



## Thirty-eighth annual report. May 1999

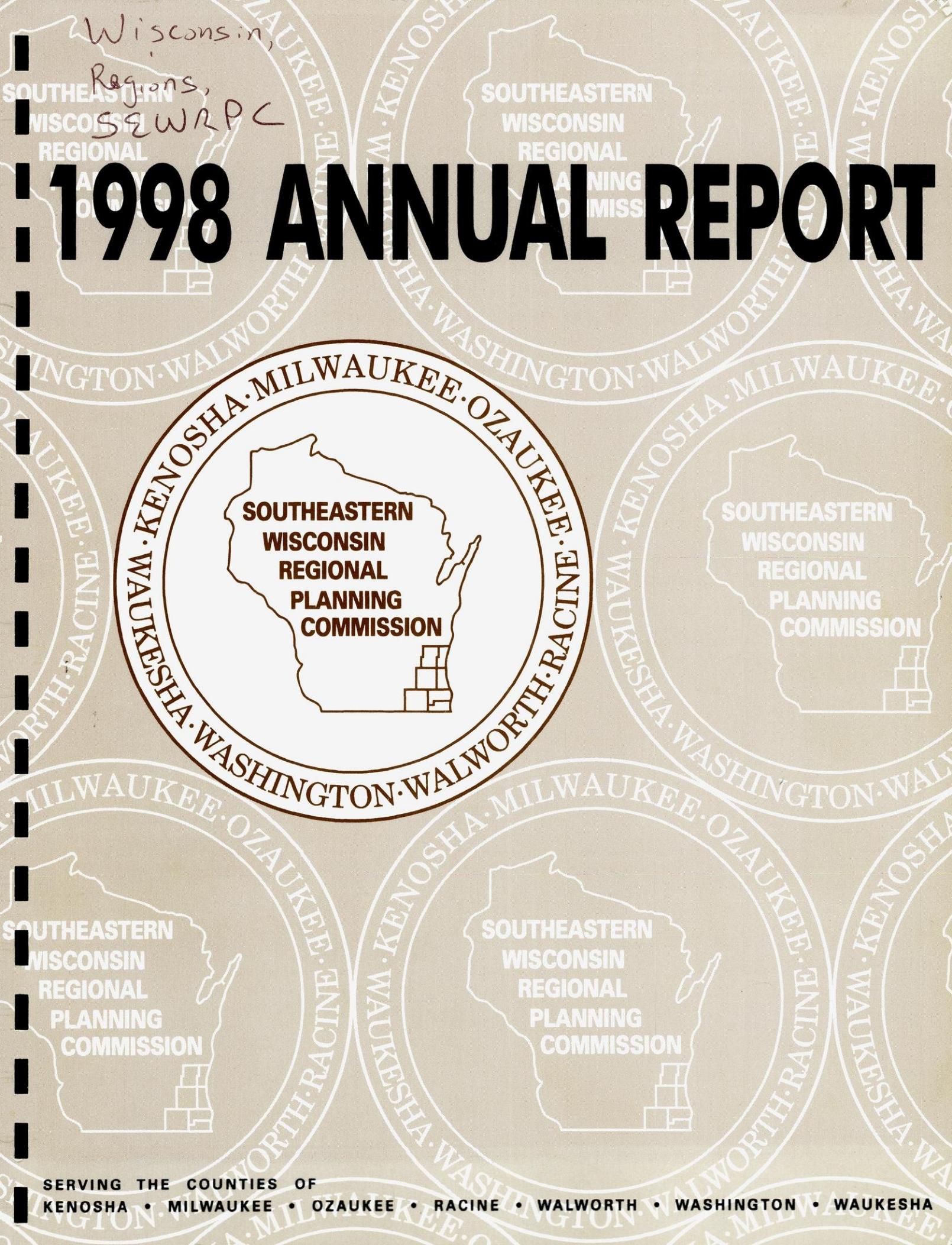
Waukesha, Wisconsin: Southeastern Wisconsin Regional Planning Commission, May 1999

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# 1998 ANNUAL REPORT

**SOUTHEASTERN  
WISCONSIN  
REGIONAL  
PLANNING  
COMMISSION**

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WISCONSIN  
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COMMISSION**

**SOUTHEASTERN  
WISCONSIN  
REGIONAL  
PLANNING  
COMMISSION**

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**THIRTY-EIGHTH ANNUAL REPORT**

**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**

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**May 1999**

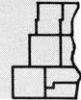
Inside Region	\$2.00
Outside Region	\$4.00



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May 25, 1999

TO: The Wisconsin Legislature and the Legislative Bodies of the  
Local Governmental Units within the Southeastern Wisconsin Region

In accordance with the requirements of Section 66.945(8)(b) of the Wisconsin Statutes, this Commission each calendar year prepares and certifies an annual report to the Wisconsin Legislature and to the legislative bodies of the constituent county and local units of government within the Region. This, the 38th annual report of the Commission, summarizes the work of the Commission in calendar year 1998 and contains a statement of the financial position of the Commission as of the end of that year, as certified by an independent auditor.

While the Commission annual report is prepared to meet the legislative requirement noted above, this document also serves as an annual report to the State and Federal agencies which fund several aspects of the Commission's work program. Importantly, the annual report is intended to provide county and local public officials and other interested citizens with a comprehensive overview of current and proposed Commission activities, thereby providing a focus for the active participation of those officials and citizens in regional plan preparation and implementation.

As do past annual reports, this report contains much useful information on development trends in the Region. This report also summarizes the progress made during 1998 by the Commission in carrying out its three basic functions: data collection and dissemination, regional plan preparation, and promotion of plan implementation.

During 1998, the Commission continued its efforts to implement the fourth-generation, design year 2020 regional land use and regional transportation system plans, both adopted in 1997. As part of its efforts to refine, detail, and extend the comprehensive plan for the Region, the Commission in 1998 adopted an updated park and open space plan for Washington County, as well as a short-range transit development plan for the Racine area.

The Commission also continued its efforts toward full development of a computerized regional geographic information system. In companion efforts, the Commission continued to work with county and local governments throughout the Region toward building computerized land information systems integrated with the regional system.

At year's end, the Commission was continuing work on the preparation of a comprehensive watershed plan for the Des Plaines River watershed, as well as its ongoing work on various county- and local-level planning efforts.

The Commission hopes that the constituent units and agencies of government concerned are pleased with its work during 1998. The Commission looks forward to continuing to serve its constituent counties and local units of government, as well as the State and Federal agencies concerned, by providing the planning services required to address the areawide environmental and developmental problems facing Southeastern Wisconsin and by promoting the intergovernmental cooperation needed to resolve those problems.

Very truly yours,



Thomas H. Buestein  
Chairman



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## ABOUT THE COMMISSION

## AUTHORITY

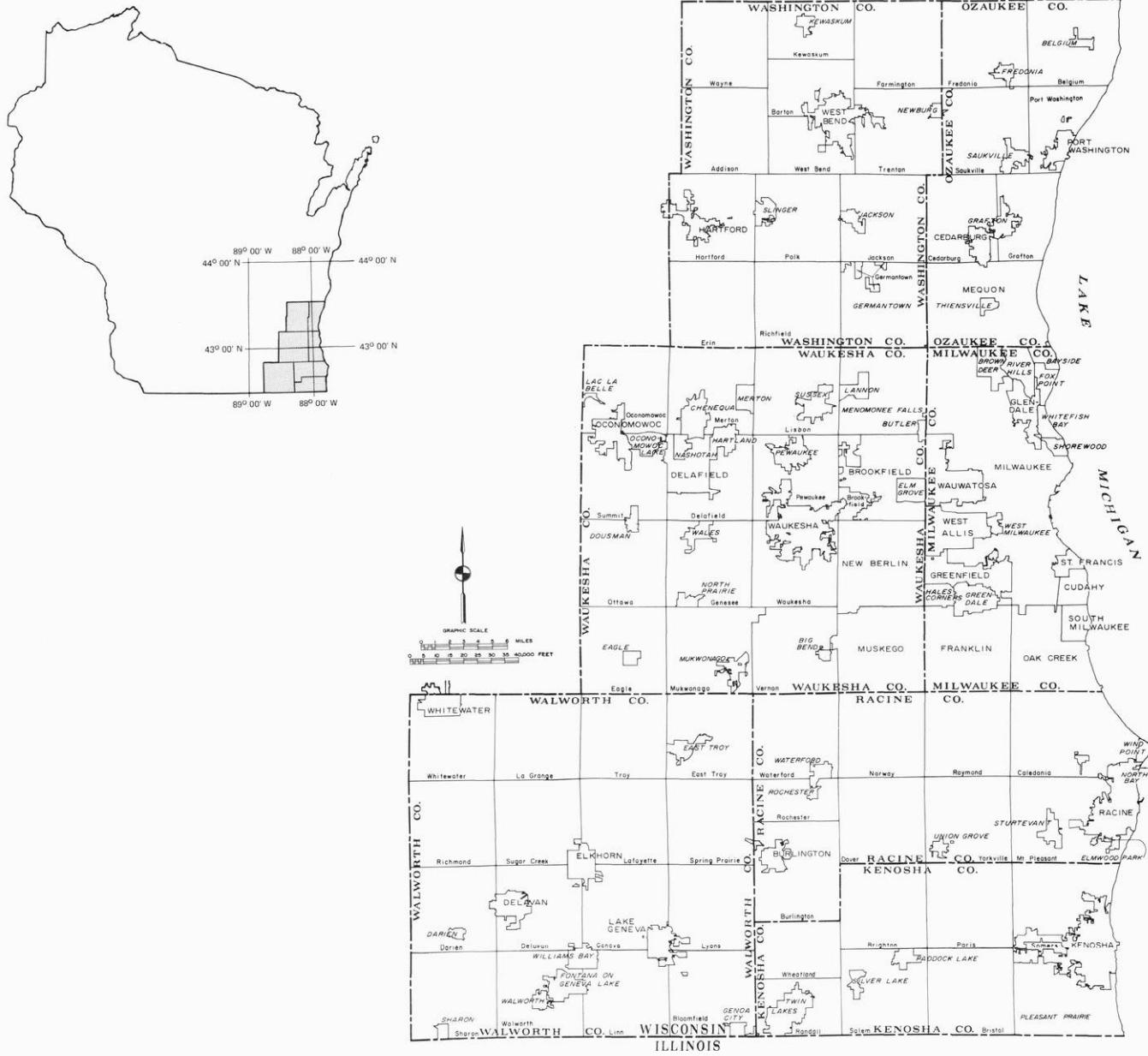
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.945 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning services necessary to solve problems which transcend the corporate boundaries and fiscal capabilities of the local units of government comprising the Southeastern Wisconsin Region.

### AREA SERVED

The Commission serves the Southeastern Wisconsin Region, which consists of the seven counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha (see Map 1). These seven counties have an area of about 2,689 square miles, or about 5 percent of the total area of the State. These counties, however, have a resident population of 1.91 million persons, or about 36 percent of the total population of the State. The seven counties provide about 1.20 million jobs, or about 38 percent of the

## Map 1

## THE SOUTHEASTERN WISCONSIN REGION



total employment of the State, and contain real property worth about \$94.4 billion as measured in equalized valuation, or about 38 percent of all the tangible wealth of the State as measured by such valuation. There are 154 general-purpose local units of government in the seven-county Region, all of which participate in the work of the Commission.

## BASIC CONCEPTS

Regional, or areawide, 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 concerned and of private interests as well.

As used by the Commission, 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 and sewerage and water supply, and of 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, 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, and 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 a common interest in the welfare of the entire Region. Regional planning is necessary to promote this consensus and the necessary cooperation among urban and rural, local, State, and Federal, and public and private interests. In this light, regional planning is not a substitute for Federal, State, or local public planning or for private planning. Rather, regional planning is a vital supplement to such planning.

## COMMISSION OFFICES OLD COURTHOUSE WAUKESHA COUNTY



The work of the Regional Planning Commission is 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.

## BASIC FUNCTIONS

The Commission conceives regional planning as having three basic functions. The first involves the collection, analysis, and dissemination of basic planning and engineering data on a uniform, areawide basis in order that better development decisions can be made in both the public and private sectors. The Commission believes that the establishment and

utilization of such data can in and of itself contribute to better development decision making within the Region. The second function involves the preparation of a framework of long-range areawide plans for the physical development of the Region. This function is mandated by State enabling legislation. While the scope and content of these plans can extend to all phases of regional development, the Commission believes that emphasis should be placed on the preparation of plans for land use and supporting transportation, utility, and community facilities. The third function involves the provision of a center for the coordination of day-to-day planning and plan implementation activities of all of the units and levels of government operating within the Region. Through this function, the Commission seeks to integrate regional and local plans and planning efforts and thereby to promote regional plan implementation.

## ORGANIZATION

The Commission consists of 21 members, three from each of the seven member counties. One Commissioner from each county is appointed or, in those counties where a county executive appoints, confirmed by the county board and is usually an elected county board supervisor. The remaining two from each county are appointed by the Governor, one from a list prepared by the county.

The Commission, as a body, is responsible for establishing overall policy, adopting the annual budget, and adopting regional plan elements. The Commission has four standing committees: Executive, Administrative, Planning and Research, and Intergovernmental and Public Relations. The Executive Committee oversees the work effort of the Commission and is empowered to act for the Commission in all matters except the adoption of the budget and the adoption of regional plan elements. The Administrative Committee oversees the routine but essential housekeeping activities of the Commission. The Planning and Research Committee reviews all of the technical work carried out by the Commission staff and its consultants. The Intergovernmental and Public Relations Committee serves as the Commission's principal arm in communicating with the constituent county boards. Commission and committee rosters are set forth in Appendix A. The

Commission is assisted in its work by 31 technical, citizen, and intergovernmental coordinating and advisory committees. These committees include both elected and appointed public officials and interested citizens with knowledge in the Commission work areas. The committees perform a significant function in both the formulation and the execution of the Commission work programs. Membership on the advisory committees, which totals 644 persons, is set forth in Appendix B.

## STAFFING

The Commission prepares an annual work program which is reviewed and approved by Federal and State funding agencies. This work program is then carried out by a core staff of full-time professional, technical, administrative, and clerical personnel, supplemented by additional temporary staff and consultants as required by the various work programs under way. At the end of 1998, the Commission staff totaled 83, including 76 full-time and seven part-time employees.

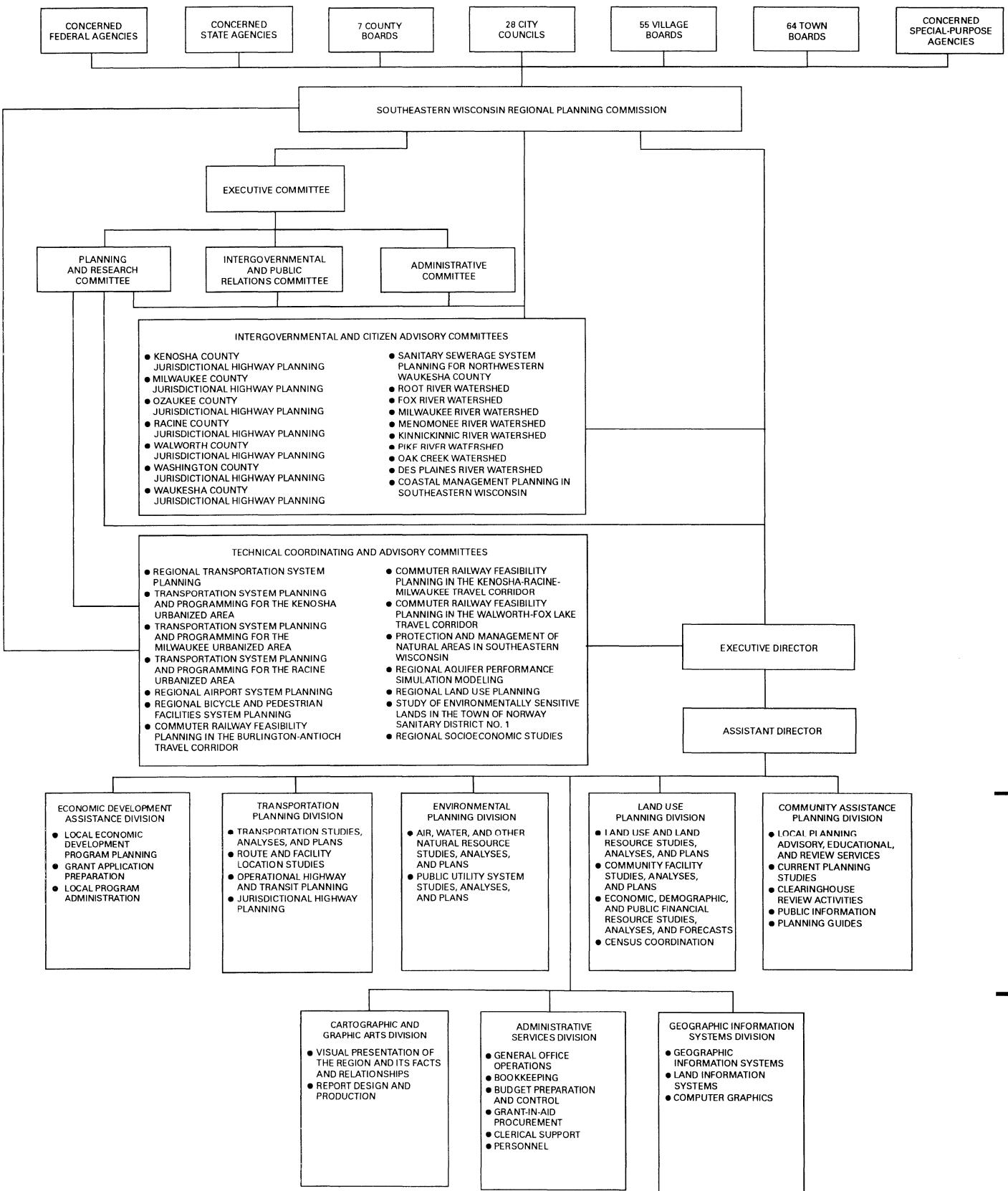
As shown in Figure 1 and in Appendix C, the Commission was in 1998 organized into eight divisions. Five of these divisions, Transportation Planning, Environmental Planning, Land Use Planning, Community Assistance Planning, and Economic Development Assistance, had direct responsibility for the conduct of the Commission's major planning programs. The remaining three divisions, Administrative Services, Cartographic and Graphic Arts, and Geographic Information Systems, provided day-to-day support of the five planning divisions.

## FUNDING

Basic financial support for the Commission's work program is provided by county tax levies apportioned on the basis of equalized valuation. These basic funds are supplemented by State and Federal aids. Revenues received by the Commission during 1998 totaled about \$6.2 million. County tax levies in 1998 totaled about \$1.8 million, or about \$0.94 per capita. The sources of this revenue for 1998 and the trend in funding since the inception of the Commission in 1960 are shown in Figures 2 through 5. There has been little change in the tax levy for regional planning since 1963 when that levy is expressed in constant dollars.

Figure 1

SEWRPC ORGANIZATIONAL STRUCTURE: 1998



The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1998 is set forth in full in Appendix E. Under the Federal Single Audit Act of 1984, the Commission's audit is subject to the review and approval of the Commission's Federal cognizant agency, the Federal Highway Administration.

## DOCUMENTATION

Documentation in the form of published reports is considered very important, if not absolutely essential, to any public planning effort. Printed planning reports represent the best means for disseminating inventory data that have permanent historical value and for promulgating plan recommendations and alternatives to such recommendations. Published reports are intended to serve as important references for public officials at the Federal and State levels, as well as at the local level, when considering important development decisions. Perhaps most importantly, however, published reports are intended to provide a focus for generating enlightened citizen interest in, and action on, plan recommendations. Accordingly, the Commission has established a series of published reports.

The first and most important type of report in the series is the planning report. The planning report is intended to document the adopted elements of the comprehensive plan for the physical development of the Region. As such, these reports constitute the official recommendations of the Regional Planning Commission. Each planning report is carefully reviewed and formally adopted by the Commission.

The second type of report in the series is the planning guide. Planning guides are intended to constitute manuals of local planning practice. As such, planning guides are intended to help improve the overall quality of public planning within the Region, and thereby to promote sound community development properly coordinated on a regionwide basis. The guides discuss basic planning and plan implementation principles, contain examples of good planning practice, and provide local governments with model ordinances and forms to assist them in their everyday planning efforts.

The third type of report in the series is the technical report. Technical reports are intended to make available to various public and private agencies within the Region valuable information assembled by the Commission staff during the course of its

planning work on a work progress basis. Technical reports document the findings of such important basic inventories as detailed soil surveys, stream-water quality surveys, potential park and open space site inventories, and horizontal and vertical control surveys.

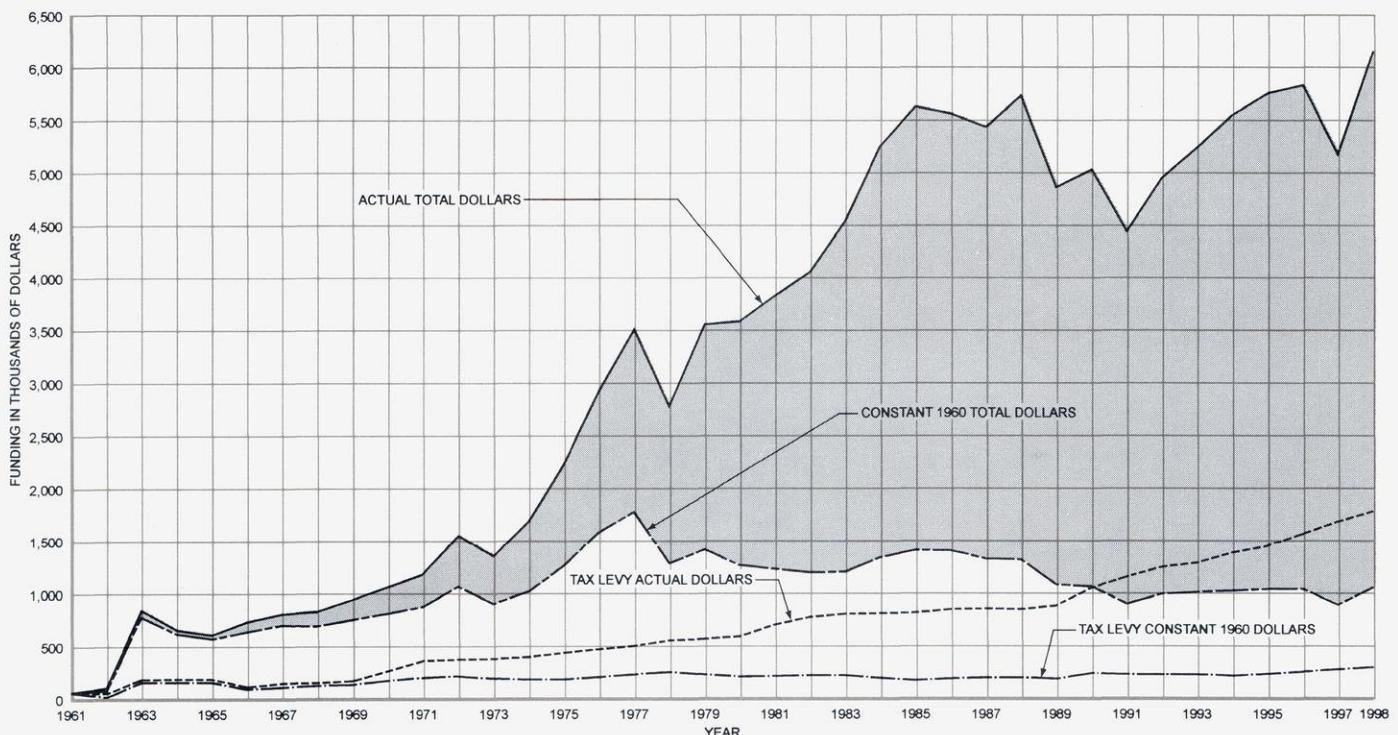
The fourth type of report in the series is similar to the technical report and is known as the technical record. This journal is published on an irregular basis and is intended primarily to document technical procedures utilized in the Commission planning programs. The documentation of such procedures assists other planning and engineering technicians in more fully understanding the Commission work programs and contributes toward advancing the science and art of planning.

The fifth type of report in the series is the community assistance planning report. These reports are intended to document local plans prepared by the Commission at the request of one or more local units of government. Occasionally, these local plans constitute refinements of, and amendments to, adopted regional and subregional plans, and are then formally adopted by the Regional Planning Commission.

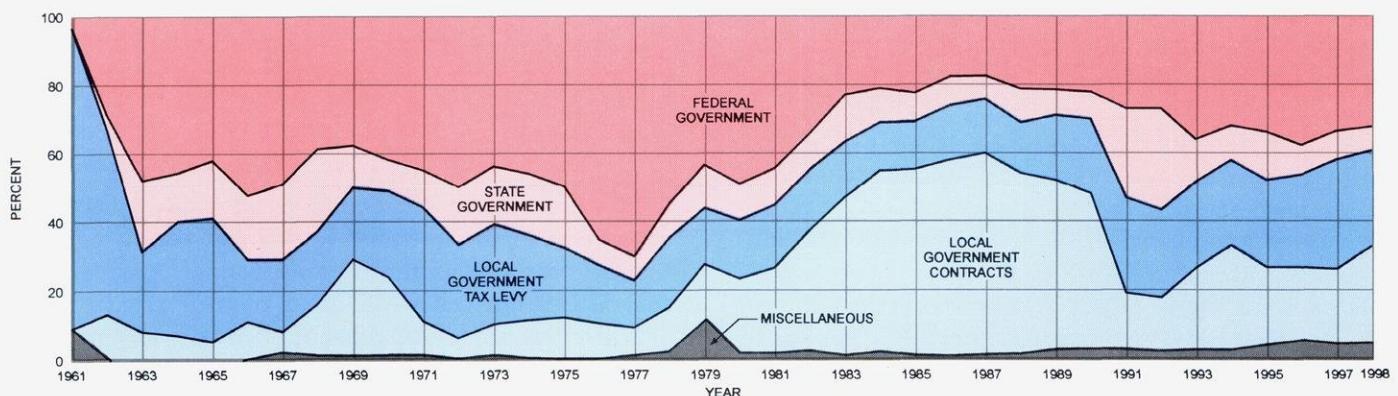
The sixth type of report in the series is the planning program prospectus. Prospectuses are prepared by the Commission as a matter of policy as the initial step in the undertaking of any new major planning program. The major objective of the prospectus is to achieve a consensus among all of the interests concerned on the need for, and objectives of, a particular proposed planning program. The prospectus documents the need for a planning program; specifies the scope and content of the work required to be undertaken; recommends the most effective method for establishing, organizing, and accomplishing the required work; recommends a practical time sequence and schedule for the work; provides sufficient cost data to permit the development of an initial budget; and suggests how to allocate costs among the various levels and units of government concerned. Importantly, the prospectuses serve as the basis for the review, approval, and funding of the proposed planning programs by the constituent county boards.

The seventh type of report in the series is the annual report. The annual report has served an increasing number of functions over the period of the Commission's existence. Originally, and most impor-

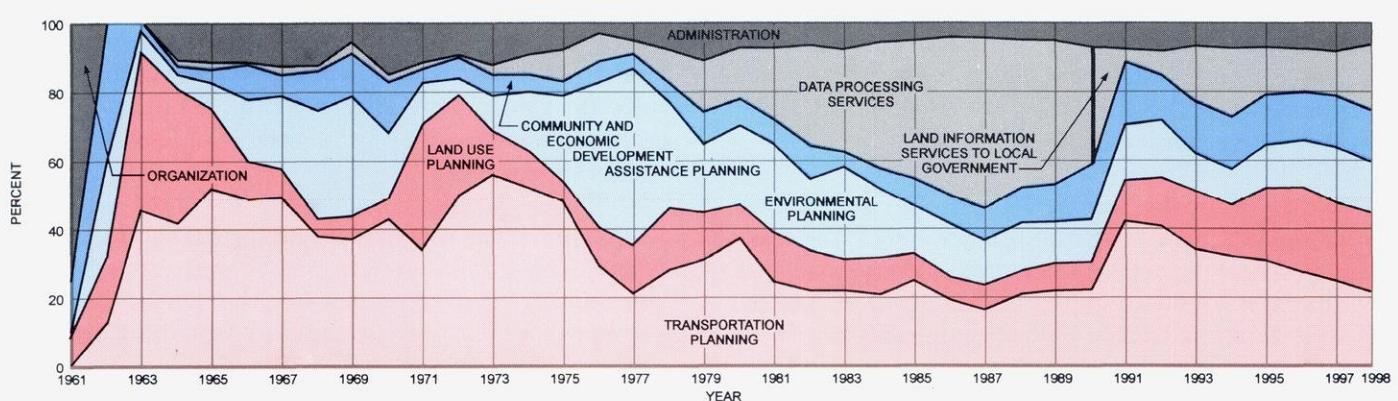
**Figure 2**  
**FUNDING TREND: 1961-1998**



**Figure 3**  
**SOURCES OF REVENUES TREND: 1961-1998**



**Figure 4**  
**EXPENDITURES TREND: 1961-1998**



tantly, the Commission's annual report was, and still is, intended to satisfy a very sound legislative requirement that a regional planning commission each calendar year prepare, publish, and certify to the Wisconsin Legislature and to the legislative bodies of the local units of government within the Region an annual report summarizing the activities of the Commission. In addition, the annual report documents activities under the continuing regional land use-transportation study and as such serves as an annual report to the Federal and State Departments of Transportation. The Commission's annual report is also intended to provide local public officials and interested citizens with a comprehensive overview of the Commission's activities and thereby to provide a focal point for the promotion of regional plan implementation.

The eighth type of report in the series is the memorandum report. These reports are intended to document the results of locally requested special studies. These special studies usually involve

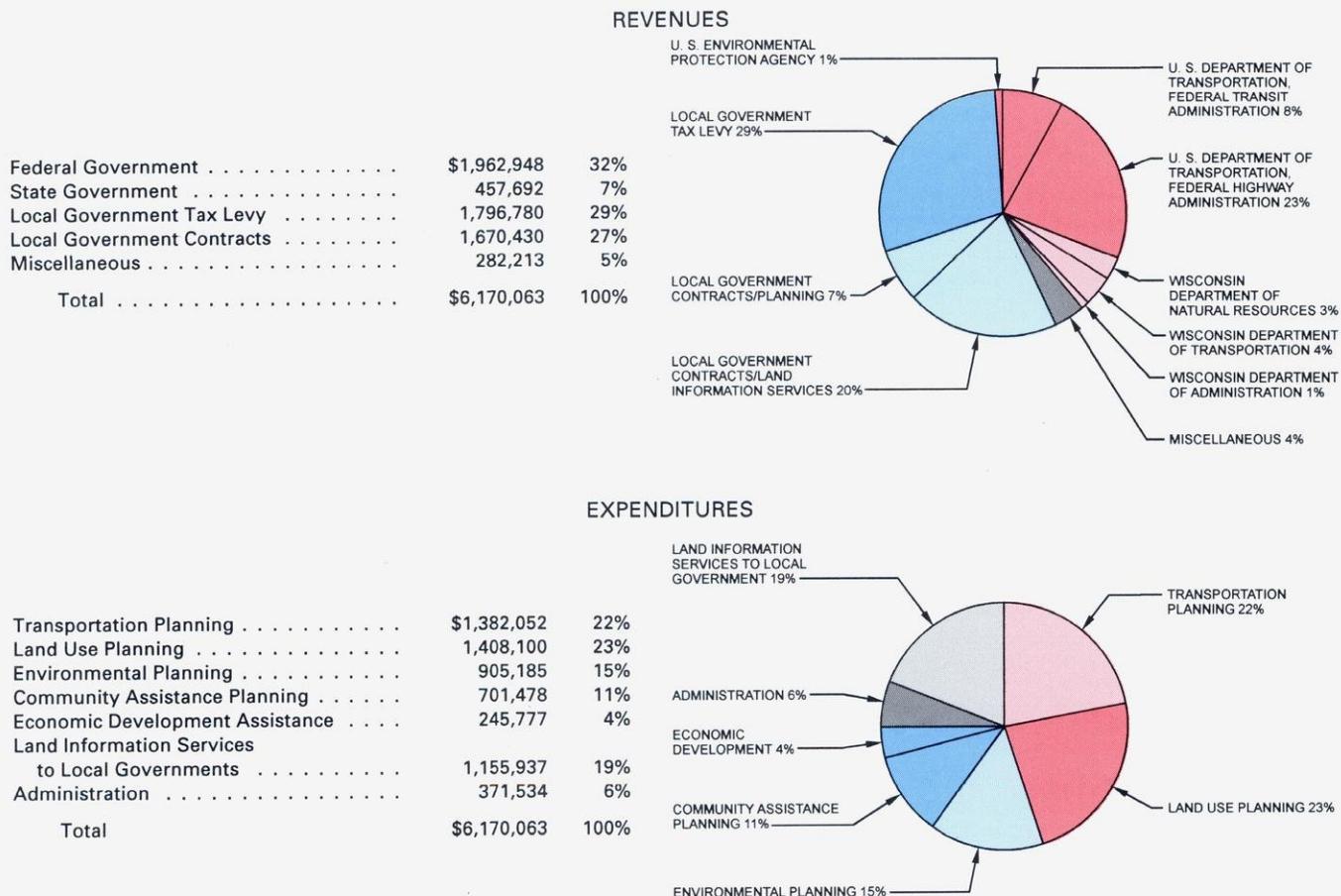
relatively minor work efforts of a short duration and are not normally intended to document formally adopted plans.

In addition to the eight basic types of reports described above, the Commission documents its work in certain miscellaneous publications, including a bimonthly newsletter, regional planning conference proceedings, study designs, public hearing and public informational meeting minutes, transportation improvement programs, and staff memorandums.

While many of the Commission's publications are relatively long and are, necessarily, written in a technical style, they do provide the conscientious, concerned citizen and elected official, as well as concerned technicians, with all of the data and information needed to comprehend fully the scope and complexity of the areawide developmental and environmental problems and of the Commission's recommendations for the resolution of those problems. A complete publication list is set forth in Appendix D.

Figure 5

REVENUES AND EXPENDITURES: 1998





# THE EVOLVING COMPREHENSIVE PLAN FOR THE REGION

## 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 [R]egion." The permissible scope and content of this plan, as outlined in the enabling legislation, extend to all phases of regional development, implicitly emphasizing, however, 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 that 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 functional systems is to be coordinated with the development of the others; 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 Commission believes that the comprehensive plan is 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 also 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 a 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 of the relationships involved both within the system being designed and between the system and its environment.

## ADOPTED PLAN ELEMENTS: 1998

The Commission initiated the important plan design function in 1963 when it embarked upon a major program to prepare a regional land use plan and a regional transportation plan. Since that time, increasing emphasis has been placed on the plan design function. Beginning in the early 1970s, this plan design function has included major plan reappraisal as well as the preparation of new plan elements.

By the end of 1998, the adopted regional plan consisted of 27 individual plan elements. These plan elements are identified in Table 1. Four of these elements are land use-related: the regional land use plan, the regional housing plan, the regional library facilities and services plan, and the regional park and open space plan.

Eleven of the plan elements relate to transportation. These consist of the regional transportation plan (highway and transit), the regional airport

**Table 1**  
**THE ADOPTED REGIONAL PLAN: DECEMBER 31, 1998**

Functional Area	Plan Element	Plan Document	Date of Adoption
Land Use, Housing, and Community Facility Planning	Regional Land Use Plan <sup>a</sup>	Planning Report No. 45, <i>A Regional Land Use Plan for Southeastern Wisconsin: 2020</i>	December 3, 1997
	Regional Library Facilities and Services Plan	Planning Report No. 19, <i>A Library Facilities and Services Plan for Southeastern Wisconsin</i>	September 12, 1974
	Regional Housing Plan	Planning Report No. 20, <i>A Regional Housing Plan for Southeastern Wisconsin</i>	June 5, 1975
	Amendment—Waukesha County	Community Assistance Planning Report No. 209, <i>A Development Plan for Waukesha County, Wisconsin</i>	December 4, 1996
	Regional Park and Open Space Plan	Planning Report No. 27, <i>A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000</i>	December 1, 1977
	Amendment—Ozaukee County Park and Open Space Plan	Community Assistance Planning Report No. 133, <i>A Park and Open Space Plan for Ozaukee County</i>	September 14, 1987
	Amendment—Kenosha County Park and Open Space Plan	Community Assistance Planning Report No. 131, <i>A Park and Open Space Plan for Kenosha County</i>	December 5, 1988
	Amendment—Racine County Park and Open Space Plan	Community Assistance Planning Report No. 134, <i>A Park and Open Space Plan for Racine County</i>	March 6, 1989
	Amendment—Washington County Park and Open Space Plan	Community Assistance Planning Report No. 136 (2nd Edition), <i>A Park and Open Space Plan for Washington County</i>	March 4, 1998
	Amendment—Waukesha County Park and Open Space Plan	Community Assistance Planning Report No. 137, <i>A Park and Open Space Plan for Waukesha County</i>	March 7, 1990
	Amendment—Walworth County Park and Open Space Plan	Community Assistance Planning Report No. 135, <i>A Park and Open Space Plan for Walworth County</i>	March 4, 1992
	Amendment—Milwaukee County Park and Open Space Plan	Community Assistance Planning Report No. 132, <i>A Park and Open Space Plan for Milwaukee County</i>	June 17, 1992
	Amendment—Waukesha County	Community Assistance Planning Report No. 209, <i>A Development Plan for Waukesha County, Wisconsin</i>	December 4, 1996
	Amendment—Regional Natural Areas and Critical Species Habitat Protection and Management Plan	Planning Report No. 42, <i>A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin</i>	September 10, 1997
	Amendment—Cedarburg Woods-West Critical Species Habitat Site	<i>Amendment to the Regional Natural Areas and Critical Species Habitat Protection and Management Plan, City of Cedarburg and Environs</i>	March 4, 1998
Transportation Planning	Regional Transportation Plan <sup>b</sup>	Planning Report No. 46, <i>A Regional Transportation System Plan for Southeastern Wisconsin: 2020</i>	December 3, 1997
	Racine Area Transit Development Plan <sup>c</sup>	Community Assistance Planning Report No. 233, <i>Racine Area Transit System Development Plan: 1998-2002, City of Racine, Wisconsin</i>	September 16, 1998
	Regional Airport System Plan <sup>d</sup>	Planning Report No. 38 (2nd Edition), <i>A Regional Airport System Plan for Southeastern Wisconsin: 2010</i>	December 4, 1996
	Kenosha Area Transit Development Plan <sup>e</sup>	Community Assistance Planning Report No. 183, <i>Kenosha Transit System Development Plan: 1991-1995, City of Kenosha, Wisconsin</i>	June 17, 1992
	Transportation Systems Management Plan	Community Assistance Planning Report No. 50, <i>A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981</i>	December 4, 1980
	Amendment—Milwaukee Northwest Side/Ozaukee County	Planning Report No. 34, <i>A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area</i>	September 8, 1983
	Amendment—Milwaukee Area	Planning Report No. 39, <i>A Freeway Traffic Management System Plan for the Milwaukee Area</i>	December 5, 1988
	Elderly-Handicapped Transportation Plan <sup>f</sup>	Planning Report No. 31, <i>A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982</i>	April 13, 1978
	Amendment—Racine Area	SEWRPC Resolution No. 78-17	December 7, 1978
	Amendment—Kenosha Area	Memorandum Report No. 107, <i>A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Kenosha Transit System</i>	January 24, 1996

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	Amendment—Racine Area	Memorandum Report No. 108, <i>A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Racine Transit System</i>	January 24, 1996
	Amendment—City of Waukesha	Memorandum Report No. 109, <i>A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Waukesha Transit System Utility</i>	January 24, 1996
	Amendment—Waukesha County	Memorandum Report No. 110, <i>A Paratransit Service Plan for Disabled Persons: 1996 Update/ Waukesha County Transit System</i>	January 24, 1996
	Amendment—Milwaukee County	Memorandum Report No. 119, <i>A Paratransit Service Plan for Disabled Persons: 1997 Update/ Milwaukee County Transit System</i>	January 24, 1997
	Waukesha Transit Development Plan	Community Assistance Planning Report No. 154, <i>A Transit System Development Plan for the City of Waukesha, 1988-1992</i>	June 20, 1990
	West Bend Transit Development Plan	Community Assistance Planning Report No. 189, <i>A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996</i>	March 4, 1992
	Bicycle and Pedestrian Facilities System Plan	Planning Report No. 43, <i>A Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2010</i>	January 25, 1995
	Ozaukee County Transit Service Plan	Community Assistance Planning Report No. 218, <i>A Transit Service Plan for Ozaukee County: 1996-2000</i>	December 6, 1995
Environmental Planning	Washington County Public Transit Service Plan	Community Assistance Planning Report No. 223, <i>A Public Transit Service Plan for Washington County: 1998-2002</i>	March 5, 1997
	Root River Watershed Plan	Planning Report No. 9, <i>A Comprehensive Plan for the Root River Watershed</i>	September 22, 1966
	Fox River Watershed Plan	Planning Report No. 12, <i>A Comprehensive Plan for the Fox River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan</i>	June 4, 1970
	Amendment—Water Pollution Control Time Schedule	Amendment to the <i>Comprehensive Plan for the Fox River Watershed</i>	September 13, 1973
	Amendment—Lower Watershed Drainage Plan	Community Assistance Planning Report No. 5, <i>Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed</i>	June 5, 1975
	Amendment—Pewaukee Flood Control Plan	Community Assistance Planning Report No. 14, <i>Floodland Management Plan for the Village of Pewaukee</i>	June 1, 1978
	Milwaukee River Watershed Plan	Planning Report No. 13, <i>A Comprehensive Plan for the Milwaukee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan</i>	March 2, 1972
	Amendment—Lincoln Creek Flood Control Plan	Community Assistance Planning Report No. 13 (2nd Edition), <i>Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin</i>	December 1, 1983
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, <i>A Water Resources Management Plan for the Milwaukee Harbor Estuary Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</i>	December 7, 1987
	Menomonee River Watershed Plan	Planning Report No. 26, <i>A Comprehensive Plan for the Menomonee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan</i>	January 20, 1977
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, <i>A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</i>	December 7, 1987

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Regional Wastewater Sludge Management Plan	Planning Report No. 29, <i>A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin</i>	September 14, 1978
	Kinnickinnic River Watershed Plan	Planning Report No. 32, <i>A Comprehensive Plan for the Kinnickinnic River Watershed</i>	March 1, 1979
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, <i>A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</i>	December 7, 1987
	Regional Water Quality Management Plan <sup>a</sup>	Planning Report No. 30, <i>A Regional Water Quality Management Plan for Southeastern Wisconsin, Volume One, Inventory Findings; Volume Two, Alternative Plans; Volume Three, Recommended Plan</i>	July 12, 1979
	Amendment—Root River Watershed	Community Assistance Planning Report No. 37, <i>A Nonpoint Source Water Pollution Control Plan for the Root River Watershed</i>	March 6, 1980
	Amendment—Walworth County Metropolitan Sewerage District	Community Assistance Planning Report No. 56 (2nd Edition), <i>Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, Walworth County, Wisconsin</i>	December 4, 1991
	Amendment—Cities of Brookfield and Waukesha	Amendment to the Regional Water Quality Management Plan—2000, <i>Cities of Brookfield and Waukesha</i>	December 3, 1981
	Amendment—Kenosha County	Community Assistance Planning Report No. 45, <i>A Farmland Preservation Plan for Kenosha County, Wisconsin</i>	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, <i>A Farmland Preservation Plan for Racine County, Wisconsin</i>	June 17, 1982
	Amendment—City of Muskego	Community Assistance Planning Report No. 64 (3rd Edition), <i>Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin</i>	December 3, 1997
	Amendment—Ashippun Lake, Waukesha County	Community Assistance Planning Report No. 48, <i>A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin</i>	September 9, 1982
	Amendment—Okauchee Lake, Waukesha County	Community Assistance Planning Report No. 53, <i>A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin</i>	September 9, 1982
	Amendment—Lac La Belle, Waukesha County	Community Assistance Planning Report No. 47, <i>A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin</i>	September 9, 1982
	Amendment—North Lake, Waukesha County	Community Assistance Planning Report No. 54, <i>A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin</i>	December 2, 1982
	Amendment—West Bend Area	Community Assistance Planning Report No. 35 (2nd Edition), <i>Sanitary Sewer Service Area for the City of West Bend and Environs, Washington County, Wisconsin</i>	June 17, 1998
	Amendment—Village of Grafton	Amendment to the Regional Water Quality Management Plan—2000, <i>Village of Grafton</i>	December 2, 1982
	Amendment—City of Brookfield	Amendment to the Regional Water Quality Management Plan—2000, <i>City of Brookfield</i>	December 2, 1982
	Amendment—Village of Sussex	Community Assistance Planning Report No. 84 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin</i>	September 7, 1994
	Amendment—Ozaukee County	Community Assistance Planning Report No. 87, <i>A Farmland Preservation Plan for Ozaukee County, Wisconsin</i>	June 16, 1983
	Amendment—Village of Germantown	Community Assistance Planning Report No. 70, <i>Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin</i>	September 8, 1983
	Amendment—Village of Saukville	Community Assistance Planning Report No. 90, <i>Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin</i>	December 1, 1983

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—City of Port Washington	Community Assistance Planning Report No. 95, <i>Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin</i>	December 1, 1983
	Amendment—Pewaukee	Community Assistance Planning Report No. 76, <i>A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin</i>	December 1, 1983
	Amendment—Belgium Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Onion River Priority Watershed Plan</i>	December 1, 1983
	Amendment—Geneva Lake Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Geneva Lake Area Communities</i>	December 1, 1983
	Amendment—Village of Butler	Community Assistance Planning Report No. 99, <i>Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin</i>	March 1, 1984
	Amendment—City of Hartford	Community Assistance Planning Report No. 92 (2nd Edition), <i>Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin</i>	June 21, 1995
	Amendment—Mukwonago Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago</i>	June 21, 1984
	Amendment—Village of Fredonia	Community Assistance Planning Report No. 96, <i>Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin</i>	September 13, 1984
	Amendment—Village of East Troy	Community Assistance Planning Report No. 112 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin</i>	June 16, 1993
	Amendment—City of Milwaukee	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Milwaukee</i>	September 13, 1984
	Amendment—Town of Pleasant Prairie	Community Assistance Planning Report No. 88, <i>A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin</i>	March 11, 1985
	Amendment—Village of Belgium	Community Assistance Planning Report No. 97 (3rd Edition), <i>Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin</i>	September 15, 1993
	Amendment—Town of Addison	Community Assistance Planning Report No. 103, <i>Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin</i>	March 11, 1985
	Amendment—Town of Yorkville	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Yorkville</i>	March 11, 1985
	Amendment—Village of Williams Bay	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Williams Bay/Walworth County Metropolitan Sewerage District</i>	March 11, 1985
	Amendment—Town of Trenton/ City of West Bend	<i>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/ Town of Trenton</i>	March 11, 1985
	Amendment—Village of Hartland	Community Assistance Planning Report No. 93, <i>Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin</i>	June 17, 1985
	Amendment—Village of Jackson Area	Community Assistance Planning Report No. 124 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Jackson and Environs, Washington County, Wisconsin</i>	September 10, 1997
	Amendment—Pewaukee Area	Community Assistance Planning Report No. 113, <i>Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin</i>	June 17, 1985
	Amendment—City of Waukesha	Community Assistance Planning Report No. 100, <i>Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin</i>	December 2, 1985

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Slinger and Environs	Community Assistance Planning Report No. 128 (3rd Edition), <i>Sanitary Sewer Service Area for the Village of Slinger and Environs, Washington County, Wisconsin</i>	December 2, 1998
	Amendment—Kenosha Area	Community Assistance Planning Report No. 106, <i>Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin</i>	December 2, 1985
	Amendment—Town of Eagle	<i>Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District</i>	December 2, 1985
	Amendment—Town of Salem	Community Assistance Planning Report No. 143, <i>Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin</i>	March 3, 1986
	Amendment—Friess Lake, Washington County	Community Assistance Planning Report No. 98, <i>A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin</i>	March 3, 1986
	Amendment—Geneva Lake, Walworth County	Community Assistance Planning Report No. 60, <i>A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin</i>	March 3, 1986
	Amendment—Pewaukee Lake, Waukesha County	Community Assistance Planning Report No. 58, <i>A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin</i>	March 3, 1986
	Amendment—Waterford/Rochester Area	Community Assistance Planning Report No. 141 (2nd Edition), <i>Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin</i>	April 24, 1996
	Amendment—City of Burlington	Community Assistance Planning Report No. 78, <i>Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin</i>	June 16, 1986
	Amendment—City of Waukesha/Town of Pewaukee	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha/Town of Pewaukee</i>	December 1, 1986
	Amendment—Salem/Paddock Lake/Bristol Area	Community Assistance Planning Report No. 145, <i>Sanitary Sewer Service Area for the Town of Salem Utility District No. 1, Village of Paddock Lake, and Town of Bristol Utility District Nos. 1 and 1B, Kenosha County, Wisconsin</i>	December 1, 1986
	Amendment—Racine Area	Community Assistance Planning Report No. 147, <i>Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin</i>	December 1, 1986
	Amendment—Town of Lyons	<i>Amendment to the Regional Water Quality Management Plan—2000, Country Estates Sanitary District/Town of Lyons</i>	March 2, 1987
	Amendment—Village of Silver Lake and Environs	Community Assistance Planning Report No. 119 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Silver Lake and Environs, Kenosha County, Wisconsin</i>	December 2, 1998
	Amendment—Village of Twin Lakes	Community Assistance Planning Report No. 149, <i>Sanitary Sewer Service Area, Village of Twin Lakes, Kenosha County, Wisconsin</i>	June 15, 1987
	Amendment—Cedarburg/Grafton Area	Community Assistance Planning Report No. 91 (2nd Edition), <i>Sanitary Sewer Service Areas for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin</i>	June 19, 1996
	Amendment—Town of Walworth	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Walworth Utility District No. 1/Walworth County Metropolitan Sewerage District</i>	June 15, 1987
	Amendment—City of West Bend	<i>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend</i>	June 15, 1987
	Amendment—City of Whitewater	Community Assistance Planning Report No. 94 (2nd Edition), <i>Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin</i>	March 1, 1995

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Town of Lyons	Community Assistance Planning Report No. 158 (2nd Edition), <i>Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin</i>	September 15, 1993
	Amendment—City of Hartford	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</i>	September 14, 1987
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, <i>A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</i>	December 7, 1987
	Amendment—City of New Berlin	Community Assistance Planning Report No. 157, <i>Sanitary Sewer Service Area for the City of New Berlin, Waukesha County, Wisconsin</i>	December 7, 1987
	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex</i>	December 7, 1987
	Amendment—Kenosha Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Kenosha and Environs</i>	December 7, 1987
	Amendment—Village of Kewaskum	Community Assistance Planning Report No. 161, <i>Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin</i>	March 7, 1988
	Amendment—Town of Darien	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Darien/Walworth County Metropolitan Sewerage District</i>	June 20, 1988
	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex</i>	June 20, 1988
	Amendment—Village of Darien	Community Assistance Planning Report No. 123 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin</i>	September 23, 1992
	Amendment—West Bend Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Town of West Bend</i>	September 12, 1988
	Amendment—Hartford Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</i>	September 12, 1988
	Amendment—Town of Waterford	<i>Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District</i>	September 12, 1988
	Amendment—Hartford Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</i>	December 5, 1988
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha</i>	December 5, 1988
	Amendment—Oconomowoc Area	Community Assistance Planning Report No. 172, <i>Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin</i>	March 6, 1989
	Amendment—Village of Genoa City	Community Assistance Planning Report No. 175 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin</i>	June 19, 1989
	Amendment—Village of Germantown	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Germantown</i>	March 6, 1989
	Amendment—Racine Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</i>	March 6, 1989
	Amendment—Upper Fox River Watershed	<i>Amendment to the Regional Water Quality Management Plan—2000, Upper Fox River Watershed—Brookfield and Sussex Sewage Treatment Plants</i>	May 15, 1989
	Amendment—Racine Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</i>	June 19, 1989
	Amendment—Lake Geneva Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Lake Geneva and Environs</i>	June 19, 1989

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Town of Geneva	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District</i>	November 6, 1989
	Amendment—Town of Waterford	<i>Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District</i>	December 4, 1989
	Amendment—Delavan Lake Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Delavan Lake Sanitary District/ Walworth County Metropolitan Sewerage District</i>	December 4, 1989
	Amendment—East Troy Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Towns of East Troy, LaFayette, and Spring Prairie, and Village of East Troy</i>	December 4, 1989
	Amendment—Waukesha Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha and Town of Waukesha</i>	June 20, 1990
	Amendment—Village of Silver Lake	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Silver Lake and Salem Utility District No. 2</i>	June 20, 1990
	Amendment—Village of Union Grove	<i>Community Assistance Planning Report No. 180, Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin</i>	September 12, 1990
	Amendment—Town of Somers	<i>Amendment to the Regional Water Quality Management Plan—2000, Kenosha and Racine Sanitary Sewer Service Areas</i>	September 12, 1990
	Amendment—City of Franklin	<i>Community Assistance Planning Report No. 176, Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin</i>	December 5, 1990
	Amendment—Village of Mukwonago	<i>Community Assistance Planning Report No. 191, Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin</i>	December 5, 1990
	Amendment—Village of Dousman	<i>Community Assistance Planning Report No. 192, Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin</i>	December 5, 1990
	Amendment—Towns of Yorkville and Mt. Pleasant	<i>Amendment to the Regional Water Quality Management Plan—2000, Towns of Yorkville and Mt. Pleasant</i>	December 5, 1990
	Amendment—Town of Bristol	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Bristol</i>	March 6, 1991
	Amendment—Village of Pewaukee	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Pewaukee</i>	March 6, 1991
	Amendment—Town of Brookfield	<i>Amendment to the Regional Water Quality Management Plan—2000, Brookfield and Waukesha Sanitary Sewer Service Areas</i>	March 6, 1991
	Amendment—Delavan Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Sanitary Sewer Service Area</i>	March 6, 1991
	Amendment—Oconomowoc Lake, Waukesha County	<i>Community Assistance Planning Report No. 181, A Water Quality Management Plan for Oconomowoc Lake, Waukesha County, Wisconsin</i>	June 19, 1991
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Salem</i>	June 19, 1991
	Amendment—Town of Caledonia	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Caledonia</i>	June 19, 1991
	Amendment—Village of Hartland	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Hartland</i>	June 19, 1991
	Amendment—Town of Caledonia	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Caledonia</i>	September 11, 1991
	Amendment—Town of Norway	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Norway</i>	September 11, 1991
	Amendment—Town of Rochester	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Rochester</i>	September 11, 1991
	Amendment—Town of Norway	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Norway</i>	September 11, 1991

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Brookfield/Elm Grove Area	Community Assistance Planning Report No. 109, <i>Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin</i>	December 4, 1991
	Amendment—Racine Area	Amendment to the <i>Regional Water Quality Management Plan—2000, City of Racine and Environs</i>	December 4, 1991
	Amendment—Pewaukee Lake Area	Amendment to the <i>Regional Water Quality Management Plan: 2000, Lake Pewaukee Sanitary District</i>	December 4, 1991
	Amendment—West Bend Area	Amendment to the <i>Regional Water Quality Management Plan: 2000, City of West Bend/Town of West Bend</i>	December 4, 1991
	Amendment—Town of Salem	Amendment to the <i>Regional Water Quality Management Plan: 2000, Town of Salem</i>	December 4, 1991
	Amendment—City of Mequon and Village of Thiensville	Community Assistance Planning Report No. 188, <i>Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin</i>	January 15, 1992
	Amendment—City of West Bend/Town of West Bend/Silver Lake Sanitary District	Amendment to the <i>Regional Water Quality Management Plan—2000, City of West Bend/Town of West Bend/Silver Lake Sanitary District</i>	March 4, 1992
	Amendment—Town of Somers	Amendment to the <i>Regional Water Quality Management Plan—2000, Town of Somers</i>	June 17, 1992
	Amendment—DelafIELD-Nashotah Area	Community Assistance Planning Report No. 127, <i>Sanitary Sewer Service Area for the City of DelafIELD and the Village of Nashotah and Environs, Waukesha County, Wisconsin</i>	January 18, 1993
	Amendment—City of Lake Geneva and Environs	Community Assistance Planning Report No. 203, <i>Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin</i>	January 18, 1993
	Amendment—Eagle Lake Sewer Utility District	Community Assistance Planning Report No. 206, <i>Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin</i>	January 18, 1993
	Amendment—Village of Hartland	Amendment to the <i>Regional Water Quality Management Plan: 2000, Village of Hartland</i>	January 18, 1993
	Amendment—Village of Newburg	Community Assistance Planning Report No. 205, <i>Sanitary Sewer Service Area for the Village of Newburg, Ozaukee and Washington Counties, Wisconsin</i>	March 3, 1993
	Amendment—Village of Twin Lakes	Amendment to the <i>Regional Water Quality Management Plan—2000, Village of Twin Lakes</i>	March 3, 1993
	Amendment—City of Muskego	Amendment to the <i>Regional Water Quality Management Plan: 2000, City of Muskego</i>	March 3, 1993
	Amendment—Villages of Lannon and Menomonee Falls	Community Assistance Planning Report No. 208, <i>Sanitary Sewer Service Areas for the Villages of Lannon and Menomonee Falls, Waukesha County, Wisconsin</i>	June 16, 1993
	Amendment—City of New Berlin	Amendment to the <i>Regional Water Quality Management Plan—2000, City of New Berlin</i>	June 16, 1993
	Amendment—Racine Area	Amendment to the <i>Regional Water Quality Management Plan—2000, City of Racine and Environs</i>	June 16, 1993
	Amendment—Powers Lake, Kenosha and Walworth Counties	Community Assistance Planning Report No. 196, <i>A Management Plan for Powers Lake, Kenosha and Walworth Counties, Wisconsin</i>	September 15, 1993
	Amendment—Wind Lake, Racine County	Community Assistance Planning Report No. 198, <i>A Management Plan for Wind Lake, Racine County, Wisconsin</i>	September 15, 1993
	Amendment—Walworth County Metropolitan Sewerage District	Amendment to the <i>Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District</i>	December 1, 1993
	Amendment—City of New Berlin	Amendment to the <i>Regional Water Quality Management Plan—2000, City of New Berlin</i>	March 9, 1994

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Walworth County Metropolitan Sewerage District	<i>Amendment to the Regional Water Quality Management Plan—2000, Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Sanitary Sewer Service Area</i>	March 9, 1994
	Amendment—Village of Fontana	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Fontana</i>	March 9, 1994
	Amendment—Village of Hartland/Lake Pewaukee Sanitary District	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Hartland and Lake Pewaukee Sanitary District</i>	March 9, 1994
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha</i>	June 15, 1994
	Amendment—City of Burlington/Bohner Lake Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Burlington/Bohner Lake Sanitary Sewer Service Areas</i>	June 15, 1994
	Amendment—City of Oak Creek	<i>Community Assistance Planning Report No. 213, Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin</i>	September 7, 1994
	Amendment—Walworth County Metropolitan Sewerage District/Village of Darien/Town of Darien	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Village of Darien/Town of Darien</i>	September 7, 1994
	Amendment—Pell Lake and Powers-Benedict-Tombeau Lakes Areas	<i>Amendment to the Regional Water Quality Management Plan—2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area, Kenosha and Walworth Counties</i>	December 7, 1994
	Amendment—Walworth County Metropolitan Sewerage District/City of Elkhorn	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area</i>	March 1, 1995
	Amendment—Villages of Fontana and Walworth and Environs	<i>Community Assistance Planning Report No. 219, Sanitary Sewer Service Area for the Villages of Fontana and Walworth and Environs, Walworth County, Wisconsin</i>	June 21, 1995
	Amendment—City of Mequon	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Mequon</i>	June 21, 1995
	Amendment—Walworth County Metropolitan Sewerage District	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Williams Bay-Geneva National-Lake Como Sanitary Sewer Service Area</i>	June 21, 1995
	Amendment—City of West Bend	<i>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Wallace Lake Sanitary District</i>	June 21, 1995
	Amendment—Racine Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</i>	September 13, 1995
	Amendment—Village of Belgium	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Belgium</i>	December 6, 1995
	Amendment—Hartland/Lake Pewaukee Areas	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Hartland and Lake Pewaukee Sanitary District</i>	December 6, 1995
	Amendment—Greater Kenosha Area	<i>Amendment to the Regional Water Quality Management Plan—2010, Greater Kenosha Area</i>	March 6, 1996
	Amendment—Pell Lake Area	<i>Community Assistance Planning Report No. 225, Sanitary Sewer Service Area for the Pell Lake Sanitary District No. 1, Walworth County, Wisconsin</i>	June 19, 1996
	Amendment—Delafield-Nashotah Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Delafield</i>	December 4, 1996
	Amendment—Pewaukee Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Pewaukee Sanitary District No. 3</i>	March 5, 1997
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha</i>	March 5, 1997
	Amendment—City of New Berlin	<i>Amendment to the Regional Water Quality Management Plan—2000, City of New Berlin</i>	June 18, 1997

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Sussex-Town of Lisbon Area	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex/Town of Lisbon</i>	June 18, 1997
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Salem</i>	June 18, 1997
	Amendment—Town of Bristol	<i>Amendment to the Regional Water Quality Management Plan, Town of Bristol</i>	September 10, 1997
	Amendment—City of New Berlin	<i>Amendment to the Regional Water Quality Management Plan, City of New Berlin</i>	December 3, 1997
	Amendment—Village of Slinger	<i>Amendment to the Regional Water Quality Management Plan, Village of Slinger</i>	December 3, 1997
	Amendment—Village of Germantown	<i>Amendment to the Regional Water Quality Management Plan, Village of Germantown</i>	March 4, 1998
	Amendment—Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Area	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Sanitary Sewer Service Area</i>	March 26, 1998
	Amendment—Brookfield-Elm Grove Area	<i>Amendment to the Regional Water Quality Management Plan, City of Brookfield</i>	June 17, 1998
	Amendment—Eagle Lake Sewer Utility District	<i>Amendment to the Regional Water Quality Management Plan, Eagle Lake Sewer Utility District</i>	June 17, 1998
	Amendment—Village of Menomonee Falls	<i>Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls</i>	June 17, 1998
	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan, Village of Sussex</i>	June 17, 1998
	Amendment—Pewaukee Area	<i>Amendment to the Regional Water Quality Management Plan, Lake Pewaukee Sanitary District</i>	September 16, 1998
	Amendment—Village of Belgium	<i>Amendment to the Regional Water Quality Management Plan, Village of Belgium</i>	December 2, 1998
	Amendment—Village of East Troy	<i>Amendment to the Regional Water Quality Management Plan, Village of East Troy</i>	December 2, 1998
	Regional Air Quality Plan	<i>Planning Report No. 28, A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000</i>	June 20, 1980
	Amendment—Emission Reduction Credit Banking and Trading System	<i>Amendment to the Regional Air Quality Attainment and Maintenance Plan: 2000, Emission Reduction Credit Banking and Trading System</i>	December 1, 1983
	Pike River Watershed Plan	<i>Planning Report No. 35, A Comprehensive Plan for the Pike River Watershed</i>	June 16, 1983
	Amendment—Town of Mt. Pleasant	<i>Amendment to the Pike River Watershed Plan, Town of Mt. Pleasant</i>	June 15, 1987
	Amendment—City of Kenosha/Town of Somers	<i>Amendment to the Pike River Watershed Plan, City of Kenosha/Town of Somers</i>	June 15, 1987
	Amendment—Upper Pike River, Lower Pike River, Pike Creek, Airport Branch, and Tributary to Airport Branch	<i>Amendment to the Pike River Watershed Plan, Kenosha and Racine Counties</i>	March 6, 1996
	Oak Creek Watershed Plan	<i>Planning Report No. 36, A Comprehensive Plan for the Oak Creek Watershed</i>	September 8, 1986
Community Assistance Planning	Kenosha Planning District Comprehensive Plan	<i>Planning Report No. 10, A Comprehensive Plan for the Kenosha Planning District, Volume One, Inventory Findings, Forecasts, and Recommended Plans; Volume Two, Implementation Devices</i>	June 1, 1972
	Racine Urban Planning District Comprehensive Plan	<i>Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume One, Inventory Findings and Forecasts; Volume Two, The Recommended Comprehensive Plan; Volume Three, Model Plan Implementation Ordinances</i>	June 5, 1975

## Table 1 Footnotes

<sup>a</sup>The regional land use plan is a fourth-generation plan. The initial regional land use plan was adopted by the Commission on December 1, 1966, and documented in SEWRPC Planning Report No. 7, Land Use-Transportation Study, Volume Three, Recommended Regional Land Use and Transportation Plans—1990. The second-generation regional land use plan was adopted by the Commission on December 19, 1977, and documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, and Volume Two, Alternative and Recommended Plans, and was subsequently amended by the adoption on June 17, 1982, of the Kenosha County and Racine County farmland preservation plans documented, respectively, in SEWRPC Community Assistance Planning Report No. 45, A Farmland Preservation Plan for Kenosha County, Wisconsin, and SEWRPC Community Assistance Planning Report No. 46, A Farmland Preservation Plan for Racine County, Wisconsin; the adoption on June 16, 1983, of the Ozaukee County farmland preservation plan documented in SEWRPC Community Assistance Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin; the adoption on December 1, 1983, of a land use plan for the Town of Pewaukee and Village of Pewaukee documented in SEWRPC Community Assistance Planning Report No. 76, A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin; the adoption on March 11, 1985, of a land use management plan for the Chiwaukee Prairie-Carol Beach area of the then Town of Pleasant Prairie documented in SEWRPC Community Assistance Planning Report No. 88, A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin; and the adoption on January 15, 1992, of a land use and transportation system development plan for the IH 94 South Freeway Corridor in Kenosha, Milwaukee, and Racine Counties, documented in SEWRPC Community Assistance Planning Report No. 200, A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties. The third-generation regional land use plan was adopted by the Commission on September 23, 1992, and documented in SEWRPC Planning Report No. 40, A Regional Land Use Plan for Southeastern Wisconsin—2010, and was subsequently amended by the adoption on June 21, 1995, of a land use and transportation system development plan for the IH 94 West Freeway Corridor in Waukesha County, documented in SEWRPC Community Assistance Planning Report No. 201, A Land Use and Transportation System Development Plan for the IH 94 West Freeway Corridor: 2010, Waukesha County, Wisconsin, and the adoption on December 4, 1996, of a development plan for Waukesha County, documented in SEWRPC Community Assistance Planning Report No. 209, A Development Plan for Waukesha County, Wisconsin.

<sup>b</sup>The regional transportation plan is a fourth-generation plan. The initial regional transportation plan was adopted by the Commission on December 1, 1966, and documented in SEWRPC Planning Report No. 7, Land Use-Transportation Study, Volume Three, Recommended Regional Land Use and Transportation Plans—1990, and was subsequently amended by the adoption on June 4, 1970, of the Milwaukee County jurisdictional highway system plan documented in SEWRPC Planning Report No. 11, A Jurisdictional Highway System Plan for Milwaukee County; the adoption on March 2, 1972, of the Milwaukee area transit plan set forth in the document entitled Milwaukee Area Transit Plan; the adoption on March 4, 1973, of the Walworth County jurisdictional highway system plan documented in SEWRPC Planning Report No. 15, A Jurisdictional Highway System Plan for Walworth County; the adoption on March 7, 1974, of the Ozaukee County jurisdictional highway system plan documented in SEWRPC Planning Report No. 17, A Jurisdictional Highway System Plan for Ozaukee County; the adoption on June 5, 1975, of the Waukesha County jurisdictional highway system plan documented in SEWRPC Planning Report No. 18, A Jurisdictional Highway System Plan for Waukesha County; the adoption on September 11, 1975, of the Washington County jurisdictional highway system plan documented in SEWRPC Planning Report No. 23, A Jurisdictional Highway System Plan for Washington County; the adoption on September 11, 1975, of the Kenosha County jurisdictional highway system plan documented in SEWRPC Planning Report No. 24, A Jurisdictional Highway System Plan for Kenosha County; and the adoption on December 4, 1975, of the Racine County jurisdictional highway system plan documented in SEWRPC Planning Report No. 22, A Jurisdictional Highway System Plan for Racine County. The second-generation regional transportation system plan was adopted by the Commission on June 1, 1978, and documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, and Volume Two, Alternative and Recommended Plans, and was subsequently amended by the adoption on June 18, 1981, of the Amendment to the Regional Transportation Plan—2000, Lake Freeway South Corridor; the adoption on June 17, 1982, of an amendment pertaining to the Milwaukee area primary transit system documented in SEWRPC Planning Report No. 33, A Primary Transit System Plan for the Milwaukee Area; the adoption on December 2, 1982, of the Amendment to the Regional Transportation Plan—2000, Racine County, and that date's Amendment to the Regional Transportation Plan—2000, Waukesha County; the adoption on September 8, 1983, of an amendment pertaining to a transportation system plan for the northwest side of Milwaukee County and for Ozaukee County documented in SEWRPC Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area; the adoption on December 1, 1983, of the Amendment to the Regional Transportation Plan—2000, Lake Freeway North/Park Freeway East; the adoption on March 11, 1985, of the Amendment to the Regional Transportation Plan—2000, Stadium Freeway South Corridor; the adoption on June 20, 1988, of that date's Amendment to the Regional Transportation Plan—2000, Waukesha County; the adoption on June 20, 1990, of the Amendment to the Washington County Jurisdictional Highway System Plan—2000; the adoption on December 5, 1990, of the Amendment to the Racine County Jurisdictional Highway System Plan—2000 and the Amendment to the Regional Transportation Plan—2000, Kenosha County; the adoption on January 15, 1992, of a land use and transportation system development plan for the IH 94 South Freeway Corridor in Kenosha, Milwaukee, and Racine Counties, documented in SEWRPC Community Assistance Planning Report No. 200, A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties; the adoption on March 4, 1992, of the Amendment to the Walworth County Jurisdictional Highway System Plan—2010; and the adoption on January 18, 1993, of the Amendment to the Ozaukee County Jurisdictional Highway System Plan: 2010. The third-generation regional transportation system plan was adopted by the Commission on December 7, 1994, and documented in SEWRPC Planning Report No. 41, A Regional Transportation System Plan for Southeastern Wisconsin: 2010, and was subsequently amended by the adoption on June 21, 1995, of a land use and transportation system development plan for the IH 94 West Freeway Corridor in Waukesha County, documented in SEWRPC Community Assistance Planning Report No. 201, A Land Use and Transportation System Development Plan for the IH 94 West Freeway Corridor: 2010, Waukesha County, Wisconsin; the adoption on December 6, 1995, of an updated jurisdictional highway system plan for Waukesha County, set forth in a Commission document entitled Amendment to the Waukesha County Jurisdictional Highway System Plan—2010; and the adoption on December 4, 1996, of a development plan for Waukesha County, documented in SEWRPC Community Assistance Planning Report No. 209, A Development Plan for Waukesha County, Wisconsin.

<sup>c</sup>The Racine area transit development plan is a fourth-generation plan. The initial plan was adopted by the Commission on September 12, 1974, and documented in SEWRPC Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979. The second-generation plan was documented in SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1988. The third-generation plan was adopted by the Commission on March 9, 1994, and documented in SEWRPC Community Assistance Planning Report No. 204, Racine Transit System Development Plan: 1993-1997, City of Racine, Wisconsin.

### Table 1 Footnotes (continued)

<sup>a</sup>The regional airport system plan is an amended and updated second-generation plan. The first-generation plan was adopted by the Commission on March 4, 1976, and documented in SEWRPC Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin. The second-generation plan was initially adopted by the Commission on June 15, 1987, and documented in the first edition of SEWRPC Planning Report No. 38, A Regional Airport System Plan for Southeastern Wisconsin: 2010.

<sup>b</sup>The Kenosha area transit development plan is a third-generation plan. The initial plan was adopted by the Commission on June 3, 1976, and documented in SEWRPC Community Assistance Planning Report No. 7, Kenosha Area Transit Development Plan: 1976-1980. The second-generation plan was adopted by the Commission on March 11, 1985, and documented in SEWRPC Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1988, City of Kenosha, Wisconsin.

<sup>c</sup>The four 1996 amendments and the single 1997 amendment to the 1978 elderly-handicapped transportation plan supersede and supplement a series of earlier amendments to the 1978 plan. These earlier amendments are as follows: 1) an amendment adopted by the Commission on June 20, 1980, and documented in SEWRPC Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Two, Milwaukee Urbanized Area/Milwaukee County; 2) three amendments adopted by the Commission on September 11, 1980, and documented in SEWRPC Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, respectively, in Volume One, Kenosha Urbanized Area; Volume Three, Racine Urbanized Area; and Volume Four, Milwaukee Urbanized Area/Waukesha County; 3) an amendment adopted by the Commission on June 18, 1981, and documented in the Amendment to the Public Transit Accessibility Plan for the Milwaukee Urbanized Area/Waukesha County, City of Waukesha Transit System; 4) five amendments adopted by the Commission on December 7, 1987, and documented, respectively, in SEWRPC Memorandum Report No. 17, A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility; SEWRPC Memorandum Report No. 21, A Public Transit Program for Handicapped Persons—Milwaukee County Transit System; SEWRPC Memorandum Report No. 22, A Public Transit Program for Handicapped Persons, Waukesha County Transit System; SEWRPC Memorandum Report No. 23, A Public Transit Program for Handicapped Persons—City of Waukesha Transit System; and SEWRPC Memorandum Report No. 24, A Public Transit Program for Handicapped Persons—City of Racine Transit System; 5) five amendments adopted by the Commission on January 15, 1992, and documented, respectively, in SEWRPC Memorandum Report No. 58, A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System; SEWRPC Memorandum Report No. 59, A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System; SEWRPC Memorandum Report No. 60, A Paratransit Service Plan for Disabled Persons—City of Racine Transit System; SEWRPC Memorandum Report No. 61, A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility; and SEWRPC Memorandum Report No. 62, A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System; 6) five amendments adopted by the Commission on January 18, 1993, and documented, respectively, in SEWRPC Memorandum Report No. 73, A Paratransit Service Plan for Disabled Persons: 1993 Update/Milwaukee County Transit System; SEWRPC Memorandum Report No. 74, A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Kenosha Transit System; SEWRPC Memorandum Report No. 75, A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Racine Transit System; SEWRPC Memorandum Report No. 76, A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Waukesha Transit System Utility; and SEWRPC Memorandum Report No. 77, A Paratransit Service Plan for Disabled Persons: 1993 Update/Waukesha County Transit System; 7) five amendments adopted by the Commission on January 24, 1994, and documented, respectively, in SEWRPC Memorandum Report No. 88, A Paratransit Service Plan for Disabled Persons: 1994 Update/Milwaukee County Transit System; SEWRPC Memorandum Report No. 89, A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Kenosha Transit System; SEWRPC Memorandum Report No. 90, A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Racine Transit System; SEWRPC Memorandum Report No. 91, A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Waukesha Transit System Utility; and SEWRPC Memorandum Report No. 92, A Paratransit Service Plan for Disabled Persons: 1994 Update/Waukesha County Transit System; 8) five amendments adopted by the Commission on January 25, 1995, and documented, respectively, in SEWRPC Memorandum Report No. 96, A Paratransit Service Plan for Disabled Persons: 1995 Update/Milwaukee County Transit System; SEWRPC Memorandum Report No. 97, A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Kenosha Transit System; SEWRPC Memorandum Report No. 98, A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Racine Transit System; SEWRPC Memorandum Report No. 99, A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Waukesha Transit System Utility; and SEWRPC Memorandum Report No. 100, A Paratransit Service Plan for Disabled Persons: 1995 Update/Waukesha County Transit System; and 9) an amendment adopted by the Commission on January 24, 1996, and documented in SEWRPC Memorandum Report No. 106, A Paratransit Service Plan for Disabled Persons: 1996 Update/Milwaukee County Transit System.

<sup>d</sup>The regional water quality management plan grew out of a first-generation regional sanitary sewerage plan adopted by the Commission on May 13, 1974, and documented in SEWRPC Planning Report No. 16, A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin.

system plan, the transportation systems management plan, the elderly and handicapped transportation plan, the regional bicycle and pedestrian facilities system plan, and detailed transit development plans for the Kenosha, Racine, Waukesha, and West Bend urban areas and for Ozaukee and Washington Counties.

Ten of the adopted plan elements fall within the broad functional area of environmental planning. These consist of the regional water quality man-

agement plan, the regional wastewater sludge management plan, the regional air quality attainment and maintenance plan, and comprehensive watershed development plans for the Root, Fox, Milwaukee, Menomonee, Kinnickinnic, and Pike River watersheds, and for the Oak Creek watershed.

The final two plan elements consist of comprehensive community development plans for the Kenosha and Racine urbanized areas.

During 1998, the Commission adopted an updated, second-generation, design year 2010 park and open space plan for Washington County as an amendment to the regional park and open space plan; an updated short-range transit system development plan for the City of Racine public transit system for the years 1998 through 2002; an amendment to the regional natural areas and critical species habitat protection and management plan regarding a plan recommendation for preservation of a critical species habitat site located within the Town of Cedarburg; and 12 amendments to the regional water quality management plan dealing with changes to sanitary sewer service areas at various locations throughout the Region. As appropriate, each of these plan amendments is described subsequently in this *Annual Report*.

## **THE CYCLICAL NATURE OF THE PLANNING PROCESS**

The Commission views the planning process as cyclical in nature, alternating between systems, or areawide, planning, and project, or local, planning. Under this concept, for example, with respect to transportation planning, transportation facilities development and management proposals are initially advanced at the areawide systems level of planning and then an attempt is made to implement the proposals through local project planning. If, for whatever reasons, a particular facility construction or management proposal advanced at the areawide systems planning level cannot be implemented at the project level, that determination is taken into account in the next phase of systems planning. A specific example of this is the Milwaukee River Parkway arterial facility included in the initial regional transportation system plan but rejected in the project planning phase of the cycle. Similar examples could be given for land use development, park and open space facilities, library facilities, flood control facilities, water pollution abatement facilities, or any of the other types of facilities or services that are the subject of Commission plan elements.

By the end of 1979, the second cycle of areawide systems planning for land use, transportation, and water quality management programs had been completed. The resulting plans represent second-generation plans for the Region, incorporating the feedback from the intensive project and facilities planning efforts completed by local agencies after, and in implementation of, the first-generation area-

wide system plans. In September 1992, the Commission adopted a third-generation regional land use plan as part of the Commission's periodic review and reappraisal of the major elements of the comprehensive regional plan. Similarly, in December 1994, the Commission adopted a third-generation regional transportation system plan as part of this review and reappraisal process. The current, fourth-generation, design year 2020 regional land use and regional transportation system plans adopted in December 1997, meanwhile, were prepared as extensions 10 years into the future of the corresponding year 2010 plans, holding to the basic principles and concepts of the year 2010 plans.

The fourth-generation, design year 2020 regional land use plan is based upon the same three basic concepts underlying the first-, second-, and third-generation regional land use plans, namely, the centralization of new urban land development to the greatest degree practicable, the preservation and protection of primary environmental corridor lands, and the preservation and protection of prime agricultural lands. The fourth-generation regional land use plan is thus conceptually identical to the three previous regional land use plans. Prepared as an extension of the year 2010 regional land use plan, the year 2020 plan incorporates revisions and amendments which reflect development which had occurred or which had been committed to since the completion of the year 2010 plan in 1992, recently completed county and municipal land use plans which are consistent with regional development objectives, and a new set of population, household, and employment forecasts for the Region through the year 2020.

The fourth-generation regional transportation system plan, which also has a design year of 2020, is designed to serve and support the adopted regional land use plan. The regional transportation system plan builds upon three earlier plans, the first adopted in 1966, the second in 1978, and the third in 1994. The currently adopted plan is an extension 10 years into the future of the year 2010 regional transportation plan. The year 2020 plan embodies the basic structure of the year 2010 plan with only modest amendments as necessary to address additional travel needs expected to materialize over the extended planning period and to appropriately incorporate plan modifications advanced by local units of government since completion of the year 2010 plan. The current plan, like the year 2010

plan, is also designed to help the Region meet the requirements of the Federal Clean Air Act Amendments of 1990 and the Federal Intermodal Surface Transportation Efficiency Act of 1991.

The initial cycle of water quality management planning consisted of the regional sanitary sewerage system plan adopted by the Commission in 1974 and the project-level planning carried out by local water quality management agencies since that time. In July 1979, the Commission adopted a regional water quality management plan, taking into account the results of the project- and facility-level planning efforts of the first planning cycle. The regional water quality management plan differed from the regional sanitary sewerage system plan primarily in scope and complexity, the regional water quality management plan dealing with such areas as regional sludge management and the control of water pollution from nonpoint sources as well as with the control of water pollution from point sources, which was the focus of the first systems-level planning effort. A report documenting the status of the regional water quality management plan, collating and summarizing all implementation actions taken and plan amendments adopted since the adoption of the initial plan in 1979, was completed and published by the Commission in March 1995.

## **PLAN ELEMENTS UNDER PREPARATION**

At the end of 1998, the Commission had under way a number of programs designed to refine, detail, amend, or extend the existing plan elements. These work efforts included the following:

- The preparation of short-range transit system development plans for Waukesha County and for the City of Waukesha and environs. As of year's end, a similar plan for the Kenosha area had been completed and was awaiting consideration and adoption by the Commission.
- The preparation of amendments to the regional water quality management plan relating to the refinement, revision, and updating of planned sanitary sewer service areas for

the Town of Norway Sanitary District No. 1 area in Racine County and the City of Oconomowoc area in Waukesha County.

- The preparation of a sanitary sewerage system plan for the northwestern Waukesha County area.
- The preparation of a second-generation, design year 2010 park and open space plan for Racine County.
- The preparation of a comprehensive watershed plan for the Des Plaines River watershed.

## **FUTURE WORK PROGRAMS**

The Commission is committed to carrying out a series of continuing planning efforts designed to ensure that the already adopted plan elements are both kept current and extended in terms of design year. Thus, the Commission annually carries on a continuing regional land use planning program designed in part to update and extend the regional land use and regional park and open space plans; a continuing regional transportation planning program designed to update and extend the regional highway, transit, airport, and bicycle and pedestrian system plans; and a continuing regional environmental planning program designed to update, amend, and extend the series of watershed plans and the regional water quality management plan.

In addition to these major continuing planning efforts, the Commission from time to time prepares supplemental plan elements as a part of the master plan for the physical development of the Region. In so doing, the Commission follows an established policy of preparing a prospectus or a study design prior to undertaking any major new planning efforts. During 1998, the Commission, the Wisconsin Geological and Natural History Survey, and the U. S. Geological Survey together completed a prospectus for a regional aquifer performance simulation modeling program for Southeastern Wisconsin. Also during the year, the Commission completed a staff memorandum regarding the scope of work for a detailed planning study of commuter rail and bus alternatives in the Kenosha-Racine-Milwaukee corridor.



# LAND USE PLANNING DIVISION

## DIVISION FUNCTIONS

The Land Use Planning Division conducts studies and prepares plan recommendations concerning the physical aspects of land use development within the Region. The Division is also responsible for developing demographic, economic, and public financial resource data that serve as the basis for the preparation of regional and subregional plans of various types by the Commission. The kinds of basic questions addressed by this Division include the following:

- How many people live and work in the Region? How are the levels of population and employment changing over time?
- Where in the Region do people live and work? How are the population, household, and employment distribution patterns changing over time?
- What are the most probable future levels of population, households, and employment in the Region? Where will people live and work in the future?
- What is the existing pattern of land use development in the Region? How is this pattern changing over time?
- Where are the significant natural resource areas of the Region located, including the wetlands, woodlands, and wildlife habitat areas? What is happening to these resources over time?
- Where are the significant agricultural lands of the Region located? At what rate are these lands being converted to other uses?
- What are the probable future demands within the Region for each of the land use categories, and what appears to be the best way to accommodate these demands?
- How can new urban development and redevelopment in the Region be adjusted to the limitations of the natural resource base?

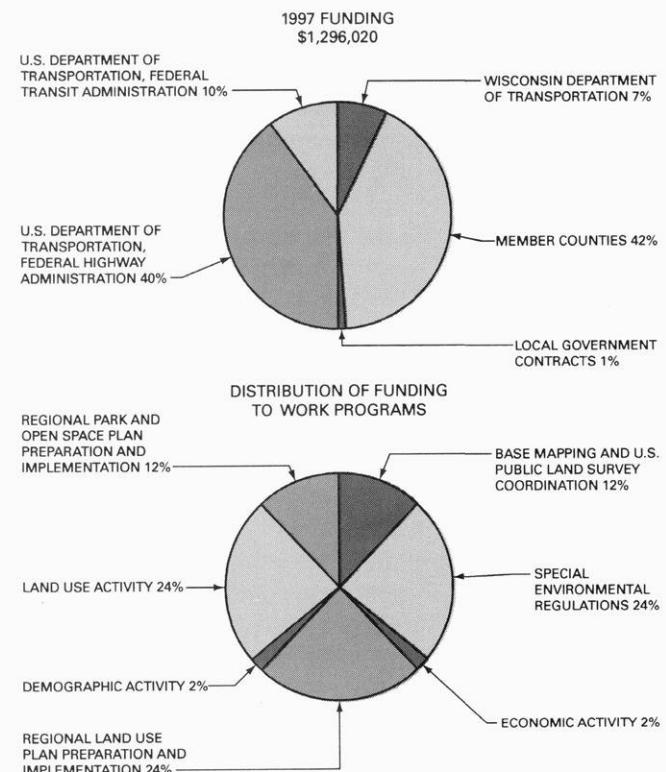
- What is the demand for outdoor recreation in the Region, and how can this demand best be met through the provision of park and open space sites and facilities?

In an attempt to provide answers to these and similar questions, the Land Use Planning Division, during 1998, conducted a number of activities in three identifiable areas: land use planning, economic and demographic analysis, and park and open space planning.

## LAND USE PLANNING

During 1998, Division efforts in land use planning were directed primarily toward implementation of the adopted regional land use plan. Much of this work involved the extension of regional land use plan data for use in subregional and local planning

**Figure 6**  
**LAND USE PLANNING DIVISION**



programs being undertaken by the Commission and by county and local units of government within the Region. The Division also continued to monitor subdivision platting activity within the seven-county Region during 1998.

## **Regional Land Use Plan—An Overview**

The year 2020 regional land use plan, documented in SEWRPC Planning Report No. 45, *A Regional Land Use Plan for Southeastern Wisconsin: 2020*, dated December 1997, was formally adopted by the Commission in that month. The basic concepts of the year 2020 regional land use plan are essentially the same as those underlying the initial, design year 1990 regional land use plan adopted by the Commission in 1966 and the subsequent design year 2000 plan adopted in 1977 and design year 2010 plan adopted in 1992. The design year 2020 plan is shown in graphic summary form on Map 2.

### *Urban Land Use*

The year 2020 regional land use plan recommends that new urban development occur along the periphery of, and outward from, the established urban centers of the Region and as infill development within those urban centers. The plan seeks 1) to centralize land use development insofar as practicable; 2) to encourage new development to occur at densities consistent with the provision of public centralized sanitary sewer, water supply, and mass transit facilities and services; 3) to encourage new urban development to occur only in areas covered by soils well suited to urban use and not subject to special hazards such as flooding and erosion; and 4) to encourage new urban development and redevelopment to occur in areas in which essential urban facilities and services are available or into which such facilities and services can be readily and economically extended. In short, the plan seeks to promote an orderly and economical settlement pattern and to avoid the creation of new developmental and environmental problems.

Under the adopted plan, the amount of land in urban use within the Region would increase from about 637 square miles in 1990 to about 737 square miles in 2020, an increase of about 100 square miles, or 16 percent. New residential development would be encouraged to occur at medium densities, defined as densities of 2.3 to 6.9 dwelling units per acre, with about 69 percent of the total projected

increase in households proposed to be accommodated within this density range. New urban development would be provided with basic public utilities, and certain existing urban areas would be retrofitted with public utilities so that by the year 2020, about 84 percent of all urban land and about 91 percent of the total resident population would be served by public sanitary sewer and water supply services.

### *Environmentally Sensitive Lands*

The adopted land use plan recommends the preservation of those lands within the Region identified as primary environmental corridors in essentially natural, open uses. Such corridors encompass concentrations of natural resource elements, including woodlands, wetlands, wildlife habitat areas, and surface water and associated floodlands and shorelands, as well as features closely related to those elements, such as historical, scenic, and recreational sites. The essentially linear corridors represent a composite of the best remaining elements of the natural resource base of the Region. Including certain agricultural-use floodplains which are envisioned to eventually revert to a natural condition, primary environmental corridors would encompass 474 square miles, or 18 percent of the total area of the Region, under planned conditions.

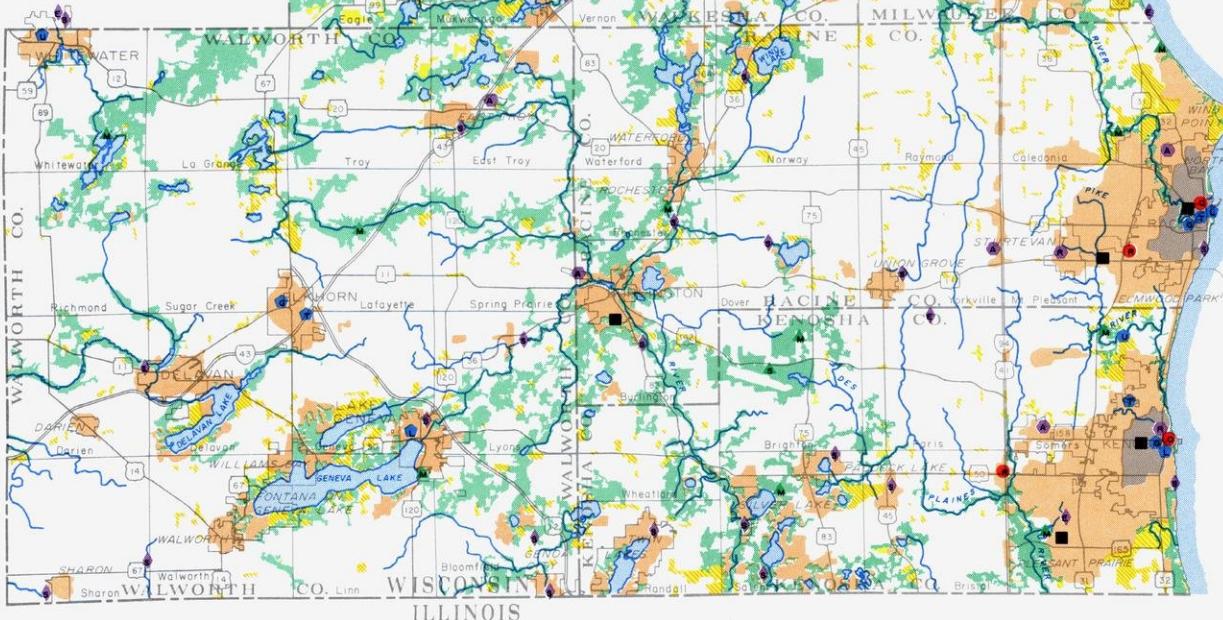
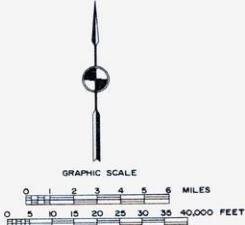
The preservation of primary environmental corridors is perhaps the single most important element of the regional land use plan. Such preservation is essential to maintenance of a high level of environmental quality in the Region, protection of its natural heritage and beauty, and provision of opportunities for recreational and educational pursuits. The exclusion of urban development from these corridors will also help avoid the creation or intensification of such serious and costly problems as water pollution, wet and flooded basements, building and pavement foundation failures, and excessive infiltration of clear water into sanitary sewerage systems.

The plan also recommends the preservation of certain smaller, but nevertheless significant, concentrations of natural resources, identified as secondary environmental corridors and isolated natural resource areas. These areas should be retained as part of the natural landscape, incorporated as local park and open space reserves, or preserved in other open space uses insofar as

**Map 2**  
**ADOPTED LAND USE PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2020**

**LEGEND**

- [Yellow Box] SUBURBAN RESIDENTIAL (0.2-0.6 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- [Yellow Box] LOW DENSITY RESIDENTIAL (0.7-2.2 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- [Orange Box] MEDIUM DENSITY RESIDENTIAL (2.3-6.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- [Grey Box] HIGH DENSITY RESIDENTIAL (7.0-17.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- MAJOR COMMERCIAL CENTER  
R—RETAIL  
O—OFFICE
- MAJOR INDUSTRIAL CENTER
- ▲ MAJOR PUBLIC OUTDOOR RECREATION CENTER  
M—MULTI-USE SITE  
S—SPECIAL PURPOSE SITE
- MAJOR TRANSPORTATION CENTER  
A—AIRPORT  
B—BUS TERMINAL  
R—PASSENGER RAIL TERMINAL  
S—SEAPORT
- MAJOR UTILITY CENTER  
S—PUBLIC SEWAGE TREATMENT PLANT  
E—ELECTRIC POWER GENERATION PLANT
- MAJOR GOVERNMENTAL OR INSTITUTIONAL CENTER  
G—COUNTY, STATE, OR FEDERAL  
ADMINISTRATIVE OFFICE  
M—MEDICAL  
U—UNIVERSITY  
T—TECHNICAL/VOCATIONAL  
L—LIBRARY  
C—CULTURAL/ENTERTAINMENT
- [Green Box] PRIMARY ENVIRONMENTAL CORRIDOR
- [White Box] AGRICULTURAL AND RURAL-DENSITY RESIDENTIAL LAND
- [Blue Box] WATER



practicable, as determined in county and local land use plans.

#### *Agricultural and Rural-Density Residential Land*

Under the plan, those areas which are neither designated for future urban use nor recommended for preservation as environmentally sensitive areas are identified as "agricultural and rural-density residential land." The plan recommends that these areas be retained in rural use. The plan encourages the continuation of agricultural uses in these areas. In particular, the plan seeks to preserve, insofar as practicable, the most productive farmlands within these areas—farmlands covered by agricultural capability Class I and Class II soils. The plan recommends that counties in the Region prepare and adopt updated farmland preservation plans which identify prime agricultural lands, appropriately taking into account Class I and Class II soils, among other factors, in this process. The plan further recommends that areas identified as prime agricultural lands in county plans be placed in protective exclusive agricultural zoning districts.

Other lands in this category—lands which are not identified as prime agricultural lands under county farmland preservation plans—are recommended to be retained in rural use. The regional land use plan encourages the continuation of agricultural activity in these areas, recognizing that such activity may occur in the form of smaller farms such as horse farms, hobby farms, or community-supported agricultural operations. Under the plan, development in these areas would be limited to rural-density residential development, defined as development with no more than one dwelling unit per five acres. Where rural-density residential development is accommodated, the plan encourages the use of cluster designs, with dwelling units developed in clusters surrounded by agricultural and other open space sufficient to maintain the overall density of no more than one dwelling unit per five acres.

#### *Local Adoption of the Regional Land Use Plan*

Many units of government have acted to formally adopt the design year 1990, 2000, and/or 2010 regional land use plans. The year 2020 regional land use plan was certified to all counties, cities, villages, and towns in the Region in April 1998. Adoption of the year 2020 regional land use plan by the units and agencies of government that have

adopted the design year 1990, 2000, or 2010 plans serves to substitute the new plan for the old. By the end of 1998, the year 2020 regional land use plan had been adopted by Racine, Walworth, and Waukesha Counties; the Cities of Cedarburg, Hartford, and West Bend; the Villages of Bayside, Brown Deer, Darien, Eagle, Hartland, Kewaskum, and Twin Lakes; and the Towns of Linn and Randall. In addition, as of year's end, the plan had been acknowledged or endorsed by the Wisconsin Department of Administration; the Wisconsin Department of Agriculture, Trade and Consumer Protection; and the Wisconsin Department of Natural Resources.

#### **Residential Subdivision Platting Activity**

The Commission annually monitors land subdivision activity within the Region. In all, 2,830 residential lots were created within the Region during 1998 by subdivision plat, compared with 4,107 lots so created in 1997. Of the residential lots created in 1998, 2,240 lots, or about 79 percent, were served by public sanitary sewers; the remaining 590 lots, or about 21 percent, were served by onsite septic tank sewage disposal systems (see Table 2 and Map 3). In the seven counties in Southeastern Wisconsin, the number of residential lots created through subdivision plats in 1998 ranged from a low of 119 lots in Walworth County to a high of 1,199 lots in Waukesha County. Historical trends in residential platting activity since 1960 are shown for the Region and by county in Figure 7.

### **ECONOMIC AND DEMOGRAPHIC ANALYSIS**

During 1998, the Division continued to monitor secondary data sources for changes in employment, population, and school enrollment levels, and continued to provide socioeconomic data in support of its work and that of the Transportation, Environmental, and Community Assistance Planning Divisions.

#### **Number of Available Jobs**

An important measure of economic activity within the Region is the number of available jobs. Since jobs are enumerated at their location, the job data are often referred to in terms of "place-of-work" employment data. It should be noted that the enumeration of jobs does not distinguish between full- and part-time jobs or indicate whether or not

Table 2

## RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1998

County	Sewered Lots		Unsewered Lots		Total Lots	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha . . . . .	250	95.1	13	4.9	263	9.3
Milwaukee . . . . .	527	100.0	0	0.0	527	18.6
Ozaukee . . . . .	139	71.3	56	28.7	195	6.9
Racine . . . . .	168	100.0	0	0.0	168	5.9
Walworth . . . . .	119	100.0	0	0.0	119	4.2
Washington . . . . .	266	74.1	93	25.9	359	12.7
Waukesha . . . . .	771	64.3	428	35.7	1,199	42.4
Region	2,240	79.2	590	20.8	2,830	100.0

the job is held by a resident of the jurisdiction in which the job is enumerated or by a commuter. The numbers of jobs available in the Region in the years 1980, 1990, and 1998 are set forth in Table 3 by employment category.

The number of jobs in the Region in 1998 was estimated at 1,202,600, an increase of 135,400 jobs, or about 13 percent, over the 1990 level of 1,067,200 jobs. As shown in Table 3, all of the employment sectors, except agriculture and the manufacture of food and kindred products and of nonelectrical machinery, provided more jobs in 1998 than in 1990. In terms of jobs lost, the largest decrease in employment between 1990 and 1998 occurred in the manufacture of nonelectrical machinery, a decrease of 1,900 jobs, or about 3 percent. In terms of jobs gained, the largest increase in employment between 1990 and 1998 occurred in the services sector, an increase of 82,100 jobs, or about 27 percent.

Employment distribution by county is shown in Table 4. In all counties in the Region, there were more jobs in 1998 than in 1990, with the largest absolute increase, 73,300 jobs, occurring in Waukesha County.

#### *Comparison of Actual and Alternative Future Employment Levels*

In 1995, the Commission developed a new set of projections of regional employment change to the design year 2020. These projections are documented in SEWRPC Technical Report No. 10 (3rd Edition), *The Economy of Southeastern Wisconsin*, October

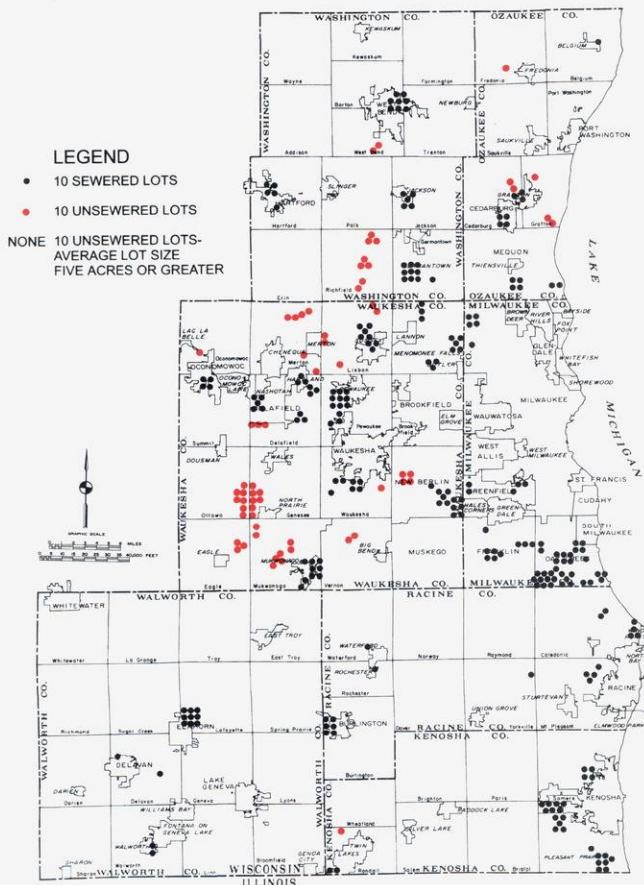
1995. Because of the uncertainty surrounding future employment levels within the Region, the Commission prepared alternative projections of regional employment levels for the year 2020. Three alternative regional economic activity scenarios were developed. Two of these were intended to represent high-growth and low-growth extremes in future employment levels; the third was intended to identify an intermediate-growth future, that is, a future that lies between the two extremes, and was considered the most likely to come about.

Subsequent to the preparation of the 2020 employment projections and as part of the preparation of the 2020 regional land use plan, the Technical Coordinating and Advisory Committee on Regional Land Use Planning reviewed the employment projections in view of recent changes in the economic structure and employment distribution within the Region. Upon completion of this review, the Committee recommended that the intermediate-growth future, as set forth in Technical Report No. 10 (3rd Edition), be used as the basis for the 2020 regional land use plan. The following table, figure, and discussion reflect the employment forecast on which the adopted year 2020 regional land use plan is based, as well as the alternative projections considered.

Employment in the Region in 1998 was anticipated to total 1,181,400 jobs under the high-growth scenario; 1,145,700 jobs under the intermediate-growth scenario; and 1,119,300 jobs under the low-growth scenario. The estimated 1998 level of 1,202,600 jobs lies about 2 percent, 5 percent, and 7 percent, respectively, above the levels anticipated under the

### Map 3

## RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1998



high-growth, intermediate-growth, and low-growth scenarios. The 1998 employment levels envisioned for the Region and each of its seven counties under each of the three future scenarios and the 1998 estimated actual employment levels within the Region and its constituent counties are set forth in Table 5 and Figure 8.

## Resident Population Levels

The size of the resident population of the Region increased from about 1,764,800 residents in 1980 to about 1,810,400 residents in 1990, an increase of about 45,600 residents, or about 3 percent. This increase was considerably greater than the increase of 8,700 residents, or less than 1 percent, from 1970 to 1980, but still much smaller than the increases of 333,000 residents, or about 27 percent, from 1950 to 1960, and 182,500 residents, or about 12 percent, from 1960 to 1970.

The Wisconsin Department of Administration estimates of 1998 resident population levels within the Region and its constituent counties are set forth in Table 6. The Department has statutory responsibility for preparing intercensal population estimates as a basis for the distribution of State shared taxes to local units of government. These estimates are based upon symptomatic indicators of population change, including automobile registrations, the number of persons filing income-tax returns, and the dollar value of exemptions for dependents claimed on income-tax returns. In 1998, the resident population of the Region was estimated by the Department to be about 1,908,100 persons, an increase of about 97,700 persons, or about 5 percent, over the 1990 Census population level. Every county in the Region, except Milwaukee County, was estimated to have experienced population increases between 1990 and 1998, ranging from a low of about 7,300 persons, or about 10 percent, in Ozaukee County to a high of about 40,700 persons, or about 13 percent, in Waukesha County. The resident population of Milwaukee County was estimated by the Department to have decreased by about 2,200 persons, or less than 1 percent, between 1990 and 1998.

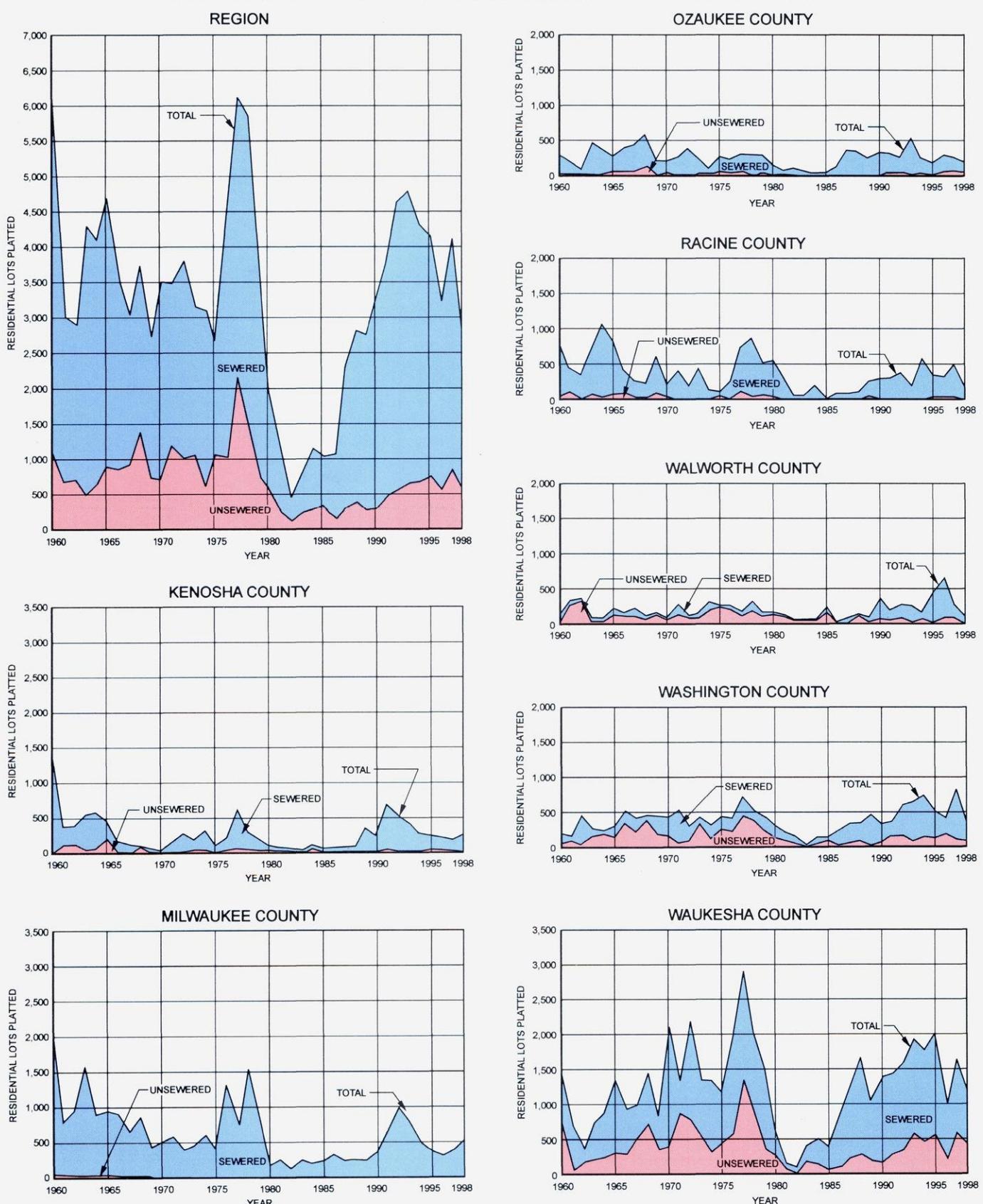
Between the Census date of April 1, 1990, and January 1, 1998, the total population increase of 97,700 persons is estimated to have resulted from a natural increase of about 92,700 persons and a net in-migration of about 5,000 persons. Natural increase in the Region has been relatively stable since 1980, ranging from about 8,000 persons to 14,000 persons yearly. Since 1990, Milwaukee County has recorded a net out-migration of about 53,200 persons, while all other counties in the Region have recorded net in-migration, ranging from a low of about 3,500 persons in Racine County to a high of about 25,800 persons in Waukesha County.

## *Comparison of Actual and Alternative Future Population Levels*

In 1995, the Commission developed a new set of projections of regional population change to the year 2020. The projections are documented in SEWRPC Technical Report No. 11 (3rd Edition), *The Population of Southeastern Wisconsin*, October 1995. As in the preparation of employment projections, the Commission developed alternative projected resident population levels to the year 2020. Three alternative regional population sce-

Figure 7

RESIDENTIAL LOTS PLATTED IN THE REGION AND ITS COUNTIES: 1960-1998



**Table 3**  
**REGIONAL EMPLOYMENT BY CATEGORY: 1980, 1990, AND 1998**

Employment Category	Number of Jobs			1980-1990 Change		1990-1998 Change	
	1980	1990 <sup>a</sup>	1998	Number	Percent	Number	Percent
Agriculture .....	10,000	7,100	6,100	-2,900	-29.0	-1,000	-14.1
Construction .....	33,800	46,100	53,100	12,300	36.4	7,000	15.2
Manufacturing							
Food and Kindred Products .....	20,200	16,600	15,500	-3,600	-17.8	-1,100	-6.6
Printing and Publishing .....	16,200	22,900	24,800	6,700	41.4	1,900	8.3
Primary Metals .....	16,800	11,400	12,400	-5,400	-32.1	1,000	8.8
Fabricated Metals .....	32,000	26,800	26,900	-5,200	-16.3	100	0.4
Nonelectrical Machinery .....	75,000	55,600	53,700	-19,400	-25.9	-1,900	-3.4
Electrical Machinery .....	40,700	23,300	27,800	-17,400	-42.8	4,500	19.3
Transportation Equipment .....	22,000	8,900	12,200	-13,100	-59.5	3,300	37.1
Other Manufacturing .....	41,300	56,100	60,200	14,800	35.8	4,100	7.3
Manufacturing Subtotal	264,200	221,600	233,500	-42,600	-16.1	11,900	5.4
Transportation, Communication, and Utilities .....	42,200	46,000	52,300	3,800	9.0	6,300	13.7
Wholesale Trade .....	46,100	54,900	63,800	8,800	19.1	8,900	16.2
Retail Trade .....	153,600	186,400	191,400	32,800	21.4	5,000	2.7
Finance, Insurance, and Real Estate .....	75,200	86,200	94,300	11,000	14.6	8,100	9.4
Services .....	214,100	305,500	387,600	91,400	42.7	82,100	26.9
Government and Government Enterprises <sup>b</sup> .....	101,600	107,000	111,800	5,400	5.3	4,800	4.5
Miscellaneous <sup>c</sup> .....	4,400	6,400	8,700	2,000	45.5	2,300	35.9
Total Jobs	945,200	1,067,200	1,202,600	122,000	12.9	135,400	12.7

<sup>a</sup>On January 1, 1988, the Wisconsin Department of Industry, Labor and Human Relations adopted a revised and updated Standard Industrial Classification (SIC) system. The primary effect of this update was a reclassification of some jobs previously coded as "electrical machinery" jobs to "other manufacturing" jobs.

<sup>b</sup>Excludes armed forces.

<sup>c</sup>Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.

**Table 4**  
**REGIONAL EMPLOYMENT BY COUNTY: 1980, 1990, AND 1998**

County	Number of Jobs			1980-1990 Change		1990-1998 Change	
	1980	1990	1998 Estimate	Number	Percent	Number	Percent
Kenosha .....	54,000	50,900	65,000	-3,100	-5.7	14,100	27.7
Milwaukee .....	581,600	613,300	615,500	31,700	5.5	2,200	0.4
Ozaukee .....	28,100	36,400	50,900	8,300	29.5	14,500	39.8
Racine .....	80,900	88,800	95,100	7,900	9.8	6,300	7.1
Walworth .....	33,400	40,200	50,700	6,800	20.4	10,500	26.1
Washington .....	35,000	46,100	60,600	11,100	31.7	14,500	31.5
Waukesha .....	132,200	191,500	264,800	59,300	44.9	73,300	38.3
Region	945,200	1,067,200	1,202,600	122,000	12.9	135,400	12.7

**Table 5**  
**ACTUAL AND PROJECTED NUMBER OF AVAILABLE JOBS BY COUNTY: 1998**

County	Estimated 1998 Jobs	Projected 1998 Jobs		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	65,000	58,700	56,900	55,600
Milwaukee .....	615,500	653,400	633,900	619,300
Ozaukee .....	50,900	42,200	40,900	40,000
Racine .....	95,100	98,900	95,900	93,700
Walworth .....	50,700	53,100	51,400	50,200
Washington .....	60,600	53,200	51,600	50,400
Waukesha .....	264,800	221,900	215,100	210,100
Region	1,202,600	1,181,400	1,145,700	1,119,300

narios were developed, each of which was closely linked to a corresponding economic activity scenario for the Region. Two of these were intended to represent high-growth and low-growth extremes in future population levels; the third was intended to identify an intermediate-growth future, that is, a future that lies between the two extremes, and was considered the most likely to come about. The regional population projections were developed using a cohort-component procedure similar to that used by the Commission in its previous population projection efforts.

Subsequent to the preparation of the 2020 population projections and as part of the preparation of the 2020 regional land use plan, the Technical Coordinating and Advisory Committee on Regional Land Use Planning reviewed the population projections in view of recent population growth and change in the Region. Upon completion of this review, the Committee recommended that the intermediate-growth future, as set forth in Technical Report No. 11 (3rd Edition), be used as the basis for the 2020 regional land use plan. The following table, figure, and discussion reflect the population forecast on which the adopted year 2020 regional land use plan is based, as well as the alternative projections considered.

Under the high-growth scenario, the population level of the Region was anticipated to reach about 2.06 million persons in 1998. The actual 1998 regional population level of 1.91 million persons was about 7 percent below this anticipated level. Under the low-growth scenario, the population level of the Region was anticipated to be about 1.87

million persons in 1998. The actual 1998 population level was about 2 percent above this level. Under the intermediate-growth scenario, the population level of the Region was anticipated to reach about 1.93 million persons in 1998. The actual 1998 population level was about 1 percent below this level. The 1998 population levels envisioned for each of the seven counties within the Region under each of these three alternative futures and the 1998 estimated county population levels are set forth in Table 7 and Figure 9.

### Household Levels

The Commission annually prepares an estimate of the number of households within the Region. The 1998 estimate is derived from the most recent available estimates of households based upon Census data, modified to reflect recent residential building-permit and demolition activity.

The number of households in the Region is estimated to have increased from about 628,000 households in 1980 to about 676,100 households in 1990, an increase of 48,100 households, or about 8 percent. This increase is less than the increase in households between 1970 and 1980, 91,500, or about 17 percent, and between 1960 and 1970, when the number of households within the Region increased by about 70,600, or about 15 percent. The increase in the number of households from 1980 to 1990 is also significantly less than the increase in households between 1950 and 1960, when the number of households increased by 111,400, or about 31 percent.

Figure 8

ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2020

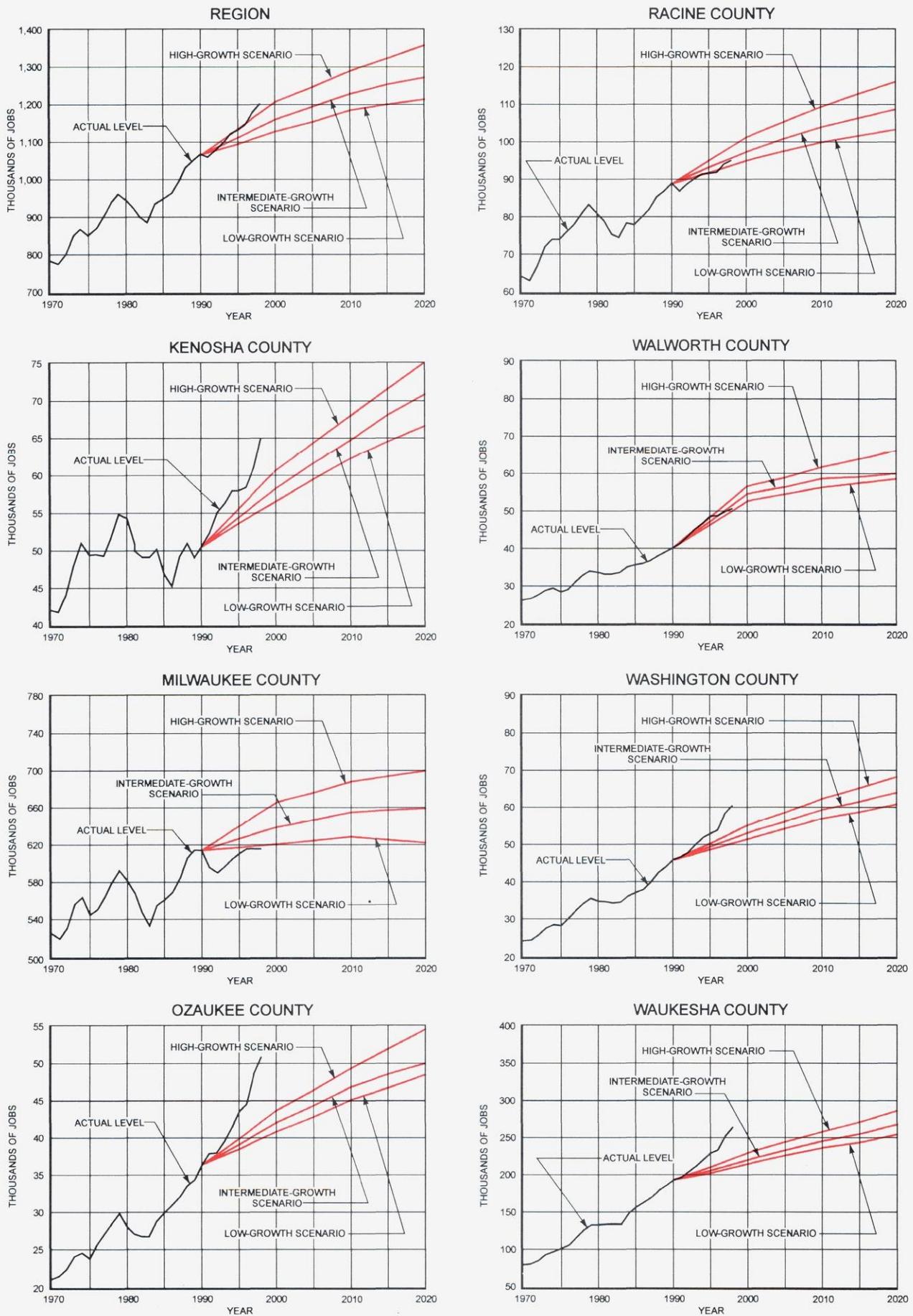


Table 6

POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1980, 1990, AND 1998

County	Population			1980-1990 Change		1990-1998 Change	
	1980 Census	1990 Census	1998 Estimate	Number	Percent	Number	Percent
Kenosha .....	123,100	128,200	141,500	5,100	4.1	13,300	10.4
Milwaukee .....	965,000	959,300	957,100	-5,700	-0.6	-2,200	-0.2
Ozaukee .....	67,000	72,800	80,100	5,800	8.7	7,300	10.0
Racine .....	173,100	175,100	187,300	2,000	1.2	12,200	7.0
Walworth .....	71,500	75,000	84,400	3,500	4.9	9,400	12.5
Washington .....	84,900	95,300	112,300	10,400	12.2	17,000	17.8
Waukesha .....	280,200	304,700	345,400	24,500	8.7	40,700	13.4
Region	1,764,800	1,810,400	1,908,100	45,600	2.6	97,700	5.4

Table 7

ACTUAL AND PROJECTED POPULATION LEVELS BY COUNTY: 1998

County	1998 Population	Projected 1998 Population		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	141,500	153,900	143,800	135,500
Milwaukee .....	957,100	1,000,200	975,200	957,700
Ozaukee .....	80,100	95,200	82,300	79,400
Racine .....	187,300	193,600	183,300	177,000
Walworth .....	84,400	91,700	83,400	79,200
Washington .....	112,300	130,500	113,500	108,700
Waukesha .....	345,400	393,000	351,900	336,200
Region	1,908,100	2,058,100	1,933,400	1,873,700

The estimated number of households in the Region in 1998 is shown by county in Table 8. The number of households in the Region is estimated to have increased from about 676,100 households in 1990 to about 736,500 households in 1998, an increase of about 60,400 households, or about 9 percent. Each county in the Region is estimated to have experienced an increase in household levels during the period from 1990 to 1998, ranging from a low of 4,000 households, or about 16 percent, in Ozaukee County to a high of 22,600 households, or about 21 percent, in Waukesha County.

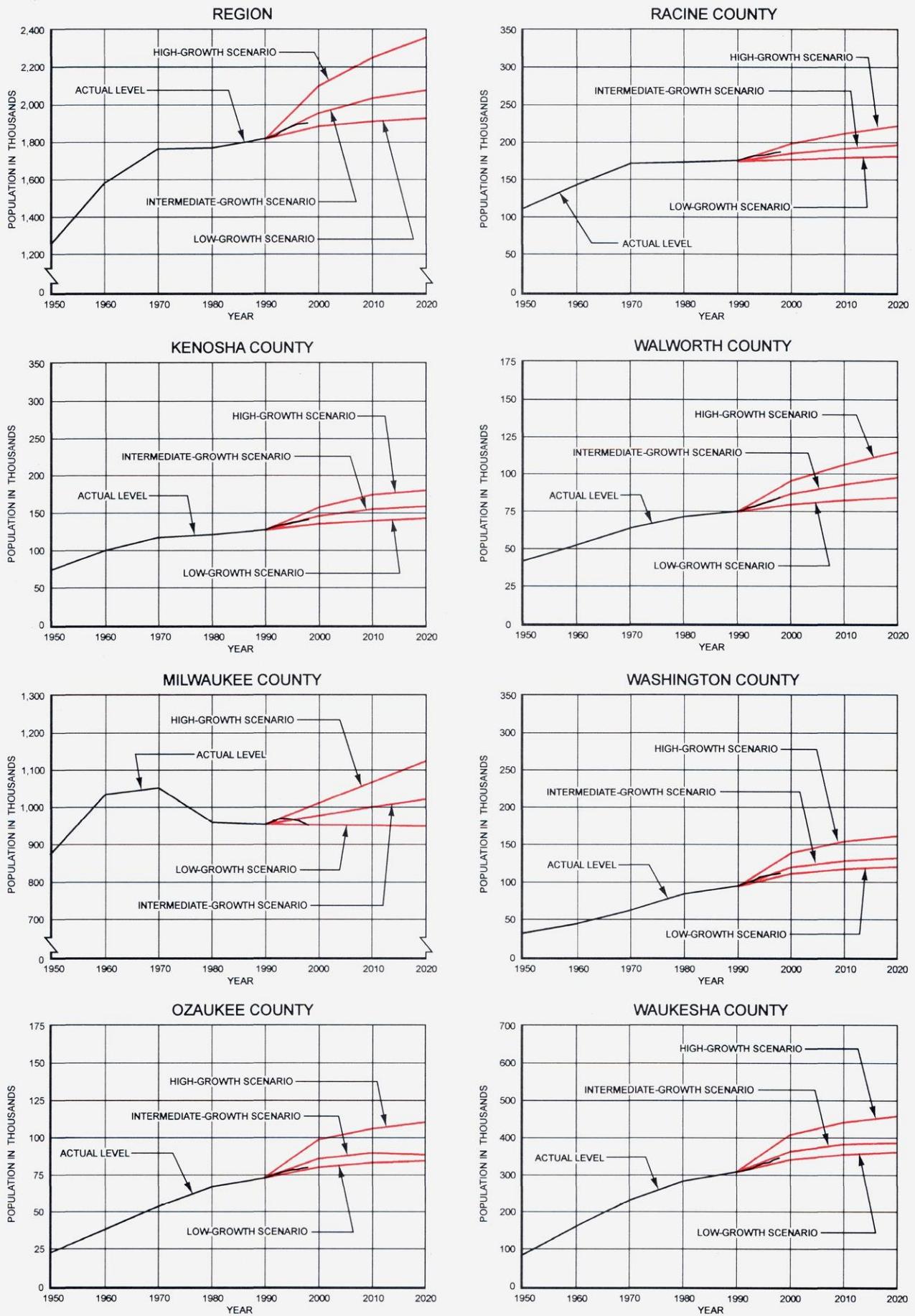
*Comparison of Actual and Alternative Future Household Levels*

In addition to preparing new employment and population projections to the year 2020, the

Commission developed alternative projections of household levels to the year 2020. Three alternative future scenarios—high-growth, intermediate-growth, and low-growth—were developed. Each of these scenarios was closely linked to a corresponding economic and population scenario for the Region. As with the year 2020 employment and population projections, the Technical Coordinating and Advisory Committee on Regional Land Use Planning reviewed the year 2020 household projections in light of recent growth and change in the Region. Upon completion of this review, the Committee recommended that the intermediate-growth future be used as the basis for the 2020 regional land use plan. The following table, figure, and discussion reflect the household forecast on which the adopted year 2020 regional land use plan is based, as well as the alternative projections considered.

Figure 9

ACTUAL AND PROJECTED REGIONAL AND COUNTY POPULATION LEVELS: 1950-2020



**Table 8****HOUSEHOLDS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1980, 1990, AND 1998**

County	Households			1980-1990 Change		1990-1998 Change	
	1980 Census	1990 Census	1998 Estimate	Number	Percent	Number	Percent
Kenosha .....	43,100	47,000	53,900	3,900	9.0	6,900	14.7
Milwaukee .....	363,600	373,100	379,700	9,500	2.6	6,600	1.8
Ozaukee .....	21,800	25,700	29,700	3,900	17.9	4,000	15.6
Racine .....	59,400	63,700	70,000	4,300	7.2	6,300	9.9
Walworth .....	24,800	27,600	32,800	2,800	11.3	5,200	18.8
Washington .....	26,700	33,000	41,800	6,300	23.6	8,800	26.7
Waukesha .....	88,600	106,000	128,600	17,400	19.6	22,600	21.3
Region	628,000	676,100	736,500	48,100	7.7	60,400	8.9

**Table 9****ACTUAL AND PROJECTED HOUSEHOLD LEVELS BY COUNTY: 1998**

County	1998 Households	Projected 1998 Households		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	53,900	56,700	53,500	51,000
Milwaukee .....	379,700	389,000	383,300	380,400
Ozaukee .....	29,700	34,300	30,000	29,200
Racine .....	70,000	71,500	68,400	66,800
Walworth .....	32,800	33,900	31,100	29,900
Washington .....	41,800	46,600	41,000	39,600
Waukesha .....	128,600	139,000	125,700	121,300
Region	736,500	771,000	733,000	718,200

Under the high-growth scenario, it was anticipated that there would be 771,000 households in the Region in 1998. The estimated 1998 regional household level of 736,500 is about 4 percent below this anticipated level. Under the low-growth scenario, it was anticipated that there would be 718,200 households in the Region in 1998. The estimated 1998 regional household level is about 3 percent above this level. Under the intermediate-growth scenario, it was anticipated that there would be 733,000 households in the Region in 1998. The estimated 1998 regional household level is less than 1 percent above this level. The actual and alternative future 1998 household levels for each of the Region's seven counties are set forth in Table 9 and Figure 10.

**School Enrollment**

Enrollment in public and nonpublic schools within the Region totaled about 381,100 students in 1998, representing an increase of 32,200 students, or about 9 percent, over the 1990 level of 348,900 students, as indicated in Table 10. Enrollment in public schools was about 312,600 students in 1998, about 29,400 students, or 10 percent, above the 1990 level of 283,200. Enrollment in nonpublic schools was about 68,500 students in 1998, about 2,800 students, or 4 percent, above the 1990 level of 65,700.

Map 4 shows public school enrollment changes between 1990 and 1998 for public school districts

Figure 10

ACTUAL AND PROJECTED REGIONAL AND COUNTY HOUSEHOLD LEVELS: 1950-2020

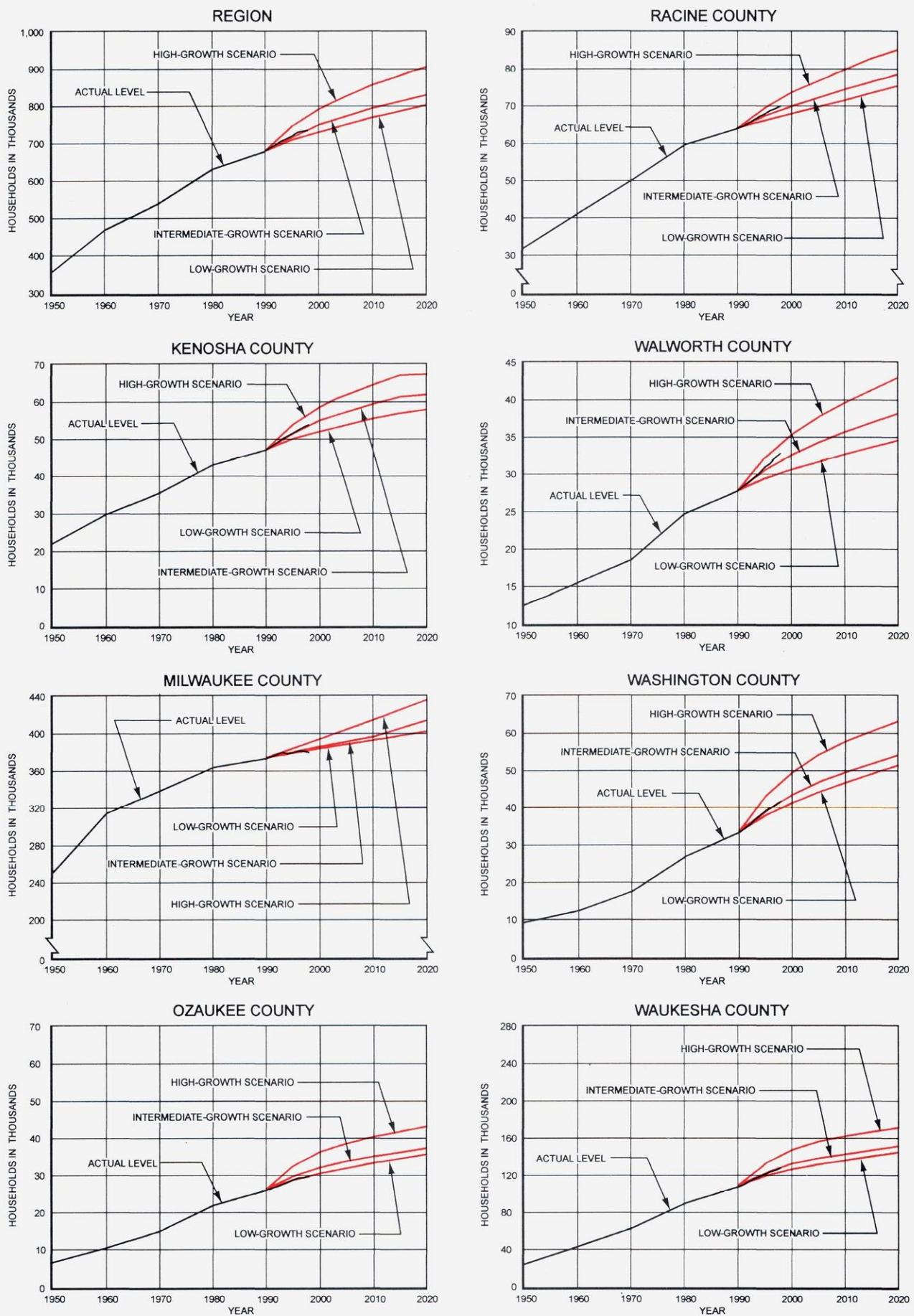


Table 10

REGIONAL SCHOOL ENROLLMENT BY COUNTY: 1980, 1990, AND 1998

County	1980	1990	1998	1980-1990 Change		1990-1998 Change	
				Number	Percent	Number	Percent
Kenosha .....	26,700	25,000	29,400	-1,700	-6.4	4,400	17.6
Milwaukee .....	184,900	178,700	187,700	-6,200	-3.4	9,000	5.0
Ozaukee .....	15,000	13,700	15,700	-1,300	-8.7	2,000	14.6
Racine .....	38,800	35,200	36,300	-3,600	-9.3	1,100	3.1
Walworth .....	13,700	13,200	16,100	-500	-3.6	2,900	22.0
Washington .....	21,500	20,000	23,400	-1,500	-7.0	3,400	17.0
Waukesha .....	68,700	63,100	72,500	-5,600	-8.2	9,400	14.9
Region	369,300	348,900	381,100	-20,400	-5.5	32,200	9.2

operating wholly or partially within the Region. Union high school districts and their constituent feeder K-8 school districts have been combined into single districts for the purpose of the mapping. A total of 50 districts, or all but five of the public K-12 and the combined union high school and K-8 districts, had higher enrollments in 1998 than in 1990. The changes in enrollment from 1990 to 1998 range from a decrease of about 7 percent in the Greendale School District to an increase of 45 percent in the Elkhorn Area School District.

### Census Coordination

The Commission serves as a coordinating agency for the U. S. Bureau of the Census within the seven-county Southeastern Wisconsin Region. Under agreements between the Commission and the Census Bureau, the Commission provides staff services to each county in preparation for the 2000 Census. During 1998, work was initiated on the review of Census statistical areas, including block groups and Census tracts, for the 2000 Census.

The Commission also participates in the U. S. Census Bureau State Data Center Program, a nationwide program under which the governor of each state designates an agency or group of agencies within the state government to serve as the lead agency within that state—known as the state data center—for the dissemination of the large volume of information collected and reported by the Census Bureau. Within the State of Wisconsin, the provision of the state data center is a joint function of the Wisconsin Department of Administration and the University of Wisconsin-Madison. Under

an agreement between the Commission and the Wisconsin state data center, the Commission serves as an affiliate member of the data center and supplies Census data access and technical assistance to Census data users within the seven-county Southeastern Wisconsin Region.

As part of its continuing Census coordinating function within the Region, the Commission also serves as a clearinghouse and central repository for a wide variety of Census data holdings. A computer-readable geographic base file containing street address ranges and Census statistical tabulating and reporting unit boundaries is maintained by the Commission for portions of the Region. Included in the Census material held by the Commission are all published reports, maps, compact disks, and microfiche cards containing data for the Southeastern Wisconsin Region. Assistance is provided to local units of government, the public, and local businesses in accessing these materials.

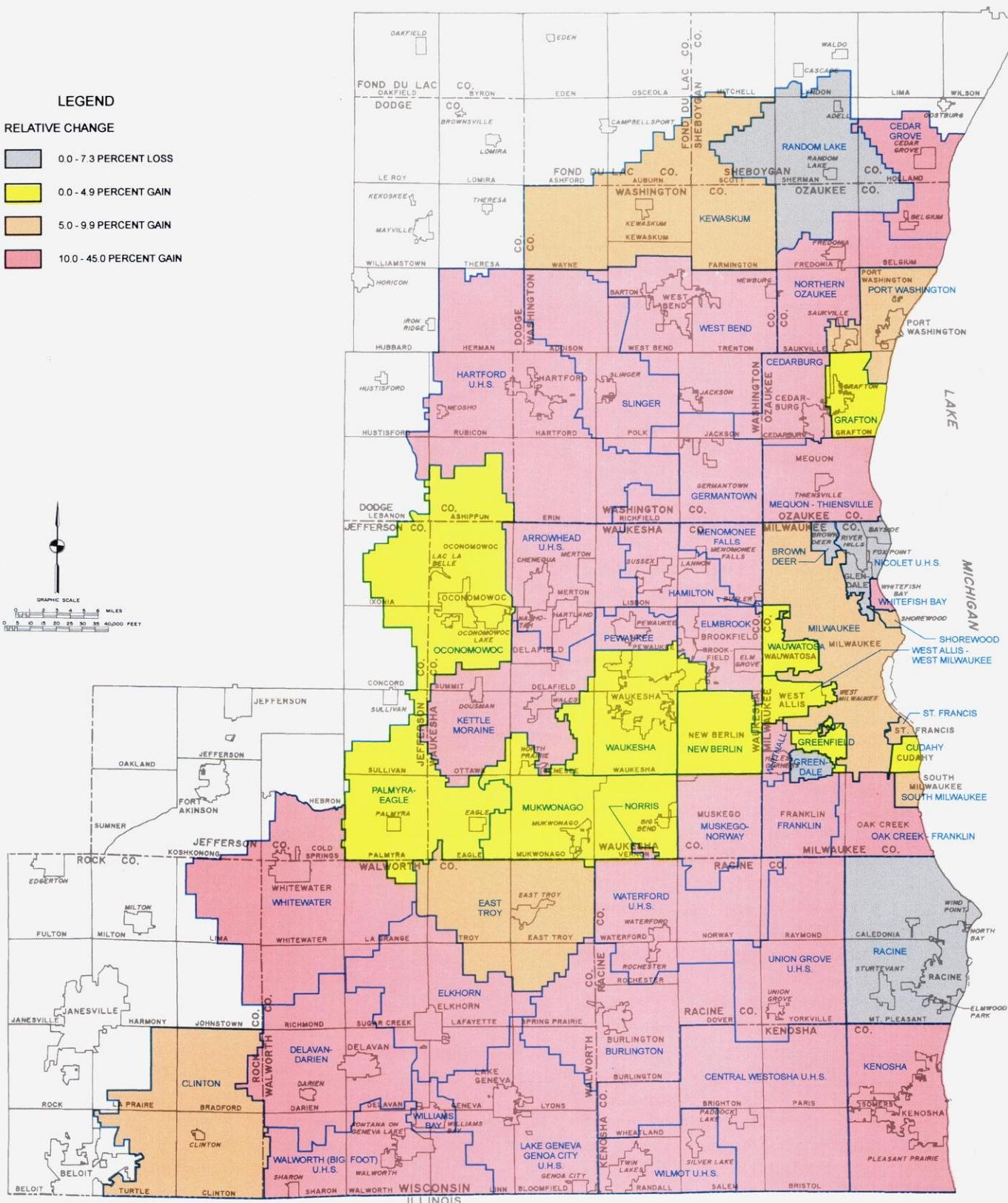
## PARK AND OPEN SPACE PLANNING

### Regional Park and Open Space Plan

On December 1, 1977, the Commission adopted a regional park and open space plan for Southeastern Wisconsin consisting of two basic elements: an open space preservation element and an outdoor recreation element. The open space preservation element consisted of recommendations for the preservation of primary environmental corridors within the Region. The outdoor recreation element consisted of the following: 1) a resource-oriented outdoor recrea-

Map 4

RELATIVE CHANGES IN PUBLIC SCHOOL ENROLLMENT IN THE REGION: 1990-1998



tion plan, providing recommendations for the number and location of large parks, recreation corridors to accommodate trail-oriented activities, and water-access facilities to enable the recreational use of rivers, inland lakes, and Lake Michigan; and 2) an urban outdoor recreation plan, providing recommendations for the number and distribution of local parks and outdoor recreational facilities required in urban areas of the Region. The initial regional park and open space plan is documented in SEWRPC Planning Report No. 27, *A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000*, November 1977.

The Commission has assisted the counties in the Region in preparing county park and open space plans which refine and extend the regional park and open space plan. Upon adoption by the Commission, such plans serve as amendments to the regional park and open space plan. During 1998, the Commission thus adopted an update of the park and open space plan for Washington County. The updated plan, adopted by the Commission on March 4, 1998, updates the previous County-level plan and extends it to the design year 2010. The new plan is documented in SEWRPC Community Assistance Planning Report No. 136 (2nd Edition), *A Park and Open Space Plan for Washington County: 2010*, August 1997, and was summarized in the Commission's *1997 Annual Report*.

The major outdoor recreation sites and recreation corridors recommended under the regional park and open space plan, as refined and detailed in county park and open space plans, are shown on Map 5.<sup>1</sup> Shown on this map are large parks—parks

of at least 100 acres in area which provide facilities for a variety of resource-oriented outdoor recreational activities; major recreation corridors accommodating trail-oriented activities; and major special-purpose outdoor recreation sites, such as Henry W. Maier Festival Park in the City of Milwaukee and Old World Wisconsin in the Town of Eagle.

In 1998, the Division staff initiated work on an update and extension of the park and open space plan for Racine County, completing much of the inventory work required for the plan update. That plan is scheduled to be completed in 1999.

#### *Regional Natural Areas and Critical Species Habitat Protection and Management Plan*

A regional natural areas and critical species habitat protection and management plan for Southeastern Wisconsin was adopted by the Commission as an amendment to the regional park and open space plan in September 1997. The regional natural areas and critical species habitat plan is documented in SEWRPC Planning Report No. 42, *A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin*, dated the month of its adoption.

The planning effort was undertaken to identify the most significant remaining natural areas—essentially, remnants of the pre-European-settlement landscape—as well as other areas vital to the maintenance of endangered, threatened, and rare plant and animal species in the Region. The plan represents an important additional element of

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<sup>1</sup>Map 5 incorporates major outdoor recreation sites and recreation corridors recommended in the following reports: SEWRPC Community Assistance Planning Report No. 131, A Park and Open Space Plan for Kenosha County, November 1987, for the portion of Kenosha County located west of IH 94, and SEWRPC Community Assistance Planning Report No. 212, A Comprehensive Plan for the Kenosha Urban Planning District, Kenosha County, Wisconsin, December 1995, for the portion of Kenosha County located east of IH 94; SEWRPC Community Assistance Planning Report No. 132, A Park and Open Space Plan for Milwaukee County, November 1991; SEWRPC Community Assistance Planning Report No. 133, A Park and Open Space Plan for Ozaukee County, July 1987; SEWRPC Community Assistance

Planning Report No. 134, A Park and Open Space Plan for Racine County, September 1988; SEWRPC Community Assistance Planning Report No. 135, A Park and Open Space Plan for Walworth County, February 1991; SEWRPC Community Assistance Planning Report No. 136 (2nd Edition), A Park and Open Space Plan for Washington County: 2010, August 1997; and SEWRPC Community Assistance Planning Report No. 209, A Development Plan for Waukesha County, Wisconsin, August 1996. Except for the plan for the Kenosha Urban Planning District, the Commission, as of the end of 1998, had adopted each of these plans as amendments to the regional park and open space plan. The plan for the Kenosha Urban Planning District was awaiting Commission adoption at the end of 1998.

Map 5

MAJOR OUTDOOR RECREATION SITES AND CORRIDORS RECOMMENDED UNDER THE REGIONAL PARK AND OPEN SPACE PLAN, AS AMENDED AND AS UNDER PROPOSED AMENDMENTS PENDING AS OF DECEMBER 31, 1998

LEGEND

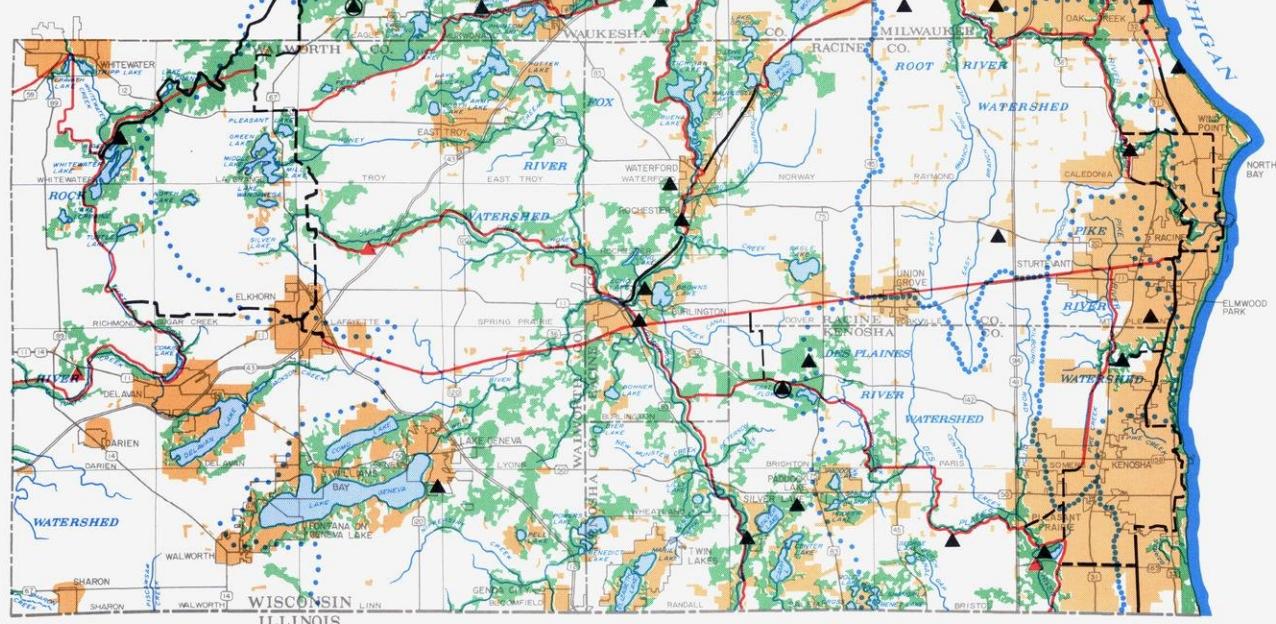
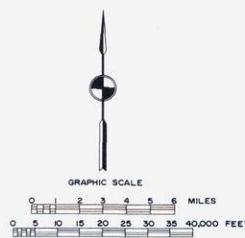
MAJOR OUTDOOR RECREATION SITES AND CORRIDORS

- ▲ EXISTING PARK SITE
- ▲ PROPOSED PARK SITE
- ▲ EXISTING SPECIAL-PURPOSE OUTDOOR RECREATION SITE
- EXISTING RECREATION CORRIDOR
- PROPOSED RECREATION CORRIDOR
- ON STREET ROUTE OR CONNECTING SEGMENT

PLANNED LAND USE

- URBAN DEVELOPMENT
- PRIMARY ENVIRONMENTAL CORRIDOR
- AGRICULTURAL AND RURAL-DENSITY RESIDENTIAL LAND
- WATER

NOTE: INDIVIDUAL COUNTY PARK AND OPEN SPACE PLAN MAPS MAY SHOW GREATER DETAIL FOR SELECTED PARK SITES, RECREATION CORRIDORS AND NATURAL RESOURCE FEATURES.



the evolving comprehensive plan for Southeastern Wisconsin. It also provides an important supplement to the open space preservation recommendations of the regional land use and park and open space plans.

Under the plan, natural areas are defined as tracts of land or water so little modified by human activity, or which have sufficiently recovered from the effects of such activity, that they contain intact native plant and animal communities believed to be representative of the pre-European-settlement landscape. Critical species habitats are defined as additional tracts of land or water which support endangered, threatened, or rare plant or animal species. The study identified a total of 447 natural areas and 142 critical species habitat sites. The distribution of these sites within the Region is shown on Map 6.

The plan recommends that each of the 589 natural areas and critical species habitat sites be protected and preserved to the maximum extent practicable as urban and rural development in the Region proceeds. The plan, as amended through the end of 1998, recommends that 539 sites, or 92 percent of the total, be placed in public or private protective conservation ownership and that the other 50 sites be protected, insofar as it is possible, through zoning and other regulatory means without protective ownership. Descriptive information for each natural area and critical species habitat site, along with the recommended means for preservation, is presented in SEWRPC Planning Report No. 42, as amended.

As of the end of 1998, the plan had been amended once. On March 4, 1998, the Commission adopted an amendment to the plan changing an initial plan recommendation that a four-acre critical species habitat site located within the Town of Cedarburg and known as the Cedarburg Woods-West site be preserved through zoning and other regulatory measures, without protective public ownership. The amendment, set forth in a Commission document titled *Amendment to the Regional Natural Areas and Critical Species Habitat Protection and Management Plan, City of Cedarburg and Environs*, March 1998, changed the initial plan recommendation to one envisioning preservation of the site through protective acquisition and ownership by the City of Cedarburg.

Also by year's end, the natural areas and critical species habitat protection and management plan had been adopted by Ozaukee, Racine, Walworth, and Washington Counties, as well as by four cities, eight villages, and four towns in the Region, and had been endorsed by the Wisconsin Natural Areas Preservation Council. In addition, Waukesha County has incorporated the natural areas and critical species habitat sites within the County into its County development plan.

## DATA PROVISION AND TECHNICAL ASSISTANCE

### Economic and Demographic Data

The Land Use Planning Division devotes considerable time each year to answering requests for demographic, economic, and related data. This function also includes the provision of technical assistance to local units of government, public agencies, and school districts in the conduct of special data acquisition activities and in the analysis of data.

During 1998, the Division responded to 360 requests for population, economic, and related information from the Commission data files. These requests came from county and local units of government, Federal and State agencies, private firms, and individual citizens. The following are some examples of Division activity during 1998 in performing the data provision and technical assistance function:

- Provision of historical and 2020 planned population data for the City of Oak Creek to an engineering firm for use in preparation of a City water and sewer utility system plan.
- Provision of historical and 2020 planned population and household data for the Pewaukee School District to the District for use in projecting future student enrollment.
- Provision of historical and 2020 planned population data for the Village of Germantown to an engineering firm for use in the preparation of a sanitary sewer system plan.
- Provision of historical and 2020 planned population data for the Village of Jackson to the Village for use in the conduct of a public facilities needs analysis.

- Provision of historical demographic and land use data for Waukesha County to the College of Agricultural and Life Sciences at the University of Wisconsin-Madison for use in a study of prime farmland conversion in Southeastern Wisconsin.

### **Land Use, Natural Resource, and Park and Open Space Data**

The Commission land use, natural resource, and park and open space data files are used extensively by State, county, and local governmental units and agencies and by private interests. In 1998, the Division responded to over 400 requests for land use, natural resource, and park and open space data. Examples of the provision of land use, natural resource, and park and open space data during 1998 include the following:

- Provision of maps and other data regarding planned land use to the Waukesha County Department of Parks and Land Use for use in preparing detailed rural-area plans for the Towns of Delafield, Genesee, Lisbon, Ottawa, Summit, Vernon, and Waukesha.
- Provision of historical land use data for the Milwaukee metropolitan area to the University of Wisconsin-Milwaukee Center for Urban Initiatives and Research for use in its study of change in local government finance.
- Provision of mapped data relating to existing residential and outdoor recreational land uses in Milwaukee County to Marquette University for use in evaluating the relationship of population and recreational opportunities.
- Provision of maps showing environmental corridors and soil suitability for residential development in the Town of Linn to the Town for use in local land use planning.
- Provision of aerial photographs showing wetland areas in the Village of Pleasant Prairie to the Village for use in local land use planning.
- Provision of information relating to environmental corridors and soils to the School District of Slinger for evaluation of a potential school site in the Town of Addison.

- Provision of maps pertaining to land use, environmental corridors, and other selected natural resource features in the Town of West Bend to a private consultant for use in local land use planning.

### **Special Environmental Inventories, Assessments, and Evaluations**

A continuing demand is placed upon the Commission to help Federal, State, and local units and agencies of government in evaluating and assessing the environmental significance and quality of specific development sites throughout the Region. Each of these evaluations involves field inspection work and requires that a report be prepared and transmitted to the requesting party. During 1998, the Commission fulfilled a total of 201 requests for such information. Most of this work effort may be divided into the following categories:

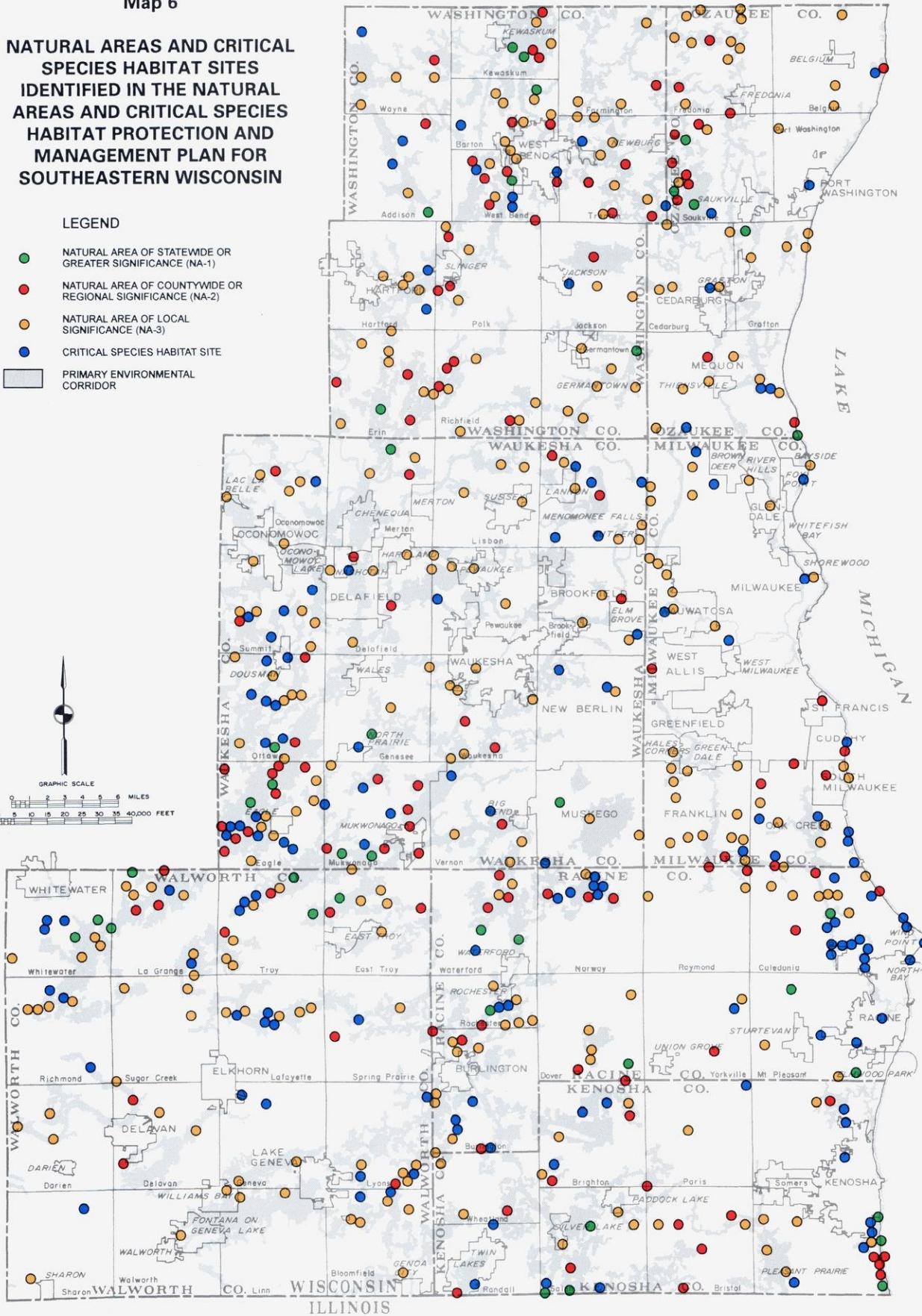
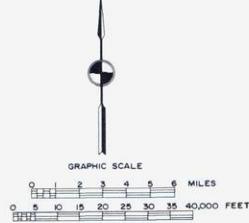
- Requests for the field identification and staking of wetland and primary environmental corridor boundaries on individual parcels in order to facilitate consideration by local governments of private development proposals. During 1998, 64 such requests were fulfilled for sites located throughout the Region (see Map 7). Each of these requests was made by a county or local planner or engineer who needed detailed field information in order to properly carry out local planning and land use control responsibilities. Once delineated in the field by the Commission staff, the precise boundaries of environmentally significant areas were surveyed by private land surveyors retained by the local unit of government or landowner concerned and the results of the survey were placed on land subdivision plats, certified survey maps, and plats of survey.
- Requests for field evaluation, identification, and delineation of wetlands and primary environmental corridors on large sites proposed for residential, commercial, and industrial development to determine whether environmentally sensitive areas of concern occur on such sites. The Commission encourages such evaluations prior to any commitment to detailed site planning. During 1998, such requests were fulfilled for a total of 80 sites located throughout the Region (see Map 7). Once delineated in the field by the Commis-

Map 6

**NATURAL AREAS AND CRITICAL SPECIES HABITAT SITES IDENTIFIED IN THE NATURAL AREAS AND CRITICAL SPECIES HABITAT PROTECTION AND MANAGEMENT PLAN FOR SOUTHEASTERN WISCONSIN**

LEGEND

- NATURAL AREA OF STATEWIDE OR GREATER SIGNIFICANCE (NA-1)
- NATURAL AREA OF COUNTYWIDE OR REGIONAL SIGNIFICANCE (NA-2)
- NATURAL AREA OF LOCAL SIGNIFICANCE (NA-3)
- CRITICAL SPECIES HABITAT SITE
- PRIMARY ENVIRONMENTAL CORRIDOR



sion staff, the precise boundaries of the environmentally significant areas concerned were surveyed by private land surveyors retained by the local unit of government or landowner concerned and the results of the survey were placed on plats of survey.

- Requests for the field identification and evaluation of environmentally sensitive areas, including wetlands, associated with transportation improvement projects. During 1998, 31 such project-related requests were fulfilled in response to requests by the Wisconsin Department of Transportation, the Waukesha County Department of Transportation, the Milwaukee County Department of Public Works, the Racine County Public Works Division, the City of Burlington, the Town of Norway, the Town of Spring Prairie, and the Town of Summit (see Map 7).
- Requests for the field identification and evaluation of environmentally sensitive areas, including wetlands, associated with municipal utility and community facility development

projects. During 1998, nine such requests were fulfilled in Kenosha, Milwaukee, Walworth, and Waukesha Counties (see Map 7).

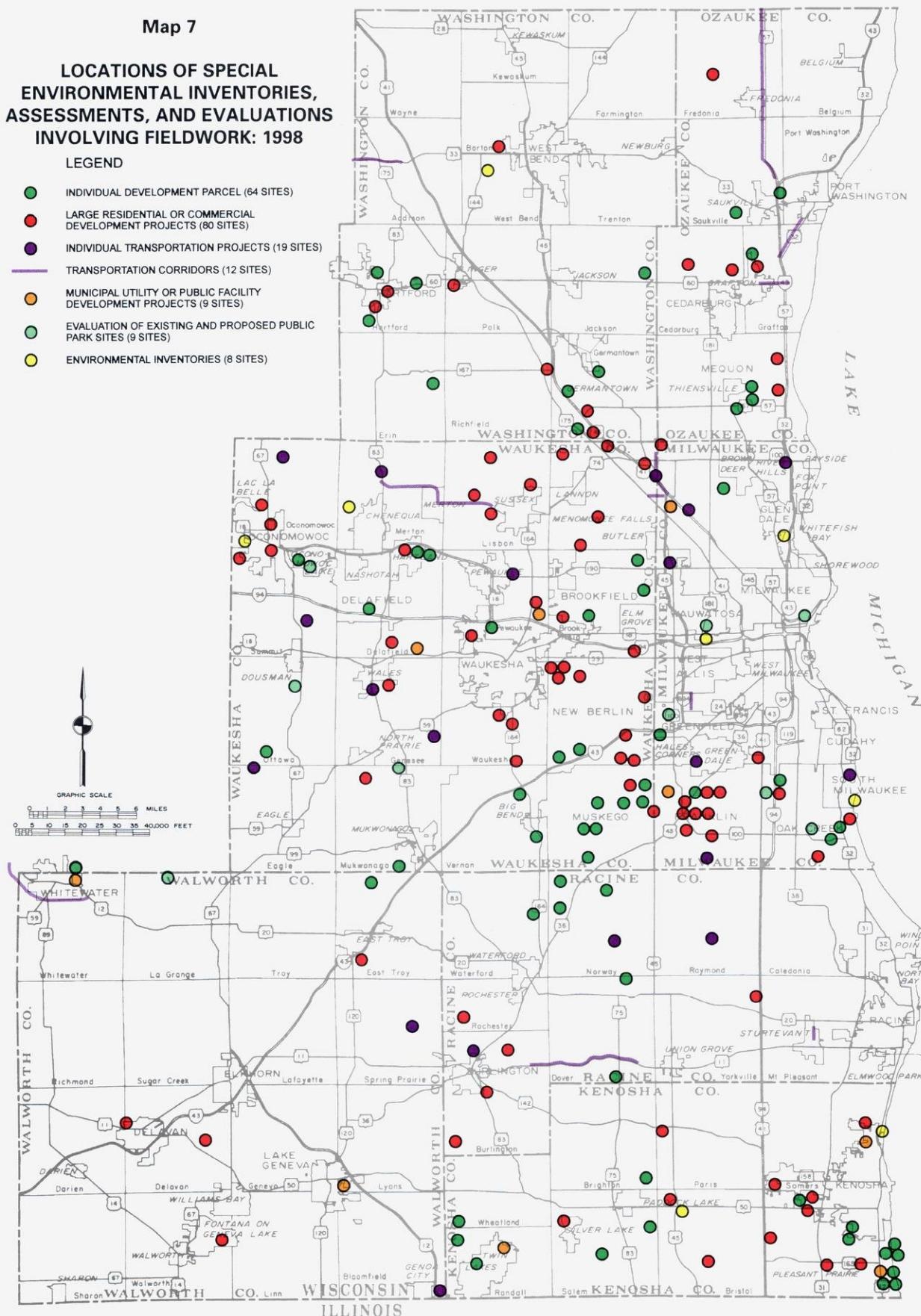
- Requests for the field identification and evaluation of environmentally sensitive areas, including wetlands, with particular attention to the evaluation of the flora and fauna present on existing and proposed public park sites in order to assist in the development, redevelopment, and, in some cases, disposal of such sites. During 1998, nine such requests were fulfilled in Milwaukee, Walworth, and Waukesha Counties (see Map 7).
- Finally, the Commission fulfilled requests for the survey of specific sites to identify and evaluate the flora and fauna present, including a determination as to whether any rare, threatened, or endangered species occur on the subject sites. During 1998, eight such requests by Federal and State agencies, as well as county and local governments, were fulfilled in Kenosha, Milwaukee, Washington, and Waukesha Counties (see Map 7).

Map 7

LOCATIONS OF SPECIAL  
ENVIRONMENTAL INVENTORIES,  
ASSESSMENTS, AND EVALUATIONS  
INVOLVING FIELDWORK: 1998

LEGEND

- INDIVIDUAL DEVELOPMENT PARCEL (64 SITES)
- LARGE RESIDENTIAL OR COMMERCIAL DEVELOPMENT PROJECTS (80 SITES)
- TRANSPORTATION PROJECTS (19 SITES)
- TRANSPORTATION CORRIDORS (12 SITES)
- MUNICIPAL UTILITY OR PUBLIC FACILITY DEVELOPMENT PROJECTS (9 SITES)
- EVALUATION OF EXISTING AND PROPOSED PUBLIC PARK SITES (9 SITES)
- ENVIRONMENTAL INVENTORIES (8 SITES)





# TRANSPORTATION PLANNING DIVISION

## DIVISION FUNCTIONS

The Commission's Transportation Planning Division makes recommendations concerning various aspects of transportation system development within the Region. The kinds of basic questions addressed by the Division include the following:

- What are the travel habits and patterns in the Region? How are these changing over time?
- What is the existing supply of transportation facilities and services?
- How can existing transportation facilities best be used and transportation demand managed to avoid new capital investment?
- How much future travel will probably be accommodated by the various travel modes, particularly the private automobile and public transit?
- What new transportation facilities are needed to accommodate existing and anticipated future travel demand?
- Who should be responsible for providing needed transportation facilities?
- What are the relationships between land use and travel demand?

In attempting to find sound answers to these and other questions, to formulate plans containing recommendations concerning these questions, and to monitor transportation system development activities in the Region, the Transportation Planning Division during 1998 conducted a number of activities in eight identifiable areas: data collection, collation, and development; long-range planning; transportation systems management planning and traffic engineering; transportation planning for the elderly and disabled; transportation improvement programming; railway transportation planning; air transportation planning; and data provision and technical assistance.

As the official metropolitan planning organization for transportation planning in the Southeastern Wisconsin Region, the Commission not only conducts transportation planning work programs with its own staff and with consultants, but also oversees related subregional transportation planning by other governmental agencies. In 1998, Milwaukee County undertook such planning work related to transit operations. The Commission is ultimately responsible for all transportation-related planning work funded by Federal agencies. Accordingly, all transportation planning activities bearing upon the Commission overall work program are reported herein, whether or not they are directly conducted by the Commission.

**Figure 11**  
**TRANSPORTATION PLANNING DIVISION**

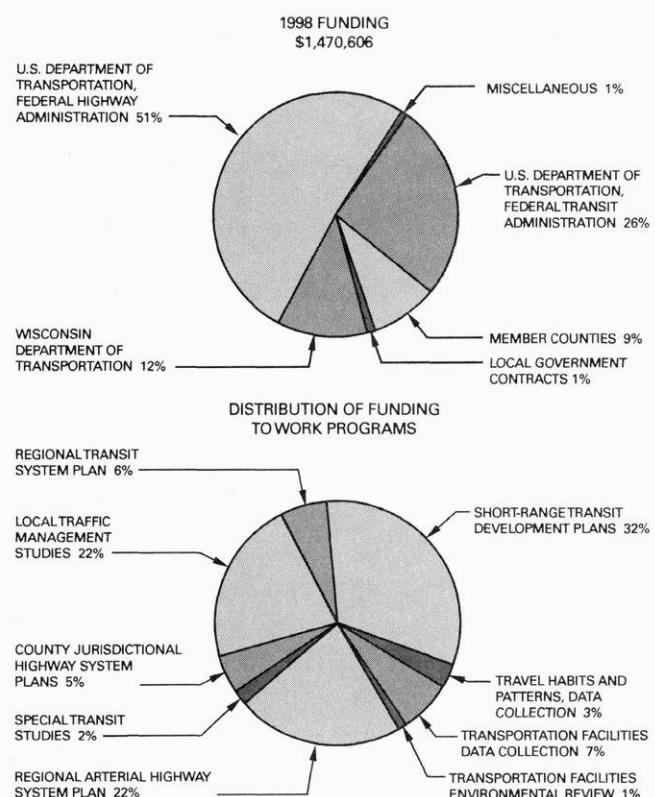


Table 11  
PERSONAL-USE VEHICLE AVAILABILITY IN THE REGION<sup>a</sup>

County	1963	1972	1997	1998
Kenosha .....	37,240	51,100	95,100	98,600
Milwaukee .....	316,350	392,000	530,180	541,900
Ozaukee .....	16,780	28,030	57,280	59,200
Racine .....	52,040	73,350	124,200	128,000
Walworth .....	22,220	33,450	62,320	65,500
Washington .....	18,340	30,390	80,290	84,100
Waukesha .....	69,390	114,450	243,850	256,000
Total	532,360	722,770	1,193,220	1,233,300

<sup>a</sup>The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, this page.

## DATA COLLECTION, COLLATION, AND DEVELOPMENT

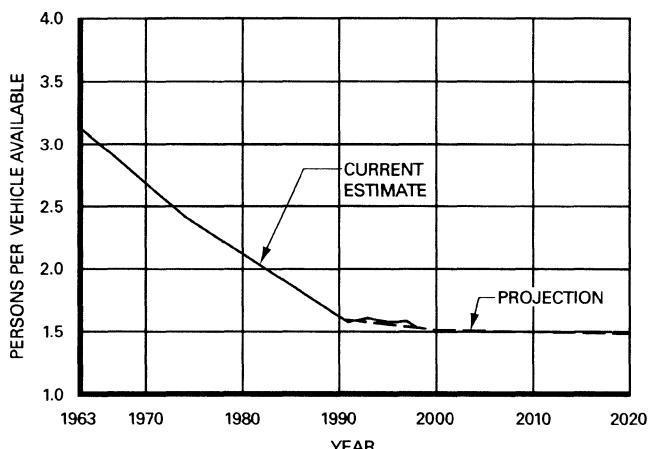
During 1998, the Division continued to monitor secondary data sources for changes in personal-use vehicle and commercial truck availability; public transit ridership, stations, and subsidies; carpool parking facility capacity and use; and traffic volumes.

### Personal-Use Vehicle and Commercial Truck Availability<sup>1</sup>

The number of personal-use vehicles—that is, automobiles, trucks, and vans used by residents of the Region for personal transportation—in 1998 totaled about 1,233,300. This represents an increase of 40,080, or more than 3 percent, over the 1997 level of 1,193,220 (see Table 11). Increases in personal-use vehicle availability in 1998 occurred in all counties in the Region. Over the past 35 years,

Figure 12

### PERSONS PER PERSONAL-USE VEHICLE<sup>a</sup>



<sup>a</sup>THE CLASSIFICATION OF AUTOMOBILES AND TRUCKS USED IN THIS ANNUAL REPORT DIFFERS FROM THAT USED IN COMMISSION ANNUAL REPORTS FOR YEARS PRIOR TO 1994. FOR AN EXPLANATION OF THE DIFFERENCES, SEE FOOTNOTE 1, THIS PAGE.

*'The classifications used to estimate vehicle availability in this Annual Report differ from those used in Commission Annual Reports for years prior to 1994. In this report, motor vehicles are divided into "personal-use vehicles" and "commercial trucks." Personal-use vehicles include not only automobiles, but also vans and light trucks available for personal use. Commercial trucks include municipal trucks and light and heavy trucks available for commercial use. In Annual Reports for years prior to 1994, vans and light trucks available for personal use were classified with light trucks available for commercial use.'*

however, there has been a generally steady, long-term trend of continued increases in the number of personal-use vehicles available to residents of the Region. The average annual rate of growth in personal-use vehicle availability within the Region from 1963 through 1998 was 2.4 percent.

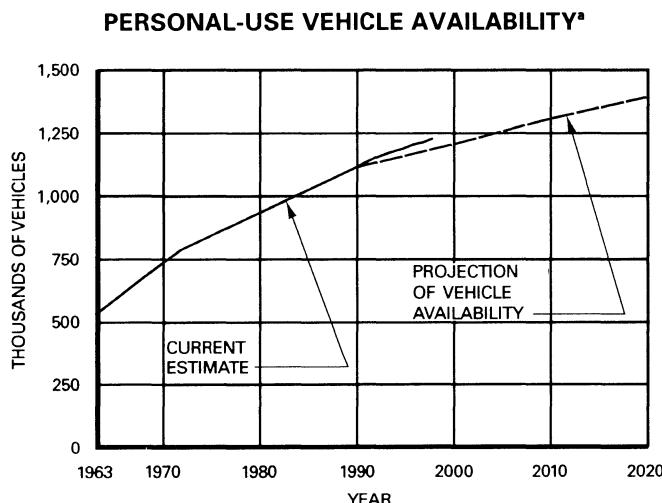
The number of persons per personal-use vehicle within the Region was estimated to be 1.54 in 1998, less than the 1.59 estimated for 1997, as shown in Figure 12. The estimated number of personal-use vehicles available within the Region may be com-

**Table 12**  
**COMMERCIAL TRUCK AVAILABILITY IN THE REGION<sup>a</sup>**

County	1963	1972	1997	1998
Kenosha .....	4,370	4,490	8,780	9,710
Milwaukee .....	25,910	26,710	39,890	45,030
Ozaukee .....	2,270	2,550	5,050	5,790
Racine .....	5,670	6,460	11,500	13,030
Walworth .....	4,190	4,840	7,770	8,620
Washington .....	3,210	4,080	7,810	8,860
Waukesha .....	7,780	10,280	25,210	28,690
Total	53,400	59,410	106,010	119,730

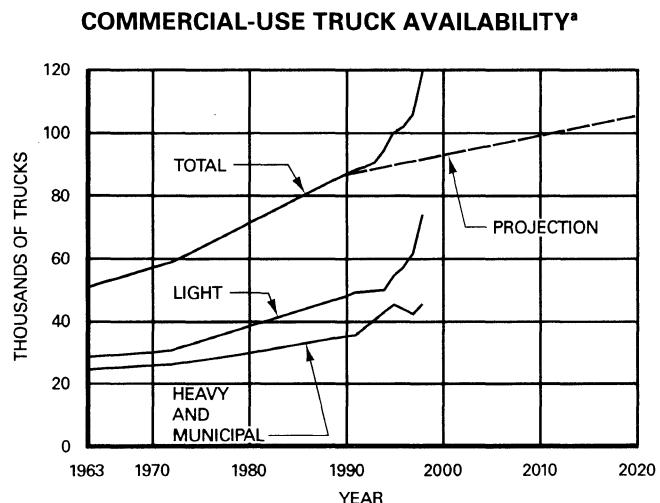
<sup>a</sup>The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, page 50.

**Figure 13**



<sup>a</sup>THE CLASSIFICATION OF AUTOMOBILES AND TRUCKS USED IN THIS ANNUAL REPORT DIFFERS FROM THAT USED IN COMMISSION ANNUAL REPORTS FOR YEARS PRIOR TO 1994. FOR AN EXPLANATION OF THE DIFFERENCES, SEE FOOTNOTE 1, PAGE 50.

**Figure 14**



<sup>a</sup>THE CLASSIFICATION OF AUTOMOBILES AND TRUCKS USED IN THIS ANNUAL REPORT DIFFERS FROM THAT USED IN COMMISSION ANNUAL REPORTS FOR YEARS PRIOR TO 1994. FOR AN EXPLANATION OF THE DIFFERENCES, SEE FOOTNOTE 1, PAGE 50.

pared to the forecast of personal-use vehicle availability developed under the long-range regional transportation system plan, as shown in Figure 13, which depicts the historical year-to-year estimate of personal-use vehicle availability and the forecast growth in personal-use vehicle availability. The 1998 forecast personal-use vehicle availability level was 1,198,100 under the adopted regional transportation system plan. Thus, the estimated 1998 regional personal-use vehicle availability level of 1,233,300 was 35,200 vehicles, or about 2.9 percent, higher than the personal-use vehicle avail-

ability level envisioned under the adopted regional transportation system plan.

The number of commercial and municipal trucks available in the Region during 1998 totaled about 119,730, an increase of about 13,720, or about 12.9 percent, over the 1997 level of 106,010 trucks (see Table 12 and Figure 14). In 1998, increases in commercial motor-truck availability occurred in each county of the Region. Light commercial trucks accounted for about 54 percent of all commercial trucks in 1963, 56 percent of all commercial trucks

**Table 13**  
**PUBLIC TRANSIT RIDERSHIP**

Transit Services	1963	1972	1991	1997	1998	Percent Change 1997-1998
<b>Intracounty Systems</b>						
Milwaukee County .....	88,546,000	52,141,000	46,460,000	45,634,900	47,246,000	3.5
City of Racine .....	2,907,000	526,000	1,829,000	1,581,400	1,516,800	-4.1
City of Kenosha .....	1,876,000	503,000	1,128,000	1,356,400	1,529,800	12.8
City of Waukesha .....	451,000	227,000	434,000	580,500	584,200	0.6
City of Whitewater .....	--	--	38,000	34,800	27,300	-21.6
City of Hartford .....	--	--	8,000	21,200	21,400	0.9
City of West Bend .....	--	--	--	99,600	112,900	13.4
City of Port Washington .....	--	--	--	25,800	24,300	-5.8
Ozaukee County .....	--	--	--	--	24,000	--
Washington County .....	--	--	--	--	22,200	--
Subtotal	93,780,000	53,397,000	49,897,000	49,334,600	51,108,900	3.6
<b>Intercounty Systems</b>						
Waukesha-Milwaukee Counties ...	534,000 <sup>a</sup>	240,000	290,000	447,000	513,400	14.9
Kenosha-Racine-Milwaukee Counties .....	230,000 <sup>a</sup>	153,000	82,000	73,800	71,600	-3.0
Ozaukee-Milwaukee Counties ....	127,000	64,000	--	79,900	96,500	20.8
Subtotal	891,000	457,000	372,000	600,700	681,500	13.5
Region Total	94,671,000	53,854,000	50,269,000	49,935,300	51,790,400	3.7

<sup>a</sup>Estimated.

in 1972, 60 percent of all commercial trucks in 1997, and 62 percent of all commercial trucks in 1998. The number of light commercial trucks available in 1998 totaled about 74,050, an increase of 10,280, or about 16.1 percent, over the 1997 level of 63,770. The number of heavy trucks and municipal trucks totaled 45,680 in 1998, an increase of about 3,440 trucks, or about 8.1 percent, from the 1997 level of 42,240. The average annual rate of growth in commercial motor-truck availability within the Region from 1963 through 1998 was 2.3 percent.

### Public Transit Ridership

Publicly owned mass transit service was provided in the Region in 1998 through 10 intracounty systems and three intercounty systems (see Table 13 and Figure 15). As shown in Table 13, total public transit ridership in the Region increased from about 49.9 million passengers in 1997 to about 51.8 million passengers in 1998, an increase of about 4 percent. While this increase is attributable primarily to the 1998 increase in ridership on the transit system operated by Milwaukee County, ridership increases also occurred on the other

systems within the Region operating in 1997 and 1998, except the intracounty services operated by the Cities of Racine, Port Washington, and Whitewater and the Kenosha-Racine-Milwaukee-area intercounty service. In addition, new shared-ride taxicab systems initiated by Ozaukee and Washington Counties in 1998 also contributed to higher regional ridership levels.

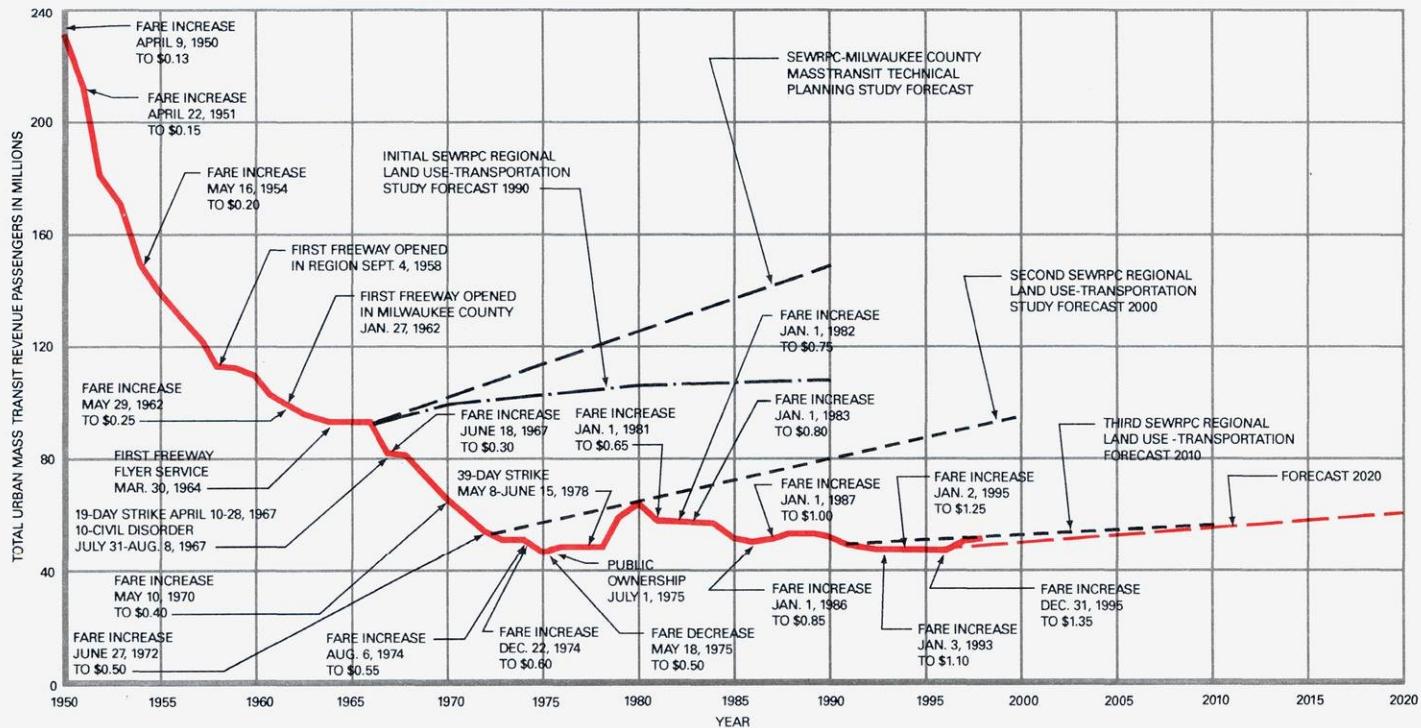
#### *Intracounty Services*

##### *Milwaukee County*

Ridership on the Milwaukee County Transit System, which provides publicly subsidized, fixed-route transit service, increased during 1998 to about 47.2 million revenue passengers from about 45.6 million revenue passengers in 1997, or by about 4 percent (see Figure 16). System ridership increased for a fourth consecutive year, something which has never previously occurred since the County began public operation of the system in 1975. During 1998, the basic cash fare for the Milwaukee County Transit System remained stable at \$1.35 per one-way trip, as did fares for freeway

Figure 15

HISTORICAL TREND IN PUBLIC TRANSIT RIDERSHIP IN THE REGION



flyer bus service, which remained at \$1.60 per one-way trip, and the price of a weekly pass or a book of 10 tickets, which remained at \$10.50. The ridership increase may have reflected the continued effects of the UPASS program, begun in the autumn of 1994. Under this program, passes are provided to each student at the University of Wisconsin-Milwaukee at a greatly discounted rate of \$30, paid for at the time of registration. Other factors contributing to the ridership increase included the addition of one new route and the implementation of more frequent service on 15 others. The number of bus-miles operated in revenue service by the Milwaukee County Transit System increased by about 4 percent during 1998, from about 17.5 million bus-miles in 1997 to about 18.2 million bus-miles in 1998.

During 1998, freeway flyer bus service was operated by Milwaukee County from 15 outlying parking terminals to either the Milwaukee central business district or the University of Wisconsin-Milwaukee. Ridership on the freeway flyer bus service totaled about 724,700 revenue passengers

in 1998, a decrease of about 2 percent from the estimated 742,600 revenue passengers carried in 1997 (see Figure 17). This decrease in freeway flyer ridership may be attributed in part to continued low fuel prices, ample and reasonably priced parking in the Milwaukee central business district, and the continuing decentralization of jobs to outlying communities.

#### City of Racine

During 1998, ridership on the fixed-route public transit system serving the City of Racine and environs decreased by about 4 percent, from the 1997 level of approximately 1,581,400 revenue passengers to about 1,516,800 revenue passengers in 1998 (see Figure 18). This ridership decrease reflects the net effects of service changes implemented in May 1998. The changes included routing adjustments to focus more service on the Regency Mall Shopping Center, as well as increases in headways on three routes during weekday peak periods, and on two others during all times of operation. The savings in operating costs from the

Figure 16

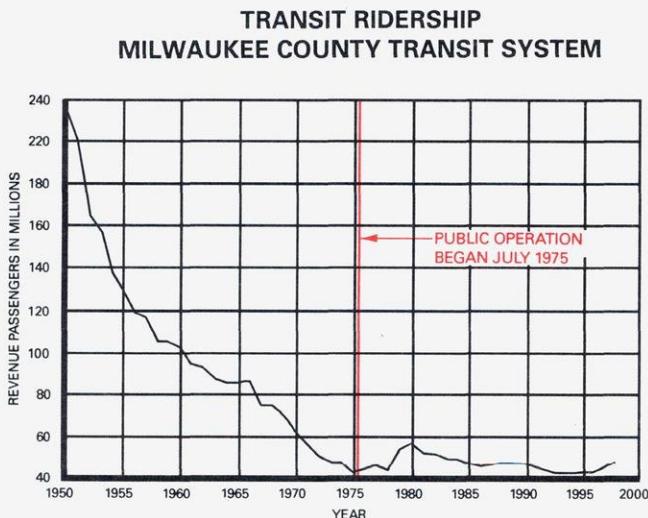
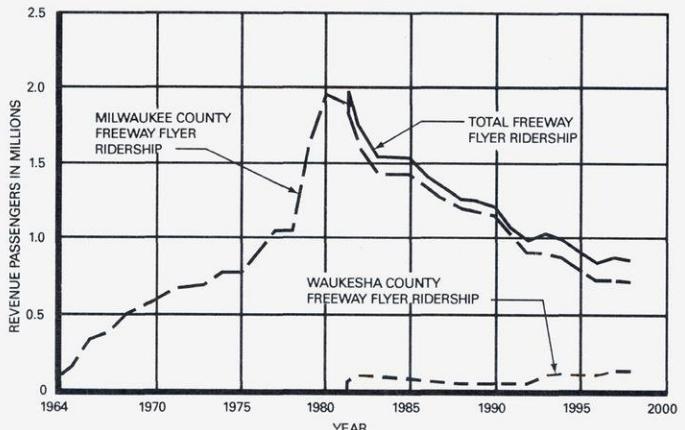


Figure 17

**FREEWAY FLYER RIDERSHIP: MILWAUKEE AND WAUKESHA COUNTY TRANSIT SYSTEMS**



service reductions was used to add service on weekday evenings between about 7:30 p.m. and 12:00 midnight. The basic cash fare for bus service remained at \$1.00 per one-way trip for adults, unchanged from 1997. The number of bus-miles operated in revenue service increased by about 5 percent during 1998, from about 1,259,200 bus-miles in 1997 to about 1,326,000 bus-miles in 1998.

To guide the public acquisition of the system and its initial years of operation, the Commission, at the request of the City of Racine, prepared a transit development plan covering the years from 1975 through 1979.<sup>2</sup> Nearly all the plan recommendations for transit route layout, schedule, fare structure, and service levels were implemented in the first years of public operation. In 1984, the Commission completed work on another transit development program for the City of Racine transit system, covering the period from 1984 through 1988.<sup>3</sup> Several of the routing changes recommended under the new plan were implemented by the transit system by December 1985. In 1993, the Commission completed the preparation of a third Racine-

<sup>2</sup>See SEWRPC Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979, June 1974.

<sup>3</sup>See SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1988, May 1984.

area transit system development plan, covering the period from 1993 through 1997.<sup>4</sup> This plan, described in the Commission's *1993 Annual Report*, was adopted by the Commission as an element of the comprehensive regional plan in March 1994. While routing changes recommended for bus service within the Town of Mt. Pleasant were implemented during 1993, other recommended service changes affecting bus routes serving the west side of the City of Racine and the Town of Caledonia which were proposed by City staff for implementation during 1995 were not acted upon by the City Common Council. During 1997, the Commission completed work on a fourth Racine-area transit system development plan setting forth recommendations for the period from 1998 through 2002.<sup>5</sup> The Commission adopted this plan as an updated element of the comprehensive regional plan on September 16, 1998. Most of the proposed service changes recommended under the plan were implemented in May 1998.

<sup>4</sup>See SEWRPC Community Assistance Planning Report No. 204, Racine Transit System Development Plan: 1993-1997, City of Racine, Wisconsin, June 1993.

<sup>5</sup>See SEWRPC Community Assistance Planning Report No. 233, Racine Area Transit System Development Plan: 1998-2002, City of Racine, Wisconsin, October 1997.

Figure 18

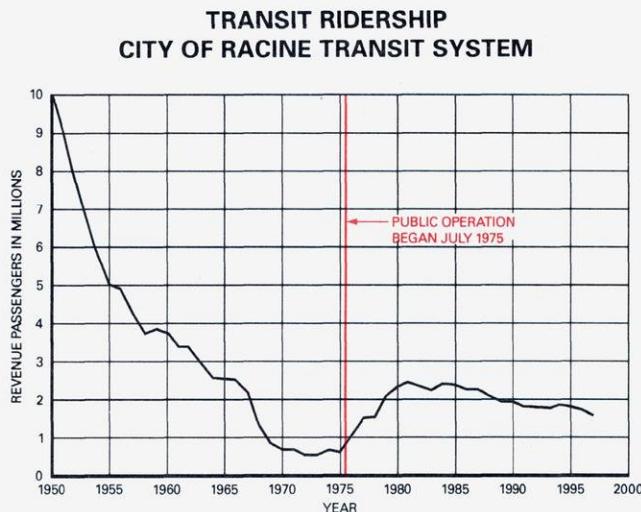
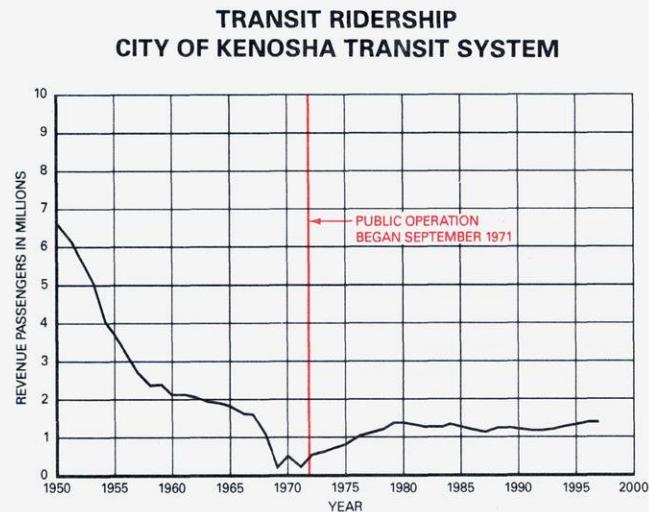


Figure 19



### City of Kenosha

Ridership on the fixed-route public transit system serving the City of Kenosha increased during 1998 (see Figure 19). Ridership during the year approximated 1,529,800 revenue passengers, an increase of about 13 percent from the 1997 ridership level of about 1,356,400 revenue passengers. The number of bus-miles operated in revenue service totaled about 1,100,500, representing an increase of about 16 percent over the 952,200 bus-miles operated during 1997. The increases in system ridership and service levels in 1998 reflect a full year of operation with improvements to weekday transit service implemented in August 1997. At that time, the transit system extended by one hour the afternoon peak period when service was provided at 30-minute headways, and also extended the service day by one and one-half hours. The cash basic fare for the Kenosha system remained at \$1.00 per one-way trip, unchanged from 1997.

To assist in the public operation of the transit system, the Commission, at the request of the City, prepared a five-year transit system development plan in 1976 for the years 1976 through 1980.<sup>6</sup> Many of the plan's recommendations regarding transit route layout and scheduling were imple-

mented in the mid-1970s as ridership on the system increased. In 1984, the Commission completed work on another transit system development plan for the City of Kenosha transit system, covering the period from 1984 through 1988.<sup>7</sup> Virtually all the routing changes recommended under the new plan were implemented by the transit system in late December 1984. During 1991, the Commission completed work on a third transit system development plan, covering the period from 1991 through 1995.<sup>8</sup> This plan, described in the Commission's *1991 Annual Report*, was adopted by the Commission as an element of the comprehensive regional plan in June 1992, thus superseding the second-generation plan thus adopted in 1985. The majority of the routing and service changes recommended under the new plan were implemented by the City in August 1993. During 1998, the Commission completed work on a fourth Kenosha-area transit system development plan setting forth recommendations for the period from 1998 through 2002. The details of this plan are described in a separate section of this *Annual Report*. Many of the recommended changes in the City's local bus routes

<sup>6</sup>See SEWRPC *Community Assistance Planning Report No. 7, Kenosha Area Transit Development Program: 1976-1980, March 1976.*

<sup>7</sup>See SEWRPC *Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1988, June 1984.*

<sup>8</sup>See SEWRPC *Community Assistance Planning Report No. 183, Kenosha Transit System Development Plan: 1991-1995, September 1991.*

were implemented in August 1998 to coincide with the opening of a new Kenosha high school.

#### City of Waukesha

Local bus service was reestablished in the City of Waukesha in August 1981, when the City placed into full-scale operation a new fixed-route transit system. The community had previously been without public transit service since June 1976, when local bus service provided by a private transit operator was discontinued. The reinstitution of transit service was guided by a transit development plan prepared by the Regional Planning Commission in 1980 at the request of the City of Waukesha.<sup>9</sup> The new Waukesha transit system and its routes, schedule, service levels, and fare structure were implemented essentially as recommended by that plan. In December 1989 the Commission completed work on another transit development plan, covering the period from 1988 through 1992.<sup>10</sup> This plan, described in the Commission's *1989 Annual Report*, was adopted by the Commission as an element of the comprehensive regional plan in June 1990. During calendar year 1998, the system carried approximately 584,200 revenue passengers, an increase of about 1 percent from the 580,500 revenue passengers carried on the system during 1997 (see Figure 20). The number of bus-miles operated in revenue service totaled about 807,800, an increase of about 3 percent from the 781,800 bus-miles operated in 1997. The increases in ridership and service levels reflect a full year of operation with reduced weekday operating headways on one route serving the Blue Mound Road corridor implemented in April 1997 as part of the congestion mitigation measures implemented during the resurfacing of IH 94 in Waukesha and Milwaukee Counties. The basic cash fare for the City transit system remained at \$1.00 per one-way trip, unchanged from 1997.

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<sup>9</sup>See SEWRPC *Community Assistance Planning Report No. 31, Waukesha Area Transit Development Program: 1981-1985*, February 1980.

<sup>10</sup>See SEWRPC *Community Assistance Planning Report No. 154, A Transit System Development Plan for the City of Waukesha: 1988-1992, December 1989*.

#### City of Whitewater

In January 1986, the City of Whitewater initiated operation of a shared-ride taxicab service. Operated on a contract basis by Brown's Cab Service, based in Fort Atkinson, the taxicab service is available seven days a week for travel primarily within the Whitewater area. The service was initiated using Federal funds available for capital and operating assistance under the Federal nonurbanized-transit-assistance program. During 1998, the Whitewater taxicab service carried approximately 27,300 revenue passengers, a decrease of about 22 percent from the 34,800 revenue passengers carried in 1997 (see Figure 21). It operated about 77,000 total vehicle-miles during 1998, about 13 percent less than the 88,600 total vehicle-miles operated in 1997. During 1998, adult fares for the service increased from \$2.00 to \$2.25 per one-way trip.

#### City of Hartford

Publicly operated transit service was also provided during 1998 by the City of Hartford, which operated a shared-ride taxicab service through its Municipal Recreation Department. The taxicab service was initiated in 1981 and is available to the public seven days a week for travel primarily within the City of Hartford and environs. During 1998, the Hartford taxicab service carried approximately 21,400 revenue passengers, an increase of about 1 percent from the 21,200 revenue passengers carried in 1997 (see Figure 22). The service operated about 46,500 total vehicle-miles, a decrease of about 1 percent from the 46,900 total vehicle-miles operated during 1997. Base cash passenger fares remained at \$1.50 per one-way trip in 1998.

#### City of West Bend

In January 1993, the City of West Bend initiated operation of a publicly subsidized shared-ride taxicab system to provide public transit service within the City and its environs. The institution of this taxicab service was guided by a transit system development plan prepared by the Regional Planning Commission in 1991 at the request of the City.<sup>11</sup> This plan, described in the Commission's

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<sup>11</sup>See SEWRPC *Community Assistance Planning Report No. 189, A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996*, February 1991.

Figure 20

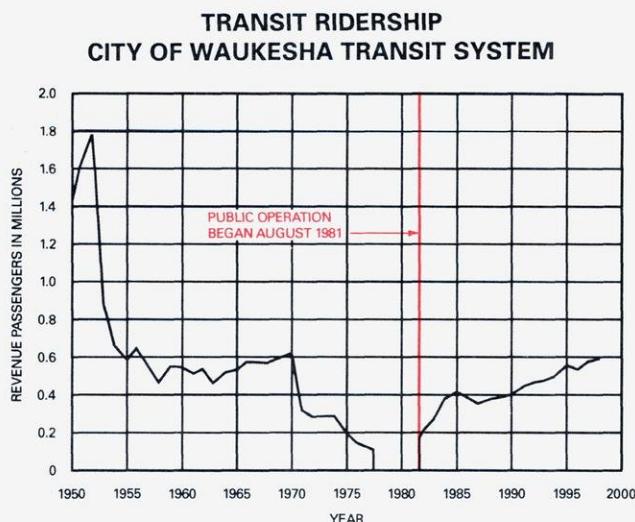


Figure 21

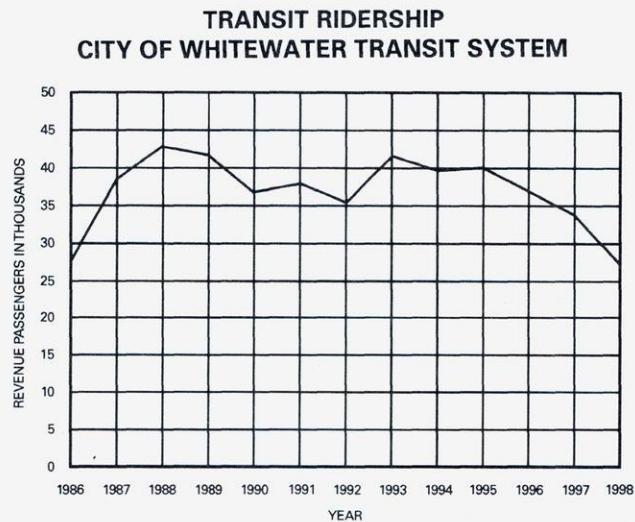


Figure 22

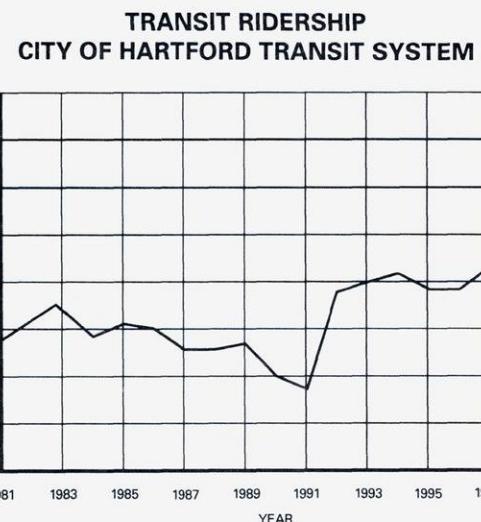
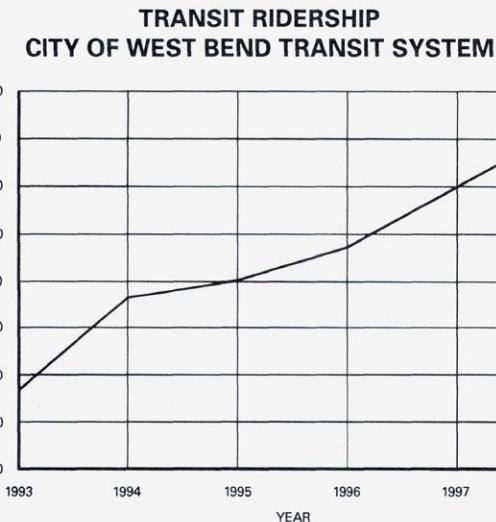


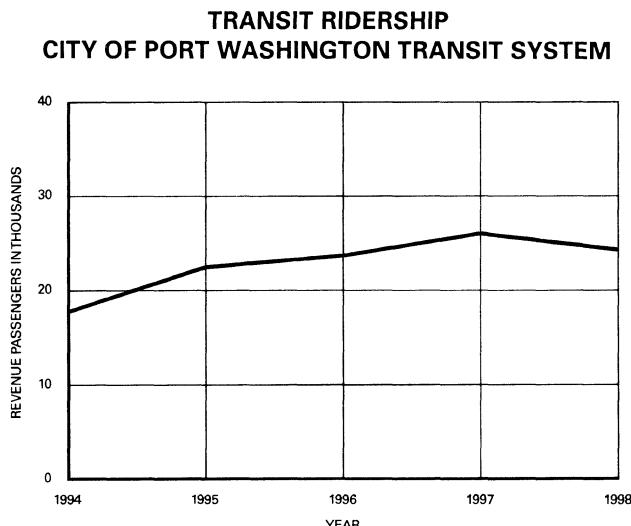
Figure 23



1991 *Annual Report*, was adopted by the Commission as an element of the comprehensive regional plan in March 1992. The operating characteristics of the West Bend shared-ride taxicab system, including its service levels and fare structure, were implemented essentially as recommended in that plan. The taxicab service is available seven days a week for travel primarily within the City of West Bend and immediately adjacent areas, and is operated on a contract basis by Specialized Transport Services, Inc. During 1998, the West Bend taxicab service carried approximately 112,900

revenue passengers and operated about 375,800 total vehicle-miles of service. These figures respectively represent an increase of about 13 percent from the 99,600 revenue passengers carried in 1997 (see Figure 23) and an increase of about 9 percent from the 345,100 total vehicle-miles operated during 1997. Ridership on the service has greatly exceeded that originally projected under the plan, resulting in a need to increase service over 1997 levels. The taxicab service in 1998 continued to charge a base adult fare of \$2.00 per one-way trip, unchanged from 1997.

Figure 24



#### City of Port Washington

On February 1, 1994, the City of Port Washington initiated operation of a publicly subsidized shared-ride taxicab system to provide public transit service within the City and its environs. The institution of this taxicab service was guided by an analysis completed by the Regional Planning Commission in 1993 at the request of the City. The analysis identified the potential ridership, fare-box revenue, operating and capital costs, and local subsidies required for a shared-ride taxicab system based upon assumptions provided by the City concerning proposed fares and desired service characteristics. The taxicab service is available seven days a week for travel primarily within the City of Port Washington and adjacent areas two miles or less from the City's corporate limits, and is operated on a contract basis by Specialized Transport Services, Inc. During 1998, the Port Washington taxicab service carried approximately 24,300 revenue passengers and operated about 83,400 total vehicle-miles of service. These figures respectively represent a decrease of about 6 percent from the 25,800 revenue passengers carried in 1997 (see Figure 24) and a decrease of about 1 percent from the 84,400 total vehicle-miles operated during 1997. The taxicab service in 1998 continued to charge a base adult cash fare of \$1.75 per one-way trip, unchanged from 1997.

#### Ozaukee County

In January 1998, Ozaukee County initiated the operation of a publicly subsidized shared-ride taxicab system as a one-year pilot program to serve travel needs within the County. The institution of the service was guided by a transit service plan prepared by the Regional Planning Commission in 1995 at the request of the County.<sup>12</sup> This plan, described in the Commission's *1995 Annual Report*, was approved by the Ozaukee County Board of Supervisors in October 1995, and was adopted by the Commission as an element of the comprehensive regional plan in December 1995. The County's transit service plan included a local service element calling for the provision of local, shared-ride taxicab service throughout the County, as well as a commuter bus element which recommended the establishment of a commuter bus route and a system of shuttle routes to serve workers commuting between Milwaukee and Ozaukee Counties. A fixed-route bus system which essentially implemented the commuter bus element of the plan was established by the County in August 1996 and is described in the following section of this *1998 Annual Report*, which deals with the Region's intercounty transit services.

The operating characteristics of the County's new shared-ride taxicab service were based largely on those recommended under the County transit service plan, except that the County service did not serve trips made entirely within the Port Washington area. The County plan had envisioned that the Port Washington taxicab service, along with the specialized transportation service for elderly and disabled persons operated in 1997 and prior years by the Ozaukee County Office of Aging Services, would be supplanted by the countywide taxicab system. As implemented, the County's taxicab service did replace the Office of Aging Services transportation program, but the City of Port Washington elected to maintain separate municipal operation of its public taxicab system to serve local trips made in the City and environs. The County's taxicab service is available seven days a week to serve trips made anywhere within Ozaukee County, except those made entirely within the service area for the Port Washington taxicab system. Fares for the service are zone-based, and somewhat higher than those

<sup>12</sup>See SEWRPC *Community Assistance Planning Report No. 218, A Transit Service Plan for Ozaukee County: 1996-2000, July 1995.*

proposed under the County transit service plan, with the base adult cash fare ranging from \$2.25 per trip for travel within one zone to \$6.50 per trip for cross-County travel encompassing four or more zones. The County contracts with a private for-profit transit operator, Handicare, Inc., to provide the taxicab service. During 1998, about 24,000 revenue passengers were carried on the Ozaukee County taxicab system, which operated a total of about 406,200 revenue vehicle-miles.

#### Washington County

In January 1998, Washington County initiated the operation of a publicly subsidized shared-ride taxicab system to serve travel needs within the County. The institution of the service was guided by a transit service plan prepared by the Regional Planning Commission in 1996 at the request of the County.<sup>13</sup> This plan was described in the Commission's *1996 Annual Report* and was adopted by the Commission as an element of the comprehensive regional plan in March 1997. The County plan had envisioned that the Washington County taxicab system would supplant other existing transit services provided in the County, including the public taxicab systems operated by the Cities of Hartford and West Bend, along with the specialized transportation service for elderly and disabled persons operated by the Washington County Office on Aging. As implemented, the County's taxicab service did replace the Office on Aging transportation program. However, the Cities of Hartford and West Bend elected to maintain separate municipal operation of their respective public taxicab systems to serve local trips made in and around those communities. The operating characteristics of the County taxicab service were based largely on those recommended under the County transit service plan. The County's taxicab service is available seven days a week to serve trips made in the Germantown-Richfield area and between the Germantown-Richfield area and anywhere else in Washington County. In all other areas of the County, service is available on weekdays only. The County system does not serve trips that can be made using the Hartford or West Bend taxicab systems. Fares for the County service are zone-based, and somewhat higher than those proposed under the County transit service plan, with

the base adult cash fare ranging from \$2.25 per trip for travel within one zone to \$6.50 per trip for cross-County travel encompassing four or more zones. The County contracts with a private for-profit transit operator, Handicare, Inc., to provide the taxicab service. During 1998, about 22,200 revenue passengers were carried on the Washington County taxicab system, which operated a total of about 452,000 revenue vehicle-miles.

#### Intercounty Services

##### Waukesha County

During 1998, Waukesha County operated 14 regular bus routes serving travel between Waukesha and Milwaukee Counties. The 14 routes reflected an increase of two routes over the 12 routes in the County system in 1997. Waukesha County contracted for all elements of their operation from two transit operators in the Milwaukee area. Eight of the routes were operated by Wisconsin Coach Lines, Inc., and six were operated by Milwaukee County as extensions of the Milwaukee County Transit System.

The eight routes operated by Wisconsin Coach Lines, Inc., included three express routes, two operated between Waukesha and downtown Milwaukee and one operated between Oconomowoc and downtown Milwaukee, all of which have been sponsored by Waukesha County since 1977; three freeway flyer routes, including one operated between Oconomowoc and downtown Milwaukee since 1981, one operated between Mukwonago and downtown Milwaukee since 1992, and one operated between Waukesha and downtown Milwaukee since 1994; and two local shuttle bus routes connecting stops along the Waukesha-Milwaukee freeway flyer route with the New Berlin Industrial Park and businesses in the then Town of Pewaukee. The two shuttle routes began operation in 1993 and 1994, respectively.

Two of the six routes operated by the Milwaukee County Transit System were initiated in 1981 and included one freeway flyer bus route operated between the Village of Menomonee Falls and downtown Milwaukee and one route providing local bus service from Milwaukee County to the Brookfield Square Shopping Center. The third and fourth routes operated by the Milwaukee County Transit System are shuttle routes for passengers working in the Menomonee Falls-Butler industrial area

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<sup>13</sup>See SEWRPC *Community Assistance Planning Report No. 223, A Public Transit Service Plan for Washington County: 1998-2002, November 1995.*

and the Menomonee Falls Industrial Park and connect with other Milwaukee County Transit System local and express bus routes. The route serving the Menomonee Falls-Butler industrial area began operation in 1995, and the route serving the Menomonee Falls Industrial Park began operation in 1997. The last two routes were added to the Waukesha County system in 1998 and bring workers from central Milwaukee County to the Quad/ Graphics, Inc., plants in Sussex and the New Berlin Industrial Park.

The bus routes initiated during 1981 were three of seven new routes implemented by Waukesha County on April 1, 1981. The Commission identified these seven routes in 1980 at the request of Waukesha County and proposed that service be implemented on a trial basis.<sup>14</sup> Additional service changes were made in 1988, 1993, and 1995 on the basis of the analyses and recommendations presented in a new transit service plan for Waukesha County completed by the Commission in 1988.<sup>15</sup>

During 1998, total ridership on the Waukesha County Transit System increased by about 15 percent, from about 447,000 trips in 1997 to about 513,400 trips in 1998 (see Figure 25). The ridership increase can be attributed to several factors, including continuing operation of the bus routes serving the Waukesha-Milwaukee travel corridor with more frequent service as part of the congestion mitigation measures implemented during the resurfacing of the IH 94 Freeway in Waukesha and Milwaukee Counties; a 1997 reduction in base adult fares from \$2.50 to \$1.00 per one-way trip for passengers traveling to or from locations west of the City of Waukesha; and ridership growth on the bus services for the Menomonee Falls-Butler industrial area and the Menomonee Falls Industrial Park. Transit fares on the Waukesha County Transit System, which are distance-related, were between \$1.00 and \$2.00 in 1998, unchanged from 1997. The number of bus-miles operated in revenue service increased from about 700,300 bus-miles in

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<sup>14</sup>See SEWRPC *Community Assistance Planning Report No. 44, Proposed Public Transit Service Improvements—1980*, Waukesha County, Wisconsin, July 1980.

<sup>15</sup>See SEWRPC *Community Assistance Planning Report No. 105, Waukesha County Transit Plan: 1988-1992*, September 1988.

1997 to about 718,100 bus-miles in 1998, or by about 3 percent.

As noted above, four of the 14 routes operated by Waukesha County in 1998 were operated as freeway flyer routes. As shown in Figure 17, total ridership on freeway flyer routes operated by Waukesha County in 1998 was about 128,900 revenue passengers, a decrease of about 3 percent from the estimated 133,200 revenue passengers carried on Waukesha County-operated freeway flyer routes in 1997. The freeway flyer service in Waukesha County served a total of nine outlying parking terminals in 1998.

#### Kenosha-Racine-Milwaukee Service

During 1998, the City of Racine, in a joint effort with the City of Kenosha and with Racine and Kenosha Counties, continued to provide commuter bus service between downtown Milwaukee and the Racine and Kenosha areas. The commuter bus service had been provided by a private transit operator, Wisconsin Coach Lines, Inc. This service is provided over surface arterial streets as an express bus service. Until 1984, the route was operated without public subsidy; the passenger and freight revenues were sufficient to offset the operating costs. During 1984, the company approached the four governmental units and asked for financial subsidy for the operation of the route. As a result, the four local units of government joined to help provide the company with the necessary financial assistance, through the State of Wisconsin, to operate the bus service.

The City of Racine has assumed responsibility as the lead agency for the commuter bus project by acting as the applicant-grantee for the State urban transit assistance funds needed to subsidize the operation of the commuter service. State transit assistance funds are the only public monies being used to subsidize the operating costs of the service. Ridership on the service approximated 71,600 revenue passengers during 1998, a decrease of about 3 percent from the 1997 ridership level of about 73,800 revenue passengers (see Figure 26). The number of bus-miles operated in revenue service decreased slightly, from about 265,400 bus-miles in 1997 to about 264,400 bus-miles in 1998, a decrease of less than 1 percent. Transit fares for the express commuter bus service, which are distance-related, ranged from \$1.00 to \$4.20 per one-way trip in 1998, unchanged from 1997.

Figure 25

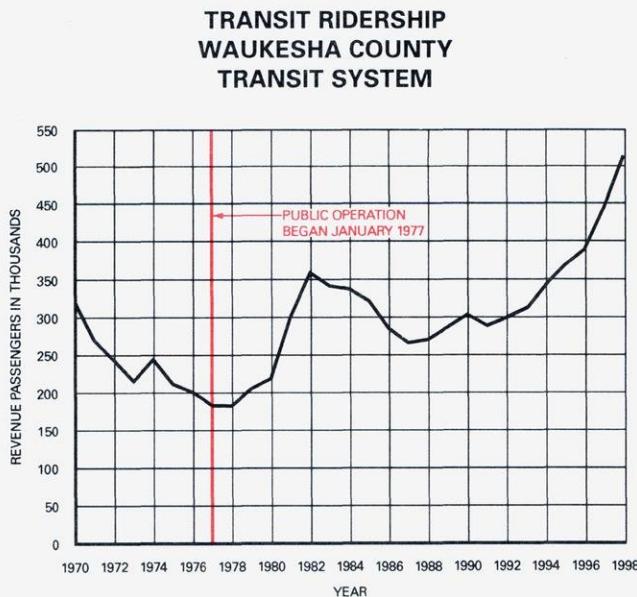
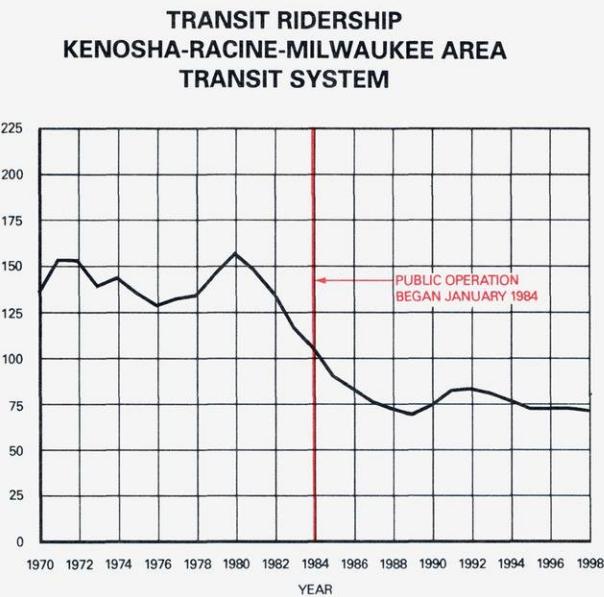


Figure 26



### Ozaukee County

On August 5, 1996, Ozaukee County initiated operation of a new, publicly subsidized bus service between central Milwaukee County and Ozaukee County, marking the reestablishment of bus service between those two Counties. Ozaukee County had been without such service since 1986, when bus service operated by a private transit company without public subsidy—Ozaukee Metropolitan Transit, Inc.—was discontinued. Prior to that effort, bus service by a different private transit company—Wisconsin Coach Lines, Inc.—had been operated under contract with, and subsidized by, Ozaukee County over the period from January 1976 to June 1978. The reinstitution of bus service between the two Counties was guided by the 1995 Ozaukee County transit service plan noted in the previous section of this *Annual Report*, which deals with the Region's intracounty transit services. The transit service plan for Ozaukee County included a commuter bus element, which recommended the establishment of a commuter bus route and a system of shuttle routes to transport workers between central Milwaukee County and Ozaukee County employment centers. The plan also included a local service element that proposed making shared-ride taxicab service, similar to that provided in the City of Port Washington, available to all County residents. An initial level of this countywide

shared-ride taxicab service was established by Ozaukee County in 1998. Because this taxicab service is an intracounty service, it is described in the previous section of this *Annual Report*.

The commuter transit services operated by Ozaukee County in 1998 included one commuter bus route operated between central Milwaukee County and four park-ride lots in Ozaukee County, including three along IH 43 located at Pioneer Road (CTH C) and at CTH V, both in the Town of Grafton, and at STH 32-STH 84, in the Town of Port Washington; and one located along STH 57 at CTH H, in the Town of Fredonia. In addition, six shuttle routes were operated from the two Grafton park-ride lots and a commuter bus stop in the City of Mequon to employment centers in Mequon, Cedarburg, Grafton, Port Washington, Saukville, and Fredonia. Service over the routes was available only to serve weekday jobs during the early-morning, mid-afternoon, and late-evening periods for first- and second-shift job starting and ending times. Fares of \$2.00 per one-way trip for the commuter bus service between central Milwaukee County and the park-ride lots served in Ozaukee County and \$0.50 per one-way trip for the connecting shuttle services were charged during 1998, unchanged from 1997. The Ozaukee County Transportation Management Association admin-

istered the service for the County and contracted with Meda-Care Vans, Inc., to operate the service.

During 1998, a total of about 96,500 revenue passengers were carried on the Ozaukee County commuter bus and shuttle transit services, an increase of about 21 percent over the 79,900 revenue passengers carried in 1997. The commuter bus and shuttle system operated a total of about 348,700 revenue vehicle-miles in 1998, an increase of about 14 percent from the 305,400 vehicle-miles operated in 1997.

### Public Transit Stations

Progress in providing the public transit stations recommended in the adopted year 2020 transportation plan is summarized on Map 8. During 1998, no new public transit stations were constructed to add to the 25 stations existing in 1997. However, two existing facilities were reconstructed during 1998 to provide for additional capacity: the State Fair Park public transit station, whose capacity was increased from 200 parking spaces to 285 parking spaces, and the STH 57 and Ozaukee County CTH H park-ride lot, whose capacity was increased from 10 parking spaces to 60 parking spaces. In addition, Waukesha County began providing freeway flyer bus service in 1998 from a park-ride lot located at the Brookfield Square Shopping Center, increasing the number of shopping center lots used as freeway flyer terminal facilities from five during 1997 to six during 1998.

Table 14 and Figure 27 provide data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 1998 at all transit stations by patrons of freeway flyer bus service and carpoolers. As shown in the table, transit service was provided at 24 of the 25 public transit-park-ride stations and at all six shopping center lots. The total of 31 freeway flyer terminal facilities represents an increase of one facility from the 30 facilities that existed in 1997. The number of spaces available at public transit-park-ride stations increased to 4,935 in 1998 from 4,800 spaces in 1997 as a result of the reconstruction of the State Fair Park and STH 57-CTH H facilities.<sup>16</sup> The

number of spaces at shopping center lots increased to 825 in 1998 from 725 in 1997. The total number of spaces available therefore increased to 5,760 in 1998 from 5,525 in 1997.

Of the 4,935 spaces available at the 25 public transit-park-ride stations, 1,762 spaces were used on an average weekday during 1998, a utilization rate of about 36 percent. Of the 825 spaces available at the six shopping center lots, 149 spaces were utilized during 1998, a utilization rate of about 18 percent. In total, about 33 percent of all available parking spaces were used on an average weekday during 1998.

### Public Transit Operating Subsidies

Transit operating subsidies in the Region during 1998 approximated \$81.9 million, compared with about \$75.1 million during 1997, as shown in Table 15. The per-ride operating subsidies for the individual intracounty public transit operators in the Region operating in 1997 and 1998, were for those years, respectively, as follows: Milwaukee County, \$1.38 and \$1.44 (see Figure 28); City of Racine, \$2.20 and \$2.37 (see Figure 29); City of Kenosha, \$2.01 and \$1.95 (see Figure 30); City of Waukesha, \$3.04 and \$2.69 (see Figure 31); City of Whitewater, \$3.14 and \$4.63 (see Figure 32); City of Hartford, \$4.00 and \$4.37 (see Figure 33); City of West Bend, \$3.78 and \$3.27 (see Figure 34); and City of Port Washington, \$2.76 and \$3.79 (see Figure 35). For the Ozaukee County and Washington County intracounty transit services, which began operation in 1998, the per-ride operating subsidies for the year were \$17.52 and \$28.58, respectively. For the Waukesha County transit service, the per-ride operating subsidy was \$5.34 in 1997 and \$5.74 in 1998 (see Figure 36); for the Kenosha-Racine-Milwaukee Counties transit service, the per-ride operating subsidy was \$7.17 in 1997 and \$7.44 in 1998 (see Figure 37); and for the Ozaukee County intercounty transit service, the per-ride

<sup>16</sup>After accounting for the expansion of the State Fair Park and STH 57-CTH H public transit stations in 1998, the addition of four former carpool parking lots in 1996 and 1997, and the expansion in 1996 of the Goerke's Corners and North Shore public transit stations, the aggregate number of available spaces

at public transit stations in the Region shown in Table 14 is 210 spaces higher than the corresponding number reported for 1995 in the Commission's 1995 Annual Report. This increase resulted from a reinventory of the parking capacity of existing public transit stations and carpool parking facilities by the Wisconsin Department of Transportation during 1996 as part of a comprehensive study of public park-ride facilities. The totals given for available parking spaces for 1995 were adjusted accordingly to reflect the revised capacities.

Map 8

RAPID TRANSIT SYSTEM PLAN  
FOR THE REGION: 2020

LEGEND

EXISTING SYSTEM: 1998

- TRANSIT STATION-PRIVATE RETAIL CENTER
- ▲ TRANSIT STATION-PUBLICLY CONSTRUCTED
- 20 STATION NUMBER (SEE TABLE 14)
- RAPID BUS-ON-FREWAY TRANSIT ROUTE
- NONFREEWAY EXTENSION OF RAPID TRANSIT ROUTE

2020 ADOPTED ROUTE

- ▲ PROPOSED TRANSIT STATION-PUBLICLY CONSTRUCTED
- PROPOSED EXPRESS BUS-ON-FREWAY TRANSIT ROUTE
- PROPOSED NONFREEWAY EXTENSION

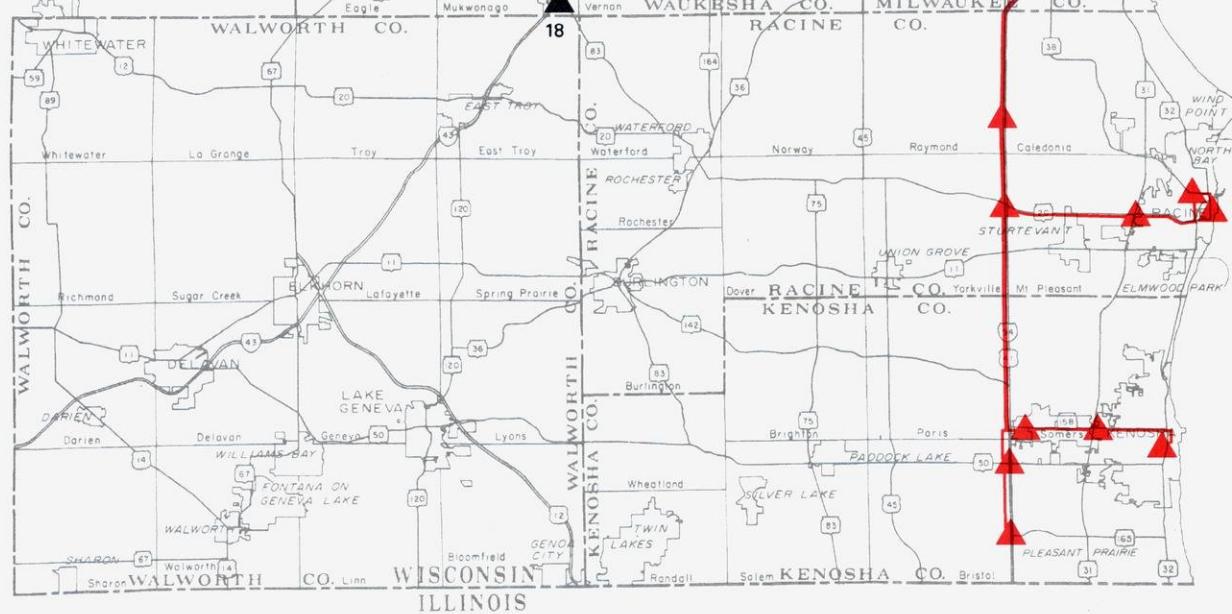
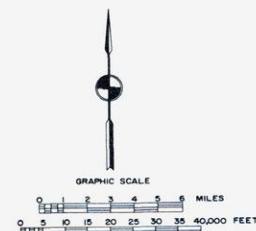


Table 14

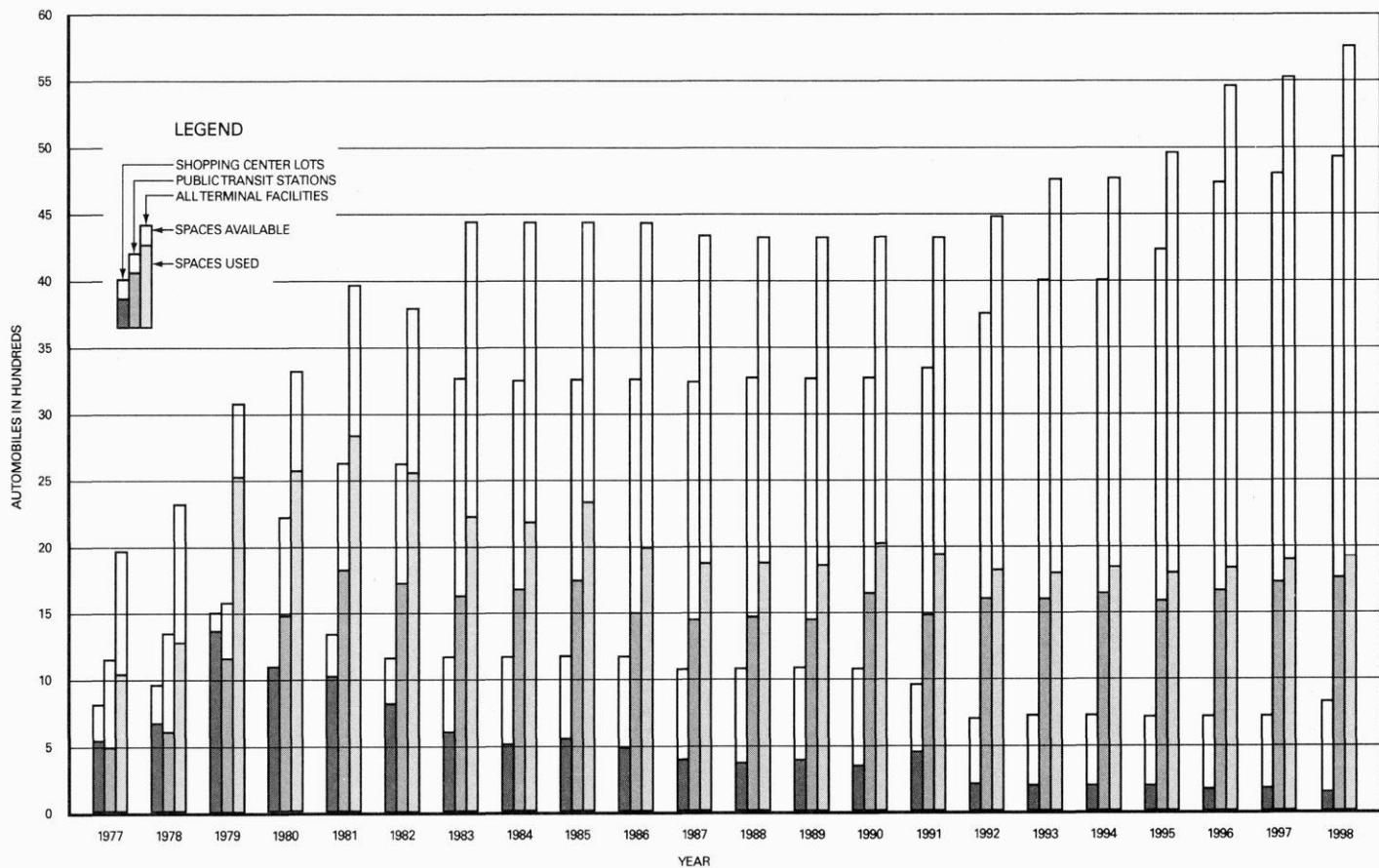
## AVERAGE WEEKDAY USE OF PARKING AT FREEWAY FLYER TERMINALS: 1998

Number <sup>a</sup>	Location	Available Parking Spaces	Autos Parked on an Average Weekday: 1998	Percent of Spaces Used
	Public Transit Stations			
1	STH 57 and CTH H (Fredonia) .....	60 <sup>b</sup>	4	7
2	IH 43 and STH 32-STH 84 (Port Washington) .....	50	33	66
3	IH 43 and CTH V (Grafton) .....	85	22	26
4	IH 43 and CTH C (Grafton) .....	65	40	62
5	Milwaukee Area Technical College (Mequon) .....	200	2 <sup>c</sup>	1
6	Northridge (Milwaukee) .....	100	11	11
7	Brown Deer (River Hills) .....	360	104	29
8	North Shore (Glendale) .....	195	55	28
9	Pilgrim Road (Menomonee Falls) .....	70	55	79
10	W. Good Hope Road (Milwaukee) .....	135	16	12
11	Timmerman Field (Milwaukee) .....	140	42	30
12	W. Watertown Plank Road (Wauwatosa) .....	240	74	31
13	STH 67 and CTH DR (Summit) .....	100	56	56
14	IH 94 and STH 83 (Delafield) .....	200	45	23
15	IH 94 and CTH G (Pewaukee) .....	45	36	80
16	Goerke's Corners (Brookfield) .....	315	177	56
17	State Fair Park (Milwaukee) .....	285 <sup>d</sup>	146	51
18	IH 43 and STH 83 (Mukwonago) .....	105	65	62
19	IH 43 and STH 164 (Big Bend) .....	55	40	73
20	IH 43 and Moorland Road (New Berlin) .....	175	38	22
21	Whitnall (Hales Corners) .....	360	193	54
22	W. Loomis Road (Greenfield) .....	410	74	18
23	W. Ryan Road (Oak Creek) .....	305	65	21
24	W. College Avenue (Milwaukee) .....	650	299	46
25	W. Holt Avenue (Milwaukee) .....	230	70	30
	Subtotal	4,935	1,762	36
	Shopping Center Lots			
26	Kohl's (Brown Deer) .....	125	59	47
27	Silver Mill (Milwaukee) .....	100	5	5
28	Phar-Mor (Brookfield) .....	200	39	20
29	Olympia (Oconomowoc) .....	50	— <sup>e</sup>	— <sup>e</sup>
30	Brookfield Square (Brookfield) .....	100	— <sup>e</sup>	— <sup>e</sup>
31	Southridge (Greendale) .....	250	46	18
--	Subtotal	825	149	18
--	Total	5,760	1,911	33

<sup>a</sup>See Map 8.<sup>b</sup>This facility was reconstructed during 1998 to provide for additional capacity. The number of available parking spaces was thus increased from 10 to 60.<sup>c</sup>Public transit service was not provided to this station during 1998. The number of autos parked represents use by carpoolers.<sup>d</sup>This facility was relocated from IH 94 and 84th Street to IH 94 and 76th Street in August 1998. The number of available parking spaces was increased from 200 to 285.<sup>e</sup>Data not available.

Figure 27

AVERAGE WEEKDAY FREEWAY FLYER PARKING LOT USE: 1977-1998



operating subsidy was \$5.92 in 1997 and \$5.61 in 1998.

### Carpool Parking Facilities

During 1998, the Commission collected data on the use of available parking supply at carpool parking facilities within the Region. As shown in Table 16, 19 publicly owned carpool parking facilities were in operation at key freeway interchanges in the outlying areas of the Region in 1998, the same as the number of such facilities which were in operation during 1997. During 1998, about 566 of the total 1,275 parking spaces available were used on an average weekday (see Figure 38). This represents a utilization rate of about 44 percent in 1998, compared with a rate of about 45 percent in 1997. The progress in providing the carpool parking lots

recommended in the adopted year 2020 regional transportation plan is summarized on Map 9.

### Traffic Count Data

During the year, the Commission conducted traffic counts for use in the analysis and planning activities of the community assistance and traffic engineering services provided to municipalities within the Region. At selected sites, data were collected on vehicle classification, turning movements, peak-hour factors, and other traffic engineering considerations.

### LONG-RANGE PLANNING

#### Regional Transportation System Plan

On December 3, 1997, the Commission formally adopted an extension of the third-generation

Table 15

## PUBLIC TRANSIT OPERATING SUBSIDIES WITHIN THE REGION: 1997-1998

Transit Services	Public Transit Operating Assistance (dollars)							
	1997 Actual				1998 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Intracounty Services								
Milwaukee County .....	5,759,500 <sup>a</sup>	45,538,900 <sup>a</sup>	11,824,600 <sup>a</sup>	63,123,000 <sup>a</sup>	5,268,500	48,790,400	13,933,100	67,992,000
City of Racine .....	674,800	1,911,900	898,700	3,485,400	922,800	1,968,800	705,000	3,596,600
City of Kenosha .....	535,700	1,416,300	771,200	2,723,200	717,200	1,530,100	728,400	2,975,700
City of Waukesha .....	326,900	940,900	495,800	1,763,600	99,200	1,111,300	362,400	1,572,900
City of Whitewater .....	45,600 <sup>a</sup>	59,500 <sup>a</sup>	4,300 <sup>a</sup>	109,400 <sup>a</sup>	54,600	67,000	4,900	126,500
City of Hartford .....	33,500	41,400	9,800	84,700	36,500	44,800	12,300	93,600
City of West Bend .....	151,000 <sup>a</sup>	186,600 <sup>a</sup>	39,300 <sup>a</sup>	376,900 <sup>a</sup>	157,200	193,000	18,700	368,900
City of Port Washington .....	30,800 <sup>a</sup>	40,400 <sup>a</sup>	--	71,200 <sup>a</sup>	39,300	48,300	4,500	92,100
Ozaukee County .....	--	--	--	--	71,300	240,100	109,200	420,600
Washington County .....	--	--	--	--	244,200	95,300	294,900	634,400
Subtotal	7,557,800	50,135,900	14,043,700	71,737,400	7,610,800	54,089,100	16,173,400	77,873,300
Intercounty Services								
Waukesha-Milwaukee Counties .....	395,600 <sup>a</sup>	1,673,100 <sup>a</sup>	318,800 <sup>a</sup>	2,387,500 <sup>a</sup>	594,700	2,070,900	283,500	2,949,100
Kenosha-Racine-Milwaukee Counties ...	--	396,300 <sup>a</sup>	132,500 <sup>a</sup>	528,800 <sup>a</sup>	--	454,400	78,600	533,000
Ozaukee-Milwaukee Counties .....	237,500	196,400	39,300	473,200	218,500	267,500	55,000	541,000
Subtotal	633,100	2,265,800	490,600	3,389,500	813,200	2,792,800	417,100	4,023,100
Region Total	8,190,900	52,401,700	14,534,300	75,126,900	8,424,000	56,881,900	16,590,500	81,896,400

Transit Services	Operating Subsidy per Ride (dollars)							
	1997 Actual				1998 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Intracounty Services								
Milwaukee County .....	0.13 <sup>a</sup>	1.00 <sup>a</sup>	0.25 <sup>a</sup>	1.38 <sup>a</sup>	0.11	1.03	0.30	1.44
City of Racine .....	0.43	1.21	0.56	2.20	0.61	1.30	0.46	2.37
City of Kenosha .....	0.39	1.04	0.58	2.01	0.47	1.00	0.48	1.95
City of Waukesha .....	0.56	1.62	0.86	3.04	0.17	1.90	0.62	2.69
City of Whitewater .....	1.31 <sup>a</sup>	1.71 <sup>a</sup>	0.12 <sup>a</sup>	3.14 <sup>a</sup>	2.00	2.45	0.18	4.63
City of Hartford .....	1.58	1.95	0.47	4.00	1.71	2.09	0.57	4.37
City of West Bend .....	1.52 <sup>a</sup>	1.87 <sup>a</sup>	0.39 <sup>a</sup>	3.78 <sup>a</sup>	1.39	1.71	0.17	3.27
City of Port Washington .....	1.19 <sup>a</sup>	1.57 <sup>a</sup>	--	2.76 <sup>a</sup>	1.62	1.99	0.18	3.79
Ozaukee County .....	--	--	--	--	2.97	10.00	4.55	17.52
Washington County .....	--	--	--	--	11.00	4.29	13.29	28.58
Average	0.15	1.02	0.28	1.45	0.15	1.06	0.31	1.52
Intercounty Services								
Waukesha-Milwaukee Counties .....	0.89 <sup>a</sup>	3.74 <sup>a</sup>	0.71 <sup>a</sup>	5.34 <sup>a</sup>	1.16	4.03	0.55	5.74
Kenosha-Racine-Milwaukee Counties ...	--	5.37 <sup>a</sup>	1.80 <sup>a</sup>	7.17 <sup>a</sup>	--	6.35	1.09	7.44
Ozaukee-Milwaukee Counties .....	2.97	2.46	0.49	5.92	2.27	2.77	0.57	5.61
Average	1.05	3.77	0.82	5.64	1.19	4.10	0.61	5.90
Region Average	0.16	1.05	0.29	1.50	0.16	1.10	0.32	1.58

<sup>a</sup>Estimated.

regional transportation system plan from the design year 2010 to the design year 2020. This extension is documented in SEWRPC Planning Report No. 46, *A Regional Transportation System Plan for Southeastern Wisconsin: 2020*, December 1997. The extension takes into account changes in population, household, and employment levels and in land use development patterns which have occurred in the Region since 1994. It also takes into account 1) new forecasts of resident population and economic activity levels for the Region, 2) the year 2020 regional land use plan, and 3) transportation facility development decisions made by State, county,

and local implementing agencies since the adoption of the design year 2010 plan in 1994. The design year 2020 plan extension is designed to serve and support the adopted design year 2020 regional land use plan, and the attendant travel demand.

The adopted regional transportation system plan includes three major elements: transportation system management, public transit system maintenance and improvement, and arterial street and highway system maintenance and improvement. A regional bicycle and pedestrian facilities system plan, while also an integral part of the adopted

Figure 28

**PUBLIC TRANSIT OPERATING SUBSIDIES: MILWAUKEE COUNTY TRANSIT SYSTEM**

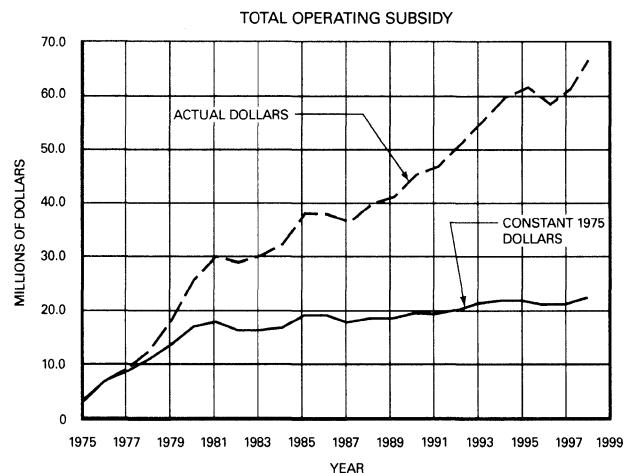
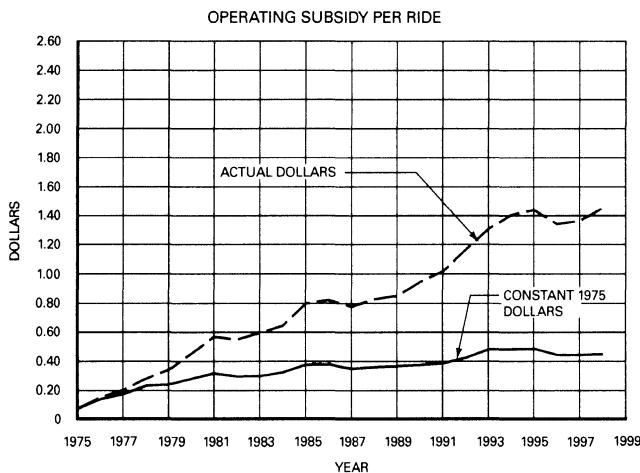


Figure 29

**PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF RACINE TRANSIT SYSTEM**

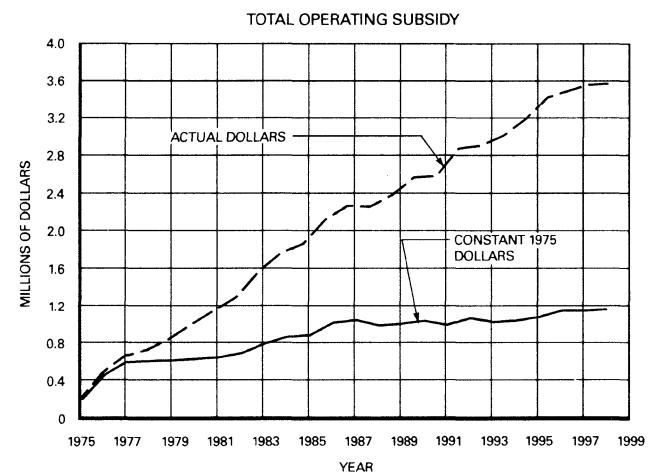
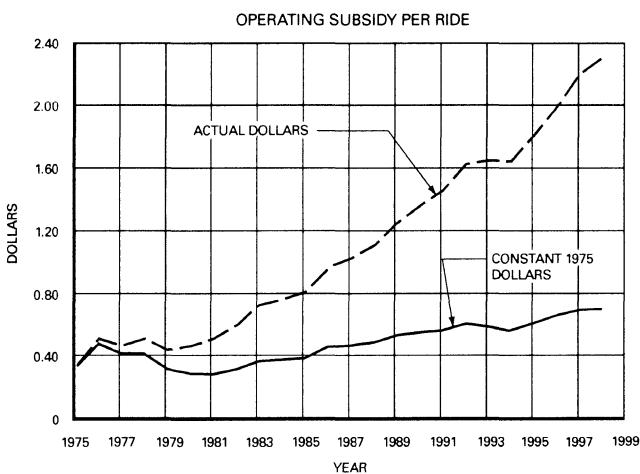


Figure 30

**PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF KENOSHA TRANSIT SYSTEM**

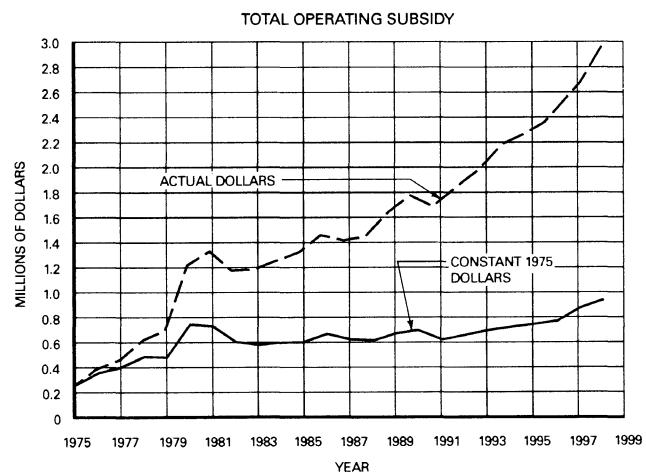
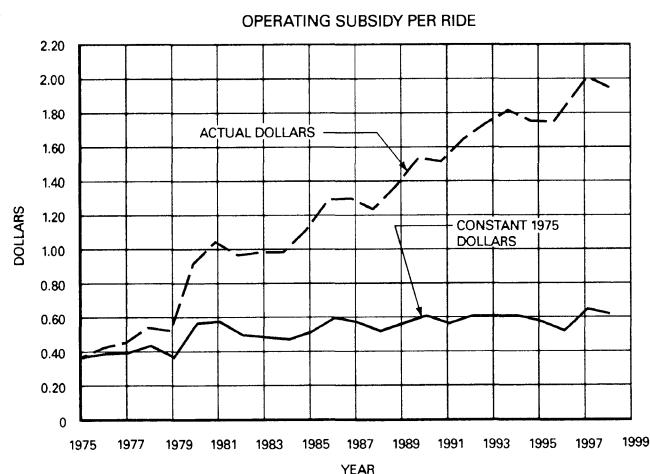


Figure 31

**PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF WAUKESHA TRANSIT SYSTEM**

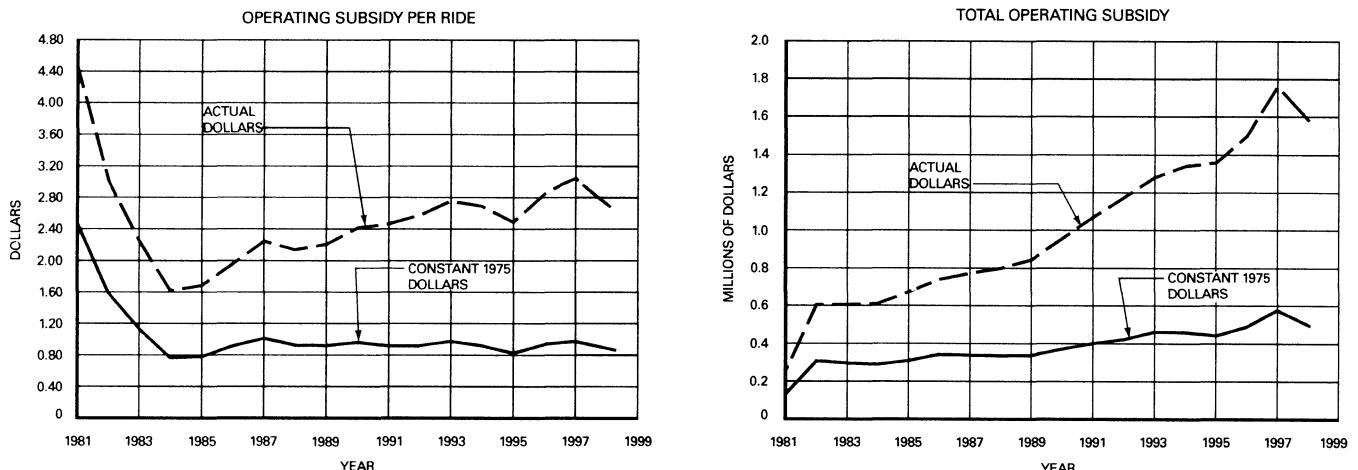


Figure 32

**PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF WHITEWATER TRANSIT SYSTEM**

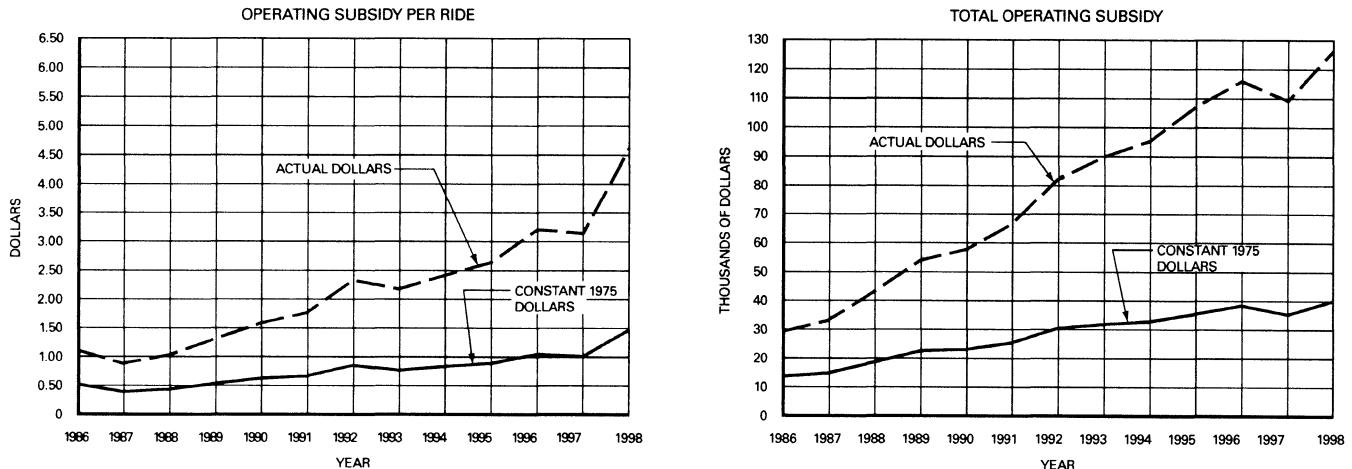


Figure 33

**PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF HARTFORD TRANSIT SYSTEM**

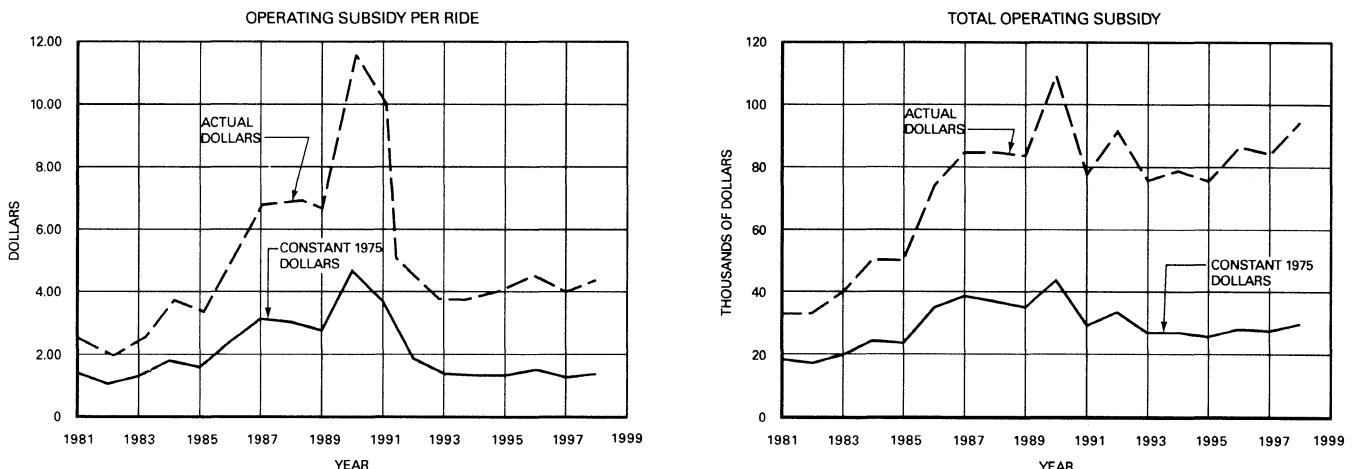


Figure 34

PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF WEST BEND TRANSIT SYSTEM

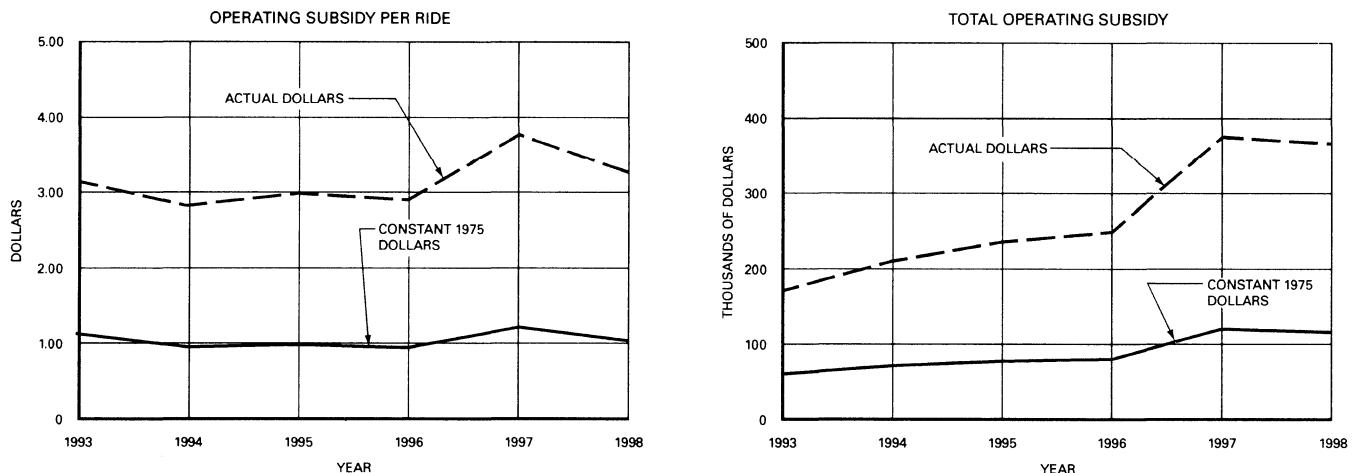


Figure 35

PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF PORT WASHINGTON TRANSIT SYSTEM

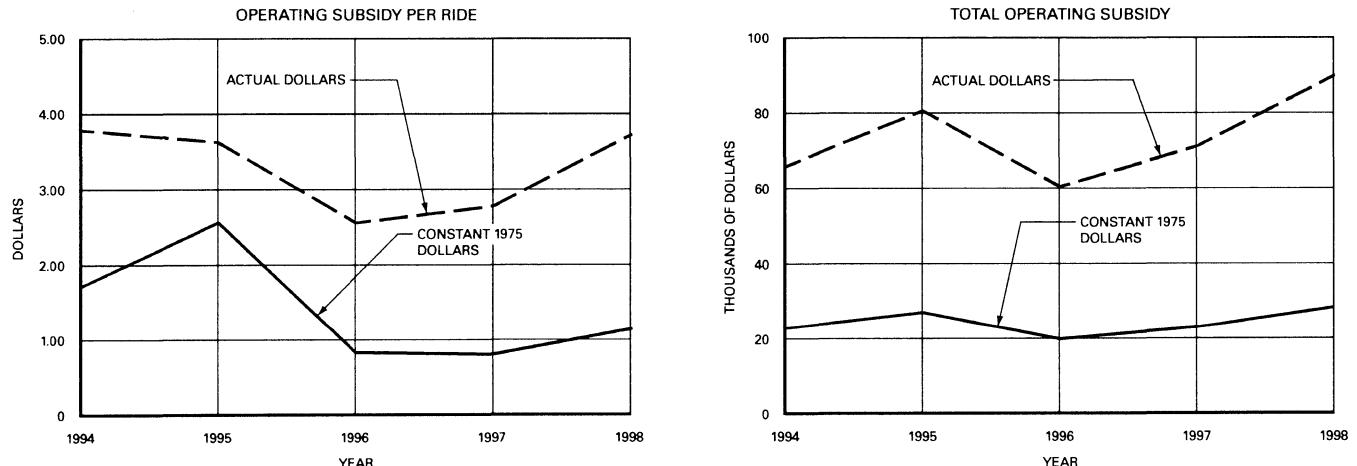


Figure 36

PUBLIC TRANSIT OPERATING SUBSIDIES: WAUKESHA COUNTY TRANSIT SYSTEM

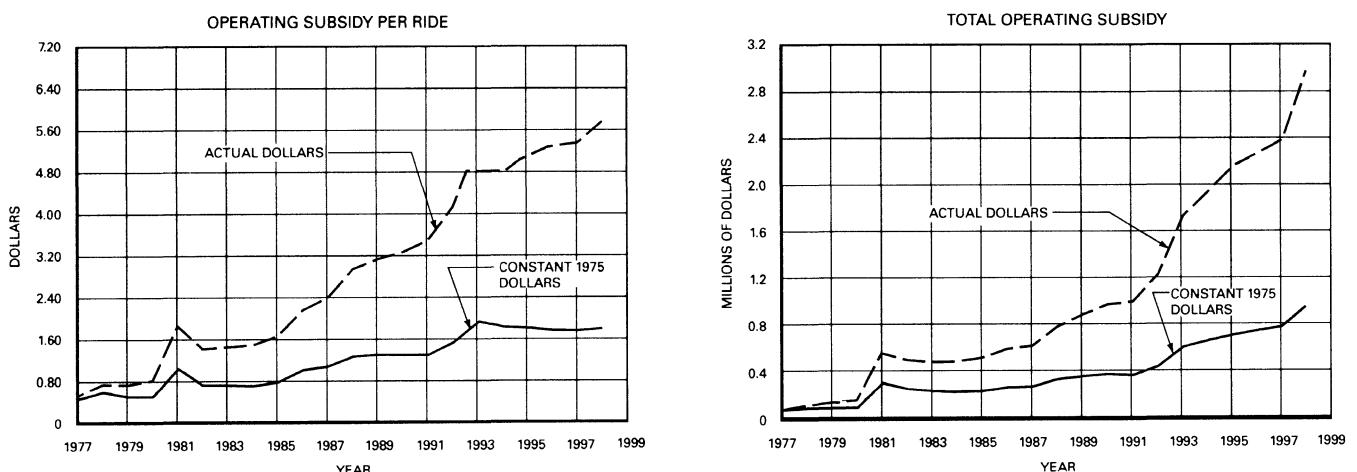


Figure 37

PUBLIC TRANSIT OPERATING SUBSIDIES: KENOSHA-RACINE-MILWAUKEE COUNTIES TRANSIT SYSTEM

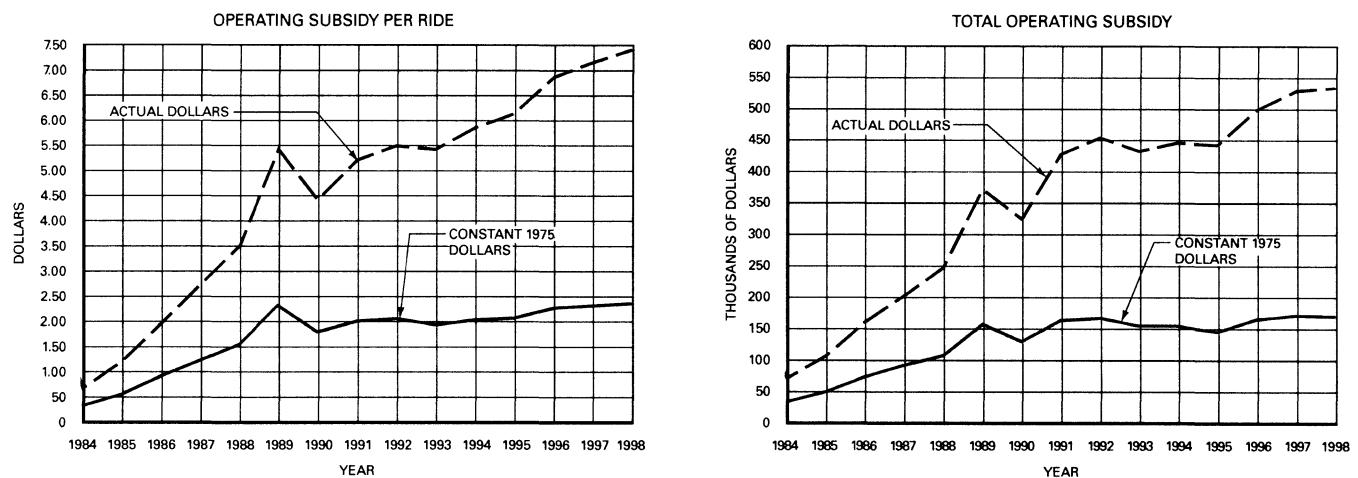


Table 16

AVERAGE WEEKDAY USE OF PARKING AT CARPOOL LOTS: 1998

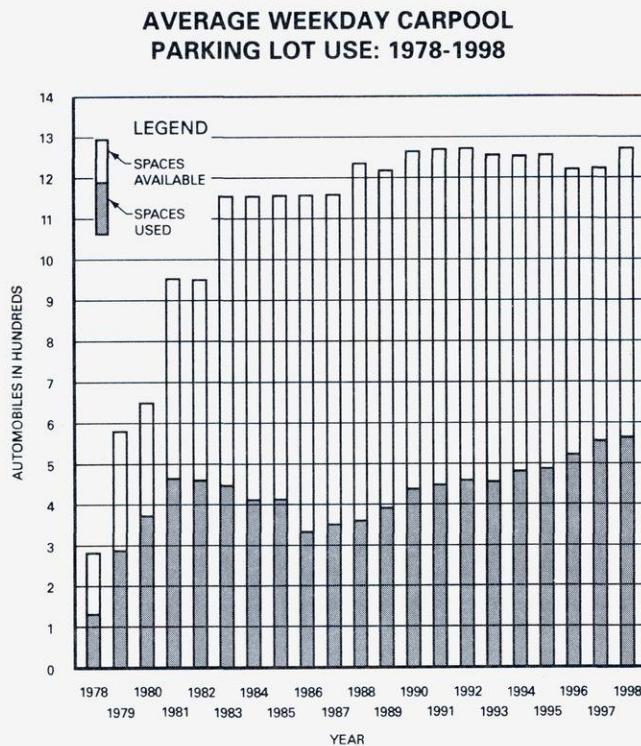
Number <sup>a</sup>	Location	Available Parking Spaces	Autos Parked on an Average Weekday: 1998	Percent of Spaces Used
1	Ozaukee County STH 57 and CTH H (Fredonia) .....	60 <sup>b</sup>	4 <sup>c</sup>	7
2	IH 43 and STH 32-STH 84 (Port Washington) .....	50	33 <sup>c</sup>	66
3	IH 43 and CTH V (Grafton) .....	85	22 <sup>c</sup>	26
4	IH 43 and CTH C (Grafton) .....	65	40 <sup>c</sup>	62
5	Washington County USH 41 and CTH K (Addison) .....	50	11	22
6	STH 60 and CTH P (Jackson) .....	30	20	67
7	USH 41 and CTH Y (Germantown) .....	100	27	27
8	Waukesha County USH 41 and Pilgrim Road (Menomonee Falls) .....	70	55 <sup>c</sup>	79
9	STH 16 and CTH P (Oconomowoc) .....	45	14	31
10	STH 16 and CTH C (Nashotah) .....	45	9 <sup>c</sup>	20
11	STH 16 and STH 83 (Chenequa) .....	35	13	37
12	STH 67 and CTH DR (Summit) .....	100	56 <sup>c</sup>	56
13	IH 94 and CTH C (Delafield) .....	30	18	60
14	IH 94 and CTH G (Pewaukee) .....	45	36 <sup>c</sup>	80
15	IH 94 and STH 164 (Pewaukee) .....	85	41	48
16	IH 43 and STH 83 (Mukwonago) .....	105	65 <sup>c</sup>	62
17	IH 43 and STH 164 (Big Bend) .....	55	40 <sup>c</sup>	73
18	IH 43 and CTH Y (New Berlin) .....	45	24	53
19	IH 43 and Moorland Road (New Berlin) .....	175	38 <sup>c</sup>	22
--	Total	1,275	566	44

<sup>a</sup>See Map 9.

<sup>b</sup>This facility was reconstructed during 1998 to provide for additional capacity. The number of available parking spaces was thus increased from 10 to 60.

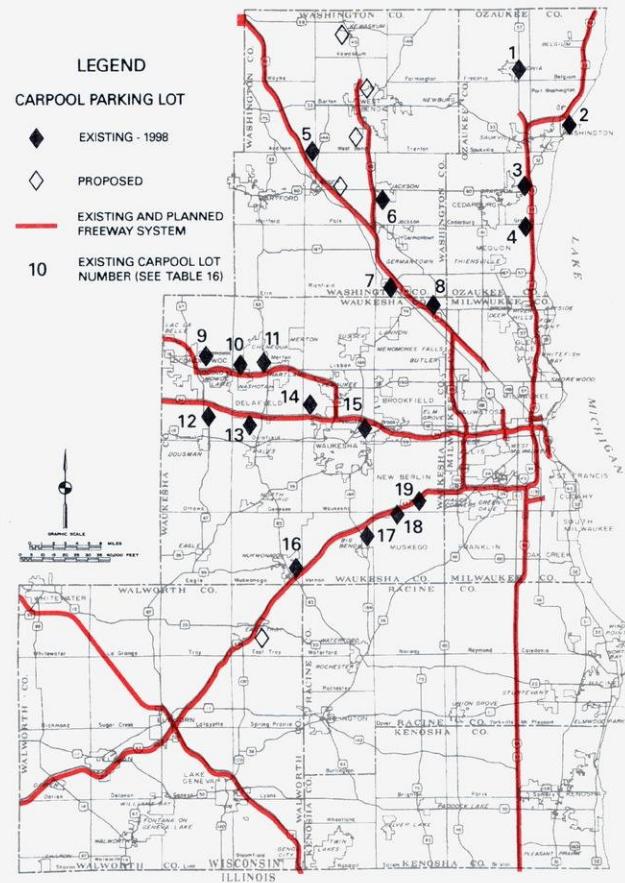
<sup>c</sup>While constructed to serve as a carpool parking facility, this facility also served as a terminal for freeway flyer or express bus service to the Milwaukee central business district. The number of parking spaces used on an average weekday includes autos parked by both carpoolers and transit patrons.

Figure 38



Map 9

**EXISTING 1998 AND PROPOSED CARPOOL PARKING LOTS**



regional transportation system plan, was prepared and adopted in 1995 as a separate element of the comprehensive regional plan, and is discussed in a separate section below.

The transportation system management element consists of the following seven measures: Milwaukee-area freeway traffic management; selected peak-period curb-lane parking restrictions; state-of-the-art traffic engineering practices, including intersection channelization and signalization; application of traffic management technology; travel demand management through ridesharing, transit use, bicycle use, and pedestrian movement, together with telecommuting and work-time rescheduling; preparation and implementation of detailed, site-specific neighborhood land use plans to facilitate travel by transit, bicycle, and pedestrian movement; and transit system management and service enhancement measures.

The public transit system element of the plan—summarized graphically on Map 10—calls for significant improvements to the public transit system, including both expansion of the geographic extent of public transit service provided and improvement in the frequency of service on many of the transit routes in the system. Service on the regional transit system would be increased by about 69 percent from the base year 1995 level, measured in terms of vehicle-miles of revenue service provided, and would include improved rapid, express, and local service.

The areawide rapid transit system would initially consist of 30 bus-based rapid transit routes operating over the freeway system and serving 73 transit stations, with service in both directions during peak periods. Ultimately, depending upon the results of detailed corridor-level planning studies, the rapid transit routes could operate over

Map 10

**PUBLIC TRANSIT ELEMENT  
OF THE ADOPTED REGIONAL  
TRANSPORTATION SYSTEM PLAN  
FOR SOUTHEASTERN WISCONSIN: 2020**

LEGEND

RAPID TRANSIT SERVICE

— BUS SERVICE IN MIXED TRAFFIC ON  
FREEWAYS AND SURFACE ARTERIAL  
STREETS AND HIGHWAYS

EXPRESS TRANSIT SERVICE

— BUS SERVICE IN MIXED TRAFFIC  
OR EXCLUSIVE LANES ON SURFACE  
ARTERIAL STREETS AND HIGHWAYS

TRANSIT STATIONS

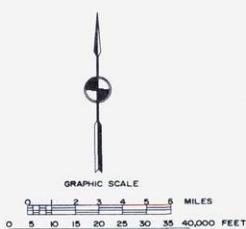
▲ WITH PARKING

△ WITHOUT PARKING

TRANSIT STATIONS

■ LOCAL TRANSIT INCLUDING  
BUT NOT LIMITED TO FIXED  
ROUTE SERVICE

□ RAPID TRANSIT – CONVENIENT  
AUTOMOBILE ACCESS TO  
TRANSIT STATIONS



Under the regional transportation system plan, rapid transit busway/high-occupancy-vehicle facilities, rapid transit commuter rail facilities, and express transit light rail facilities would be considered as alternatives to motor-bus transit service over arterial street and highway lanes. Consideration of such fixed-guideway transit facilities would be initiated as part of federally required detailed transit planning alternatives analysis studies for each of the corridors identified under the plan. The potential corridors for busway, commuter rail, and light rail facilities are shown on Maps 30 and 31 of SEWRPC Planning Report No. 46, *A Regional Transportation System Plan for Southeastern Wisconsin: 2020*, December 1997. The implementation of these fixed-guideway transit facilities would depend upon the outcome of the corridor studies. Upon completion of each study, the local units of government concerned—particularly, the potential transit operator involved—the Wisconsin Department of Transportation, and the Regional Planning Commission would have to affirm the study findings and, if necessary, amend the regional transportation system plan.

exclusive busway facilities in the most congested freeway travel corridors in the Region.

The plan recommends that the potential for commuter rail passenger service be evaluated by conducting feasibility studies 1) in four major travel corridors radiating from Milwaukee south to Kenosha to a connection with existing Chicago-oriented service, west to Oconomowoc, northwest to West Bend, and north to Saukville, and 2) regarding two potential extensions of Chicago-oriented commuter railway passenger train service, one to Walworth in Walworth County and one to Burlington in Racine County.

The express transit service would consist of 12 routes serving major travel corridors largely within Milwaukee County. Initially, service would be provided by buses operating in mixed traffic over surface arterial streets and highways, with limited stops, but could ultimately be provided by buses operating over reserved lanes on arterial streets or could be converted to the light rail transit mode, depending upon the outcome of detailed corridor-level planning studies.

The plan recommends the continued operation of local bus transit service over arterial and collector streets, with frequent stops, throughout the Kenosha, Milwaukee, and Racine urbanized areas, with substantial improvements in the frequency of service provided, particularly on the major local routes. The plan also recommends the continuation of local transit services through shared-ride taxis in the smaller urban areas of the Region, as well as continuation of appropriate paratransit services to help meet the transportation needs of persons with disabilities.

The 3,612-mile arterial street and highway system recommended for the Region is graphically summarized on Map 11. The arterial street and highway system maintenance and improvement element of the plan envisions the construction of 124 route miles of new arterial facilities, the improvement of 405 route-miles of existing facilities, often including widening to provide additional capacity, and the resurfacing and reconstruction of 3,083 route-miles necessary to maintain the remaining existing facilities.

Among the new arterial facilities recommended to be constructed are the Lake Parkway; the STH 16 Freeway bypass of Oconomowoc; the USH 12 Free-

way in Walworth County; the STH 36 bypass of Burlington; and the completion of the western leg of the Waukesha circumferential arterial facility.

Among the facilities recommended to be widened and otherwise improved are the following: Pewaukee Road (CTH J) in Washington and Waukesha Counties; Cleveland Avenue (CTH D) and Racine Avenue (CTH Y) in Waukesha County; STH 31 and CTH Y in Kenosha and Racine Counties; Northwestern Avenue (CTH K) and Spring Street (CTH C) in Racine County; STH 57 and Port Washington Road (CTH W) in Ozaukee County; STH 33 and STH 60 in Ozaukee and Washington Counties; and Rawson Avenue (CTH BB) in Milwaukee County. The plan also recommends the completion of the widening of STH 50 in Kenosha and Walworth Counties. New freeway interchanges are recommended to be provided at Highland Road and IH 43, Calhoun Road and IH 94, and Walworth County CTH O and IH 43.

The plan recommendation that the remaining 3,083 route-miles of arterial streets and highways be maintained either through resurfacing or reconstruction to the same capacity also includes a proposal to reconstruct and modernize the Milwaukee-area freeway system to current freeway design standards. Freeway rehabilitation and modernization efforts are recommended to be coordinated with the results of feasibility studies examining the potential for providing busways and high-occupancy-vehicle lanes in the most congested corridors.

Implementation of the plan may be expected to provide a transportation system that will effectively serve and promote a desirable regional land use pattern and meet anticipated future travel demand in a balanced and practicable manner at an adequate level of service. Under the plan, the number of automobiles and light trucks available for use in the Region would increase from about 1.13 million to about 1.39 million, or about 23 percent. Comparison of selected average weekday regional travel demand characteristics in the year 2020 under the plan to 1995 levels indicates that the following may be expected: internal person-trips may be expected to increase to about 6.5 million from about 5.8 million, or about 12 percent; internal vehicle-trips would increase to about 5.7 million from about 4.8 million, or about 19 percent; vehicle-miles of travel would increase to about 47.0 million from about 35.9 million, or about 31 percent; and transit

ridership would increase to about 207,300 from about 163,100, or about 27 percent.

About 241 miles of the planned 3,612-mile regional arterial street and highway system, or nearly 7 percent, may be expected to operate under congested conditions by the year 2020, compared to the approximately 433 miles, or about 13 percent, of the 3,277-mile regional arterial street and highway system operating under such conditions in 1995.

### **Preparation of New County Highway System Plan for Walworth County Under Way**

Preparation of a new, third-generation jurisdictional highway system plan for Walworth County was initiated in 1998. The new plan will update the recommendations set forth in the original plan adopted by the Commission in 1973 and in the updated plan adopted by the Commission in 1992. As with the 1992 plan, the new plan is being prepared in response to changes in land use development and traffic patterns within the County.<sup>17</sup> Preparation of this plan update was requested by the Walworth County Highway Commissioner in 1997 and is being guided by the Commission's 31-member Walworth County Jurisdictional Highway Planning Committee.

When completed, the new plan will include a proposed system of arterial facilities able to meet existing and probable future travel demand at an adequate level of service. The plan will recommend the number of traffic lanes required on each segment of the arterial system and identify the location and configuration of the various facilities that constitute the system. The plan will also recommend which level of government should assume responsibility for the construction, operation, and maintenance of each arterial facility.

Members of the Committee identified 14 specific issues for analysis and evaluation. The issues may be generally categorized as either reexaminations of currently adopted plan recommendations, or as additions to the currently adopted plan. Issues

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<sup>17</sup>See SEWRPC Planning Report No. 15, *A Jurisdictional Highway System Plan for Walworth County, October 1972, and the Commission document titled Amendment to the Walworth County Jurisdictional Highway System Plan—2010, March 1992.*

involving currently adopted plan recommendations raised for reexamination include the following: 1) the need to provide four traffic lanes on STH 50 through the City of Lake Geneva; 2) the need to provide four traffic lanes on STH 50 between STH 67 and Geneva Street north of the Village of Williams Bay; 3) the provision of a more direct extension of CTH C between CTH X and USH 14 in the Village of Darien; 4) the long-recommended transfer of arterial streets located within incorporated areas and serving a county trunk highway function to the jurisdiction of the County; 5) the jurisdiction over CTH H within the City of Lake Geneva; 6) review of the planned jurisdictional transfer of Bloomfield Road between the planned STH 120 bypass and CTH H in the Town of Bloomfield; 7) review of the planned jurisdictional transfer to the County of STH 120 between USH 12 and STH 50 in the City of Lake Geneva; 8) the jurisdiction over existing USH 12 between the City of Whitewater and STH 67 following the construction of the USH 12 Freeway; 9) the planned jurisdiction over all arterial facilities in the Whitewater area; and 10) the relocation of a planned new interchange on IH 43 from CTH O to CTH F in the Town of Delavan. Proposed additions to the currently adopted plan include the following: 1) South Street between STH 120 and CTH H in the City of Lake Geneva and the Town of Linn as a local trunk arterial; 2) Bowers Road between CTH ES and CTH D in the Town of Lafayette and the Town of Troy as a County trunk arterial; 3) a new interchange on USH 12 at Bloomfield Road in the Town of Bloomfield; and 4) a new interchange on USH 12 at CTH B in the Town of Bloomfield.

The Commission staff and the Committee initiated the evaluation of these 14 issues in 1998 and may be expected to complete their work in 1999.

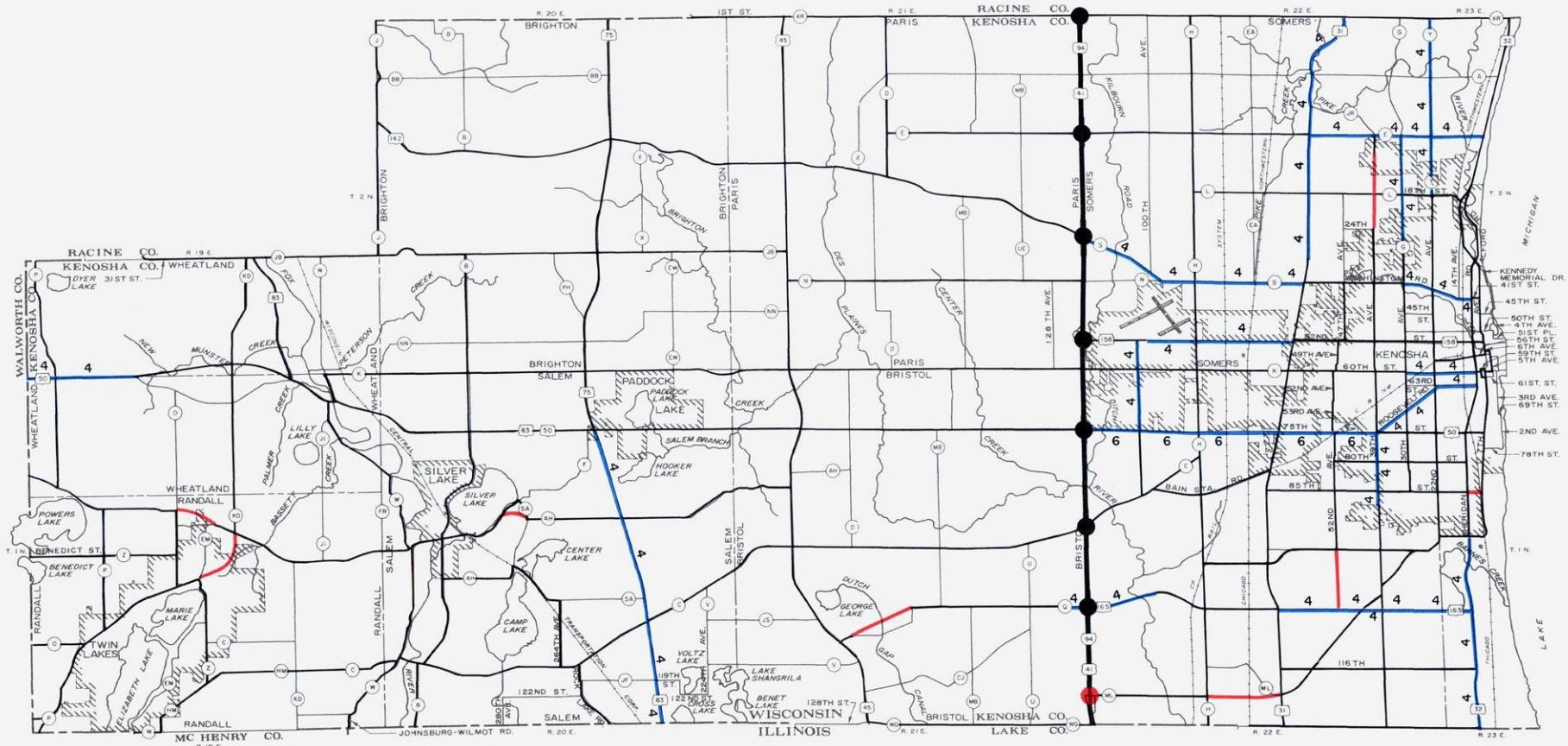
### **Regional Bicycle and Pedestrian Facilities System Plan**

The Commission adopted a design year 2010 bicycle and pedestrian facilities system plan for the Region on January 25, 1995. The plan is documented in SEWRPC Planning Report No. 43, *A Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2010*, December 1994.

The regional bicycle and pedestrian facilities system plan is intended to be an integral part of the

## Map 11

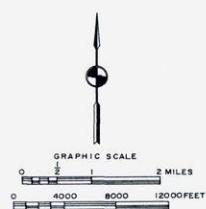
## FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN KENOSHA COUNTY: 2020 ADOPTED REGIONAL TRANSPORTATION SYSTEM PLAN



## LEGEND

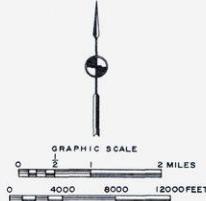
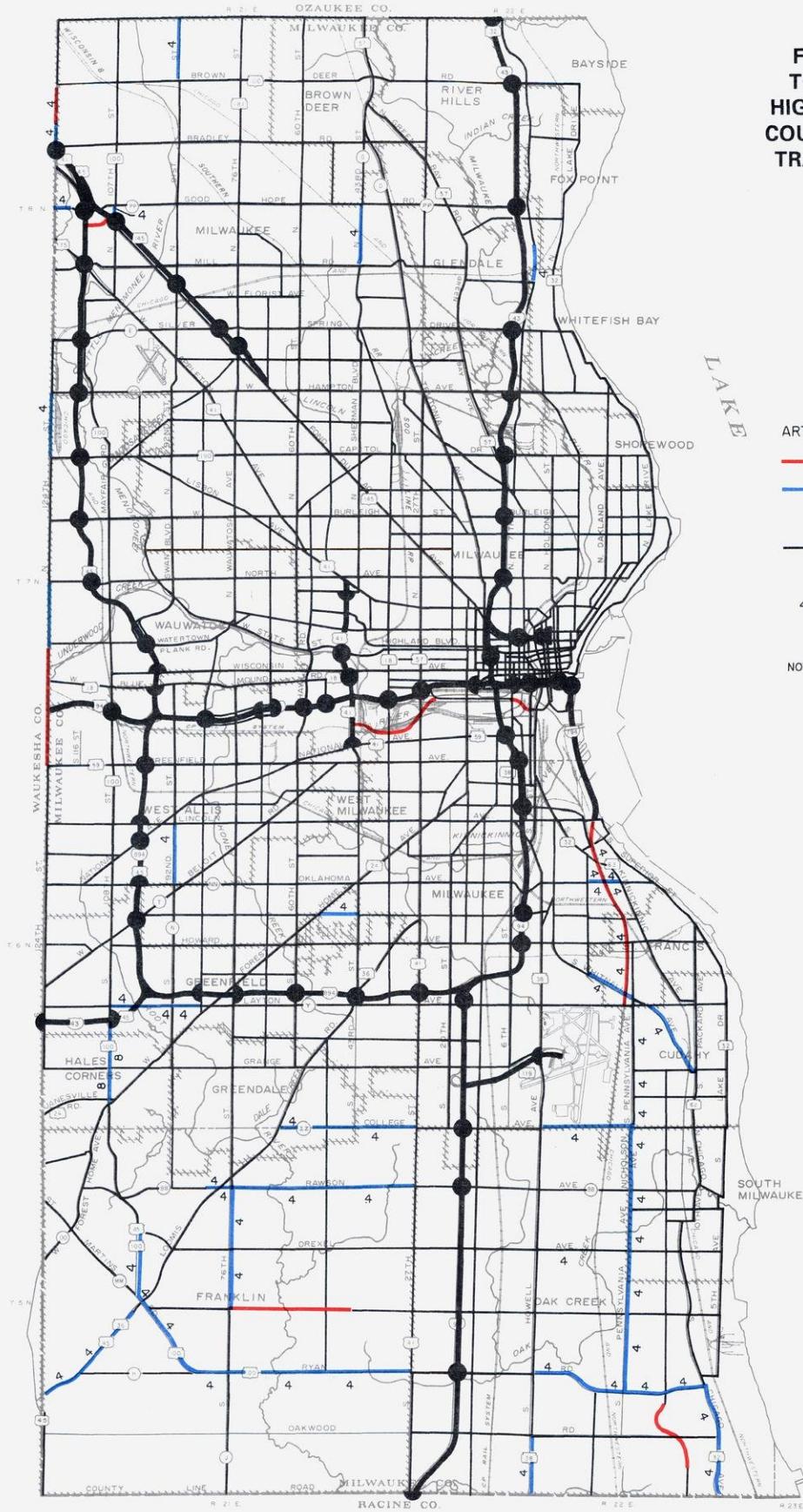
**ARTERIAL STREET OR HIGHWAY**

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)



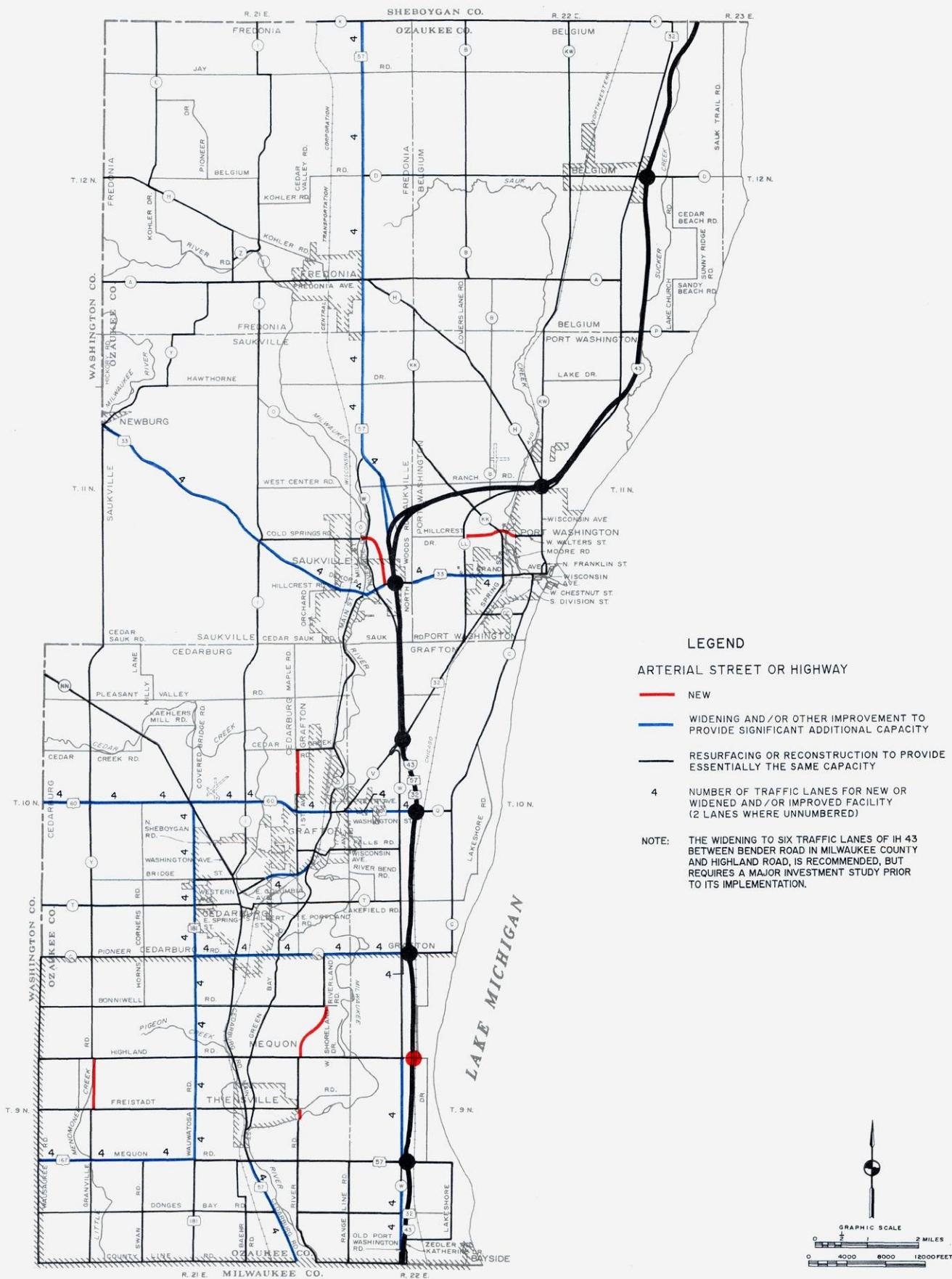
Map 11 (continued)

FUNCTIONAL IMPROVEMENTS  
TO THE ARTERIAL STREET AND  
HIGHWAY SYSTEM IN MILWAUKEE  
COUNTY: 2020 ADOPTED REGIONAL  
TRANSPORTATION SYSTEM PLAN



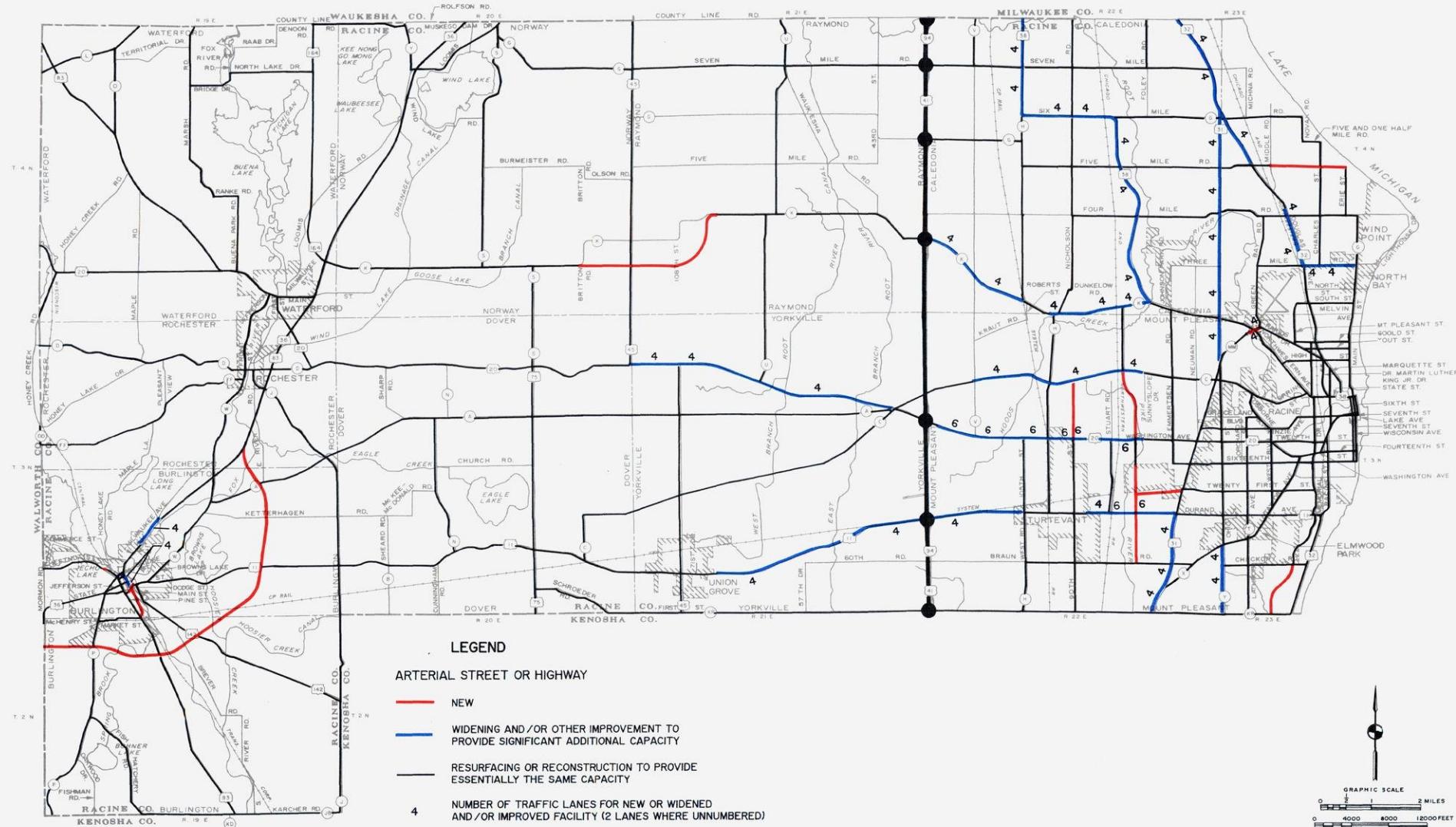
Map 11 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM  
IN OZAUKEE COUNTY: 2020 ADOPTED REGIONAL TRANSPORTATION SYSTEM PLAN



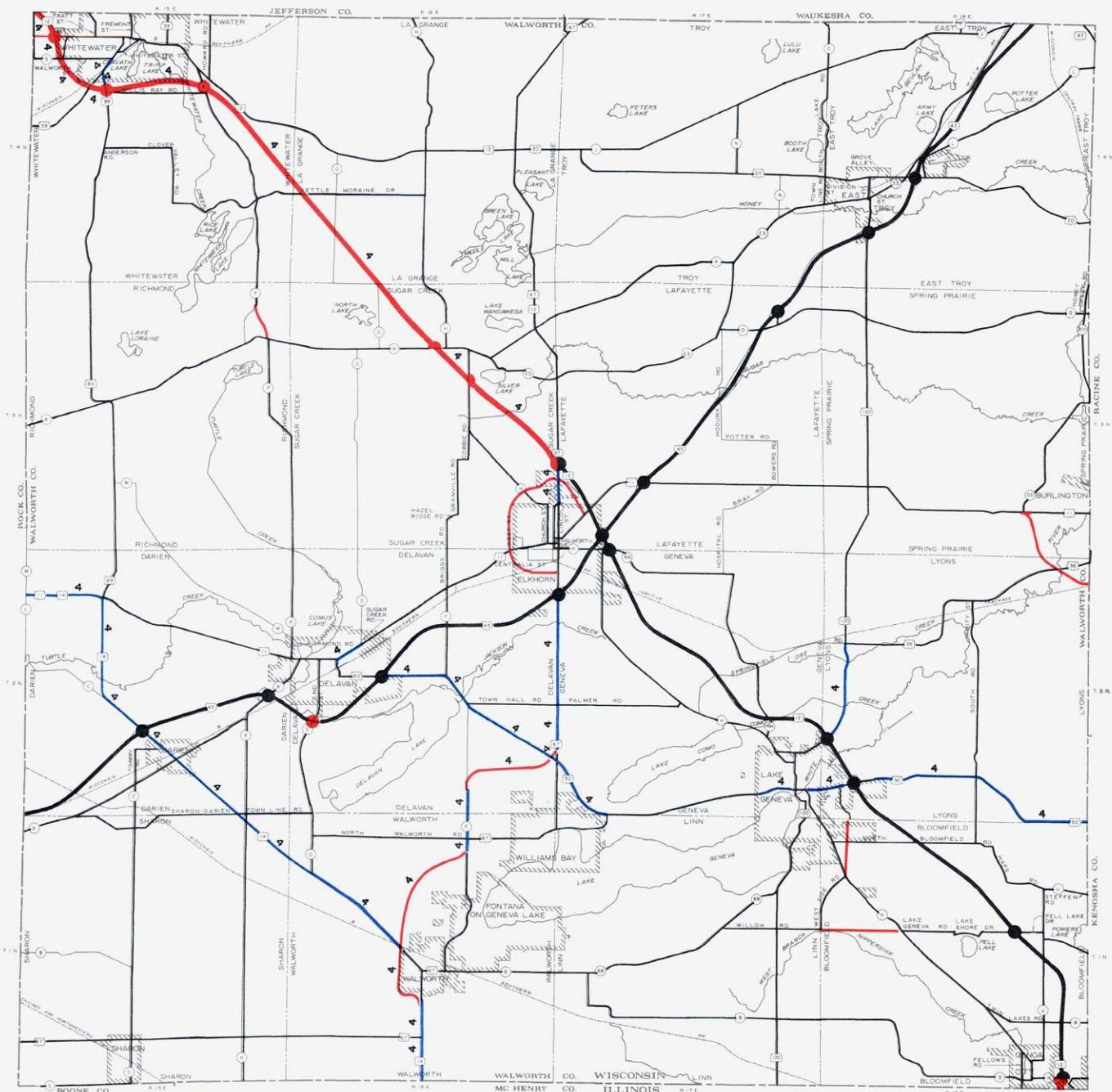
Map 11 (continued)

**FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM  
IN RACINE COUNTY: 2020 ADOPTED REGIONAL TRANSPORTATION SYSTEM PLAN**



### Map 11 (continued)

## FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WALWORTH COUNTY: 2020 ADOPTED REGIONAL TRANSPORTATION SYSTEM PLAN



## LEGEND

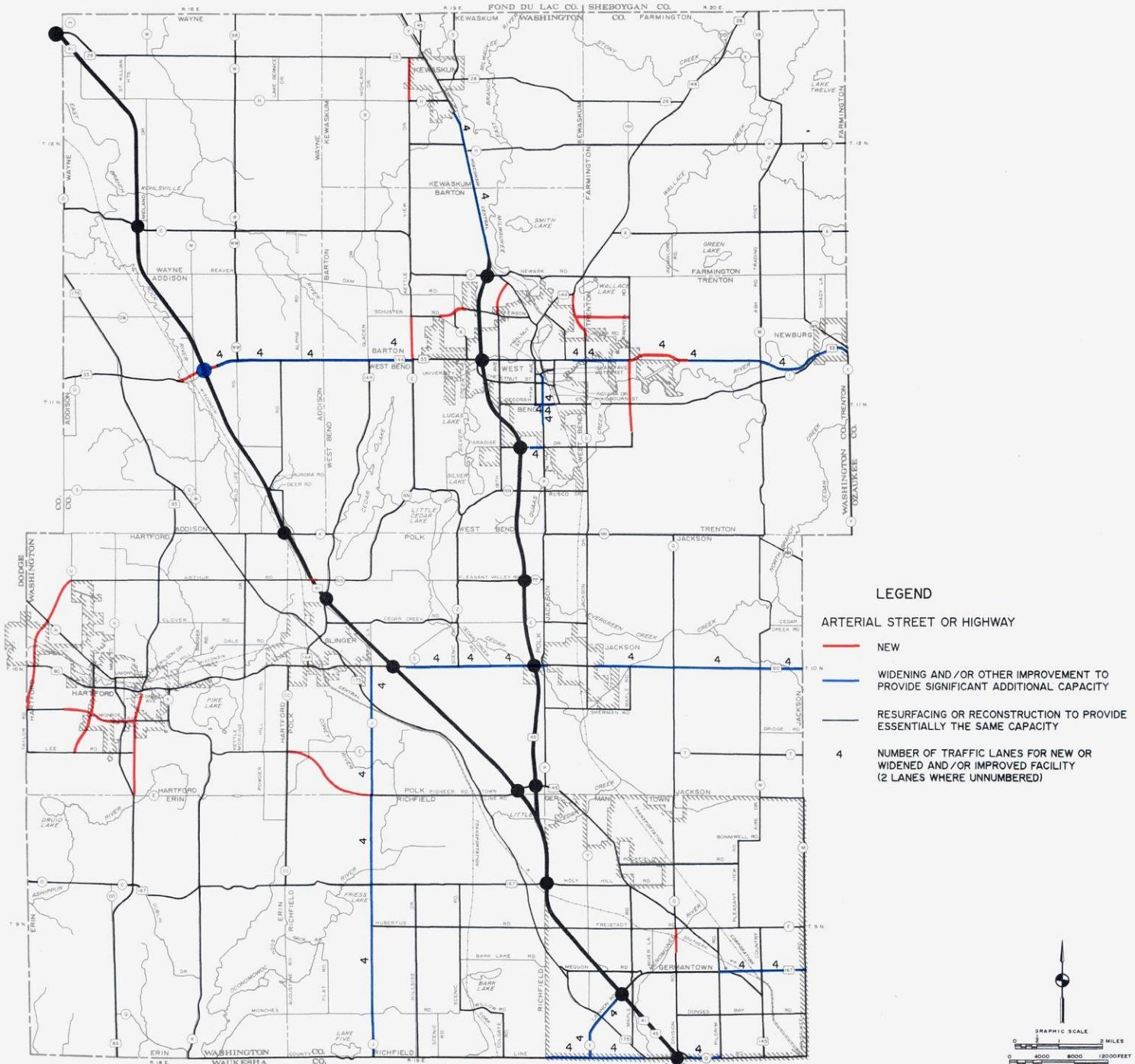
**ARTERIAL STREET OR HIGHWAY**

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE LINES IMPERFECT)



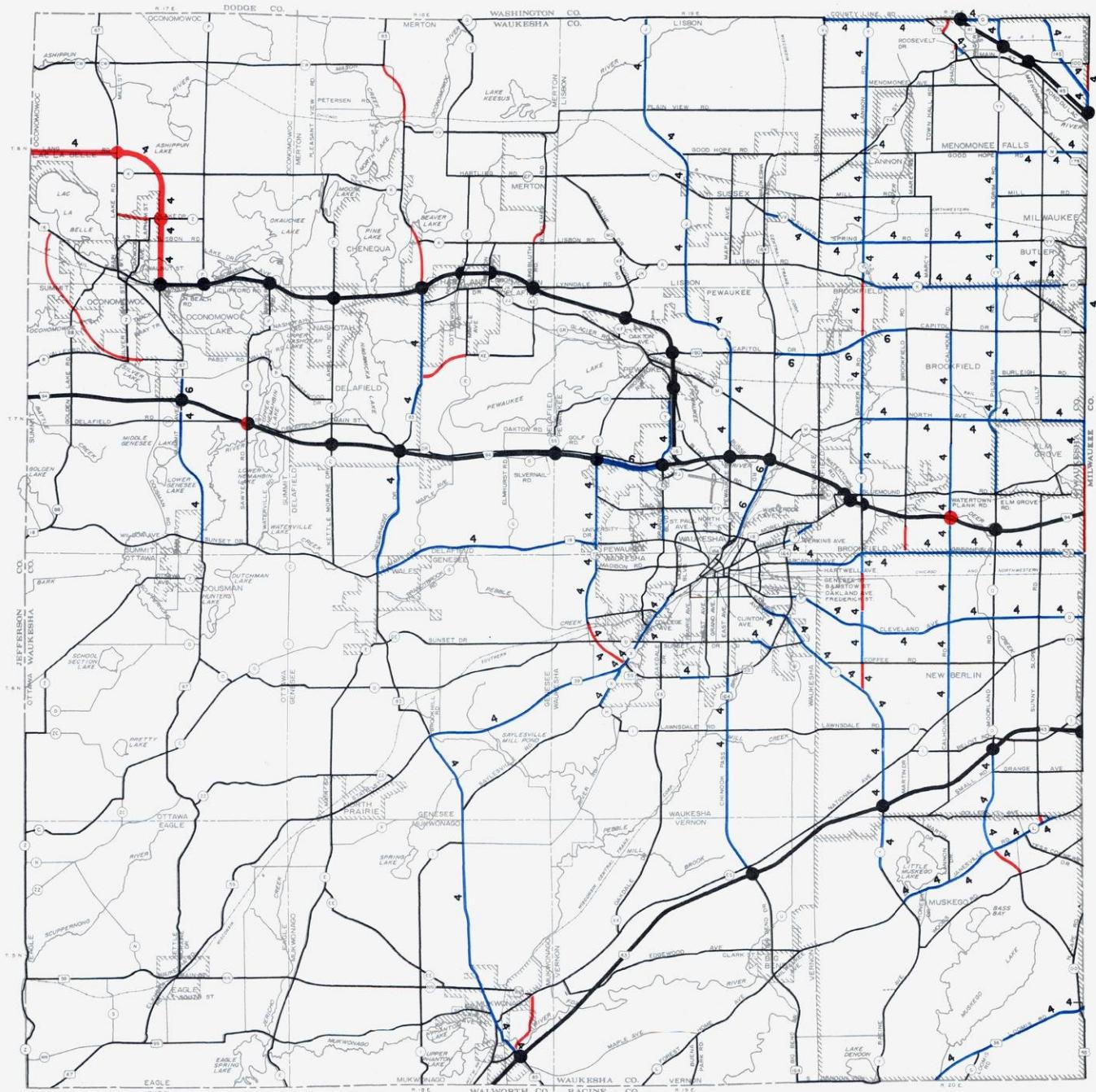
Map 11 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM  
IN WASHINGTON COUNTY: 2020 ADOPTED REGIONAL TRANSPORTATION SYSTEM PLAN



### Map 11 (continued)

## FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WAUKESHA COUNTY: 2020 ADOPTED REGIONAL TRANSPORTATION SYSTEM PLAN

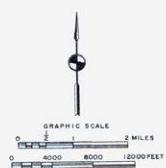


## LEGEND

**ARTERIAL STREET OR HIGHWAY**

- NEW
- WIDENING AND / OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY

4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND / OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)



adopted year 2020 regional transportation system plan.

The regional bicycle and pedestrian facilities system plan is intended to assist public officials in considering improvements to better accommodate bicycle and pedestrian travel as part of the existing and planned regional transportation system, and to encourage increased levels of such travel for primarily utilitarian, as opposed to recreational, purposes.

## **TRANSPORTATION SYSTEMS MANAGEMENT PLANNING AND TRAFFIC ENGINEERING**

During 1998, the Commission continued a work effort to carry out transportation systems management or traffic engineering studies for communities in Southeastern Wisconsin. In addition to the Kenosha-area transit system development plan described in detail in this section, five other such local-level studies were completed during the year.

The first such study, requested by the Village of Kewaskum, was a traffic engineering study of four intersections along Fond du Lac Avenue (USH 45) in the Village to determine if the delay incurred by motorists on the cross streets could be reduced. Data on average weekday traffic volumes, intersection turning movements, traffic accidents, and vehicular delay were collected and analyzed. The evaluation of potential alternative traffic engineering actions to reduce the delay incurred by motorists on the cross streets indicated that the prohibition of on-street parking on USH 45 to increase the length of gaps in the USH 45 traffic stream was the only traffic engineering action currently appropriate at three of the intersections. Warrants for the installation of traffic signals were very nearly met at the fourth intersection, and it was recommended that the intersection continue to be monitored. The study findings and recommendations have been documented in SEWRPC Memorandum Report No. 126, *Traffic Engineering Study of Selected Intersections along Fond du Lac Avenue (USH 45) in the Village of Kewaskum: 1997, Washington County, Wisconsin, July 1998*.

The second study, requested by the City of Delafield, involved a review of the need for potential local collector and land access street extensions and

of existing parking and traffic control in the core area of the City. This area is bounded by Exeter Street and Nagawicka Lake on the north, First Street on the east, IH 94 on the south, and Cushing Park Road on the west. A number of inventories were conducted and included the collection of data with respect to average weekday traffic volumes, traffic accidents and turning movements at selected intersections, existing parking supply, and existing traffic control signage. A pattern of local street extensions for the southeastern quadrant of the study area was recommended based on land uses identified in the adopted regional land use plan. An alternative local street pattern, intended to address locally proposed revisions to that plan proposed when that plan was under consideration, was also identified. Additional off-street parking was recommended at four sites. The conversion of existing on-street angle parking to parallel parking was recommended. No significant changes in the existing traffic control system were recommended, but a number of specific traffic control signs were recommended to be installed. The study findings and recommendations have been documented in SEWRPC Memorandum Report No. 127, *A Transportation Study for the Core Area of the City of Delafield, Waukesha County, Wisconsin, November 1998*.

The third study, requested by the City of Glendale, involved an assessment of travel through the neighborhood bounded by W. Silver Spring Drive on the north, N. Lydell Avenue on the east, W. Henry Clay Street on the south, and N. Port Washington Road on the west. Average weekday traffic volume data were collected on selected streets within the neighborhood. An inventory of the existing traffic control signage was conducted and license-plate data were collected from vehicles entering and exiting the neighborhood on selected streets. These data were utilized to determine the extent and pattern of travel through the neighborhood. Construction of a cul-de-sac on N. Mohawk Avenue between W. Richter Place and W. Birch Avenue was recommended for consideration for implementation. It was noted, however, that the disruption of neighborhood travel patterns attendant to such implementation may be more undesirable than the problem such implementation is intended to abate. The study findings and recommendations have been documented in SEWRPC Memorandum Report No. 128, *Assessment of Travel through the Neighborhood Bounded by W. Silver Spring Drive, N. Port Washington Road, N. Lydell Avenue, and*

*W. Henry Clay Street in the City of Glendale: 1997,  
Milwaukee County, Wisconsin, April 1998.*

The fourth study, requested by the Town of Yorkville, involved the review of a traffic impact study regarding the proposed expansion of an existing development in the southwestern quadrant of the IH 94 interchange with STH 20 in the Town. The focus of the study was the current and projected future tractor-trailer truck traffic generated by the development during the morning and evening peak traffic hours. The study was also to compare those volumes to current tractor-trailer truck traffic at the IH 94 interchange with STH 50 and to current tractor-trailer truck traffic at another site comparable to the proposed development. Manual vehicle classification counts were conducted at both interchanges and at both development sites to determine the number of tractor-trailer trucks in the traffic stream at those locations. The total traffic volumes observed at the two interchanges during the peak hours were virtually the same, but nearly 25 percent more tractor-trailer trucks were observed at the IH 94 interchange with STH 20 than at the interchange with STH 50. Similarly, the total traffic volumes observed at the subject site and the comparable site were approximately the same, but about 28 percent more tractor-trailer trucks were observed at the subject site than at the comparable site. The findings of the manual vehicle classification counts were transmitted to the Town of Yorkville in a letter report, along with the projected future tractor-trailer truck volumes attendant to the proposed expansion.

The fifth study, requested by the City of Hartford, was a traffic impact study for a proposed development focusing on selected intersections within the City's central business district. The study was to consider the traffic impacts under two scenarios, one with a proposed local street extension, and one without the proposed extension. Analyses indicated that the proposed local street extension had the potential to reduce delay at the subject intersections, even with the traffic estimated to be generated by the proposed new development. Accordingly, the proposed extension of the local street was recommended for consideration. The findings and recommendations of the study were documented in a letter report to the City of Hartford.

## Ridesharing Programs

One of the recommendations of the regional transportation systems management plan is the continued promotion of ridesharing. The Commission has provided assistance to ridesharing efforts in the Milwaukee metropolitan area since the 1970s. This assistance has included the conduct of studies and the provision of computer facilities to official Milwaukee-area ridesharing programs originally administered by Milwaukee County. The computer facilities were used to match potential carpoolers with each other. In 1987, administrative responsibilities for the conduct of the Milwaukee-area ride-share program were transferred from Milwaukee County to the Wisconsin Department of Transportation, District 2. The Commission continued to assist in this effort by providing the computer facilities necessary to conduct the matching program until mid-1994, when the Department assumed full responsibility for the ride-share program, including the provision of computer facilities for the matching program.

## Kenosha-Area Transit System Development Plan Completed

During 1998, the Commission completed work on a new transit system development plan for the City of Kenosha public transit system. The plan, documented in SEWRPC Community Assistance Planning Report No. 231, *Kenosha Area Transit System Development Plan: 1998-2002, City of Kenosha, Wisconsin*, April 1998, was prepared at the request of, and in cooperation with, the City. The City's Kenosha Area Public Transit Planning Advisory Committee, composed of elected and appointed public officials, leaders of area businesses, and other concerned citizens, provided guidance in the preparation of the plan. The new plan updates a previous transit system development plan prepared by the Regional Planning Commission for the City in 1991. As of year's end, the new plan was awaiting consideration and adoption by the Commission.

The recommended plan includes a local transit service element and a commuter transit service element. The local transit service element recommends a number of changes in the existing service provided by the City of Kenosha transit system, the most significant of which are the following:

- Alignment and schedule changes for all regular routes except Route No. 1 to create a new west-side transfer point at the site of the new Kenosha high school, the Indian Trail Academy, near 60th Street and 68th Avenue; to extend service to developing areas west of Green Bay Road; and to eliminate unproductive route segments or improve route operation. The proposed new route alignments are shown on Map 12.
- Expansion of service to major industrial centers west of Green Bay Road to serve job locations that cannot be served within the existing operating hours of the transit system. Two new weekday industrial park routes, Routes Nos. 9 and 10, would be operated to accommodate first-shift starting times of 6:00 a.m. and 6:30 a.m. and second-shift ending times of 11:00 p.m. and 12:00 midnight at employers located in the major industrial centers involved (see Map 13). Additional bus trips would also be added to Route No. 8 on weekday afternoons and to Routes Nos. 7 and 8 on Saturdays.
- Continued operation of the expanded weekday afternoon service on the regular routes of the system implemented in August 1997, and reduction of headways from 60 minutes to 30 minutes during the weekday midday period by the end of 2002.
- Construction of a new electric circulator streetcar line to serve the Kenosha central business district and the Harborpark area (see Map 12).
- Relocation of the common transfer point for the regular routes of the transit system in the downtown Kenosha area to a new facility on the proposed downtown circulator route (see Map 12).

The commuter transit service element of the plan identifies transit service improvements to better serve travel between the Kenosha area and the Racine and Milwaukee areas, as well as between the Kenosha area and Lake County, Illinois. The recommended service improvements include the following:

- Restructuring of the existing publicly subsidized Milwaukee-Racine-Kenosha bus route

operated by Wisconsin Coach Lines, Inc., to eliminate unproductive route segments and to provide for faster travel between downtown Racine and downtown Kenosha and the Milwaukee central business district.

- Establishment of a new express bus service on weekdays between the downtown transfer terminals for the Racine and Kenosha local bus systems.
- Use of a combination of ridesharing, subscription transit service, and conventional commuter transit service to accommodate travel by Kenosha-area residents to and from jobs in Lake County, Illinois. It is envisioned that the recommended transportation improvement measures involved would be staged to provide for a logical expansion of services as demand increases.
- Construction of park-ride lots configured to facilitate transit service near the intersection of Green Bay Road (STH 31) and 52nd Street (STH 158), in the City of Kenosha; the IH 94-75th Street (STH 50) interchange, in the City of Kenosha or the Village of Pleasant Prairie; and the intersection of Green Bay Road (STH 31) and Washington Avenue (STH 20), in the Town of Mt. Pleasant.

The transit system development plan for the Kenosha area recommended by the Advisory Committee addresses the need to improve both local and commuter transit services in the Kenosha area. At the same time, the plan attempts to minimize the attendant additional costs to the City of Kenosha for proposed new and improved services in acknowledgment that significant increases in City funds will be required over the planning period to fund committed service improvements and capital projects, such as the envisioned electric circulator streetcar line for the Harborpark area. The development of the west-side transfer point proposed under the plan would 1) provide direct transit access to the new Kenosha high school, the Indian Trail Academy, 2) reduce indirect travel and increase the convenience of using transit for transit patrons traveling to and from locations between 39th Avenue and Green Bay Road, and 3) facilitate the expansion of service into developing areas west of Green Bay Road, all without incurring the need for significant increases in operating costs and local funds. Similarly, the proposed restructuring

of commuter bus service in the Milwaukee-Racine-Kenosha travel corridor would provide for faster and more frequent service for weekday peak-period commuting and, through increases in State aid over existing 1997 levels, continue to assure that no local funds would be required for service operation.

Where service improvements or new services which will entail substantial additional costs have been recommended, such as the reduction of weekday midday headways or the creation of new services operated between Kenosha and Racine or Lake County, Illinois, the plan proposes that such services initially be undertaken on a trial, or demonstration, basis, either by using Federal funds available for that purpose or by a partnership with the private sector.

### **Racine-Area Transit System Development Plan Adopted**

As noted above, on September 16, 1998, the Commission adopted a short-range public transit system development plan for the greater Racine area as an updated element of the comprehensive regional plan. The Racine-area plan, which covers the years from 1998 through 2002, is documented in SEWRPC Community Assistance Planning Report No. 233, *Racine Area Transit System Development Plan: 1998-2002, City of Racine, Wisconsin*, October 1997, and was summarized in the Commission's *1997 Annual Report*.

### **Job Access and Reverse Commute Regional Transportation Plan Completed**

During the autumn of 1998, the Commission prepared a job access and reverse commute transportation plan for the Southeastern Wisconsin Region. The plan, set forth in a December 1998 Commission staff memorandum titled *Job Access and Reverse Commute Regional Transportation Plan*, was a prerequisite for grants to be made under a new job access and reverse commute program administered by the U. S. Department of Transportation, Federal Transit Administration (FTA). Such grants are intended to provide funding for new or improved transit services that may be needed to connect welfare recipients, unemployed persons, and low-income individuals to jobs and related employment activities. The plan identified for the Region the residential concentrations of the target population groups, the distribution of jobs, deficiencies in the existing public

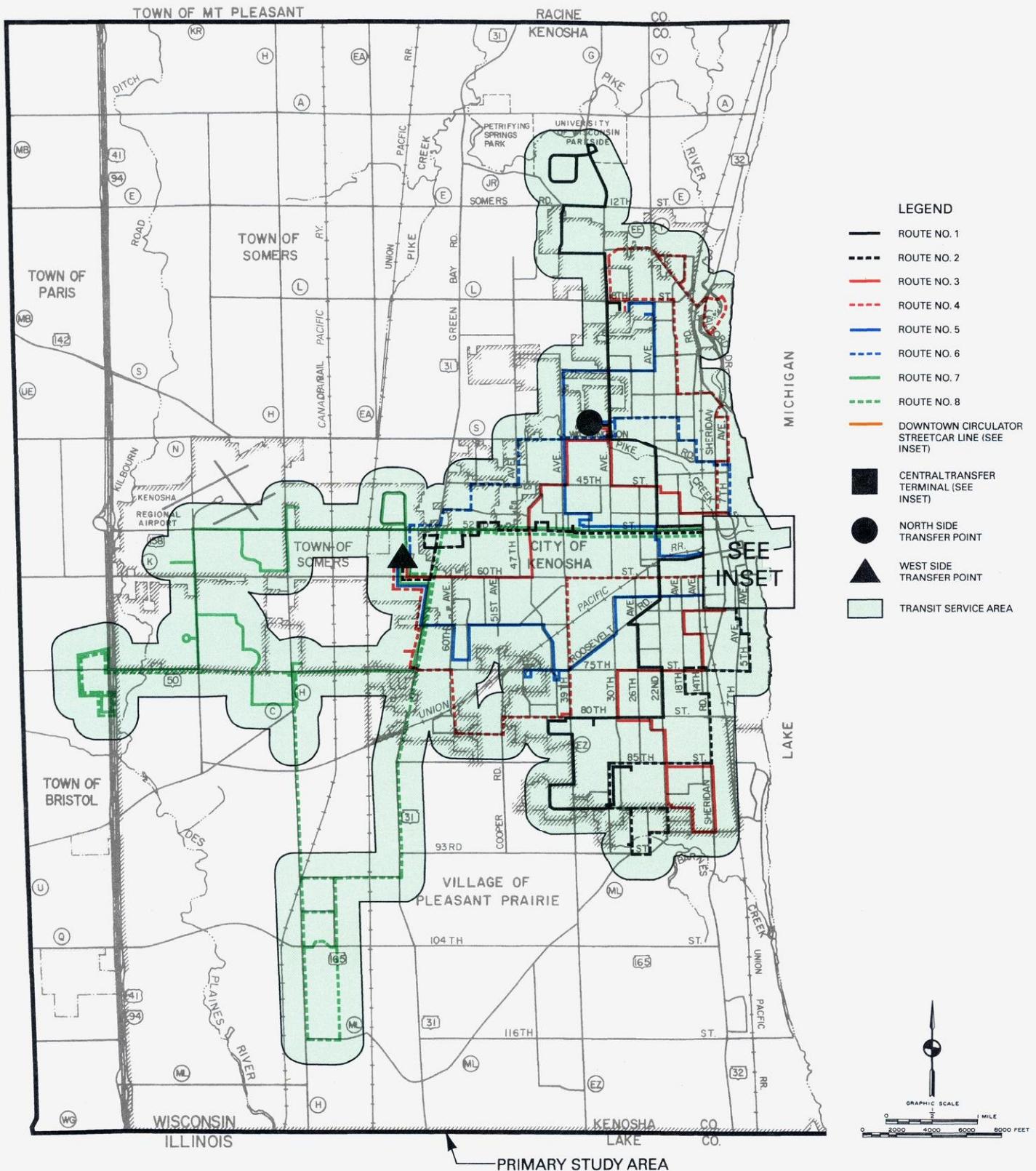
transit services in connecting the target populations with the job concentrations, and priority service improvements to correct the identified transit service deficiencies.

Substantial efforts to identify the needs for employment-related transit services envisioned under the FTA job access and reverse commute program, as well as a substantial planning for service improvements and extensions to address those needs, had already been completed by the Commission in preparing its regional transportation plan for the year 2020, by the Milwaukee County Transit System and the Wisconsin Urban Transit Association (WUTA) in conducting a welfare reform and transportation study, and by the Private Industry Council (PIC) of Milwaukee County in preparing its application for funds for employment-related transportation projects under the State of Wisconsin's Temporary Assistance to Needy Families (TANF) program. The regional job access and reverse commute transportation plan, consequently, drew greatly upon, and essentially updated, the analyses and recommendations of previous planning efforts.

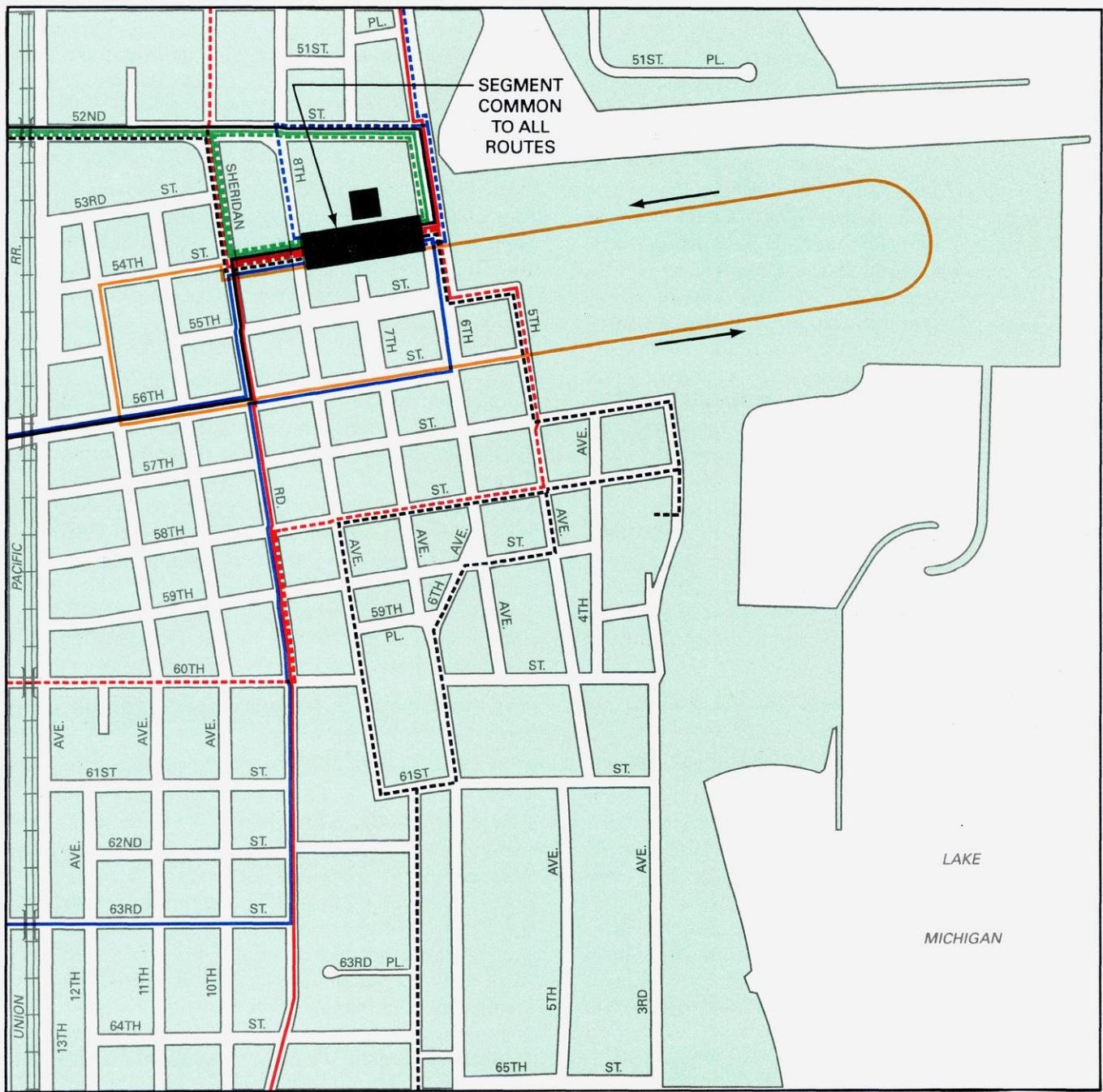
In preparing the plan, it was found that the heaviest concentrations of the welfare-recipient and low-income target population groups were located in the central and northwestern portions of Milwaukee County. Significantly smaller concentrations of those populations were also identified in the central portions of the Cities of Racine, Kenosha, and Waukesha. At the same time, less than 2 percent of the new jobs created in the Region between 1990 and 1997 have been located in Milwaukee County, and about 75 percent of those new jobs have been located in Waukesha, Ozaukee, and Washington Counties. Waukesha County alone accounted for over one-half of the total estimated regional increase in jobs between 1990 and 1997. The overwhelming majority of the public transit service in the Region is provided by the Region's seven fixed-route bus systems. The service areas for these existing bus systems encompass virtually all of the residential concentrations of welfare recipients in the Region and over 90 percent of the residential concentrations of the Region's low-income population. Consequently, the job access and reverse commute transportation plan for the Region focused on identifying major deficiencies with respect to the existing transit systems in providing service to connect the target welfare-recipient and low-income populations with jobs, and

Map 12

RECOMMENDED REGULAR ROUTES FOR THE KENOSHA TRANSIT SYSTEM



### **Inset for Map 12**



### GRAPHIC SCALE

0 200 400 800 FEET

on identifying improvements to the existing transit services to address these deficiencies.

The plan proposes that an initial set of actions be considered as a priority over the next few years to address the identified transit service deficiencies. These actions were identified by a special work group convened by the Commission to assist in preparing the plan. The work group consisted of representatives of the public transit operators, the "W-2" program agencies, and the private industry councils within the Milwaukee urbanized area. The proposed actions included 1) the expansion of fixed-route bus services to provide the welfare-recipient and low-income populations residing in central Milwaukee County with access to jobs within Milwaukee and Waukesha Counties, 2) the provision of child-care transportation services, and 3) the development of a comprehensive data base on the existing available transit services in the Region to be used to link workers with jobs. The work group recommended that funding be sought under the FTA job access and reverse commute program during 1999 for 14 projects implementing improved and expanded bus services for Milwaukee and Waukesha Counties and having a total annual operating cost of about \$2 million, and indicated that Milwaukee County was the most appropriate grant applicant. The work group's two other priority actions were not advanced for funding in 1999, as specific proposals were not available. Details regarding the specific child-care transportation services found to be needed and the structure and content of the envisioned computerized transit information data base were proposed to be developed during 1999 by the W-2 agencies and the Milwaukee PIC so that potential projects that would implement the two remaining proposed priority actions could be considered for inclusion in future job access and reverse commute program grant requests.

### **Milwaukee County Short-Range Transit Planning**

During 1998, short-range transit planning activities for the Milwaukee County Transit System were conducted by the staff of that system and the Milwaukee County Department of Public Works. Through this planning effort, the following major activities were carried out during the year: development of the annual element of the regional transportation improvement program, preparation of a Title VI assessment evaluating the provision of

transit service to special population groups, and updating of programs for the inclusion of business enterprises operated by the disadvantaged, minorities, and women in the provision of transit service.

### **TRANSPORTATION PLANNING FOR THE ELDERLY AND DISABLED**

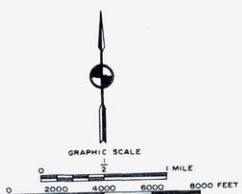
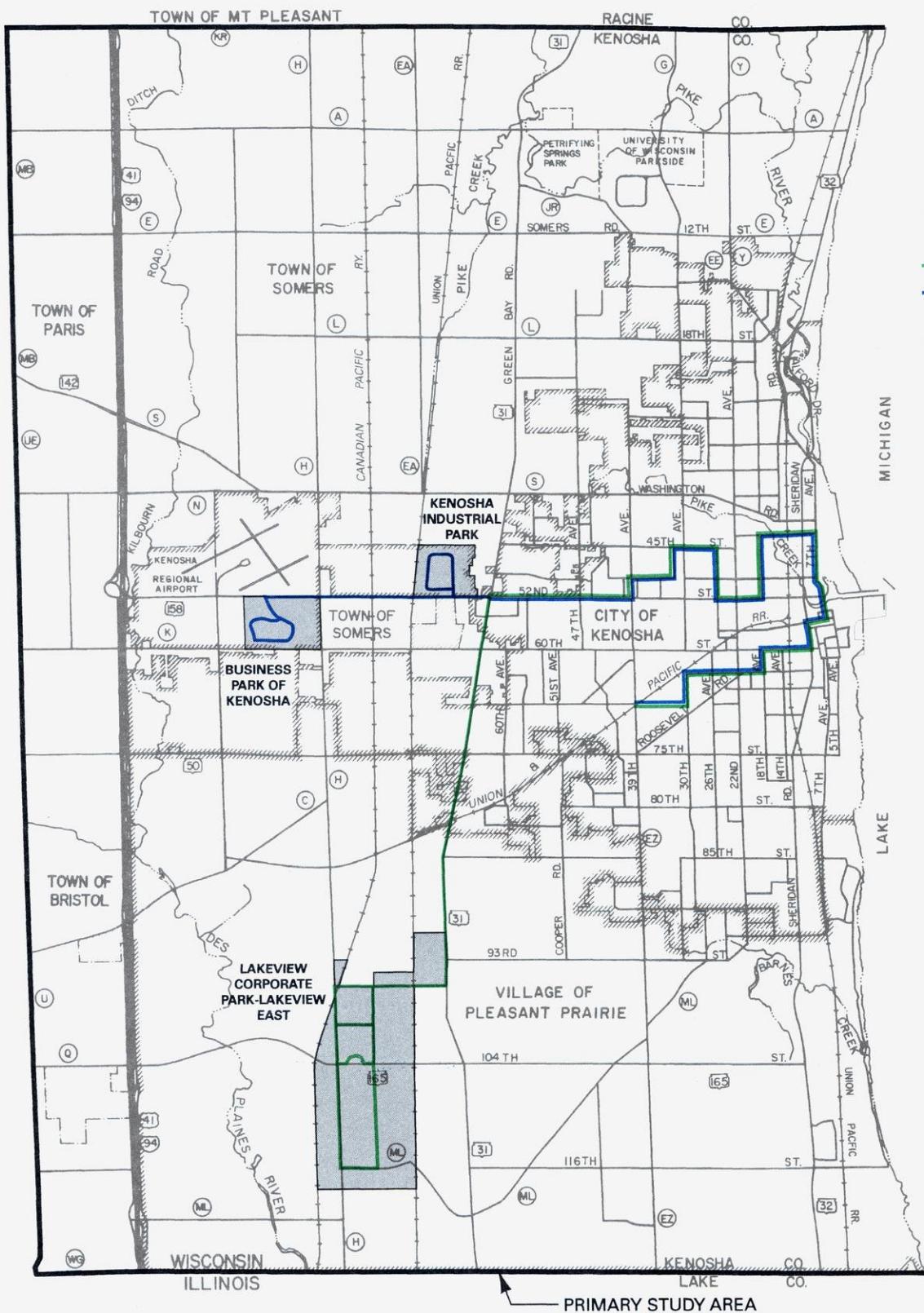
In 1978, the Commission adopted a transportation plan for transportation-handicapped people in the Region. The plan is documented in SEWRPC Planning Report No. 31, *A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982*, April 1978. The plan is designed to reduce, and sometimes to eliminate, the existing physical and economic barriers to independent travel by transportation-handicapped individuals. In accordance with the thrust of the Federal rules then in effect, the plan recommended that the local bus systems serving the Milwaukee, Kenosha, and Racine urbanized areas be equipped with wheelchair lifts and ramps or other conveniences to the extent that the nonpeak-hour bus fleets would be fully accessible to wheelchair users and semiambulatory persons. For those transportation-handicapped persons in the three urbanized areas who would continue to be unable to use public bus systems, the institution of a user-side subsidy program was recommended. Such a program would enable eligible transportation-handicapped persons to arrange for their own transportation by taxi or private wheelchair van carrier, with the local transit operator subsidizing the cost of the trip. For transportation-handicapped persons living outside the three major urban areas, the plan recommended that each county implement a demand-responsive transportation service administered through the county and operated by either an interested privately owned transportation service provider or a social-service transportation provider. The plan also recommended that the transportation services provided by existing social-service agencies in each county be coordinated to make more efficient use of their transportation-related facilities and services, with the county board in each county given the responsibility of effecting such coordination.

### **Americans with Disabilities Act**

On July 26, 1990, the Americans with Disabilities Act (ADA) was signed into law. The Act can be characterized as an omnibus civil rights law for persons with disabilities. With respect to public transit service, the ADA includes two provisions that

Map 13

PROPOSED INDUSTRIAL PARK ROUTES FOR THE KENOSHA TRANSIT SYSTEM



have a significant impact on the operation of public transit services. One provision requires all vehicles used in providing fixed-route transit for which purchase or lease contracts are entered into after August 26, 1990, to be accessible to persons with disabilities, including those using wheelchairs. A second provision requires all public entities that provide fixed-route transit service to provide comparable paratransit service to disabled persons unable to use the fixed-route system. Regulations designed to implement this paratransit service provision of the ADA were issued by the U. S. Department of Transportation, Federal Transit Administration (FTA), on September 6, 1991. These regulations amended previous Federal regulations pertaining to the provision of paratransit services to persons with disabilities. The Federal ADA paratransit eligibility and service requirements were described in the Commission's *1991 Annual Report*.

The 1991 regulations required each public entity operating a fixed-route transit system to prepare and submit to the FTA by January 26, 1992, a plan for providing the required complementary paratransit service. Additionally, in each case, annual updates of the initial plan, which would document the progress achieved in implementing the plan and any significant changes to the plan content or timetable, were also required to be submitted each year thereafter until full compliance with the Federal ADA paratransit regulations was achieved. The five public entities in the Region which in 1991 operated fixed-route transit systems, Milwaukee and Waukesha Counties and the Cities of Kenosha, Racine, and Waukesha, each requested Commission assistance in preparing the initial paratransit service plans submitted in January 1992 to comply with the new Federal regulations, as well as in preparing needed annual updates submitted in January of subsequent years amending the initial paratransit plans. The most recent plan updates as of the end of 1998 are documented in a series of SEWRPC memorandum reports<sup>18</sup> which were

published in January 1996 or January 1997 and adopted by the Commission as amendments to the 1978 regional elderly-handicapped transportation plan. These five amendments, whose plan documents were summarized in the *1995 and 1996 Annual Reports*, thus supersede a series of earlier amendments to the regional elderly-handicapped transportation plan, as set forth in a footnote to Table 1 of this *1998 Annual Report* (see page 21). The plan updates indicated that all of the public transit operators except Milwaukee County were in compliance with the Federal ADA paratransit regulations. Summaries of each operator's current paratransit service plan are provided in the following sections.

#### *Milwaukee County*

The current paratransit service plan for the Milwaukee County Transit System proposes that the County comply with the current Federal regulations by making modifications to the County's paratransit service for disabled persons, provided through the Milwaukee County Transit Plus program, formerly known as the user-side subsidy program. Under this program, eligible disabled users have their transportation publicly subsidized so that they can purchase service from participating private service providers of their choice. With the Transit Plus program, the user has the freedom to choose the service provider and when and where he or she wishes to travel within Milwaukee County. During 1997, one private taxicab company and 14 private van carriers were under contract with the County to participate in the program.

Milwaukee County's 1997 plan update indicated that while the County had made substantial progress in implementing the then-recommended modifications to the Transit Plus program proposed in the 1992 plan and in subsequent plan updates, the program at the end of 1996 had yet to meet certain requirements under the prescribed Federal ADA

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<sup>18</sup>See *SEWRPC Memorandum Reports No. 107, A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Kenosha Transit System; No. 108, A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Racine Transit System; No. 109, A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Waukesha Transit System Utility; No. 110, A Paratransit Service Plan for Disabled Persons: 1996 Update/*

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*Waukesha County Transit System; and No. 119, A Paratransit Service Plan for Disabled Persons: 1997 Update/Milwaukee County Transit System. SEWRPC Memorandum Reports Nos. 107 through 110 were published and adopted by the Commission in January 1996, while SEWRPC Memorandum Report No. 119 was published and adopted by the Commission in January 1997.*

paratransit service criteria, including those relating to the following:

1. Service area, in particular those requirements which call for paratransit service to be provided to all areas served by Milwaukee County's regular fixed-route bus service, including small areas in Waukesha and Ozaukee Counties immediately adjacent to Milwaukee County;
2. Response time, in particular those requirements which call for accepting trip reservations on a next-day basis and for scheduling service within one hour of the requested time; and
3. Capacity constraints, in particular those requirements which prohibit operating with insufficient service capacity which results in a pattern or practice of trip denials, missed trips, or untimely pickups.

To provide the County with the time it needed to address the capacity and other problems of the Transit Plus paratransit program, the County's 1997 plan update proposed to extend the timetable for achieving full compliance with the ADA paratransit service requirements from January 27, 1997, to December 31, 1999, or by almost three years. Over this three-year period, Milwaukee County proposed to examine the structure of the paratransit program, identify the modifications needed to bring the County into full compliance with the ADA paratransit service requirements, and implement all necessary program changes. Pursuant to the FTA regulations issued to implement the ADA requirements, the County, in January 1997, submitted a request to the FTA for this temporary time extension along with the County's 1997 plan update.

In April 1997, the FTA informed the County that the Transit Plus program was in probable non-compliance with Federal ADA regulations, and indicated that it was willing to negotiate and enter into a Voluntary Compliance Agreement with the County which would present the County's good-faith effort as to how and when full compliance would be achieved. At the end of 1997, the County and the FTA had negotiated an agreement under which a redesigned Transit Plus program would be in full compliance by December 31, 1998, one year earlier than had been previously proposed

by the County. Under the agreement, the redesigned program would include the following: a reduction of the number of private van companies with which the County contracts for service to five or less; coordination of eligibility with other specialized transportation programs offered within the County; establishment of a centralized, single point of contact for registering users, making trip reservations, and dispatching vehicles to serve trip requests; assurance that all vehicles meet ADA requirements and that drivers are properly trained; and creation of an ombudsman position in the County Executive's Office for Persons with Disabilities to provide outreach to and address complaints from the disabled community.

In August 1998, the County revamped the paratransit program so that accessible van service was provided by only two private carriers, Laidlaw Transit Services, Inc., and Transit Express, Inc., which respectively covered the northern half and the southern half of the County. Taxicab service under the program remained unchanged. The County had also implemented a new computerized trip reservation system in cooperation with the van service providers which permitted users to call just one telephone number to arrange for service. Each of the two van contractors was required to have vehicles dedicated to, and visually identifiable as being part of, the Transit Plus program. An ombudsman position in the County Executive's Office for Persons with Disabilities was established and filled in January 1998 to assist in the transition to the new operations methods. At the end of 1998, the County was preparing a report to be sent to the FTA verifying full compliance with the ADA requirements under the Voluntary Compliance Agreement.

During 1998, about 780,000 one-way trips were made under the Transit Plus program, an increase of about 7 percent over the 726,900 one-way trips made under the program during 1997. Fares for the Transit Plus program remained at \$2.50 per one-way trip during 1998.

#### *Waukesha County*

The current paratransit service plan for the Waukesha County Transit System proposes that the County comply with the current Federal regulations by making modifications to the County's program providing paratransit service for disabled persons unable to use its fixed-route bus service,

the parallel commuter bus program. Under the current program, Waukesha County offers door-to-door lift-equipped van service to disabled individuals for trips with origins and destinations within one mile on either side of two regular noncommuter bus routes which are subsidized by Waukesha County within the major travel corridor between the City of Waukesha and the City of Milwaukee central business district. The paratransit service offered under the parallel commuter bus program during 1998 was administered for the Waukesha County Transportation Department by the Waukesha County Department of Aging and provided through a contract with a private transit operator, Curative Transportation Services, Inc.

Waukesha County's plan indicates that all the modifications to the parallel commuter bus program proposed under the 1992 plan and the subsequent plan updates had been implemented by mid-1995, and the service was in full compliance with the Federal ADA paratransit service requirements. No significant changes to the County's paratransit service were made during 1998. During 1998, about 8,300 one-way trips were made under the program, a 12 percent increase over the 7,400 one-way trips made under the program during 1997.

#### *City of Kenosha*

The current paratransit service plan for the City of Kenosha transit system proposes that the City comply with the current Federal regulations by making modifications to the City's paratransit service for disabled persons provided through the Kenosha County Care-A-Van program. This paratransit service is designed to provide door-to-door transportation to disabled individuals who are unable to use the fixed-route bus service provided by the City's fixed-route transit system. To provide the service, the City annually participates in, and contributes funds to, the Care-A-Van program, a service administered by the Kenosha County Department of Human Services, Division of Aging Services, and provided on a contract basis by the Kenosha Achievement Center, Inc. The funds annually contributed to the program by the City of Kenosha, however, are used specifically to support the provision of paratransit service for disabled persons who are certified as unable to use the City's fixed-route transit system and who use the service to travel within only that portion of Kenosha County east of IH 94 plus an area of commercial development within the County located west of

IH 94 near the IH 94-STH 50 interchange. The service is available throughout the area served by the City's fixed-route transit system.

The City of Kenosha's plan indicates that the modifications to the paratransit service to correct deficiencies arising from inadequate capacity would be implemented during 1996. With these modifications, the City's paratransit service came into full compliance with the Federal ADA paratransit service requirements at the end of 1996. During 1998, about 15,600 one-way trips were made on the paratransit service, a decrease of less than 1 percent from the 15,700 one-way trips made on the service during 1997.

#### *City of Racine*

The current paratransit service plan for the City of Racine transit system proposes that the City comply with the current Federal regulations by making modifications to the paratransit service for disabled persons provided through the City's paratransit program. The City's paratransit service is designed to provide door-to-door transportation to disabled individuals who are unable to use the fixed-route bus service provided by the City's fixed-route bus system, the Belle Urban System. To provide the paratransit service, the City of Racine annually participates in, and contributes funds to, the paratransit program administered by the Racine County Human Services Department. The funds annually contributed to the program by the City of Racine, however, are used specifically to support the provision of paratransit service for disabled persons who are certified as transportation-handicapped and who use the service to travel within only the eastern portion of Racine County and to the University of Wisconsin-Parkside in Kenosha County. The service is provided on a contract basis by Laidlaw Transit Inc. and is available throughout the area served by the City's fixed-route transit system.

The City of Racine's plan indicates that all the modifications proposed under the 1992 plan had been implemented during 1992 and that the service is currently in full compliance with the Federal ADA paratransit service requirements. Changes to the City's paratransit service made during 1998 included expansion of the weekday service hours until 12:00 midnight to coincide with expanded bus service on weekday evenings. During 1998, about 32,800 one-way trips were made on the paratransit

service, a decrease of about 11 percent from the 36,700 one-way trips made on the service in 1997.

#### *City of Waukesha*

The current paratransit service plan for the City of Waukesha Transit System Utility proposes that the City comply with the current Federal regulations by making modifications to the paratransit service for disabled persons provided through the City's METROLIFT program. The paratransit service provided under the METROLIFT program is designed to provide door-to-door transportation to disabled individuals who are unable to use the fixed-route bus service provided by the City's fixed-route bus system, Waukesha Metro Transit. The Waukesha Transit System Utility currently provides the service offered under the METROLIFT program using employees of the private firm the City contracts with to manage and operate its fixed-route bus system.

The City of Waukesha's plan indicates that all the service modifications proposed under the 1992 plan were implemented during 1992 and that the service is currently in full compliance with the Federal ADA paratransit service requirements. During 1998, about 12,400 one-way trips were made on the paratransit service, an increase of about 9 percent from the 11,400 one-way trips made on the service during 1997.

#### *Adoption Status*

All the original 1992 paratransit service plans, along with the paratransit service plan updates for 1993 through 1997, were adopted by the respective public transit operators involved and by the Commission prior to their transmittal to the Federal Transit Administration.

### **TRANSPORTATION IMPROVEMENT PROGRAMMING**

In October 1998 and December 1998, the Commission amended the previously adopted three-year transportation improvement program (TIP) for Southeastern Wisconsin, as required by the U. S. Department of Transportation. The previously adopted program is set forth in a Commission document titled *A Transportation Improvement Program for Southeastern Wisconsin: 1998-2000*, November 1997. The two 1998 amendments to the program were developed with the assistance of the

Wisconsin Department of Transportation staff and through the cooperation of various local units and agencies of government in the Region, including the Cities of Kenosha, Milwaukee, and Racine and the Counties of Milwaukee and Waukesha as the operators of special mass transportation systems in their respective areas.

The 1998-2000 TIP, as amended, identifies all highway and mass transportation projects in the two transportation management areas of the Region, the Milwaukee transportation management area, which includes Milwaukee, Ozaukee, Washington, and Waukesha Counties, and the Kenosha-Racine-Walworth transportation management area, programmed for implementation during the three-year period with the aid of U. S. Department of Transportation funds administered through the Federal Highway Administration and the Federal Transit Administration. Following approval of the 1998 amendments by the Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming for the Kenosha, Milwaukee, and Racine Urbanized Areas, the Regional Planning Commission formally adopted the amendments to the program on October 22, 1998, and December 17, 1998, respectively.

The amended 1998-2000 TIP authorizes funding for many important projects essential to maintaining the existing highway system, including the resurfacing of the North-South Freeway (IH 43) from Lexington Avenue to the Marquette Interchange, and of IH 94 from IH 43 to the Milwaukee-Racine county line, the reconstruction of USH 18 from STH 83 to the Waukesha-Jefferson county line, and the reconstruction of CTH ES from Hi-Lo Drive to CTH NN in Waukesha County. The TIP also authorizes funding for key transit projects, including the purchase of replacement buses for the Milwaukee County and City of Racine transit systems. In addition, the TIP authorizes projects essential to the improvement of the Region's highway and transit systems. For example, included in the TIP are the construction of the extension of CTH KD from CTH F to CTH Z in Kenosha County, the reconstruction of STH 31 between CTH MM and Four Mile Road in Racine County, and the initiation of commuter bus service in Washington County.

The amended 1998-2000 TIP contains 987 projects for the three-year programming period, representing a total potential investment in transportation improvements and services of about \$1.450 billion.

Of this total, \$709 million, or about 49 percent, is proposed to be provided in Federal funds; \$488 million, or about 34 percent, in State funds; and \$253 million, or about 17 percent, in local funds.

While the entire three-year program is an important planning tool, the first two years are of primary interest, because a transportation system improvement project in the Region may be eligible for Federal funding in 1999 only if it is included in the first two years of the TIP. Proposed expenditures total \$478,478,200 in 1999 and include 345 highway improvement and 79 transit projects. A cost summary for these projects is shown in Table 17.

In order to provide a basis for a better understanding of the types of transportation improvements proposed to be undertaken in the Region, projects have been grouped into nine categories: 1) highway preservation, or reconstruction of existing facilities to maintain present capacities; 2) highway improvement, or reconstruction of existing facilities to increase present capacities; 3) highway expansion, or construction of new facilities; 4) highway safety; 5) highway-related environmental enhancement projects; 6) highway improvement off the Federal aid system; 7) transit preservation; 8) transit improvement; and 9) transit expansion projects. Figure 39 reflects graphically the proposed expenditures in 1999 for these nine project categories for each of the two transportation management areas. At least three of the expenditure patterns apparent in the figures deserve comment:

- A significant proportion of financial resources is to be devoted to the preservation of the existing transportation facilities and services in the Region—about 70 percent. This allocation of resources is especially notable considering that virtually none of the funding for routine highway maintenance activities—snow plowing, ice control, grass cutting, power for street lighting, and litter pick-up—is included in the TIP.
- The expenditure of funds for highway expansion totals about \$9.2 million, or 2 percent of total programmed expenditures in the Region. The expenditures for highway improvement to increase present highway capacities total approximately \$60.4 million, or 13 percent of total expenditures. This compares to the \$228.3 million programmed for expenditures

on highway preservation, 48 percent of total expenditures.

- A significant proportion of total financial resources is devoted to public transit projects, which account for about 29 percent of programmed resources for 1999. Of the total programmed resources for public transit, 76 percent is for preservation, 19 percent is for service improvement, and 5 percent is for service expansion.

## **RAILWAY TRANSPORTATION PLANNING**

The Regional Planning Commission participates in railway planning by monitoring the status of railway service within the Southeastern Wisconsin Region, proposals for service changes, and related issues that may affect the Region, and by providing technical assistance to local communities as requested. As of December 31, 1998, railway freight service was being provided within Southeastern Wisconsin over a total of about 500 miles of active main-line trackage, as shown on Map 14.

Intercity passenger train service in the Region is provided by Amtrak between Chicago and Minneapolis-St. Paul over Canadian Pacific Railway trackage, with stops in Southeastern Wisconsin at Milwaukee and Sturtevant. Commuter rail service is provided between Kenosha and Chicago, with intermediate stops throughout the north shore suburbs of northeastern Illinois, by the Union Pacific Railroad under an agreement with Metra, the commuter rail division of the Regional Transportation Authority (RTA) in northeastern Illinois.

### **Commuter Rail Feasibility Studies**

During 1998, work was conducted on three commuter rail feasibility studies. The findings of these studies were intended to provide the information needed by public officials to make a decision as to whether or not to proceed with further consideration of commuter rail service in a specific corridor.

The first of these studies examined the feasibility of providing commuter rail service in the Kenosha-Racine-Milwaukee corridor. This service would be an extension of the existing commuter rail route already operated by Metra between Kenosha and Chicago. The feasibility study was undertaken at the request of the Counties and Cities of Kenosha,

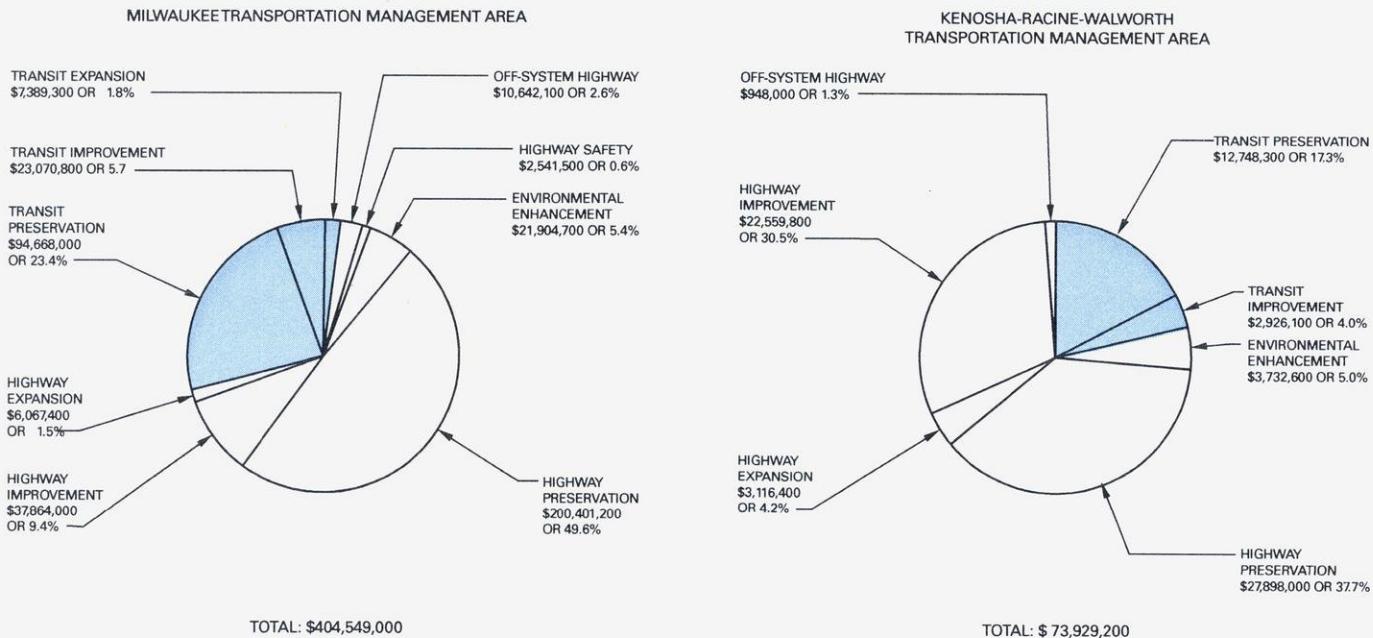
Table 17

**COST SUMMARY OF PROJECTS WITHIN 1999 OF THE AMENDED 1998-2000 TRANSPORTATION IMPROVEMENT PROGRAM BY TRANSPORTATION MANAGEMENT AREA, COUNTY, AND FUNDING SOURCE**

Transportation Management Area	Proposed 1999 Expenditures
Milwaukee Area	
Milwaukee County	
Federal .....	\$139,865,800
State .....	108,745,100
Local .....	75,858,000
Total	\$324,468,900
Ozaukee County	
Federal .....	\$ 7,691,600
State .....	1,404,600
Local .....	1,511,600
Total	\$ 10,607,800
Washington County	
Federal .....	\$ 4,458,300
State .....	8,106,100
Local .....	1,219,800
Total	\$ 13,784,200
Waukesha County	
Federal .....	\$ 31,238,000
State .....	10,723,500
Local .....	13,726,600
Total	\$ 55,688,100
Milwaukee Area Subtotal	
Federal .....	\$183,253,700
State .....	128,979,300
Local .....	92,316,000
Total	\$404,549,000
Kenosha-Racine-Walworth Area	
Kenosha County	
Federal .....	\$ 14,804,900
State .....	17,698,400
Local .....	3,376,900
Total	\$ 35,880,200
Racine County	
Federal .....	\$ 9,572,600
State .....	9,045,700
Local .....	5,418,900
Total	\$ 24,037,200
Walworth County	
Federal .....	\$ 3,597,900
State .....	8,745,500
Local .....	1,668,400
Total	\$ 14,011,800
Kenosha-Racine-Walworth Area Subtotal	
Federal .....	\$ 27,975,400
State .....	35,489,600
Local .....	10,464,200
Total	\$ 73,929,200
Region Total	
Federal .....	\$211,229,100
State .....	164,468,900
Local .....	102,780,200
Total	\$478,478,200

Figure 39

**DISTRIBUTION OF EXPENDITURES IN 1999 OF THE AMENDED 1998-2000  
TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY**



Racine, and Milwaukee and was funded by those local governments and the Wisconsin Department of Transportation. The study findings and conclusions are presented in SEWRPC Community Assistance Planning Report No. 239, *Feasibility Study of Commuter Railway Passenger Train Service in the Kenosha-Racine-Milwaukee Corridor*, June 1998.

Based upon the findings of this study, the Commission Advisory Committee which guided the conduct of the study concluded that the potential extension of commuter rail service between Kenosha, Racine, and Milwaukee, as well as the potential extension of commuter rail service between Kenosha and Racine, was technically feasible and potentially financially feasible. Accordingly, the Advisory Committee recommended that the next phase of development for such service be undertaken. That phase would consist of a detailed planning study. The Advisory Committee further recommended that the detailed planning study work be undertaken as soon as possible. The Commission has formally transmitted the results of the feasibility study, together with a Commission staff memoran-

dum outlining the scope of work for the detailed planning study, to the Secretary of the Wisconsin Department of Transportation and to the County Executives and Mayors of the Counties and Cities of Kenosha, Milwaukee, and Racine. As of the end of 1998, a decision as to whether or not to proceed with the detailed planning study was being considered by those officials.

During 1998, significant work was also completed on two studies which were examining the feasibility of providing commuter rail or commuter bus service in, respectively, the Walworth-Fox Lake, Illinois, and the Burlington-Antioch, Illinois, corridors. With respect to both of these studies, inventories of existing land use and travel patterns and existing transportation services and facilities were completed as of year's end. Also during 1998, identification and analysis of potential routes, stations, equipment, and operating plans were completed. Most of the work necessary to complete an assessment of facility conditions and an identification of improvement needs, as well as to provide estimates of the capital costs involved, was also completed.

## Map 14

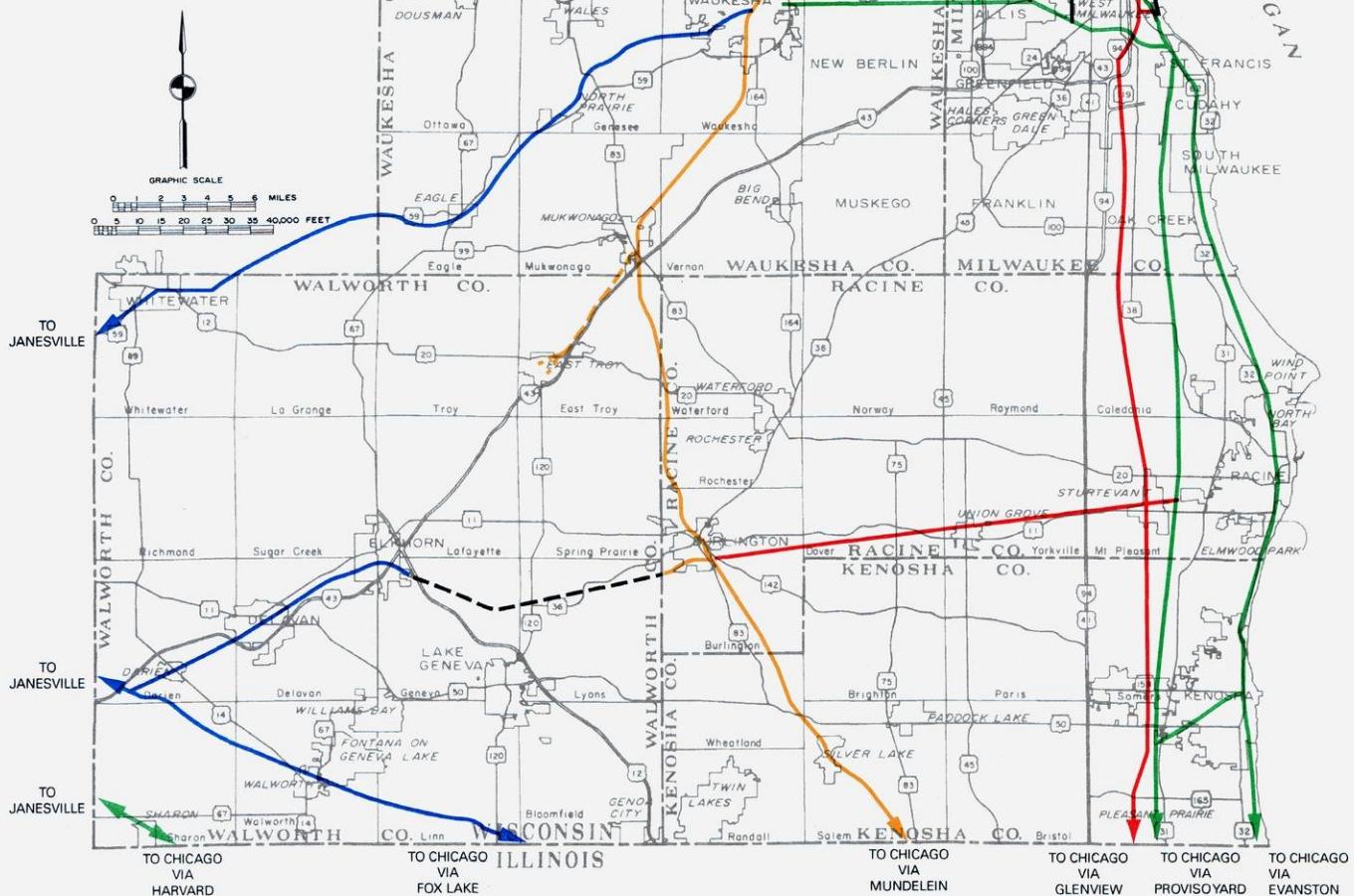
COMMON-CARRIER  
RAILWAY FREIGHT LINES IN  
SOUTHEASTERN WISCONSIN  
DECEMBER 31, 1998

## LEGEND

- CANADIAN PACIFIC RAILWAY (CP)
- UNION PACIFIC RAILROAD (UP)
- WISCONSIN CENTRAL  
TRANSPORTATION CORPORATION (WC)
- WISCONSIN & SOUTHERN RAILROAD  
COMPANY (WSOR)
- MUNICIPALITY OF EAST TROY  
WISCONSIN RAILROAD (METW)
- JOINT USE OR PRIVATE FACILITIES
- INACTIVE TRACKAGE

#### TRACKAGE RIGHTS

RAILROAD HAVING TRACKAGE RIGHTS		
RAILROAD GRANTING TRACKAGE RIGHTS		LOCATION
WC	CP	DUPLAINVILLE- MILWAUKEE
WC	CP	CANCO- MILWAUKEE
WC	UP	GRANVILLE-BUTLER
WC	WSOR	RUGBY JUNCTION NORTH MILWAUKEE
WSOR	CP	NORTH MILWAUKEE- MILWAUKEE
WSOR	WC	SLINGER- WAUKESHA



As of the end of 1998, it was expected that both feasibility studies would be completed during the first half of 1999.

## AIR TRANSPORTATION PLANNING

During 1998, Commission activities in air transportation and airport planning included the continued monitoring of aviation activities within and surrounding the Region and the continued monitoring of, and provision of technical assistance to, airport master planning activities toward implementation of the updated and revised regional airport system plan adopted by the Commission in 1996. The adopted regional airport system plan is described in SEWRPC Planning Report No. 38 (2nd Edition), *A Regional Airport System Plan for Southeastern Wisconsin: 2010*, November 1996.

The Commission staff continued to monitor aviation activity within the Region during 1998. General trends in the level of aviation activity within Southeastern Wisconsin are indicated by the number of aircraft operations at, and passengers using, Milwaukee County's General Mitchell International Airport, as well as by the number of aircraft based within the Region.

General Mitchell International Airport is the largest and busiest airport in the Region and the only airport within the Region with scheduled air carrier service. In 1998, total aircraft operations at Mitchell International totaled about 219,100, representing an increase of about 3 percent over the 212,600 operations there in 1997. The 1998 total is about 3 percent above the 211,700 operations forecast to occur at Mitchell International during that year under the adopted regional airport system plan.

From 1997 to 1998, the number of air carrier enplaning and deplaning passengers at Mitchell International decreased by about 63,000, to about 5,536,000 passengers, or about 1 percent below the 1997 level of about 5,599,000 passengers. The 1998 level was about 424,000, or about 7 percent, less than the 5,960,000 passengers forecast for that year under the adopted regional airport system plan.

General aviation activity can be measured in terms of the number of aircraft based within Southeastern Wisconsin according to Wisconsin Department of Transportation aircraft registration records. As shown in Table 18, a total of 1,562 aircraft were

based in the Region in 1998, representing an increase of less than 1 percent over the total of 1,552 aircraft based in the Region during 1997. The number of aircraft based in the Region during 1998 was about 3 percent higher than the total of 1,517 forecast for that year under the adopted regional airport system plan.

## DATA PROVISION AND TECHNICAL ASSISTANCE

The Commission spends a considerable amount of time and effort each year in responding to requests for transportation data and technical assistance. Many transportation data requests involve obtaining existing or forecast traffic volumes on selected arterial facilities. Other requests are usually for data necessary for the support of special studies. These special requests are typically made by local units of government, the Wisconsin Department of Transportation, and private businesses and developers.

The following is a sample listing of the assistance provided by the Division in 1998:

- At the request of the City of Brookfield, the Commission staff conducted analyses of a "buildout" land use development alternative along with potential modifications to the adopted regional transportation system plan as it applies within the City. The City was provided with forecast traffic volumes for all arterial facilities within the City under the adopted 2020 regional land use and transportation system plans, as well as under the modified buildout alternative.
- At the request of Washington County, the Commission staff conducted an analysis to determine whether the County's highway maintenance responsibilities could be performed more efficiently out of a single facility located at the Washington County Fair Park site, in the northwestern corner of the intersection of CTH P and CTH PV, than out of the existing facilities located in the Village of Slinger and the City of West Bend. The findings of this analysis are documented in SEWRPC Memorandum Report No. 132, *Highway Maintenance Facility Location Study, Washington County, Wisconsin*, December 1998.

**Table 18**  
**GENERAL AVIATION AIRCRAFT BASED IN THE REGION**

County	1960	1970	1980	1990	1997	1998
Kenosha .....	28	76	123	195	254	247
Milwaukee .....	338	356	388	358	345	338
Ozaukee .....	19	32	29	28	22	23
Racine .....	65	108	179	228	237	241
Walworth .....	23	48	98	127	179	185
Washington .....	45	118	158	191	195	197
Waukesha .....	118	243	304	341	320	331
Total	636	981	1,279	1,468	1,552	1,562

- At the request of Washington County, the Commission staff conducted a capital needs analysis of the current County trunk highway system. An inventory was prepared, including data on the average weekday traffic volume, pavement condition rating, pavement width, drainage, and passing sight distance for each segment of the existing system. The inventory permitted the determination of deficiencies and the prioritization of improvements for each segment, resulting in a capital improvement program. The findings of this analysis will be presented in a SEWRPC memorandum report which was under preparation at year's end.
- At the request of the Village of Union Grove, the Commission staff conducted 24-hour machine traffic counts on selected Village streets. In addition, 10-hour manual turning movement counts were conducted at the intersections of 11th Avenue and 67th Drive and of 13th Avenue and 67th Drive. These data were transmitted to the Village in a letter report.
- At the request of the City of Lake Geneva, Commission staff participated in four workshops conducted as part of an STH 50-Main Street planning study in the City. The study was sponsored jointly by the City of Lake Geneva and the Wisconsin Department of Transportation. Commission staff served in a technical staff resource role, assisting the City, the Department, and a 20-member City-created Citizens Advisory Committee guiding the conduct of the study.
- The Commission staff worked with Citizens for a Better Environment (CBE) to prepare travel forecasts for two year 2040 futures that were proposed for Southeastern Wisconsin by CBE. In addition to forecast travel volumes, estimates of vehicle-miles of travel, traffic congestion, and transportation system improvement costs were developed.
- At the request of the City Engineer of the City of Milwaukee, the Commission staff prepared a staff memorandum titled *Analysis of Existing and Year 2020 Traffic Impacts of the Termination of the Park East Freeway at N. 4th Street*, dated July 1998. The memorandum documents existing and probable future year 2020 traffic conditions within the City's central business district and the probable effects on those conditions with the potential of the termination of the Park East Freeway at N. 4th Street.
- At the request of Milwaukee County, average weekday traffic forecasts were prepared for S. 92nd Street between W. Oklahoma Avenue and W. Howard Avenue.



# ENVIRONMENTAL PLANNING DIVISION

## DIVISION FUNCTIONS

The Commission's Environmental Planning Division conducts studies related to, and provides recommendations for, the protection and enhancement of the Region's environment. The kinds of basic questions addressed by this Division include the following:

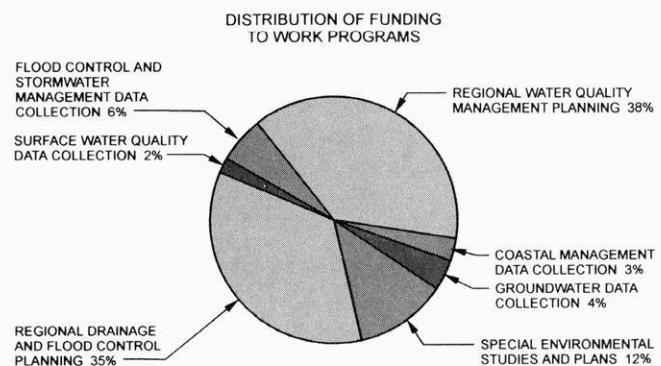
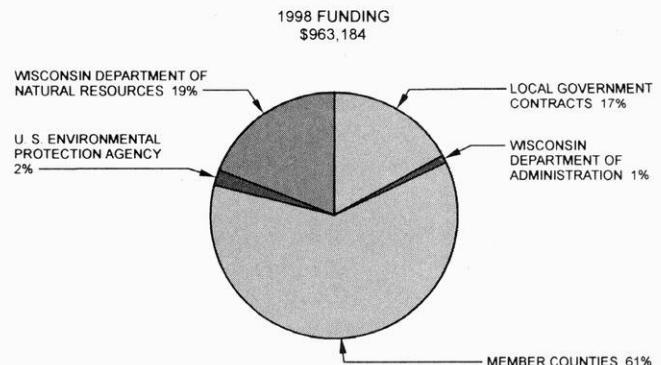
- What is the existing quality of the lakes, streams, and groundwaters of the Region? Is its water quality getting better or worse over time?
- What are the sources of water pollution? How can these sources best be controlled to abate water pollution and meet water quality objectives?
- What areas of the Region should be provided with sanitary sewer service, and what are the most cost-effective ways of providing such service?
- What are the location and extent of the natural floodlands along the lakes and streams of the Region?
- What are the best ways to resolve existing flooding problems and to ensure that new flooding problems are not created?
- What are the best ways to resolve existing stormwater drainage, as opposed to flooding, problems and to provide adequate drainage facilities for existing and probable future rural and urban development? How can improved stormwater drainage systems best be integrated with needed nonpoint source water pollution abatement measures?
- What needs to be done to ensure a continued, ample supply of safe drinking water?

- How can solid wastes best be managed for recycling and disposal in an environmentally safe and energy-efficient manner?
- How can the Lake Michigan shoreline best be protected and used?

In attempting to find sound answers to these and related questions, to develop recommendations concerning environmental protection and enhancement, to monitor levels of environmental quality in the Region, and to respond to requests for data and technical assistance, activities were conducted in 1998 in three identifiable program areas: water quality management planning; watershed, floodland, and stormwater management planning; and coastal management planning.

**Figure 40**

## ENVIRONMENTAL PLANNING DIVISION



## **WATER QUALITY MANAGEMENT PLANNING**

During 1998, Commission water quality management planning efforts continued to be focused primarily on activities relating to implementation of the adopted regional management plan and on groundwater management activities. Such activities included providing assistance in the preparation of inland lake management plans; preparing local sanitary sewer service area plans; assisting counties and other local units of government in the Region in completing nonpoint source pollution abatement system plans and project designs, and sewerage facilities plans in preparation for the construction of point source pollution abatement facilities, both of which types of plans are identified in the adopted regional plan as needed; working cooperatively with the Wisconsin Geological and Natural History Survey on a regional groundwater resource inventory and analysis program; and helping prepare a proposal for the development of a regional groundwater aquifer simulation model. The Commission also continued to assist the Wisconsin Departments of Natural Resources and of Commerce in the review of proposed public sanitary sewer extensions, proposed private main sewers and building sewers, and proposed large onsite sewage disposal systems and holding tanks.

### **The Regional Water Quality Management Plan**

In 1979, the Commission completed and adopted a regional water quality management plan. The plan, designed in part to meet the Congressional mandate that the waters of the United States be made to the extent practicable "fishable and swimmable," is set forth in SEWRPC Planning Report No. 30, *A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings*, September 1978; Volume Two, *Alternative Plans*, February 1979; and Volume Three, *Recommended Plan*, June 1979. The plan provides recommendations for the control of water pollution from such point sources as sewage treatment plants, points of separate and combined sewer overflow, and industrial waste outfalls and from such nonpoint sources as urban and rural stormwater runoff. The regional water quality management plan is one of the more important plan elements adopted by the Commission since, in addition to providing clear and concise recommendations for

the control of water pollution, it provides the basis for the continued eligibility of local units of government for Federal and State loans and grants in partial support of sewerage system development and redevelopment, for the issuance of waste discharge permits by the Wisconsin Department of Natural Resources, for the review and approval of public sanitary sewer extensions by that Department, for the review and approval of private sanitary sewer extensions and large onsite sewage disposal systems and holding tanks by the Wisconsin Department of Commerce, and for Federal and State financial assistance in support of local nonpoint source water pollution control projects.

The adopted regional water quality management plan for Southeastern Wisconsin consists of five major elements: a land use element, a point source pollution abatement element, a nonpoint source pollution abatement element, a sludge management element, and a water quality monitoring element. A descriptive summary of the initial regional water quality management plan was provided in the Commission's *1979 Annual Report*.

Subsequently, the Commission completed a report documenting the content and implementation status of the regional water quality management plan as amended over approximately the first 15 years since the initial adoption of the plan. This report, SEWRPC Memorandum Report No. 93, *A Regional Water Quality Management Plan for Southeastern Wisconsin: An Update and Status Report*, March 1995, provides a comprehensive restatement of the regional water quality management plan as thus amended. The plan status report reflects implementation actions taken and plan amendments adopted since the initial plan was completed. The status report also documents, as available data permit, the extent of progress which had been made toward meeting the water use objectives and supporting water quality standards set forth in the regional water quality management plan.

### **Nonpoint Source Pollution Abatement Planning**

The adopted regional water quality management plan recommends that local agencies charged with responsibility for nonpoint source pollution control prepare refined and detailed local-level nonpoint source pollution control plans and programs. Such plans and programs are to identify and implement

the nonpoint source pollution control practices that should be applied to specific lands. This more refined and detailed level of planning was recommended because the design of nonpoint source pollution abatement practices should be a localized, highly detailed, and individualized effort, an effort that is based on site-specific knowledge of the physical, managerial, social, and fiscal considerations that affect the landowners concerned.

The Commission provides assistance in planning and project review activities for a number of programs which are considered to be steps toward implementation of the nonpoint pollution abatement recommendations set forth in the regional water quality management plan. These programs include the following: the Wisconsin Nonpoint Source Priority Watershed Pollution Abatement Program, administered by the Wisconsin Department of Natural Resources in cooperation with the Wisconsin Department of Agriculture, Trade and Consumer Protection, a program which provides cost-sharing funds for individual projects or land management practices to local governments and private landowners following completion and adoption of detailed watershed plans; the stormwater discharge permit system administered by the Department of Natural Resources; and local-level stormwater management and land and water resource management planning programs. During 1998, the Commission provided assistance to the State agencies involved and the counties and other local units of government concerned in carrying out these programs. Examples of this work include the following:

- At the request of Kenosha County, the Commission staff reviewed and commented on proposed stormwater management and nonpoint source pollution control measures attendant to site development plans for two subdivisions in the Town of Somers; for four institutional development projects, two in the Town of Bristol, one in the Town of Randall, and one in the Town of Wheatland; and for five commercial and industrial development projects, one in the Town of Paris, two in the Town of Salem, one in the Town of Somers, and one in the Town of Wheatland.
- The Commission staff provided overall coordination for the preparation of a joint State of Wisconsin stormwater discharge permit application, a process involving the Cities

of Brookfield, Greenfield, and Wauwatosa and the Villages of Butler, Elm Grove, Germantown, Menomonee Falls, and West Milwaukee. An agreement specifying the responsibilities of the eight communities and the Commission in the preparation of the permit application was adopted by all parties. The Commission staff prepared standards and procedures recommended to be used by the group communities for stormwater management systems inventories and maps.

- At the request of Milwaukee County, Commission staff served on a steering committee established to oversee the preparation of a stormwater management plan for Lawrence J. Timmerman Airport, the Grantosa Creek subwatershed, and the east side of the Lower Menomonee River subwatershed. The plan will incorporate more-specific nonpoint pollution control recommendations into the drainage and flood control recommendations developed under the plan documented in SEWRPC Memorandum Report No. 53, *A Stormwater Drainage and Flood Control System Plan for Grantosa Creek, Cities of Milwaukee and Wauwatosa, Milwaukee County, Wisconsin*, February 1992.
- Commission staff provided assistance in mapping and data provision to and served as a member of the advisory committee overseeing the preparation of the Waukesha County land and water resource management plan, a prototype plan under development by the Waukesha County Department of Parks and Land Use.
- The Commission staff provided the Wisconsin Department of Natural Resources with land use data for communities in the Root River watershed. Those data were to be used by the Department in its determination as to which communities in the watershed would be designated to obtain stormwater discharge permits.

### **Lake Management Planning**

The adopted regional water quality management plan recommends that detailed, comprehensive lake management plans be prepared for the drainage areas directly tributary to each of the 101 major lakes lying within Southeastern Wisconsin.

The Commission and the Wisconsin Department of Natural Resources work with local lake community organizations, including lake management associations and lake protection and rehabilitation districts, to complete the preparation of such lake management plans. As budget and work program conditions permit, these lake management plans are documented in Commission community assistance planning reports. These reports describe the existing chemical, biological, and physical water quality conditions of each lake in question; existing and proposed uses of the lake and attendant water quality objectives and standards; recommended pollution abatement measures required in each lake watershed to protect and enhance lake water quality; and recommended aquatic plant management and other appropriate in-lake measures needed to provide for a range of suitable recreational uses of the lake.

Prior to 1998, comprehensive lake management plans were completed for the following lakes within the Region: Powers in Kenosha and Walworth Counties; Wind in Racine County; Geneva, and Whitewater and Rice, in Walworth County; Friess in Washington County; and Ashippun, Eagle Spring, Fowler, Little Muskego, North, Oconomowoc, Okauchee, and Pewaukee, and Lac La Belle, all in Waukesha County.

In addition, prior to 1998, a number of other, more narrowly focused plans were prepared, including a lake use management plan for Waubeesee Lake and the Anderson Canal, which connects Long Lake (Kee Nong Go Mong Lake) to Waubeesee Lake, in Racine County; an aquatic plant management plan for the Phantom Lakes in Waukesha County; a lake protection plan for Silver Lake in Waukesha County; a public boating access and waterway protection plan for Big Muskego Lake in Waukesha County; a watershed inventory report for Upper Nemahbin Lake in Waukesha County; lake protection and recreational use plans for Silver Lake in Washington County and Hunters Lake in Waukesha County; and a lakefront recreational use and waterway protection plan for that portion of the shoreline of Pewaukee Lake located within the Village of Pewaukee in Waukesha County. While these plans or reports form elements of comprehensive lake water quality management plans, they do not, in and of themselves, constitute such plans.

During 1998, the Commission continued to provide technical assistance to certain municipalities, lake management associations, and lake protection and

rehabilitation districts. During the year, the Commission participated in lake-management-related meetings convened by the University of Wisconsin-Extension, the Wisconsin Department of Natural Resources, and the Wisconsin Association of Lakes. Technical assistance relating to specific lake management needs was provided to municipalities and lake associations or districts for Voltz Lake in Kenosha County; Powers Lake in Kenosha and Walworth Counties; Wind Lake in Racine County; Geneva and Pell Lakes, and the Lauderdale Lakes, all in Walworth County; Little Cedar, Friess, Pike, and Silver Lakes in Washington County; Eagle Spring, Fowler, Middle Genesee, Lower Kelly, Little Muskego, Nagawicka, Upper Nemahbin, Upper and Lower Phantom, Pretty, Silver, and Willow Springs Lakes, Lake Keesus, Lac La Belle, and Linnie Lac in Waukesha County; and Upper Kelly Lake in Waukesha and Milwaukee Counties.

Assistance in preparing applications for State grants in partial support of lake protection and management planning was also provided during 1998 for several lakes. Over the years from 1992 through 1998, the Commission assisted in preparing grant applications in support of 43 lake-management-related projects.

#### *Lake Protection Plan for Pretty Lake*

The Commission completed a lake protection plan for Pretty Lake during 1998. The plan, documented in SEWRPC Memorandum Report No. 122, *A Lake Protection Plan for Pretty Lake, Waukesha County, Wisconsin*, April 1998, was prepared by the Commission for the Pretty Lake Protection and Rehabilitation District. This plan documents existing and anticipated conditions and potential management problems pertaining to Pretty Lake and presents a recommended plan for the resolution of these problems. The Pretty Lake lake protection plan recommends that actions be taken to manage in-lake macrophyte beds and protect ecologically valuable areas adjacent to the Lake and in its watershed. Specifically, these actions include acquisition of lands to the west of the Lake as a measure to protect Pretty Lake's surface-water level as well as its water quality. The plan recommends only limited aquatic plant management action, including selected manual removal and surveillance activities in areas where Eurasian water milfoil and purple loosestrife are present. The plan also recommends that the macrophyte beds that contain Eurasian water milfoil be marked as motor-exclu-

sionary zones to attenuate the further proliferation of that plant. An initial and periodic future fishery surveys are also recommended. The plan envisions continuation of an ongoing program of public information and education informing riparian residents and Lake users of additional options regarding household chemical usage, lawn and garden care, shoreland protection and maintenance, and recreational usage of the Lake. The plan also recommends continued reliance on onsite sewage disposal systems as the most cost-effective means of wastewater management.

#### *Aquatic Plant Inventory for Pine Lake*

During 1998, the Commission completed an aquatic plant inventory of Pine Lake. This inventory, documented in SEWRPC Memorandum Report No. 124, *An Aquatic Plant Inventory for Pine Lake, Waukesha County, Wisconsin*, December 1998, was prepared by the Commission at the request of the Village of Chenequa, and in cooperation with the Wisconsin Department of Natural Resources. This inventory report documents the findings of an aquatic plant inventory completed by Commission staff and designed to be used, in conjunction with oblique aerial photography acquired by the Village, as part of an ongoing aquatic-plant-monitoring program in Pine Lake. The program is specifically designed to identify the growth and spread of Eurasian water milfoil.

#### *Lake Management Plan for Lake Keesus*

Also during 1998, the Commission completed a comprehensive lake management plan for Lake Keesus. The plan, documented in SEWRPC Community Assistance Planning Report No. 227, *A Lake Management Plan for Lake Keesus, Waukesha County, Wisconsin*, June 1998, was prepared by the Commission at the request of the Lake Keesus Protection and Rehabilitation District, and in cooperation with the Wisconsin Department of Natural Resources, the U. S. Geological Survey, and the Waukesha County Department of Parks and Land Use. The plan, which has a design year of 2010, is intended to serve as a guide to the making of decisions concerning the use and management of Lake Keesus. The study area, which is coterminous with the total tributary drainage area of the Lake, encompasses 4.2 square miles in north central Waukesha County.

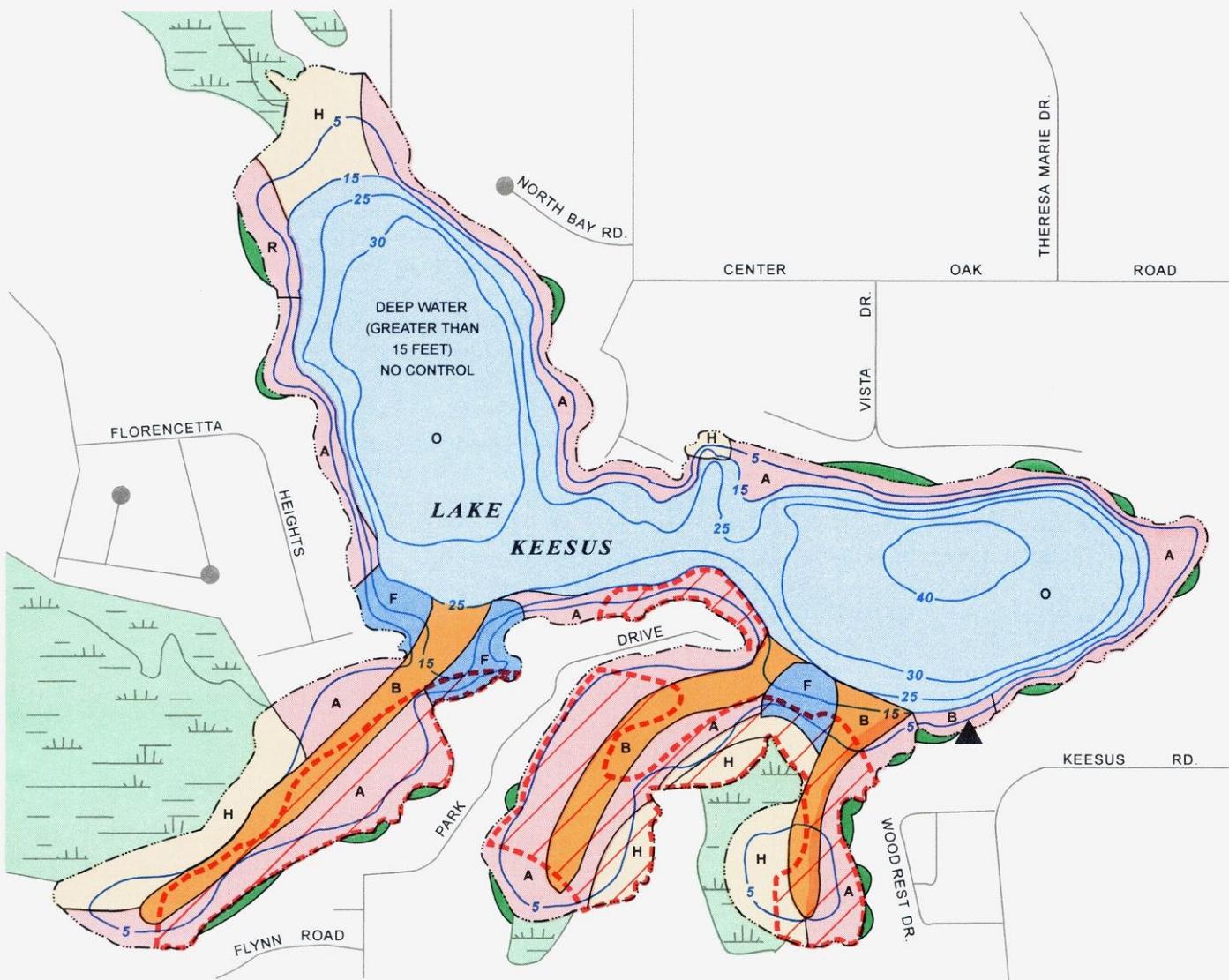
Alternative management techniques evaluated included watershed, lake rehabilitation, and in-lake measures. Those alternative measures incorporated into the recommended management plan, after evaluation, included the following:

- Maintenance of historical low- and medium-density shoreline residential land uses.
- Review and adjustment of current zoning regulations to ensure general consistency with the Waukesha County development plan, minimizing loss of open space lands.
- Continued protection of environmental corridor lands.
- Promotion of urban nonpoint pollution source control practices, such as fertilizer and pesticide use management, critical-area protection, litter and pet waste controls, and leaf and yard waste storage and disposal controls.
- Ongoing implementation of construction-site erosion controls.
- Adoption of conservation-oriented agricultural and nutrient management practices.
- Adoption of an onsite sewage disposal system management and inspection program.
- Ongoing management of aquatic plant communities, including continued reliance on mechanical harvesting to maintain navigation channels and fishing lanes, limited application of chemical herbicides to manage nuisance plant species, and appropriate algal controls to minimize outbreaks of swimmer's itch.
- Protection of fish-breeding habitat through shoreline maintenance practices and monitoring of fish species composition.
- Continued participation in the Wisconsin Department of Natural Resources Self-Help Monitoring Program.
- Continuation of public informational programming efforts.

Map 15 presents a graphic summary of the recommended management plan for Lake Keesus.

Map 15

RECOMMENDED LAKE MANAGEMENT PLAN FOR LAKE KEECUS



LEGEND

WATER DEPTH CONTOUR IN FEET

POTENTIAL PUBLIC ACCESS SITE

LAKE USE ZONES

A: ACCESS   H: HABITAT

B: BOATING   O: OPEN WATER

F: FISHING   R: RECREATION

AQUATIC PLANT MANAGEMENT

HARVESTING: HIGH PRIORITY  
CHEMICALS: LIMITED

HARVESTING: MODERATE PRIORITY  
CHEMICALS: LIMITED

HARVESTING: LOW PRIORITY  
CHEMICALS: NONE

HARVESTING: NONE  
CHEMICALS: NONE

ENVIRONMENTALLY VALUABLE AREAS  
RECOMMENDED FOR PROTECTION

MILFOIL CONTROL AREA HARVESTING:  
SHALLOW CUTTING TO CONTROL  
EURASIAN WATER MILFOIL

MONITORING PROGRAM

CONDUCT FISH SURVEY

CONDUCT AQUATIC PLANT SURVEY

CONTINUE WATER QUALITY MONITORING

LAND USE MANAGEMENT

PROTECT ENVIRONMENTALLY  
VALUABLE AREAS:

-NO BOAT ACCESS

-NO PLANT HARVESTING

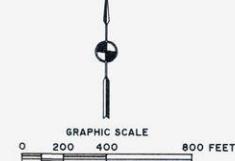
-NO HERBICIDE USE

INCLUDE SHORE YARD PROVISIONS  
IN ZONING ORDINANCE

SHORELINE PROTECTION

MAINTAIN AND REPAIR EXISTING  
STRUCTURES: PROTECT UNSTABLE AREAS

ESTABLISH SHORELINE VEGETATION



## **Local and Subregional Sewerage Facilities Planning**

During 1998, the Commission continued to work with local engineering staffs and consultants in the preparation of detailed local sewerage facilities plans designed to meet the requirements of Section 201 of the Federal Clean Water Act, the requirements of the Wisconsin Clean Water Fund administered by the Wisconsin Department of Natural Resources, and good engineering practice. Work activities during 1998 included the provision of basic economic, demographic, land use, and natural resource base data for use in the preparation of the facilities plans; the extension of the findings and recommendations of the regional water quality management plan, particularly those regarding sanitary sewer service areas, trunk sewer configurations, and treatment plant locations, capacities, and levels of treatment; and the review of, and comment on, the preliminary plans.

The Commission was directly involved in the following local and subregional sewerage facility planning efforts in 1998:

- Continued assistance to local units of government within the Region in developing facility plans for modifications to existing public sewerage systems and for providing new centralized sanitary sewerage systems. During 1998, local sewerage facilities plans were completed for the Village of Twin Lakes and Village of Silver Lake in Kenosha County and the Town of Norway Sanitary District No. 1 in Racine County. These plans set forth recommendations for the extension of existing and for the construction of new sewerage facilities in accordance with the recommendations of the adopted regional water quality management plan. In addition, facility planning was completed for major regional sewerage systems in the Milwaukee metropolitan and greater Racine areas. As of year's end, these facilities plans were adopted by the local units of government concerned and were approved or under review by the Wisconsin Department of Natural Resources.
- Continuation of work on the preparation of a sanitary sewerage system plan for northwestern Waukesha County. The Commission is administering this important system planning work on behalf of the 17 local units of

government concerned. A consultant has been retained by the Commission to conduct the technical work involved. The planning program was outlined in a prospectus prepared and published by the Commission in 1993 at the request of the local units of government concerned. The prospectus placed particular emphasis upon the importance of identifying the most cost-effective and environmentally sound sewerage system required to serve existing and probable future urban development in northwestern Waukesha County. It is envisioned that the study will also address the institutional and fiscal considerations inherent in the development of the recommended sewerage facilities.

## **Sanitary Sewer Extensions and Sewer Service Area Refinement Process**

The adoption by the Commission during 1979 of a regional water quality management plan for Southeastern Wisconsin set into motion a process whereby, under rules promulgated by the Wisconsin Department of Natural Resources, the Commission must review and comment on all proposed public sanitary sewer extensions. Such review and comment must relate a proposed public sewer extension to the sanitary sewer service areas identified in the adopted regional water quality management plan; and, under Section NR 110.08(4) of the Wisconsin Administrative Code, the Department may not approve any proposed public sanitary sewer extension unless such extension is found to be in conformance with the adopted areawide water quality management plan. In addition, rule changes promulgated by the Wisconsin Department of Industry, Labor and Human Relations during 1985 require the Commission to comment on certain proposed private sanitary sewer extensions and large onsite sewage disposal systems and holding tanks relative to the adopted areawide water quality management plan. Under Section Comm 82.20(4) of the Wisconsin Administrative Code, the Wisconsin Department of Commerce may not approve any proposed private main sewer or building sewer extension unless such extension is found to be in conformance with an adopted areawide water quality management plan. A similar finding must be made for large-scale onsite sewage treatment and disposal systems and holding tanks under a cooperation agreement between the Wisconsin Departments of Commerce and Natural Resources.

When the regional water quality management plan was adopted in 1979, that plan included preliminary recommended sanitary sewer service areas tributary to each recommended public sewage treatment plant within the Region. A total of 85 such sanitary sewer service areas were delineated in the adopted plan. These initially recommended sanitary sewer service areas were based upon the second-generation regional land use plan for the plan design year 2000. As such, the preliminary delineations were general in nature and did not reflect detailed local planning considerations. Accordingly, the Commission recommended that upon adoption of the regional water quality management plan, work be undertaken to refine and detail each of the sewer service areas in cooperation with the local units of government concerned. A process for refining and detailing the areas was set forth in the adopted regional plan, for each area involving intergovernmental meetings with the affected units of government and culminating in the holding of a public hearing on the refined and detailed sewer service area map. Such a map was to identify not only the planned perimeter of the sewer service area, but also the location and extent of the primary environmental corridors within that service area, which corridors contain the best and most important elements of the natural resource base. Preserving the environmental corridor lands in essentially natural, open uses was considered essential to the maintenance of the overall quality of the environment and to avoidance of the creation of serious and costly developmental problems. Urban development was to be excluded from the corridors identified in the sewer service area plans, an important factor to be considered in the extension of sanitary sewer service.

The Commission also determined that each refined and detailed sanitary sewer service area plan, including detailed delineations of the primary environmental corridors within the service area involved, would be documented in a Commission community assistance planning report. That report would be formally adopted by the appropriate local sewerage agency and by the Commission and forwarded to the Wisconsin Department of Natural Resources and the U. S. Environmental Protection Agency for approval as an amendment to the adopted regional water quality management plan.

As noted above, the regional water quality management plan as originally adopted in 1979 identified

85 sanitary sewer service areas. Subsequent to adoption of the original plan, the Commission, in cooperation with the local units of government concerned, has carried out a continuing work effort to refine and detail the planned sewer service areas within the Region and thereby amend the adopted regional water quality management plan. During 1998, this work effort included the following:

- The completion and adoption by the Commission of a second-generation sanitary sewer service area plan for the City of West Bend and environs in Washington County. The prior plan for the City and environs was completed and adopted by the Commission in 1982, adopted by the City in 1983, and amended several times thereafter. The updated and revised plan was also adopted by the local units of government concerned in 1998 and forwarded to the Wisconsin Department of Natural Resources for approval.
- The completion and adoption by the Commission of a third-generation sanitary sewer service area plan for the Village of Slinger and environs in Washington County. The prior plan for the Village and environs was completed and adopted in 1993 and amended in 1997. The updated and revised plan was also adopted by the local units of government concerned in 1998 and forwarded to the Wisconsin Department of Natural Resources for approval.
- The completion and adoption by the Commission of a second-generation sanitary sewer service area plan for the Village of Silver Lake and environs in Kenosha County. The prior plan for the Village and environs, adopted by the Village in 1986, was published and adopted by the Commission in 1987 and amended in 1990. The updated and revised plan was also adopted by the local units of government concerned in 1998 and forwarded to the Wisconsin Department of Natural Resources for approval.
- The adoption by the Commission of amendments to the sanitary sewer service areas for the Village of Belgium in Ozaukee County; the Eagle Lake Sewer Utility District in Racine County; the Village of East Troy and

the Delavan-Delavan Lake area in Walworth County; the Village of Germantown in Washington County; and the City of Brookfield, the Village of Menomonee Falls, the Village of Sussex, and the Lake Pewaukee Sanitary District in Waukesha County.

By the end of 1998, as a result of the refinement and detailing process, a total of 72 of the 85 initially identified sanitary sewer service areas had been refined and detailed. Because the refinement and detailing process sometimes involves the redefinition and combination of previously defined areas, these 72 originally defined areas are represented by a total of 56 redefined areas.

In addition, the refinement and detailing process sometimes has resulted in the recognition of new sanitary sewer service areas which were either not envisioned in the original 1979 regional water quality management plan or were part of envisioned larger sewer service areas. As of the end of 1998, 12 such areas had been delineated by amendments to the regional water quality management plan. These 12 new areas include the following: the Powers-Benedict-Tombeau Lakes area, located in Kenosha and Walworth Counties; the City of Franklin and the City of Oak Creek portions of the Milwaukee Metropolitan Sewerage District, located in Milwaukee County; the Bohner Lake area, located in Racine County; the Alpine Valley, the Country Estates Sanitary District, the Pell Lake, and the Griedanus Landfill areas, all located in Walworth County; the Eagle Spring Lake Sanitary District, the Village of Lannon portion of the Lannon-Menomonee Falls area, and the Mukwonago County Park area, all located in Waukesha County; and the Rainbow Springs area, located in both Waukesha and Walworth Counties.

The planning status of the recommended sanitary sewer service areas within the Region is summarized in Table 19 and on Map 16. The table identifies the 85 initially identified sewer service areas; the 72 initially identified sewer service areas for which the recommended plan refinement process was completed at the end of 1998; and the 56 redefined areas and the 12 new areas resulting from the plan refinement process. The table also identifies the documents setting forth each refined and detailed sanitary sewer service area plan and the respective dates on which the Commission adopted those documents as amendments to the regional water quality management plan.

Pending the completion of such plan refinement studies in cooperation with the local units of government concerned, the Commission must use the more general sewer service area recommendations set forth in the adopted regional water quality management plan as a basis for reviewing and commenting on individual proposed sanitary sewer extensions.

During 1998, review comments were provided on 212 proposed public sanitary sewer extensions and 159 proposed private main sewer or building sewer extensions, distributed by county as shown in Table 20.

## **Groundwater Management Planning**

For the past several years, the Southeastern Wisconsin Regional Planning Commission has been working cooperatively with the Wisconsin Geological and Natural History Survey on a regional groundwater resource inventory and analysis program. The primary purpose of this effort has been the development of hydrogeologic data which can be used to support the preparation of a groundwater management element of the regional water quality management plan. The groundwater-related inventories developed under this effort are being documented in a report which was under preparation at year's end. The primary focus of the project is the shallow aquifer system and the vulnerability of that system to contamination.

As the groundwater inventory and analysis project proceeded, the need to address the deeper aquifer system together with the shallow aquifer in an integrated data development and modeling program was raised. A regional groundwater aquifer simulation model is proposed to be developed to meet this need. The proposed modeling program is described in an October 1998 document entitled *Regional Aquifer Performance Simulation Modeling Program Prospectus*, prepared jointly by the Commission, the Wisconsin Geological and Natural History Survey, and the U. S. Geological Survey. This prospectus was prepared under the guidance of the Commission's Technical Advisory Committee on Regional Aquifer Performance Simulation Modeling, whose membership includes both groundwater users and technical experts. The prospectus also incorporates suggestions received at four public informational meetings regarding the proposed modeling program. These informational meetings, which were designed to explain the envisioned

Table 19

## PLANNED SANITARY SEWER SERVICE AREAS IN THE REGION: 1998

County	Name(s) of Initially Defined Sanitary Sewer Service Area(s)	Name(s) of Refined and Detailed Sanitary Sewer Service Area(s) <sup>a</sup>	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Kenosha	Bristol IH 94 Kenosha Pleasant Park Pleasant Prairie North Pleasant Prairie South Somers	Greater Kenosha	March 6, 1996	<i>Amendment to the Regional Water Quality Management Plan—2010, Greater Kenosha Area, March 1996</i>
	Bristol-George Lake	Bristol	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, <i>Sanitary Sewer Service Area for the Town of Salem Utility District No. 1, Village of Paddock Lake, and Town of Bristol Utility District Nos. 1 and 1B, Kenosha County, Wisconsin, October 1986</i>
	Camp-Center Lakes Cross Lake Rock Lake Wilmot	Salem South	March 3, 1986	SEWRPC Community Assistance Planning Report No. 143, <i>Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin, February 1986</i>
	Hooker-Montgomery Lakes	Salem North	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, <i>Sanitary Sewer Service Area for the Town of Salem Utility District No. 1, Village of Paddock Lake, and Town of Bristol Utility District Nos. 1 and 1B, Kenosha County, Wisconsin, October 1986</i>
	Paddock Lake	Paddock Lake	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, <i>Sanitary Sewer Service Area for the Town of Salem Utility District No. 1, Village of Paddock Lake, and Town of Bristol Utility District Nos. 1 and 1B, Kenosha County, Wisconsin, October 1986</i>
	--	Powers-Benedict-Tombeau Lakes	December 7, 1994	<i>Amendment to the Regional Water Quality Management Plan—2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area, Kenosha and Walworth Counties, December 1994</i>
	Silver Lake	Silver Lake	December 2, 1998	SEWRPC Community Assistance Planning Report No. 119, 2nd Edition, <i>Sanitary Sewer Service Area for the Village of Silver Lake and Environs, Kenosha County, Wisconsin, December 1998</i>
	Twin Lakes	Twin Lakes	June 15, 1987	SEWRPC Community Assistance Planning Report No. 149, <i>Sanitary Sewer Service Area for the Village of Twin Lakes, Kenosha County, Wisconsin, May 1987</i>
Milwaukee	Milwaukee Metropolitan Sewerage District (portion)	Franklin	December 5, 1990	SEWRPC Community Assistance Planning Report No. 176, <i>Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, October 1990</i>
	Milwaukee Metropolitan Sewerage District (portion)	Oak Creek	September 7, 1994	SEWRPC Community Assistance Planning Report No. 213, <i>Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin, July 1994</i>
	Milwaukee Metropolitan Sewerage District (portion)	--	--	--
	South Milwaukee	--	--	--

**Table 19 (continued)**

County	Name(s) of Initially Defined Sanitary Sewer Service Area(s)	Name(s) of Refined and Detailed Sanitary Sewer Service Area(s) <sup>a</sup>	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Ozaukee	Belgium	Belgium	September 15, 1993	SEWRPC Community Assistance Planning Report No. 97, 3rd Edition, <i>Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin</i> , August 1993
	Cedarburg Grafton	Cedarburg Grafton	June 19, 1996	SEWRPC Community Assistance Planning Report No. 91, 2nd Edition, <i>Sanitary Sewer Service Areas for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin</i> , June 1996
	Fredonia Waubeka	Fredonia Waubeka	September 13, 1984	SEWRPC Community Assistance Planning Report No. 96, <i>Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin</i> , July 1984
	Lake Church	--	--	--
	Mequon Thiensville	Mequon Thiensville	January 15, 1992	SEWRPC Community Assistance Planning Report No. 188, <i>Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin</i> , January 1992
	Port Washington	Port Washington	December 1, 1983	SEWRPC Community Assistance Planning Report No. 95, <i>Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin</i> , September 1983
	Saukville	Saukville	December 1, 1983	SEWRPC Community Assistance Planning Report No. 90, <i>Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin</i> , September 1983
Racine	--	Bohner Lake	June 15, 1994	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Burlington/Bohner Lake Sanitary Sewer Service Areas</i> , June 1994
	Burlington	Burlington	June 16, 1986	SEWRPC Community Assistance Planning Report No. 78, <i>Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin</i> , April 1986
	Eagle Lake	Eagle Lake	January 18, 1993	SEWRPC Community Assistance Planning Report No. 206, <i>Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin</i> , December 1992
	Racine Caddy Vista	Racine Caddy Vista	December 1, 1986	SEWRPC Community Assistance Planning Report No. 147, <i>Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin</i> , November 1986
	Southern Wisconsin Center	Southern Wisconsin Center	September 12, 1990	SEWRPC Community Assistance Planning Report No. 180, <i>Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin</i> , August 1990
	Union Grove	Union Grove	September 12, 1990	SEWRPC Community Assistance Planning Report No. 180, <i>Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin</i> , August 1990

**Table 19 (continued)**

County	Name(s) of Initially Defined Sanitary Sewer Service Area(s)	Name(s) of Refined and Detailed Sanitary Sewer Service Area(s) <sup>a</sup>	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Racine (continued)	Waterford/Rochester Tichigan Lake	Waterford/Rochester	April 24, 1996	SEWRPC Community Assistance Planning Report No. 141, 2nd Edition, <i>Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin</i> , April 1996
	Wind Lake	--	--	--
	Yorkville	--	--	--
Walworth	--	Alpine Valley	December 4, 1989	Amendment to the Regional Water Quality Management Plan—2000, <i>Towns of East Troy, LaFayette, and Spring Prairie, and Village of East Troy</i> , December 1989
	Darien	Darien	September 23, 1992	SEWRPC Community Assistance Planning Report No. 123, 2nd Edition, <i>Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin</i> , July 1992
	Delavan Delavan Lake Elkhorn Walworth County Institutions Williams Bay Lake Como --	Delavan-Delavan Lake Elkhorn Williams Bay-Geneva National-Lake Como Griedanus Landfill	December 4, 1991	SEWRPC Community Assistance Planning Report No. 56, 2nd Edition, <i>Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District</i> , November 1991
	East Troy Potter Lake	East Troy Potter Lake	June 16, 1993	SEWRPC Community Assistance Planning Report No. 112, 2nd Edition, <i>Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin</i> , June 1993
	Fontana Walworth	Fontana-Walworth	June 21, 1995	SEWRPC Community Assistance Planning Report No. 219, <i>Sanitary Sewer Service Area for the Villages of Fontana and Walworth and Environs, Walworth County, Wisconsin</i> , June 1995
	Genoa City	Genoa City	June 19, 1996	SEWRPC Community Assistance Planning Report No. 175, 2nd Edition, <i>Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin</i> , May 1996
	Lake Geneva	Lake Geneva	January 18, 1993	SEWRPC Community Assistance Planning Report No. 203, <i>Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin</i> , December 1992
	Lyons --	Lyons Country Estates Sanitary District	September 15, 1993	SEWRPC Community Assistance Planning Report No. 158, 2nd Edition, <i>Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin</i> , August 1993
	--	Pell Lake	June 19, 1996	SEWRPC Community Assistance Planning Report No. 225, <i>Sanitary Sewer Service Area for the Pell Lake Sanitary District No. 1, Walworth County, Wisconsin</i> , June 1996
	Sharon	--	--	--

**Table 19 (continued)**

County	Name(s) of Initially Defined Sanitary Sewer Service Area(s)	Name(s) of Refined and Detailed Sanitary Sewer Service Area(s) <sup>a</sup>	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Walworth (continued)	Whitewater	Whitewater	March 1, 1995	SEWRPC Community Assistance Planning Report No. 94, 2nd Edition, <i>Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin</i> , March 1995
Washington	Allenton	Allenton	March 11, 1985	SEWRPC Community Assistance Planning Report No. 103, <i>Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin</i> , September 1984
	Germantown	Germantown	September 8, 1983	SEWRPC Community Assistance Planning Report No. 70, <i>Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin</i> , July 1983
	Hartford	Hartford	June 21, 1995	SEWRPC Community Assistance Planning Report No. 92, 2nd Edition, <i>Sanitary Sewer Service Area for the City of Hartford and Environs, Washington County, Wisconsin</i> , June 1995
	Jackson	Jackson	September 10, 1997	SEWRPC Community Assistance Planning Report No. 124, 2nd Edition, <i>Sanitary Sewer Service Area for the Village of Jackson and Environs, Washington County, Wisconsin</i> , September 1997
	Kewaskum	Kewaskum	March 7, 1988	SEWRPC Community Assistance Planning Report No. 161, <i>Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin</i> , December 1988
	Newburg	Newburg	March 3, 1993	SEWRPC Community Assistance Planning Report No. 205, <i>Sanitary Sewer Service Area for the Village of Newburg, Ozaukee and Washington Counties, Wisconsin</i> , March 1993
	Slinger	Slinger	December 2, 1998	SEWRPC Community Assistance Planning Report No. 128, 3rd Edition, <i>Sanitary Sewer Service Area for the Village of Slinger and Environs, Washington County, Wisconsin</i> , December 1998
	West Bend	West Bend	June 17, 1998	SEWRPC Community Assistance Planning Report No. 35, 2nd Edition, <i>Sanitary Sewer Service Area for the City of West Bend and Environs, Washington County, Wisconsin</i> , June 1998
Waukesha	Beaver Lake	--	--	--
	Brookfield East Elm Grove Brookfield West	Brookfield East Brookfield West	December 4, 1991	SEWRPC Community Assistance Planning Report No. 109, <i>Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin</i> , November 1991
	Butler	Butler	March 1, 1984	SEWRPC Community Assistance Planning Report No. 99, <i>Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin</i> , February 1984

**Table 19 (continued)**

County	Name(s) of Initially Defined Sanitary Sewer Service Area(s)	Name(s) of Refined and Detailed Sanitary Sewer Service Area(s) <sup>a</sup>	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Waukesha (continued)	Delafield-Nashotah Nashotah-Nemahbin Lakes	Delafield-Nashotah	January 18, 1993	SEWRPC Community Assistance Planning Report No. 127, <i>Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin</i> , November 1992
	Dousman	Dousman	December 5, 1990	SEWRPC Community Assistance Planning Report No. 192, <i>Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin</i> , December 1990
	--	Eagle Spring Lake	December 2, 1985	<i>Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District</i> , December 1985
	Hartland	Hartland	June 17, 1985	SEWRPC Community Assistance Planning Report No. 93, <i>Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin</i> , April 1985
	Menomonee Falls --	Menomonee Falls Lannon	June 16, 1993	SEWRPC Community Assistance Planning Report No. 208, <i>Sanitary Sewer Service Areas for the Villages of Lannon and Menomonee Falls, Waukesha County, Wisconsin</i> , June 1993
	Mukwonago	Mukwonago	December 5, 1990	SEWRPC Community Assistance Planning Report No. 191, <i>Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin</i> , November 1990
	--	Mukwonago County Park	June 21, 1984	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago</i> , June 1984
	Muskego	Muskego	December 3, 1997	SEWRPC Community Assistance Planning Report No. 64, 3rd Edition, <i>Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin</i> , December 1997
	New Berlin	New Berlin	December 7, 1987	SEWRPC Community Assistance Planning Report No. 157, <i>Sanitary Sewer Service Area for the City of New Berlin, Waukesha County, Wisconsin</i> , November 1987
	North Lake	--	--	--
	North Prairie	--	--	--
	Oconomowoc-Lac La Belle Silver Lake	Oconomowoc	March 6, 1989	SEWRPC Community Assistance Planning Report No. 172, <i>Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin</i> , February 1989
	Oconomowoc Lake	--	--	--
	Okauchee Lake	--	--	--
	Pewaukee	Pewaukee	June 17, 1985	SEWRPC Community Assistance Planning Report No. 113, <i>Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin</i> , June 1985
	Pine Lake	--	--	--

**Table 19 (continued)**

County	Name(s) of Initially Defined Sanitary Sewer Service Area(s)	Name(s) of Refined and Detailed Sanitary Sewer Service Area(s) <sup>a</sup>	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Waukesha (continued)	--	Rainbow Springs	June 21, 1984	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago, June 1984</i>
	Sussex-Lannon	Sussex	September 7, 1994	<i>SEWRPC Community Assistance Planning Report No. 84, 2nd Edition, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, September 1994</i>
	Wales	--	--	--
	Waukesha	Waukesha	December 2, 1985	<i>SEWRPC Community Assistance Planning Report No. 100, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, June 1985</i>

<sup>a</sup>*This category also includes unrefined sanitary sewer service areas which were either not envisioned in the original 1979 regional water quality management plan or which were part of larger sanitary sewer service areas, but have since been delineated by amendments to the regional water quality management plan.*

modeling program to water utility managers, government officials, and other interested parties, were held throughout the Region in the autumn of 1998. The prospectus, along with a request for endorsement and funding as proposed therein, has been transmitted to all water utilities in the Region which use groundwater as a source of supply.

## **WATERSHED, FLOODLAND, AND STORMWATER MANAGEMENT PLANNING**

During 1998, Commission efforts in watershed, floodland, and stormwater management planning included cosponsoring a conference on integrated stormwater and floodland management for elected and appointed officials and other interested citizens from the Kinnickinnic, Menomonee, Milwaukee, and Root River watersheds and the Oak Creek watershed; initiating a study to revise regional rainfall-depth-duration-frequency data; updating the hydrologic and hydraulic analyses that were originally conducted under the Commission's Oak Creek watershed study; preparing floodland zoning maps for the portion of the Village of Pleasant Prairie within the Des Plaines River watershed; continuing work on a Des Plaines River watershed study; continuing work on a stormwater management plan for the Dousman Ditch and Underwood Creek subwatersheds; providing technical assistance to local governmental units in the development and implementation of floodland and stormwater manage-

ment plans, policies, and practices; providing hydrologic and hydraulic data, including flood-flow and flood-stage data, to consulting engineers and governmental agencies; and conducting a cooperative stream-gaging program.

### **Watershed Planning**

During 1998, the Commission staff updated the hydrologic and hydraulic analyses for the Oak Creek watershed that were originally conducted under the watershed study which was completed in 1986. The updated analyses utilized recent large-scale topographic mapping and resulted in the redefinition of floodplain limits along the main stem of Oak Creek, the North Branch of Oak Creek, the Mitchell Field Drainage Ditch, Southland Creek, a tributary to Southland Creek, and a tributary to the upper Oak Creek main stem. The revised hydraulic simulation model was also provided to the City of Oak Creek for use by the City's engineering consultant in the preparation of a stormwater management plan for the City.

Work continued during the year on the Des Plaines River watershed study. A set of 26 digital floodplain zoning maps was prepared by the Commission staff for the portion of the Village of Pleasant Prairie within the Des Plaines River watershed. Those maps cover the streams for which 100-year recurrence interval flood profiles were computed

## Map 16

## RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 1998

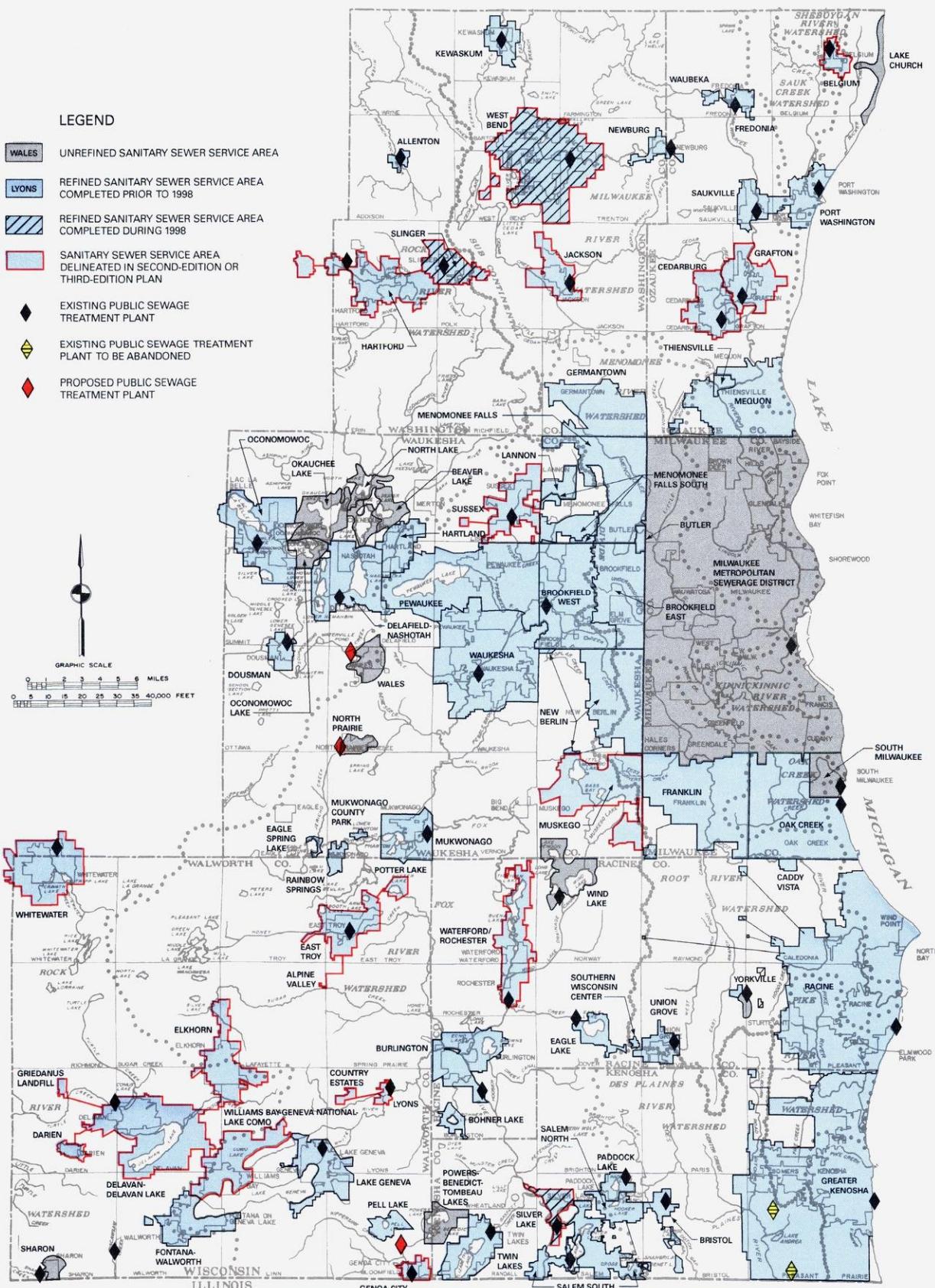


Table 20

**SANITARY SEWER  
EXTENSION REVIEWS: 1998**

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Kenosha .....	22	12	34
Milwaukee .....	38	38 <sup>a</sup>	76
Ozaukee .....	12	7	19
Racine .....	29	20	49
Walworth .....	27	21	48
Washington ....	20	12	32
Waukesha .....	64	49	113
Total	212	159	371

<sup>a</sup>The Commission has delegated the responsibility for the review of building sewer extensions within the City of Milwaukee to the City. During 1998, 376 reviews of building sewer extensions were conducted by the City.

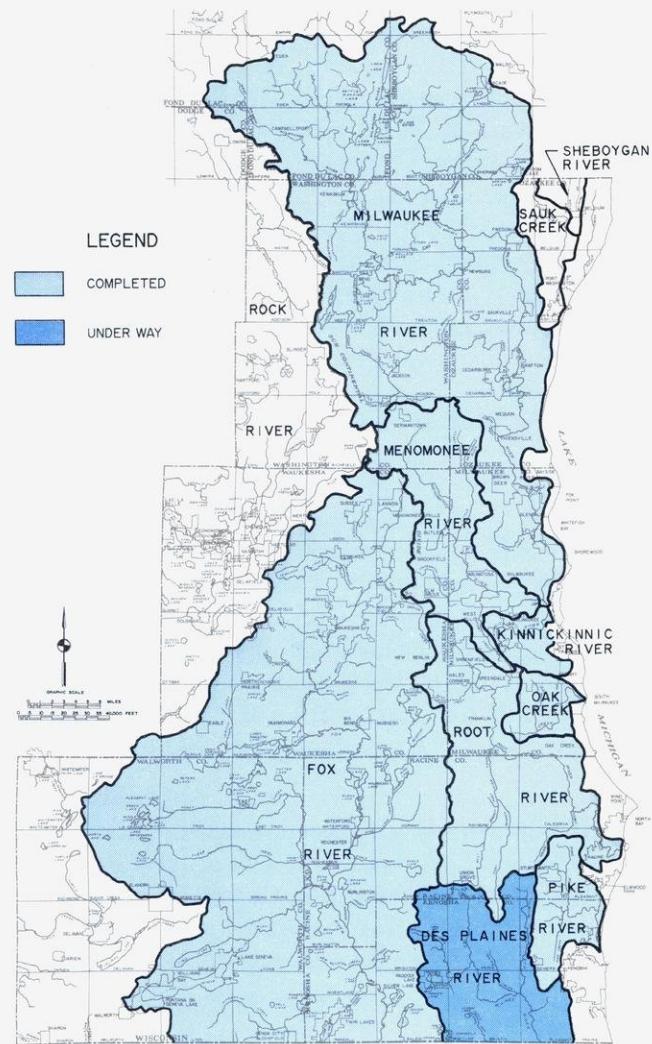
under the watershed study. The maps and supporting hydrologic and hydraulic analyses were reviewed and approved by the Wisconsin Department of Natural Resources and adopted by the Village. The Commission staff coordinated that review and approval process and presented the results of the zoning map study to the Village Plan Commission and the Village Board. In addition, an analysis of economic factors relative to the implementation of agricultural land conservation practices in the watershed was completed. That analysis is an important component of both the nonpoint source pollution control and stream restoration elements of the plan. A technical contractor for the Federal Emergency Management Agency was provided with the 100-year lake stage for Lake Shangrila as developed under the watershed study. The U. S. Army Corps of Engineers Hydrologic Engineering Center was provided with hydrologic modeling data that were to be used in a Corps of Engineers study of the effects of depressional wetlands on surface runoff. Map 17 indicates the coverage of the watershed studies conducted by the Commission through 1998.

**Stormwater and Floodland  
Management Planning**

During 1998, the Commission staff provided technical assistance to State and local governmental agencies in resolving stormwater and floodland management problems. Both stormwater drainage

Map 17

**SEWRPC WATERSHED STUDIES  
UNDER WAY OR COMPLETED: 1998**



and flood control deal with problems of disposal of runoff; but the distinction between these two concepts is not always clear. The Commission defines flood control as the prevention of damage from the overflow of streams and watercourses. In contrast, drainage is defined by the Commission as the disposal of excess stormwater on the land surface before such water has entered defined stream channels. While the Commission continues to be extensively involved in flood control planning, its work efforts in recent years have been increasingly directed toward stormwater management planning.

In 1998, the Commission undertook a number of stormwater and floodland management planning activities at the request of local governments. The following are examples of such work:

- The Commission and the Southeastern Wisconsin Municipal Executives, along with the Milwaukee Metropolitan Sewerage District, the Southeast Area Land and Water Conservation Association, the University of Wisconsin-Extension, the Wisconsin Department of Natural Resources, and Marquette University, planned and sponsored a conference on integrated stormwater and floodland management. The conference attendees included elected and appointed officials and other interested citizens, primarily from the Kinnickinnic, Menomonee, Milwaukee, and Root River watersheds and the Oak Creek watershed. As a follow-up to the conference, watershed steering committees consisting of chief elected municipal officials were established and the Commission initiated the process of providing the staff resources needed to facilitate the work of the committees and to provide technical guidance to the committees.
- At the request of the City of Milwaukee, the Commission staff performed an analysis to evaluate the hydraulic effects of a proposed replacement for the S. Chase Avenue bridge over the Kinnickinnic River.
- At the request of Racine County, the Commission staff reviewed the floodplain aspects of proposed activities along Spring Brook in the City of Burlington; Eagle Creek in the Towns of Dover and Rochester; Waubeesee Lake, the Goose Lake Branch Canal, and the Muskego Canal in the Town of Norway; the Pike River in the Town of Mt. Pleasant; and the Fox River and Honey Creek in the Town of Waterford.
- At the request of the Village of Grafton, the Commission staff reviewed and provided recommendations for refinement of a floodplain study for a portion of Ulao Creek.
- At the request of the Village of Jackson, the Commission staff prepared hydraulic analyses of a 1.1-mile-long reach of Cedar Creek in the

vicinity of the Cedar Creek business park near STH 60 and USH 45. The analyses were required by the Federal Emergency Management Agency in order to account for physical changes that had altered the flood profile and the floodplain boundary of the subject reach since the time of the preparation of the Federal flood insurance study for the reach.

- The Commission staff continued preparation of digital shoreland and floodplain maps for Washington County, as requested by the County.
- At the request of Waukesha County, the Commission staff reviewed hydrologic and hydraulic analyses performed to delineate floodplain boundaries along Pebble Creek and the Pebble Brook Tributary in the City of Waukesha and along Brandy Brook in the Town of Delafield.
- The Commission staff completed a Stormwater Drainage Plan for the Imperial and Honey Creek Estates Subdivisions in the City of Brookfield.
- The Commission staff provided technical assistance and guidance to two local task forces that were formed following the extreme storm of August 6, 1998. One task force was formed by the City of Brookfield to address flooding and stormwater drainage problems throughout the City and the other was formed jointly by the City of Brookfield and the Village of Elm Grove to address problems in the Underwood Creek subwatershed. The Commission staff made presentations at two public informational seminars in the Village of Elm Grove, three Underwood Creek Task Force meetings, and two City of Brookfield task force meetings. The deliberations of the task forces occurred concurrently with the later stages of the preparation by the Commission of the stormwater management plan for the Dousman Ditch and Underwood Creek subwatersheds. Thus, information developed under that planning effort was made available to the task forces and suggestions by the Underwood Creek Task Force were evaluated within the context of the plan.

- At the request of the Village of Menomonee Falls, the Commission staff performed hydrologic analyses for the estimation of flood flows in the Lilly Creek subwatershed resulting from the major storm of June 20 and June 21, 1997. The hydrologic model used for the analysis was developed by the Commission staff for a Lilly Creek subwatershed stormwater management and flood control plan completed by the Commission in 1993.
- The Commission staff surveyed the elevations of high-water marks from the flood of August 6, 1998, at 18 locations along the Menomonee River, Dousman Ditch, Underwood Creek, the North Branch of Underwood Creek, Grantosa Creek, Lincoln Creek, and Southbranch Creek in the Cities of Brookfield, Milwaukee, and Wauwatosa and the Villages of Brown Deer and Elm Grove.
- Commission staff served on the steering committee for the Milwaukee Metropolitan Sewerage District's project relating to the removal of the Menomonee River drop structure near N. 43rd Street and on the District's watercourse system plan policy committee. The Commission staff also worked in close coordination with the District and its consultants who were preparing an updated watercourse system plan.

The Commission staff routinely provides hydrologic and hydraulic data to Federal, State, and local agencies and units of government and to private consultants for use in the design of bridges and culverts along streams in the Region, in the facilities design phase of projects recommended under Commission plans, and in other water resource and environmental projects. During 1998, data were provided for the following: 1) Pike Creek in the City of Kenosha; 2) Unnamed Tributary No. 4 to Jerome Creek in the Village of Pleasant Prairie; 3) Center Creek in the Town of Bristol; 4) the Pike River and Pike Creek in the Town of Somers; 5) the Kinnickinnic, Menomonee, Little Menomonee, Milwaukee, and Root Rivers, Beaver, Brown Deer Park, Dretzka Park, Fish, Grantosa, Hale, Honey, Indian, Lincoln, Lyons, Oak, the North Branch of Oak, Southbranch, Underwood, the South Branch of Underwood, Villa Mann, and Woods Creeks in Milwaukee and Waukesha Counties; 6) Chicory and Waxdale Creeks in the Town of Mt. Pleasant; 7) the

Rubicon River and Pike Lake in the Town of Hartford; 8) Deer Creek in the City of Brookfield; 9) the S. 130th Street Tributary to the Root River in the City of New Berlin; and 10) Sussex and Willow Springs Creeks in the Village of Sussex.

## **Floodplain Data Availability**

The availability of flood hazard data within the Region is shown on Map 18. The Commission has completed comprehensive watershed plans for the Fox (Illinois), Kinnickinnic, Menomonee, Milwaukee, Pike, and Root River watersheds, and for the Oak Creek watershed, and has substantially completed the study for the Des Plaines River watershed, resulting in definitive flood hazard data—in the form of peak flood flows and stages associated with the 100-year recurrence interval floods—for about 724 miles of stream channel, not including stream channels in the Milwaukee River watershed lying outside the Region in Sheboygan and Fond du Lac Counties. In addition, special Commission floodland management studies have resulted in the development of definitive flood hazard data for a total of about 78 additional miles of stream channel. Large-scale topographic maps displaying the location and extent of the 100-year recurrence interval flood hazard areas and prepared to Commission specifications are available for the riverine areas along about 627 miles of stream channel. This represents an increase of about 5 percent over the 1997 total.

## **Flood Insurance Rate Studies**

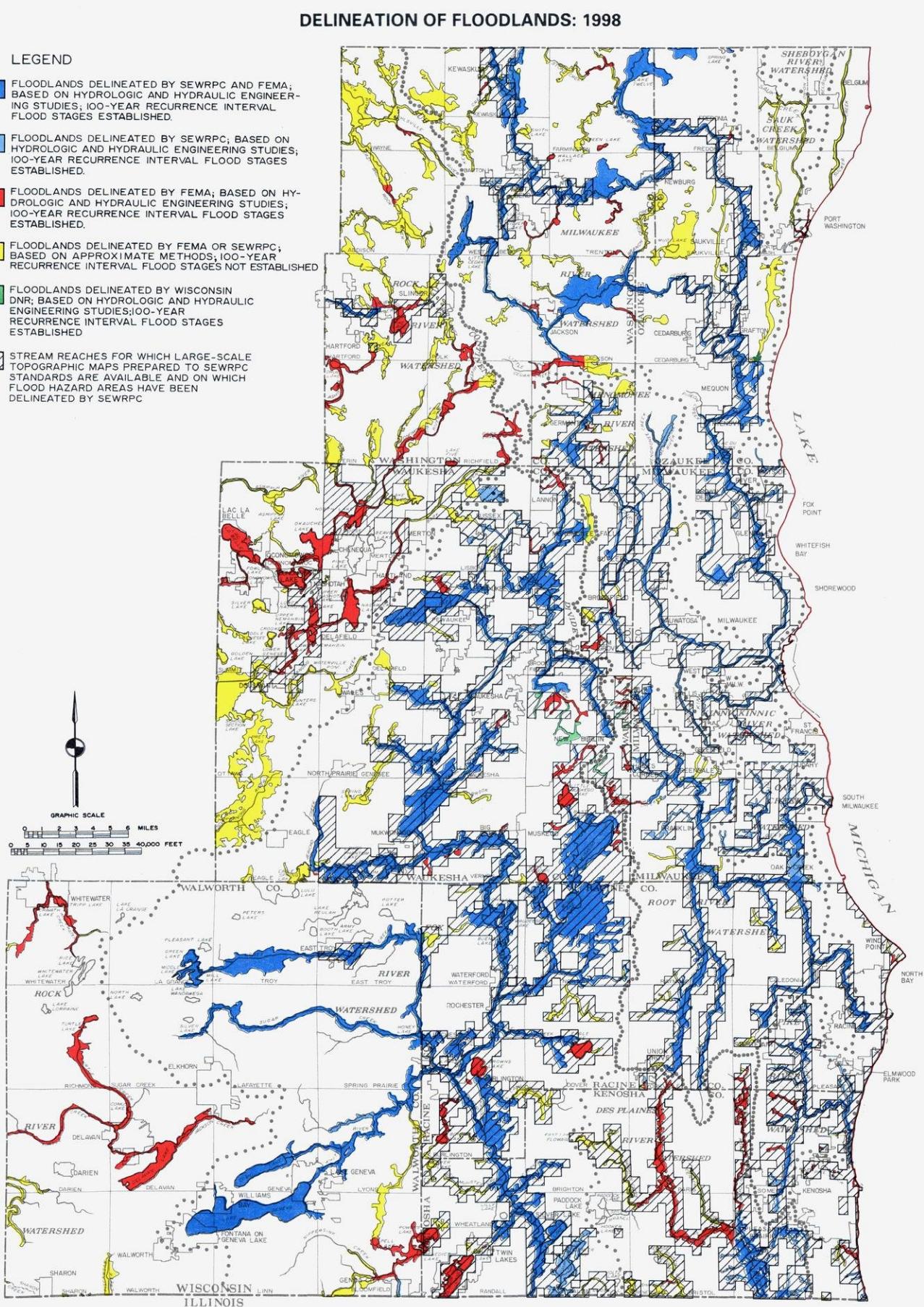
Under the National Flood Insurance Act of 1968, the Federal Emergency Management Agency was given authority to conduct studies to determine the location and extent of floodlands and the monetary damage risks related to the insurance of urban development in floodland areas. The Agency is proceeding with the conduct and periodic updating of such studies on a community-by-community basis throughout the United States. While the Commission has not directly contracted with the Agency for the conduct of such studies, the Commission does cooperate with the engineering firms involved in the conduct of such studies under contract to the Federal government, particularly in the provision of basic flood hazard data already developed by the Commission in a more comprehensive and cost-effective manner through

Map 18

DELINEMENT OF FLOODLANDS: 1998

LEGEND

- FLOODLANDS DELINEATED BY SEWRPC AND FEMA; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
- FLOODLANDS DELINEATED BY SEWRPC; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
- FLOODLANDS DELINEATED BY FEMA; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
- FLOODLANDS DELINEATED BY FEMA OR SEWRPC; BASED ON APPROXIMATE METHODS; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES NOT ESTABLISHED.
- FLOODLANDS DELINEATED BY WISCONSIN DNR; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
- / STREAM REACHES FOR WHICH LARGE-SCALE TOPOGRAPHIC MAPS PREPARED TO SEWRPC STANDARDS ARE AVAILABLE AND ON WHICH FLOOD HAZARD AREAS HAVE BEEN DELINEATED BY SEWRPC.



its series of watershed planning programs and stormwater management planning studies. The Commission provides to the contractors all of the detailed hydrologic and hydraulic data developed under the Commission watershed studies for the various streams in the Region and shares with the contractors the results of the analytical phases of such studies. Development by the Commission of such data makes it possible for the Federal Emergency Management Agency to carry out the flood insurance rate studies more efficiently and at considerably less cost than if such data had to be developed on a community-by-community basis. Commission participation in and review of the study findings, moreover, assures consistency between studies for communities located along a given river or stream.

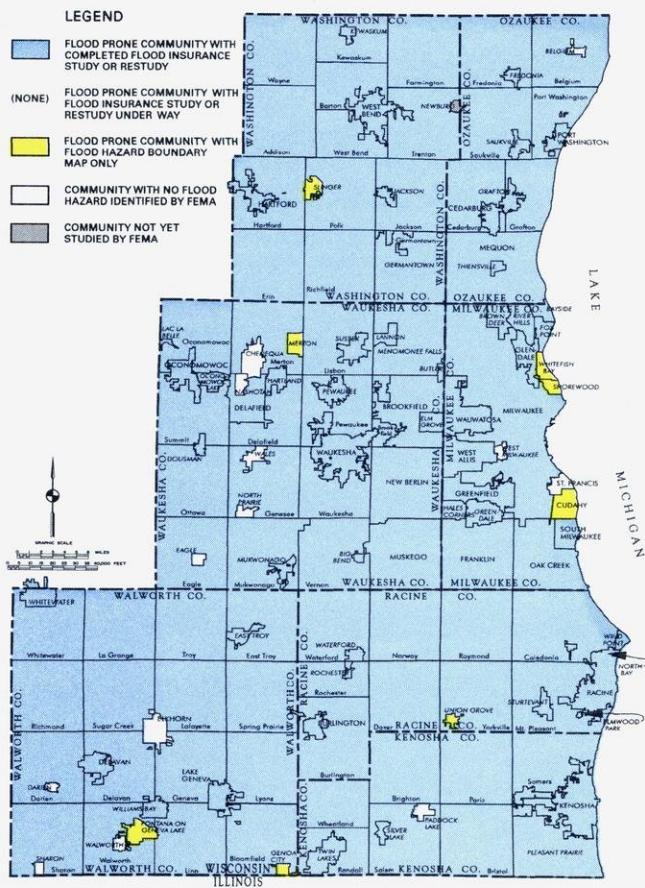
Federal flood insurance studies are carried out individually for incorporated cities and villages and for the unincorporated areas of counties. The status of flood insurance rate studies in the Region at the end of 1998 is shown on Map 19.

As shown on Map 19, as of 1998, there were 24 cities or villages in the Region for which the Federal Emergency Management Agency had not conducted a flood insurance rate study. In eight cases, the Agency has instead published a "flood hazard boundary map," which shows the approximate location of floodlands without the support of detailed engineering studies. The remaining 16 cities or villages in the Region are not considered by the Agency to contain flood hazard areas. In one of those 16, the Village of Newburg in Washington and Ozaukee Counties, a flood hazard area was identified and delineated by the Commission in the Milwaukee River watershed study. Although the Agency has not yet undertaken a flood insurance study for the Village of Newburg, the Village has enacted appropriate floodland zoning regulations.

Besides providing available data from the Commission files to the contractors conducting such studies for the Federal Emergency Management Agency, the Commission staff helps to delineate floodways and attends meetings with local officials and citizens to discuss the results of flood insurance rate studies. Under its community assistance program, the Commission also assists local communities in enacting sound floodland regulations as required for participation in the Federal Flood Insurance Program.

Map 19

#### STATUS OF FLOOD INSURANCE STUDIES: 1998



#### Stream-Gaging Program

Streamflow data are essential to the sound management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous-recording streamflow gages were in operation within the Region. Since that time, the Commission has been instrumental in establishing, through cooperative, voluntary, intergovernmental action, a more adequate streamflow-gaging program (see Map 20). The U. S. Geological Survey assists in the funding of the stream gages, operates the gages, and annually publishes the data collected under the streamflow-monitoring program. In 1998, there were 28 continuous-recording streamflow gages in operation on stream reaches entering,

Map 20

## LOCATION OF U. S. GEOLOGICAL SURVEY STREAM-GAGING STATIONS: 1998

## LEGEND

1▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY COOPERATIVELY MAINTAINED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (2)

2▲ CONTINUOUS STAGE RECORDER GAGE- COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY WAUKESHA COUNTY BOARD; MILWAUKEE METROPOLITAN SEWERAGE DISTRICT; KENOSHA WATER UTILITIES; CITY OF RACINE AND RACINE WATER AND WASTEWATER UTILITIES; AND SEWRPC (14)

3▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE U.S. ARMY CORPS OF ENGINEERS AND THE WALWORTH COUNTY METROPOLITAN SEWERAGE DISTRICT (1)

4▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (1)

5▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE FONTANA-WALWORTH WATER POLLUTION CONTROL COMMISSION (1)

6▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE CITY OF BROOKFIELD (1)

7▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE WALWORTH COUNTY METROPOLITAN SEWERAGE DISTRICT (1)

8▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE CITY OF MUSKEGO (1)

9▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE TOWNS OF DELAVAN (3)

10▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE GENEVA LAKE ENVIRONMENTAL AGENCY (3)

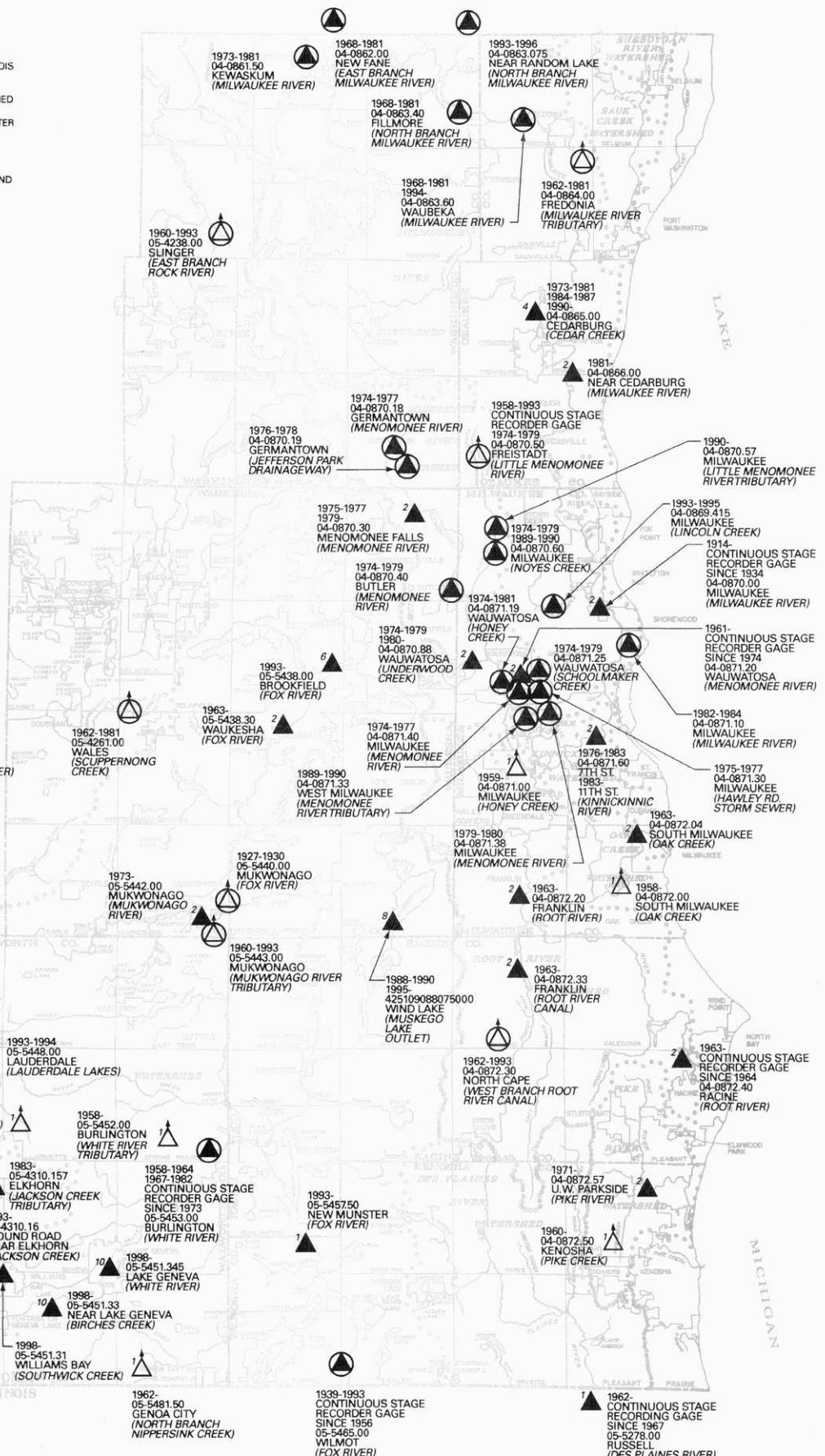
▲ CREST STAGE GAGE- COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF TRANSPORTATION (7)

▲ CREST STAGE GAGE- NO LONGER IN OPERATION (9)

1962 PERIOD OF RECORD

05-4261 U.S. GEOLOGICAL SURVEY CAGING STATION NUMBER ASSIGNED, IN DOWNSTREAM ORDER, TO ALL STATIONS REGARDLESS OF WHETHER THEY ARE CONTINUOUS OR PARTIAL RECORD GAGES. A "4" PREFIX INDICATES THAT THE GAGE IS ON A STREAM LOCATED EAST OF THE SUBCONTINENTAL DIVIDE, WHEREAS A "5" PREFIX DENOTES A GAGING STATION LOCATED WEST OF THE SUBCONTINENTAL DIVIDE

WALES NAME ASSIGNED TO GAGING STATION BY THE U.S. GEOLOGICAL SURVEY



lying within, or originating within the Region, three more than in 1997. Of the 28 gages, 14 were financially supported by the Waukesha County Board of Supervisors, the Milwaukee Metropolitan Sewerage District, the City of Racine and the Racine Water and Wastewater Utilities, and the Kenosha Water Utility under the Commission's cooperative program. In addition, one gage was supported by the Fontana-Walworth Water Pollution Control Commission, one gage was supported by the City of Brookfield, one gage was supported by the Wisconsin Department of Natural Resources, one gage was supported by the U. S. Army Corps of Engineers and the Walworth County Metropolitan Sewerage District, one gage was supported by the Walworth County Metropolitan Sewerage District, one gage was supported by the City of Muskego, three gages were supported by the Town of Delavan, three gages were supported by the Geneva Lake Environmental Agency, and two gages were supported by the Illinois Department of Transportation.

## COASTAL MANAGEMENT PLANNING

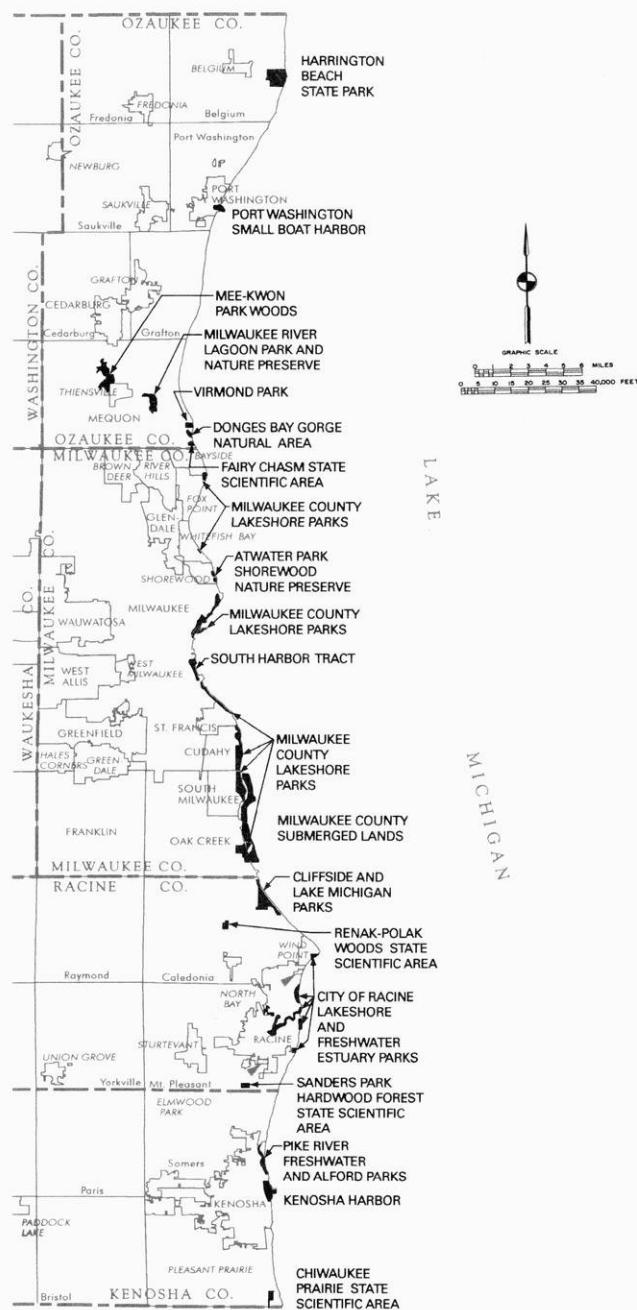
During 1998, the Commission continued to provide assistance to the Wisconsin Department of Administration in the conduct of the Wisconsin Coastal Management Program. This program is intended to coordinate governmental activities in the management of the Lake Michigan and Lake Superior coastal zones of the State. The program is being carried out by the State pursuant to the Federal Coastal Zone Management Act of 1972 through the Wisconsin Coastal Management Council.

Under an agreement with the Wisconsin Department of Administration, Bureau of Energy and Coastal Policy Analysis, the Commission in 1975 formed and staffed a Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin. This Committee represents a variety of interests, including local elected and appointed officials, the university community, and recreational, navigational, and environmental interest groups. The primary function of this Committee is the review of State coastal studies and reports as they are proposed and produced.

One of the continuing functions of the Commission under the coastal management program is the designation of special coastal areas. In 1998, no additional areas in the Region were formally designated as special coastal areas. The existing Lake Michigan shoreline special coastal areas are shown

Map 21

### DESIGNATED COASTAL AREAS IN SOUTHEASTERN WISCONSIN



on Map 21. These special areas have natural, scientific, economic, cultural, or historical importance. Designation by the Wisconsin Coastal Management Council as a special coastal area ensures eligibility for financial or technical assistance for special coastal area management activities through the Wisconsin Coastal Management Program and focuses attention on a valuable coastal resource.



# ECONOMIC DEVELOPMENT ASSISTANCE DIVISION

## DIVISION FUNCTIONS

The Economic Development Assistance Division assists local units of government in the Region in pursuing economic development activities and promotes the coordination of local economic development plans and programs. The Division provides four basic types of services: local economic development program planning; economic development data and information provision; economic development project planning services; and Federal and State grant-in-aid procurement and public administration assistance.

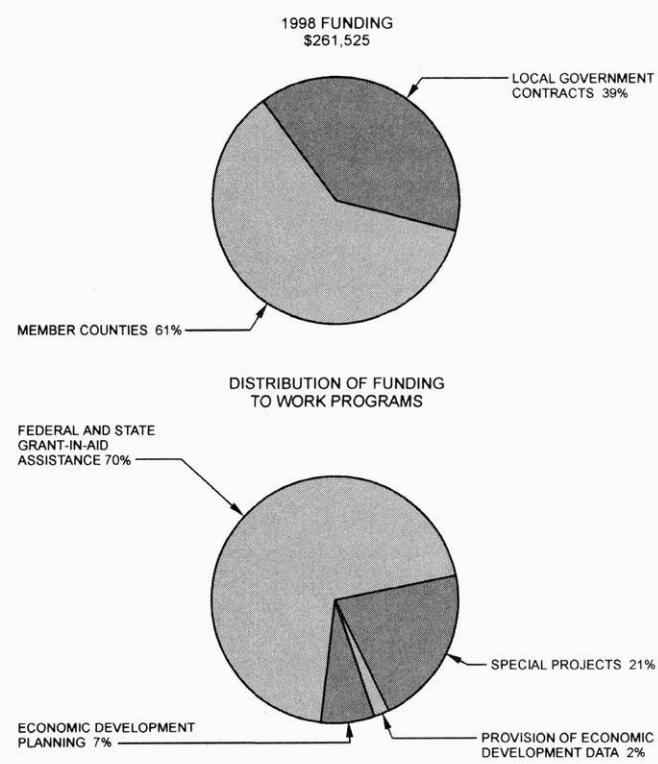
## LOCAL ECONOMIC DEVELOPMENT PROGRAM PLANNING

Communities within the Southeastern Wisconsin Region have identified a need for ongoing local economic development activities. This need has been evidenced by a variety of local and regional economic development problems, including the following: 1) structural changes in the regional and national economies, as evidenced by a declining proportion of manufacturing employment and an increasing proportion of retail trade and service employment, 2) the growing importance to employers of international trade and government sales, 3) the availability of workers for the full range of employment opportunities in the Region, and 4) decisions by local businesses and industries to relocate to, or expand in, areas outside a community within the Region.

There has been an increasing interest in carefully planning local economic development programs in order to contain the rising costs of promoting economic development. In order to attract new and retain existing employers, some communities have chosen to purchase land for industrial parks and to provide the necessary infrastructure for development. Examples of the latter policy include the provision of roadway, sanitary sewer, water supply, and stormwater drainage improvements. Other communities have improved central commercial

business districts through street resurfacing; improvements to curbs and gutters, sidewalks, public parking lots, and utilities; and the provision of such streetscape amenities as trees and curbside benches. Because the costs of these improvements have continued to escalate, however, and because business establishments have become less attached to existing geographic locations, many communities have begun to reevaluate previous decisions to promote economic development. While some have decided not to promote the growth of existing business and industry or the location of new firms within their boundaries, others have decided to continue to pursue a range of local economic development measures. These include identifying the types of economic development compatible with

**Figure 41**  
**ECONOMIC DEVELOPMENT ASSISTANCE DIVISION**



overall community development goals and objectives and promoting such compatible economic development activities. In response to the increased interest in furthering economic development at the local level, the Commission has developed a staff capability to assist public agencies and private organizations in such efforts.

During 1998, the Commission engaged in the following local economic development program planning efforts:

- Provision of the demographic and socioeconomic data necessary to enable preparation of county overall economic development program plan annual reports for Kenosha and Racine Counties. These reports serve to maintain county eligibility for Federal public works grants and revolving loan fund programs to further economic development.
- Participation in the activities of the Regional Economic Partnership, an economic development initiative of the seven counties in the Southeastern Wisconsin Region, the City of Milwaukee, the Wisconsin Electric Power Company, the Metropolitan Milwaukee Association of Commerce, and the Commission. Activities undertaken by the Partnership in 1998 included maintaining a site on the World Wide Web listing all of the Region's major industrial parks and linking the site to the home pages of Partnership members; implementing a marketing program to attract businesses to the Region from locations outside Wisconsin; and conducting periodic educational forums for providing economic development professionals in the Region with information on important economic development issues.

## **ECONOMIC DEVELOPMENT DATA AND INFORMATION PROVISION**

Considerable Commission staff effort is directed at responding to requests for economic development-related data. This function also includes the provision of short-term technical assistance to local units of government, public agencies, and local development corporations in the analysis of economic development data. During 1998, the Division prepared written responses from the Commission files to 71 requests for economic development-

related data. In addition, the Division responded to approximately 360 requests made by telephone and through personal visits to the Commission offices. These requests came from local units of government, Federal and State agencies, local development organizations, businesses, and individual citizens. The following are some examples of Division activity in performing this function during 1998:

- Provision of Wisconsin Department of Workforce Development data identifying the number of industries and employees by industry type within communities in Southeastern Wisconsin. In addition, Wisconsin Department of Administration, U. S. Bureau of the Census, U. S. Bureau of Economic Analysis, U. S. Bureau of Labor Statistics, and Southeastern Wisconsin Regional Planning Commission demographic and socioeconomic data were provided upon request. These types of data were provided to various units and agencies of government, nonprofit organizations, and businesses in Southeastern Wisconsin.
- Provision of assistance to local community staff and representatives of businesses interested in locating or expanding in communities in Southeastern Wisconsin, utilizing information on State and Federal business loan and infrastructure development programs.

## **ECONOMIC DEVELOPMENT PROJECT PLANNING SERVICES**

- Economic development project planning involves conducting detailed economic development planning studies for local units of government, development corporations, and other organizations concerned with economic development and seeking Commission assistance. During 1998, the following representative project planning services were provided:
- Work was completed on the preparation of newly updated economic profiles for 29 cities, villages, and towns within Ozaukee, Racine, Walworth, and Washington Counties, as well as of a new profile for the Town of Yorkville in Racine County. These profiles are part of a series of economic profiles originally prepared in 1984 and updated in 1988, 1990, and 1994 with the assistance of the Wisconsin Electric Power

Company. The series also includes economic profiles for 32 cities, villages, and towns within Kenosha, Milwaukee, and Waukesha Counties. Profiles not updated in 1998 will be updated in 1999. The communities for which profiles were updated in 1998 are shown on Map 22.

- Assistance was provided to the Racine County Economic Development Corporation with the conduct of, and data analysis for, a countywide business retention survey.
- Assistance was provided to the Burlington Area Chamber of Commerce in the tabulation of results from a 1998 Burlington-area wage survey.
- Continued assistance was provided to Kenosha County in the preparation of a Federal Emergency Management Agency-Flood Mitigation Assistance plan for the 100-year recurrence interval floodplain of the Fox River in the County.
- Assistance was provided to the Southeastern Wisconsin Housing Corporation in the preparation of an environmental assessment for a U. S. Department of Housing and Urban Development-Community Development Block Grant award that would assist with the financing of a new subdivision for low- and moderate-income residents in the City of Delavan.'

#### **FEDERAL AND STATE GRANT-IN-AID PROCUREMENT AND PUBLIC ADMINISTRATION ASSISTANCE**

The Commission staff provides assistance to local units of government in the preparation of Federal and State grant-in-aid applications and, after issuance of a grant award, in the administration of the related programs. The Commission, upon request, also assists in the administration of local revolving loan fund programs. The grant applications seek State or Federal funding to provide below-market-interest-rate loans to businesses or grants to local units of government in an effort to expand employment opportunities and to increase the community tax base, to provide for the rehabilitation of existing housing for low- and moderate-income persons, to improve deficient public facilities serving low- and moderate-income persons, and to assist communities in recovering from natural disasters.

#### **Grant Procurement Assistance**

In 1998, the Commission assisted local units of government and economic development-related agencies in obtaining the following grant awards:

- The Town of Mt. Pleasant received approval for a Wisconsin Community Development Block Grant-Public Facilities for Economic Development application that was prepared with the assistance of Commission staff. The resulting \$430,000 grant award will be used by the Town to finance roadway improvements attendant to the development of a Continental Properties Company, Inc., mixed-use business park in the Town.
- The Village of Sturtevant received approval for a Wisconsin Community Development Block Grant-Public Facilities for Economic Development application that was prepared with the assistance of Commission staff. The resulting \$510,000 grant award will be used by the Village to finance the construction of a new water tower that will serve the new Golden Books Family Entertainment, Inc., manufacturing facility in the Village.
- Racine County received approval for a Wisconsin Community Development Block Grant-Economic Development application that was prepared with the assistance of Commission staff. The resulting \$1.0 million grant award will be used to provide a low-interest loan to assist Golden Books Family Entertainment, Inc., with the purchase of new printing equipment for the firm's manufacturing facility in the Village of Sturtevant.
- The City of Racine received approval for a Wisconsin Department of Transportation-Transportation Facilities Economic Assistance and Development Program (TEA) application that was prepared with the assistance of Commission staff. The resulting \$220,000 grant award will be used to finance the construction of a railway spur to serve the Norske Skog Flooring (USA), Inc., manufacturing facility in the City.
- The City of Racine and the Racine County Economic Development Corporation received approval for a U. S. Economic Development Administration-Title IX Revolving Loan Fund application that was prepared with the assistance of Commission staff. The resulting \$600,000 grant award will be used to capitalize an

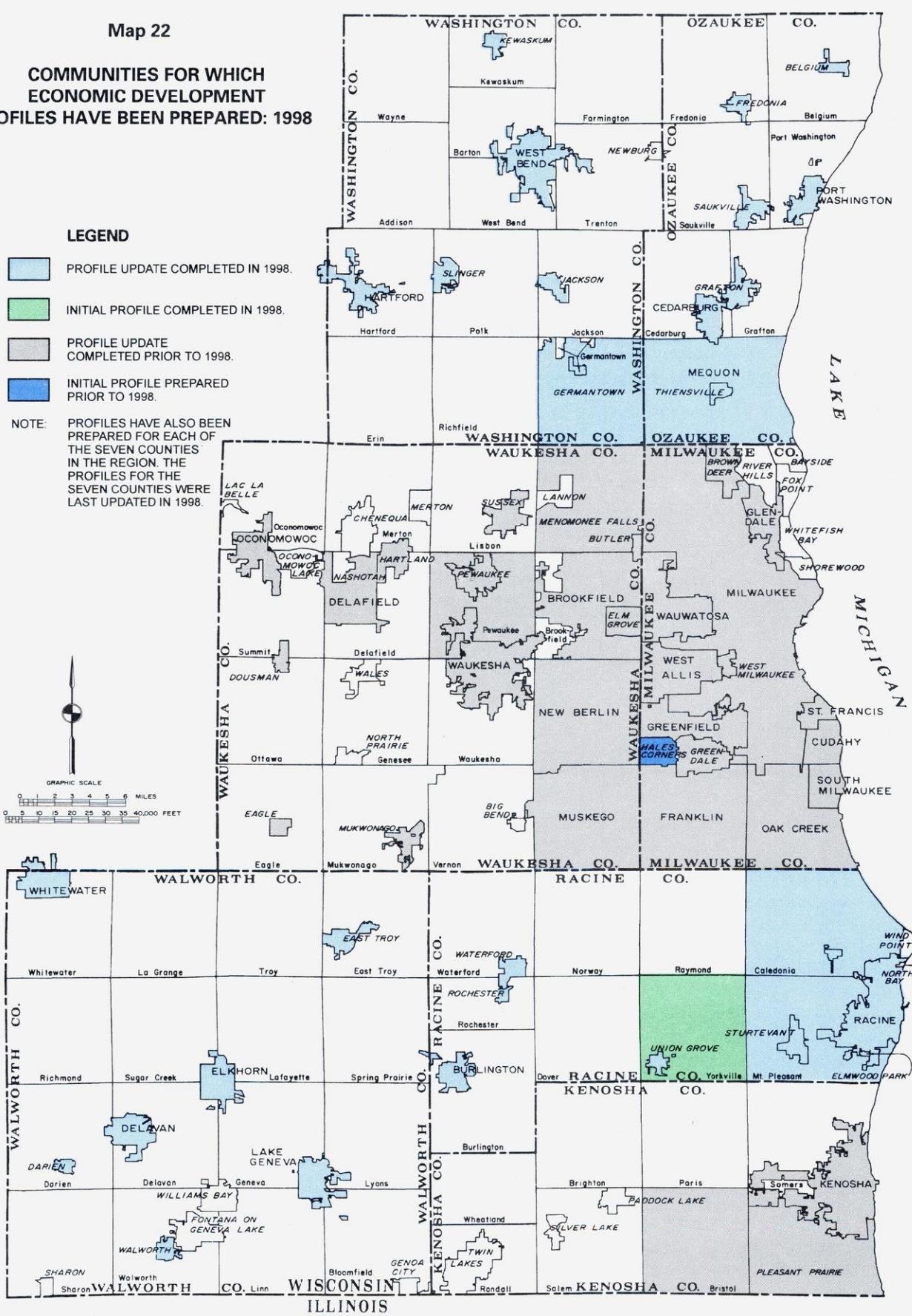
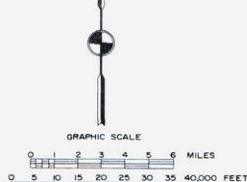
Map 22

COMMUNITIES FOR WHICH  
ECONOMIC DEVELOPMENT  
PROFILES HAVE BEEN PREPARED: 1998

LEGEND

- PROFILE UPDATE COMPLETED IN 1998.
- INITIAL PROFILE COMPLETED IN 1998.
- PROFILE UPDATE COMPLETED PRIOR TO 1998.
- INITIAL PROFILE PREPARED PRIOR TO 1998.

NOTE: PROFILES HAVE ALSO BEEN PREPARED FOR EACH OF THE SEVEN COUNTIES IN THE REGION. THE PROFILES FOR THE SEVEN COUNTIES WERE LAST UPDATED IN 1998.



industrial building recycling loan fund program in the City.

- The City of Cedarburg received approval for a Wisconsin Community Development Block Grant-Economic Development application that was prepared with the assistance of Commission staff. The resulting \$746,000 grant award will be used to provide a low-interest loan to assist Norstar Aluminum Molds, Inc., with the purchase of machinery and equipment from the Kelch Corporation.
- Kenosha County received approval for a Wisconsin Community Development Block Grant-Housing and Neighborhood Revitalization application that was prepared with the assistance of Commission staff. The resulting \$496,800 grant award will be used to finance the acquisition and removal of five residential structures that are located in the 100-year recurrence interval floodplain of the Fox River, as well as to finance a program to assist low- and moderate-income renters in purchasing a home.
- The Village of Menomonee Falls received approval for a Federal Emergency Management Agency-Hazard Mitigation Grant Program application that was prepared with the assistance of Commission staff. The resulting \$1,680,930 grant award will be used to finance the acquisition and removal of 10 residential dwellings that are located in the 100-year recurrence interval floodplain of Lilly Creek.
- The Village of Menomonee Falls received approval for two Waukesha County Community Development Block Grant-Disaster Recovery Initiative applications that were prepared with the assistance of Commission staff. The resulting grant awards, totaling \$69,523, will be used to assist with the acquisition and removal of residential dwellings that are located in the 100-year recurrence interval floodplain of Lilly Creek.
- The Village of Sturtevant received approval for a Wisconsin Department of Transportation-Congestion Mitigation and Air Quality Program (CMAQ) application that was prepared with the assistance of Commission staff. The resulting \$812,000 grant award will be used to assist with the relocation of the Canadian Pacific Railway/Amtrak depot that is owned by the Village and serves it and the greater Racine area.
- The Commission staff completed work on the following grant applications during 1998 for submission to their respective funding agencies for consideration in 1999:
  - A Kenosha County application to the Wisconsin Community Development Block Grant-Housing and Neighborhood Revitalization Program for continued financing of the existing program to acquire residential structures located in the 100-year recurrence interval floodplain of the Fox River.
  - A Village of Menomonee Falls application to the Wisconsin Community Development Block Grant-Disaster Recovery Initiative Program for financial assistance with the acquisition and removal of residential dwellings that are located in the 100-year recurrence interval floodplain of Lilly Creek.

## Public Administration

In addition to helping local communities apply for available Federal and State funds, the Commission will, upon request, contract with successful applicants for the administration of the grant awards and for the administration of revolving loan funds financed with repayments on loans to businesses and homeowners. The Commission will also contract with local communities, upon request, to administer locally financed revolving loan fund programs. A number of activities are involved in administering these programs, including ensuring that the terms of each grant award or funding program are met. During 1998, the Commission provided contract services to administer the following grant awards that were made in 1997:

- A Wisconsin Community Development Block Grant-Public Facilities for Economic Development grant award totaling \$1.0 million and a Wisconsin Department of Transportation-Transportation Facilities Economic Assistance and Development Program (TEA) grant award totaling \$1.0 million. These grant awards were obtained by the Village of Menomonee Falls with the assistance of Commission staff to finance roadway improvements in the Village and the City of Milwaukee on behalf of Strong Capital Management, Inc., and M & I Data Services, a division of Marshall & Ilsley Corporation.
- A Wisconsin Community Development Block Grant-Economic Development grant award totaling \$506,000 obtained by Kenosha County with

the assistance of Commission staff. This grant award is being used to provide a low-interest loan to assist the Cherry Corporation with the purchase of new machinery and equipment for the firm's manufacturing facility in the Village of Pleasant Prairie.

- A Wisconsin Community Development Block Grant-Public Facilities for Economic Development grant award totaling \$181,000 obtained by Kenosha County with the assistance of Commission staff. This grant award is being used to finance roadway improvements attendant to the expansion of the Cherry Corporation in the Village of Pleasant Prairie.
- A Federal Emergency Management Agency-Flood Mitigation Assistance grant award totaling \$4,500 obtained by the Kenosha County Housing Authority with the assistance of Commission staff. This grant award is being used to prepare a flood mitigation plan for the 100-year recurrence interval floodplain of the Fox River in Kenosha County, as noted above.
- In addition, the Commission provided contract services to administer the following grant awards that were made in 1998:
- A Wisconsin Community Development Block Grant-Public Facilities for Economic Development grant award totaling \$430,000 obtained by the Town of Mt. Pleasant with the assistance of Commission staff. This grant award will be used to finance roadway improvements attendant to the development of a Continental Properties Company, Inc., mixed-use business park in the Town.
- A Wisconsin Community Development Block Grant-Public Facilities for Economic Development grant award totaling \$510,000 obtained by the Village of Sturtevant with the assistance of Commission staff. This grant award will be used to finance the construction of a new water tower that will serve the new Golden Books Family Entertainment, Inc., manufacturing facility in the Village.
- A Wisconsin Community Development Block Grant-Economic Development grant award totaling \$1.0 million obtained by Racine County with the assistance of Commission staff. This

grant award will be used to provide a low-interest loan to assist Golden Books Family Entertainment, Inc., with the purchase of new printing equipment for the firm's manufacturing facility in the Village of Sturtevant.

- A Wisconsin Community Development Block Grant-Economic Development grant award totaling \$746,000 obtained by the City of Cedarburg with the assistance of Commission staff. This grant award will be used to provide a low-interest loan to assist Norstar Aluminum Molds, Inc., with the purchase of new machinery and equipment for the firm's manufacturing facility in the City.
- A Wisconsin Community Development Block Grant-Economic Development grant award totaling \$406,000 obtained by Ozaukee County. This grant award will be used to provide a low-interest loan to assist Kapco, Inc., with the purchase of new machinery and equipment for the firm's manufacturing facility in the Village of Grafton.
- A Wisconsin Community Development Block Grant-Housing and Neighborhood Revitalization grant award totaling \$496,800 obtained by Kenosha County with the assistance of Commission staff. This grant award will be used to finance the acquisition and removal of five residential structures that are located in the 100-year recurrence interval floodplain of the Fox River, as well as to finance a program to assist low- and moderate-income renters in purchasing a home.
- A Federal Emergency Management Agency-Hazard Mitigation Grant Program grant award totaling \$1,680,930 obtained by the Village of Menomonee Falls with the assistance of Commission staff. This grant award will be used to finance the acquisition and removal of 10 residential dwellings that are located in the 100-year recurrence interval floodplain of Lilly Creek.
- Two Waukesha County Community Development Block Grant-Disaster Recovery Initiative grant awards totaling \$69,523 obtained by the Village of Menomonee Falls with the assistance of Commission staff. These grant awards will be used to assist with the acquisition and removal of residential dwellings that are located in the 100-year recurrence interval floodplain of Lilly Creek.

Finally, the Commission provided technical assistance in the utilization and administration of revolving loan fund programs established through repayments on Wisconsin Community Development Block Grant awards and through locally borrowed funds during 1998 as follows:

- Provision of assistance to the Village of East Troy in providing information to businesses interested in obtaining financing from the Village's Community Development Block Grant-Economic Development revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of two loans totaling \$245,000 that were provided with the assistance of the Commission and 2) provision of assistance in the preparation of two semiannual reports to the Wisconsin Department of Commerce.
- Provision of assistance to the Village of Menominee Falls in providing information to businesses interested in obtaining financing from the Village's Community Development Block Grant-Economic Development revolving loan fund program and the Village's economic development master fund program, and in completing the following activities: 1) provision of assistance in the servicing of 18 loans totaling \$860,100 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of five new loans totaling \$169,100; 3) provision of assistance in updating marketing brochures for the two loan programs; and 4) provision of assistance in the preparation of two semiannual reports to the Wisconsin Department of Commerce.
- Provision of assistance to the City of Muskego in providing information to businesses interested in obtaining financing from the City's Community Development Block Grant-Economic Development revolving loan fund program and in the servicing of three loans totaling \$218,210 that were provided with the assistance of the Commission.
- Provision of assistance to the City of Mequon in providing information to businesses interested in obtaining financing from the City's Community Development Block Grant-Economic Development revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of a \$50,000 loan
- Provision of assistance to the Village of Sussex in providing information to businesses interested in obtaining financing from the Village's Community Development Block Grant-Economic Development revolving loan fund program and the Village's community enhancement fund program, and in the packaging, closing, and servicing of three new loans totaling \$95,675.
- Provision of assistance to the City of Cedarburg in providing information to businesses interested in obtaining financing from the City's Community Development Block Grant-Economic Development revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of a \$738,000 loan that was provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of a new \$142,400 loan; 3) provision of assistance in the revision of the policies-and-procedures manual for the City's revolving loan fund program; and 4) provision of assistance in the preparation of two semiannual reports to the Wisconsin Department of Commerce.
- Provision of assistance to the City of Port Washington in providing information to businesses interested in obtaining financing from the City's Community Development Block Grant-Economic Development revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of two loans totaling \$1,212,000 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of a new \$100,000 loan; and 3) provision of assistance in the preparation of two semiannual reports to the Wisconsin Department of Commerce.
- Provision of assistance to Ozaukee County in developing a policies-and-procedures manual for the County's Community Development Block Grant-Economic Development revolving loan fund program and in the preparation of one semiannual report to the Wisconsin Department of Commerce.

that was provided with the assistance of the Commission and 2) provision of assistance in revising the policies-and-procedures manual for the City's revolving loan fund program.

- Provision of assistance to Washington County in the packaging, closing, and servicing of four loans for the County's Community Development Block Grant-Economic Development revolving loan fund program and in the identification of funding sources to further capitalize the County's revolving loan fund program.
- Provision of assistance to the Kenosha County Housing Authority in utilizing and administering

the County's Community Development Block Grant-Housing Rehabilitation revolving loan fund program, which included the following activities: 1) submission of 28 loan applications to the Kenosha County Housing Authority for review and approval; 2) conduct of closings for 23 revolving loan fund loans totaling \$178,924; 3) provision of information to 58 residents interested in borrowing funds from the revolving loan fund program; and 4) servicing of 279 outstanding revolving loan fund loans.

# COMMUNITY ASSISTANCE PLANNING DIVISION

## DIVISION FUNCTIONS

The Community Assistance Planning Division has primary responsibility for assisting local units of government in the Region in the conduct of local planning efforts, thereby promoting coordination of local and regional plans and plan implementation actions and generally promoting good public administration as well as sound physical development within the Region. In 1998, the Division provided four basic types of services: educational, advisory, review, and project planning.

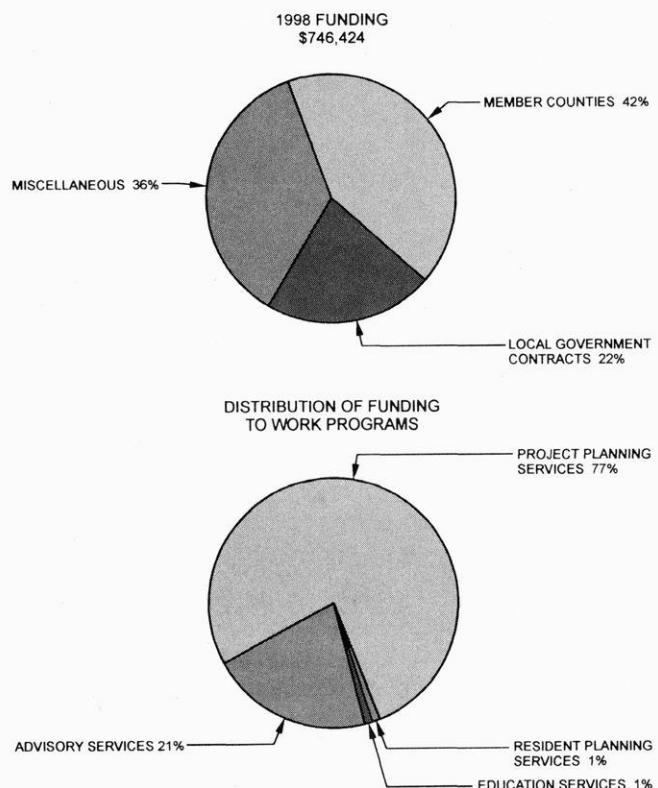
## EDUCATIONAL SERVICES

Educational services are provided by Commission staff to local units of government and citizen groups on request. They are directed at explaining the need for, and purposes of, continuing local, regional, and State planning programs and the relationships that should exist between these different levels of planning. In addition, these efforts are directed at encouraging the creation, organization, staffing, and financing of local planning programs. During 1998, educational efforts included the following:

- Presentations regarding the general scope of the work of the Commission and the details of specific work programs to local governmental, student, professional, and civic groups, including two presentations to real-estate-records classes at Waukesha County Technical College.
- Presentations regarding the year 2020 regional land use plan to the Lake Country Rotary Club in the Village of Hartland, Upper Iowa University classes in the City of West Allis, the Golden Kiwanis Club and the Sunrise Rotary Club, both in the City of Waukesha, and the Wisconsin Rural Leadership Seminar.

- A presentation on an industrial land survey to the Racine County Economic Development Corporation and a presentation on land use planning at the county level to the Ozaukee County Health Initiative.
- A presentation on growth management to a University of Wisconsin-Milwaukee graduate urban planning class; a presentation on farmland preservation recommendations and the year 2020 regional land use plan to a University of Wisconsin Center-Waukesha County class; and a presentation on regional planning to a Carroll College class on managing in the public sector.

**Figure 42**  
**COMMUNITY ASSISTANCE PLANNING DIVISION**



- Participation in a University of Wisconsin-Extension teleconference workshop on rural growth management and conservation subdivision practices; a presentation on rural cluster development, with a "hands-on" design exercise, at a local planning and zoning workshop held in Washington County and sponsored by the University of Wisconsin-Extension; and presentations on rural growth management practices, rural cluster development, lot averaging, and design controls to the Towns of Saukville and Wayne.
- A presentation on growth and change in the Milwaukee metropolitan area to the Commercial Association of Realtors, in Milwaukee.
- A presentation on the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) project to the Southeastern Wisconsin Assessors Association and a presentation of the MCAMLIS digital mapping capability to the City Administrator of the City of St. Francis and to City Engineering Department staff members.
- A presentation on automated land information systems and a report on the development of such a system for Walworth County to the Elkhorn Noon Rotary Club, and a similar presentation and report to the Elkhorn Kiwanis Club.
- A presentation on wetlands to a University of Wisconsin-Milwaukee conservation-of-natural-resources class, a similar presentation to Wild Ones, a native-plant-conservation organization, and a presentation on wetlands and primary environmental corridors in Southeastern Wisconsin to a Marquette University engineering class.
- A presentation on natural areas and environmental corridors in the Menomonee River watershed at the "Rivers to Lakes" conference sponsored by Great Lakes United and held in the City of St. Francis, and a presentation on the regional natural areas plan at a University of Wisconsin-Parkside public forum.
- A presentation on the New Berlin Woods and the regional natural areas plan at the City of New Berlin Department of Parks & Recreation's dedication of the New Berlin Woods, and a presentation on the habitat in Southeastern Wisconsin of Butler's garter snake, a State of Wisconsin-designated threatened species, at the Midwest Fish and Wildlife Conference, held in Milwaukee.
- Conduct of natural area tours at a natural areas conference held at Carroll College, and conduct of a field tour of bogs and fens at an annual meeting of The Nature Conservancy held at Lutherdale Camp at Lauderdale Lakes, Walworth County.
- Preparation of four Commission newsletters, including two combined issues, discussing Commission planning programs and related activities. The newsletters are distributed to about 2,200 parties, including public officials, interested private citizens, and other parties.
- Preparation and distribution to news media throughout the Region of two news releases respectively 1) announcing the conduct of a survey of passengers on City of Waukesha Metro Transit buses and 2) announcing the conduct of a similar survey on Waukesha County-operated buses operating between Waukesha and Milwaukee Counties.
- Preparation of the Commission's *1997 Annual Report*.

## ADVISORY SERVICES

Advisory services consist of the provision of basic planning and engineering data available in the Commission's files to local units of government and private interests, and the provision, on an ad hoc basis, of technical planning and engineering assistance to local communities. Representative advisory services performed during 1998 included the following:

- Provision of information to the Town of Spring Prairie on the application of the year 2020 regional land use plan to the Town.
- Provision of guidance on zoning amendment procedures to the Town of Fredonia and to a resident of the City of Wauwatosa, and on zoning-ordinance-updating procedures to a consultant in Milwaukee County.

- Provision of information regarding sample fence regulations to the Village of Whitefish Bay, sample sign regulations to the Town of LaGrange, the control of billboards, appropriate uses in industrial districts, accessory dwellings, and conditional uses controlling hours of operation to the Town of Polk, "right-to-farm" ordinances to the Town of Merton, the use of planned unit development ordinances in the Region and the regulation of building materials to the Village of Hartland, the use of conservancy districts to the Town of Cedarburg, the calculation of density using conservancy districts to the Town of Fredonia, the requirements for building setbacks in wetlands to the City of Franklin, the requirements for separation distances between group homes to the City of Cudahy, noise ordinances to the Kenosha County Office of Planning & Development and the City of Cedarburg, street-yard requirements and building coverage limits to the Village of Elm Grove, and home occupations to the City of Glendale.
- Provision of information on the use of environmental corridors for land conservation on a regional scale to a graduate student at the University of North Carolina.
- Provision of information on rural cluster development to the Towns of Polk and Saukville, a municipal engineer in Madison, the West Central Wisconsin Regional Planning Commission, the Town of Somerset in St. Croix County, Calumet County, a private consultant in Shawano County, and the Mississippi River Regional Planning Commission.
- Provision of information on trip generation and parking standards for community-based residential facilities and nursing homes to the Village of Hartland, typical parking standards for franchise coffee houses and elderly-care facilities to the City of Mequon, and sample zoning provisions regulating parking location requirements to the Village of Butler.
- Provision of review and advisory comments to the Town of Polk regarding a resident's application for a setback variance to permit a storage building, interpretation of the Town zoning and land division ordinances with respect to a resident's application for rezoning and nonconforming land division, and the continuation of nonconforming uses for a new owner; of advisory comments to a resident of the Village of Walworth on the need for rezoning to permit an expansion of a nonconforming use; and of advisory comments on the expansion of a nonconforming private park to the Town of Grafton.
- Provision of a sample land division ordinance to the City of New Berlin, sample zoning and land division ordinances to an engineering firm in the Town of Pewaukee, of a sample developer's agreement, sample irrevocable letter of credit, and sample contractor's performance bond to the City of Port Washington, and of information on proper access to rural rear lots to the Towns of Polk and Saukville.
- Provision of a historical Walworth County zoning map and ordinance to a local attorney.
- Provision of advisory comments on private street standards to the Walworth County Department of Planning, Zoning, Sanitation & Solid Waste Management.
- Provision of assistance regarding inquiries about the Federal Flood Insurance Program and regarding flood insurance rate maps for 333 sites throughout the Region. Eighty-six of these inquiries were made in person and 184 were made by telephone or fax.

## REVIEW SERVICES

Review services are intended to encourage the incorporation into local planning programs, plans, and plan implementation devices, such as zoning and subdivision control ordinances, of regional studies and plans. In addition, review services are intended to prevent unnecessary duplication of planning efforts and to coordinate and encourage regional plan implementation. Three basic types of review services are performed: review of local plans, plan implementation devices, and development proposals; review of Federal and State grant applications; and review of environmental impact statements, reports, and assessments.

Reviews in the first category during 1998 included reviews of 45 preliminary land subdivision plats, including seven in the Town of Mt. Pleasant, four

Table 21

## STATE AND FEDERAL GRANT REVIEWS: 1998

Review Category	Number of Reviews	Aggregate Amount of Federal and State Grant, Loan, or Mortgage Insurance Requests
Community Action . . . . .	35	\$ 93,554,359
Community Development . . . . .	7	6,802,153
Community Facilities . . . . .	5	1,844,346
Conservation . . . . .	39	110,185,822
Historic Programs . . . . .	1	928,994
Housing . . . . .	7	58,754,792
Solid Waste . . . . .	4	5,362,723
Transportation . . . . .	18	14,213,807
Water Facilities . . . . .	1	5,657,026
<b>Total</b>	<b>117</b>	<b>\$297,304,022</b>

in the Village of Mukwonago, three each in the Towns of Pewaukee and Spring Prairie, two each in the Villages of Belgium, Fredonia, Germantown, and Walworth and in the Towns of Caledonia and Sugar Creek, and one each in the Cities of Burlington, Franklin, Hartford, New Berlin, and Oconomowoc, the Villages of Paddock Lake, Pleasant Prairie, Saukville, and Waterford, and the Towns of Delavan, East Troy, Fredonia, Lafayette, LaGrange, Randall, and Waterford. Review of a proposed cluster development in the Village of Sussex was also completed during the year.

Commission activities regarding the review of Federal and State grant applications during 1998 are summarized in Table 21. In total, review comments were provided for 117 applications for Federal and State grants, loans, or mortgage insurance guarantees requesting in the aggregate over \$297 million in Federal and State financial assistance. Of the 117 requests, 11 were found to be in conformance with, and to serve to implement, the adopted regional plan elements. The remaining 106 were found to be not in conflict with the adopted regional plan elements.

Division activities, as noted above, also include the review of environmental impact statements, reports, and assessments. Comments are provided, when required, relating the proposed projects and data contained in the environmental impact statements to the adopted regional plans. During 1998, the Commission staff reviewed the draft environmental assessment related to the closure and

abandonment of the U. S. Department of the Air Force automated communications site located in the City of Mequon, as well as the environmental impact statement for a Wisconsin Department of Corrections proposal to construct a medium-security holding facility on a site in the City of Milwaukee.

## PROJECT PLANNING SERVICES

Project planning services generally involve the conduct for local member units of government, at cost, of detailed planning studies resulting in the preparation of local plans and plan implementation devices. During 1998, the Commission's local project planning efforts included the following:

### Land Use Plans

- Completion of land use plans for the Village of Saukville and the Town of Sharon, documented, respectively, in SEWRPC Community Assistance Planning Reports No. 234, *A Land Use Plan for the Village of Saukville: 2010, Ozaukee County, Wisconsin*, December 1998, and No. 228, *A Land Use Plan for the Town of Sharon: 2010, Walworth County, Wisconsin*, September 1998.
- Continuation of work on land use plans for the Village of Rochester and the Towns of Dover, Fredonia, Rochester, Saukville, Troy, and Wayne.

- Initiation of work on land use plans for the Towns of Belgium and Lyons and the Village of Hartland, beginning with community surveys in each municipality. Work was also initiated on land use plans for the Village of Union Grove and the Town of Yorkville.

### **Park and Open Space Plans**

- Completion of new park and open space plans for the City of Wauwatosa and the Village of Jackson, documented, respectively, in SEWRPC Community Assistance Planning Reports No. 207, *A Park and Open Space Plan for the City of Wauwatosa, Milwaukee County, Wisconsin*, March 1998, and No. 244, *A Park and Open Space Plan for the Village of Jackson, Washington County, Wisconsin*, November 1998.
- Continuation of work on a new park and open space plan for the City of Lake Geneva and on updates of the park and open space plans for the Cities of Brookfield and West Bend.
- Initiation of work on an updated park and open space plan for the Town of Eagle.

### **Zoning Ordinances and Maps**

- Completion of work on a zoning ordinance and map for the Town of Addison.
- Continuation of work on shoreland zoning maps for Washington County, a shoreland zoning ordinance and maps for Ozaukee County, and the updating of zoning ordi-

nances and maps for the Cities of Cudahy and Waukesha and of zoning ordinances for the Village of Fontana-on-Geneva Lake and the Town of Brookfield.

- Initiation of work on zoning ordinances for the Villages of Kewaskum and River Hills.
- Reprinting of the Town of Polk zoning ordinance.

### **Land Division Ordinances**

- Completion of work on an updated subdivision control ordinance for the Town of Sugar Creek.

### **Other Project Planning Efforts**

- Completion of work on an impact fee ordinance for a park and trail for the Town of Sugar Creek.
- Completion of work on a potential building cap system for the Town of Fredonia.
- Completion of an inventory of fire protection and emergency medical services in that portion of Racine County west of IH 94. This data collection and reporting effort, undertaken at the request of the general-purpose units of local government in the study area and of the Racine County Planning and Development Division, is documented in SEWRPC Memorandum Report No. 129, *Inventory of Fire Protection and Emergency Medical Services for Western Racine County*, December 1998.



# CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

## DIVISION FUNCTIONS

The Commission's Cartographic and Graphic Arts Division provides basic services to other Commission divisions in a number of functional areas. The Division is responsible for creating and maintaining current a series of regional planning base maps that are used not only by the Commission, but are extensively used also by other units of government and by private interests. In addition, the Division is responsible for securing aerial photography of the Region at five-year intervals selected to coincide with U. S. Bureau of the Census decennial census years and related intercensal periods. The Division also provides in-house document reproduction services, as well as those reproduction services needed to provide copies of aerial photos, soil maps, and base maps for use by other units of government and by private interests.

The Division also serves as a regional coordinating center for the conduct of large-scale topographic mapping efforts and the collation of horizontal and vertical survey control data. This function includes the preparation, upon request, of contracts and specifications for large-scale mapping and control survey efforts by county and local units of government. Another Division function, begun in 1984 and attendant to the Commission Executive Director's service as the Milwaukee County Surveyor, is the indexing and filing of records of all land surveys completed in Milwaukee County.

Finally, a major Division function involves final report production, including editing, type composition, proofreading, illustration preparation, offset printing, and binding.

## BASE MAPPING

During 1998, work continued on the updating of the Commission's one-inch>equals-2,000-feet-scale county planning base maps, using 1995 orthophotography and Wisconsin Department of Transportation state aid mileage summary maps. In 1998, this effort included updating of planimetric features and changing civil division corporate

limit lines to reflect recent annexations and incorporations.

## SURVEY CONTROL AND TOPOGRAPHIC AND CADASTRAL MAPPING

The Commission encourages county and local units of government in the Region to prepare one-inch>equals-100-feet-scale and one-inch>equals-200-feet-scale, two-foot-contour-interval topographic maps based on a Commission-recommended monumented control survey network, relating the U. S. Public Land Survey System to the State Plane Coordinate System. The Division assists counties and local communities in the preparation of contracts and specifications for these programs. All the horizontal and vertical control survey data obtained as part of these mapping efforts are compiled by the Division. The Commission thus serves as a center for the collection, collation, and coordination of control survey data throughout the Region.

Three of the seven counties of the Region have completed monumentation, control survey, and large-scale topographic mapping programs: Racine County in 1976, Kenosha County in 1988, and Milwaukee County in 1996. Such programs are under way in the remaining four counties. These county surveying and mapping programs represent model programs.

As shown on Map 23 and in Table 22, a total of 9,223 U. S. Public Land Survey corners in the Region as of the end of 1998 had been relocated, monumented, and coordinated, representing about 78 percent of all such corners in the Region. Map 24 shows those areas of the Region for which, as of the end of 1998, large-scale topographic maps had been or were being prepared to Commission-recommended standards. As shown in Table 22, the area thus completed totals about 1,762 square miles, or about 66 percent of the total area of the Region. Samples of products obtained under the monumentation, control survey, and large-scale topographic mapping programs are shown in Figures 43 and 44 and on Map 26.

Map 23

RELOCATION, MONUMENTATION,  
AND COORDINATION OF U. S. PUBLIC  
LAND SURVEY CORNERS: 1998

LEGEND

- U.S. PUBLIC LAND SURVEY CORNERS WHICH HAVE BEEN RELOCATED, MONUMENTED, AND COORDINATED
- U.S. PUBLIC LAND SURVEY CORNERS WHICH ARE BEING RELOCATED, MONUMENTED, AND /OR COORDINATED

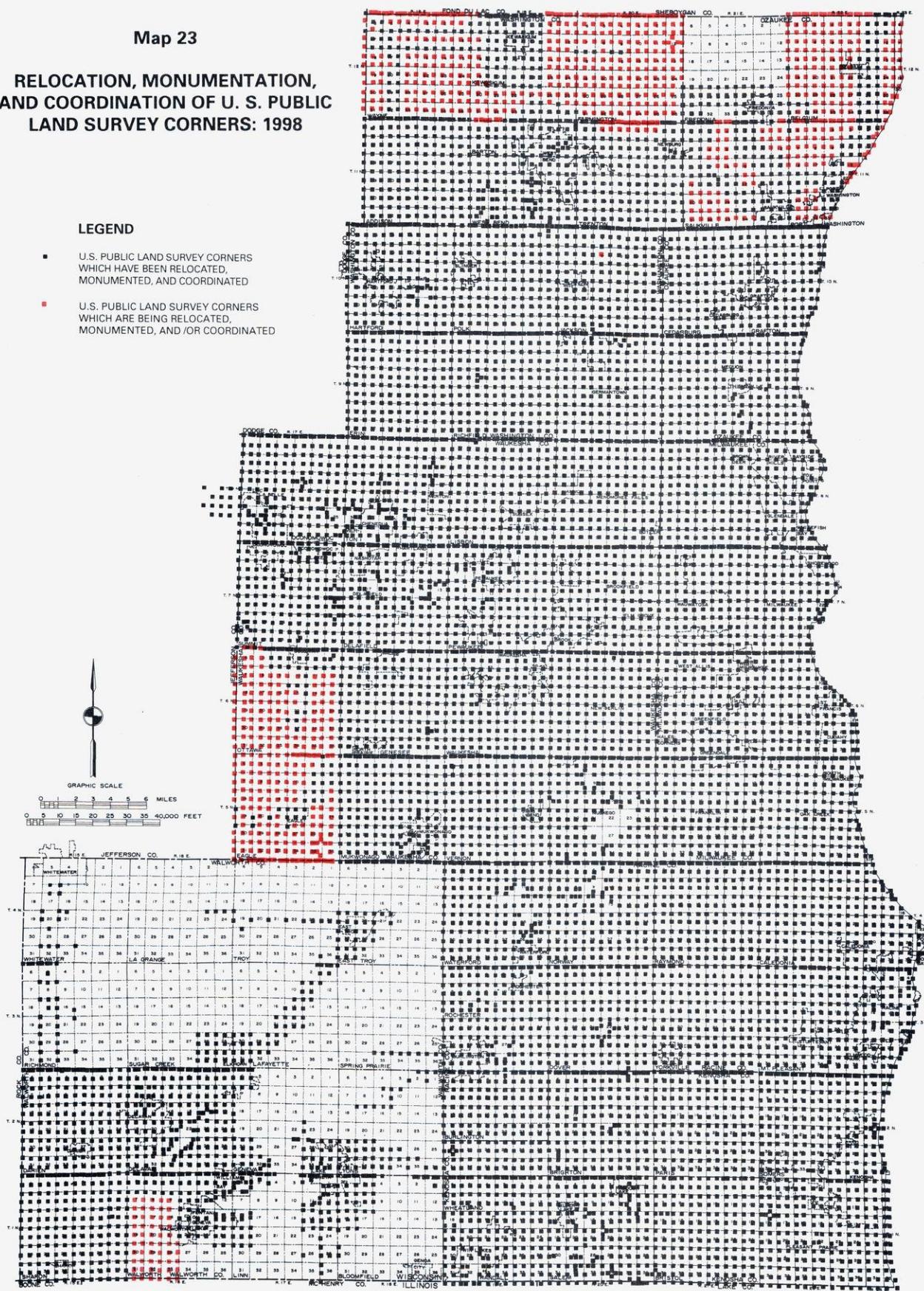


Table 22

**RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND  
SURVEY CORNERS AND COMPLETION OF LARGE-SCALE TOPOGRAPHIC MAPPING: 1998**

County	Estimated Total Corners <sup>b</sup>	Number of U. S. Public Land Survey Corners Which Have Been Relocated, Monumented, and Coordinated <sup>a</sup>							
		Wisconsin Department of Transportation	SEWRPC	County	Milwaukee Metropolitan Sewerage District	Local <sup>c</sup>	Multi-Agency	Total	Percent
Kenosha .....	1,203	58	168	914	--	63	--	1,203	100.00
Milwaukee .....	1,065	72	184	132	159	492	26	1,065	100.00
Ozaukee .....	1,064	143	179	254	3	110	--	689	64.76
Racine .....	1,478	--	172	1,306	--	--	--	1,478	100.00
Walworth .....	2,503	315	--	520	--	121	11	967	38.63
Washington ....	1,905	150	164	737	--	428	51	1,530	80.31
Waukesha .....	2,535	78	463	1,154	--	596	--	2,291	90.37
Region	11,753	816	1,330	5,017	162	1,810	88	9,223 <sup>d</sup>	78.47

<sup>a</sup>As of the end of 1998, an additional 948 U. S. Public Land Survey corners were being incorporated into the control survey system.

<sup>b</sup>The estimated number of corners for each county was determined by assigning standard and closing corners to the respective county concerned and by alternately assigning common corners to the two or more counties concerned.

<sup>c</sup>Includes 21 cities, 21 villages, and four towns.

<sup>d</sup>Because of the need to set witness corners, these 9,223 U. S. Public Land Survey corners, including the centers of the sections, are marked by 9,379 monuments.

County	Total Area (square miles)	Area (square miles) of Large-Scale Topographic Mapping Completed <sup>a</sup>						
		SEWRPC	County	Milwaukee Metropolitan Sewerage District	Local <sup>b</sup>	Multi-Agency	Total	Percent
Kenosha .....	278	27.75	236.25	--	14.00	--	278.00	100.00
Milwaukee .....	242	11.00	102.00	49.50	77.00	2.50	242.00	100.00
Ozaukee .....	234	24.25	78.50	--	17.50	--	120.25	51.39
Racine .....	340	25.50	314.50	--	--	--	340.00	100.00
Walworth .....	578	--	88.00	--	27.50	--	115.50	19.98
Washington ....	436	22.75	42.50	--	89.25	9.00	163.50	37.50
Waukesha .....	581	78.75	279.00	--	145.25	--	503.00	86.57
Region	2,689	190.00	1,140.75	49.50	370.50	11.50	1,762.25	65.54

NOTE: Includes only those areas of the Region for which large-scale topographic maps have been prepared and throughout which U. S. Public Land Survey corners have been relocated, monumented, and coordinated utilizing SEWRPC-recommended procedures. Area shown indicates original large-scale topographic mapping programs. Of the 190.00 square miles originally mapped under SEWRPC programs, 110.50 square miles have been updated by other agencies. Of the 1,140.75 square miles originally mapped under county programs, 2.00 square miles have been updated by other agencies. Of the 370.50 square miles originally mapped under local programs, 189.50 square miles have been updated by other agencies.

<sup>a</sup>As of the end of 1998, large-scale topographic mapping was being extended into an additional 188.25 square miles of area.

<sup>b</sup>Includes 21 cities, 21 villages, and four towns.

Map 25 shows those areas of the Region for which, as of the end of 1998, large-scale cadastral (parcel) maps had been or were being prepared to Commission-recommended standards, either by Commission staff or by private contractors working

under programs administered by the Commission. These areas total approximately 1,345 square miles, or about 50 percent of the total area of the Region. A sample of a portion of a completed cadastral map is shown on Map 27.

Map 24

LARGE-SCALE TOPOGRAPHIC  
MAPPING PREPARED TO  
COMMISSION-RECOMMENDED  
SPECIFICATIONS

LEGEND

- [Yellow box] DIGITAL TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 100'
- [Light Green box] DIGITAL TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 200'
- [Light Blue box] ANALOG TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 100'
- [Light Purple box] ANALOG TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 200'
- [Red box with diagonal lines] DIGITAL TOPOGRAPHIC MAPPING UNDER PREPARATION AT A SCALE OF 1" = 100'
- [Black box with diagonal lines] DIGITAL TOPOGRAPHIC MAPPING UNDER PREPARATION AT A SCALE OF 1" = 200'

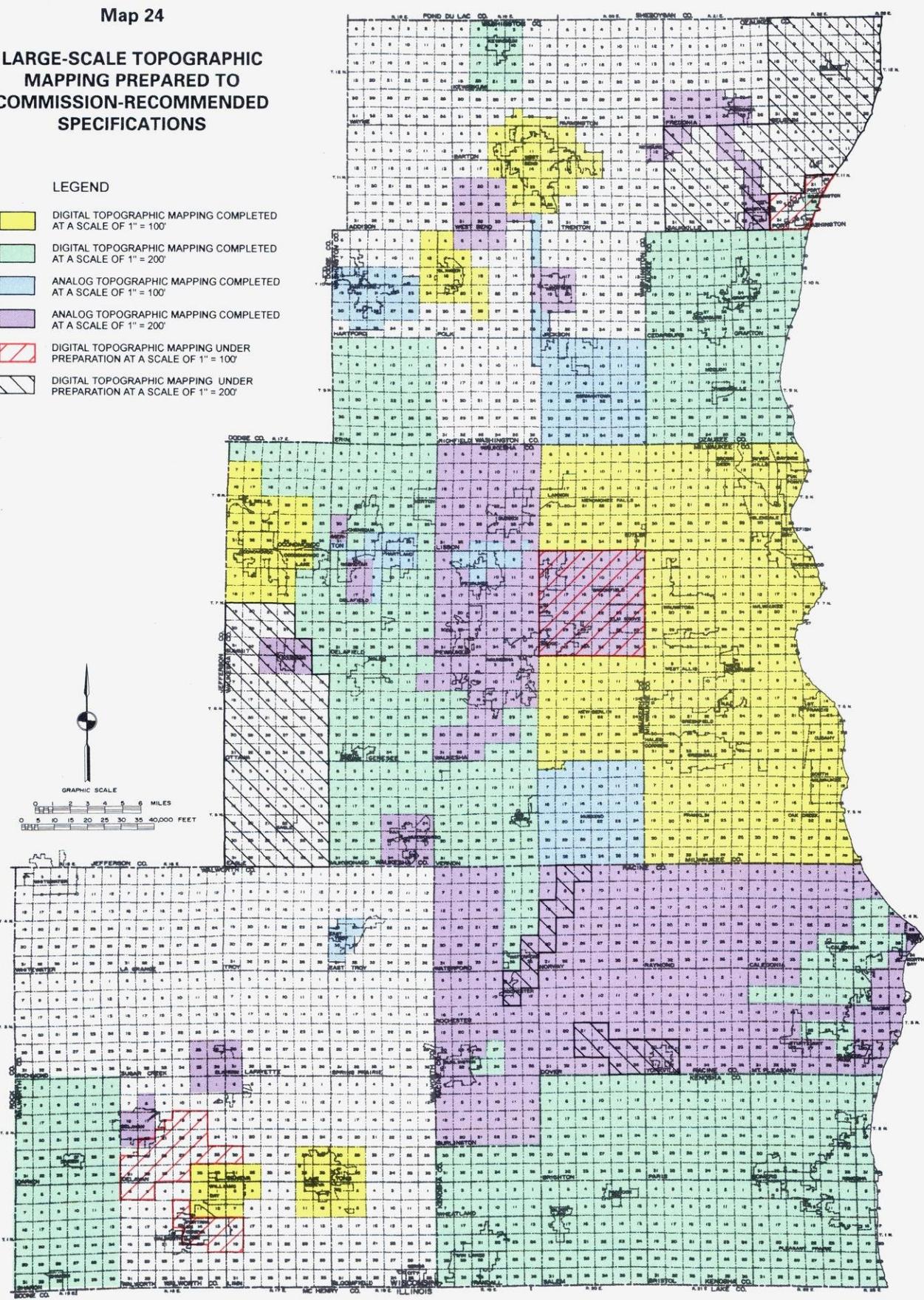




Figure 43

RECORD OF U. S. PUBLIC LAND SURVEY CONTROL STATION

RECORD OF U. S. PUBLIC LAND SURVEY CONTROL STATION

U. S. PUBLIC LAND SURVEY CORNER	16 <sup>15</sup> 21122	T 5	N, R 21	E, MILWAUKEE	COUNTY, WIS.
GEODETIC SURVEY BY:	AERO-METRIC ENGINEERING, INC.				YEAR: 1993
STATE PLANE COORDINATES OF:	SECTION CORNER				
NORTH	329,685.22				
EAST	2,533,357.57				
ELEVATION OF STATION:	761.697				
HORIZONTAL DATUM: WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE					
VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM OF 1929					
CONTROL ACCURACY:	THIRD ORDER, CLASS I				THETA ANGLE: + 1-22-03
VERTICAL: SECOND ORDER, CLASS II					
LOCATION SKETCH:					
<p>SURVEYOR'S AFFIDAVIT: As County Surveyor, I hereby certify that I set a concrete monument with SEWRPC brass cap to mark this corner; replacing a cast iron plug with cross set in the concrete pavement to mark this corner in November 1957 by Laverne F. Cook, S-998, State Highway Commission of Wisconsin Project Engineer, following highway reconstruction; replacing a cast iron plug with cross set in the then existing concrete pavement to mark this corner in 1944 by the Milwaukee County Highway Department following highway reconstruction; replacing a cast iron plug with cross set in the then existing concrete pavement to mark this corner in 1915 by the Milwaukee County Highway Department following highway reconstruction; replacing a cut limestone monument set to mark this corner in 1878 by Jonathan C. Crouse, Surveyor; replacing in turn a wood post set to mark this corner in June 1836 by Elasha Dwelle, Deputy United States Surveyor, in the conduct of the original United States Public Land Survey; that I referenced the same as shown hereon; and that this record is correct and complete to the best of my knowledge and belief.</p>					
DATE OF SURVEY:	7 May 1992				
REGISTERED LAND SURVEYOR					
S - 157					
FORM PREPARED BY SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION					

MILWAUKEE COUNTY  
LAND SURVEY RECORDS

In 1984, State legislation was enacted which in part requires that in a county having a population of 500,000 or more, where there is no county surveyor, a copy of each land survey plat prepared by a land surveyor be filed in the office of the regional planning commission, the executive director of which is to act in the capacity of county surveyor for the county. Under this act, the commission is also made responsible for perpetuating corners of the

U. S. Public Land Survey which may be subject to destruction, removal, or burial through construction or other activities and for maintaining a record of the surveys required for such perpetuation. This act became effective on May 28, 1984.

In 1998, under the requirements of this legislation, the Division received, indexed, and filed 1,512 records of land surveys completed within Milwaukee County, the only county within the Region which meets the statutory criteria concerned. This brings the total number of records of land surveys completed within Milwaukee County which have been filed by the Division to 27,620.

Updated copies of lists of the filed survey records are prepared quarterly and transmitted to the Milwaukee County Director of Public Works, the Milwaukee County Register of Deeds, selected city and village engineers within the County, and all land surveyors who have submitted records of surveys to the Commission for indexing and filing.

Since 1961, the Commission has maintained records on U. S. Public Land Survey corners within the entire Region. Since 1984, the Commission, as noted above, has also been responsible for the perpetuation of the U. S. Public Land Survey System in Milwaukee County.

REPRODUCTION SERVICES

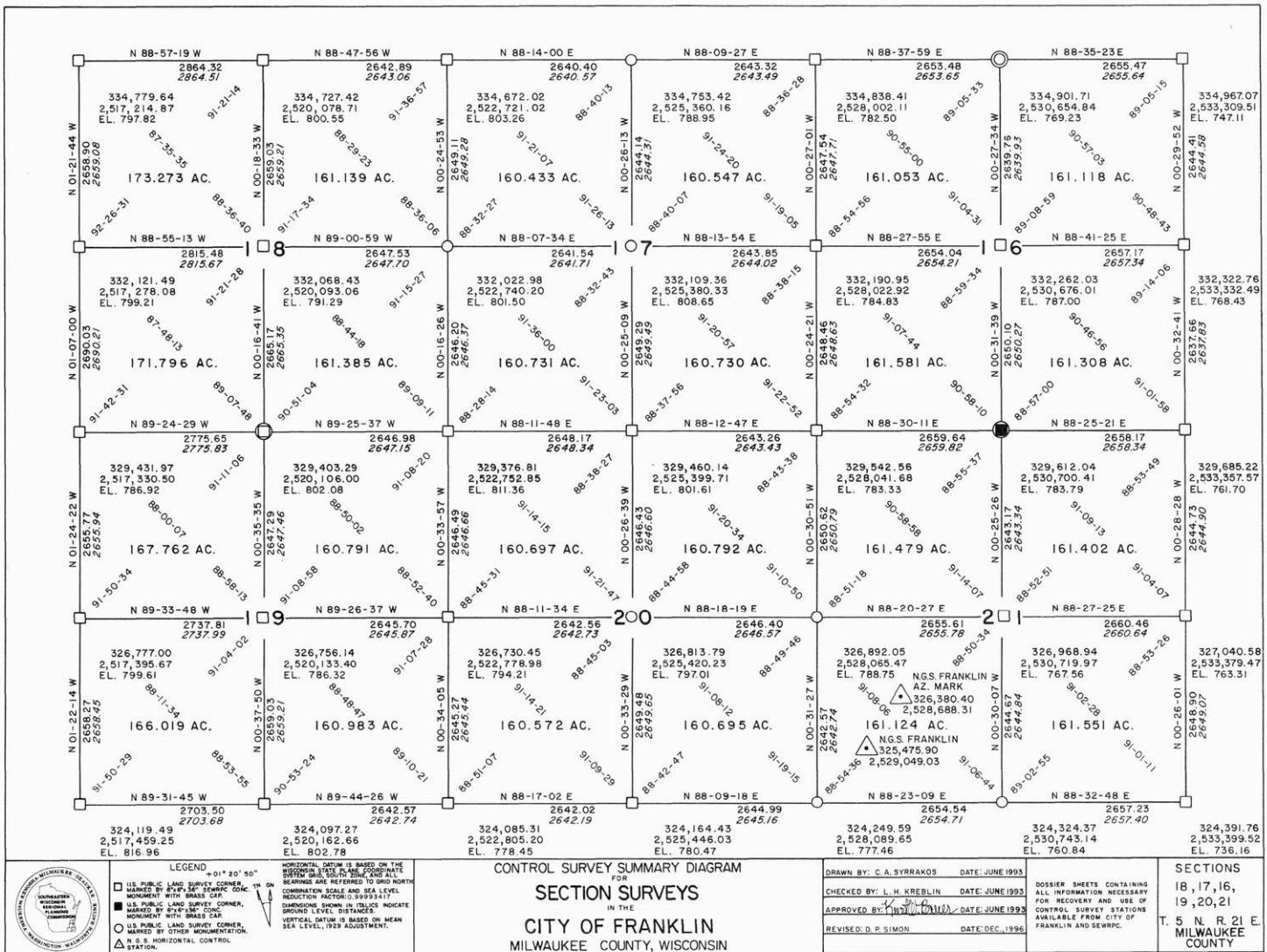
In addition to serving all other Commission divisions through in-house reproduction of reports, the Division provided reproduction services for local units of government and private interests. During 1998, a total of 6,586 prints of aerial photographs of portions of the Region were reproduced, along with 44 soil map prints and 109 prints of maps in the Commission base map series.

FINAL REPORT PRODUCTION

The Commission produces most of its documents using in-house staff and equipment. During 1998, the Cartographic and Graphic Arts Division was responsible for the production of the following Commission publications:

Figure 44

TYPICAL CONTROL SURVEY SUMMARY DIAGRAM



WORK PROGRAMS, STUDY DESIGNS,  
AND PROSPECTUSES

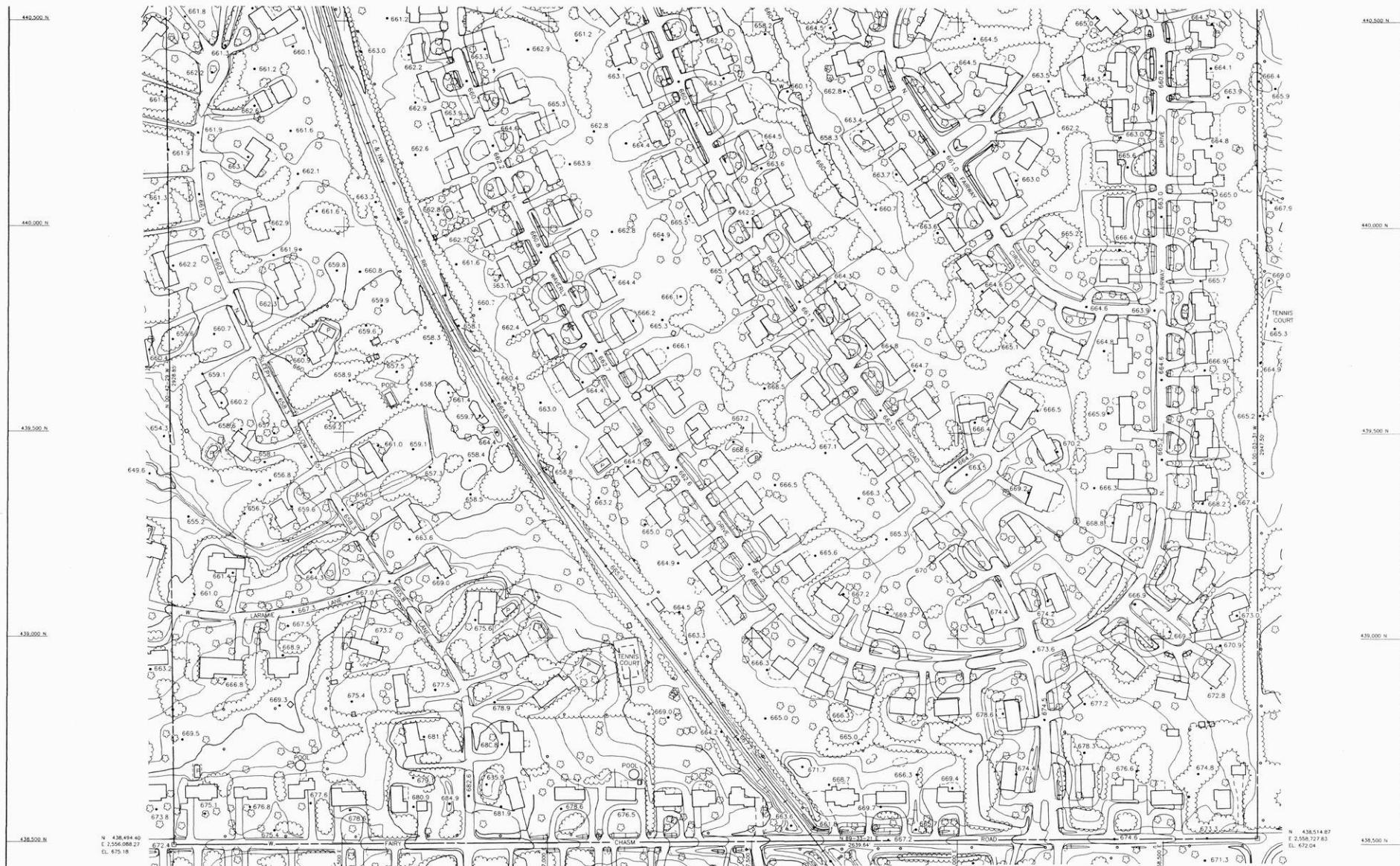
- Overall Work Program—1999 Southeastern Wisconsin Regional Planning Commission, October 1998, 200 pages
- Staff Memorandum, Scope of Work for a Detailed Planning Study of Commuter Rail

and Bus Alternatives in the Kenosha-Racine-Milwaukee Corridor, July 1998, 17 pages

- Regional Aquifer Performance Simulation Modeling Program Prospectus, October 1998, 33 pages; prepared jointly by the Commission, the Wisconsin Geological and Natural History Survey, and the U. S. Geological Survey

## Map 26

## **TYPICAL TOPOGRAPHIC MAP**



#### LEGEND

TRIANGULATION STATION  
MENTED LAND SURVEY CORNER  
IC TRAVERSE STATION  
R TBM (LABELLED)  
THIS MAP WAS FINANCED IN PART THROUGH  
THE WISCONSIN LAND INFORMATION BOARD

COMBINATION SCALE AND SEA LEVEL  
REDUCTION FACTOR: 0.99990739  
HORIZONTAL DATUM IS THE WISCONSIN  
STATE PLANE COORDINATE SYSTEM, SOUTH  
ZONE. [NORTH AMERICAN DATUM OF 1927]  
VERTICAL DATUM IS NATIONAL GEODETIC  
VERTICAL DATUM OF 1929.  
COMPILED TO NATIONAL MAP ACCURACY  
STANDARDS UTILIZING STEREO-PHOTOGRAM-  
METRIC METHODS.  
DATE OF PHOTOGRAPHY: APRIL 23, 1990  
AME PROJECT NO. 089121

GLOBAL  
NORTH

100

SCALE: 1"=100', CONTOUR INTERVAL: 2'  
 -26'-10" TO PLACE ELEVATIONS ON CITY OF  
 MILWAUKEE DATEDUMINUS 580.603  
 100 200 300 400  
 GRAPHIC SCALE IN FEET

TOPOGRAPHIC MAP OF  
NE1/4 SECTION 5  
TOWNSHIP 8 NORTH, RANGE 22 EAST  
MILWAUKEE COUNTY, WISCONSIN

PREPARED FOR  
MILWAUKEE COUNTY, WISCONSIN  
BY  
AERO-METRIC ENGINEERING, INC.  
SHEBOYGAN, WISCONSIN  
UNDER A PROGRAM ADMINISTERED BY THE  
SOUTHEASTERN WISCONSIN REGIONAL  
PLANNING COMMISSION





## ANNUAL REPORTS

- *1997 Annual Report*, August 1998, 256 pages

## COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 35 (2nd Edition), *Sanitary Sewer Service Area for the City of West Bend and Environs, Washington County, Wisconsin*, June 1998, 63 pages
- No. 119 (2nd Edition), *Sanitary Sewer Service Area for the Village of Silver Lake and Environs, Kenosha County, Wisconsin*, December 1998, 44 pages
- No. 128 (3rd Edition), *Sanitary Sewer Service Area for the Village of Slinger and Environs, Washington County, Wisconsin*, December 1998, 31 pages
- No. 207, *A Park and Open Space Plan for the City of Wauwatosa, Milwaukee County, Wisconsin*, March 1998, 69 pages
- No. 227, *A Lake Management Plan for Lake Keesus, Waukesha County, Wisconsin*, June 1998, 116 pages
- No. 228, *A Land Use Plan for the Town of Sharon: 2010*, Walworth County, Wisconsin, September 1998, 101 pages
- No. 231, *Kenosha Area Transit System Development Plan: 1998-2002*, City of Kenosha, Wisconsin, April 1998, 251 pages
- No. 234, *A Land Use Plan for the Village of Saukville: 2010*, Ozaukee County, Wisconsin, December 1998
- No. 239, *Feasibility Study of Commuter Railway Passenger Train Service in the Kenosha-Racine-Milwaukee Corridor*, June 1998, 142 pages
- No. 244, *A Park and Open Space Plan for the Village of Jackson, Washington County, Wisconsin*, November 1998, 61 pages

## MEMORANDUM REPORTS

- No. 122, *A Lake Protection Plan for Pretty Lake, Waukesha County, Wisconsin*, April 1998, 106 pages
- No. 124, *An Aquatic Plant Inventory for Pine Lake, Waukesha County, Wisconsin*, December 1998, 56 pages
- No. 126, *Traffic Engineering Study of Selected Intersections along Fond du Lac Avenue (USH 45) in the Village of Kewaskum: 1997*, Washington County, Wisconsin, July 1998, 57 pages
- No. 127, *A Transportation Study for the Core Area of the City of Delafield, Waukesha County, Wisconsin*, November 1998, 37 pages
- No. 128, *Assessment of Travel through the Neighborhood Bounded by W. Silver Spring Drive, N. Port Washington Road, N. Lydell Avenue, and W. Henry Clay Street in the City of Glendale: 1997*, Milwaukee County, Wisconsin, April 1998, 16 pages
- No. 129, *Inventory of Fire Protection and Emergency Medical Services for Western Racine County*, December 1998, 31 pages
- No. 132, *Highway Maintenance Facility Location Study*, Washington County, Wisconsin, December 1998, 10 pages

## NEWSLETTERS

- Vol. 38, Nos. 1-6, 124 pages

## OTHER

- *Amendment to the Regional Natural Areas and Critical Species Habitat Protection and Management Plan*, City of Cedarburg and Environs, March 1998, 2 pages
- *Amendment to the Regional Water Quality Management Plan*, Village of Germantown, March 1998, 19 pages
- *Amendment to the Regional Water Quality Management Plan*, Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Sanitary Sewer Service Area, March 1998, 3 pages

- *Amendment to the Regional Water Quality Management Plan, City of Brookfield, June 1998, 10 pages*
- *Amendment to the Regional Water Quality Management Plan, Eagle Lake Sewer Utility District, June 1998, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls, June 1998, 5 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Sussex, June 1998, 7 pages*
- *Amendment to the Regional Water Quality Management Plan, Lake Pewaukee Sanitary District, September 1998, 5 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Belgium, December 1998, 5 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of East Troy, December 1998, 4 pages*
- Staff Memorandum, *Job Access and Reverse Commute Regional Transportation Plan, December 1998, 28 pages*



# GEOGRAPHIC INFORMATION SYSTEMS DIVISION

## DIVISION FUNCTIONS

The Commission's Geographic Information Systems Division provides basic support services not only to the Commission's planning divisions, but also to county and local governments in the development of automated land information systems. Since the mid-1970s, the Division has had a computer mapping capability that has provided the foundation for a still-evolving regional geographic information system (GIS). A geographic information system is defined as a computer-based system of capturing, storing, retrieving, analyzing, and reproducing geographically based data such as land use, soils, wildlife habitat, and floodplain boundaries and associated attribute data. The system thus identifies and maps characteristics of areas without regard to real-property ownership. In the Commission's GIS, the basis for the control of these data sets is the U. S. Public Land Survey System tied to the State Plane Coordinate System by accurate horizontal control surveys.

A land information system (LIS) is conceptually different from a GIS only in that an important new component is added—real-property boundary lines with definitions of ownership parcels. The data in an LIS are therefore all parcel-related. Since such cultural information is also directly related to the U. S. Public Land Survey System, it is possible to integrate fully the Commission's regional GIS data base with the additional information being developed under the county land information systems within the Region. As counties complete these land information systems, it may be expected that the regional GIS in Southeastern Wisconsin will, in effect, be merged with the seven county land information systems into a single computer-based system. Such a system would contain a wide range of planning data pertaining both to the physical characteristics of the land and environment and to the cultural characteristics of how the land is owned and managed.

The following sections present a technical description of the Commission computer mapping capabilities, a discussion of the status of the regional GIS, and a review of the status of the seven county land information systems under development within Southeastern Wisconsin.

## COMPUTER MAPPING CAPABILITIES

The Commission has maintained a computer-assisted mapping capability since 1976. At that time, the Commission utilized computer-assisted drafting (CAD) software to create, maintain, and replicate maps for planning purposes. CAD-type software performs well in situations where these basic mapping functions are required, but does not provide the ability to analyze map data or to integrate information from diverse spatial data sets. GIS software is a more appropriate tool to incorporate maps with related attribute data, and to extract and generate new information from the analysis of multiple sets of map data. The ability to perform these types of operations is especially valuable to the Commission in areawide planning efforts. Therefore, in 1987, the Commission acquired GIS software to support map digitization, map production, and map-related analytical functions.

The Commission's geographic information system currently includes GenaMap GIS software and MicroStation CAD software. The GenaMap software supports a wide variety of data collection, map analysis, and map production tasks. To supplement this GIS functionality, the MicroStation software is used in a variety of map review and map preparation operations, and facilitates the translation and comparison of digital map files between differing file formats. Oracle relational data base software is also used in conjunction with the GenaMap software to relate important attribute information to graphics files in Commission GIS projects.

The computer hardware configuration that supports the GenaMap and MicroStation software is based upon Hewlett-Packard engineering work stations running the UNIX computer operating system. A number of peripheral devices are connected to these work stations through a local area network (LAN), including 12 Hewlett-Packard color terminals utilized for data collection and preparation. The LAN also includes four- and eight-millimeter magnetic tape drives and CD-ROM drives for data transfer, six large-format Calcomp digitizing tables for data collection, and three Hewlett-Packard color ink-jet plotters for final map production.

## DEVELOPMENT OF A REGIONAL GEOGRAPHIC INFORMATION SYSTEM

Since the mid-1970s, the Commission has had under development a regional geographic information system with an emphasis on acquiring and utilizing data for regional planning purposes. The initial development of the system began with the conversion to digital format of land use and related inventories that previously were quantified, manipulated, and stored in hard-copy form. Over the years, the Commission has continued these map conversion efforts to build a large inventory of planning data sets for the Region. Currently, the regional GIS consists largely of resource inventories such as land use, soils, environmental corridors, vegetation, wildlife habitat, and related inventories. In addition to these data sets, the GIS also includes digital aerial orthophotography and digital base mapping for each county within the Region. A partial list of the planning inventories and other data sets contained in the Commission's regional geographic information system, and, where applicable, the year of currency of each data set, includes the following:

- Aerial Orthophotography: 1995
- Land Use: 1963, 1970, 1975, 1980, 1985, 1990, 1995
- Soil Mapping Units
- Historical Urban Growth: 1995
- Vegetation: 1985, 1995
- Wildlife Habitat: 1985, 1995
- Inventory Environmental Corridors: 1990, 1995
- Planned Environmental Corridors
- Pre-European-Settlement Vegetation: 1836
- County Base Maps: 1985, 1990, 1995
- Natural Areas and Critical Species Habitats
- Civil Division Boundaries: 1985, 1990, 1995
- Regional Land Use Plan: 2010, 2020

- Major Watershed Boundaries
- Park and Open Space Sites

Many of these data sets are in development and have not been fully converted to digital format. The Commission continues to work annually toward building and enhancing the computerized regional planning data base. Over time, the Commission intends to augment its GIS by adding demographic boundaries, planning analysis areas for regional planning purposes, network and attribute data attendant to regional transportation system mapping, and numerous additional data sets. Because the regional GIS is continually evolving, potential users of the data residing in the system need to make specific inquiries to the Commission regarding data availability.

## DEVELOPMENT OF COUNTY-BASED LAND INFORMATION SYSTEMS

Since its inception, the Commission has recommended that county and local units of government in the Region adopt a model for development of land information systems that includes preparation of base mapping and overlay mapping. This model for development consists of the following components:

1. The completion of the location and remonumentation of all U. S. Public Land Survey corners and quarter-section corners, including the centers of the sections, to Commission standards.
2. The completion of high-order horizontal and vertical control surveys to establish the State Plane Coordinates and elevations of the U. S. Public Land Survey corners to Commission standards.
3. The completion of topographic base maps in digital and hard-copy form at one-inch-equals-100-feet or one-inch-equals-200-feet scales, with two-foot contour intervals.
4. The completion of cadastral overlay maps in digital and hard-copy form at similar one-inch-equals-100-feet or one-inch-equals-200-feet scales. These maps provide detailed information on the location and configuration of all real-property boundaries, including the boundaries of all streets and public ways and other public landholdings. These maps also

assign a parcel identification number (tax key number) to each ownership parcel to enable the linking of geographic with nongeographic data files.

- The creation of an initial series of planning-oriented overlay maps in digital form, including parcel ownership, assessed valuation, soils, land use, wetland, floodplain, shoreland, and zoning data.

The first four components of this model establish the creation of large-scale topographic base maps and cadastral overlay maps founded upon a Commission-recommended monumented control survey network that accurately relates the U. S. Public Land Survey System to the State Plane Coordinate System. With this foundation in place, the final component of planning-oriented mapping can be added to create a modern system of land information access and management. Land information systems developed in this manner can be further enhanced with the addition of a wide variety of maps and spatially related data files, providing information on demographic and administrative areas, public works, transportation, emergency services, public safety, land conservation, and numerous other applications. All counties and many local units of government in the Region are actively developing and enhancing land information systems according to this model of implementation.

Efforts to develop county-based land information systems were significantly enhanced by the initiation in 1990 of the Wisconsin Land Information Program. This program, overseen by the Wisconsin Land Information Board (WLIB), provides a focal point for land records modernization issues and efforts within Wisconsin. Under the program, counties throughout the State are to prepare and implement plans to modernize land records systems. The program includes a funding mechanism, based upon supplemental Register of Deeds filing and recording fees, that facilitates the implementation of county land records modernization plans. Additional funds from the program are used by the WLIB primarily to award grants to county and local governments for projects that would implement these county plans.

By the end of 1992, the Commission had assisted all seven counties in the Region in preparing county land information system plans. The following summarizes the major activities carried out during 1998

with the assistance of the Commission in the implementation of those plans.

### **Kenosha County**

The Kenosha County land records modernization plan is documented in SEWRPC Community Assistance Planning Report No. 185, *A Plan for the Creation of an Automated Mapping and Parcel-Based Land Information System for Kenosha County*, August 1990. The plan formalized a work effort that had begun in the mid-1980s following a land information system demonstration project undertaken jointly by the Commission and Kenosha County using the Town of Randall as a demonstration area. Based on that pilot project, the Kenosha County plan envisioned the completion of activities intended to provide an initial, usable land information system for the County. These planned work efforts followed the aforementioned model for land information systems development, and included the completion of land and control surveys, of large-scale topographic mapping and large-scale cadastral overlays, and of a series of parcel-related map files of planning data. The land and control surveys and the topographic mapping in hard-copy form were completed prior to the preparation of the County plan. The plan recommended that the conventional maps be converted to digital form by digitizing or scanning techniques.

With the assistance of the Commission, the following steps were taken during 1998 toward the implementation of the Kenosha County plan and the completion of the initially defined County land information system:

- Work was completed on Kenosha County's 1997 topographic mapping program, which involved the acquisition of large-scale digital and hard-copy topographic mapping for an area of seven square miles. The Commission obtained this mapping under an agreement with Kenosha County. The mapping replaces previously completed analog-format topographic maps that had become outdated.
- Work was also completed on two mapping projects that resulted from Kenosha County's 1996 grant awards from the Wisconsin Land Information Board. These two projects involved the enhancement of existing digital planimetric and hydrographic map files by the addition of elevation contours and spot elevations and associated text from existing hard-

copy topographic maps. The January 1996 grant project and the July 1996 grant project together involved the completion of digital topographic map files for an approximately 241-square-mile area of the County.

- A similar project that involved the preparation of enhanced digital topographic map files with continuous contour lines was also completed. The work for this project involved the acquisition of enhanced topographic map files for the seven-square-mile area encompassed by the 1994 topographic mapping program in Kenosha County.
- Work was initiated on the County's 1998 topographic mapping program. Administered by the Commission, this project involves the extension of the coverage of new large-scale topographic mapping over another nine square miles in the County.

In 1995, the initial land information system was completed for the entirety of Kenosha County. The system includes automated base mapping, cadastral overlays, and planning and zoning overlays for an area of approximately 278 square miles, containing nearly 60,000 ownership parcels. During 1996, Kenosha County undertook the maintenance and updating of the digital cadastral and zoning map files and related hard-copy maps contained in the County land information system. This ongoing effort will involve updating files as necessary and maintenance in a current condition of the digital data for all land information system applications.

## **Milwaukee County**

The Milwaukee County land records modernization plan is documented in SEWRPC Community Assistance Planning Report No. 177, *Feasibility Study for a Milwaukee County Automated Mapping and Land Information System*, October 1989. The plan proposed the creation of an automated digital mapping base for the entire County based upon Commission-recommended control survey and mapping specifications. The mapping was intended to build upon historical base mapping efforts carried out by Milwaukee County, the Milwaukee Metropolitan Sewerage District, a number of the cities and villages in the County, and the Commission. The Milwaukee County plan also proposed the creation of a public-private partnership to jointly develop, own, and manage the automated base map.

As reported in prior *Annual Reports*, a number of major steps have been taken to implement the Milwaukee County land information system plan. These steps include the execution in 1990 of a cooperative agreement between Milwaukee County, Wisconsin Bell (now known as Ameritech), the Wisconsin Electric Power Company, and the Wisconsin Gas Company to jointly develop and maintain the recommended land information system. During 1993, an addendum to the cooperative agreement was executed that added the Milwaukee Metropolitan Sewerage District as a full partner in the development of the land information system. The development of that system, known by the acronym MCAMLIS, is being overseen by a Steering Committee that includes the Milwaukee County Surveyor, a position, under State law, filled by the Commission. The Steering Committee in turn has contracted with the Commission to provide for the day-to-day technical management of the program.

The MCAMLIS work program, as refined in an implementation study completed in 1991, includes the completion of land surveys and remonumentation of all U. S. Public Land Survey corners and quarter-section corners in the County, and the completion of high-order horizontal and vertical control surveys of these corners. The work program also includes the completion of large-scale digital and hard-copy topographic and cadastral overlay mapping. In addition, the work program calls for the creation of a data set containing the street addresses of all structures identified in the mapping program.

Prior to 1992, all recommended land and control survey work had been completed and steps had been undertaken to prepare, on a phased basis, the digital topographic base mapping and cadastral overlays. During 1998, the following additional major steps were taken toward completion of the MCAMLIS-recommended work program:

- The Commission continued in its role of providing assistance and administration to the Milwaukee County Automated Mapping and Land Information System. In this capacity, the Commission staff prepared letter reports and progress reports, budget and finance reports, and assisted the MCAMLIS Steering Committee in the preparation of meeting agendas and minutes of regular meetings. The Commission staff also administered several grant awards and related contracts for Wisconsin Land Information Board grant award projects, and

provided MCAMLIS digital and hard-copy data to requesting parties as necessary.

- Work was completed on a project that involved obtaining new aerial photography and one-inch>equals-100-feet-scale, two-foot-contour-interval finished topographic maps and topographic map files for an area of about 9.25 square miles in the central portion of the City of Milwaukee previously covered by older topographic mapping.
- Work was also completed on two large-scale digital and hard-copy cadastral mapping projects. The first project, funded in part by a July 1995 grant award from the WLIB, involved obtaining cadastral mapping for 92 U. S. Public Land Survey quarter sections, containing an estimated 25,800 parcels, in various parts of the County. The second project, partially funded by a January 1996 WLIB grant award, involved acquiring similar mapping for an area of 45 quarter sections containing approximately 13,435 parcels in portions of the City of Greenfield and other areas in central Milwaukee County.
- A project involving the extension of the MCAMLIS street address data base was completed. Street addresses were collected and field-verified for an area covering most of the City of Glendale, containing an estimated 5,100 parcels.
- Work continued on two additional projects that will support digital parcel mapping through the extension of the street address data base under development in the County. Both projects are being partially funded by grant awards received in 1997 from the WLIB. The first project involves the collection and verification of address information that can be linked to digital cadastral mapping for an area covering approximately 48,875 parcels in the eastern part of the County. The second project, similar to the first addressing project, involves the further extension of the street address data base to an area covering approximately 48,965 parcels in the western part of the County.
- Work was initiated on a cadastral mapping pilot project being performed jointly by the Commission and the City of Milwaukee. The project involves the transformation and adjust-

ment of existing City digital cadastral map files to conform to current control survey information. Commission staff will review the adjusted digital map files for conformance to MCAMLIS specifications.

- During 1998, the Commission prepared contracts and agreements to initiate work on a project partially funded by a July 1996 WLIB grant award. This project includes the preparation of new digital and hard-copy cadastral mapping at a one-inch>equals-100-feet scale for an area within the City of Milwaukee containing approximately 9,155 parcels.

As of December 31, 1998, large-scale digital topographic base mapping and large-scale digital cadastral overlays had been completed for the entirety of Milwaukee County. Of this area, however, the cadastral mapping prepared by the Cities of Milwaukee and West Allis, encompassing an area of 135 square miles, or about 56 percent of the County, does not yet fully meet MCAMLIS standards. Nevertheless, the acquisition of large-scale, high-quality map products over an extensive portion of the County represents one of the more significant accomplishments to date of the MCAMLIS project.

In recognition of the work efforts accomplished since its inception in 1991, the MCAMLIS program received the Public Policy Forum award for overall management innovation in local government in 1995. The award recognizes the unique cooperative efforts of the MCAMLIS participants and the multitude of applications that the system is intended to serve. In presenting the award, the Forum said that the MCAMLIS program has avoided duplication of effort and the large costs that would have been entailed if the utilities and municipalities involved had individually developed their own automated mapping systems.

### Ozaukee County

The Ozaukee County land records modernization plan was completed in 1992. The plan is documented in SEWRPC Community Assistance Planning Report No. 142, *A Land Information System Plan for Ozaukee County*, April 1992. The plan built upon prior limited topographic base mapping efforts completed to Commission-recommended specifications. More specifically, the plan envisions the completion of land and control surveys for the County, the completion of topographic base mapping at a scale

of one inch equals 200 feet, and the completion of complementary cadastral overlay mapping at a scale of one inch equals 200 feet.

The Commission worked with Ozaukee County and the City of Mequon in developing an initial project to facilitate the implementation of the County land information system plan. This project, partially funded by a December 1992 grant from the Wisconsin Land Information Board, was completed in 1994. The project involved the conduct of land and control surveys and digital topographic base mapping for an area of approximately 46 square miles, or 20 percent, of Ozaukee County. This area encompassed most of the City of Mequon, all of the Village of Thiensville, and that portion of the Village of Bayside lying within the County. This project, which involved multiple funding sources, required a detailed prioritization of tasks, as a portion of the project area was located within a separately managed coastal management zone.

Following completion of the Mequon project, the Ozaukee County Land Information Office assumed full responsibility for carrying out additional projects to complete implementation of the County land information system plan. The Commission continues to work with the County toward ensuring that the products produced meet Commission-recommended standards.

### Racine County

The Racine County land records modernization plan is documented in SEWRPC Community Assistance Planning Report No. 194, *A Land Information System Plan for Racine County*, August 1991. The plan built upon control survey and conventional base mapping work completed by Racine County based upon Commission-recommended mapping specifications. Indeed, Racine County was the first county within the Region to complete the Commission-recommended control survey and topographic mapping program, in 1976. The Racine County plan recommended the completion of land and control surveys, which were actually completed prior to the preparation of the plan. In addition, the plan recommended that conventional large-scale topographic maps that were completed for the entirety of the County be converted to digital format, and that digital cadastral overlay mapping be prepared to complement the topographic mapping. The plan called for the completion of an initial series of planning-related digital files, including parcel ownership,

land use, soils, and zoning data. Finally, the plan recommended the establishment of a computerized image indexing, storage, retrieval, transmittal, and copying system in the Register of Deeds office.

The following steps were taken during 1998 toward completion of the Racine County land information system:

- Work was completed on a cadastral mapping project that resulted from a July 1994 grant award from the Wisconsin Land Information Board. This project involved the acquisition of large-scale digital and hard-copy cadastral mapping for an area of approximately 38 square miles containing about 11,320 parcels in the Villages of Elmwood Park and Sturtevant and the Town of Mt. Pleasant.
- A demonstration project involving the creation of tax-unit and district-boundary-line files for an area of completed digital cadastral mapping in the Towns of Norway and Raymond was finished during this period. This project involved the preparation of digital map files of school district and management district boundaries and woodland-tax-law-unit boundaries, and the identification of parcels divided into smaller tax units as determined by those special boundaries.
- Work continued on a project resulting from a grant award received from the WLIC for the January 1995 grant period. This project will result in the creation of necessary map products in two distinct areas of the County. Digital cadastral map files and hard-copy maps will be prepared for an approximately 46-square-mile area containing about 10,144 parcels in the Town of Caledonia and environs. In addition, digital and hard-copy cadastral mapping, digital planimetric mapping, and digital zoning-related mapping will be prepared for an approximately 13-square-mile area covering portions of the Towns of Raymond and Yorkville.
- Three topographic mapping projects were under way in Racine County during 1998. A topographic mapping project initiated in 1996 was completed, resulting in the acquisition of one-inch-equals-200-feet-scale, two-foot-contour-interval digital and hard-copy mapping for an approximately 13-square-mile area in

the Waterford-Burlington area. Work continued on a topographic mapping project initiated in 1997 and involving the preparation of similar large-scale topographic mapping for an approximately 12-square-mile area in western Racine County. In addition, final agreements and contracts were prepared for the 1998 Racine County topographic mapping project, which will involve the provision of large-scale digital and hard-copy topographic mapping for an area of approximately 12 square miles covering the Village of Union Grove and portions of the Towns of Dover and Yorkville.

- Work continued on two similar projects originating from WLIB grant awards. The January 1996 grant project will involve the completion of digital cadastral, planimetric, and zoning-related mapping in an approximately 95-square-mile area in western Racine County, encompassing the Village of Union Grove, portions of the Towns of Waterford and Yorkville, and the entire Town of Dover. The July 1996 grant project will involve the collection of similar mapping for an approximately 65-square-mile area consisting of the City of Burlington, the Villages of Rochester and Waterford, the Towns of Burlington and Rochester, and a portion of the Town of Waterford.
- Work was initiated on a planimetric and zoning district mapping project in the eastern portion of the County. The planimetric mapping project element, which will be funded in part by an award from the WLIB for the 1997 grant period, involves the collection of digital planimetric features from existing hard-copy topographic maps for an area of about 63 square miles. The zoning district mapping project element will involve the preparation of digital zoning boundary maps for an area of approximately 85 square miles covering the Villages of Elmwood Park, North Bay, Sturtevant, and Wind Point, and the Towns of Caledonia and Mt. Pleasant.
- Commission staff also continued to attend Racine County's regularly scheduled CORAGIS Advisory Committee meetings during 1998, providing technical and logistical advice regarding County GIS projects and issues to that group.

As of the end of 1998, digital topographic base maps and cadastral overlays had been completed for approximately 16 square miles, or about 5 percent of the area of the County. Digitally converted topographic base maps—lacking contour lines and spot elevations—and digital cadastral overlays had been completed for an additional 77 square miles, or about 23 percent of the County. In addition, digital topographic base maps had been completed for an additional 27 square miles, or about 8 percent of the County, while digital cadastral overlay maps were available for an additional 69 square miles, or about 20 percent of the County. Digital planimetric mapping not including contour lines or spot elevations was available for about 138 square miles, or approximately 41 percent of the County.

### **Walworth County**

The Walworth County land records modernization plan is documented in SEWRPC Community Assistance Planning Report No. 139, *A Land Information System Plan for Walworth County*, September 1991. The plan builds upon prior limited topographic base mapping efforts completed by local units of government within the County to Commission-recommended specifications. Specifically, the plan envisions the completion of land and control surveys for all U. S. Public Land Survey corners in the County, and the completion of digital and hard-copy topographic base mapping and complementary cadastral overlay mapping. The plan also called for the creation of an automated tract index for land records modernization purposes.

The following steps were taken in 1998 toward implementation of the Walworth County plan:

- Work was completed on the first vertically integrated mapping project undertaken in Walworth County. Resulting from a January 1995 grant award from the WLIB, this project involved the completion of land and control surveys, the preparation of digital and hard-copy topographic base mapping, and the compilation of digital and hard-copy cadastral overlays for an approximately 16-square-mile area encompassing the City of Lake Geneva and environs. All mapping prepared under the project was prepared at a scale of one inch equals 100 feet, and the topographic mapping utilized two-foot contour intervals.

- A second vertically integrated mapping project, originating from a July 1996 WLIB grant award, was also completed during 1998. The project resulted in the completion of land survey work, horizontal and vertical control survey work, and large-scale digital and hard-copy topographic and cadastral mapping at a one-inch>equals-100-feet scale for an approximately 8.5-square-mile land area encompassing the Village of Williams Bay and environs.
- Two projects that will involve extending the coverage of land and control surveys, large-scale topographic mapping, and large-scale cadastral mapping in hard-copy and digital formats in Walworth County were initiated. The first project involves the conduct of the necessary survey work and the acquisition of large-scale mapping for an area encompassing approximately 6.75 square miles and containing about 2,055 parcels, covering the Village of Fontana-on-Geneva Lake and environs. The second project entails the conduct of control survey work and the preparation of similar large-scale topographic and cadastral mapping for an area surrounding Delavan Lake. This area covers approximately 16 square miles and contains about 3,500 real-property parcels.
- Final agreements and contracts were prepared for and work was initiated on a project made possible by a grant award from the WLIB to Walworth County for the 1997 grant period. This project will result in the completion of land and control survey work for an approximately 15-square-mile area in portions of the Village of Walworth and the Town of Walworth. The tasks to be performed under this project include the relocation and monumentation of selected U. S. Public Land Survey corners, the establishment of State Plane Coordinates and attendant data for selected corners, and the completion of dossier sheets and control survey summary diagrams for the project area.
- The Commission worked with Walworth County to structure a major effort to complete the automated mapping base over the next seven years.

## Washington County

The Washington County land records modernization plan was completed in 1992, and is documented in SEWRPC Community Assistance Planning Report No. 184, *A Land Information System Plan for Washington County*, March 1992. Building upon prior topographic base mapping efforts completed to Commission-recommended specifications, the plan calls for the completion of land and control surveys for all U. S. Public Land Survey corners in the County. In addition, the plan envisions the completion of topographic maps in digital and hard-copy formats at a scale of one inch equals 200 feet, as well as the completion of digital and hard-copy cadastral mapping at a similar scale.

In 1998, the Commission assisted Washington County in effecting the following steps toward implementation of the County plan:

- Work was completed on a project that resulted in the acquisition of large-scale base mapping for the Town of Erin. This project originated from a July 1996 grant award from the WLIB, and included the preparation of one-inch>equals-200-feet-scale, two-foot-contour-interval digital and hard-copy topographic mapping and similar large-scale digital and hard-copy cadastral mapping for an approximately 36-square-mile area covering the Town. Digital terrain model files were also prepared for the project area.
- Work continued on a similar vertically integrated project involving the acquisition of digital and hard-copy topographic mapping, digital terrain model files, and digital and hard-copy cadastral mapping for an area of approximately 14 square miles encompassing the Village of Slinger and environs. The mapping is being prepared at a one-inch>equals-100-feet scale, and the topographic mapping will include two-foot contour intervals.
- A project involving the conduct of land survey work for 90 U. S. Public Land Survey section and quarter-section corners in portions of the Towns of Kewaskum and Wayne was continued in 1998. The project is being carried out jointly by the Washington County Surveyor and the Commission.

- Work also continued on an extensive horizontal control survey project being carried out over a large area of Washington County. The tasks included in this project are the conduct of horizontal control surveys for 611 U. S. Public Land Survey corners, the augmentation of previously prepared dossier sheets for these corners, and the updating of horizontal control information on control survey summary diagrams for the affected corners.
- The Commission and the Town of Erin entered into an agreement whereby the Commission will prepare digital and hard-copy map products for use by the Town in its planning efforts. The products to be prepared include maps containing information on land use, soil suitability, wildlife habitat, slopes, and selected natural resources.

### **Waukesha County**

The Waukesha County land records modernization plan is documented in SEWRPC Community Assistance Planning Report No. 193, *A Land Information System Plan for Waukesha County*, April 1991. The plan builds upon prior topographic and cadastral base mapping efforts completed to Commission-recommended specifications by the local units of government concerned and the Commission. More specifically, the plan envisions the completion of land and control surveys to locate and remonument all U. S. Public Land Survey section and quarter-section corners in the County. The plan also recommends the completion of large-scale digital and hard-copy topographic mapping, and the conversion to digital form of the approximately 61 percent of the County for which topographic mapping had been previously completed. Finally, the plan recommends the completion of large-scale digital cadastral overlay mapping, and further recommends that the existing hard-copy cadastral maps that had been completed by local municipalities and the Commission be converted to digital form over time.

With Commission assistance, the following steps were taken during 1998 toward implementation of the Waukesha County land information system plan:

- Work was completed on two topographic mapping projects originating from grant awards from the WLIC. The July 1994 grant award

project included land and control survey work and the preparation of digital topographic mapping at scales of one inch equals 100 feet and one inch equals 200 feet for an area of approximately 36 square miles in the Town of Oconomowoc and environs. The second project, supported by a January 1995 grant award, involved the conduct of land and control surveys and the acquisition of one-inch>equals-100-feet-scale digital topographic mapping for an area of about 15 square miles in the Town of Summit and environs.

- A County land information plan project carried out by the Commission and the Village of Menomonee Falls was completed during 1998. This project involved the acquisition of one-inch>equals-100-feet-scale digital cadastral mapping for the approximately 33-square-mile area of the Village.
- Work continued on two large-scale topographic mapping projects in western Waukesha County. Both of these projects involve the preparation of one-inch>equals-200-feet-scale, two-foot-contour-interval topographic base mapping in hard-copy and digital formats. The first project involves the completion of the geodetic reference framework and the preparation of large-scale topographic mapping for an approximately 34-square-mile area in portions of the Towns of Ottawa and Summit. The second project involves the conduct of land and survey control work and the preparation of large-scale digital and hard-copy topographic mapping for an approximately 50-square-mile area covering all of the Village of Eagle and the Town of Eagle and a portion of the Town of Ottawa. Completion of this project will complete digital planimetric and topographic map coverage of Waukesha County.
- Work also continued on a project resulting from the County's successful July 1996 grant application to the WLIC. This project involves the preparation of large-scale digital and hard-copy cadastral mapping for an approximately 72-square-mile project area containing about 12,500 parcels in the Delafield-Merton area of the County, as well as the preparation of large-scale digital planimetric mapping for an approximately 15-square-mile subarea within

the larger project area. The project also involves the generation of a metadata report documenting the source materials and decisions used in the preparation of the cadastral mapping.

- Two cadastral mapping projects in the Oconomowoc-Summit area of Waukesha County were initiated in 1998. The two projects are a result of grants from the Wisconsin Land Information Board for the 1997 grant period. The first project involves the preparation of digital and hard-copy cadastral mapping at a scale of one inch equals 100 feet for an approximately 30-square-mile area. This project area contains approximately 6,962 parcels. The second project involves the preparation of digital and hard-copy cadastral mapping at a scale of one inch equals 200 feet for an approxi-

mately 38-square-mile area containing about 3,435 parcels. Parcel-level metadata reports will also be acquired for both projects.

As of the end of 1998, digital topographic maps and cadastral overlays had been completed over approximately 203 square miles, or about 35 percent of the total area of the County. Digitally converted topographic base maps—lacking contour lines and spot elevations—and digital cadastral overlays had been completed for an additional 156 square miles, or an additional 27 percent of the County. Digital topographic base maps had been completed for an additional 147 square miles, or an additional 25 percent of the County. Finally, digital planimetric mapping without contour lines and spot elevations had been completed for an area of 14 square miles, or about 2 percent of the County.

# ADMINISTRATIVE SERVICES DIVISION

## DIVISION FUNCTIONS

The Commission's Administrative Services Division performs a number of functions supportive of the work of all of the other Commission divisions. These functions include financial management, consisting of accounting, bookkeeping, and budget control; personnel management and the implementation of affirmative action and equal opportunity programs; grant-in-aid procurement; purchasing and clerical support; and the sale and distribution of publications.

### FINANCIAL MANAGEMENT AND PLANNING

One of the most important functions of the Division is management of the Commission's financial affairs. This includes maintaining a fund accounting system, preparing Commission payrolls, and processing accounts receivable and payable. Through the computerized accounting system, monthly financial management reports are prepared, including budget control, cash flow, and quarterly Treasurer's reports. These reports are utilized by the Commission, its committees, and its Executive Director to ensure that the financial integrity of the Commission is maintained.

The Division is also responsible for ensuring that financial institutions controlled by members of minority groups receive a fair share of the Commission's business. This task was continued during 1998 by maintaining a trust account with a minority-controlled bank within the Commission's service area. In addition, the Commission has established a business enterprise program, including the completion, maintenance, and expansion of a list of disadvantaged- and women-owned businesses which are contacted as potential Commission vendors.

The Division is also responsible for assisting the Executive Director in preparing the Commission annual budget. With the help of this document and an accompanying federally required overall work program, the Commission is able to plan and organize its work effort from a sound financial basis.

## PERSONNEL ADMINISTRATION

Personnel recruitment, testing, and selection are centered in the Administrative Services Division. During 1998, the Commission continued to make progress in carrying out a comprehensive equal employment opportunity program in the areas of recruitment, employment, promotion, transferring, and training. Action was taken to better monitor applicant flow in order to gauge progress in attracting minority applicants as required in the affirmative action program. Efforts were continued toward attracting qualified minority and women applicants during the year.

### GRANT-IN-AID PROCUREMENT

Along with accounting for the Federal, State, and local funds received to operate the Commission, the Division is responsible for Federal and State grant application preparation. This includes completing the necessary application forms, including supporting narratives describing proposed work programs, preparing budgets to carry out the work programs, and assisting in obtaining final grant approval. These grants provide a substantial portion of the working capital required to carry out the Commission's overall work program.

The Division also processes any claims for reimbursement of expenses incurred under each grant contract, prepares detailed financial status reports as required by Federal and State funding agencies, and maintains detailed financial records for audit by grantor agencies.

The Commission's annual overall work program, a document, as noted above, required by Federal regulation, is also prepared with the assistance of the Division. This report is an important vehicle for securing Federal and State grants-in-aid, and serves as a guide to the financial management of the Commission.

### PURCHASING AND CLERICAL SUPPORT

The Administrative Services Division provides the Commission with purchasing services and

clerical staff support in the typing of reports, in addition to the typing of routine and specialized correspondence.

#### **SALE AND DISTRIBUTION OF PUBLICATIONS**

During 1998, the Division distributed a total of 38,304 copies of Commission publications. These included the following: 128 prospectuses, 1,284 planning reports, 274 amendments to planning

reports, 105 technical reports, 1,680 community assistance planning reports, 329 memorandum reports, 11 technical records, 730 annual reports, 8,799 newsletters, 24,730 community economic profiles, 153 transportation improvement programs, two overall work programs, and 79 planning guides. In addition, the Division distributed 6,586 aerial photographs, 44 soils maps, 463 topographic maps, 3,872 control survey station dossiers and control survey summary diagrams, and 109 maps from the Commission's base map series.

**APPENDICES**



## Appendix A

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: 1998

COMMISSIONERS	TERM EXPIRES	COMMITTEES
<b>KENOSHA COUNTY</b>		<b>EXECUTIVE COMMITTEE</b>
*** Leon T. Dreger .....	2000	Thomas H. Buestrin, Chairman
* Thomas J. Grolinski .....	2004	William R. Drew, Vice-Chairman
** Sheila M. Siegler .....	2004	Daniel J. Diliberti
<b>MILWAUKEE COUNTY</b>		Tyrone P. Dumas
** Daniel J. Diliberti .....	2004	David B. Falstad
*** William R. Drew, Vice-Chairman .....	2002	Robert F. Hamilton
* Tyrone P. Dumas .....	2002	Jean M. Jacobson
<b>OZAUKEE COUNTY</b>		Allen L. Morrison
* Leroy A. Bley .....	2002	Daniel S. Schmidt
** Thomas H. Buestrin, Chairman .....	2002	Sheila M. Siegler
*** Elroy J. Schreiner .....	2000	
<b>RACINE COUNTY</b>		<b>ADMINISTRATIVE COMMITTEE</b>
*** David B. Falstad .....	2004	Sheila M. Siegler, Chairman
** Martin J. Itzin .....	2000	Allen L. Morrison, Vice-Chairman
* Jean M. Jacobson, Secretary .....	2002	Duane H. Bluemke
<b>WALWORTH COUNTY</b>		Thomas H. Buestrin
*** Anthony F. Balestrieri .....	2000	William R. Drew
* Allen L. Morrison, Treasurer .....	2000	David B. Falstad
** Robert J. Voss .....	2002	Jean M. Jacobson
<b>WASHINGTON COUNTY</b>		Daniel S. Schmidt
*** Lawrence W. Hillman .....	2000	Elroy J. Schreiner
** Daniel S. Schmidt .....	2004	Paul G. Vrakas
* Patricia A. Strachota .....	2002	
<b>WAUKESHA COUNTY</b>		<b>INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE</b>
*** Duane H. Bluemke .....	2004	Daniel J. Diliberti, Chairman
* Robert F. Hamilton .....	2000	Thomas J. Grolinski, Vice-Chairman
** Paul G. Vrakas .....	2004	Leroy A. Bley
		Duane H. Bluemke
		Thomas H. Buestrin
		Robert F. Hamilton
		Jean M. Jacobson
		Allen L. Morrison
		Patricia A. Strachota
* Elected by County Board or appointed by County Executive and confirmed by County Board.		<b>PLANNING AND RESEARCH COMMITTEE</b>
** Appointed by the Governor from a County-supplied list of candidates.		Daniel S. Schmidt, Chairman
*** Appointed by the Governor on his own motion without reference to any County-supplied list.		Duane H. Bluemke, Vice-Chairman
		Anthony F. Balestrieri
		Thomas H. Buestrin
		Daniel J. Diliberti
		Leon T. Dreger
		Lawrence W. Hillman
		Martin J. Itzin
		Allen L. Morrison
		Elroy J. Schreiner
		Patricia A. Strachota
		Robert J. Voss
		Paul G. Vrakas



## Appendix B

### COMMISSION ADVISORY COMMITTEES: 1998

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIRPORT SYSTEM PLANNING

Duane H. Bluemke ..... Commissioner, Southeastern Wisconsin Regional Planning Commission  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary  
C. Barry Bateman ..... Airport Director, General Mitchell International Airport  
Wayde B. Buck ..... Airport Director, Kenosha Regional Airport  
John B. Capelle ..... Director of Community Development, City of West Bend  
Lois M. Clark ..... Acting Administrator, Village of East Troy  
Robert S. Demski ..... Owner, Sylvania Airport, Town of Yorkville  
Tyrone P. Dumas ..... Director of Public Works, Milwaukee County  
Major Steven Ford ..... Base Civil Engineer, Wisconsin National Guard  
Thomas J. Gorlinski ..... Supervisor, Kenosha County Board  
Glenn S. Januska ..... Airport Manager, Waukesha County-Crites Field  
Robert W. Kunkel ..... Director, Bureau of Aeronautics, Wisconsin Department of Transportation  
N. David Mann ..... Vice President and Airport Manager, Batten Airport, Racine  
George E. Melcher ..... Director, Office of Planning and Development, Kenosha County  
Paul E. Milewski ..... Director of Community Development, City of Oak Creek  
Daniel J. Millenacker ..... Airport Planner, U. S. Department of Transportation, Federal Aviation Administration  
Lois Mitchell ..... Owner, Capitol Airport, City of Brookfield  
John C. Spielmann ..... City Planner and Director of Development, City of Hartford  
Randy L. Tetzlaff ..... Community Economic Development Agent, University of Wisconsin-Extension, Ozaukee County  
Earl E. Vorpagel, Jr. ..... Chairman, Airport Commission, City of Burlington  
Randall E. Wade ..... Chief of Statewide System Planning, Bureau of Planning, Division of Transportation Investment Management, Wisconsin Department of Transportation

#### KENOSHA COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Frederick J. Patrie ..... Director of Public Works, Kenosha County  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary  
John M. Antaramian ..... Mayor, City of Kenosha  
Nickolas E. Arnold ..... Administrator, City of Kenosha  
Shirley Boening ..... Chairman, Town of Salem  
Michael J. Faber ..... President, Village of Silver Lake  
Leslie J. Fafard ..... District Director, Wisconsin Department of Transportation  
Carol J. Fischer ..... Chairman, Town of Somers  
Raymond A. Forgianni, Jr. ..... Director of City Development, City of Kenosha  
Lauren A. Fox ..... Chairman, Town of Randall  
Thomas L. Frank ..... Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation  
Marlene P. Goodson ..... President, Village of Paddock Lake  
Thomas W. Kerkman ..... Chairman, Town of Brighton  
George E. Melcher ..... Director, Office of Planning and Development, Kenosha County  
Carol A. Paus ..... President, Village of Twin Lakes  
Michael R. Pollockoff ..... Administrator, Village of Pleasant Prairie  
Donald Smitz ..... Chairman, Town of Wheatland  
Donald M. Wienke ..... Chairman, Town of Bristol  
Mark Wisniewski ..... Chairman, Kenosha County Highway and Parks Committee  
August Zirbel, Jr. ..... Chairman, Town of Paris

#### MILWAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Tyrone P. Dumas ..... Director of Public Works, Milwaukee County  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary  
Leslie J. Fafard ..... District Director, Wisconsin Department of Transportation  
Thomas L. Frank ..... Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation  
James R. Grassman ..... Administrator, City of Wauwatosa  
Richard H. Halfman ..... Village Engineer, Village of Brown Deer  
Dennis M. Johnson ..... City Engineer, City of West Allis  
Mariano A. Schifalacqua ..... City Engineer, City of Milwaukee

#### RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Glenn M. Lampark ..... Director of Public Works, Racine County  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern Wisconsin Regional Planning Commission  
Acting Secretary  
Gary J. Beck ..... Chairman, Town of Rochester  
Arnold L. Clement ..... Director of Planning and Development, Racine County  
Leslie J. Fafard ..... District Director, Wisconsin Department of Transportation  
Thomas L. Frank ..... Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation  
Edward C. Furey ..... Chairman, Town of Dover  
Richard J. Furst ..... Trustee, Village of Wind Point  
William J. Hassey ..... Chairman, Town of Norway  
Arthur W. Henning, Sr. ..... President, Village of Waterford  
Alan W. Jasperson ..... Chairman, Town of Raymond  
Richard M. Jones ..... Commissioner of Public Works, City of Racine  
Roger Kieffer ..... President, Village of Rochester  
Clifford Kinsey ..... Chairman, Town of Burlington  
Michael P. Kroes ..... Chairman, Town of Caledonia  
Robert Langmesser ..... Chairman, Town of Waterford  
Richard A. Linsmeier ..... Interim Director of City Development, City of Racine  
Edna M. Lowe ..... President, Village of Union Grove  
Dennis C. Mahoney ..... President, Village of North Bay  
Cecil F. Mehring ..... Director of Highway Engineering, Racine County  
Thomas P. Melzer ..... Chairman, Town of Mt. Pleasant  
Carolyn A. Milkie ..... President, Village of Sturtevant  
Frank A. Miller ..... President, Village of Elmwood Park  
James E. Moyer ..... Chairman, Town of Yorkville

#### OZAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Robert R. Dreblow ..... Highway Commissioner, Ozaukee County  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern Wisconsin Regional Planning Commission  
Acting Secretary  
Lester A. Bartel, Jr. ..... Chairman, Town of Grafton  
Anthony R. Depies ..... City Engineer, City of Port Washington  
Leslie J. Fafard ..... District Director, Wisconsin Department of Transportation  
Thomas L. Frank ..... Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation  
Robert Gehrke ..... Street Commissioner, Department of Public Works, Village of Thiensville  
Daniel B. Gute ..... Chairman, Town of Saukville  
Frederick Kaul ..... Chairman, Ozaukee County Highway Committee

**OZAUKEE COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE  
(continued)**

Francis J. Kleckner	Chairman, Town of Belgium
Jeffery P. Knight	President, Village of Saukville
John P. Kuerschner	Mayor, City of Cedarburg
Michael A. MacLaurin	Chairman, Town of Fredonia
James J. Moriarty	Mayor, City of Mequon
William Rathsack	President, Village of Fredonia
Kenneth A. Roell	Highway Commissioner/Town Engineer, Town of Cedarburg
Lee E. Schlenvogt	Chairman, Town of Port Washington
Donald J. Schommer	President, Village of Belgium
Rodney Schroeder	President, Village of Grafton

**WALWORTH COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Benjamin J. Coopman, Jr.	Highway Commissioner, Walworth County Chairman
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Acting Secretary	Chairman, Town of Darien
James R. Bilskey	City Manager, City of Whitewater
Gary W. Boden	Chairman, Town of Linn
David Bollweg	Chairman, Town of Delavan
Maureen C. Fahay	Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation
Thomas L. Frank	Systems Planning Manager, District 2, Wisconsin Department of Transportation
Edward J. Friede	Chairman, Town of LaFayette
Carl A. Gustafson	President, Village of Sharon
Michael Hornby	Chairman, Town of Geneva
George W. Jacobson	Chairman, Town of LaGrange
Neal J. Kedzie	President, Village of Williams Bay
Marianne P. Klemke	President, Village of Fontana-on-Geneva Lake
Irene M. LaBonne	President, Village of East Troy
William Loesch	Chairman, Town of Lyons
William R. Mangold	Supervisor, Town of Bloomfield
Kenneth Monroe	Chairman, Town of East Troy
Clayton O. Montez	Chairman, Town of Sharon
Allen L. Morrison	Chairman, Town of Richmond
Linda Olenski	Mayor, City of Elkhorn
Paul Ormson	President, Village of Genoa City
James M. Parker	President, Village of Walworth
David A. Rasmussen	Chairman, Walworth County Transportation and Parks Committee
Lawrence E. Scharine	City Administrator, City of Lake Geneva
James W. Stadler	Chairman, Town of Spring Prairie
James M. Stowell	Supervisor, Town of Troy
James Stute	Chairman, Town of Walworth
James Van Dreser	Chairman, Town of Sugar Creek
Loren Waite	Director of Public Works, City of Delavan
Mark E. Wendorf	President, Village of Darien
Robert Wenzel	

**WASHINGTON COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Kenneth M. Pesch	Highway Commissioner, Washington County Chairman
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Acting Secretary	Chairman, Town of Barton
Russell C. Abel	Chairman, Town of Kewaskum
George B. Allman	Chairman, Town of Hartland
Paul N. Bautzmann	Supervisor, Washington County Board
Howard O. Butch	Director of Community Development, City of West Bend
John B. Capelle	Mayor, City of Hartford
James Core	District Director, Wisconsin Department of Transportation
Leslie J. Fafard	Wisconsin Division Administrator, Federal Highway Administration, U. S. Department of Transportation
William K. Fung	Supervisor, Washington County Board
Peter L. Gonnering	President, Village of Newburg
Walter B. Grotelueschen	President, Village of Germantown
Charles J. Hargan	Supervisor, Town of West Bend
James E. Heipp	Chairman, Town of Polk
Willard F. Heppé	Clerk, Town of Jackson
Gordon C. Hoffmann	Chairman, Town of Germantown
Paul J. Metz	Chairman, Washington County Board
Kenneth F. Miller	Mayor, City of West Bend
Michael R. Miller	Administrator, Land Use and Park Department, Washington County
Paul E. Mueller	Chairman, Town of Richfield
William R. Neureuther	Clerk, Village of Slinger
Dean A. Otte	City Engineer, City of Hartford
William Ripp	

**WASHINGTON COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE  
(continued)**

Daniel S. Schmidt	Administrator, Village of Kewaskum
Don M. Shane	Citizen Member
Donna J. Spaeth	President, Village of Jackson
John C. Spielmann	City Planner and Director of Development, City of Hartford
Mark Strobel	Chairman, Town of Wayne
John Theusch	Chairman, Town of Farmington
Cheryl Vogt	Clerk, Town of Addison
Frank Volpintesta	Chairman, Town of Erin
Gary Wendorff	Member, Plan Commission, City of Hartford
Todd W. Wetterau	Trustee, Village of Germantown

**WAUKESHA COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Larry Alexander	Trustee, Village of Wales
Kathryn C. Bloomberg	Mayor, City of Brookfield
Richard A. Bolte	Director of Transportation, Waukesha County
Harlan E. Clinkenbeard	Administrator/Planner, Town of Pewaukee
David L. De Angelis	Mayor, City of Muskego
Leslie J. Fafard	District Director, Wisconsin Department of Transportation
Paul A. Feller	Director of Public Works, City of Waukesha
Raymond O. Foster, Jr.	President, Village of Oconomowoc Lake
Thomas L. Frank	Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation
Jerry W. Gasser	President, Village of Mukwonago
Terry Gissal	President, Village of Lannon
Mark Grosel	President, Village of Nashotah
James P. Hansen	President, Village of North Prairie
Hamid Hashemizadeh	Director, Department of Public Works, City of New Berlin
Keith Henderson	Chairman, Town of Brookfield
Donald R. Holt	Chairman, Town of Lisbon
Vytautas P. Janusonis	Chairman, Town of Ottawa
Thomas E. Kraus	Chairman, Town of Merton
John F. Laimon	President, Village of Pewaukee
Sharon L. Lear	Chairman, Town of Genesee
Edmond McAleer	Mayor, City of Delafield
James W. Nortman	President, Village of Elm Grove
Joseph St. Thomas	Chairman, Town of Oconomowoc
Allen Salmela	President, Village of Eagle
Karen L. Schuh	Supervisor, Town of Vernon
Bernard Schultz	City Engineer, City of Oconomowoc
Richard Seaman, Jr.	Trustee, Village of Chenequa
Jennifer M. Sheiffer	Administrator, Village of Pewaukee
James S. Soneberg	President, Village of Big Bend
Rodney T. Stilwell	Supervisor, Town of Waukesha
George Stumpf	President, Village of Lac La Belle
Maurice Sullivan	Chairman, Town of Summit
John H. Tevis	President, Village of Sussex
Marian L. Vek	Chairman, Town of Mukwonago
Max A. Vogt	Public Works Director, Village of Menomonee Falls
Robert W. Weber	President, Village of Merton
Donald Wilton	Chairman, Town of Eagle
Walter J. Woloszyk	President, Village of Butler
Kent D. Woods	Chairman, Town of Delafield
Bartley Zilk	President, Village of Dousman

**INTERGOVERNMENTAL COORDINATING AND ADVISORY  
COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND  
PROGRAMMING FOR THE RACINE URBANIZED AREA**

Glenn M. Lampark	Director of Public Works, Racine County
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Janet A. Bernberg	President, Village of Wind Point
James J. Blazek	City Engineer, City of Racine
Melissa A. Cook	Transportation Urban Planner, Transportation Section, Southeast Region, Wisconsin Department of Natural Resources
Jon J. Dederich	Plan Commissioner, Village of Elmwood Park
Patrick A. DeGrave	Administrator, Town of Mt. Pleasant
Joel P. Ettlinger	Area Director, Federal Transit Administration, U. S. Department of Transportation
Leslie J. Fafard	District Director, Wisconsin Department of Transportation
William K. Fung	Wisconsin Division Administrator, Federal Highway Administration, U. S. Department of Transportation
Michael J. Glasheen	Transit Planner, City of Racine

**INTERGOVERNMENTAL COORDINATING AND ADVISORY  
COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND  
PROGRAMMING FOR THE RACINE URBANIZED AREA**  
(continued)

Kenneth J. Leonard	Director, Bureau of Planning, Division of Transportation Investment Management, Wisconsin Department of Transportation
Linda A. Lovejoy	Chief, Public Transit Section, Bureau of Transit and Local Roads, Wisconsin Department of Transportation
Dennis C. Mahoney	President, Village of North Bay
Carolyn A. Milkie	President, Village of Sturtevant
Cheryl L. Newton	Environmental Protection Specialist, Region V, U. S. Environmental Protection Agency
Thomas L. Ruetten	President, Wisconsin Coach Lines, Inc.
Mark J. Schmalz	Town Engineer, Town of Caledonia

**INTERGOVERNMENTAL COORDINATING AND ADVISORY  
COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND  
PROGRAMMING FOR THE KENOSHA URBANIZED AREA**

Frederick J. Patrie	Director of Public Works, Kenosha County
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Melissa A. Cook	Transportation Urban Planner, Transportation Section, Southeast Region, Wisconsin Department of Natural Resources
Joel P. Ettinger	Area Director, Federal Transit Administration, U. S. Department of Transportation
Leslie J. Fafard	District Director, Wisconsin Department of Transportation
William K. Fung	Wisconsin Division Administrator, Federal Highway Administration, U. S. Department of Transportation
Frederick A. Haerter	Public Service Administrator, City of Kenosha
Kenneth J. Leonard	Director, Bureau of Planning, Division of Transportation Investment Management, Wisconsin Department of Transportation
Linda A. Lovejoy	Chief, Public Transit Section, Bureau of Transit and Local Roads, Wisconsin Department of Transportation
Joseph McCarthy	Director, Department of Transportation, City of Kenosha
Cheryl L. Newton	Environmental Protection Specialist, Region V, U. S. Environmental Protection Agency
Michael R. Pollockoff	Administrator, Village of Pleasant Prairie
Thomas L. Ruetten	President, Wisconsin Coach Lines, Inc.

**INTERGOVERNMENTAL COORDINATING AND ADVISORY  
COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND  
PROGRAMMING FOR THE MILWAUKEE URBANIZED AREA**

Tyrone P. Dumas	Director of Public Works, Milwaukee County
F. Thomas Ament	Milwaukee County Executive
Richard A. Bolte	Director of Transportation, Waukesha County
Patrick T. Curley	Director, Intergovernmental Relations Division, City of Milwaukee
Anthony J. Czaja	Supervisor, Milwaukee County Board
Robert R. Dreblow	Highway Commissioner, Ozaukee County
Brian G. DuPont	City Engineer, City of Greenfield
Richard H. Halfman	Village Engineer, Village of Brown Deer
Dennis M. Johnson	City Engineer, City of West Allis
James C. Kaminski	Commissioner of Public Works, City of Milwaukee
Kathryn A. Kuhn	Legislative Coordinator, Milwaukee County
LeAnn M. Launstein	Supervisor, Milwaukee County Board
Carol J. Lombardi	Mayor, City of Waukesha
Michael L. Morgan	Commissioner, Department of City Development, City of Milwaukee
James Rowen	Policy Director, Office of the Mayor, City of Milwaukee
Mariano A. Schifalacqua	City Engineer, City of Milwaukee
S. Howard Young	Engineering Administrator, City of Wauwatosa

**Nonvoting Technical Staff Members**

Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Rodney A. Clark	Chief, State Highways and Local Assistance Section, Office of Policy and Budget, Wisconsin Department of Transportation
Melissa A. Cook	Transportation Urban Planner, Transportation Section, Southeast Region, Wisconsin Department of Natural Resources

**INTERGOVERNMENTAL COORDINATING AND ADVISORY  
COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND  
PROGRAMMING FOR THE MILWAUKEE URBANIZED AREA**  
(continued)

Joel P. Ettinger	Area Director, Federal Transit Administration, U. S. Department of Transportation
Leslie J. Fafard	District Director, Wisconsin Department of Transportation
William K. Fung	Wisconsin Division Administrator, Federal Highway Administration, U. S. Department of Transportation
Thomas P. Kujawa	Managing Director, Milwaukee County Transit System
Linda A. Lovejoy	Chief, Public Transit Section, Bureau of Transit and Local Roads, Wisconsin Department of Transportation
Thomas L. Ruetten	President, Wisconsin Coach Lines, Inc.

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON REGIONAL TRANSPORTATION SYSTEM PLANNING**

Frederick J. Patrie	Director of Public Works, Kenosha County
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Edward A. Beimborn	Professor of Civil Engineering and Mechanics, University of Wisconsin-Milwaukee
Peter W. Beitzel	Vice-President of International Trade, Transportation, and Business Development, Metropolitan Milwaukee Association of Commerce
John M. Bennett	City Engineer, City of Franklin
Richard A. Bolte	Director of Transportation, Waukesha County
Benjamin J. Coopman, Jr.	Highway Commissioner, Walworth County
Robert R. Dreblow	Highway Commissioner, Ozaukee County
Tyrone P. Dumas	Director of Public Works, Milwaukee County
Lloyd L. Eagan	Director, Bureau of Air Management, Wisconsin Department of Natural Resources
Joel P. Ettinger	Area Director, Region V, Federal Transit Administration, U. S. Department of Transportation
Leslie J. Fafard	District Director, Wisconsin Department of Transportation
Paul A. Feller	Director of Public Works, City of Waukesha
Raymond A. Forgianni, Jr.	Director, Department of City Development, City of Kenosha
William K. Fung	Wisconsin Division Administrator, Federal Highway Administration, U. S. Department of Transportation
Michael J. Glasheen	Transit Planner, City of Racine
George E. Hall	Chief, Boundary Review Section, Bureau of Intergovernmental Relations, Wisconsin Department of Administration
Thomas A. Howells	President, Wisconsin Motor Carriers Association
Dennis M. Johnson	City Engineer, City of West Allis
Robert C. Johnson	Transit Coordinator, City of Waukesha
Robert Kennedy	Transit System Utility Land Use Policy Analyst, Citizens for a Better Environment
David A. Kuemmel	Associate Professor, Civil and Environmental Engineering, Marquette University
Thomas P. Kujawa	Managing Director, Milwaukee County Transit System
Glenn M. Lampark	Director of Public Works, Racine County
Kenneth J. Leonard	Director, Bureau of Planning, Division of Transportation Investment Management, Director, Department of Transportation, City of Kenosha
Joseph McCarthy	Highway Commissioner, Washington County
Kenneth M. Pesch	Highway Commissioner, Washington County
James Rowen	Policy Director, Office of the Mayor, City of Milwaukee
Thomas L. Ruetten	President, Wisconsin Coach Lines, Inc.
Philip J. Scherer	Executive Director, Transportation Development Association of Wisconsin
Mariano A. Schifalacqua	City Engineer, City of Milwaukee

**TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON  
REGIONAL BICYCLE AND PEDESTRIAN FACILITIES SYSTEM PLANNING**

Thomas W. Meaux	Treasurer, Milwaukee County
Terry L. Witkowski	Safety Director, City of Milwaukee Police Department
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Paul A. Feller	Director of Public Works, City of Waukesha

**TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON  
REGIONAL BICYCLE AND PEDESTRIAN FACILITIES SYSTEM PLANNING  
(continued)**

Neal R. Frauenfelder	Planning Manager, Walworth County Department of Planning, Zoning, Sanitation, and Solid Waste Management
Thomas J. Genske	Surveyor and Construction Superintendent, Ozaukee County
Steven S. Haimo	President, Bay View Bicycle Club
Thomas P. Huber	State Bicycle and Pedestrian Program Coordinator, Wisconsin Department of Transportation
Marlin P. Johnson	Member, Ice Age Trail Committee
Stephen N. Kamuiru	Director, Transit and Traffic Engineering Services, Milwaukee County
James W. Kavemeier	Parks Manager, Waukesha County Department of Parks and Land Use
Vivian M. "Kit" Keller	Policy Analyst, Bicycle Federation of America and Pedestrian Federation of America
Mary J. Lange	Engineer, City of Brookfield
Jaclyn D. Lawton	Environmental Coordinator, Federal Highway Administration
Randal LeClaire	Traffic Engineer, City of Kenosha
Douglas E. McIntosh	Traffic Engineer, City of Racine
Raymond G. Meyer	Public Member, Ozaukee County
Mary R. Monroe	Director of Public Relations, Trek Bicycle Company
Maureen A. Murphy	Special Projects Manager, Milwaukee County
Robert F. Pfeiffer	Group Manager-Projects South, District 2, Wisconsin Department of Transportation
Mark A. Piotrowicz	Planner, City of West Bend
Jeffrey S. Polenske	Traffic Control Engineer, City of Milwaukee
Sara Rottunda	Member, Transportation Subcommittee, Governor's Advisory Bicycle Coordinating Council
Paul S. Sandgren	Superintendent, Lapham Peak State Forest, Wisconsin Department of Natural Resources
Mariano A. Schifalacqua	City Engineer, City of Milwaukee
William R. Waldron	Planning Analyst, Milwaukee County Department of Parks, Recreation and Culture

**TECHNICAL ADVISORY COMMITTEE ON COMMUTER RAILWAY FEASIBILITY PLANNING IN THE KENOSHA-RACINE-MILWAUKEE TRAVEL CORRIDOR**

Frederick J. Patrie	Director of Public Works, Kenosha County Chairman
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Linda Bolte	Deputy Director for Planning, Chicago Area Transportation Study
Julie K. Brown	Manager of Commuter Rail Development, Union Pacific Railroad
Tyrone P. Dumas	Director of Public Works, Milwaukee County
Joel P. Ettinger	Area Director, Region V, Federal Transit Administration, U. S. Department of Transportation
E. Craig Faucett	Director of Engineering, City of Cudahy
Gary A. Foyle	Director of Planning and Analysis, Metra
Thomas L. Frank	Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation
Edward J. Friede	Manager, Systems Planning Group, Wisconsin Department of Transportation, District 2
Thomas P. Kujawa	Managing Director, Milwaukee County Transit System
Glenn M. Lampark	Director of Public Works, Racine County
Kenneth J. Leonard	Director, Bureau of Planning, Division of Transportation Investment Management, Wisconsin Department of Transportation
Joseph McCarthy	Director of Transportation, City of Kenosha
Mark R. Nordling	Director, Commercial Development, Canadian Pacific Railway
Mariano A. Schifalacqua	City Engineer, City of Milwaukee
Jack Schultz	City Engineer, City of St. Francis
James M. Smith	Mayor, City of Racine
Michael J. Sullivan	Design Engineer, City of Oak Creek
Kyle E. Vandercar	City Engineer, City of South Milwaukee

**TECHNICAL ADVISORY COMMITTEE ON COMMUTER RAILWAY FEASIBILITY PLANNING IN THE WALWORTH-FOX LAKE TRAVEL CORRIDOR**

Benjamin J. Coopman, Jr.	Highway Commissioner, Walworth County Chairman
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
David Bollweg	Chairman, Town of Linn
Linda Bolte	Deputy Director for Planning, Chicago Area Transportation Study
Joel P. Ettinger	Area Director, Region V, Federal Transit Administration, U. S. Department of Transportation
Gary A. Foyle	Director of Planning and Analysis, Metra
Thomas L. Frank	Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation
Edward J. Friede	Manager, Systems Planning Group, Wisconsin Department of Transportation, District 2
William E. Gardner	President, Wisconsin & Southern Railroad Company
John M. Glass	Trustee, Village of Walworth
Marianne P. Klemke	President, Village of Williams Bay
Irene M. LaBonne	President, Village of Fontana-on-Geneva Lake
Kenneth J. Leonard	Director, Bureau of Planning, Division of Transportation Investment Management, Wisconsin Department of Transportation
James M. Parker	President, Village of Genoa City
Pauline A. Parker	Supervisor, Walworth County Board; Member, Walworth County Transportation, Parks & Public Works Committee
Floyd F. Pierce	Supervisor, Town of Walworth
Charles Rude	Alderman, City of Lake Geneva
William H. Sills III	Secretary, Geneva Lake Area Joint Transit Commission; Member, Wisconsin River Rail Transit Commission
Mark E. Wendorf	Director of Public Works, City of Delavan

**TECHNICAL ADVISORY COMMITTEE ON COMMUTER RAILWAY FEASIBILITY PLANNING IN THE BURLINGTON-ANTIOCH TRAVEL CORRIDOR**

Glenn M. Lampark	Director of Public Works, Racine County Chairman
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Lester Boehm	Supervisor, Town of Burlington
Shirley Boening	Chairman, Town of Salem
Linda Bolte	Deputy Director for Planning, Chicago Area Transportation Study
Alan Bryner	Trustee, Village of Silver Lake
A. Roger Cupps	Planning Supervisor, Transportation Planning, Wisconsin Department of Transportation
Joel P. Ettinger	Regional Director, Region V, Federal Transit Administration, U. S. Department of Transportation
Gary A. Foyle	Director of Planning and Analysis, Metra
Thomas L. Frank	Planning and Research Engineer, Federal Highway Administration, U. S. Department of Transportation
Jeannie E. Hefty	Mayor, City of Burlington
Glenn J. Kerbs	Vice President, Engineering, Wisconsin Central Ltd.
Kenneth J. Leonard	Director, Bureau of Planning, Division of Transportation Investment Management, Wisconsin Department of Transportation
Frederick J. Patrie	Director of Public Works, Kenosha County
Donald Smitz	Chairman, Town of Wheatland
Robin J. Vos	Chairman, Finance Committee, Racine County Board

**ROOT RIVER WATERSHED COMMITTEE**

Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County Chairman
Richard A. Linsmeier	Interim Director of City Development, Vice-Chairman
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
John M. Bennett	City Engineer, City of Franklin
James J. Blazek	City Engineer, City of Racine
David L. De Angelis	Mayor, City of Muskego
Brian G. DuPont	City Engineer, City of Greenfield
Dennis M. Johnson	City Engineer, City of West Allis
Ronald W. Kazmierczak	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
Anne Spray Kinney	Executive Director, Milwaukee Metropolitan Sewerage District

### ROOT RIVER WATERSHED COMMITTEE

(continued)

Orville L. Kurth	District Conservationist, U. S. Natural Resources Conservation Service, Milwaukee and Waukesha Counties
Glenn M. Lampark	Director of Public Works, Racine County
Dale J. Richards	Mayor, City of Oak Creek
James R. Ryan	President, Village of Hales Corners
Charles L. Seeger	County Conservationist, Racine County
James M. Smith	Mayor, City of Racine

### FOX RIVER WATERSHED COMMITTEE

William D. Rogan	Former Commissioner, Southeastern Wisconsin Regional Planning Commission
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Grey Abendroth	President, Western Racine County Sewerage District
Gary J. Beck	Chairman, Town of Rochester
Kathryn C. Bloomberg	Mayor, City of Brookfield
Arnold L. Clement	Director of Planning and Development, Racine County
Lee Cunningham	Agricultural Agent, Walworth County
David L. De Angelis	Mayor, City of Muskego
Paul A. Feller	Director of Public Works, City of Waukesha
Robert E. Harvey	Citizen Member, Town of Vernon
William J. Hassey	Chairman, Town of Norway
Jeannie E. Hefty	Mayor, City of Burlington
Arthur W. Henning, Sr.	President, Village of Waterford
Ronald W. Kazmierczak	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
Roger E. Kieffer	President, Village of Rochester
Eugene Kovacs	Director, Walworth County Department of Planning, Zoning, Sanitation, and Solid Waste Management
Orville L. Kurth	District Conservationist, U. S. Natural Resources Conservation Service
Robert Langmesser	Chairman, Town of Waterford
George E. Melcher	Director, Office of Planning and Development, Kenosha County
John H. Mielke	Consulting Engineer, Rueker & Mielke, Inc., Waukesha
Raymond J. Moyer, Jr.	Citizen Member, Town of Waterford
Cloyd A. Porter	Wisconsin State Representative
Phil H. Sander	Representative, Southeastern Wisconsin Sportsmen's Federation
Dr. Bruno E. Schiffleger	Citizen Member, City of Elkhorn
Karen L. Schuh	Chairman, Town of Vernon
Charles L. Seeger	County Conservationist, Racine County
Donald Smitz	Chairman, Town of Wheatland
John C. Toshner	Director, Waukesha County Department of Parks and Land Use
Alvin R. Wilks	Commissioner, Racine County Farm Drainage Board
Stan Wilson	Citizen Member, City of Burlington

### MILWAUKEE RIVER WATERSHED COMMITTEE

Richard W. Cutler	Attorney, Milwaukee
Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County
Delbert J. Cook	Chairman, Cedar Creek Restoration Council
James B. Esselmann	Chairman, Town of Trenton
Lawrence W. Hillman	Commissioner, Southeastern Wisconsin Regional Planning Commission
William T. Jens	County Board Chairman, Sheboygan County
James C. Kaminski	Commissioner of Public Works, City of Milwaukee
Ronald W. Kazmierczak	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
Anne Spray Kinney	Executive Director, Milwaukee Metropolitan Sewerage District
Harry J. Kollman	Administrator, City of Mequon
Robert L. Konik	Planner, Fond du Lac County
Raymond R. Krueger	Chairman, Milwaukee River Restoration Council, Inc.
Christopher B. Lear	Administrator/Clerk, Village of Saukville
Marilyn H. Merten	Clerk, Washington County
Paul E. Mueller	Administrator, Washington County Land Use and Park Department
Steven Narveson	Director, Ozaukee County Department of Environmental Health
Richard E. Zarling	Former Director of Elementary Education, Kewaskum Community Schools

### MENOMONEE RIVER WATERSHED COMMITTEE

James C. Kaminski	Commissioner of Public Works, City of Milwaukee
Gordon Rozmus	Director of Community Development, City of Wauwatosa
Vice-Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County
Robert B. Boucher	Representative, Friends Of The Menomonee River
Andrea Steen Crawford	Manager, Village of Elm Grove
Richard A. Farrenkopf	Manager, Village of Menomonee Falls
Gary A. Gagnon	Village Engineer, Village of Germantown
Dennis M. Johnson	City Engineer, City of West Allis
Ronald W. Kazmierczak	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
President, Wauwatosa State Bank	
Anne Spray Kinney	Executive Director, Milwaukee Metropolitan Sewerage District
George C. Keller	
Raymond J. Kipp	Dean Emeritus, College of Engineering, Marquette University
Harry J. Kollman	Administrator, City of Mequon
Frederick E. Sowinski	Director of Manufacturing, Falk Corporation, Milwaukee
John C. Toshner	Director, Waukesha County Department of Parks and Land Use
Clark E. Wangerin	Special Projects Engineer, City of Brookfield

### KINNICKINN RIVER WATERSHED COMMITTEE

Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County
Mariano A. Schifalacqua	City Engineer, City of Milwaukee
Vice-Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Tyrone P. Dumas	Director of Public Works, Milwaukee County
Brian G. DuPont	City Engineer, City of Greenfield
E. Craig Faurett	Director of Engineering, City of Cudahy
Dennis M. Johnson	City Engineer, City of West Allis
James C. Kaminski	Commissioner of Public Works, City of Milwaukee
Anne Spray Kinney	Executive Director, Milwaukee Metropolitan Sewerage District
Stanley Polewski	Proprietor, Polewski Pharmacy, Milwaukee
Franklin C. Schultz	Waste Management Team Supervisor, Southeast Region, Wisconsin Department of Natural Resources
Frank J. Wabiszewski	Vice-President, Maynard Steel Casting Company, Milwaukee

### PIKE RIVER WATERSHED COMMITTEE

George E. Melcher	Director of Planning and Development, Kenosha County
Vice-Chairman	President, Mt. Pleasant Stormwater Drainage District No. 1
James Turek	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Arnold L. Clement	Director of Planning and Development, Racine County
Carol J. Fischer	Chairman, Town of Somers
Raymond A. Forgianni, Jr.	Director of City Development, City of Kenosha
Donald N. Hallowell	Public Works Director, Town of Mt. Pleasant
Gerald L. Hebard	District Conservationist, U. S. Natural Resources Conservation Service, Racine County
Ronald W. Kazmierczak	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
Neils E. Ladine	Director, Division of Golf, Public Works Department, Kenosha County
Chelvadurai Manogaran	Associate Professor, Department of Geography, University of Wisconsin-Parkside
Thomas P. Melzer	Chairman, Town of Mt. Pleasant
Carolyn A. Milkie	President, Village of Sturtevant
O. Fred Nelson	General Manager, City of Kenosha Water Utility
Charles A. Schweitzer	Chief Engineer, Racine Water and Wastewater Utility
Charles L. Seeger	County Conservationist, Racine County
Barry Thomas	Conservation Chairman, John Muir Chapter, Sierra Club

#### OAK CREEK WATERSHED COMMITTEE

Tammy LaBorde	Administrator, City of South Milwaukee
Chairman	
Paul E. Milewski	Director of Community Development, City of Oak Creek
Vice-Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County
John M. Bennett	City Engineer, City of Franklin
Ronald W. Kazmierczak	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
Anne Spray Kinney	Executive Director, Milwaukee Metropolitan Sewerage District
Charles G. Lambert	Secretary, Milwaukee County Conservation Alliance
Gary A. Mick	Director of Environmental Services, Department of Public Works, Milwaukee County
Mariano A. Schifalacqua	City Engineer, City of Milwaukee
Douglas R. Sleight	Member, South Milwaukee Yacht Club
Kenneth Vick	Airport Engineer, Milwaukee County Department of Public Works

#### DES PLAINES RIVER WATERSHED COMMITTEE

George E. Melcher	Director, Office of Planning and Development, Kenosha County
Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Nancy C. Braker	Director of Science and Stewardship, The Nature Conservancy
John F. Burke	Manager, Halter Wildlife Area
Arnold L. Clement	Director of Planning and Development, Racine County
Shirley B. Davidson	Chairman, Town of Bristol
Carol J. Fischer	Chairman, Town of Somers
Raymond A. Forgianni, Jr.	Director of City Development, City of Kenosha
Marlene P. Goodson	President, Village of Paddock Lake
Leonard R. Johnson	Kenosha County Board Supervisor; Chairman, Kenosha County Land Conservation Committee
Wayne E. Koessl	Representative, WISPARC Corporation
Ward S. Miller	Executive Director, Lake County Stormwater Management Commission
O. Fred Nelson	General Manager, City of Kenosha Water Utility
Douglas J. Noble	Supervisor, Kenosha County Board
Phillip D. Peters	Executive Director, Northeastern Illinois Planning Commission
Gregory J. Pilarski	Illinois Fox Basin Team Supervisor, Wisconsin Department of Natural Resources
Michael R. Pollockoff	Administrator, Village of Pleasant Prairie
Phil H. Sander	Member, Des Plaines Wetland Conservancy, Inc.
August Zirbel, Jr.	Chairman, Town of Paris

#### TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON COASTAL MANAGEMENT IN SOUTHEASTERN WISCONSIN

Dr. Norman P. Lasca	Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee
Chairman	
Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County
Vice-Chairman	
Donald M. Reed	Chief Biologist, Southeastern Wisconsin Regional Planning Commission
Secretary	
Hubert J. Albert	Port Washington Yacht Club
Joseph A. Dean	Mayor, City of Port Washington
E. Craig Faurett	Director of Engineering, City of Cudahy
Susan E. Joyce	Manager, Village of Fox Point
James C. Kaminski	Commissioner of Public Works, City of Milwaukee
Anne Spray Kinney	Executive Director, Milwaukee Metropolitan Sewerage District
Tammy LaBorde	Administrator, City of South Milwaukee
Gloria L. McCutcheon	District Director, Southeast Region, Wisconsin Department of Natural Resources
Gary A. Mick	Director of Environmental Services, Department of Public Works, Milwaukee County
Dr. William G. Murphy	Former Professor, Soils Mechanics, College of Engineering, Marquette University; Engineers and Scientists of Milwaukee
C. William Nelson	Member, Great Lakes Sports Fisherman's Club
Mary C. Nelson	City of South Milwaukee. Shoreline Property Owner
Dr. William T. Painter	President, Foundation Engineering, Inc., Milwaukee
James M. Phinney	Resident, Village of Fox Point
Phil H. Sander	Representative, Southeastern Wisconsin Sportsmen's Federation
Charles L. Seeger	County Conservationist, Racine County
Kenneth J. Szallai	Port Director, Board of Harbor Commissioners, City of Milwaukee

#### INTERGOVERNMENTAL COORDINATING AND ADVISORY COMMITTEE FOR THE NORTHWESTERN WAUKESHA COUNTY SANITARY SEWERAGE SYSTEM PLAN

Kent D. Woods	Representative, Town of Delafield
Chairman	
Jeffery A. Flaws	President, Village of Wales
Vice-Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Dale W. Arenz	Attorney, Ixonia Sanitary District No. 2
Raymond O. Foster, Jr.	President, Village of Oconomowoc Lake
James W. Hansen	Utilities Superintendent, Village of Dousman
Robert W. Hyde	General Manager, Delafield-Hartland Water Pollution Control Commission
Vytautas P. Janusonis	Chairman, Town of Ottawa
Thomas E. Kraus	Chairman, Town of Merton
David C. Lamerand	President, Village of Hartland
Sharon L. Lear	Chairman, Town of Genesee
Richard L. Mace	Manager, Planning and Zoning, Waukesha County Department of Parks and Land Use
Edmond McAleer	Mayor, City of Delafield
William J. Mielke	Consulting Engineer, City of Oconomowoc
Joseph St. Thomas	Chairman, Town of Oconomowoc
Jackie A. Shuda	Wastewater Engineer, Illinois Fox Basin Team, Wisconsin Department of Natural Resources
George Stumpf	President, Village of Lac La Belle
Maurice Sullivan	Chairman, Town of Summit
Wallace C. Thiel	Administrator, Village of Hartland
William Treuden	Trustee, Village of Nashotah
Robert W. Weber	President, Village of Merton
Gary L. Wieczorek	Administrator, Village of Chenequa

#### TECHNICAL ADVISORY COMMITTEE ON REGIONAL AQUIFER PERFORMANCE SIMULATION MODELING

Brian S. Barrett	General Manager, Waukesha Water Utility
Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Douglas S. Cherkauer	Professor of Geology, University of Wisconsin-Milwaukee
Arnold L. Clement	Director, Racine County Planning and Development Division
Dean Fischer	Director of Public Works, City of Whitewater
Francis G. Fujia	Water Supply Municipal Engineer, Wisconsin Department of Natural Resources
Gary A. Gagnon	Village Engineer, Village of Germantown
Warren A. Gebert	District Chief, U. S. Geological Survey
Ronald G. Hennings	Assistant Director, Wisconsin Geological and Natural History Survey
Terrance H. Kiekhaefer	Manager, City of West Bend Water Utility
Thomas J. Krueger	Water and Wastewater Utility Manager, Village of Grafton
Michael D. Lemcke	Chief, Groundwater Management Section, Wisconsin Department of Natural Resources
George E. Melcher	Director, Kenosha County Office of Planning and Development
Michael P. Rau	Director of Water Services, Bonestroo, Rosene, Anderlin & Associates, Inc.
Thomas Rossmiller	Director of Public Works, Village of East Troy
Shuichi Sasaki	Production Manager, Kikkoman Foods, Inc.
Steven H. Schultz	Principal Engineer, Ruekert & Mielke, Inc.
Mark D. Simon	Water Superintendent, City of Brookfield
Larry R. Wims	Utility Superintendent, City of New Berlin
Constance Wilson	Utility Manager, Burlington Water Utility

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL LAND USE PLANNING

Arnold L. Clement	Director of Planning and Development, Racine County
Chairman	
Harlan E. Clinkenbeard	Administrator/Planner, Town of Pewaukee
Vice-Chairman	
Philip C. Evenson	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Susan L. Baldwin	Director of Parks, Recreation and Culture, Milwaukee County
John B. Capelle	Director of Community Development, City of West Bend
Lewis R. Dixon	Manager, Land Use Planning, WISPARC Corporation
Daniel F. Ertl	Director of Planning and Zoning, City of Brookfield
Raymond A. Forgianni, Jr.	Director of City Development, City of Kenosha
Neal R. Frauenfelder	Planning Manager, Walworth County Department of Planning, Zoning, Sanitation, and Solid Waste Management
George E. Hall	Chief, Boundary Review Section, Bureau of Intergovernmental Relations, Wisconsin Department of Administration
Frank M. Hedcock	Director of Community Development, City of Waukesha

**TECHNICAL COORDINATING AND ADVISORY  
COMMITTEE ON REGIONAL LAND USE PLANNING  
(continued)**

Gregory I. Igl . . . . . District Conservationist, U. S. Natural Resources Conservation Service, Walworth County  
 J. David Jelinski . . . . . Director, Land and Water Resources Bureau, Wisconsin Department of Agriculture, Trade and Consumer Protection  
 Robert Kennedy . . . . . Land Use Policy Analyst, Citizens for a Better Environment  
 Richard A. Linsmeier . . . . . Interim Director of City Development, City of Racine  
 James J. Lynch . . . . . Director of Community Development, Village of Shorewood  
 Gloria L. McCutcheon . . . . . District Director, Southeast Region, Wisconsin Department of Natural Resources  
 George E. Melcher . . . . . Director, Office of Planning and Development, Kenosha County  
 Paul E. Milewski . . . . . Director of Community Development, City of Oak Creek  
 Michael L. Morgan . . . . . Commissioner, Department of City Development, City of Milwaukee  
 Paul E. Mueller . . . . . Administrator, Washington County Land Use and Park Department  
 Gordon Rozmus . . . . . Director of Community Development, City of Wauwatosa  
 Brad Lee G. Steinke . . . . . Director of Community Development, City of Mequon  
 John C. Toshner . . . . . Director, Waukesha County Department of Parks and Land Use  
 Jean M. Werbie . . . . . Community Development Director, Village of Pleasant Prairie  
 Dan A. Wilson . . . . . Resource-Horticulture Agent, University of Wisconsin-Extension, Washington County  
 Lawrence P. Witzling . . . . . Associate Dean of Architecture and Urban Planning, University of Wisconsin-Milwaukee

**TECHNICAL ADVISORY COMMITTEE  
ON SOCIOECONOMIC STUDIES**

Philip C. Evenson . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Chairman and Secretary  
 Jeffrey C. Browne . . . . . Senior Researcher, Public Policy Forum  
 James K. Caldwell . . . . . President, First Citizens State Bank, Whitewater  
 Balkrishna D. Kale . . . . . Demographer, Demographic Services Center, Wisconsin Department of Administration  
 Thomas S. Kopitzke . . . . . Manager of Forecasting, Ameritech  
 Dale A. Landgren . . . . . Director of Business Planning, Wisconsin Electric Power Company  
 Patrick Linnane . . . . . Deputy Director, Milwaukee County Planning Council for Health and Human Services  
 Terry F. Ludeman . . . . . Chief, Local Workforce Planning Section, Bureau of Workforce Information, Wisconsin Department of Workforce Development  
 Bret J. Mayborne . . . . . Economic Research Director, Metropolitan Milwaukee Association of Commerce  
 George E. Melcher . . . . . Director, Kenosha County Office of Planning and Development  
 Paul E. Mueller . . . . . Administrator, Washington County Land Use and Park Department  
 Helen A. Ramon . . . . . Executive Director, Southeastern Wisconsin Area Agency on Aging  
 Eugene A. Schubert . . . . . Economist, Wisconsin Department of Revenue  
 Mary J. Stott . . . . . Senior Planner, Department of City Development, City of Milwaukee  
 Paul R. Voss . . . . . Director, Applied Population Laboratory, University of Wisconsin-Madison  
 Thomas Walker . . . . . Administrator, Division of Planning, Wisconsin Department of Transportation  
 Sandra M. Wysocki . . . . . Strategic Planning Manager, Milwaukee Journal Sentinel

**TECHNICAL ADVISORY COMMITTEE FOR THE  
PROTECTION AND MANAGEMENT OF NATURAL  
AREAS IN SOUTHEASTERN WISCONSIN**

Dr. Forest W. Stearns . . . . . Professor Emeritus, Department of Biological Sciences, University of Wisconsin-Milwaukee  
 Chairman . . . . . Chief Biologist, Southeastern Wisconsin Regional Planning Commission  
 Donald M. Reed . . . . . Secretary, Former Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Dr. Kurt W. Bauer . . . . . Wisconsin Regional Planning Commission  
 John E. Bielefeldt . . . . . Naturalist, Racine County Parks Department  
 Dr. Martyn J. Dibben . . . . . Executive Director, Schlitz Audubon Center  
 Wesley Eisenhauer . . . . . Former Director, Horticulture-Nature Division, Milwaukee County Department of Parks, Recreation and Culture  
 Andrew A. Holschbach . . . . . Land Conservation Director, Ozaukee County  
 Marlin P. Johnson . . . . . Associate Professor, Department of Biological Sciences, University of Wisconsin-Waukesha Center  
 G. Andrew Larsen . . . . . Executive Director, Riveredge Nature Center, Ozaukee County  
 Dr. Diane S. Lindsley . . . . . Horticulture Director, Milwaukee County Department of Parks, Recreation and Culture  
 Paul E. Matthiae . . . . . Chief, Natural Areas Section, Wisconsin Department of Natural Resources-Madison  
 Peter E. McKeever . . . . . State Director, The Nature Conservancy, Wisconsin Chapter  
 James P. Morrissey . . . . . Environmental Impact Coordinator, Wisconsin Department of Natural Resources-Southeast Region  
 Dr. David F. Overstreet . . . . . Principal Investigator, Great Lakes Archaeological Research Center  
 Jerry A. Schwarzmeier . . . . . Park Naturalist, Retzer Nature Center, Waukesha County  
 Dr. S. Galen Smith . . . . . Professor Emeritus, Department of Biology, University of Wisconsin-Whitewater  
 David W. White . . . . . Director, YWCA River Bend Nature Center, Racine  
 Dan A. Wilson . . . . . Resources Agent, University of Wisconsin-Extension, Washington County

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON THE STUDY OF ENVIRONMENTALLY SENSITIVE LANDS  
IN THE TOWN OF NORWAY SANITARY DISTRICT NO. 1**

Richard G. Rehberg . . . . . Vice-Chairman, Planning and Development Committee, Racine County  
 Chairman . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Philip C. Evenson . . . . . Secretary . . . . . Executive Director, Wind Lake Management District  
 Kathy A. Aron . . . . . Executive Director, Wind Lake Management District  
 Arnold L. Clement . . . . . Director of Planning and Development, Racine County  
 Jarmen Czuta . . . . . District Manager, Town of Norway Sanitary District No. 1  
 Lloyd Human . . . . . Former Chairman, Town of Norway  
 Philip T. Jacobson . . . . . Former Member, Town of Norway Plan Commission  
 Roland Kieffer . . . . . Member, Town of Norway Plan Commission  
 Robert J. Malsack . . . . . Vice-President, Tri-Lakes Conservation, Inc.  
 Delores Otto . . . . . Former Supervisor, Town of Norway  
 Dale J. Pfeiffle . . . . . Environmental Protection Specialist, U. S. Army Corps of Engineers  
 Mary Ellen Vollbrecht . . . . . Chief, Rivers and Regulation Section, Bureau of Fisheries Management and Habitat Protection, Wisconsin Department of Natural Resources  
 Robert F. Welch . . . . . Citizen Member  
 Melvin W. Wendt . . . . . Citizen Member



## Appendix C

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 1998

#### EXECUTIVE DIVISION

Philip C. Evenson, AICP  
Executive Director

Kenneth R. Yunker, PE  
Assistant Director

Elaine I. Andersen  
Executive Secretary

Ruth D. Jaeger  
Executive Secretary

#### **GEOGRAPHIC INFORMATION SYSTEMS DIVISION**

John G. McDougall  
Geographic Information Systems Manager  
  
Thomas D. Patterson  
MCAMLIS Project Manager  
  
Paul J. Clavette  
John D. Harasha  
Principal Programmer/Analysts

Patricia L. Schulze  
Senior Specialist  
  
Michael G. Gosetti  
Geographic Information Systems Supervisor

Bradley T. Subotnik  
Specialist  
  
Patricia L. Bouchard  
Jean M. Roman  
David M. Schulze  
John P. Senkerik  
Bradley J. Thomann  
Stephen W. Waldorf  
Rosemary K. Wilcenski  
Andrew J. Williamson  
Thomas L. Woodzick  
Geographic Information Systems Technicians

#### **ADMINISTRATIVE SERVICES DIVISION**

Elizabeth A. Larsen  
Administrative Officer  
  
Marcia L. Hayd  
Sandra L. Wasson  
Secretaries  
  
Kathleen A. Lisota  
Bookkeeper  
  
Sylvia Carlson  
Receptionist  
  
Robert J. Klatkiewicz  
Office Clerk

#### **LAND USE PLANNING DIVISION**

Bruce P. Rubin  
Chief Land Use Planner  
  
William J. Stauber, AICP  
Principal Planner  
  
Douglas J. Koehler  
Timothy J. McCauley  
Senior Planners  
  
David A. Schilling  
Kathryn E. Sobottke  
Senior Specialists  
  
Donald P. Heckel  
Jeffrey A. McVay  
James P. Siegler  
Thomas P. Zagar  
Research Analysts  
  
Nancee A. Nejedlo  
Principal Planning Draftsman  
  
Joyce G. Pariseau  
Aaron J. Staples  
Research Aides  
  
Christine A. Patock  
Secretary

#### **TRANSPORTATION PLANNING DIVISION**

Donald R. Martinson, PE  
Chief Transportation Engineer  
  
Robert E. Beglinger  
Principal Engineer  
  
Albert A. Beck  
Otto P. Dobnick  
Principal Planners  
  
John L. Zastrow  
Principal Specialist  
  
Patrick A. Pittenger  
Senior Planner  
  
Deborah L. Fredericks  
Planner  
  
Christopher T. Hiebert  
Engineer  
  
Wendy J. Burton-Whitcomb  
Secretary

#### **CARTOGRAPHIC AND GRAPHIC ARTS DIVISION**

Leland H. Kreblin, RLS  
Chief Planning Illustrator  
  
B. Lynn Nowak  
Donald P. Simon  
Principal Planning Draftsmen  
  
Dean W. Boyer  
Jean C. Johnson  
Senior Planning Draftsmen  
  
James M. Kocher  
LuAnn Sakale  
Christel A. Syrrakos  
Planning Draftsmen  
  
Louis L. Pezzi  
Richard J. Wazny  
Office Equipment Operators  
  
Dolores M. Knezinek  
Graphic Arts Technician  
  
Scott K. Enk  
Senior Editor

#### **ECONOMIC DEVELOPMENT PLANNING DIVISION**

John T. Washburn, RLS  
Senior Specialist  
  
Arno M. Klausmeier  
Librarian/Editor  
  
Holly V. Halbrucker  
Secretary  
  
John R. Meland  
Chief Economic Development Planner  
  
Patrick W. Drinan  
Garry M. Werra  
Senior Economic Development Planners

#### **COMMUNITY ASSISTANCE PLANNING DIVISION**

Monica C. Drewniany, AICP  
Chief Community Assistance Planner  
  
Nancy M. Anderson  
Kevin S. Hall  
Richard R. Kania, AICP, RLA  
Principal Planners  
  
Jennifer J. Reek  
Senior Planning Draftsman  
  
Vanessa L. Opel  
Planning Draftsman  
  
Joyce A. Gramz  
GIS Planning Specialist

#### **ENVIRONMENTAL PLANNING DIVISION**

Robert P. Biebel, PE  
Chief Environmental Engineer  
  
Donald M. Reed  
Chief Specialist  
  
Michael G. Hahn, PE  
Ronald J. Printz, PE  
Principal Engineers  
  
Jeffrey A. Thornton  
Principal Planner  
  
Thomas M. Slawski  
Senior Planner  
  
LeAnn S. Colburn  
Rachel E. Lang  
Lawrence A. Leitner  
Senior Specialists  
  
Najoua Ksontini  
Joshua A. Murray  
Engineers  
  
Kathleen I. Griswold  
Christine M. Hinz  
Christopher J. Jors  
Edward J. Schmidt  
Research Analysts  
  
Patricia M. Kokan  
Secretary



## Appendix D

### PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-1998

#### PROSPECTUSES

Regional Planning Program, April 1962\*

Root River Watershed Planning Program, March 1963\*

Fox River Watershed Planning Program, October 1964\*

Continuing Land Use-Transportation Study, May 1965

Milwaukee River Watershed Planning Program, September 1966\*

Comprehensive Library Planning Program, April 1968

Community Shelter Planning Program, August 1968

Racine Urban Planning District Comprehensive Planning Program, November 1968

Regional Sanitary Sewerage System Planning Program, December 1968

Menomonee River Watershed Planning Program, November 1969

Comprehensive Regional Airport Planning Program, December 1969\*

Regional Housing Study, December 1969

Deep Sandstone Aquifer Simulation Modeling Program, October 1972

Regional Park, Outdoor Recreation, and Related Open Space Planning Program, March 1973

Preliminary Engineering Study for the Abatement of Pollution from Combined Sewer Overflow in the Milwaukee Metropolitan Area, July 1973\*

Kinnickinnic River Watershed Planning Program Prospectus, November 1974\*

Regional Air Quality Maintenance Planning Program Prospectus, November 1974

Preliminary Engineering Study for the Abatement of Water Pollution in the Kenosha Urban Area, December 1975

Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus, September 1978\*

Milwaukee Area Primary Transit System Alternatives Analysis Prospectus, October 1978

Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Prospectus, November 1978

Milwaukee Area Work Time Rescheduling Study Prospectus, December 1978

Pike River Watershed Planning Program Prospectus, April 1979

Milwaukee Area Freeway Traffic Management System Study Prospectus, June 1979

Oak Creek Watershed Planning Program Prospectus, December 1979

Prospectus for an Energy Emergency Contingency Plan for Southeastern Wisconsin, December 1983

Milwaukee River Priority Watersheds Program Prospectus, March 1985

Stormwater Drainage and Flood Control Planning Program Prospectus for the Milwaukee Metropolitan Sewerage District, March 1985

Infrastructure Study for the Southeastern Wisconsin Region, June 1986

Milwaukee High Lake Level Impact Study Prospectus, December 1987

Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Kenosha Area, June 1988

Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Racine Area, May 1989\*

Natural Area Protection and Management Planning Program Prospectus, August 1989\*

Prospectus for the Preparation of a Comprehensive Plan for the Kenosha Urban Planning District, December 1990

Des Plaines River Watershed Planning Program Prospectus, September 1991

Prospectus for a Study of Emergency Medical Services in Waukesha County, March 1992

Prospectus for the Preparation of a Sanitary Sewerage System Plan for the Northwestern Waukesha County Area, September 1993

Regional Aquifer Performance Simulation Modeling Program Prospectus, October 1998

## OVERALL WORK PROGRAMS

Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1976-1980, December 1975

Overall Work Program of the Southeastern Wisconsin Regional Planning Commission: 1977-1981, December 1976

Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1978-1982, December 1977

Overall Work Program—1979 Southeastern Wisconsin Regional Planning Commission, October 1978

Overall Work Program—1980 Southeastern Wisconsin Regional Planning Commission, November 1979

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Overall Work Program—1982 Southeastern Wisconsin Regional Planning Commission, November 1981

Overall Work Program—1983 Southeastern Wisconsin Regional Planning Commission, October 1982

Overall Work Program—1984 Southeastern Wisconsin Regional Planning Commission, November 1983

Overall Work Program—1985 Southeastern Wisconsin Regional Planning Commission, October 1984

Overall Work Program—1986 Southeastern Wisconsin Regional Planning Commission, October 1985

Overall Work Program—1987 Southeastern Wisconsin Regional Planning Commission, September 1986

Overall Work Program—1988 Southeastern Wisconsin Regional Planning Commission, November 1987

Overall Work Program—1989 Southeastern Wisconsin Regional Planning Commission, November 1988

Overall Work Program—1990 Southeastern Wisconsin Regional Planning Commission, November 1989

Overall Work Program—1991 Southeastern Wisconsin Regional Planning Commission, November 1990

Overall Work Program—1992 Southeastern Wisconsin Regional Planning Commission, December 1991

Overall Work Program—1993 Southeastern Wisconsin Regional Planning Commission, December 1992

Overall Work Program—1994 Southeastern Wisconsin Regional Planning Commission, November 1993

Overall Work Program—1995 Southeastern Wisconsin Regional Planning Commission, November 1994

Overall Work Program—1996 Southeastern Wisconsin Regional Planning Commission, December 1995

Overall Work Program—1997 Southeastern Wisconsin Regional Planning Commission, December 1996

Overall Work Program—1998 Southeastern Wisconsin Regional Planning Commission, November 1997

Overall Work Program—1999 Southeastern Wisconsin Regional Planning Commission, October 1998

## STUDY DESIGNS

Study Design for the Continuing Regional Land Use-Transportation Study: 1970-1974\*

Study Design for the Continuing Land Use-Transportation Study: 1972-1976\*

Study Design for the Areawide Water Quality Planning and Management Program for Southeastern Wisconsin: 1975-1977\*

Study Design for the Milwaukee Harbor Estuary Comprehensive Water Resources Planning Program, September 1981

Study Design for the Continuing Regional Land Use-Transportation Study: 1992-2000, February 1993

Waukesha County Development Plan Study Design, May 1993

Upland Environmental Corridor Protection Study Design, September 1995

## PLANNING REPORTS

No. 1 - Regional Planning Systems Study, December 1962\*

No. 2 - Regional Base Mapping Program, July 1963\*

No. 3 - The Economy of Southeastern Wisconsin, June 1963\*

No. 4 - The Population of Southeastern Wisconsin, June 1963\*

No. 5 - The Natural Resources of Southeastern Wisconsin, June 1963\*

No. 6 - The Public Utilities of Southeastern Wisconsin, July 1963\*

No. 7 - The Regional Land Use-Transportation Study

Volume 1 - Inventory Findings: 1963, May 1965

Volume 2 - Forecasts and Alternative Plans: 1990, June 1966

Volume 3 - Recommended Regional Land Use and Transportation Plans: 1990, November 1966\*

PLANNING REPORTS-continued

- No. 8 - Soils of Southeastern Wisconsin, June 1966\*
- No. 9 - A Comprehensive Plan for the Root River Watershed, July 1966\*
- No. 10 - A Comprehensive Plan for the Kenosha Planning District
  - Volume 1 - Inventory Findings, Forecasts, and Recommended Plans, February 1967\*
  - Volume 2 - Implementation Devices, February 1967\*
- No. 11 - A Jurisdictional Highway System Plan for Milwaukee County, March 1969\*
- No. 12 - A Comprehensive Plan for the Fox River Watershed
  - Volume 1 - Inventory Findings and Forecasts, April 1969\*
  - Volume 2 - Alternative Plans and Recommended Plan, February 1970
- No. 13 - A Comprehensive Plan for the Milwaukee River Watershed
  - Volume 1 - Inventory Findings and Forecasts, December 1970\*
  - Volume 2 - Alternative Plans and Recommended Plan, October 1971\*
- No. 14 - A Comprehensive Plan for the Racine Urban Planning District
  - Volume 1 - Inventory Findings and Forecasts, December 1970
  - Volume 2 - The Recommended Comprehensive Plan, October 1972
  - Volume 3 - Model Plan Implementation Ordinances, September 1972
- No. 15 - A Jurisdictional Highway System Plan for Walworth County, October 1972\*
- No. 16 - A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974
- No. 17 - A Jurisdictional Highway System Plan for Ozaukee County, December 1973
- No. 18 - A Jurisdictional Highway System Plan for Waukesha County, January 1974
- No. 19 - A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974
- No. 20 - A Regional Housing Plan for Southeastern Wisconsin, February 1975
- No. 21 - A Regional Airport System Plan for Southeastern Wisconsin, December 1975
- No. 22 - A Jurisdictional Highway System Plan for Racine County, February 1975
- No. 23 - A Jurisdictional Highway System Plan for Washington County, October 1974\*
- No. 24 - A Jurisdictional Highway System Plan for Kenosha County, April 1975
- No. 25 - A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000
  - Volume 1 - Inventory Findings, April 1975
  - Volume 2 - Alternative and Recommended Plans, May 1978
- No. 26 - A Comprehensive Plan for the Menomonee River Watershed
  - Volume 1 - Inventory Findings and Forecasts, October 1976\*
  - Volume 2 - Alternative Plans and Recommended Plan, October 1976\*
- No. 27 - A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000, November 1977
- No. 28 - A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000, June 1980
- No. 29 - A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin, July 1978\*
- No. 30 - A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000
  - Volume 1 - Inventory Findings, September 1978\*
  - Volume 2 - Alternative Plans, February 1979\*
  - Volume 3 - Recommended Plan, June 1979\*
- No. 31 - A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, April 1978
- No. 32 - A Comprehensive Plan for the Kinnickinnic River Watershed, December 1978\*
- No. 33 - A Primary Transit System Plan for the Milwaukee Area, June 1982
- No. 34 - A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area, August 1983
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- No. 200 - A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties, December 1991\*
- No. 201 - A Land Use and Transportation System Development Plan for the IH 94 West Freeway Corridor: 2010, Waukesha County, Wisconsin, September 1994
- No. 202 - A Park and Open Space Plan for the City of Muskego, Waukesha County, Wisconsin, January 1992
- No. 203 - Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin, December 1992
- No. 204 - Racine Transit System Development Plan: 1993-1997, City of Racine, Wisconsin, June 1993
- No. 205 - Sanitary Sewer Service Area for the Village of Newburg, Ozaukee and Washington Counties, Wisconsin, March 1993
- No. 206 - Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin, December 1992
- No. 207 - A Park and Open Space Plan for the City of Wauwatosa, Milwaukee County, Wisconsin, March 1998
- No. 208 - Sanitary Sewer Service Areas for the Villages of Lannon and Menomonee Falls, Waukesha County, Wisconsin, June 1993
- No. 209 - A Development Plan for Waukesha County, Wisconsin, August 1996
- No. 210 - City of West Bend Transportation System Plan: 2010, Washington County, Wisconsin, March 1994
- No. 211 - A Land Use Plan for the Town of Geneva: 2010, November 1997\*
- No. 212 - A Comprehensive Plan for the Kenosha Urban Planning District, Kenosha County, Wisconsin, December 1995
- No. 213 - Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin, July 1994
- No. 214 - A Land Use and Street System Plan for the Village of Kewaskum: 2010, Washington County, Wisconsin, September 1997
- No. 215 - An Environmentally Sensitive Lands Preservation Plan for the Town of Norway Sanitary District No. 1, Racine County, Wisconsin, June 1996
- No. 216 - A Land Use Plan for the Village of Sussex: 2010, Waukesha County, Wisconsin, December 1997
- No. 217 - A Land Use Plan for the Town of Waterford: 2010, Racine County, Wisconsin, May 1995
- No. 218 - A Transit Service Plan for Ozaukee County: 1996-2000, July 1995
- No. 219 - Sanitary Sewer Service Area for the Villages of Fontana and Walworth and Environs, Walworth County, Wisconsin, June 1995
- No. 220 - A Land Use Plan for the Town of Sugar Creek: 2010, Walworth County, Wisconsin, August 1995
- No. 221 - A Park and Open Space Plan for the Village of Thiensville, Ozaukee County, Wisconsin, March 1996
- No. 222 - A Lake Management Plan for Little Muskego Lake, Waukesha County, Wisconsin, June 1996

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- No. 223 - A Public Transit Service Plan for Washington County: 1998-2002, November 1996
- No. 224 - A Lake Management Plan for Whitewater and Rice Lakes, Walworth County, Wisconsin, February 1997
- No. 225 - Sanitary Sewer Service Area for the Pell Lake Sanitary District No. 1, Walworth County, Wisconsin, June 1996
- No. 226 - A Lake Management Plan for Eagle Spring Lake, Waukesha County, Wisconsin, October 1997
- No. 227 - A Lake Management Plan for Lake Keesus, Waukesha County, Wisconsin, June 1998
- No. 228 - A Land Use Plan for the Town of Sharon: 2010, Walworth County, Wisconsin, September 1998
- No. 231 - Kenosha Area Transit System Development Plan: 1998-2002, City of Kenosha, Wisconsin, April 1998
- No. 233 - Racine Area Transit System Development Plan: 1998-2002, City of Racine, Wisconsin, October 1997
- No. 234 - A Land Use Plan for the Village of Saukville: 2010, Ozaukee County, Wisconsin, December 1998
- No. 238 - A Land Use Plan for the Town of Trenton: 2010, Washington County, Wisconsin, December 1997
- No. 239 - Feasibility Study of Commuter Railway Passenger Train Service in the Kenosha-Racine-Milwaukee Corridor, June 1998
- No. 244 - A Park and Open Space Plan for the Village of Jackson, Washington County, Wisconsin, November 1998

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- No. 1 - Cedarburg Central Business District Parking Study, City of Cedarburg, Ozaukee County, Wisconsin, December 1986
- No. 2 - Courthouse Parking Study, Ozaukee County, Wisconsin, November 1986
- No. 3 - Alternative Industrial Park Site Location and Cost Estimate Analysis, City of Oconomowoc, Waukesha County, Wisconsin, December 1986\*
- No. 4 - Pilgrim Parkway Traffic Study, Village of Elm Grove, Waukesha County, Wisconsin, December 1986\*
- No. 5 - Capital Improvements Program: 1987-1991, Village of East Troy, Walworth County, Wisconsin, December 1986\*
- No. 6 - Report of the Hoan Bridge South Task Force, Milwaukee County, Wisconsin, December 1986
- No. 7 - Public Transit Ridership Trends in Southeastern Wisconsin: 1975-1986, May 1987
- No. 8 - Assessment of Transportation Needs of Elderly and Handicapped Residents of Ozaukee County, June 1987
- No. 9 - An Arterial Highway System Plan for Eastern Racine County, April 1987
- No. 10 - City of Elkhorn Fact Book, Walworth County, Wisconsin, November 1986
- No. 11 - City of Elkhorn Overall Economic Development Program Plan, Walworth County, Wisconsin, December 1986\*
- No. 12 - Economic Development Fact Book, City of Oconomowoc, Waukesha County, Wisconsin, March 1987
- No. 13 - Overall Economic Development Program Plan, City of Oconomowoc, Waukesha County, Wisconsin, March 1987
- No. 14 - Village of Menomonee Falls Economic Development Fact Book, September 1991
- No. 15 - Overall Economic Development Program Plan, Village of Menomonee Falls, Waukesha County, Wisconsin, September 1987
- No. 16 - Unpolluted Dredge Materials Disposal Plan for the Port Washington Harbor, City of Port Washington, Ozaukee County, Wisconsin, May 1987

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- No. 17 - A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility, May 1987\*
- No. 18 - A Central Public Works Facility Building Program, Site Location Analysis, and Site Development Plan for the City of New Berlin, May 1987
- No. 19 - Overall Economic Development Program Plan, City of Burlington, Racine County, Wisconsin, March 1988
- No. 20 - CTH N Traffic Study, City of Cedarburg, Ozaukee County, Wisconsin, February 1987
- No. 21 - A Public Transit Program for Handicapped Persons—Milwaukee County Transit System, June 1987\*
- No. 22 - A Public Transit Program for Handicapped Persons—Waukesha County Transit System, June 1987\*
- No. 23 - A Public Transit Program for Handicapped Persons—City of Kenosha Transit System, June 1987\*
- No. 24 - A Public Transit Program for Handicapped Persons—City of Racine Transit System, June 1987\*
- No. 25 - Traffic Impact Study of Proposed Development along Paradise Drive between the USH 45 Bypass and S. Main Street, City of West Bend, Washington County, Wisconsin, September 1987\*
- No. 26 - Official Map, City of Burlington, Racine County, Wisconsin, December 1987
- No. 27 - Village of Mukwonago Industrial Park Development Plan, Waukesha County, Wisconsin, March 1988
- No. 28 - Streams and Watercourses for Which the Milwaukee Metropolitan Sewerage District Has Assumed Jurisdiction for Drainage and Flood Control Purposes, August 1987
- No. 29 - A Plan for the Abatement of Through Traffic Problems in the Village of West Milwaukee, March 1988
- No. 30 - Overall Economic Development Program Plan, City of South Milwaukee, Milwaukee County, Wisconsin, March 1988
- No. 31 - Analysis of the Conversion from One-Way to Two-Way Operation of Pine Street from State Street to Jefferson Street, City of Burlington, Racine County, Wisconsin, January 1988
- No. 32 - Traffic Engineering Study of West and North Beach Roads in the Village of Oconomowoc Lake, Waukesha County, Wisconsin, January 1991
- No. 33 - Traffic Engineering Study of Robinhood Drive in the Village of Menomonee Falls, Waukesha County, Wisconsin, December 1989
- No. 34 - Overall Economic Development Program Plan, City of West Allis, Milwaukee County, Wisconsin, September 1988
- No. 35 - A Stormwater Management Plan for the Crayfish Creek Subwatershed, City of Oak Creek, Milwaukee County, Wisconsin, June 1988
- No. 36 - Traffic Engineering Study of Milwaukee Avenue (STH 36) between the Central Business District and the Northern Corporate Limits of the City of Burlington, Racine County, Wisconsin, August 1988
- No. 37 - Economic Development Fact Book, City of South Milwaukee, Milwaukee County, Wisconsin, May 1988
- No. 38 - A Regional Transportation Authority Feasibility Study for Southeastern Wisconsin, November 1990
- No. 39 - A Flood Control Plan for a Portion of the Menomonee River Estuary Area, June 1989
- No. 40 - An Inventory of Vacant or Underutilized Lands in the Riverine Areas of Central Milwaukee County, May 1989
- No. 41 - A Traffic Safety Study of N. Berkeley Boulevard between E. Montclaire Avenue and E. School Road in the Village of Whitefish Bay, Milwaukee County, Wisconsin, November 1991
- No. 42 - Traffic Engineering Study of Grandview Boulevard—CTH T—from Northview Road to Fatima Drive, Waukesha County, Wisconsin, July 1989
- No. 43 - Amtrak Milwaukee-Chicago Passenger Survey Findings: May 1989, August 1989

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- No. 44 - Town of Lisbon Southeast Area Quarry Operations—Environmental Impact Evaluation, September 1990
- No. 45 - Overall Economic Development Program Plan, Village of Slinger, Washington County, Wisconsin, October 1989
- No. 46 - Traffic Impact Study of the Interchange of STH 33 and CTH LL, Ozaukee County, Wisconsin, September 1989
- No. 47 - Economic Development Fact Book, City of West Allis, Milwaukee County, Wisconsin, October 1989\*
- No. 48 - Washington Avenue (STH 57) Traffic Study in the City of Cedarburg, Ozaukee County, Wisconsin, January 1991
- No. 49 - Overall Economic Development Program Plan, City of Brookfield, Waukesha County, Wisconsin, December 1989
- No. 50 - Traffic Engineering Study of County Line Road (CTH Q) between the Intersection with Appleton Avenue (STH 175) and USH 41/45, December 1990
- No. 51 - Traffic Study of W. Fond du Lac Avenue in the Village of Menomonee Falls between N. 124th Street (STH 145) and W. Main Street (STH 74), Waukesha County, Wisconsin, January 1991
- No. 52 - Traffic Impact Study of the Alpine Valley Music Theatre in the Town of LaFayette, January 1991
- No. 53 - A Stormwater Drainage and Flood Control System Plan for Grantosa Creek, Cities of Milwaukee and Wauwatosa, Milwaukee County, Wisconsin, February 1992
- No. 54 - Traffic Engineering Study of E. Birch Avenue in the Village of Whitefish Bay, January 1991
- No. 55 - Traffic Engineering Study of Keup Road between Columbia Road (STH 57) and STH 60 in the City and Town of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, May 1995
- No. 56 - A Lakefront Recreational Use and Waterway Protection Plan for the Village of Pewaukee, Waukesha County, Wisconsin, March 1996\*
- No. 57 - Amtrak Milwaukee-Chicago Passenger Survey Findings: June 1991, January 1993
- No. 58 - A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System, January 1992
- No. 59 - A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System, January 1992
- No. 60 - A Paratransit Service Plan for Disabled Persons—City of Racine Transit System, January 1992
- No. 61 - A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility, January 1992
- No. 62 - A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System, January 1992
- No. 63 - A Land Use-Transportation Study of the N. 76th Street Corridor, August 1991
- No. 64 - Lake Arterial Extension Planning Study, August 1991
- No. 65 - Analysis of the Intersection of S. Pine Street (STH 83) and E. State Street (STH 83) in the City of Burlington, Racine County, Wisconsin, September 1991
- No. 66 - City of Cudahy Overall Economic Development Program Plan, Milwaukee County, Wisconsin, June 1992
- No. 67 - Central Area Parking Study, City of Lake Geneva, Walworth County, Wisconsin, April 1996
- No. 68 - Regional Land Use Plan Implementation in Southeastern Wisconsin: Status and Needs, May 1993
- No. 69 - Environmental Assessment of the Proposed Development of the Millard Sand and Gravel Pit, July 1992
- No. 70 - A Wildlife Habitat Management Plan for the Franklin Lions Legend Park Study Area, August 1991
- No. 71 - A Specialized Transportation Service Plan for Elderly and Disabled Persons within Waukesha County, June 1992\*

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- No. 72 - Analysis of Traffic Engineering Actions Proposed by City of Cedarburg Staff for S. Washington Avenue (STH 57/STH 143), Ozaukee County, Wisconsin, May 1995
- No. 73 - A Paratransit Service Plan for Disabled Persons: 1993 Update/Milwaukee County Transit System, January 1993\*
- No. 74 - A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Kenosha Transit System, January 1993\*
- No. 75 - A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Racine Transit System, January 1993\*
- No. 76 - A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Waukesha Transit System Utility, January 1993\*
- No. 77 - A Paratransit Service Plan for Disabled Persons: 1993 Update/Waukesha County Transit System, January 1993\*
- No. 78 - Traffic Study of STH 83 between the Illinois-Wisconsin State Line and STH 50 in Kenosha County, March 1993
- No. 79 - An Agricultural Drainage and Urban Stormwater Management Plan for Racine County Farm Drainage District No. 1, Village of Waterford and Towns of Norway and Waterford, Racine County, Wisconsin, September 1993
- No. 80 - A Development Plan for the Parkside East Neighborhood, Town of Somers, Kenosha County, Wisconsin, September 1993
- No. 81 - Aquatic Plant Management Plan for Phantom Lakes, Waukesha County, Wisconsin, July 1993\*
- No. 82 - A Lake Protection Plan for Silver Lake, Waukesha County, Wisconsin, July 1993
- No. 83 - City of Cudahy Economic Development Fact Book, Milwaukee County, Wisconsin, August 1993
- No. 84 - Transportation Impacts of W. Wisconsin Avenue Closure between N. 11th Street and N. 16th Street, City of Milwaukee, Milwaukee County, Wisconsin, August 1993
- No. 85 - A Development Plan for the Endicott Neighborhood, City of Brookfield, Waukesha County, Wisconsin, September 1993
- No. 86 - Traffic Engineering Study of Ann Rita Drive, Coventry Drive, and Macaulay Drive in the Canterbury Hill Subdivision, City of Brookfield, Waukesha County, Wisconsin, July 1993
- No. 87 - Public Involvement in the Transportation System Planning and Programming Processes: Year 2010 Regional Transportation System Plan, January 1994
- No. 88 - A Paratransit Service Plan for Disabled Persons: 1994 Update/Milwaukee County Transit System, January 1994\*
- No. 89 - A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Kenosha Transit System, January 1994\*
- No. 90 - A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Racine Transit System, January 1994\*
- No. 91 - A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Waukesha Transit System Utility, January 1994\*
- No. 92 - A Paratransit Service Plan for Disabled Persons: 1994 Update/Waukesha County Transit System, January 1994\*
- No. 93 - A Regional Water Quality Management Plan for Southeastern Wisconsin: An Update and Status Report, March 1995\*
- No. 94 - A Recommended Public Boating Access and Waterway Protection Plan for Big Muskego Lake, Waukesha County, Wisconsin, July 1994
- No. 95 - Traffic Engineering Study of W. Bender Road between Milwaukee River Parkway and Jean-Nicolet Road in the City of Glendale, Milwaukee County, Wisconsin, August 1994
- No. 96 - A Paratransit Service Plan for Disabled Persons: 1995 Update/Milwaukee County Transit System, January 1995\*
- No. 97 - A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Kenosha Transit System, January 1995\*

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- No. 98 - A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Racine Transit System, January 1995\*
- No. 99 - A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Waukesha Transit System Utility, January 1995\*
- No. 100 - A Paratransit Service Plan for Disabled Persons: 1995 Update/Waukesha County Transit System, January 1995\*
- No. 101 - Upper Nemahbin Lake Watershed Inventory Findings, Waukesha County, Wisconsin, May 1995
- No. 102 - Water Level Control Plan for the Waterford-Vernon Area of the Middle Fox River Watershed, Racine and Waukesha Counties, Wisconsin, March 1995
- No. 103 - Assessment of Conformity of the Year 2010 Regional Transportation System Plan and the 1995-1997 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan, December 1994
- No. 104 - Incorporation of the Federally Required Congestion Management System within the Year 2010 Regional Transportation System Plan and the Continuing Transportation System Planning Process, December 1994
- No. 105 - Traffic Study of the Intersection of Barker Road (CTH Y) and Watertown Road, Town of Brookfield, Waukesha County, Wisconsin, March 1995
- No. 106 - A Paratransit Service Plan for Disabled Persons: 1996 Update/Milwaukee County Transit System, January 1996
- No. 107 - A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Kenosha Transit System, January 1996
- No. 108 - A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Racine Transit System, January 1996
- No. 109 - A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Waukesha Transit System Utility, January 1996
- No. 110 - A Paratransit Service Plan for Disabled Persons: 1996 Update/Waukesha County Transit System, January 1996
- No. 111 - Waukesha County Greenway Corridor Study, Towns of Waukesha and Vernon, May 1996
- No. 113 - Traffic Study of the Intersection of N. Port Washington Road (CTH W) and W. Highland Road for the City of Mequon: June 1995, Following Opening of St. Mary's Hospital, City of Mequon, Ozaukee County, Wisconsin, September 1996
- No. 114 - Traffic Control Study for the Village of Fox Point, Village of Fox Point, Milwaukee County, Wisconsin, August 1996
- No. 115 - Traffic Safety Study of the Segment of CTH BB between Brink Road and Hillside Road, Town of Linn, Walworth County, Wisconsin, September 1996
- No. 116 - Assessment of Conformity of the 1997-1999 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan, October 1996
- No. 117 - Traffic Study of Selected Intersections in the Village of Hartland, Waukesha County, Wisconsin, November 1996
- No. 118 - Traffic Study of the Intersections of N. Berkeley Boulevard and E. Silver Spring Drive and N. Diversey Boulevard, N. Consaul Place and E. Silver Spring Drive in the Village of Whitefish Bay, Milwaukee County, Wisconsin, November 1996
- No. 119 - A Paratransit Service Plan for Disabled Persons: 1997 Update/Milwaukee County Transit System, January 1997
- No. 120 - A Lake Protection and Recreational Use Plan for Hunters Lake, Waukesha County, Wisconsin, May 1997
- No. 121 - Traffic Engineering Study of N. 68th Street in the Village of Brown Deer, Milwaukee County, Wisconsin, December 1996
- No. 122 - A Lake Protection Plan for Pretty Lake, Waukesha County, Wisconsin, April 1998
- No. 123 - A Lake Protection and Recreational Use Plan for Silver Lake, Washington County, Wisconsin, September 1997

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- No. 124 - An Aquatic Plant Inventory for Pine Lake, Waukesha County, Wisconsin, December 1998
- No. 125 - Assessment of Conformity of the Year 2020 Regional Transportation System Plan and the 1998-2000 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan, December 1997
- No. 126 - Traffic Engineering Study of Selected Intersections along Fond du Lac Avenue (USH 45) in the Village of Kewaskum: 1997, Washington County, Wisconsin, July 1998
- No. 127 - A Transportation Study for the Core Area of the City of Delafield, Waukesha County, Wisconsin, November 1998
- No. 128 - Assessment of Travel through the Neighborhood Bounded by W. Silver Spring Drive, N. Port Washington Road, N. Lydell Avenue, and W. Henry Clay Street in the City of Glendale: 1997, Milwaukee County, Wisconsin, April 1998
- No. 129 - Inventory of Fire Protection and Emergency Medical Services for Western Racine County, December 1998
- No. 132 - Highway Maintenance Facility Location Study, Washington County, Wisconsin, December 1998

## ECONOMIC DEVELOPMENT PROFILES

Economic Development Profiles have been prepared for the Southeastern Wisconsin Region, for each of the seven counties in the Region, for the Milwaukee Metropolitan Statistical Area, and for the following communities within each of the seven counties:

Kenosha County  
City of Kenosha  
Village of Pleasant Prairie  
Town of Bristol

Milwaukee County  
City of Cudahy  
City of Franklin  
City of Glendale  
City of Greenfield  
City of Milwaukee  
City of Oak Creek  
City of St. Francis  
City of South Milwaukee  
City of Wauwatosa  
City of West Allis  
Village of Brown Deer  
Village of Hales Corners  
Village of West Milwaukee

Ozaukee County  
City of Cedarburg  
City of Mequon  
City of Port Washington  
Village of Belgium  
Village of Fredonia  
Village of Grafton  
Village of Saukville  
Village of Thiensville

Racine County  
City of Burlington  
City of Racine  
Village of Rochester  
Village of Sturtevant  
Village of Union Grove  
Village of Waterford  
Town of Caledonia  
Town of Mt. Pleasant  
Town of Yorkville

Walworth County  
City of Delavan  
City of Elkhorn  
City of Lake Geneva  
City of Whitewater  
Village of Darien  
Village of East Troy  
Village of Walworth

Washington County  
City of Hartford  
City of West Bend  
Village of Germantown  
Village of Jackson  
Village of Kewaskum  
Village of Slinger

Waukesha County  
City of Brookfield  
City of Delafield  
City of Muskego  
City of New Berlin  
City of Oconomowoc  
City of Waukesha  
Village of Butler  
Village of Dousman  
Village of Eagle  
Village of Elm Grove  
Village of Hartland  
Village of Menomonee Falls  
Village of Mukwonago  
Village of Pewaukee  
Village of Sussex  
Town of Pewaukee

## LAKE USE REPORTS-FOX RIVER WATERSHED

### Kenosha County

No. FX-40, Benedict Lake  
No. FX-12, Camp Lake  
No. FX-27, Center Lake  
No. FX-35, Cross Lake  
No. FX-45, Dyer Lake\*  
No. FX-7, Elizabeth Lake

No. FX-34, Lilly Lake\*  
No. FX-17, Marie Lake\*  
No. FX-13, Powers Lake\*  
No. FX-11, Silver Lake\*  
No. FX-45, Voltz Lake

### Racine County

No. FX-25, Bohner Lake  
No. FX-15, Browns Lake  
No. FX-9, Eagle Lake  
No. FX-42, Echo Lake\*  
No. FX-32, Kee Nong Go-Mong Lake

No. FX-29, Long Lake\*  
No. FX-6, Waterford-Tichigan Lakes\*  
No. FX-276, Waubeesee Lake  
No. FX-5, Wind Lake\*

### Walworth County

No. FX-41, Army Lake  
No. FX-40, Benedict Lake\*  
No. FX-7, Beulah Lake  
No. FX-31, Booth Lake  
No. FX-4, Como Lake\*  
No. FX-1, Lake Geneva  
No. FX-Lauderdale Lakes  
(17, Green Lake,  
20, Middle Lake,  
18, Mill Lake)

No. FX-39, Lulu Lake  
No. FX-21, North Lake  
No. FX-37, Pell Lake  
No. FX-43, Peters Lake\*  
No. FX-25, Pleasant Lake  
No. FX-24, Potters Lake\*  
No. FX-38, Silver Lake  
No. FX-30, Wandawega Lake

### Waukesha County

No. FX-3, Big Muskego Lake  
No. FX-23, Denoon Lake  
No. FX-19, Eagle Spring Lake\*  
No. FX-10, Little Muskego Lake\*

No. FX-14, Lower Phantom Lake  
No. FX-2, Pewaukee Lake\*  
No. FX-34, Spring Lake  
No. FX-33, Upper Phantom Lake

## LAKE USE REPORTS-MILWAUKEE RIVER WATERSHED

### Fond du Lac County

No. ML-2, Long Lake\*  
No. ML-9, Auburn Lake  
No. ML-21, Forest Lake  
No. ML-12, Mauthe Lake\*  
No. ML-18, Mud Lake\*  
No. ML-5, Kettle Moraine Lake\*

### Washington County

No. ML-3, Little Cedar Lake\*  
No. ML-14, Green Lake  
No. ML-19, Lake Twelve  
No. ML-13, Lucas Lake  
No. ML-11, Smith Lake  
No. ML-20, Wallace Lake\*  
No. ML-15, Barton Pond  
No. ML-1, Big Cedar Lake\*  
No. ML-8, Silver Lake\*  
No. ML-16, West Bend Pond

### Ozaukee County

No. ML-4, Mud Lake  
No. ML-17, Spring Lake

### Sheboygan County

No. ML-6, Random Lake\*  
No. ML-10, Crooked Lake  
No. ML-7, Lake Ellen

## TECHNICAL RECORDS

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- Regional Planning in Southeastern Wisconsin
  - by Kurt W. Bauer, Executive Director
- The SEWRPC Land Use-Transportation Study
  - by J. Robert Doughty, Study Director
- Home Interview Sample Selection-Part I
  - by Kenneth J. Schlager, Chief Systems Engineer
- Truck and Taxi Sample Selection
  - by Thomas A. Winkel, Urban Planning Supervisor
- A Backward Glance: Early Toll Roads in Southeastern Wisconsin
  - by Richard E. Rehberg, Editor

Volume 1-No. 2, December 1963-January 1964

- Arterial Network and Traffic Analysis Zones
  - by Richard B. Sheridan, Chief Transportation Planner
- Conducting the Household Postal Questionnaire Survey
  - by Wade G. Fox, Cartography and Design Supervisor
- Conducting the Home Interview Survey
  - by Sheldon W. Sullivan, Administrative Officer
- Aerial Photographs and Their Use in the Land Use Inventory
  - by Harlan E. Clinkenbeard, Land Use Planning Chief
- A Backward Glance: The U. S. Public Land Survey in Southeastern Wisconsin
  - by Richard E. Rehberg, Editor

Volume 1-No. 3, February-March 1964

- Conducting the Truck and Taxi Survey
  - by Sheldon W. Sullivan, Administrative Officer
- Conducting the Truck and Taxi Postal Questionnaire Survey
  - by Wade G. Fox, Cartography and Design Supervisor
- Conducting the External Survey
  - by William E. Creger, P.E., Traffic Operations Engineer
- Rail and Transit Inventory and Design of the Transit Network
  - by David A. Kuemmel, P.E., Transportation Planning Engineer
- A Backward Glance: The Man-Made Ice Age
  - by Richard E. Rehberg, Editor

Volume 1-No. 4, April-May 1964\*

- The Application of Soil Studies to Regional Planning
  - by Kurt W. Bauer, Executive Director
- Coding
  - by Wade G. Fox, Cartography and Design Supervisor, and
  - Robert L. Fisher, Coding Supervisor
- Inventory of Existing Outdoor Recreation Facilities and Historic Sites in Southeastern Wisconsin
  - by Theodore F. Lauf, Research Analyst
- Inventory of Potential Park and Related Open Space Sites
  - by Karl W. Holzwarth, Landscape Architect
- A Backward Glance: The Electric Interurban Railway
  - by Richard E. Rehberg, Editor

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Reconciliation of Sample Coverage in the Internal O & D Surveys  
by Eugene G. Muhich, P.E., Transportation Planning Engineer  
The Contingency Check Program  
by Wade G. Fox, Cartography and Design Supervisor  
Inventory of the Arterial Street Network  
by William T. Wambach, Jr., P.E.  
A Backward Glance: The Milwaukee and Rock River Canal  
by James E. Seybold, Editor

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Checking the Network Description for Arterial Highway and Transit Networks  
by Richard B. Sheridan, Chief Transportation Planner  
A Study of the Water Quality and Flow of Streams in Southeastern Wisconsin  
by Roy W. Ryling, Hydrologist  
Expanding the Origin-Destination Sample  
by Richard B. Sheridan, Chief Transportation Planner, and  
Wade G. Fox, Cartography and Design Supervisor  
A Backward Glance: Greendale-Garden City in Wisconsin  
by Kurt W. Bauer, Executive Director

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Simulation Models in Urban and Regional Planning  
by Kenneth J. Schlager, Chief Systems Engineer

Volume 2-No. 2, December 1964-January 1965

Capacity of Arterial Network Links  
by Richard B. Sheridan, Chief Transportation Planner  
The ABC Method of Current Population Estimating  
by Donald L. Gehrke, Economics and Population Analyst, and  
Orlando E. Delogu, Financial Resources and Legal Analyst  
O & D Surveys Accuracy Checks  
by Eugene G. Muhich, P.E., Transportation Planning Engineer  
A Backward Glance: Railroad Transportation in Southeastern Wisconsin  
by Patricia J. Tegge, Editor

Volume 2-No. 3, February-March 1965

Determination of Historical Flood Frequency for the Root River of Wisconsin  
by James C. Ringenoldus, P.E., Harza Engineering Company  
The Regional Multiplier  
by Kenneth J. Schlager, Chief Systems Engineer  
A Backward Glance: The Street Railway in Milwaukee  
by Henry M. Mayer, Administrative Assistant,  
Milwaukee & Suburban Transport Corporation

Volume 2-No. 4, April-May 1965\*

Determination of Runoff for Urban Storm Water Drainage System Design  
by Kurt W. Bauer, Executive Director

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Screen Line Adjustment of Trip Data

by Richard B. Sheridan, P.E., Chief Transportation Planner

Inventory of Land Development Regulations in Southeastern Wisconsin

by William J. Kockelman, Chief Community Assistance Planner

A Backward Glance: Highway Development in Southeastern Wisconsin-Part I

by Jean C. Meier, Librarian and Research Assistant

Volume 2-No. 6, August-September 1965

A Modal Split Model for Southeastern Wisconsin

by Edward Weiner, Highway Engineer

Volume 3-No. 1, 1968

Transit System Development Standards

by Edward Weiner, Transportation Planning Engineer

Modified Rapid Transit Service in the Southeastern Wisconsin Region

by Sheldon W. Sullivan, Administrative Officer

A Backward Glance: Highway Development in Southeastern Wisconsin-Part II

by Jean C. Meier, Research Assistant, and

Sheldon W. Sullivan, Administrative Officer

Volume 3-No. 2, 1969

Characteristics of Travel in the Milwaukee Central Business District

by Sheldon W. Sullivan, Administrative Officer

Computing the Center of Population and the Geographic Center

by Wayne H. Faust, Associate Planner

A Backward Glance: Downtown Yesterdays

by Gerald P. Caffrey, Milwaukee Municipal Reference Librarian

Volume 3-No. 3, September 1971\*

Hydrogeologic Considerations in Liquid Waste Disposal,

with a Case Study in Southeastern Wisconsin

by Martha J. Ketelle, Department of Geology and Geophysics,

University of Wisconsin-Madison

Volume 3-No. 4, September 1971

Characteristics of Air and Ground Travel Generated by

General Mitchell Field Airport Terminal: May 1968

by Sheldon W. Sullivan, Chief of Data Collection

Shifts in Centers of Population within the Region: 1960-1970

by Wayne H. Faust, Associate Planner

A Backward Glance: The Development of General Mitchell Field

by Sheldon W. Sullivan, Chief of Data Collection

TECHNICAL RECORDS—continued

Volume 3-No. 5, March 1973\*

Freeway Flyer Service in Southeastern Wisconsin-A Progress Report: 1964-1971  
by Sheldon W. Sullivan, Chief of Data Collection

Development of Equations for Rainfall Intensity-Duration-Frequency Relationship  
by Stuart G. Walesh, Water Resources Engineer

A Backward Glance: The American Automobile-A Brief History of the Development  
of the American Automobile and the Growth of Automobile Registrations in the  
United States, Wisconsin, and the Southeastern Wisconsin Region: 1896-1970  
by Sheldon W. Sullivan, Chief of Data Collection

Volume 3-No. 6, April 1976\*

Floodland Management: The Environmental Corridor Concept  
by Stuart G. Walesh, SEWRPC Water Resources Engineer

Characteristics of Travel in the Milwaukee Central Business District: 1963 and 1972  
by Sheldon W. Sullivan, SEWRPC Chief of Data Collection, and  
Jean Lusk, SEWRPC Research Analyst

The Changing Factorial Ecology of Milwaukee's Black Ghetto  
by Harold McConnell, Richard A. Karsten, and Marilyn Ragusa

A Backward Glance: Environmental Corridors of Yesterday and Today  
by Dr. Jeremy M. Katz, Research Psychologist, and Jeanne Sollen, Editor

Volume 4-No. 1, March 1978\*

A Backward Glance: Milwaukee's Water Story  
by Milwaukee Water Works

Is There a Groundwater Shortage in Southeastern Wisconsin?  
by Douglas S. Cherkauer and Vinton W. Bacon,  
University of Wisconsin-Milwaukee

An Overview of the Sources of Water Pollution in Southeastern Wisconsin  
by Kurt W. Bauer, Executive Director, SEWRPC

The Effect of Sample Rate on Socioeconomic and Travel Data  
Obtained through Standard Home Interview  
by Jean Lusk, SEWRPC Planner

Volume 4-No. 2, March 1981

Refining the Delineation of the Environmental Corridors in Southeastern Wisconsin  
by Bruce P. Rubin, Chief Land Use Planner, SEWRPC, and  
Gerald H. Emmerich, Jr., Senior Planner, SEWRPC

Water Quality and Quantity Simulation Modeling for the Areawide  
Water Quality Management Planning Program for Southeastern Wisconsin  
by Thomas R. Sear, P.E., Senior Water Resources Engineer, SEWRPC

Evaluation of a Water Quality Standard for Total Phosphorus in  
Flowing Streams in Southeastern Wisconsin  
by David B. Kendzierski, Senior Planner, SEWRPC

Bibliography of Lake Michigan Shore Erosion and Nearshore Process Studies  
by Norman P. Lasca, Professor, Department of Geological Sciences and Center  
for Great Lakes Studies, University of Wisconsin-Milwaukee, and  
David Baier, Warren Baumann, Patrick Curth, and Jan H. Smith, Geologists,  
Department of Geological Sciences and Center for Great Lakes Studies,  
University of Wisconsin-Milwaukee

A Backward Glance: Historic Evolution of the Local Governmental  
Structure in Southeastern Wisconsin  
by Eileen Hammer

TECHNICAL RECORDS—continued

Volume 4-No. 3, February 1982

Preservation of Scientifically and Historically Important Geologic Sites  
in Milwaukee County, Wisconsin

by Donald G. Mikulic, Staff Geologist, Illinois State Geological Survey, and  
Joanne Kluessendorf, Geologic Research Assistant, Illinois State Geological  
Survey, Champaign, Illinois

Inventory of Solid Waste Management Facilities in Southeastern Wisconsin: 1980

by Robert P. Biebel, Principal Engineer, SEWRPC, and  
Joseph E. Stuber, Senior Engineer, SEWRPC

Inventory Findings of Cannonball Passenger Surveys: 1980 and 1971

by Jean M. Lusk, SEWRPC Planner

A Backward Glance: Historic Evolution of the Local Governmental Structure

in Southeastern Wisconsin

by Eileen Hammer

Volume 4-No. 4, February 1984

Characteristics of Travel in Six Major Attractors in the Southeastern Wisconsin Region

by Jean M. Lusk, SEWRPC Planner, and  
John L. Zastrow, SEWRPC Senior Specialist

Shopping Centers: Characteristics of Travel-1963-1972

by Jean M. Lusk, SEWRPC Planner, and  
John L. Zastrow, SEWRPC Senior Specialist

A Backward Glance: Historic Evolution of the Local Governmental Structure

in Southeastern Wisconsin

by Eileen Hammer

Volume 4-No. 5, December 1989

Review and Analysis of Lake Michigan Water Levels at Milwaukee, Wisconsin

by David P. Kendzierski, SEWRPC Principal Planner

Lake Levels and Datum Differences

by Kurt W. Bauer, SEWRPC Executive Director

A Backward Glance—A History of Storm Damage and Protective Measures in Milwaukee Harbor

by Bruce W. Jordan, M.A.

Volume 4-No. 6, December 1993

Interpreting Soils of Southeastern Wisconsin for Onsite Disposal of Household Sewage

by Marvin T. Beatty, Ph.D., Professor Emeritus of Soil Science, University of Wisconsin-Madison

Shifts in Centers of Population within the Region: 1963-1990

by Donald G. Dittmar, SEWRPC Senior Specialist

Methodology for Review of Challenges to Wetland Field Delineations Conducted

by the Southeastern Wisconsin Regional Planning Commission

by Donald M. Reed, SEWRPC Chief Biologist

A Backward Glance—Unincorporated Settlements in Southeastern Wisconsin

by Arno M. Klausmeier, SEWRPC Librarian, with Assistance from

Scott K. Enk, SEWRPC Senior Editor

ANNUAL REPORTS

1961,\* 1962,\* 1963, 1964, 1965, 1966, 1967, 1968, 1969,\* 1970, 1971, 1972,\* 1973, 1974, 1975, 1976,  
1977, 1978,\* 1979,\* 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992,  
1993, 1994, 1995, 1996, and 1997

## CONFERENCE PROCEEDINGS

- 1st Regional Planning Conference, December 6, 1961\*
- 2nd Regional Planning Conference, November 4, 1962\*
- 3rd Regional Planning Conference, November 20, 1963\*
- 4th Regional Planning Conference, May 12, 1965\*
- 5th Regional Planning Conference, October 26, 1965\*
- 6th Regional Planning Conference, May 6, 1969
- 7th Regional Planning Conference, January 19, 1972
- 8th Regional Planning Conference, October 16, 1974
- Regional Conference on Sanitary Sewerage System User and Industrial Waste Treatment Recovery Charges, July 18, 1974
- 9th Regional Planning Conference, April 14, 1976
- 10th Regional Planning Conference, March 15, 1978
- 11th Regional Planning Conference, April 19, 1979
- 12th Regional Planning Conference, January 31, 1980\*
- 13th Regional Planning Conference, November 9, 1983
- 14th Regional Planning Conference, May 13, 1985
- 15th Regional Planning Conference, November 14, 1988
- 16th Regional Planning Conference, May 5, 1992
- 17th Regional Planning Conference, June 27, 1994

## NEWSLETTERS

Volumes 2-38

## TRANSPORTATION IMPROVEMENT PROGRAMS

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978-1982, December 1977\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979-1983, December 1978\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980-1984, December 1979\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981-1985, December 1980\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1982-1986, December 1981\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1983-1987, December 1982\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1984-1988, December 1983\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1986-1990, December 1985\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1987-1991, December 1986\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1988-1992, December 1987\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1989-1993, December 1988
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994, December 1989
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1991-1995, December 1990

#### TRANSPORTATION IMPROVEMENT PROGRAMS—continued

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1992-1996, October 1991
- A Transportation Improvement Program for Southeastern Wisconsin: 1993-1998, December 1992
- A Transportation Improvement Program for Southeastern Wisconsin: 1995-1997, November 1994
- A Transportation Improvement Program for Southeastern Wisconsin: 1997-1999, September 1996
- A Transportation Improvement Program for Southeastern Wisconsin: 1998-2000, November 1997

#### OTHER

- Twenty-Five Years of Regional Planning, December 1985
- Economic Development Planning Staff Memorandum No. 94-01, Southeastern Wisconsin Region Industrial/Business Park Directory: July 1994, August 1994
- Scope of Work for a Detailed Planning Study of Commuter Rail and Bus Alternatives in the Kenosha-Racine-Milwaukee Corridor, July 1998
- Job Access and Reverse Commute Regional Transportation Plan, December 1998

\*Out of print.



## Appendix E

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### INDEPENDENT AUDITOR'S REPORT

To the Commissioners of  
Southeastern Wisconsin  
Regional Planning Commission  
Waukesha, Wisconsin

We have audited the accompanying general purpose financial statements of the Southeastern Wisconsin Regional Planning Commission, as of December 31, 1998, and for the year then ended. The information included in these statements is the responsibility of the Southeastern Wisconsin Regional Planning Commission's management. Our responsibility is to express an opinion on these general purpose financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that the audit be planned and performed to provide reasonable assurance that the general purpose financial statements are free of material misstatement. The audit included examining, on a test basis, evidence supporting the amounts and disclosures in the general purpose financial statements. The audit also included assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall general purpose financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the financial position of the Southeastern Wisconsin Regional Planning Commission, as of December 31, 1998 and the results of its operations for the year then ended in conformity with generally accepted accounting principles.

*David L. Scrima S.C.*

David L. Scrima, S.C.  
Waukesha, Wisconsin  
May 3, 1999

Southeastern Wisconsin Regional Planning Commission

Combined Balance Sheet - All Fund Types and Account Groups

December 31, 1998

	<u>Governmental Fund Types</u>		<u>Account Groups</u>	<u>Total</u>	
	<u>General</u>	<u>Special Revenue</u>	<u>General Fixed Assets</u>	<u>(Memorandum Only)</u>	<u>1998</u>
<b>Assets</b>					
Treasurer's Cash	\$ 2,075,912	\$ 641,168	\$	\$ 2,075,912	\$ 1,909,016
Grants receivable				641,168	607,149
Contracts and service agreements receivable	491,095			491,095	664,745
Prepaid expense	36,508			36,508	38,868
Fixed assets			1,322,139	1,322,139	951,799
Due from other funds	626,641			626,641	581,257
<b>Total Assets</b>	<b>\$ 3,230,156</b>	<b>\$ 641,168</b>	<b>\$ 1,322,139</b>	<b>\$ 5,193,463</b>	<b>\$ 4,752,834</b>
<b>Liabilities</b>					
State sales tax	\$ 278	\$ 14,527	\$	\$ 278	\$ 714
Accounts payable	657,396			671,923	600,258
Vacation accrual	161,736			161,736	138,998
Deferred revenue	515,325			515,325	568,527
Sick pay accrual	51,388			51,388	60,930
Due to other funds		626,641		626,641	581,257
Accrued payroll	131,317			131,317	119,264
<b>Total Liabilities</b>	<b>1,517,440</b>	<b>\$ 641,168</b>		<b>2,158,608</b>	<b>2,069,948</b>
<b>Fund Equity</b>					
Investments in fixed assets			1,322,139	1,322,139	951,799
Fund balances - designated	1,015,073			1,015,073	1,015,073
- undesignated	697,643			697,643	716,014
<b>Total Fund Equity</b>	<b>1,712,716</b>		<b>1,322,139</b>	<b>3,034,855</b>	<b>2,682,886</b>
<b>Total Liabilities and Fund Equity</b>	<b>\$ 3,230,156</b>	<b>\$ 641,168</b>	<b>\$ 1,322,139</b>	<b>\$ 5,193,463</b>	<b>\$ 4,752,834</b>

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Statement of Revenues, Expenditures and Changes in Fund Balance - All Governmental Fund Types

For the Year Ended December 31, 1998

	<u>Governmental Fund Types</u>		<u>Total</u>	
	<u>General</u>	<u>Special Revenue</u>	<u>(Memorandum Only)</u>	<u>1998</u>
<b>Revenues</b>				
Contributions from counties	\$ 1,796,780	\$ 2,368,887	\$ 1,796,780	\$ 1,705,110
Grant revenues			2,368,887	2,059,460
Contract and service grants	1,559,915	336,167	1,896,082	1,124,959
Pass-through grants	687,528		687,528	825,050
Interest on invested funds	106,263		106,263	81,778
Other income	120,728		120,728	152,819
<b>Total Revenues</b>	<b>4,271,214</b>	<b>2,705,054</b>	<b>6,976,268</b>	<b>5,949,176</b>
<b>Expenditures</b>				
Salaries and fringe benefits	2,243,090	1,502,736	3,745,826	3,744,909
Office and other expenses				
Technical consultants	1,269,127	103,769	1,372,896	419,662
Technical consultants - pass-through	687,528		687,528	825,050
Office supplies	75,320	1,148	76,468	102,940
Insurance, audit, legal fees	45,941		45,941	41,979
Library acquisition and dues	30,968	1,604	32,572	31,658
Reprographics and publications	81,749	24,853	106,602	99,287
Newsletter	1,594		1,594	2,252
Postage expense	20,650	7	20,657	25,946
Travel expense	33,371	13,667	47,038	45,553
Telephone expense	31,344		31,344	34,608
Rent	189,408		189,408	217,876
Annual report	6,635		6,635	5,406
Other operating expenses	2,161	1,589	3,750	18,142
Unemployment compensation expense	2,080		2,080	1,198
Auto/office equipment/maintenance	189,353		189,353	175,184
Capital outlay	434,827		434,827	102,710
Regional conference	120		120	2,231
<b>Total Expenditures</b>	<b>5,345,266</b>	<b>1,649,373</b>	<b>6,994,639</b>	<b>5,896,591</b>
<b>Excess (Deficit) Revenues Over Expenditures</b>	<b>(1,074,052)</b>	<b>1,055,681</b>	<b>( 18,371)</b>	<b>52,585</b>
Indirect Expense Allocation				
<b>Fund Balance - beginning of year</b>	<b>1,731,087</b>	<b>-</b>	<b>1,731,087</b>	<b>1,678,502</b>
<b>Fund Balance - end of year</b>	<b>\$ 1,712,716</b>	<b>\$ -</b>	<b>\$ 1,712,716</b>	<b>\$ 1,731,087</b>

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Statement of Revenues, Expenditures and Changes  
in Fund Balances - Budget and Actual - All Government Fund Types

For the Year Ended December 31, 1998

	<u>Budget</u>	<u>Actual</u>	<u>Variance Favorable (Unfavorable)</u>
Revenues			
Contributions from counties	\$ 1,796,780	\$ 1,796,780	\$
Grant revenues	2,233,720	2,368,887	135,167
Contract and service grants	1,630,245	1,896,082	265,837
Pass-through grants		687,528	687,528
Interest on invested funds		106,263	106,263
Other income		120,728	120,728
<b>Total Revenues</b>	<b>5,660,745</b>	<b>6,976,268</b>	<b>1,315,523</b>
Expenditures			
Salaries and fringe benefits	4,074,515	3,745,826	328,689
Office and other expenses			
Technical consultants	701,215	1,372,896	( 671,681)
Technical consultants - pass-through		687,528	( 687,528)
Office supplies	80,000	76,468	3,532
Insurance, audit, legal fees	45,400	45,941	( 541)
Library acquisition and dues	30,000	32,572	( 2,572)
Reprographics and publication	133,000	106,602	26,398
Newsletter	6,500	1,594	4,906
Postage expense	22,000	20,657	1,343
Travel expense	42,000	47,038	( 5,038)
Telephone expense	30,000	31,344	( 1,344)
Rent	188,200	189,408	( 1,208)
Annual report	8,000	6,635	1,365
Other operating expenses	12,000	3,750	8,250
Unemployment compensation expense	3,500	2,080	1,420
Auto/office equipment/maintenance	78,415	189,353	( 110,938)
Capital outlay	203,000	434,827	( 231,827)
Regional conference	3,000	120	2,880
<b>Total Expenditures</b>	<b>5,660,745</b>	<b>6,994,639</b>	<b>1,333,894</b>
Excess Expenditures Over Revenues	-	( 18,371)	( 18,371)
Fund Balance - beginning of year	-	<u>1,731,087</u>	-
Fund Balance - end of year	<u>\$ -</u>	<u>\$ 1,712,716</u>	<u>\$ -</u>

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to Financial Statements

For the Year Ended December 31, 1998

Note 1 - Summary of Significant Accounting Policies (Cont'd)

Account Group

General Fixed Asset Group - Used to account for fixed assets not accounted for in any other fund.

Total (Memorandum Only) - The column captioned Total (Memorandum Only) in the combined financial statements is a total of the columnar statements by fund type and account groups. The total column is not comparable to a consolidation and does not present financial position and results of operations in conformity with generally accepted accounting principles because the same basis of accounting is not used by all funds and interfund transactions and balances and account groups balancing accounts have not been eliminated.

Budget

The Commission's annual budget is prepared principally on the cash basis and represents departmental appropriations as authorized and any authorized revisions during the year to reflect changes in programs and activities. The budget cash basis differs from generally accepted accounting principles (GAAP). Actual amounts in the accompanying budgetary comparison statement are presented on the modified accrual basis.

Cash and Cash Equivalents

In addition to bank accounts and petty cash, this classification includes all short-term investments.

Basis of Accounting

The modified accrual basis of accounting is followed by the governmental funds. Under the modified accrual basis those items of revenue for which a valid receivable can be determined in advance of their due date should be recognized on the accrual basis. All other items are recognized on the cash basis because the time of collection generally coincides with the determination of the amount. Expenditures are recognized when a liability to be met from fund assets is incurred.

Fixed Assets

Governmental general fixed assets acquired during the year ended December 31, 1998 are recorded as expenditures in the governmental funds. Generally accepted accounting principles require that these fixed assets be capitalized at cost in the general fixed assets account group.

Accrued Sick Leave

The Commission accrues up to 130 days for sick leave when an employee retires. The employee may use these funds to purchase health insurance after they retire.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to Financial Statements

For the Year Ended December 31, 1998

The accompanying summary of Southeastern Wisconsin Regional Planning Commission's more significant accounting policies is presented to assist the reader in interpreting the financial statements and other data in this report. These policies, as presented, should be reviewed as an integral part of the accompanying financial statements. The accounting policies of Southeastern Wisconsin Regional Planning Commission conform to generally accepted accounting principles as applicable to governmental units.

Note 1 - Summary of Significant Accounting Policies

Reporting Entity

The Commission uses the criteria set forth by the Governmental Accounting Standards Board to determine the scope of the Commission's reporting entity. The accompanying financial statements reflect all significant operations of the Commission which are under control of the Commissioners of Southeastern Wisconsin Regional Planning Commission.

Basic of Presentation

Southeastern Wisconsin Regional Planning Commission is a public agency serving the local communities within the counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha.

The accounts of the Commission are organized on the basis of funds and account groups, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures. Government resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled. The following funds and account groups are used by the Commission:

Governmental Funds

General Fund - The General Fund is the general operating fund of the Commission. It is used to account for all financial resources except those required to be accounted for in another fund.

Special Revenue Fund - Special Revenue Funds are used to account for the specific revenue sources (other than major capital projects) that are legally restricted to expenditures for specified purposes.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to the Financial Statements

For the Year Ended December 31, 1998

Note 1 - Summary of Significant Accounting Policies (Cont'd)

Accrued Vacation

The Commission accrues unused vacation time since the unused vacation time is cumulative from year to year. The maximum accrual per individual is 30 days.

Fund Balances

The Commission classifies its fund equity as follows:

Designated Fund Balances - indicates that portion of fund equity, which has been segregated for specific purposes.

Undesignated Fund Balances - indicates that portion of fund equity, which is available for budgeting or other uses in future periods.

Note 2 - General Fixed Asset Group

The following is a cost breakdown of fixed assets as of December 31 of the year indicated. Generally accepted accounting principles require that these fixed assets be capitalized at the original cost. Fair market value at liquidation would be different from these values.

	1998	1997
Office furniture	\$ 199,704	\$ 160,139
Computers and related equipment	519,134	325,149
Office equipment	425,447	324,448
Automobiles	163,836	134,612
Field equipment	14,018	7,451
	-----	-----
	\$ 1,322,139	\$ 951,799
	=====	=====

Note 3 - Employee Retirement Plan

All eligible Southeastern Wisconsin Regional Planning Commission employees participate in the Wisconsin Retirement System, a cost-sharing multiple-employer public employee retirement system (PERS). The payroll for employees covered by the system for the year ended December 31, 1998 was \$2,566,015; the employer's total payroll was \$2,765,173.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to the Financial Statements

For the Year Ended December 31, 1998

Note 3 - Employee Retirement Plan (Cont'd)

All permanent employees expected to work over 600 hours a year are eligible to participate in the System. Covered employees in the general category are required by statute to contribute 6.4% of their salary (4.7% for Executives and Elected Officials, 5.8% for Protective Occupations with Social Security, and 6.2% for Protective Occupations without Social Security), to the plan. Employers may make these contributions to the plan on behalf of employees. Employers are required to contribute the remaining amounts necessary to pay the projected cost of future benefits. The total required contribution for the year ended December 31, 1998 was \$302,855, which consisted of \$143,980, or 5.8% of payroll from the employer and \$158,875, or 6.4% of payroll from employees. Total contributions for the years ending December 31, 1998 and 1997 were \$302,855 and \$305,229, respectively, equal to the required contributions for each year.

Employees who retire at or after age 65, are entitled to receive a retirement benefit. Employees may retire at age 55, (50 for protective occupation employees), and receive actuarially reduced benefits. Retirement benefits are calculated at 1.6% (2.0% for Executives, Elected Officials, and Protective Occupations with Social Security and 2.5% for Protective Occupations without Social Security) of final average earnings for each year of creditable service. Final average earnings is the average of the employees' three highest years earnings. Employees terminating covered employment before becoming eligible for requirement benefit may withdraw their contributions and, by doing so, forfeit all rights to any subsequent benefit. For employees beginning participation after 1/1/90, creditable service in each of five years is required for eligibility for a retirement annuity. Participants employed prior to 1990 and on or after April 24, 1998 are immediately invested.

The System also provides death and disability benefits for employees. Eligibility for and the amount of all benefits is determined under Chapter 40 of the State Statutes.

The System uses the "Entry Age Normal with Frozen Initial Liability" actuarial method in establishing employer contribution rates. Under this method the Unfunded Accrued Actuarial Liability is affected only by the monthly amortization payments, compound interest, the added liability created by new employer units, and any added liabilities caused by changes in benefit provisions. All actuarial gains or losses arising from the difference between actual and assumed experience are reflected in the determination of the normal cost. The unfunded accrued actuarial liability is being amortized over a 40-year period beginning January 1, 1990. The unfunded liability for Southeastern Wisconsin Regional Planning Commission as of December 31, 1998 was \$619,548, or .029% of the total system unfunded liability of \$2.14 billion.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to the Financial Statements

For the Year Ended December 31, 1998

Note 3 - Employee Retirement Plan (Cont'd)

The "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date and disregarding the Wisconsin Retirement System funding objective of maintaining stable contribution rates over the long-term future. The measure, which is the actuarial present value of credited projected benefits, is intended to help users assess the System's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among PERS and employers. The System does not make separate measurements of assets and pension benefit obligation of individual employers. The System's net assets, at actuarial value, available for benefits on December 31, 1997 was \$38.6 billion.

Ten year historical trend information showing the Wisconsin Retirement System's progress in accumulating sufficient assets to pay benefits when due is presented in the next Comprehensive Annual Financial Report.

Note 4 - Cash and Temporary Investments

Cash and temporary investment balances as disclosed on the accompanying financial statements are comprised of the following:

Cash on hand and on deposit	\$ 185,244
Temporary cash investments	1,890,668
	-----
	\$ 2,075,912
	=====

Note 5 - Cognizant Agency

The cognizant agency for the Single Audit report is the Wisconsin Department of Transportation.

Note 6 - Commitments

Rent

The Commission leases space from Waukesha County under a lease agreement that runs through December 31, 2002. The Commission has the option of renewing the lease for two successive periods of five years each. The minimum lease

Southeastern Wisconsin Regional Planning Commission

Combined Notes to Financial Statements

For the Year Ended December 31, 1998

Note 6 - Commitments (Cont'd)

payments are as follows: 1999 - \$178,821, 2000 - \$178,821, 2001 - \$178,821, 2002 - \$178,821. The Commission leases 32 parking spaces at 111 East Main Street. The Commission paid for improvements to the land in lieu of rent payments until the end of the lease on August 31, 2003. The commission has the option of renewing the lease for an additional five years at \$22.00 per month per space.

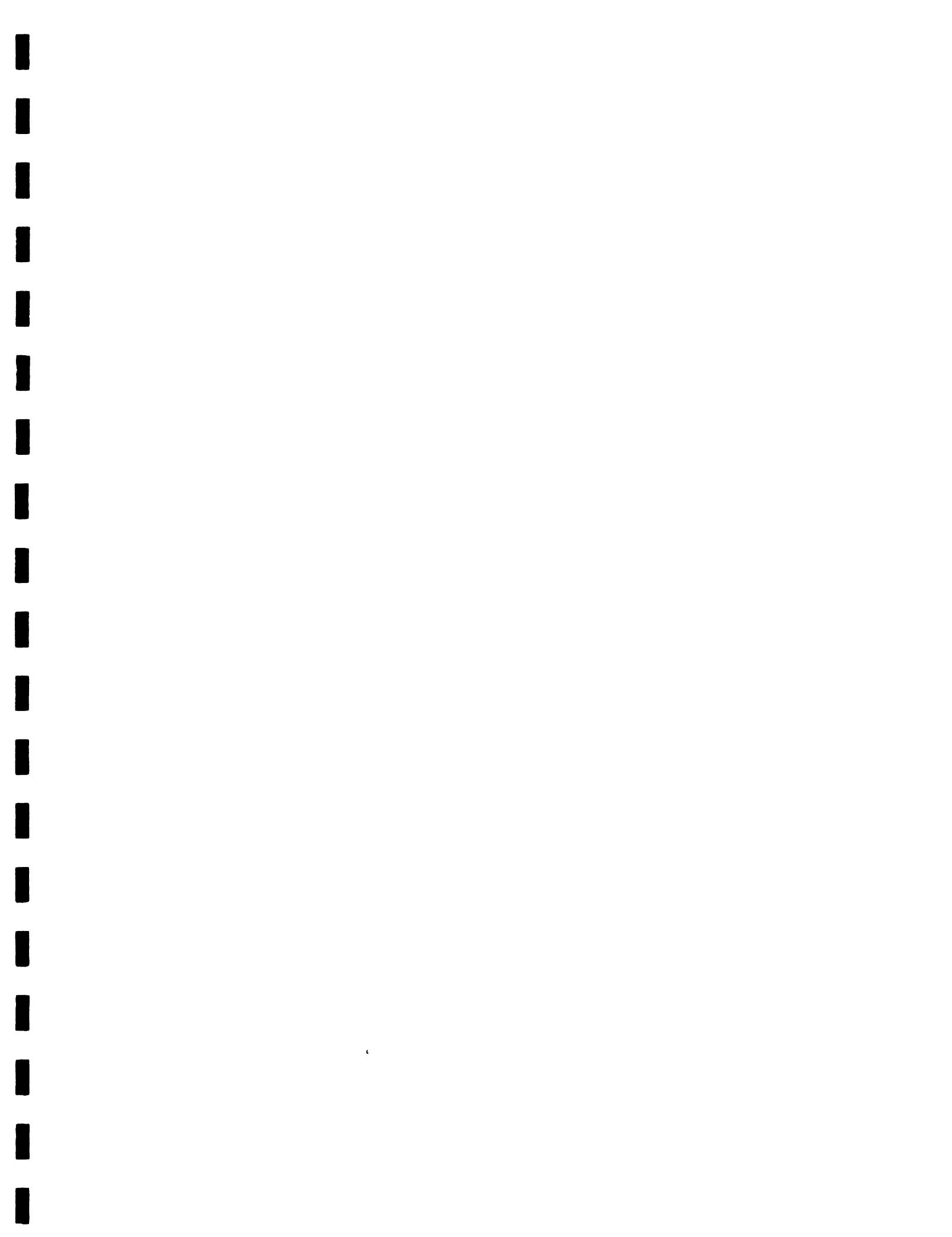
Note 7 - Designated Funds

The Commission has designated the following funds for future purposes:

Surveying and mapping services trust	\$ 118,000.00
Equipment replacement	50,000.00
Unemployment Compensation Trust	50,000.00
Errors and Omissions Insurance	150,000.00
Computer Graphics Reserve Account	350,000.00
Stream Gaging	13,195.00
Office Computer Reserve Account	260,000.00
Planning Program Account	23,878.00
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	\$ 1,015,073.00
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