inflation since 1979, the maximum credit has now been effectively reduced to the equivalent of about \$2,150. Thus, the credit level has not changed with real and inflationary changes in property taxes.

5. Assessments of Agricultural Land

The Wisconsin agricultural land preservation program is perceived to have had only a minimal affect in urbanizing counties on holding down assessments on lands that are classified as prime farmlands, even in the case where such prime farmlands have been placed in exclusive agricultural use zoning districts. In part this is because of the geographically scattered nature of the farmland preservation program reflected both in a broad "checkerboard" pattern of participation by zoning jurisdictions and, in some cases, in a narrow "checkerboard" pattern within an individual zoning jurisdiction, which results in the sale and conversion to urban development of scattered farms. The market value of the land sold for urban development is then imputed to adjacent farmlands by local assessors, thus raising farmland assessments and the property taxes paid by farmers. The perceptions of the Advisory Committee are that exclusive agricultural zoning is not widely viewed by local assessors as a permanent impediment to the conversion of land from rural to urban use. Apparently that viewpoint is also held in the private land market sector, since offering prices for land zoned for exclusive agricultural use are often based upon the speculative value for development rather than on an intrinsic value for agricultural production. Taken together, these factors impose higher assessments and consequently higher property taxes on many farmlands, including those enrolled in the state farmland preservation program and thus subject to exclusive use zoning.

6. Widely Held Views of Property Rights

One of the major impediments to the imposition of exclusive agricultural use

zoning with large minimum farm sizes is the widely held view, frequently expressed by elected town and county officials, that while zoning is an appropriate public policy tool to regulate the details of both rural and urban development, zoning should not be used to prohibit a landowner from converting land from rural to urban use. This viewpoint is clearly reflected in the older zoning ordinances in the Region that permit urban residential development on agriculturally zoned lands and agricultural uses on residentially zoned lands and is rooted in a belief that a landowner has a fundamental right to make such a decision without zoning interfering with that right.

Actions Proposed to Be Taken
to Help Resolve the Problem

Given the foregoing, and recognizing the need for more information before changes in public policy attendant to agricultural land preservation can be precisely described, debated, and endorsed, the Advisory Committee recommends that an effort be undertaken to strengthen the existing Wisconsin Farmland Preservation Program. That effort would begin with a well-structured evaluation of the effectiveness of that program, including the development of a data base designed to address the perceptions noted above related to the structural and operational weaknesses of the current program and to assessment practices of agricultural land. Recognizing that such a detailed program evaluation would provide substantial further insight into this matter, the Advisory Committee did draw some tentative conclusions as to how the program might be revised to make it a better and more effective tool in achieving the objective of preserving prime farmlands. These conclusions would lead to the following adjustments to the program:

1. Greater Commitment to Planning

The Committee suggests that the Wisconsin Farmland Preservation Program be renewed and strengthened by a greater commitment to county farmland preservation plans. While the basic thrust of the current plan requirement is sound, the Committee suggests that the program recognize the periodic need to update and recertify each county plan, including a recognition that county plans be properly related to duly adopted regional plans and

the need to require that all state and local government actions regarding farmland preservation zoning and tax credits be specifically related to, and consistent with, the adopted county plans. Any proposals to deviate from the adopted plans should begin with a reevaluation of those plans. Specific consideration should be given to required county plan revisions at regular intervals of no more than 10 years.

2. Less Inclusive Definition of Prime Farmlands

As presently structured, the state program provides considerable flexibility to county and local governments in defining what lands are to be designated as prime farmlands and thereby become eligible for tax credits. Credits are now being given, for example, even to those landowners who are farming lands that in county plans had been designated as transitional in nature and to be converted to urban use. Such credits, in the opinion of the Advisory Committee, are unnecessary. The Committee suggests that the definition of prime farmlands be made less inclusive, with a view toward identifying truly large, contiguous blocks of prime farmland that are not needed for urban development in the foreseeable future and that are not considered suitable for the location of new urban development in adopted farmland preservation plans. Available tax credit funds should be focused on such less inclusive areas.⁵

3. Strong Relationship between Zoning and Planning/State-Local Zoning Partnership

The Committee suggests that the program have a strong and consistent zoning aspect. The program should require that all lands identified for preservation in identified county plans be required to be placed in exclusive agricultural use zoning districts with a 35-acre minimum farm size.

Furthermore, that exclusive use zoning should be made a truly state-local partnership zoning in a manner akin to the state-local partnership zoning attendant to floodplains and shorelands. Any changes to exclusive use agricultural zoning would, under such a partnership, have to be approved both at the local and state levels of government and would require first a change in the plan. Such a partnership approach to zoning would ensure long-term stability in the preservation program and would send a signal to the land market of a strong commitment to the permanent preservation of such lands in agricultural and open space uses. The Committee suggests that such signals would, in turn, be reflected in market prices paid for land and should result in lower farmland assessments and lower property taxes paid by farmers. The Committee noted that it would be important that local assessors understand the stable nature of the commitment to prime agricultural zoning that would be inherent in the proposed state-local zoning partnership and reflect that commitment in the assessment practices at the local level. If local assessors do not recognize such a stable commitment to zoning, then pressures could be expected to mount for county- or even state-level assessment of prime farmlands.

4. Direct Property Tax Credits

The Advisory Committee also suggests that consideration be given to restructuring the program to provide direct property tax relief, not income tax credits. The program should provide for a significant measure of relief, in contrast to the minimum credit to which many farmers are currently limited. In the view of the Committee, the state commitment ought to be to the preservation of the prime farmland, irrespective of the income of the owner of those lands.

The overall objective of the foregoing suggested changes to the State Farmland Preservation Program would be to bring about a greater commitment to the permanent preservation of prime farmland in southeastern Wisconsin and throughout the State. As perceived by the Advisory Committee, the present tax credit and

⁵*In those cases where a new county plan would result in a farmer no longer being eligible for tax credits, it is suggested that any payback requirement attendant to previously received credits be waived.*

farmland preservation planning and zoning program is not viewed as having much permanency by the parties concerned. Many landowners are believed to view the program as short-term in nature, and offering relatively modest property tax credits. Other landowners are believed to choose not to participate in the program because the credits are insignificant in light of personal income levels and in light of the related constraints on the potential development of the land. Furthermore, it is believed that assessors do not view exclusive agricultural zoning as much of an impediment to the conversion of land from rural to urban use. If these perceptions are confirmed in the recommended evaluation of the program, the changes proposed would seek to create an environment in which the preservation of prime agricultural lands would be viewed by all concerned as a permanent objective for large blocks of land. This would be accomplished through a state-local partnership approach to planning and zoning, through significant reductions in property assessments on the lands concerned, and through the provision of direct property tax relief.

The Advisory Committee also recommends that in conducting the suggested program evaluation, specific consideration be given the following two concerns. The first involves an assessment of the potential shift in the property tax burden from those property taxpayers who own prime farmland to other property taxpayers should the suggested state-local zoning partnership for prime farmland become a reality. The Advisory Committee recognizes that, in some cases, such a zoning partnership could reduce the anticipated market value of land and, consequently, the assessment of that land. Any significant reductions in property assessment, however, are likely to be confined to those portions of south-eastern Wisconsin where urban development pressures are greatest and where market and assessed values of land have significantly increased in anticipation of future conversion of land from rural to urban use. In many portions of the Region, however, the Advisory Committee would not expect large reductions in the assessment of prime farmlands since there are no significant urban development pressures. The program evaluation should examine this concern and assess and document any expected shift in property tax burden from the prime farmland to other rural lands and to urban properties.

The second concern relates to ensuring that the suggested state-local zoning partnership be instituted in a sound manner so that the zoning would be able to withstand legal challenges of unconstitutional takings and inverse condemnation. The Committee suggests that this can be accomplished primarily by ensuring that the county farmland preservation plans and attendant state-local farmland preservation zoning identify only those farmlands that are truly productive, with agriculture constituting an economically viable land use for the foreseeable future. The selection of sound criteria for the designation of farm parcels as prime farmland should take into account not only the soil resources, but also considerations of the urban land market and of location. If prime farmlands are properly defined and included in a plan and then are made subject to the recommended state-local partnership zoning, there should be little or no risk associated with legal challenges of unconstitutional taking of the property through such zoning. Moreover, the suggested state-local zoning, like all good zoning ordinances, must provide for an appeal mechanism to provide an administrative remedy in those cases, for example, where the plan is later determined to be based upon faulty information or where changing circumstances render the plan and zoning ordinance obsolete.

The Advisory Committee recommends that the suggested program evaluation be sponsored by the Wisconsin Department of Agriculture, Trade and Consumer Protection. The evaluation should also include participation by the Wisconsin Department of Revenue and other interested parties, including county and local governments, the agricultural community, environmental interest groups, and regional planning commissions.

PROMOTION OF COMPACT AND CONTIGUOUS URBAN DEVELOPMENT

Statement of the Problem

The regional land use plan recommends that new urban development in the Region be located in areas that can be readily and economically provided with essential public sanitary sewer and water supply services. In essence, the plan seeks to promote a compact, contiguous urban

development pattern with cost-effective outward extensions of public utility systems. To achieve this objective, the regional land use plan recommends that lands not proposed for new urban development and not included within delineated primary environmental corridors either be placed in exclusive use agricultural zoning districts if prime farmlands are concerned, or if nonprime farmlands are concerned, be placed in truly rural residential zoning districts with minimum lot sizes of five acres. Despite this recommendation, about half of the new urban residential development that has taken place in the Region, measured in terms of total area converted to urban residential use, has occurred in a highly diffused fashion in areas not contiguous to existing urban growth at very low densities and supported by onsite sewage disposal systems and private wells. This development is, nevertheless, urban in character, occurring typically on lot sizes of one to two acres, and thus does not meet the definition of truly rural residential development. In some cases this development has occurred on prime farmland; in other cases it has occurred in those remaining portions of the rural area of the Region where urban residential development is recommended to be discouraged.

The basic problem, then, is twofold. First, by locating such diffuse new urban development on prime farmlands, the productive soil resource is destroyed in terms of any future agricultural potential. Second, a highly diffused, low-density urban development pattern is created, carrying with it potentially high future costs associated with the ultimate failure of onsite sewage disposal systems and the potential contamination of private wells, with the provision of adequate stormwater management, and with the provision of urban services such as solid waste collection and police and fire protection. Moreover, an urban development pattern scattered throughout a rural landscape makes it very costly and impractical to provide transit to serve the travel needs of the residents of these areas, should that become necessary, thus making the area totally dependent on travel by automobile.

Major Factors Believed to Be Contributing to the Problem

The Advisory Committee concluded that there appear to be several factors that contribute to the problem of continued diffusion of low-density

urban residential development in the outlying rural areas. These factors may be summarized as follows:

1. Urban Land Market Demand

As noted above under the discussion attendant to the preservation of prime agricultural lands, there continues to exist a strong urban land market demand for residential lots to be served by private sewage disposal systems and private wells in rural areas. The regional land use plan recommends that this demand be satisfied by the public sanctioning, through appropriate zoning, of the development of truly rural residential lots in two kinds of locations: 1) in the upland portions of primary environmental corridors beyond planned sanitary sewer service areas and 2) on those rural lands not deemed to be prime agricultural in character. The five-acre minimum was chosen because it is generally believed that development at that density or lower can be accommodated without significant alteration of the landscape, without creating costly stormwater drainage problems, without significant disruption to the wildlife habitat, and without creating concentrations of sewage disposal systems and private wells, which threaten groundwater pollution and the public health. A five-acre-minimum lot would normally provide sufficient area to locate one or more replacement onsite sewage disposal systems. In addition, residential development at five-acre-minimum densities would not create travel demands that exceed the safe capacity of the existing system of farm-to-market roads. Instead of attempting to meet the market demand on lots at least five acres in area, the land market, abetted by historic zoning practices in some areas of the Region, continues to create and offer substantial numbers of one- to three-acre lots.

2. Lack of Comprehensive State Policy Concerning Urban Development Location

As noted in the discussion above of the preservation of prime agricultural lands, there is no state policy designed to promote compact, contiguous, efficient urban development patterns, nor to distinguish clearly

between sound urban and sound rural development. This lack of state policy not only works against the state policy of preserving prime agricultural lands, but also stands as implicit endorsement by the State of the continued marketing of urban residential lots in rural areas. The absence of such a state urban development policy continues to have negative affects on state functions, including the provision of state trunk highways and the management of air and water quality.

3. Diminishment of the Effect of Septic Tank Regulation on Development Patterns
At one time the regulation by county and local governments of the installation and maintenance of private sewage disposal systems had worked to help implement the regional plan recommendation to promote a more compact and efficient urban development pattern. Over the last 15 years, however, state-sponsored research has developed engineered, onsite, largely above-ground sewage disposal systems which, when combined with mandated uniform statewide regulation of such systems, have made it possible for developers to promote new urban development in widely scattered locations throughout the Region. In addition, in some jurisdictions sewage holding tanks are being allowed to serve new urban development. While some questions may remain as to the long-term efficacy of these state-sponsored changes and as to the means of disposal of septage, the natural soil limitations on the safe operation of septic tank systems can no longer be considered to represent an effective constraint on the location of new urban development.
4. Widely Held Views of Property Rights
As noted above under the discussion of prime agricultural land preservation, a major impediment to regional land use plan implementation in terms of the placement of new urban residential development is the widely held view that zoning regulations should not be used to prohibit a landowner from converting land from rural to urban uses. There is great reluctance in some zoning jurisdictions because of this viewpoint to replace historic, blan-

ket, small-lot urban residential zoning with relatively large-lot, five-acre-minimum rural residential zoning.

Actions Proposed to Be Taken to Help Resolve the Problem

After carefully considering this problem and the factors that contribute to the problem, the Advisory Committee suggests that consideration be given to the following:

1. Formulation of State Policy on the Promotion of Compact and Efficient Urban Development Patterns
The Committee recommends that a formal state policy be developed which promotes and favors compact, efficient urban development patterns. Such a policy should include direction to state agencies to take the policy into account when formulating and administering rules and regulations and when carrying out their day-to-day responsibilities and duties. Leadership in securing the legislation needed to express such a policy should come from both the Wisconsin Department of Natural Resources and the Wisconsin Department of Transportation, two state agencies whose missions and programs are most directly and adversely affected by continuation of scattered, diffused urban development patterns.
2. Integration of State-Level Oversight of Private Sewage Disposal System Regulation with Areawide Water Quality Management Plan
The Committee recommends that a process be established at the state level to ensure that state decision making with respect to the installation of private sewage disposal systems is consistent with the areawide water quality management plan for southeastern Wisconsin that has been formally adopted by the Wisconsin Natural Resources Board. In effect, this recommendation would extend to private sewage disposal systems the same regulatory and decision-making framework now in place with respect to the construction of sewage treatment plants and the extension of public and private sanitary sewers. As discussed in Chapter IV, under administrative rules adopted by the Wisconsin Natural Resources Board, the Wisconsin

Department of Natural Resources may not approve sewage treatment plants and public sanitary sewers without first making a finding that the development proposed to be supported by such sewerage facilities is in conformance with, and would serve to implement, the land use element of the adopted areawide water quality management plan. No similar regulatory link between the adopted plan and state decision making concerning private sewage disposal systems currently exists; the Committee recommends that this gap be filled.

The Committee recognizes that new legislation may be required to effect this recommendation. Two state agencies are involved in this matter: the Wisconsin Department of Natural Resources, whose governing Board has the responsibility to formally adopt and administer the State's water quality management plan, a key component of which is the areawide water quality management plan for southeastern Wisconsin; and the Wisconsin Department of Industry, Labor and Human Relations, which currently has the statutory responsibility to regulate the installation of plumbing systems, including private sewage disposal systems. The latter regulation in southeastern Wisconsin is carried out exclusively through state-county relationships throughout southeastern Wisconsin, except for Milwaukee County, which is for all practical purposes fully sewerred.

Under the regulatory system envisioned by the Advisory Committee, the State would require that all permits issued for private sewage disposal systems be accompanied by a finding that the land use development proposed to be served by a system is in conformance with, and would serve to implement, the areawide water quality management plan adopted by the Natural Resources Board. Absent such a finding, the six county agencies in southeastern Wisconsin that have the responsibility to review applications for permits for private sewage disposal systems, subject to the oversight of the Wisconsin Department of Industry, Labor and Human Relations, would be prohibited from issuing permits. From an administrative and legal point of view, the

findings would be made by the regulatory agencies concerned, the Wisconsin Department of Industry, Labor and Human Relations and the county agencies which issue the permits under that Department's rules. Like the process currently in place for sewage treatment plants and sanitary sewer extensions, however, most of the work of carrying out that function could be completed by the Regional Planning Commission at the request of the Department.

As a practical matter, what this recommendation would mean is that a proposed land development project to be served by one or more private sewage disposal systems would not be able to move forward unless and until the project was designed in accordance with the land use recommendations included in the adopted regional water quality management plan. Just like sewerred urban subdivisions now are required to be designed to be consistent with that plan insofar as location within a planned sewer service area is concerned, and insofar as the relationship between that subdivision and primary environmental corridors is concerned, irrespective of local zoning requirements, subdivisions and other land development projects proposed to be served by private sewage disposal systems would also have to meet the land use plan recommendations with respect to location and density. Subdivisions on prime agricultural lands outside of planned urban service areas would be effectively precluded, as would subdivisions in other rural areas unless the development density was found to be consistent with the plan. In such other rural areas, that development density would have to be no greater than one residential dwelling unit per five acres of land. This density could be achieved through either the platting of five-acre-minimum-size lots or through a cluster design which might plat smaller than five-acre lots but include deed-restricted open space lands so that overall development density did not exceed one unit per five acres of land.

By implementing this recommendation, the State would be taking a major step toward fulfilling its commitment to imple-

mentation of the regional water quality management plan as adopted by the Natural Resources Board, effectively treating development outside of planned sewer service areas in the same way as development is treated within such areas. The recommended approach would help discharge the responsibilities of the Wisconsin Departments of Natural Resources and of Industry, Labor and Human Relations under the Wisconsin Environmental Policy Act, whereby state agencies are required to examine not only the primary, or direct, impacts of regulatory decisions, but the secondary, or indirect, impacts as well. To date, the Wisconsin Department of Industry, Labor and Human Relations, in discharging its responsibilities with respect to the regulation of private sewage disposal systems, has chosen to focus only on the primary impacts of those systems, ignoring the secondary, land use-related, impacts that occur when regulatory decisions are made.

PROTECTION AND PRESERVATION OF UPLAND PORTIONS OF PRIMARY ENVIRONMENTAL CORRIDORS

Statement of the Problem

The regional land use plan recommends that the primary environmental corridors of the Region be protected and preserved. The Advisory Committee concluded that the current set of public land use control regulations, particularly including the state-local partnership zoning efforts attendant to floodlands, shorelands, and wetlands, combined with the integration of state and regional water quality management planning and the link between that planning and state regulatory decision making regarding sanitary sewer extensions, effectively operates to protect about three-quarters of the primary environmental corridor lands.

The Committee also found, however, that about one-quarter of the corridor lands are vulnerable to development and destruction, particularly through urban residential development utilizing onsite sewage disposal systems. The vulnerable corridor lands are upland in nature, consisting largely of woodlands, significant wildlife habitat areas, and, particularly outside of planned sanitary sewer service areas, steeply sloped lands.

Destruction of these upland corridor areas continues to occur outside planned sewer service areas where urban residential development projects supported by septic tanks and private wells are approved with no local zoning to the contrary. Some of the vulnerable lands lie within planned sanitary sewer service areas in locations where the Wisconsin Department of Natural Resources is unable to buttress a denial of a sewer extension with a finding of adverse water quality impacts related to a proposed development project.

This particular regional land use plan recommendation is underlain by ecological considerations which dictate that the upland, as well as lowland, portions of environmental corridors be protected and preserved. The upland areas are as essential as the lowland areas to providing corridor continuity and biological diversity in terms of plant and animal life. The problem, then, is one of failure to take all of the steps necessary to provide the proper protection to these environmentally sensitive areas. While the regional land use and companion park and open space plans identify certain primary environmental corridors for public acquisition, it is recognized in those plans that there are insufficient funds available to acquire all such corridor lands. In many cases, then, the plan calls for the imposition of public land use regulations that would permit truly rural, low-density residential development within the upland corridors which would not destroy the resource base. That development, however, should not exceed a density of one unit per five acres of corridor land.

Major Factors Believed to Be Contributing to the Problem

The Advisory Committee concluded that there are a number of factors which appear to contribute to the problem of continued loss of upland primary environmental corridors. These factors are summarized as follows:

1. Market Demand for Wooded Lots

Wooded terrain has long been viewed as desirable locations for residential development. This is true both within urban areas, where wooded single-family lots typically command higher market prices than open lots, and in rural areas, where the upland wooded portions of primary environmental corridors are frequently targeted for conversion to urban use before adjacent farmland.

2. Maximum Economic Return to Developers
Given a strong urban residential land market demand, some developers have long sought to maximize their economic return on a parcel by creating as many individual building sites as possible that can be marketed as wooded lots. This is true both in sewerred urban areas and in unsewerred rural areas. The typical lot size in a sewerred urban area is one-half acre, while in unsewerred areas it is one acre, far from the five-acre minimum called for in the regional plan.

3. Historic Approach to Local Zoning of Upland Wooded Areas
Historically, local zoning jurisdictions have tended to reflect the urban land market demands for wooded lots by placing upland wooded areas in zoning districts that respond to the desires of land developers to create as many wooded lots as possible. The local zoning ordinances tend to be oriented toward achieving the narrow public objective of establishing as much high-value residential tax base within such wooded areas as possible, rather than achieving the broader public objective of preserving and protecting the upland woods as important parts of the natural resource base.

4. Fragmented Approach to State Environmental Legislation
Efforts at the state level of government to address the failure of local governments adequately to protect environmentally sensitive lands through zoning have been fragmentary rather than comprehensive in nature. Thus, over time, Wisconsin enacted legislation that protected as individual components of the resource base floodplains, shorelands, and most recently, wetlands within shorelands, rather than comprehensively addressing all the resources, both upland and lowland, that make up environmental corridors. Moreover, it is often difficult in local zoning jurisdictions to create the political will necessary to enact protective zoning regulations to address the upland-resource portions of the environmental corridors because the state-mandated efforts are typically viewed as all that is necessary to protect the resources adequately. Thus, the regulatory extent

of the state-mandated zoning efforts tends to become the lowest common denominator upon which most zoning ordinances are based. This categorical approach to the state-mandated protection of natural resources is fundamentally contrary to the ecological considerations that would view the whole of the resource base as having greater value than the sum of its individual parts.

Actions Proposed to Be Taken to Help Resolve the Problem

After carefully considering this problem and the factors that contribute to the problem, the Advisory Committee suggests that consideration be given to the following:

1. Broadening of Existing State-Local Floodland and Shoreland Zoning Partnership to Address Environmental Corridors

The Committee recommends that consideration be given to changing the existing state-local zoning partnership regarding floodlands and shorelands into one that is based not on the individual resource base elements of floodlands and shoreland, but more broadly on environmental corridors as a whole. This would require abandoning the current statutory relationship between shoreland zoning and navigable waters, a relationship that historically has been difficult to operationalize properly given the lack of definition of navigable waters, and establishing a new relationship based upon defined and delineated environmental corridors. In essence, this new relationship would require the preparation and adoption of plans that identify environmental corridors based upon sound criteria, a basic step already completed in southeastern Wisconsin. The relationship would also require that county and local zoning jurisdictions, subject to the same type of state oversight that exists today relative to floodplain and shoreland zoning, adopt and enforce zoning ordinances fully consistent with the corridor preservation and protection recommendations. As is the case with the current approach to floodplain and shoreland zoning, the State would adopt zoning standards. These standards, however, would be consistent

with the plan recommendations and not be the basis upon which plans are formulated. One such standard, for example, would be the five-acre residential development density recommended in the upland portions of primary environmental corridors. Local zoning regulations would be required to meet this standard either through a five-acre residential lot size minimum or, as already noted, through a cluster design that would permit smaller than five-acre building sites combined with deed-restricted private open space so that the overall density standard is met.

2. Broadening of the Basis for State Sanitary Sewer Extension Decision Making

As noted above, the existing link between state-level decision making on sanitary sewer extensions and the areawide water quality management plan serves effectively to protect many portions of environmental corridors where there is a clear and direct relationship to the protection and enhancement of the surface and groundwaters of the State. The basis for this link lies in state water quality-related legislation and the mission of the Wisconsin Department of Natural Resources in carrying out the intent of that legislation. Under this proposal by the Advisory Committee, the Wisconsin Department of Natural Resources, which has a resource protection mission broader than water quality alone, would broaden the basis upon which it could make regulatory decisions attendant to sanitary sewer extensions. The Advisory Committee recommends that the Department examine this matter and take such action as may be necessary to broaden the basis for the regulation of sanitary sewer extension to encompass protection of all the resources found in the environmental corridors.

3. Elimination of "Loophole" in Current State Regulatory Framework Regarding Sewer Extension Reviews

While the Wisconsin Department of Natural Resources, with respect to public sanitary sewer extensions, and the Wisconsin Department of Industry, Labor and Human Relations, with respect to private sanitary sewer extensions, generally are able to link their regulatory decisions to the recommen-

dations of the areawide water quality management plan adopted by the Wisconsin Natural Resources Board, there does exist one "loophole" in that linking framework. That loophole relates to the exemption from seeking water quality plan conformance findings for all building sewers proposed to serve buildings that have less than 54 "drainage fixture units." This provision effectively eliminates from the plan conformance review process one- and two-family homes and some commercial buildings, potentially even large warehouses. The effective result of this exemption is the construction from time to time of buildings within primary environmental corridors in a manner inconsistent with the plan recommendations and the consequent destruction of the resources found therein. The Advisory Committee recommends that this exemption be eliminated from the administrative rules promulgated by the Wisconsin Department of Industry, Labor and Human Relations so that the resources are fully protected and landowner equity achieved.

REVITALIZATION OF THE OLDER INDUSTRIAL CENTERS OF THE REGION

Statement of the Problem

The Advisory Committee examined that aspect of the regional land use plan dealing with the number, size, and location of major industrial centers in the Region. The Committee found that private sector land market forces—often with public sector support in the form of publicly owned industrial land banks, tax incremental financing techniques, and favorable zoning decisions, all focused on tax base enhancement—have operated in recent years to effect a significant decentralization of jobs. Employment densities in the older industrial centers in the Region, including Kenosha, Milwaukee, Racine, West Allis, and West Milwaukee, have declined significantly. Major new employment centers are being created in the outlying portions of the Region, not only at locations where the regional land use plan recommended that new centers be created, but at other locations in the Region as well.

This trend of job decentralization has a number of implications that combine to create a plan implementation problem. These include a grow-

ing stock of deteriorated and underutilized industrial buildings; a growing stock of sites cleared of obsolescent structures, reuse of which is constrained by problems costly to correct, such as pollution by toxic or hazardous materials; an increasing underutilization of the existing transportation and utility infrastructure in the older portions of the Region; and the creation of new jobs at, or relocation of existing jobs to, locations that require longer travel distances for central city residents, thus making it more difficult and costly for those residents to access jobs and contributing to the increase in the amount of overall travel in the Region.

It is recognized that while, in some cases, municipalities grant rezoning decisions in response to newly proposed industrial development, in other cases, municipalities prezone substantial areas of land for industrial land well in advance and often in substantial excess of the existing and even probable future market demand. Regional Planning Commission studies have identified substantial overzoning for industrial purposes throughout the Region. In many cases, that overzoning takes place in areas that may be appropriate in the long-term future for industrial development, but which lack essential public utility infrastructure. Notwithstanding such overzoning, however, local communities in the Region also often rezone for industrial use for the express purpose of accommodating a specific development proposal, sometimes at variance with regional and local land use plans, and even in the face of overzoning elsewhere.

Major Factors Believed to Be Contributing to the Problem

In considering this matter, the Advisory Committee concluded that a number of factors appear to be contributing to the decentralization of employment in the Region, which factors make it difficult to revitalize the aging industrial centers in the Region as recommended in the adopted regional land use plan. Factors which need to be recognized in this respect include:

1. Physical and Spatial Factors

The older industrial centers in the Region were developed in large part in the first half of the 20th century with railway access as a primary location criterion. The physical structures are frequently multi-story in nature and aging, and, in many cases, are obsolescent in terms of accom-

modating current manufacturing, warehousing, and office needs. Furthermore, many structures are environmentally obsolescent in the sense that they are poorly insulated and inefficient in energy use. In addition, in some cases, the buildings contain asbestos, which may present a reuse problem. Current production and distribution methods place a premium on spatial efficiency and on freeway access. That premium can be realized only in newer horizontal structures located in proximity to freeway interchanges.

A shift of goods movement from railway to truck has placed a premium on locations with good freeway access. The change in production techniques requiring "just-in-time delivery" of materials and components is related to that premium, with the arterial system becoming virtually a part of the production line. Most of the older areas were developed with good access to the railway and, in some cases, waterway systems. That access is no longer needed in many cases. Even though an older industrial area may be located relatively close to the freeway network, if the sites cannot be seen from the freeway the sites are at a competitive disadvantage with newer sites in outlying areas selected with freeway access in mind.

In addition, these older centers were developed largely before the dominance of the automobile in personal travel and, as a result, the areas do not include sites large enough to accommodate adequate off-street parking. The sites often are not large enough to provide the flexibility needed by dynamic, growing companies to expand, which some companies do as often as every five years.

Another factor relates to the environmental constraints found in older areas. In some cases, historic production practices have led to site contamination. Under current environmental laws, reuse of the sites requires costly remediation efforts. These remediation costs alone place older central city sites at a competitive disadvantage with new, outlying, uncontaminated sites.

A final factor that is physically and spatially related involves the entire concept of "quality" which is currently a strong driving force. For many firms, obtaining the goals associated with the concept of "total quality management" means providing modern work places in campus-like settings, viewed as essential to attracting personnel who are interested in "quality" production and results. Not only do these firms desire high-quality buildings and sites to attract and retain a good work force, but the quality perception means that the neighborhood within which the work force is placed must also be perceived as a quality environment. The problems of neighborhood deterioration in the vicinity of aging industrial areas, which have both physical and social dimensions and which are manifested in both real and perceived threats to the security of persons and property, work against redevelopment efforts. Real estate professionals believe that these quality-related factors are a major driving force in site selection at the present time; a force which, by its very nature, works against siting decisions in the older industrial areas of the Region.

2. The Owner/Manager Residence Factor

Real estate professionals have observed that one of the factors in making industrial location decisions is the personal residence of the owner and/or key managers of a firm. Those owners and managers in recent years have tended to select personal residences in outlying suburban and exurban locations. When decisions must be made concerning expansion and/or relocation of the firms that those individuals own or manage, there is a tendency to seek new sites in proximity to their personal residences. This factor works directly against efforts to revitalize the aging industrial centers in the Region.

3. Property Tax Base Factors

Local governments usually perceive it to be in their financial best interest to seek industrial tax base. Local officials generally believe that an increase in industrial tax base will help reduce future property taxes paid by residential property owners.

Given the complexity of the system of state aids, that perception may or may not be borne out, since an increase in municipal tax base may lead to a reduction in state aids. Nevertheless, industrial tax base tends to be perceived as desirable in most municipalities and, hence, it should be expected that public sector efforts will continue to be made to attract industrial development to newly established outlying centers, including efforts to attract existing firms from the older industrial centers in the Region.

Conclusions and Preliminary

Recommendations of the Advisory Committee

Taking into account the complex factors bearing on this matter, the Advisory Committee agreed upon the following conclusions and preliminary recommendations with respect to the broad problem concerning revitalization of the older industrial centers of the Region:

1. Future regional and local land use plans should emphasize infill development within the older industrial centers of the Region. The plans should not necessarily presume that current employment levels in the older industrial centers will be maintained. This is not to say that some of these older centers will not survive as regional industrial centers in terms of meeting the minimum employment threshold specified in the plan of 3,500 industrial employees. It is to say, however, that there are many forces working against the widespread revitalization of these areas as major employment centers and that, in most cases, these aging centers will need to be downscaled and/or converted to other kinds of land uses.

The basis for the Committee's conclusion lies in a realistic appraisal of the costs associated with attempting to assemble and market in a competitive redevelopment mode the older industrial centers of the Region. To be competitive with newer suburban centers, sites from 100 to 300 acres in area would have to be assembled, cleared, and environmentally decontaminated. At a minimum, it may be expected that the costs of so doing in an older urban area could reach as high as from \$0.5 to \$1.0 million per acre. In comparison, fully

improved, environmentally clean, and "quality" conscious industrial land in outlying locations can be provided at costs ranging from \$45,000 to \$80,000 per acre. Even if the costs were more competitive, environmental and historic preservation requirements often make it difficult to assemble a large central city site that could be marketed competitively with new suburban sites. While state urban redevelopment and blight elimination laws can be helpful in bringing about industrial redevelopment projects, federal law on environmental decontamination frequently works against efforts to reuse available sites. Given the foregoing, it is likely that employment levels in the aging industrial centers of the Region will continue to decrease.

2. Notwithstanding the foregoing, the Advisory Committee concluded that the local communities concerned should undertake strategic and physical planning efforts relating to each of the major aging industrial areas. Properly structured and carried out, such detailed, neighborhood-oriented planning would help to determine the extent to which each of these areas may be expected to remain as an employment center, and the concomitant extent to which part or all of the area concerned might better be converted to other land uses. Through such planning it may be possible to develop a unique industrial role for a particular area that could involve, for example, public training and other work force oriented programs. It might also be possible to relocate in such areas firms that are already in central city locations and that need to relocate for spatial and environmental reasons. Public assistance tools like tax incremental financing and enterprise zones can be expected to be helpful measures in this redevelopment planning, but it should not be expected that these measures will enable relatively small-scale redeveloped central city sites to compete effectively with relatively large-scale new sites in outlying areas.
3. In recognition of the importance of having competitive employment centers in south-eastern Wisconsin, competitive in the

sense that these employment centers are viewed as advantageous in the international and national competition for businesses and industries, and in further recognition of the interests of equity attendant to the property tax base that such employment centers create, the Advisory Committee recommends that a study be undertaken to provide greater insight into the affects of competition among local governments for tax base within south-eastern Wisconsin. That study should be structured to provide a sound data base on the extent to which industrial property impacts the property tax burden of residential taxpayers in varying kinds of local communities given the current system of state aids. Moreover, the study should examine the potential desirability of instituting some mechanism for sharing the tax base in Wisconsin that might further greater equity and might help reduce the tax base competition among communities that works against implementation of the regional land use plan. Such a study should be undertaken by a committee created for this purpose at the regional level or, in the alternative, at the state level by a gubernatorial or legislative committee. In either case, the committee should include private sector professionals knowledgeable about the forces underlying the present trends toward decentralization of industrial employment such as the spatial, locational, and transportation needs of modern manufacturing industries; the fiscal impacts of industrial development on general- and special-purpose units of local government; the incentives offered by competing municipalities to attract and retain industrial development; and the impact on transportation, employment, and taxation in urban areas of industrial decentralization.

OTHER PLAN IMPLEMENTATION TECHNIQUES CONSIDERED

In developing the foregoing recommendations concerning actions to strengthen regional land use plan implementation, the Advisory Committee considered and rejected other potential plan

implementation techniques. The following briefly addresses the Committee's findings with respect to these other techniques:

1. Comprehensive State-Level Growth Management Framework

One of the plan implementation techniques considered would involve the creation of a new comprehensive land use planning and plan implementation framework in Wisconsin. A growing number of states in the nation have chosen in recent years to put in place various types of urban and rural growth management frameworks substantially different from the framework established under the standard planning enabling legislation developed in the 1920s. While these state efforts have different emphases, the essential elements of such a new framework for Wisconsin would include the following:

- a. Mandatory regional planning throughout the State.
- b. A legislatively mandated consistency between regional plans and state-level plans and policies.
- c. A mandated undertaking of county and local planning that would be intended to refine and detail the regional plan and be fully consistent with such plans.
- d. A mandated consistency between county and local plans and county and local zoning ordinances and maps.

The Advisory Committee gave consideration to recommending such a broad restructuring of the planning enabling legislation in Wisconsin. As reflected in the recommendations presented earlier in this chapter, the Committee opted instead for what might be termed evolutionary changes in the current growth management framework in Wisconsin. In the opinion of the Advisory Committee, while the conceptual growth management framework reflected in state-mandated planning and vertical and horizontal plan consistency might have merit and be fully warranted elsewhere, especially in rapidly growing states, such an approach should

not be necessary to achieve the goal of greater implementation of the regional land use plan in southeastern Wisconsin.

2. Acquisition of Development Rights on Prime Agricultural Lands

The Advisory Committee gave consideration to the plan implementation technique of public acquisition of development rights as a way of preserving all or selected prime agricultural lands in the Region. The Committee rejected this technique in part because of the amount of public resources that would be required to carry out such a technique and in part because of a belief that a more rigorous approach to the current farmland preservation program likely would prove to be effective in substantially carrying out the regional land use plan recommendations in this respect.

3. Acquisition of Primary Environmental Corridor Lands

The Committee also gave consideration to the plan implementation technique of greater public acquisition of primary environmental corridors. Again, the Committee rejected this technique in favor of a stronger approach to public regulation of corridor lands. The Committee believed that it would not be possible to raise the significant additional sums of public monies required to purchase the vulnerable corridor lands, particularly in the face of a plan recommendation that concludes that these lands could substantially be preserved and protected through relatively modest adjustments to the public regulation of private land development.

SUMMARY OF PRELIMINARY RECOMMENDATIONS

This chapter has set forth a set of preliminary recommendations made by the Advisory Committee with a view toward strengthening efforts to implement the regional land use plan in southeastern Wisconsin. These actions may be briefly summarized as follows:

1. Preservation of Prime Agricultural Lands

The Advisory Committee recommends that an effort be undertaken to strengthen the existing Wisconsin Farmland Preservation

Program and thereby to strengthen implementation of the regional plan recommendation to preserve substantial portions of the prime agricultural lands in the Region. The effort should begin with a well-structured evaluation of the effectiveness of the current program, including addressing certain aspects of the structure and operation of that program and current assessment practices of agricultural land. Pending the results of that program evaluation, the Advisory Committee suggests that the program might be revised and strengthened in the following important ways:

- a. A greater commitment to the preservation and regular updating of county farmland preservation plans.
- b. A less inclusive definition of prime farmlands, with a view toward focusing tax-credit funds on truly large, contiguous blocks of prime farmland not needed for urban development in the foreseeable future.
- c. The establishment of a true state-local partnership in zoning prime farmlands akin to the existing partnership zoning for floodplains and shorelands.
- d. The provision of direct property tax credits to farmers irrespective of income.

The Committee recommends that this program evaluation be sponsored by the Wisconsin Department of Agriculture, Trade and Consumer Protection.

2. Promotion of Compact and Contiguous Urban Development

The Advisory Committee recommends that the following steps be taken to address the problems associated with continued urban growth at very low densities in scattered locations and supported by onsite sewage disposal systems and private wells:

- a. Formulation and adoption of a state policy to promote and favor more compact, efficient urban development patterns.
- b. The linking of state and county regulatory decisions concerning private

sewage disposal systems with the recommendations of the areawide water quality management plan. Under the proposed linkage, decisions to issue permits for private sewage disposal systems would have to be accompanied by a finding that the land use development proposed to be served is in conformance with, and would serve to implement, the areawide water quality management plan adopted by the Natural Resources Board. This plan-regulatory linkage framework would be akin to the current linkage in place with respect to sewage treatment plants and sanitary sewer extensions. In effect, by providing this linkage between the plan and state regulations, residential subdivisions on prime agricultural lands outside planned urban service areas would be effectively precluded, as would subdivisions in other rural areas unless the development density was found to be consistent with the plan.

3. Protection and Preservation of Upland Portions of Primary Environmental Corridors

The Advisory Committee recommends that the following actions be taken to ensure that all primary environmental corridors identified in the regional land use plan are protected and preserved:

- a. A broadening of the existing state-local zoning partnership that is now focused on floodplains and shorelands to include environmental corridors as a whole. The historic relationship between shoreland zoning and navigable waters would be set aside in favor of a broader relationship based upon defined and delineated environmental corridors. County and local governments would become partners with the State in enacting zoning regulations fully consistent with the corridor preservation and protection recommendations.
- b. A broadening of the basis for state decisions regarding sanitary sewer extensions to enable the Wisconsin Department of Natural Resources to deny approval of sanitary sewer

extensions found to conflict with the environmental corridor preservation recommendations in the regional land use plan, thus broadening the basis for such denial from the present narrow one of adverse water quality impacts.

- c. Elimination of a "loophole" in the current state regulatory framework concerning sanitary sewer extensions whereby small residential and commercial structures are exempt from the plan conformance review process and can, thereby, be constructed in primary environmental corridors contrary to plan recommendations.

4. Revitalization of the Older Industrial Centers of the Region

The Advisory Committee concluded that special attention needs to be given to the older industrial centers and adjacent neighborhoods in the Region experiencing declining employment levels and the aging physical plants found in those centers. Given the forces that work against the widespread revitalization of these areas as major employment centers, the Advisory Committee concluded that, in most cases, those aging centers will need to be downscaled and/or converted to other kinds of land uses. The Advisory Committee also concluded that it would be beneficial to undertake the following steps in this respect:

- a. The local communities concerned, in cooperation with the private business sector, should undertake strategic and physical planning efforts relating to each of the major aging industrial areas. The purpose of this detailed, neighborhood-oriented planning would be to determine the extent to which each of these areas may be expected to remain as an employment center, and the extent to which part or all of the area concerned might better be converted to other land uses compatible with the adjoining neighborhoods. Through such planning, for example, it may be possible to identify a particular industrial role for a given area and to focus available resources—including publicly supported work force training programs, tax incremental financing measures, and business tax credit measures—in a coordinated way on a redevelopment program for that area.
- b. A special study should be undertaken relating to the property tax base that employment centers create. The relationship between the creation of additional industrial tax base and the system of state aids to communities should be reexamined. The potential desirability of instituting some form of industrial tax base sharing mechanism in Wisconsin to bring greater equity to all taxing jurisdictions should also be explored.

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Chapter VI

SUMMARY, CONCLUSIONS, AND PRELIMINARY RECOMMENDATIONS

STUDY REQUEST AND PURPOSE

On December 4, 1991, the Regional Planning Commission, acting in response to a request from the Governor and the Legislature through the Wisconsin Department of Transportation, authorized a study relating to implementation of the adopted regional land use plan. To oversee the study, the Commission created a 25-member Advisory Committee. Each of the seven counties in the Region appointed two representatives to the Committee. In addition, the Commission directly appointed to the Committee two central city representatives, as well as six representatives of the following interests: land development, economic development, environmental preservation, public works, municipal law, and local government finance. The Wisconsin Department of Transportation was represented by its Southeast District Director. As Chairman, the Commission appointed Mr. Richard W. Cutler, an Attorney and former Regional Planning Commissioner from Milwaukee County. Working from May 19, 1992, through November 24, 1992, the Committee completed the requested study, the findings, conclusions, and recommendations of which are documented in this report and summarized in this chapter.

The basic purpose of the study was to examine the extent to which development in the Region has, over the last approximately two decades, occurred in conformance with, or at variance to, the adopted regional land use plan and to recommend, as might be found desirable, means by which plan implementation could be strengthened. In carrying out the study, the Committee examined in depth the various elements of the adopted regional land use plan, quantified the status of plan implementation, and considered the various regulatory and other measures that are currently available to promote implementation of the regional land use plan. The work of the Committee was coordinated with the work of a separate Statewide Land Use Task Force convened by the Wisconsin Department of Transportation to address transportation-related land use and urban design issues. The state-level Task Force was chaired by Mr. William Ryan Drew, the Director of Administration for Milwaukee County and a regional planning commissioner.

REGIONAL LAND USE PLAN OVERVIEW

The Committee determined to utilize the second-generation regional land use plan as the basis for its work. That plan was adopted in 1977 and had as a base year 1970 and a design year 2000. The plan was based upon a controlled existing trend concept and served to refine, detail, and extend a first-generation plan adopted in 1966.

The adopted regional land use plan places heavy emphasis on the continued effect of the urban land market on determining the location, intensity, and character of future urban development. In the public interest, the plan seeks to influence the operation of that market in the following three important ways:

1. The plan seeks to encourage urban development in those areas of the Region which are covered by soils suitable for such development; which are not subject to special hazards, such as flooding and shoreline erosion; and which can be readily served by essential municipal facilities and services, particularly including sanitary sewerage, public water supply, and mass transit. The plan thus seeks to achieve a more compact, centralized land use pattern and to discourage the areawide diffusion of low-density urban development within the Region.
2. The plan seeks to preserve in essentially natural, open uses those elements of the natural resource base most important to the overall quality of the environment, that is, the best remaining woodlands, wetlands, floodlands, wildlife habitat areas, steep slopes, and shorelands. These natural resources within the Region occur in linear areas which have been termed "environmental corridors."
3. The plan seeks to preserve the most productive farmlands in the Region, termed "prime agricultural lands," in agricultural use.

Based upon a set of regional land use development objectives, which are supported by plan-

ning principles and quantifiable planning standards, the regional land use plan thus seeks to accommodate growth and change within the Region in a more cost-effective and environmentally sound manner. The following more specifically summarizes the major recommendations of the plan:

1. The plan seeks to moderate the declining trend in urban population densities and the continued diffusion of urban development throughout the Region. Urban population densities, which stood at 11,300 persons per square mile in 1920 and which steadily declined to 4,800 persons per square mile by 1963, are envisioned to continue to decline under the plan, but at a decreasing rate, approximating 4,100 persons per square mile by 1985 and 3,800 persons per square mile by 2000.
2. Over the 30-year plan implementation period 1970 through 2000, the urban development area of the Region would be expanded by about 238 square miles, including about 133 square miles by the midpoint of the planning period, 1985. New urban development would be located so as to provide, in conjunction with existing development, a compact, contiguous, and efficient urban pattern.
3. About two-thirds of the land required to be converted to urban use would be for residential purposes. By the year 1985, this would require the conversion of about 58 square miles of land from rural to residential use, bringing the total amount of such land within the Region to 281 square miles. About two-thirds of the new residential development would occur at medium density, averaging about four dwelling units per net acre.
4. All new urban development would be served by public sanitary sewer and water supply and existing developed areas not so served would be retrofitted, so that by the year 2000 over 90 percent of the developed urban area and of the regional population would be provided with public sanitary sewer and water supply services.
5. A total of 16 major commercial, retail, and/or office centers would serve the Region by the year 2000, including 10 centers that existed in 1963, three centers that were built by 1970 in accordance with the recommendations of the first-generation plan, and three new centers, in Milwaukee, Oak Creek, and Racine. These 16 centers would be the planned location of about 127,500 retail and service jobs, or about 30 percent of all such jobs in the Region.
6. A total of 22 major industrial centers would serve the Region by the year 2000, including 15 centers that existed in 1963, two centers that were built by 1970 in accordance with the recommendations of the first-generation plan, and five new centers, in Burlington, Kenosha, Milwaukee, Oak Creek, and Waukesha. These 22 centers would be the planned location of about 239,300 industrial jobs, or about 60 percent of all such jobs in the Region.
7. A total of 29 major outdoor recreation centers would serve the Region by the year 2000, including 12 centers that existed in 1963, 15 centers which had been acquired by 1970 in accordance with recommendations contained in the first-generation plan, and two new centers, one each in Walworth and Washington Counties.
8. About 476 square miles of primary environmental corridor land and water, or about 18 percent of the total area of the Region, would be protected and preserved through a combination of public acquisition and public land use regulation.
9. About 1,139 square miles of prime agricultural land, or about 42 percent of the total area of the Region, would be protected from urban encroachment and preserved in agricultural use through a combination of public land use regulation and public tax policies.

FINDINGS AND CONCLUSIONS AS TO PLAN IMPLEMENTATION STATUS

The Advisory Committee examined the status of implementation of the second-generation regional land use plan as of 1985, midway through the 30-year plan design period 1970 through 2000. The findings of the Committee may be summarized as follows:

1. While the regional population remained virtually unchanged from 1970 to 1985, households increased slightly more than forecast and jobs increased slightly less than forecast. Since households and jobs are the basic determinants of the demand for urban land, the overall scale of growth approximated that anticipated by the year 1985 in the regional land use plan.
2. About 139 square miles of land were committed to urban use over the 15-year period, about six square miles, or 5 percent, more than planned. Because there was no population growth during that period, however, urban population density declined to about 3,600 persons per square mile, substantially below the planned level of about 4,100 persons per square mile.
3. Of the 139 square miles of new urban development created by 1985, about 72 square miles, or 52 percent, were located in areas recommended for such development in the regional plan. The remaining 66 square miles, or 48 percent, were located in scattered, outlying areas contrary to plan recommendations.
4. About 65 square miles of land were converted to residential use during the 15-year period. This represents about seven square miles, or 12 percent, more than envisioned in the plan. Moreover, much of the new residential development took place not in the medium-density category as recommended, but in the low-density category. While the plan had envisioned that 32 square miles of new medium-density residential development would occur by 1985, only about 17 square miles of such development actually occurred. While the plan envisioned that only about 12 square miles of new development would occur at low densities, about 41 square miles of such development actually occurred.
5. Public sanitary sewer service was provided to about 63 square miles, or about 45 percent, of the 139 square miles of new development. Public water supply service was provided to 48 square miles, or about 35 percent of the new urban development. During the 15-year monitoring period, about 30 square miles of unsewered existing development was retrofitted with sewer service, while about 14 square miles of existing urban development without public water supply was retrofitted with such service. The net result was that by 1985 sanitary sewer service was provided to 71 percent of the developed urban area, down from 73 percent in 1970, and to 87 percent of the regional population, up from 85 percent in 1970. Also by 1985, public water supply service was provided to 57 percent of the developed area, down from 63 percent in 1970, and to 80 percent of the population, up from 79 percent in 1970.
6. Significant declines in industrial employment occurred over the monitoring period at many of the older industrial centers in the Region. While 16 of the 17 centers existing in 1970 continued to meet the employment threshold for classification as a major center, employment at one center, West Allis, no longer met that threshold. All five proposed new industrial centers were under development in accordance with the plan recommendations. However, two additional centers, both in Waukesha County, were developed in areas not recommended in the plan. In addition, the development of four other potential major industrial centers was either begun or announced in areas not recommended for such development in the plan.
7. Monitoring data indicate that 12 of the 13 major commercial centers that existed in 1970 continued to meet the requisite employment threshold in 1985. The Mitchell Street center in Milwaukee, however, no longer met that criterion. Two of the three proposed new centers were developed in accordance with the plan recommendations, with initial development having taken place at the third planned new center. In addition, however, the development of seven other potential major commercial centers of both the office and retail types was either begun or announced in areas not recommended for such development in the plan.
8. Significant progress has been made in implementing the major outdoor recreation center element of the regional land use plan. Of the 15 proposed new centers

identified in the first- and second-generation regional land use plans, 13 have been publicly acquired and developed in whole or in part for public use. Only two new sites remain to be acquired. These two new sites are still in open land uses and remain available for public purchase. One new major park site was acquired in a location not recommended in the plan.

9. Over the 15-year monitoring period, there were both gains and losses in primary environmental corridor lands, with gains totaling about 12.5 square miles and losses totaling about 20.0 square miles. Most gains occurred in rural portions of the Region, while losses occurred in both the rural and urban portions of the Region. The net change was a loss of about 7.5 square miles of corridor land, or about 2 percent. About 350 square miles, or 75 percent of the total of 476 square miles, of corridor lands have been fully or substantially protected through public ownership or public land use regulation. The unprotected corridor lands consist largely of upland corridors in the rural portions of the Region.
10. By 1985, about 92 square miles of prime agricultural land had been converted to urban use in the Region. This represents 75 square miles more than planned. About 585 square miles of prime farmland, or 56 percent of the total, had been properly zoned to reduce the likelihood of conversion to urban uses.

Given the foregoing findings, the Advisory Committee drew the following conclusions as to the status of land use plan implementation:

1. There is a need to strengthen efforts to protect and preserve the primary environmental corridors of the Region. While substantial progress has been made, both in publicly acquiring corridor lands and in exercising proper land use control on such lands, the upland corridor areas remain vulnerable to loss through inappropriate development.
2. There is a need to strengthen efforts to preserve and protect the prime agricultural lands of the Region. The rate of prime agricultural land loss is five times greater

than necessary. Only about one-half the total stock of prime farmland has been properly zoned despite efforts by the State to provide a measure of property tax relief.

3. No need exists to change the way in which the major outdoor recreation element of the regional land use plan is being carried out. That element of the plan has been substantially implemented, with only two proposed major parks remaining to be acquired.
4. There is a significant need to strengthen efforts to channel urban land market forces so as to provide a more compact, contiguous, and efficient urban development pattern. In terms of total land area, only about one-half the new urban residential development is occurring in areas recommended for such development in the regional plan, with less than one-half the new urban development being provided with public sanitary sewer and water supply services. The continuing diffusion of unsewered, low-density, residential development throughout much of the Region needs to be significantly abated.
5. It would be desirable to abate the trend toward the decentralization of job locations in the Region. Employment at the older and more centrally located major industrial centers in particular is declining well below planned levels. A need exists to strengthen the present efforts to revitalize the older major industrial centers of the Region.

FINDINGS AND CONCLUSIONS AS TO PLAN IMPLEMENTATION MEASURES

The Advisory Committee also examined the various measures that are currently available for use in Wisconsin to aid in regional land use plan implementation. These measures include simply the task of collecting, analyzing, and disseminating sound planning and engineering data; the provision by the Regional Planning Commission of advisory and review services to county and local governments and state and federal agencies; a variety of educational efforts undertaken by the Regional Planning Commission, at times in cooperation with the University of Wisconsin-Extension; plan refinement and detailing efforts by county and local governments; land acquisition by public agencies and

private nonprofit corporations; the public regulation of land use; the public regulation at the state level of sanitary sewers and private onsite sewage disposal systems; and public tax policies that seek to influence land use decisions. After reviewing in detail these various plan implementation measures, the Committee drew the following basic conclusions:

1. The continued development and dissemination of sound planning and engineering data on a uniform, areawide basis by the Regional Planning Commission represents a very effective way in which the regional land use plan recommendations can be implemented and the objectives underlying those recommendations achieved. Consequently, this activity needs continued attention by the Regional Planning Commission and continued funding support by federal, state, county, and local governments.
2. The general, areawide nature of the regional land use plan makes it imperative that county and local governments undertake planning efforts to adopt, refine, and detail the regional plan, thereby giving the regional plan more specific meaning and promoting better understanding and acceptance at the county and local levels of government. A greater commitment to the cooperative preparation of county and local land use plans and of supporting sewer service area plans is needed so that the regional land use plan recommendations can be carried into the greater depth and detail needed to apply such implementation measures as zoning, land subdivision control, and public land acquisition properly and effectively. The process of carrying out such focused planning efforts helps to build a broader base of understanding of the regional land use plan and creates a sense of "ownership" of that plan at the county and local level. Consequently, the Committee concluded that county and local governments should undertake more detailed land use planning efforts within the framework of the regional land use plan.
3. It is important that county and local governments seek timely review comments on development proposals from the Regional Planning Commission on a day-to-day basis. While it should not be expected that local officials will always concur in the findings and recommendations that the Commission may make in response to requests for review of local development proposals, by following a process whereby such comments are sought and received, local officials are ensured that the regional plan recommendations will be taken into account at the time development decisions are made. Consequently, the Advisory Committee concluded that county and local governments should be encouraged to seek regional review comments on local development proposals of significance.
4. Public ownership of land is the most effective way to bring about those elements of the regional land use plan which deal with the protection and preservation of the natural resource base. Ideally, the primary environmental corridors would be publicly owned and managed for permanent preservation in natural, open uses. The reality, however, is that funding for purchase of all corridor lands is not available. To maximize the effective use of available funds, the Committee concluded that county and local governments should give more attention to acquisition techniques that involve less than fee simple purchase.
5. Zoning by county and local governments can be a highly effective measure for implementing the regional land use plan. Its application on a uniform, areawide basis, however, requires a broad understanding by elected officials and by the general public of the plan recommendations and of the reasons underlying those recommendations, so that the political will necessary to exercise fully the discretionary zoning authority now available under Wisconsin law is developed. As a plan implementation measure, zoning is stronger when it is undertaken jointly by two governmental entities, as, for example, joint county-town zoning, joint state-county zoning, and joint state-local zoning. Zoning is also more effective when the proper administrative staff and legal support is provided so that the zoning regulations are effectively administered.
6. The integration of regional and state plans and the linking of state regulatory deci-

sions to the recommendations contained in those plans creates a very effective regional land use plan implementation measure. This is best evidenced by the incorporation of the areawide water quality management plan for southeastern Wisconsin, which has as a fundamental element the regional land use plan, into the State Water Quality Management Plan adopted by the Wisconsin Natural Resources Board and then by requiring state regulatory decisions to be made in a manner consistent with the plan. In effect, the process of integrating the regional and state water quality management plans has created a partnership between state and local governments whereby communities desiring to provide public sanitary sewer service must define reasonable urban growth limits, and within those limits firmly commit to the protection and preservation of environmentally sensitive lands. The Committee concluded that this plan implementation technique is underutilized, since it is not currently applicable to the rural portions of the Region.

7. The failure of neighboring communities to reach agreement as to municipal boundary changes and the provision of utility services can contribute to the accommodation of urban development in locations at variance with the regional land use plan recommendations. This is particularly true with respect to the relationship between incorporated and unincorporated communities. The Committee took note of a recent state law creating a new procedure for boundary and service agreements with state oversight and approval and concluded that local governments in the Region should seek to take advantage of the new law so that intergovernmental boundary and service disputes do not constitute an impediment to plan implementation.
8. Land subdivision control regulations, encompassing not only subdivision plats but certified survey maps as well, can be an effective means to implement certain detailed aspects of the regional land use plan. Accordingly, the Committee concluded that county and local governments should make more effective use of these

existing regulations to ensure the dedication or reservation of environmentally sensitive lands, to control properly access to arterial highways, and to make sure that urban development is amenable to transit service and use.

PRELIMINARY RECOMMENDATIONS FOR STRENGTHENING PLAN IMPLEMENTATION

On the basis of the foregoing conclusions, and drawing upon the analytical findings summarized above, the Committee made four basic preliminary recommendations directed at strengthening implementation of the regional land use plan.

Preliminary Recommendation No. 1: Evaluate and Modify State Farmland Preservation Program

The Wisconsin Department of Agriculture, Trade and Consumer Protection should evaluate the effectiveness of the current Wisconsin Farmland Preservation Program and, as may be found necessary or desirable, make modifications thereto, seeking legislation if necessary. In such study, the Department should consider the following modifications to address perceived weaknesses in the current program:

1. Requiring that county farmland preservation plans be updated and recertified periodically and that all farmland preservation zoning actions and tax credit decisions be directly related to such plans.
2. Adopting a less inclusive definition of prime farmlands, seeking in the redefinition to focus the program on truly large blocks of such land not needed for urban development, while avoiding the expenditure of tax credits on lands proposed to be urbanized.
3. Establishing a state-county-local farmland zoning partnership whereby the State and the county and/or local governments concerned would have to agree on the establishment of, and subsequent changes to, exclusive agricultural zoning regulations and district maps.

4. Providing direct property tax credits to farmers rather than the indirect provision of property tax relief through income tax credits.

In recommending reevaluation of the Wisconsin Farmland Preservation Program, the Committee took note of the fact that prime farmland in southeastern Wisconsin was being converted to urban use at a rate far in excess of that called for under the adopted regional land use plan and that an invaluable natural resource, the soil resource, was being unnecessarily destroyed. The Committee was also mindful of the fact that agriculture constitutes an important element of the economic base of the Region and that better regional land use plan implementation would help retain that base. The Committee recognized that this recommendation would apply to about 1,122 square miles of land, or about 42 percent of the total area of the seven-county Southeastern Wisconsin Region.

In making the recommendation for a reevaluation of the Wisconsin Farmland Preservation Program and in suggesting modifications to that program that should be considered in the recommended reevaluation, the Committee sought to address the following perceived weaknesses in the program: 1) the voluntary nature of participation in the program, which tends to result in a "checkerboard" pattern of participation, 2) the lack of commitment to a continuing planning process that would update and recertify county farmland preservation plans, 3) the need to ensure that exclusive agricultural zoning districts are applied in a manner fully consistent with the county plan recommendations, 4) the need to ensure that later rezonings do not emasculate the original intent of the county plan and zoning ordinance, and 5) the need to provide direct property tax relief to all farmers in substantial amounts, rather than to continue to provide what is often perceived to be inadequate tax relief through an income tax credit program that operates more as an income redistribution program than a land use management program.

By addressing these perceived weaknesses and by strengthening the state farmland preservation program, the Advisory Committee believes that it will become feasible to hold down real property assessments on lands that are classified as prime farmlands. A greater commitment to planning and zoning as envisioned, especially the proposed partnership zoning, should have the effect

of changing the views of local assessors that prime agricultural zoning is not an effective impediment to the conversion of land from rural to urban use. With lower assessments and with direct property tax relief made available on a uniform basis irrespective of income, the Committee reasoned, the Wisconsin Farmland Preservation Program could become a far more effective means of implementing the prime agricultural preservation element of the regional land use plan.

**Preliminary
Recommendation
No. 2: Promote
Compact and
Contiguous Urban
Development**

The State of Wisconsin should take the following two actions to address the problems associated with continued diffusion of low-density urban development over large areas of the Region supported by onsite sewage disposal systems and private wells:

1. Formulating and adopting through legislation a comprehensive state policy favoring and promoting more compact, efficient urban development. This would require state agencies, particularly the Departments of Administration; Development; Natural Resources; Transportation; Agriculture, Trade and Consumer Protection; and Industry, Labor and Human Relations, to reflect that policy in the formulation and promulgation of administrative rules and in day-to-day regulatory and other decision making.
2. Linking state and county regulatory decisions concerning the number and location of private sewage disposal systems to the recommendations and provisions of the State Water Quality Management Plan adopted by the Wisconsin Natural Resources Board. That plan includes the areawide water quality management plan for southeastern Wisconsin, an important element of which is the regional land use plan. The linking would take place through oversight by the Wisconsin Department of Industry, Labor and Human Relations of county regulation of private sewage disposal systems.

In making this recommendation, the Committee noted that there is no current state policy designed to promote contiguous, compact, efficient urban development patterns nor to distinguish clearly between sound urban and sound rural development. This lack of state policy not

only works against the policies underlying the Wisconsin Farmland Preservation Program, but also stands as implicit state endorsement of the continued marketing of urban residential lots in a scattered, diffused fashion throughout rural areas. The Committee noted that the absence of such a state urban development policy has negative effects on a number of state functions, including the provision of state trunk highways and the management of air and water quality.

In making this recommendation, the Committee also noted that, through statutes and administrative rules, the Wisconsin Natural Resources Board has appropriately linked the day-to-day regulatory decision making of its staff to the broad policies reflected in the water quality management plans adopted by that Board. Under rules adopted by the Board, the Department staff cannot approve proposed new sewage treatment plants, existing sewage treatment plant improvements, or public sanitary sewer extensions except when such plants, plant improvements, and public sewer extensions are found to conform to the State Water Quality Management Plan. The state plan encompasses the areawide water quality management plan for southeastern Wisconsin, an important element of which is the regional land use plan.

Under an interagency agreement with the Wisconsin Department of Industry, Labor and Human Relations, a similar linkage is in place with respect to most extensions of private sanitary sewers. Under the expanded linkage proposed by the Advisory Committee, decisions by the Wisconsin Department of Industry, Labor and Human Relations and by those counties which operate under that Department's oversight to issue permits for private sewage disposal systems would have to be accompanied by a finding that the land use development proposed to be served was consistent with the State Water Quality Management Plan and thereby with the regional land use plan. By providing this supplemental linkage, residential subdivisions on prime agricultural lands would be effectively precluded, as would subdivisions in other rural areas unless the development density was truly rural in nature, that is, at least five acres of land per dwelling unit. This particular recommendation would apply to the entire planned rural area of southeastern Wisconsin, estimated at about 1,742 square miles, or 65 percent of the total area of the Region.

Preliminary
Recommendation
No. 3: Protect and
Preserve Upland
Environmental
Corridors

The Wisconsin Department of Natural Resources should seek the following changes through legislation and administrative rules to ensure that, through state oversight, all primary environmental corridors are protected and preserved in the manner recommended in the regional land use plan:

1. The existing state-county and state-local floodplain-shoreland zoning partnership should be broadened to include all the delineated primary environmental corridors. The existing state policy protects only the floodland and wetland portions of the corridors along navigable streams and around navigable lakes and such portions of the corridors within urban sewer service areas that can be demonstrated to have adverse water quality impacts if developed. Through the new partnership and the zoning standards envisioned thereunder, the State effectively would be requiring county and local governments to exercise zoning to protect all primary environmental corridor lands.
2. The statutory basis whereby the Wisconsin Department of Natural Resources denies approval of sanitary sewer extensions needed to effect urban development that conflicts with the plan recommendations should be broadened to encompass other adverse environmental impacts consistent with the Department mission as the public steward of the natural resources of the State. At present, the basis for such denial is narrowly founded on adverse water quality impacts.
3. Working with the Wisconsin Department of Industry, Labor and Human Relations, the Wisconsin Department of Natural Resources should effect a change in the Administrative Code to eliminate the current "loophole" whereby private sanitary sewer extensions to serve certain residential and commercial structures are exempt from the water quality management plan review conformance process. The current rules are inequitable to individual landowners and result in the construction of buildings in corridors contrary to plan recommendations.

In making this recommendation, the Committee noted that the preservation and protection of the primary environmental corridors of the Region is perhaps the most important single recommendation contained in the regional land use plan. The corridors encompass about 476 square miles, or about 18 percent of the Region. The Committee also took note of the fact that while state-mandated floodplain and shoreland-wetland zoning and sewer extension policies have effectively worked to preserve the lowland portions of such corridors, the upland portions of the corridors remain vulnerable to urban development in the absence of appropriate local zoning, particularly in the rural portions of the Region where sanitary sewer extension approval by the State is not an issue. These vulnerable upland portions comprise about 25 percent of the total corridor area. The Committee recognized that ecological considerations dictate that the upland, as well as the lowland portions of the corridors, be protected and preserved; both types of areas are essential to providing corridor continuity and biological diversity in terms of plant and animal life.

In making this recommendation, the Committee also noted that implementation of the regional land use plan would accommodate truly rural, low-density residential development within the upland corridors without destroying the resource base. That development, however, should not exceed a density of one unit per five acres of corridor land. Finally, the Committee noted that implementation of this particular recommendation would represent an evolution of the more narrowly based, but now widely accepted, state-county and state-local partnerships regarding the zoning of floodplains and shorelands, while at the same time making state and local corridor preservation and protection policies fully consistent.

**Preliminary
Recommendation
No. 4: Ameliorate
Problems Created
by Industrial Job
Decentralization**

The following actions should be taken in an attempt better to cope with the effects of the present trend of industrial job decentralization in the Region:

1. Those local units of government within the Region which have aging industrial centers—the Cities of Glendale, Kenosha, Milwaukee, Racine, and West Allis and the Village of West Milwaukee—should undertake strategic and physical planning efforts for each such area. The purpose of

this detailed, neighborhood-oriented planning would be to determine the extent to which each area may be expected to remain as an industrial employment center and the extent to which the area concerned might better be converted to other land uses.

2. A special study should be undertaken to examine the potential desirability of instituting some form of tax base sharing mechanism that: a) could bring greater equity in metropolitan areas with respect to the distribution of the benefits of the property tax base that major employment centers create and b) might help reduce tax base competition among communities, competition which can work against implementation of the regional land use plan. This study, which could be conducted at the regional level through a public-private partnership, should be directed by a committee that would include private sector professionals knowledgeable about the complex factors that underlie the trends toward decentralization of industrial employment and the fiscal impacts of industrial development on local governments. Alternatively, the study could be undertaken statewide by a gubernatorial or legislative task force.

In making this recommendation, the Committee concluded that a number of strong market forces are working against a widespread revitalization of the older industrial centers of the Region and toward job decentralization. These market forces include physical and spatial factors attendant to the cramped, obsolescent, and environmentally deficient physical plant that exists in the aging centers; the problems associated with providing “quality” sites within aging industrial areas, including the problems of neighborhood deterioration which have both physical and social dimensions and which are manifested in both real and perceived threats to the security of persons and property, the difficulty of providing sites in older central areas of a size and at a cost competitive with rates in outlying areas, the factor of real and perceived inadequate access to the freeway system, and the factor of the preferences of owners and managers to locate and relocate firms in proximity to their personal residences which frequently are not near the aging industrial centers. Taken together, these factors make it most difficult for central cities to market industrial sites in a manner competitive with sites in outlying areas.

Given the foregoing, the Committee concluded that the trend to job decentralization is largely inexorable, that to remain competitive in a national and increasingly an international economy most new industrial sites will be located in outlying portions of the Region, and that special studies should be undertaken with a view toward ameliorating the adverse effects of this unfortunate trend. These studies would include both strategic and physical planning efforts attendant to the reuse and redevelopment of existing aging industrial centers and a special study that would examine the potential desirability of instituting some form of industrial tax base sharing in the metropolitan area.

CONCLUDING REMARKS

In endorsing the foregoing set of preliminary recommendations for strengthening regional land use plan implementation through the evolutionary use of intergovernmental partnerships, the Advisory Committee carefully did not recommend the imposition of an elaborate comprehensive state growth management system in Wisconsin. Such a system would probably include legislatively mandated consistency in land use planning, requiring both the "horizontal" and "vertical" integration of plans and plan implementation devices involving municipalities, counties, regional planning commissions, and state agencies. Such legislatively mandated planning, or growth management, frameworks have been created in recent years in some states to deal with problems caused by the lack of a coordinated, areawide approach to public land use and related infrastructure system planning and development. The Committee concluded that because of the consensus that has developed in southeastern Wisconsin over the past 30 years on the basic objectives underlying the regional land

use plan, the best approach to growth management in southeastern Wisconsin would be to build upon that consensus and seek to achieve greater levels of plan implementation through partnership efforts. In addition to requiring state agency involvement in regional land use plan implementation, the recommended approach would require counties and local units of government in the Region to give more attention to the preparation of land use plans within the framework of the regional land use plan and to adjusting county and local zoning ordinances to ensure that the plans are being implemented. In so doing, county and local growth management objectives, as well as such objectives underlying the regional land use plan, would be met.

The foregoing recommendations for strengthening regional land use plan implementation in southeastern Wisconsin were initially put forth by the Advisory Committee in November 1992. The Advisory Committee then determined to present the set of recommendations to the Wisconsin Department of Transportation as the state agency requesting and funding the Committee's work; other state agency officials concerned with land use planning and development; and to other interested and concerned parties, including county and local officials and representatives of the environmental and agricultural communities. The Advisory Committee agreed that it would complete this review process on the recommendations before it concluded its work and formally reported to the Regional Planning Commission. Thus, the Advisory Committee held open the possibility for modifications to its set of recommendations pending the review and consultation process described above. The Committee agreed that it would reconvene in Spring 1993 to give further consideration to its recommendations. The results of the review process and the Committee's response thereto are summarized in Chapter VII.

Chapter VII

FINAL RECOMMENDATIONS

INTRODUCTION

The Advisory Committee's set of four preliminary recommendations for strengthening regional land use plan implementation in South-eastern Wisconsin were selectively presented for review and comment over an approximate six-month period beginning in December 1992 and extending through May 1993. The Committee intended that this review process be undertaken prior to formulating a final set of recommendations. The review process was led by a Presentation Subcommittee of the full Advisory Committee.¹ On May 13, 1993, the Advisory Committee met to receive the report of the Presentation Subcommittee. After receiving that report, the Advisory Committee, in all cases except one noted below, acted unanimously to significantly modify three of the four recommendations initially put forth, basing those modifications upon the comments received during the review process. The remaining sections of this chapter briefly document the review process and the pertinent comments received and set forth the final recommendations of the Advisory Committee.

REVIEW PROCESS AND COMMENTS

The process of seeking review comments on the preliminary recommendations of the Advisory Committee consisted of three steps: face-to-face meetings with the Secretaries and senior staff of six key State agencies, at which meetings the preliminary recommendations of the Advisory Committee were presented and discussed in detail; discussions with key officials of several major interest groups; and a briefing on the preliminary recommendations to the Executive Committee of the Southeastern Wisconsin Regional Planning Commission. The results of this review process may be summarized as follows:

1. Meetings with Six State Agency Secretaries and Senior Personnel

Face-to-face meetings were held by members of the Presentation Subcommittee with the Secretaries and senior personnel of the Departments of Administration; Agriculture, Trade and Consumer Protection; Industry, Labor and Human Relations; Natural Resources; Transportation; and Revenue. Meetings with the first five State Secretaries were initially planned as part of the review process; a meeting with the State Secretary of Revenue came about at the suggestion of the State Secretary of Agriculture, Trade and Consumer Protection, who noted that two portions of the Committee's recommendation attendant to the preservation of farmland would be more appropriately directed to the Department of Revenue. By letter dated May 11, 1993 (copy reproduced in Appendix A), the State Secretary of Transportation formally responded on behalf of five of the State agencies to the Advisory Committee's preliminary recommendations. The reaction of the State agencies may be summarized as follows:

- a. Overall, the State agencies agreed with the Advisory Committee's identification of the problems and issues concerned, which formed the basis for the Committee's initial set of recommendations. While noting that these problems and issues were of interest to State government, the State agencies took the position that land use planning and plan implementation were county and local municipal responsibilities that ought to be carried out with, by clear implication, little or no State oversight. The agencies, accordingly, expressed concern that the preliminary recommendations tended to focus primarily on modifications to programs being conducted by the State in order to achieve better implementation of adopted regional and local land use plans.
- b. The Wisconsin Department of Administration viewed the land use plan imple-

¹ *The Presentation Subcommittee was chaired by Mr. Richard W. Cutler and included Messrs. Daniel M. Finley, J. Michael Mooney, Paul E. Mueller, and Paul G. Vrakas, assisted as necessary by Commission staff.*

mentation issue as not ripe for discussion at the State level of government. The Department suggested that the Advisory Committee undertake a process whereby the identified problems and issues are thoroughly discussed at the local municipal level of government; from such a process perhaps support for the suggested State level actions could be developed over time.

- c. The Wisconsin Department of Agriculture, Trade and Consumer Protection indicated that the Advisory Committee's suggestions for potential modifications to the nontax-related aspects of the State Farmland Preservation Program would be taken into account as the Department reevaluates the Program and undertakes rulemaking activity attendant to that Program later in 1993. The Department also indicated its strong opinion that county and local municipal governments should have the full responsibility for creating and administering exclusive agricultural zoning ordinances and maps intended to implement farmland preservation plans.
- d. The Wisconsin Department of Industry, Labor and Human Relations rejected the Advisory Committee's preliminary recommendation that the provisions of the State plumbing code be used to help achieve compliance with the land use element of the State's water quality management plan. The Department indicated its strong opinion that the basis on which permits governing the installation of onsite sewage disposal systems are issued should be narrowly confined to the performance characteristics of the proposed systems. The Department indicated that it would not view as appropriate State level interference with local land use decisions.
- e. The Wisconsin Department of Natural Resources supported the Advisory Committee's recommendations attendant to the protection and preservation of upland environmental corridors. The Department, however, also indicated that stronger evidence of local support for greater State involvement in the protection of such corridors needs to

materialize before the Department can take steps to carry out the Committee's recommendation in this respect.

- f. The Wisconsin Department of Transportation indicated that it supported the Advisory Committee's recommendation that State government promote compact and contiguous urban development. The Department indicated, however, that its support for that recommendation was conditioned upon working within the current framework of local and regional land use planning in Wisconsin, whereby county and local units of government bear the primary responsibility for preparing land use plans and ensuring that those plans are implemented.

While not included in the letter reproduced in Exhibit A, at a meeting with the Secretary of the Wisconsin Department of Revenue, the Presentation Subcommittee was informed that the Governor had proposed, in a pending State biennial budget bill, to direct that the Department of Revenue undertake a study that would examine the real property-tax burden borne by farmers with a view to potentially changing the basis for the assessment of farmland from one of relationship to market value irrespective of land use to one of relationship to value for agricultural use only. Such a study would include an analysis of the impacts of property-tax burden shifts that would accompany such a change in property-tax assessment policy.

- 2. Meetings with Four Major Interest Groups
The Presentation Subcommittee also held meetings with four different interest groups in an attempt to elicit reaction to the Advisory Committee's initial recommendations. These four organizations were the Wisconsin Economic Development Association, a Statewide organization of individuals working in the economic development field in both the public and private sectors; the Wisconsin Realtors Association; the Alliance of Cities; and the Milwaukee Metropolitan Builders Association. Contact was made with these particular organizations because they represent individuals and groups perceived to have a very strong interest in urban development and the means by which such development

might be impacted by adoption of the Advisory Committee's recommendations.

The Subcommittee reported that the Board of Directors of the Wisconsin Economic Development Association had reviewed and unanimously endorsed the preliminary recommendations put forth by the Advisory Committee. The Environmental Work Group of the Wisconsin Realtors Association also reacted favorably to those recommendations and intended to forward a formal position on those recommendations to the full Association Board of Directors later in 1993. The Board of Directors of the Alliance of Cities organization was scheduled to consider the preliminary recommendations of the Committee shortly, with the staff of that organization expressing enthusiastic support for those recommendations. The President of the Metropolitan Builders Association of Milwaukee had personally reviewed the preliminary recommendations and indicated support for those recommendations, promising to bring the recommendations to the attention of the full organization later in 1993.

3. Southeastern Wisconsin
Regional Planning Commission
Executive Committee

On April 7, 1993, the Executive Director of the Southeastern Wisconsin Regional Planning Commission briefed the SEWRPC Executive Committee on the preliminary recommendations made by the Advisory Committee. The Executive Committee was also given a brief report on the initial reactions of the State Department Secretaries to those recommendations. While the SEWRPC Executive Committee did not take a formal position on the recommendations, individual members of the Executive Committee provided review comments that were reported to the Advisory Committee. In particular, the Advisory Committee was informed that while there would probably be broad support at the county level for the Committee's recommendation regarding the protection of upland primary environmental corridors, there probably would be significant objection to those preliminary recommendations which would envision greater State involvement in, and oversight of, county and local municipal zoning concern-

ing agricultural land. Furthermore, there would probably be opposition at the County level to linking State agency decision making touching onsite sewage disposal systems to the land use element of the regional water quality management plan.

**FINAL ADVISORY
COMMITTEE RECOMMENDATIONS**

After receiving the report of the Presentation Subcommittee, and upon further careful deliberation, the Advisory Committee acted to modify three of the four preliminary recommendations to strengthen regional land use implementation. No changes were made to that recommendation dealing with the protection and preservation of upland environmental corridors. The key changes to the other three recommendations are as follows:

1. The previously proposed recommendation that the Wisconsin Department of Agriculture, Trade and Consumer Protection in its reevaluation of the State farmland preservation program consider adoption of a State-county farmland zoning partnership was deleted in favor of a recommendation to establish a new system whereby operating farmland in Wisconsin within the farmland preservation program would be assessed for real estate property-tax purposes for the value of the land for farming purposes only.² The revised recommendation, in this respect, would be directed to the Wisconsin Department of Revenue.
2. The preliminary recommendation to link State regulatory decisions concerning the approval of onsite sewage disposal systems to the land use element of the State water quality management plan through rule changes by the Wisconsin Department of Industry, Labor and Human Relations was deleted in favor of a recommendation that the Wisconsin Department of Natural

²*This particular change in the recommendations was the only change not unanimously approved by the Advisory Committee. Member Paul E. Mueller objected to the deletion of the proposed State-county farmland zoning partnership from the set of recommendations.*

Resources be authorized to require that private sewage disposal system regulations adopted by the Wisconsin Department of Industry, Labor and Human Relations be consistent with the State water quality management plan; or, in the alternative, that counties be authorized to impose private sewage disposal system regulations in a manner consistent with the State water quality management plan.

3. The preliminary recommendation in regard to the amelioration of problems created by job decentralization in the Region was modified slightly to delete the recommendation that the proposed study be undertaken by a gubernatorial or legislative task force. This particular recommendation was further modified to expand the scope of the proposed study to include an examination of the causes of job decentralization.

Given these changes, the final recommendations of the Advisory Committee are as follows:

**Recommendation
No. 1: Evaluate
State Farmland
Preservation
Program and
Consider Changing
the Basis for
Farmland
Assessments and
Attendant Property-
Tax Relief**

The Wisconsin Department of Agriculture, Trade and Consumer Protection should evaluate the effectiveness of the current Wisconsin Farmland Preservation Program and, as may be necessary or desirable, make modifications thereto. In such study, the Department should consider the first two modifications to the Program listed below. The Wisconsin Department of Revenue, in its proposed 1993 study of the assessment of agricultural land, should consider the last two modifications listed below.

1. Requiring that county farmland preservation plans be updated and recertified periodically and that all farmland preservation zoning actions and tax credit decisions be directly related to such plans.
2. Adopting a less inclusive definition of prime farmlands, seeking the redefinition to focus the program on truly large blocks of such land not needed for urban development, while avoiding the expenditure of

tax credits on lands planned to be converted to urban use.

3. Establishing a system whereby operating farmland within the farmland preservation program would be assessed for real estate tax purposes upon its value for agricultural use only.
4. Providing direct property-tax credits to operating farmers rather than the indirect provision of property-tax relief through income-tax credits.

**Recommendation
No. 2: Promote
Compact and
Contiguous Urban
Development**

The State of Wisconsin should take the following two actions to address problems associated with continued diffusion of low-density urban development, supported by onsite sewage disposal systems and private wells, over large areas of the Region.

1. Formulation and adoption by the State Legislature of a comprehensive State policy favoring and promoting more compact, efficient urban development. This would require State agencies, particularly the Wisconsin Departments of Administration; Development; Natural Resources; Transportation; Agriculture, Trade and Consumer Protection; and Industry, Labor and Human Relations, to reflect that policy in the formulation and promulgation of administrative rules and in day-to-day regulatory and other decision making and to coordinate policies of individual agencies where they may, in an increasingly complex society, work toward conflicting ends, especially as regards the encouragement or channeling of urban development to locations imposing substantial direct or indirect costs to taxpayers, threats to the public health and safety, or harm to the environment.
2. Linking State and county regulatory decisions concerning the number and location of private sewage disposal systems to the recommendations and provisions of the State Water Quality Management Plan as adopted by the Wisconsin Department of Natural Resources. That plan includes the areawide water quality management plan for Southeastern Wisconsin, an important element of which is the regional land use plan. The linking would take place either:

- a. By authorizing the Wisconsin Department of Natural Resources to require that any regulations or actions of the Wisconsin Department of Industry, Labor and Human Relations relative to the approval of private sewage disposal systems be consistent with the State Water Quality Management Plan adopted by the Wisconsin Department of Natural Resources pursuant to the requirements of the United States Clean Water Act; or, in the alternative,
- b. Through county regulation of private sewage disposal systems after delegation by the Wisconsin Department of Industry, Labor and Human Relations, or by the State Legislature, of the authority to counties so electing to impose regulations consistent with the State Water Quality Management Plan.

Recommendation
No. 3: Protect and
Preserve Upland
Environmental
Corridors

The Wisconsin Department of Natural Resources should seek the following changes through administrative rules, and, if necessary, legislation to ensure that, through State oversight, all primary environmental corridor areas are protected and preserved in the manner recommended in the regional land use plan:

1. The existing State-county and State-local floodplain-shoreland zoning partnership should be broadened to include all the delineated primary environmental corridor areas. The existing State policy protects only the floodland and wetland portions of the corridors located along navigable streams and around navigable lakes and such portions of the corridors within urban sewer service areas that can be demonstrated to have adverse water quality impacts if developed. Through the new partnership and the zoning standards envisioned, the State would require county and local municipal governments to exercise zoning to protect all primary environmental corridor lands.
2. The statutory basis whereby the Wisconsin Department of Natural Resources denies approval of sanitary sewer extensions needed to effect urban development conflicting with the plan recommendations should be broadened to encompass other

adverse environmental impacts consistent with the Department mission as the public steward of the natural resources of the State. At present, the basis for such denial is narrowly founded on adverse water quality impacts.

3. Working with the Wisconsin Department of Industry, Labor and Human Relations, the Wisconsin Department of Natural Resources should effect a change in the Administrative Code to eliminate the current "loophole" whereby private sanitary sewer extensions to serve certain residential and commercial structures are exempt from the water quality management plan review conformance process. The current rules are inequitable to individual landowners and result in the construction of buildings in corridors contrary to plan recommendations.

Recommendation
No. 4: Ameliorate
Problems
Created by Job
Decentralization

The following actions should be taken:

1. Those local units of government within the Region which have aging industrial centers, such as the Cities of Glendale, Kenosha, Milwaukee, Racine, Waukesha, and West Allis and the Village of West Milwaukee, should undertake strategic and physical planning efforts for each such center. The purpose of this detailed planning would be to determine the extent to which each center may be expected to remain as a major industrial employment center and the extent to which the area concerned might better be converted to other land uses.
2. A special study should be undertaken to examine the causes of, and possible means for modifying, the present trend of industrial, commercial, and office job decentralization and ameliorate its effects, including the potential institution of some form of tax base sharing mechanism that: a) would provide for the more equitable distribution in metropolitan areas of the benefits of the increased property-tax base that major new employment centers create and b) might help to reduce tax base competition among communities, competition which can work against the best interest of the metropolitan area as a whole. This study

should be conducted at the regional level through a public-private partnership and should be directed by a committee which would include public officials and private sector professionals knowledgeable about

the complex factors which underlie the trends toward decentralization of industrial, commercial, and office employment and the fiscal impacts of such development on local governments.

APPENDICES

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Appendix A

LETTER OF MAY 11, 1993, FROM CHARLES H. THOMPSON, SECRETARY, WISCONSIN DEPARTMENT OF TRANSPORTATION, TO RICHARD W. CUTLER



Wisconsin Department of Transportation

Tommy G. Thompson
Governor

Charles H. Thompson
Secretary

OFFICE OF THE SECRETARY
P. O. Box 7910
Madison, WI 53707-7910

May 11, 1993

Mr. Richard W. Cutler, Chairman
SEWRPC Technical and Intergovernmental Advisory Committee
on Regional Land Use Plan Implementation
Suite 2811
411 East Wisconsin Avenue
Milwaukee, Wisconsin 53202

Dear Mr. Cutler:

Five of the state agencies involved in various land use issues -- the Departments of Administration; Agriculture, Trade and Consumer Protection; Industry, Labor and Human Relations; Natural Resources; and Transportation -- read with interest the final recommendations of the Southeastern Wisconsin Regional Planning Commission's Technical and Intergovernmental Advisory Committee on Regional Land Use Plan Implementation.

I have volunteered to coordinate the agencies' comments on the committee's report. Our agencies would like to commend the Southeastern Wisconsin Regional Planning Commission (SEWRPC) for bringing this committee together, for undertaking an evaluation of the extent to which the region's adopted land use plan has been implemented, and for identifying certain critical areas in which plan implementation can be strengthened.

The issues identified in the committee's recommendations -- farmland preservation, sewage disposal system regulation, protection of sensitive environmental areas, industrial job decentralization -- are all of interest to the state. The state is also supportive of the broader goal of better implementation of adopted regional and local land use plans. While land use planning has a long history in our state as a local and regional activity, the extent to which adopted land use plans are implemented in many cases determines the effectiveness of the programs and activities of our state agencies.

For this reason our agencies appreciate the work of the SEWRPC committee and the problems raised in the committee's recommendations. However, we do have several concerns about the recommendations which we would like to share with you. Our overriding concern is that the recommendations focus primarily on modifications to state programs in order to achieve better

implementation of adopted regional and local land use plans. The state certainly wants to be supportive of better planning and improved plan implementation, and we do not want to hinder planning or plan implementation, but we do not see the state as the central figure responsible for implementation of local or regional plans. Instead, we see implementation of adopted land use plans as primarily a local activity.

Each of our agencies has prepared comments for you on the committee's report. We would like to emphasize that while some of our comments express concerns, we think that the issues raised in the committee's report are important and need to be addressed. Following are each of our agencies comments on the recommendations of the Technical and Intergovernmental Advisory Committee on Regional Land Use Plan Implementation:

Department of Administration

Upon review of the SEWRPC committee recommendations, the Department of Administration (DOA) is reluctant to recommend that the Governor propose legislation which would result in state control of local land use decisions. The Department also questions the existence of a widespread consensus that a problem exists in this area. We feel that a common understanding of the problem and its dimensions must precede the solutions offered by the SEWRPC committee. Until that consensus develops, we do not feel this issue is ripe for discussion at the state level. Also, rather than treat this as a statewide issue, SEWRPC may wish to look at it as a regional issue with a particular focus on Milwaukee.

We recommend that SEWRPC take steps to create an intensified awareness of the problem and develop grass roots support for state-level action. Such a process should begin with town officials and the towns associations within each county and eventually develop a regional consensus. At that point, it may be more appropriate to discuss state involvement.

Department of Agriculture, Trade and Consumer Protection

The Department of Agriculture, Trade and Consumer Protection recognizes the need to continue efforts to preserve and protect prime agricultural lands not only in your region, but throughout Wisconsin. We also appreciate the work done by SEWRPC in documenting land use trends in the southeastern region over the fifteen year monitoring period.

We are required to draft administrative rules pertaining to the Farmland Preservation Program and we will be initiating this process this year. We appreciate your willingness to have a representative participate on our rule advisory committee. We will consider the SEWRPC Committee Plan recommendations; however, we cannot endorse the plan because we do not solely administer the Farmland Preservation Program. The Department of Revenue, Land Conservation Board, and local governments also have important administrative roles.

The preservation of prime agricultural lands is accomplished primarily through the actions of local units of government which are responsible for creating and implementing county farmland preservation plans and zoning ordinances. We view this local government authority as a key component in land use decision-making.

Department of Industry, Labor and Human Relations

The Department of Industry, Labor and Human Relations (DILHR) recognizes the importance of the issues identified in the SEWRPC Committee report, and we share some of the long term objectives of the report. However, we do not concur with the recommendations pertaining to the regulation of private sewage systems. In essence, the recommendations advocate that DILHR mandate compliance with regional land use plans through DILHR's administration of the plumbing code. Our view is that sanitary permits should be conditioned on the performance characteristics of a proposed septic system, not upon collateral issues addressed in a land use plan. Sanitary permits should not be used as a de facto land use planning instrument in place of local land use plans developed with broad participation and enacted by elected officials accountable to the public. Land use decisions regarding where and what type of growth should occur are most appropriately made at the local level, not through the DILHR plumbing code. DILHR's efforts are best directed towards promoting the use and development of advanced treatment systems and systems maintenance.

Department of Natural Resources

The Department of Natural Resources (DNR) is supportive of the SEWRPC Committee recommendations relating to our agency -- in particular, protection and preservation of upland environmental corridors. The DNR appreciates the work that SEWRPC has done in identifying this issue as a problem. We believe that the initial impetus for this recommendation must come from the local level. If strong local concern is expressed for the preservation of upland environmental corridors, our agency will support measures to protect them.

Department of Transportation

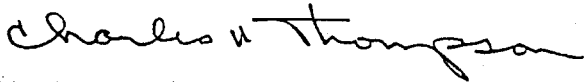
None of the committee's recommendations is directed solely at the Department of Transportation (DOT), but the second recommendation -- promoting compact and contiguous urban development -- is of interest to DOT and other state agencies. The DOT-sponsored Statewide Land Use Task Force endorsed a similar recommendation calling for development of a state land use policy which favors and promotes more compact, efficient urban development. We support this recommendation of the SEWRPC committee and of the Statewide Land Use Task Force, and would like to play a role in implementation of the recommendation. However, we would like to do so within the current framework of land use planning in Wisconsin which maintains local units of government and regional planning commissions as the primary agencies responsible for land use planning and plan implementation. The Statewide Land Use Task Force clearly did not support a state regulatory program to control urban development.

In summary, all of our agencies appreciate the work that SEWRPC and the Technical and Intergovernmental Advisory Committee on Regional Land Use Plan Implementation have done to identify barriers to successful land use plan implementation in southeastern Wisconsin and in other regions of the state as well. We agree that the problems identified exist and support pursuit of ways to rectify them. However, we feel that in the tradition of local and regional land use planning in

Wisconsin, the role of local governments in resolving these problems needs to be more clearly identified and strengthened. Undoubtedly, further exploration of this topic will elaborate ways in which the state can be supportive and each of us is committed to this. Nevertheless, local governments are the agencies empowered to implement land use plans, and strategies are needed which can help to achieve greater levels of plan implementation at the local level.

We appreciate your consideration of our comments and are certain there will be opportunity for further dialogue on these important issues in the future.

Sincerely,

A handwritten signature in cursive script, reading "Charles H. Thompson". The signature is written in dark ink and is positioned above the printed name and title.

Charles H. Thompson
Secretary

cc: James R. Klauser, Secretary, Wisconsin Department of Administration
George E. Meyer, Secretary, Wisconsin Department of Natural Resources
Carol Skornicka, Secretary, Wisconsin Department of Industry, Labor and Human Relations
Alan T. Tracy, Secretary, Wisconsin Department of Agriculture, Trade, and Consumer Protection