

# 2004 ANNUAL REPORT



SERVING THE COUNTIES OF  
KENOSHA • MILWAUKEE • OZAUKEE • RACINE • WALWORTH • WASHINGTON • WAUKESHA

**SOUTHEASTERN WISCONSIN  
REGIONAL PLANNING COMMISSION**

**KENOSHA COUNTY**

Leon T. Dreger  
Adelene Greene  
Leonard R. Johnson

**RACINE COUNTY**

Richard A. Hansen,  
Treasurer  
Michael J. Miklasevich  
James E. Moyer

**MILWAUKEE COUNTY**

William R. Drew,  
Vice Chairman  
Lee Holloway  
Linda J. Seemeyer

**WALWORTH COUNTY**

Anthony F. Balestrieri  
Gregory L. Holden  
Allen L. Morrison

**OZAUKEE COUNTY**

Robert A. Brooks  
Thomas H. Buestrin,  
Chairman  
Gus W. Wirth, Jr.  
Secretary

**WASHINGTON COUNTY**

Kenneth F. Miller  
Daniel S. Schmidt  
David L. Stroik

**WAUKESHA COUNTY**

Kenneth C. Herro  
Anselmo Villarreal  
Paul G. Vrakas

**SOUTHEASTERN WISCONSIN REGIONAL  
PLANNING COMMISSION STAFF**

Philip C. Evenson, AICP . . . . . Executive Director  
Kenneth R. Yunker, PE . . . . . Deputy Director  
Nancy M. Anderson, AICP . . . . . Chief Community Assistance Planner  
Robert E. Beglinger . . . . . Chief Transportation Engineer  
Michael G. Hahn, PE, PH. . . . . Chief Environmental Engineer  
Leland H. Kreblin, RLS . . . . . Chief Planning Illustrator  
Elizabeth A. Larsen . . . . . Business Manager  
John G. McDougall . . . . . Geographic Information Systems Manager  
John R. Meland . . . . . Chief Economic Development Planner  
Dr. Donald M. Reed . . . . . Chief Biologist  
William J. Stauber, AICP . . . . . Chief Land Use Planner

## **FORTY-FOURTH ANNUAL REPORT**

### **SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**

Commission Offices  
W239 N1812 Rockwood Drive  
P.O. Box 1607  
Waukesha, Wisconsin 53187-1607

Telephone (262) 547-6721  
Fax (262) 547-1103  
[www.sewrpc.org](http://www.sewrpc.org)

The preparation of this publication was financed in part through planning funds provided by the Wisconsin Department of Transportation; the Wisconsin Department of Natural Resources; and the U.S. Department of Transportation, Federal Highway and Federal Transit Administrations.

**June 2005**

Inside Region \$2.00  
Outside Region \$4.00

(This page intentionally left blank)



# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607 •

TELEPHONE (262) 547-6721  
FAX (262) 547-1103

Serving the Counties of:

KENOSHA  
MILWAUKEE  
OZAUKEE  
RACINE  
WALWORTH  
WASHINGTON  
WAUKESHA



June 30, 2005

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 66.0309(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 44th annual report of the Commission, summarizes the work of the Commission in calendar year 2004 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 that 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 2004 by the Commission in carrying out its three basic functions: data collection and dissemination, regional plan preparation, and promotion of plan implementation.

The Commission hopes that the constituent units and agencies of government concerned are pleased with its work during 2004. 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,

A handwritten signature in black ink, appearing to read "Thomas H. Buestrin".

Thomas H. Buestrin  
Chairman

(This page intentionally left blank)

## TABLE OF CONTENTS

	Page		Page
ABOUT THE COMMISSION .....	1	ECONOMIC DEVELOPMENT ASSISTANCE DIVISION.....	127
THE EVOLVING COMPREHENSIVE PLAN FOR THE REGION .....	9	COMMUNITY ASSISTANCE PLANNING DIVISION .....	133
LAND USE PLANNING DIVISION .....	25	CARTOGRAPHIC AND GRAPHIC ARTS DIVISION .....	139
TRANSPORTATION PLANNING DIVISION .....	57	GEOGRAPHIC INFORMATION SYSTEMS DIVISION.....	151
ENVIRONMENTAL PLANNING DIVISION .....	97	ADMINISTRATIVE SERVICES DIVISION.....	157
TELECOMMUNICATIONS PLANNING DIVISION .....	123		

## LIST OF APPENDICES

Appendix		Page
A	Southeastern Wisconsin Regional Planning Commission Commissioners and Committees: 2004.....	161
B	Commission Advisory Committees: 2004 .....	163
C	Southeastern Wisconsin Regional Planning Commission Staff: 2004.....	169
D	Publications of the Southeastern Wisconsin Regional Planning Commission: 1962-December 2004.....	171
E	Report of Audit Examination for Year Ending 2004 .....	203

(This page intentionally left blank)



# ABOUT THE COMMISSION

## AUTHORITY

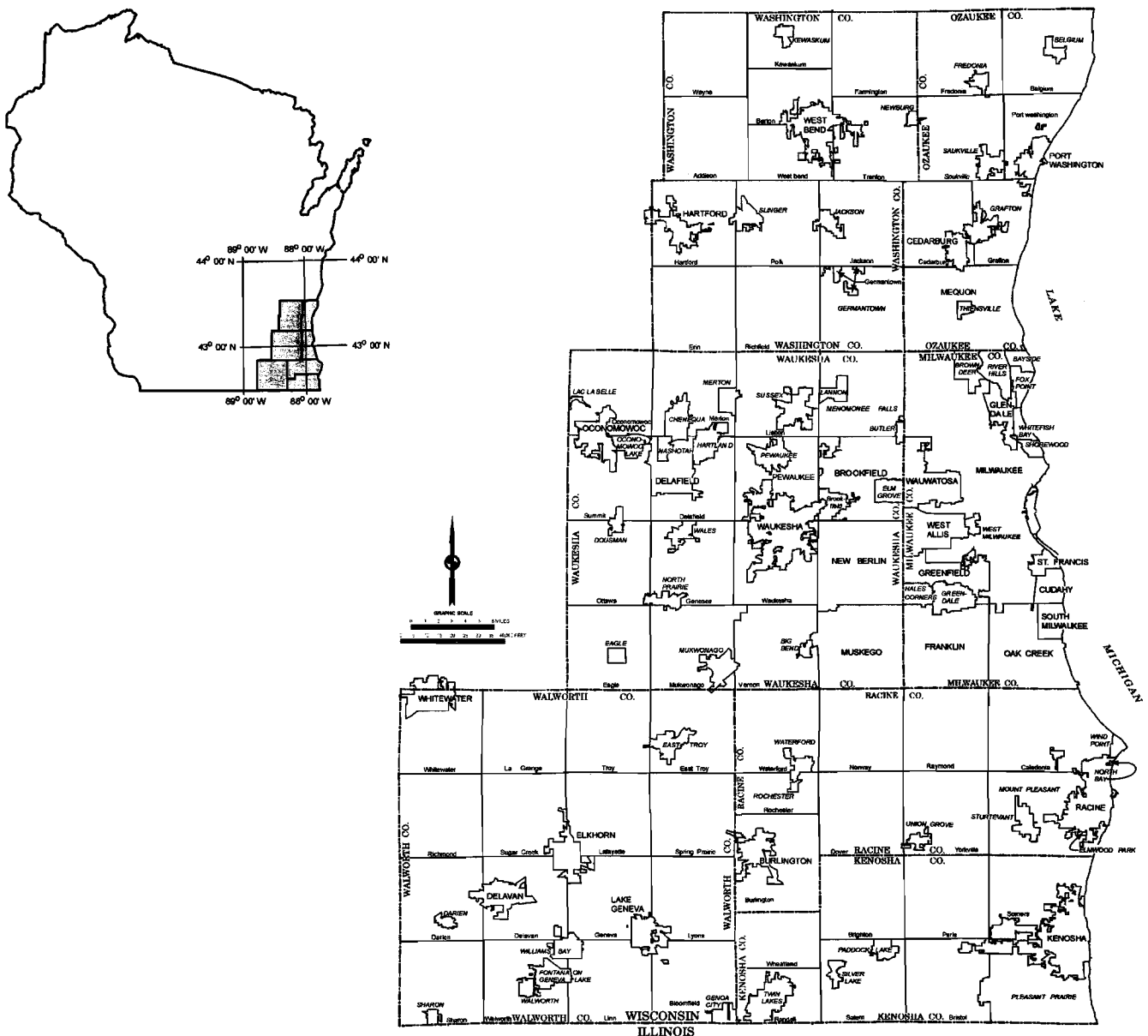
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.0309 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning 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 1.97 million persons, or about 36 percent of the total population of the State. The seven counties provide about 1.19 million jobs, or about 36 percent of the total

Map 1

## THE SOUTHEASTERN WISCONSIN REGION



employment of the State, and contain real property worth about \$145.4 billion as measured in equalized valuation, or about 37 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.

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 a series of 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. Advisory committee rosters are 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 2004, the Commission staff totaled 82, including 75 full-time and seven part-time employees.

As shown in Figure 1 and in Appendix C, the Commission was in 2004 organized into nine divisions. Six of these divisions, Transportation Planning, Environmental Planning, Land Use Planning, Community Assistance Planning, Economic Development Assistance and Telecommunications Planning, 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 2004 totaled about \$8.1 million. County tax levies in 2004 totaled about \$2.3 million, or about \$1.18 per capita. The sources of this revenue for 2004 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.

The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 2004 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.

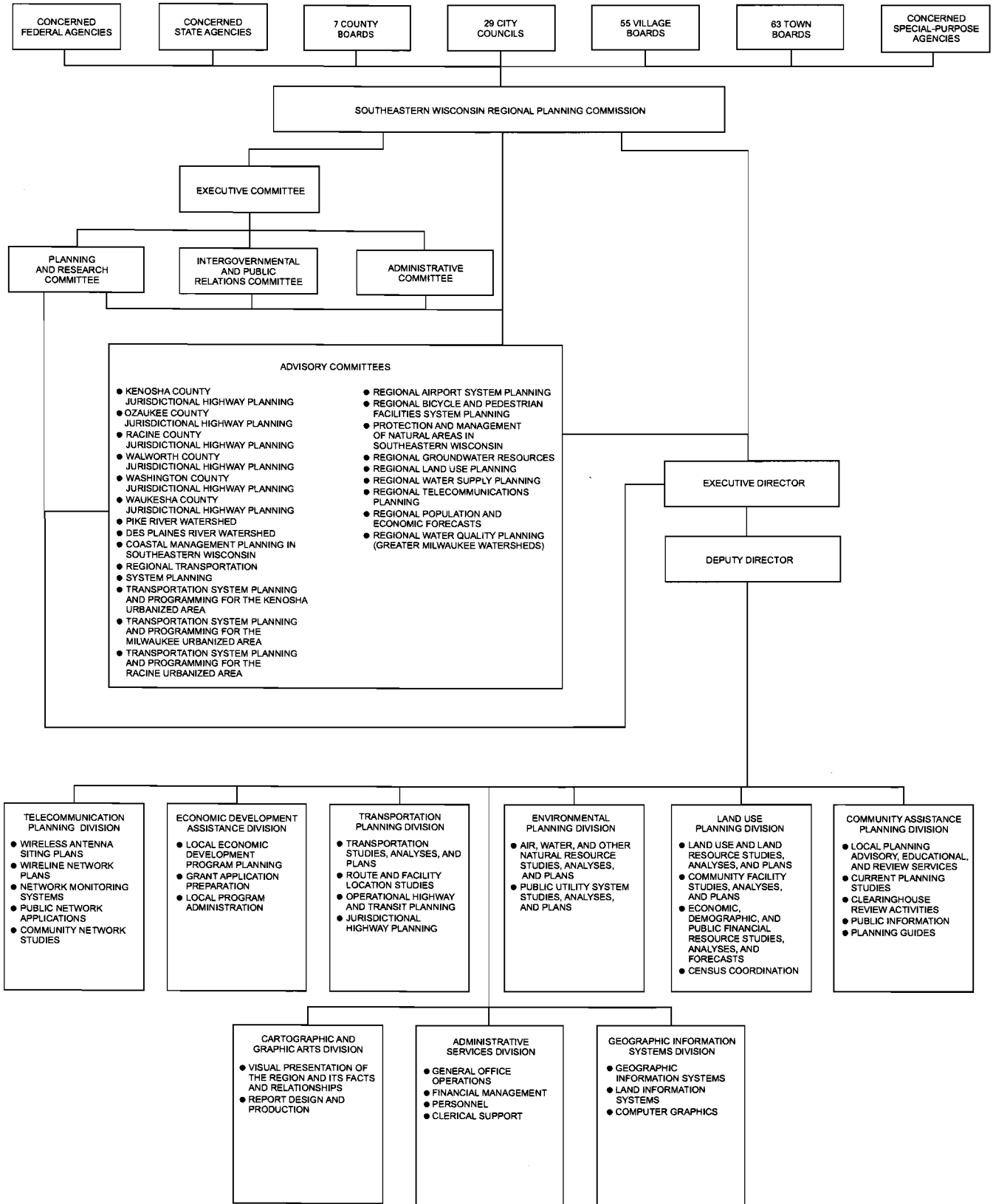
## DOCUMENTATION

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.

Figure 1

SEWRPC ORGANIZATIONAL STRUCTURE: 2004





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.

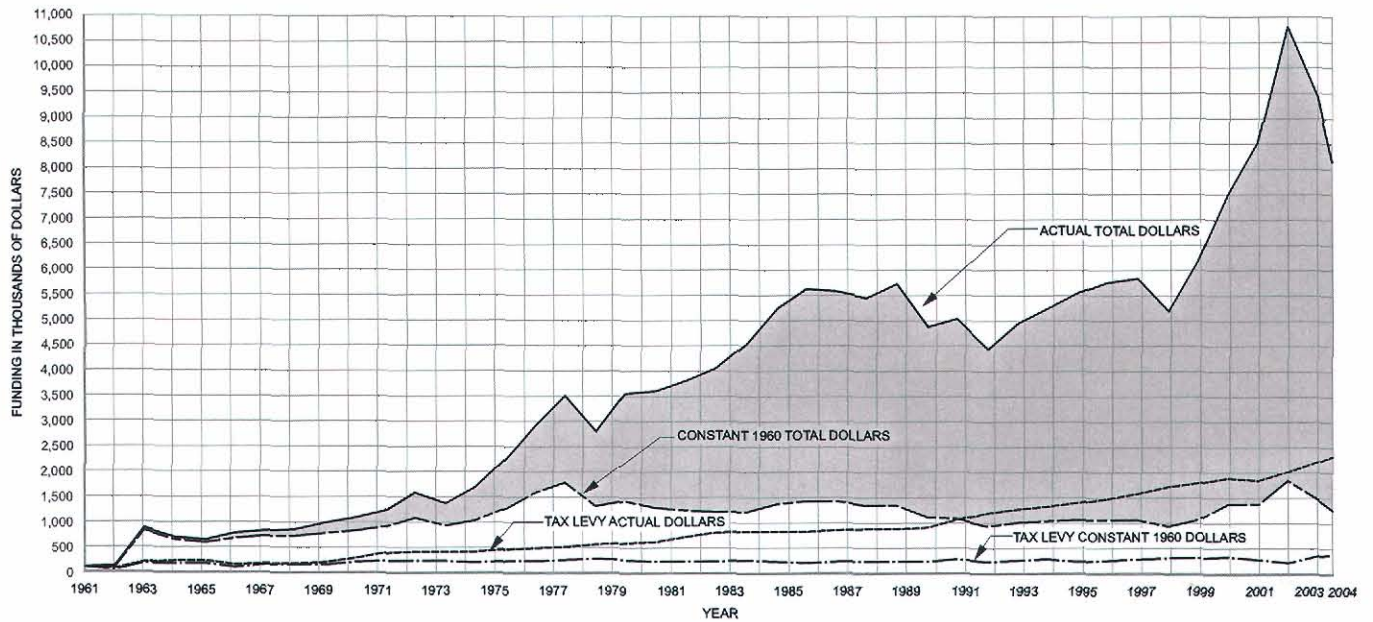
The major objective of the prospectus is to achieve a consensus among all of the interests concerned on the need for, and objectives of, a particular proposed planning program. The prospectus documents the need for a planning program; specifies the scope and content of the work required to be undertaken; 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 importantly, 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 U.S. and Wisconsin 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.

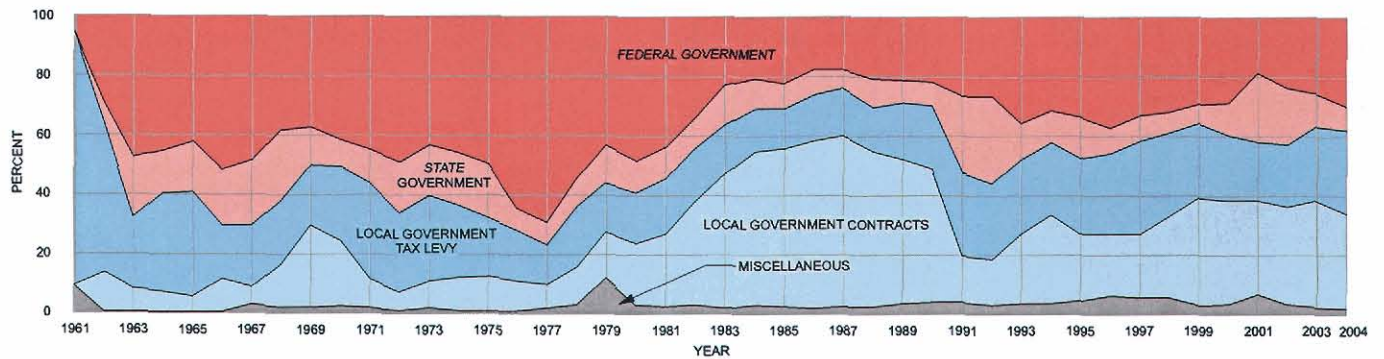
The eighth type of report in the series is the memorandum report. These reports are intended to document the results of locally requested special studies. These special studies usually involve relatively minor work efforts of a short duration and are not normally intended to document formally adopted plans.

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

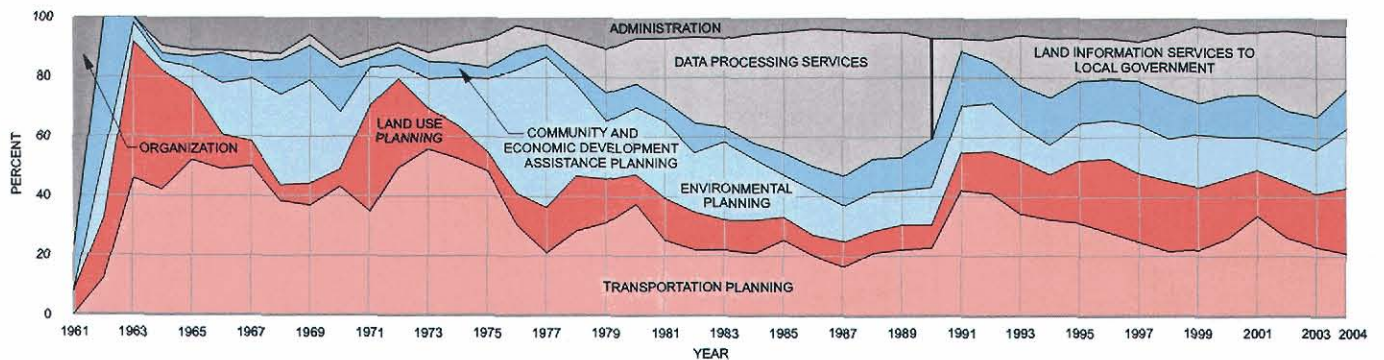
**Figure 2**  
**FUNDING TREND: 1961-2004**



**Figure 3**  
**SOURCES OF REVENUES TREND: 1961-2004**



**Figure 4**  
**EXPENDITURES TREND: 1961-2004**



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

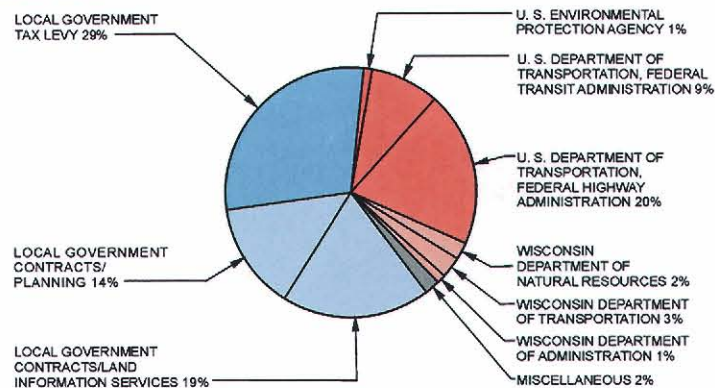
to comprehend fully the scope and complexity of the areawide developmental and environmental problems and of the Commission's recommendations for the resolution of those problems. A complete publication list is set forth in Appendix D.

Figure 5

# REVENUES AND EXPENDITURES: 2004

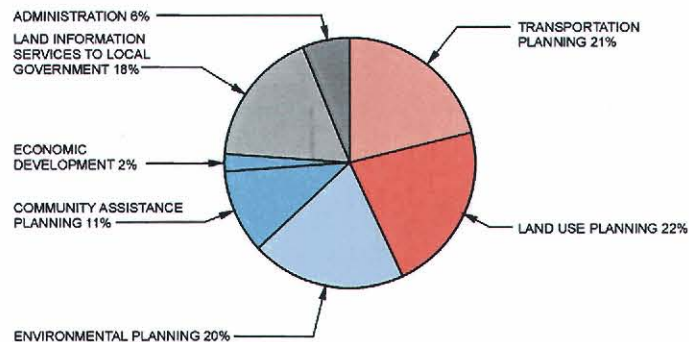
Federal Government .....	\$ 2,404,815	30%
State Government .....	648,792	8%
Local Government Tax Levy .....	2,317,515	28%
Local Government Contracts .....	2,609,454	32%
Miscellaneous .....	154,560	2%
<b>Total</b>	<b>\$8,135,136</b>	<b>100%</b>

## REVENUES



Transportation Planning .....	\$ 1,638,989	21%
Land Use Planning .....	1,784,865	22%
Environmental Planning .....	1,556,876	20%
Community Assistance Planning .....	864,906	11%
Economic Development Assistance .....	196,592	2%
Land Information Services to Local Governments .....	1,460,577	18%
Administration .....	456,945	6%
<b>Total</b>	<b>\$7,959,750</b>	<b>100%</b>

## EXPENDITURES



(This page intentionally left blank)



# 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 that 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 multijurisdictional 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: 2004

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 2004, the adopted regional plan consisted of 29 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.

Twelve of the plan elements relate to transportation. These consist of the regional transportation plan (highway and transit), the regional airport system plan, the transportation systems management plan, the elderly and handicapped transportation plan, the regional bicycle and pedestrian facilities system plan,

Table 1

## THE ADOPTED REGIONAL PLAN: DECEMBER 31, 2001

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
	Amendment—Walworth County	Community Assistance Planning Report No. 252, <i>A Land Use Plan, Walworth County, Wisconsin: 2020</i>	June 20, 2001
	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, (2nd Edition), <i>A Park and Open Space Plan for Ozaukee County</i>	September 12, 2001
	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, (2nd Edition), <i>A Park and Open Space Plan for Racine County</i>	December 5, 2001
	Amendment—Washington County Park and Open Space Plan	Community Assistance Planning Report No. 136 (3rd Edition), <i>A Park and Open Space Plan for Washington County</i>	June 16, 2004
	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 (2nd Edition), <i>A Park and Open Space Plan for Walworth County</i>	December 6, 2000
	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
	Amendment—Milwaukee County	<i>Amendment to the Year 2020 Regional Transportation System Plan and Year 2000-2002 Transportation Improvement Program for the Removal and Reconfiguration of the Park East Freeway</i>	February 1, 2001
	Amendment—Washington County	Amendment to the Washington County Jurisdictional Highway System Plan: 2020	June 19, 2002
	Amendment—Region	Affirmation of Year 2020 Regional Transportation System Plan and Extension of Plan Design Year to 2025	March 20, 2003
	Amendment—Region	Amendment to the Regional Freeway Transportation Plan (Regional Freeway System)	May 21, 2003
	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. 231, <i>Kenosha Area Transit System Development Plan: 1998-2002, City of Kenosha, Wisconsin</i>	March 3, 1999
	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

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	Amendment—Racine Area Amendment—Kenosha Area	SEWRPC Resolution No. 78-17 Memorandum Report No. 107, <i>A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Kenosha Transit System</i>	December 7, 1978 January 24, 1996
	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>	September 12, 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
	Amendment—Region Update and Extension	<i>Amendment to the Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2020</i>	December 5, 2001
	Ozaukee County Transit Service Plan <sup>9</sup>	Community Assistance Planning Report No. 265, <i>Ozaukee County Transit System Development Plan 002-2006</i>	December 6, 1995
	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
	Waukesha County Transit Development Plan	Community Assistance Planning Report No. 245, <i>Waukesha County Transit System Development Plan: 2002-2006</i>	December 4, 2002
Environmental Planning	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	<i>Amendment to the 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>h</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	<i>Amendment to the Regional Water Quality Management Plan—2000, 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	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Grafton</i>	December 2, 1982
	Amendment—City of Brookfield	<i>Amendment to the Regional Water Quality Management Plan—2000, 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
	Amendment—Port Washington Area	Community Assistance Planning Report No. 95 (2nd Edition), <i>Sanitary Sewer Service Area for the City of Port Washington and Environs, Ozaukee County, Wisconsin</i>	December 6, 2000
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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 (3rd Edition), <i>Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin</i>	September 12, 2001
	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, (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin</i>	March 3, 2004
	Amendment—East Troy Area	Community Assistance Planning Report No. 112 (3rd Edition), <i>Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin</i>	December 6, 2000
	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, (2nd Edition), <i>Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin</i>	March 3, 2004
	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 Area	Community Assistance Planning Report No. 100 (2nd Edition), <i>Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin</i>	March 3, 1999
	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

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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, (2nd Edition), <i>Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin</i>	December 5, 2001
	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
	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

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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	<i>Community Assistance Planning Report No. 123 (2nd Edition), 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	<i>Community Assistance Planning Report No. 172 (2nd Edition), Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin</i>	September 15, 1999
	Amendment—Village of Genoa City	<i>Community Assistance Planning Report No. 175 (2nd Edition), Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin</i>	June 19, 1996
	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
	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

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Dousman Area	Community Assistance Planning Report No. 192 (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin</i>	March 1, 2000
	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	Community Assistance Planning Report No. 181, <i>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
	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	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</i>	December 4, 1991
	Amendment—Pewaukee Lake Area	<i>Amendment to the Regional Water Quality Management Plan: 2000, Lake Pewaukee Sanitary District</i>	December 4, 1991
	Amendment—West Bend Area	<i>Amendment to the Regional Water Quality Management Plan: 2000, City of West Bend/Town of West Bend</i>	December 4, 1991
	Amendment—Town of Salem	<i>Amendment to the 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	<i>Amendment to the 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	<i>Amendment to the 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	<i>Amendment to the Regional Water Quality Management Plan: 2000, Village of Hartland</i>	January 18, 1993

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Twin Lakes</i>	March 3, 1993
	Amendment—City of Muskego	<i>Amendment to the 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	<i>Amendment to the Regional Water Quality Management Plan—2000, City of New Berlin</i>	June 16, 1993
	Amendment—Racine Area	<i>Amendment to the 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	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District</i>	December 1, 1993
	Amendment—City of New Berlin	<i>Amendment to the Regional Water Quality Management Plan—2000, City of New Berlin</i>	March 9, 1994
	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	Community Assistance Planning Report No. 213, <i>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	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 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

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Belgium	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Belgium</i>	December 6, 1995
	Amendment—Hartland/ 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	Community Assistance Planning Report No. 225, <i>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
	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
	Amendment—City of New Berlin	<i>Amendment to the Regional Water Quality Management Plan, City of New Berlin</i>	March 3, 1999
	Amendment—Town of Norway Sanitary District No. 1 and Environs	Community Assistance Planning Report No. 247, <i>Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, Racine and Waukesha Counties, Wisconsin</i>	June 16, 1999
	Amendment—Village of Genoa City	<i>Amendment to the Regional Water Quality Management Plan, Village of Genoa City</i>	June 16, 1999
	Amendment—Oconomowoc Area	<i>Amendment to the Regional Water Quality Management Plan, City of Oconomowoc</i>	June 16, 1999
	Amendment—Village of Hartland	<i>Amendment to the Regional Water Quality Management Plan, Village of Hartland</i>	June 16, 1999
	Amendment—City of Hartford	<i>Amendment to the Regional Water Quality Management Plan, City of Hartford and Environs</i>	September 15, 1999
	Amendment—Eagle Lake Sewer Utility District	<i>Amendment to the Regional Water Quality Management Plan, Eagle Lake Sewer Utility District</i>	September 15, 1999
	Amendment—City of Muskego	<i>Amendment to the Regional Water Quality Management Plan, City of Muskego</i>	December 1, 1999
	Amendment—Village of Mukwonago	<i>Amendment to the Regional Water Quality Management Plan, Village of Mukwonago</i>	December 1, 1999

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Racine Area	<i>Amendment to the Regional Water Quality Management Plan, City of Racine and Environs</i>	December 1, 1999
	Amendment—City of Burlington	<i>Amendment to the Regional Water Quality Management Plan, City of Burlington</i>	March 1, 2000
	Amendment—Village of Paddock Lake	<i>Amendment to the Regional Water Quality Management Plan, Village of Paddock Lake</i>	June 21, 2000
	Amendment—Waterford-Rochester Area	<i>Amendment to the Regional Water Quality Management Plan, Western Racine County Sewerage District</i>	June 21, 2000
	Amendment—Village of Darien	<i>Amendment to the Regional Water Quality Management Plan, Village of Darien</i>	June 21, 2000
	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan, Village of Sussex</i>	December 6, 2000
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, City of Waukesha</i>	February 1, 2001
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan, Town of Salem</i>	March 7, 2001
	Amendment—Northwestern Waukesha County	<i>Amendment to the Regional Water Quality Management Plan and Summary Report—Northwestern Waukesha County Sewerage System Plan</i>	March 7, 2001
	Amendment—Walworth County Metropolitan Sewerage District/ City of Elkhorn	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/City of Elkhorn</i>	June 20, 2001
	Amendment—Villages of Fontana and Walworth	<i>Amendment to the Regional Water Quality Management Plan, Villages of Fontana and Walworth</i>	June 20, 2001
	Amendment—Village of Hartland and Town of Delafield	<i>Amendment to the Regional Water Quality Management Plan, Village of Hartland and Town of Delafield</i>	June 20, 2001
	Amendment—Village of Kewaskum	<i>Amendment to the Regional Water Quality Management Plan, Village of Kewaskum</i>	June 20, 2001
	Amendment—City of Muskego	<i>Amendment to the Regional Water Quality Management Plan, City of Muskego</i>	June 20, 2001
	Amendment—City of St. Francis	<i>Amendment to the Regional Water Quality Management Plan, City of St. Francis</i>	August 1, 2001
	Amendment—Village of Belgium	<i>Amendment to the Regional Water Quality Management Plan, Village of Belgium</i>	September 12, 2001
	Amendment—Village of Jackson	<i>Amendment to the Regional Water Quality Management Plan, Village of Jackson</i>	September 12, 2001
	Amendment—Village of Saukville	<i>Amendment to the Regional Water Quality Management Plan, Village of Saukville</i>	September 12, 2001
	Amendment—City of Oconomowoc	<i>Amendment to the Regional Water Quality Management Plan, City of Oconomowoc</i>	December 5, 2001
	Amendment—Greater Kenosha Area	<i>Amendment to the Regional Water Quality Management Plan, Greater Kenosha Area</i>	December 5, 2001
	Amendment—Village of Paddock Lake	<i>Amendment to the Regional Water Quality Management Plan, Village of Paddock Lake</i>	December 5, 2001
	Amendment—Village of Fredonia	<i>Amendment to the Regional Water Quality Management Plan, Village of Fredonia</i>	March 6, 2002
	Amendment—Village of Hartland	<i>Amendment to the Regional Water Quality Management Plan, Village of Hartland</i>	March 6, 2002
	Amendment—Village of Saukville	<i>Amendment to the Regional Water Quality Management Plan, Village of Saukville</i>	March 6, 2002
	Amendment—City of Pewaukee and City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, City of Pewaukee and City of Waukesha</i>	June 19, 2002
	Amendment—Village of Slinger	<i>Amendment to the Regional Water Quality Management Plan, Village of Slinger</i>	June 19, 2002
	Amendment—City of Burlington	<i>Amendment to the Regional Water Quality Management Plan, Village of Sussex</i>	September 11, 2002
	Amendment—City of Muskego	<i>Amendment to the Regional Water Quality Management Plan, City of Muskego</i>	September 11, 2002
	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>	September 11, 2002
	Amendment—Village of Mukwonago	<i>Amendment to the Regional Water Quality Management Plan, Village of Mukwonago</i>	December 4, 2002
	Amendment—City of Racine and Environs	<i>Amendment to the Regional Water Quality Management Plan, City of Racine and Environs</i>	December 4, 2002
	Amendment—Village of Jackson	<i>Amendment to the Regional Water Quality Management Plan, Village of Jackson Sewer Service Area Plan</i>	June 18, 2003
	Amendment—City of Racine	<i>Amendment to the Regional Water Quality Management Plan, City of Racine Sewer Service Area Plan</i>	June 18, 2003
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan, Town of Salem Sewer Service Area Plan</i>	September 10, 2003



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—City of Whitewater	<i>Amendment to the Regional Water Quality Management Plan, City of Whitewater Sanitary Sewer Service Area Plan</i>	September 10, 2003
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, City of Waukesha Sanitary Sewer Service Area Plan</i>	September 10, 2003
	Amendment—Village of Mukwonago	<i>Amendment to the Regional Water Quality Management Plan, Village of Mukwonago Sanitary Sewer Service Area Plan</i>	September 10, 2003
	Amendment—Pell Lake	<i>Amendment to the Regional Water Quality Management Plan, Pell Lake Sanitary District No. 1 Sewer Service Area Plan</i>	September 10, 2003
	Amendment—Village of Slinger	<i>Amendment to the Regional Water Quality Management Plan, Village of Slinger Sewer Service Area Plan</i>	September 10, 2003
	Amendment—Allenton Sanitary District	<i>Amendment to the Regional Water Quality Management Plan, Allenton Sanitary District</i>	December 3, 2003
	Amendment—Village of Germantown	<i>Amendment to the Regional Water Quality Management Plan, Village of Germantown Sewer Service Area</i>	December 3, 2003
	Amendment—City of Port Washington	<i>Amendment to the Regional Water Quality Management Plan, City of Port Washington Sewer Service Area Plan</i>	December 3, 2003
	Amendment—Waterford and Rochester Area	<i>Amendment to the Regional Water Quality Management Plan, Waterford-Rochester Area Sewer Service Area Plan</i>	December 3, 2003
	Amendment—Village of Pewaukee	<i>Amendment to the Regional Water Quality Management Plan, Village of Pewaukee</i>	March 3, 2004
	Amendment—Elkhorn Area	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area</i>	March 3, 2004
	Amendment—Village of Menomonee Falls	<i>Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls</i>	June 16, 2004
	Amendment—Jackson Area	<i>Amendment to the Regional Water Quality Management Plan, Village of Jackson</i>	June 16, 2004
	Amendment—Lake Como Area	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District-Lake Como Sanitary Sewer Service Area</i>	June 16, 2004
	Amendment—Williams Bay Area	<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>	September 15, 2004
	Amendment—Twin Lakes Area	<i>Amendment to the Regional Water Quality Management Plan, Village of Twin Lakes</i>	September 15, 2004
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, City of Waukesha</i>	September 15, 2004
	Amendment—Kewaskum Area	<i>Amendment to the Regional Water Quality Management Plan, Village of Kewaskum</i>	December 1, 2004
	Amendment—Burlington Area	<i>Amendment to the Regional Water Quality Management Plan, City of Burlington/Bohner Lake Sanitary Sewer Service Areas</i>	December 1, 2004
	Amendment—Lake Geneva Area	<i>Amendment to the Regional Water Quality Management Plan, City of Lake Geneva</i>	December 1, 2004
	Amendment—Delavan/Delavan Lake Area	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District-Delavan/Delavan Lake Sewer Service Area</i>	December 1, 2004
	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

**Table 1 (continued)**

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Oak Creek Watershed Plan	Planning Report No. 36, <i>A Comprehensive Plan for the Oak Creek Watershed</i>	September 8, 1986
	Des Plaines River Watershed Plan	Planning Report No. 44, <i>A Comprehensive Plan for the Des Plaines River Watershed</i>	June 18, 2003
Community Assistance Planning	Kenosha Planning District Comprehensive Plan	Planning Report No. 10, <i>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	Planning Report No. 14, <i>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

<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

**Table 1 Footnotes (continued)**

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.

<sup>d</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>e</sup>The Kenosha area transit development plan is a fourth-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. The third-generation plan was adopted by the Commission on June 17, 1992, and documented in SEWRPC Community Assistance Planning Report No. 183, Kenosha Transit System Development Plan: 1991-1995, City of Kenosha, Wisconsin.

<sup>f</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 Kenosha 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>g</sup>The Ozaukee County Transit Plan is an amended and updated second generation plan. The first generation plan was adopted by the Commission on December 6, 1995, and documented in SEWRPC Community Assistance Planning Report No. 218, A Transit Service Plan for Ozaukee County: 1996-2000.

<sup>h</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.

and detailed transit development plans for the Kenosha, Racine, Waukesha, and West Bend urban areas and for Ozaukee, Washington, and Waukesha Counties.

Eleven of the adopted plan elements fall within the broad functional area of environmental planning. These

consist of the regional water quality management 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, Des Plaines, 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 2004, the Commission adopted one amendment to the regional park and open space plan: an updated park and open space plan for Washington County. In addition, the Commission adopted 14 amendments to the regional water quality management plan dealing with changes to planned 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 areawide 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 that reflect development that had occurred or that had been committed to since the completion of the year 2010 plan in 1992, recently completed county and municipal land use plans that 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 2004, 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 updated regional land use and regional transportation system plans, and the extension of those plans to a design year 2035. This will be followed by the preparation of updated jurisdictional highway system plans for several counties.
- The preparation of new short-range transit system development plans for Milwaukee County and the Cities of Kenosha and Racine.
- The preparation of an updated park and open space plan for Milwaukee County.
- The preparation of an updated water quality management plan for the Milwaukee area watersheds, working in conjunction with the Milwaukee Metropolitan Sewerage District.
- The preparation of two new regional plan elements, one dealing with water supply and the other dealing with telecommunications.

## **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. The above referenced efforts attendant to telecommunications planning and water supply planning represent two such new programs.

# LAND USE PLANNING DIVISION

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 2004, 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 2004, 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 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 2004.

### 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.

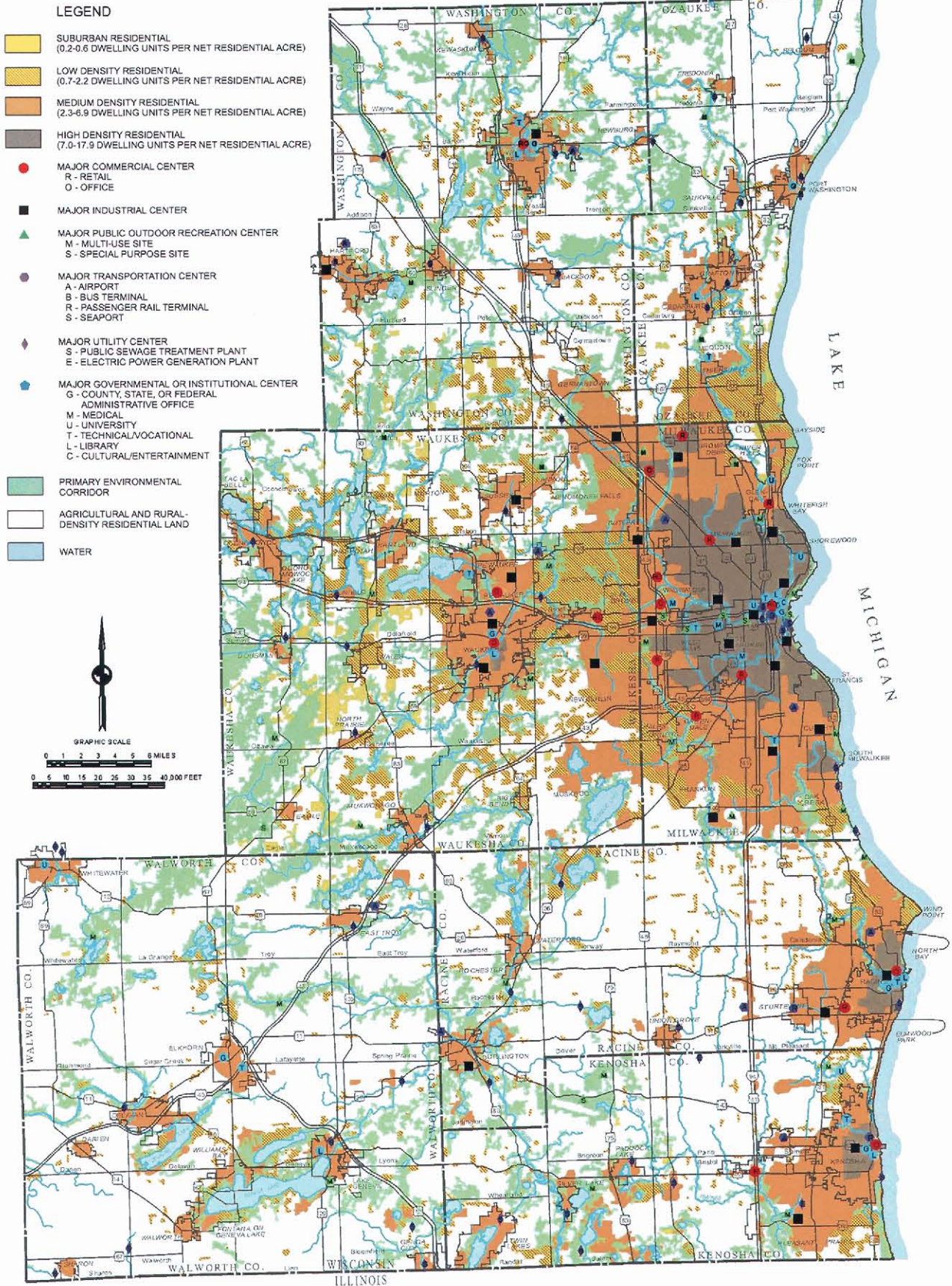
### *Urban Land Use*

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



Map 2

ADOPTED LAND USE PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2020





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 flood-plains 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 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 agricul-

Table 2

**RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 2004**

County	Sewered Lots		Unsewered Lots <sup>a</sup>		Total Lots	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha .....	662	98.7	9	1.3	671	12.9
Milwaukee.....	573	100.0	0	0.0	573	11.0
Ozaukee.....	140	63.1	82	36.9	222	4.3
Racine.....	459	95.0	24	5.0	483	9.3
Walworth.....	296	85.5	50	14.5	346	6.6
Washington.....	492	60.5	321	39.5	813	15.6
Waukesha.....	1,605	76.6	490	23.4	2,095	40.3
Region	4,227	81.2	976	18.8	5,203	100.0

<sup>a</sup>Of the 976 lots to be served by onsite sewage disposal systems, 241 lots, or 25 percent, occurred at a rural density of no more than one dwelling unit per five acres. This includes 9 such lots in Kenosha County, 50 in Ozaukee County, 7 in Walworth County, 109 in Washington County, and 66 in Waukesha County.

tural 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 2004, the year 2020 regional land use plan had been adopted by Kenosha, Milwaukee, Racine, Walworth, Washington, 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, 5,203 residential

lots were created within the Region during 2004 by subdivision plat, compared with 4,245 lots so created in 2003 (see Table 2 and Map 3). In the seven counties in Southeastern Wisconsin, the number of residential lots created through subdivision plats in 2004 ranged from a low of 222 lots in Ozaukee County to a high of 2,095 lots in Waukesha County. The historical trend in residential platting activity since 1960 is shown for the Region and by county in Figure 6.

Of the residential lots created in 2004, 4,227 lots, or 81 percent, were to be served by public sanitary sewers; the remaining 976 lots, or 19 percent, were to be served by onsite sewage disposal systems. Of the 976 lots to be served by onsite sewage disposal systems, 241 lots, or 25 percent, occurred at a rural density—that is, an overall density of no more than one dwelling unit per five acres. The balance occurred at urban densities of more than one dwelling unit per five acres.

#### **ECONOMIC AND DEMOGRAPHIC ANALYSIS**

During 2004, the Division prepared projections of employment, population, and household levels to the year 2035; continued to monitor secondary data sources for changes in employment, population, and housing levels; and continued to provide socioeconomic data in support of its work and that of the Transportation, Environmental, and Community Assistance Planning Divisions.

## Year 2035 Employment and Population Projections

The projection of future employment, population, and household levels is essential for the Southeastern Wisconsin Regional Planning Commission to properly carry out its responsibility of preparing a comprehensive plan for the physical development of the Region. To facilitate the development of projections, the Commission periodically undertakes detailed studies of the economic and demographic base of the Region. In July 2004, the Commission completed two studies that resulted in new projections of employment, population, and households for the Region to the year 2035. The two studies, which were prepared under the guidance of the Commission's Advisory Committee on Regional Population and Economic Forecasts, are documented in the fourth editions of SEWRPC Technical Report No. 10, *The Economy of Southeastern Wisconsin*, and SEWRPC Technical Report No. 11, *The Population of Southeastern Wisconsin*.

Under the recently completed economic and demographic studies, as in prior studies, the Commission projected a range of future employment, population, and household levels—high, intermediate, and low—for the Region. This approach recognizes the uncertainty that surrounds any effort to predict future socioeconomic conditions. The intermediate projections prepared under the studies are considered the most likely to be achieved for the Region overall. The high and low projections are intended to provide an indication of the range of employment, population, and household levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

### The Economy of Southeastern Wisconsin

To provide a basis for the development of employment projections, the recently completed economic study included an analysis of trends in the civilian labor force and employment in the Region.

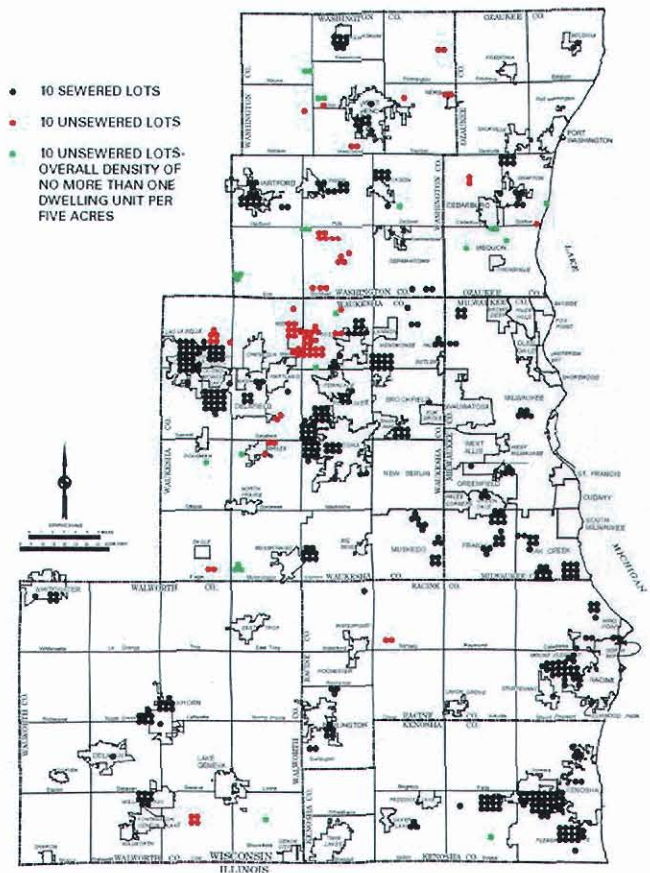
#### Civilian Labor Force Trends

The civilian labor force is that portion of the total population age 16 and over that is either employed at one or more nonmilitary jobs or temporarily unemployed. Since the labor force is essentially a proportion of total population, changes in the labor force generally mirror changes in population.

As indicated in Table 3, the civilian labor force of the Region was 1,008,400 persons in 2000, compared to

Map 3

### RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 2004



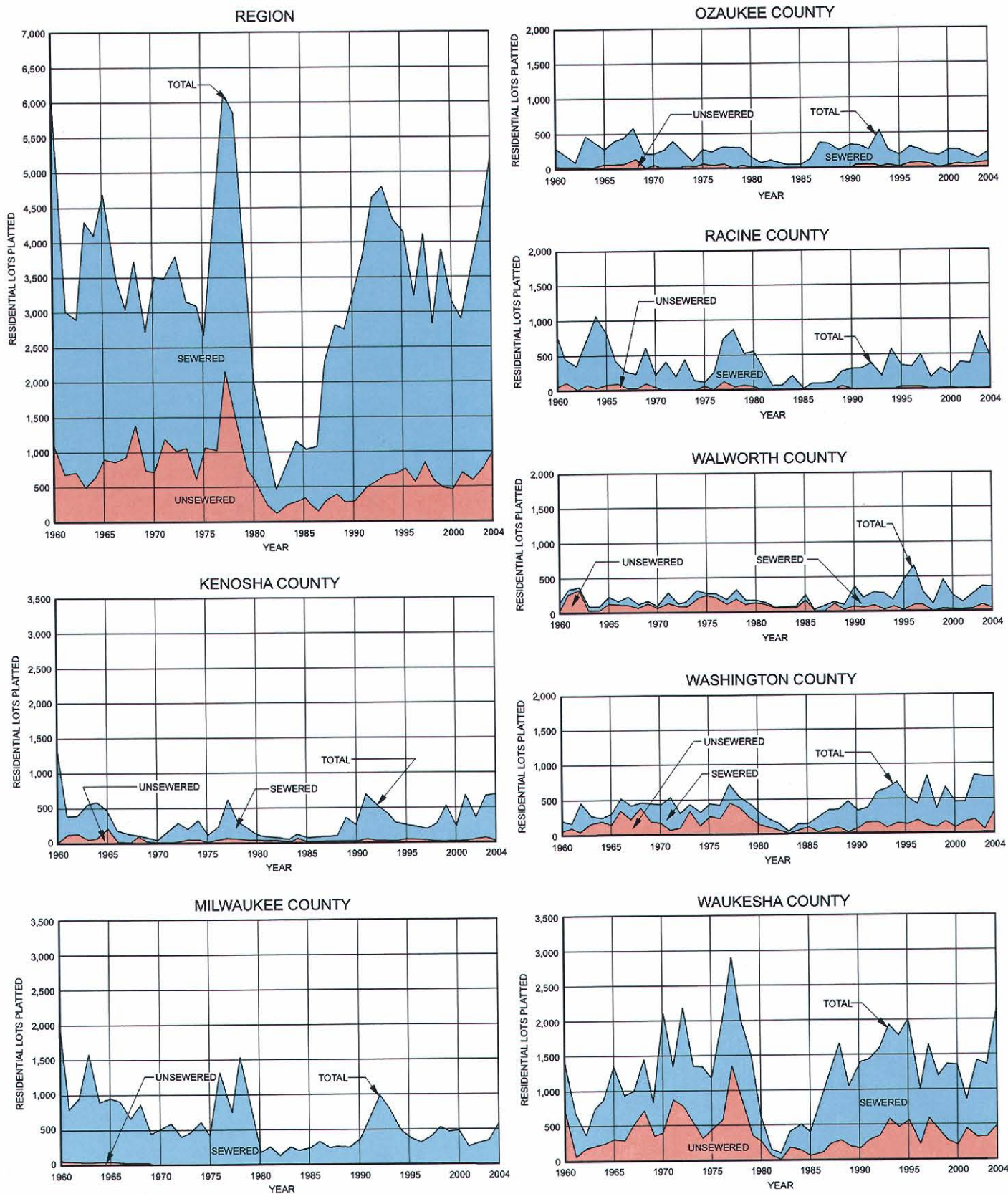
934,200 persons in 1990. The increase of 74,200 persons, or 8 percent, compares to increases of 58,000 during the 1980s, 140,100 during the 1970s, and just under 100,000 in both the 1960s and 1950s. In relative terms, the Region's labor force grew at a somewhat slower rate than both the State and the national labor force during the 1990s. As a result, the Region's share of the State labor force decreased from 37 to 35 percent, and the Region's share of the national labor force also declined slightly.

The gender makeup of the civilian labor force changed slightly during the 1990s, following substantial changes during the previous four decades. The female component increased from 29 percent in 1950, to 47 percent in 1990, and to 48 percent in 2000. The male component decreased from 71 percent in 1950, to 53 percent in 1990, and to 52 percent in 2000. As indicated in Figure 7, the civilian labor force participation rate (the civilian



Figure 6

RESIDENTIAL LOTS PLATTED IN THE REGION AND ITS COUNTIES: 1960-2004



labor force as a percent of total population age 16 and older) also increased significantly, from 56.6 percent in 1950 to the 1990 rate of 67.6 percent, largely due to increased participation by females since 1950. The civilian labor force participation rate was 68.2 percent for the Region in 2000.

### *Employment Trends*

Employment data are intended to represent the number of jobs available in a given area. The number of jobs reported generally exceeds the civilian labor force because numerous individuals in the labor force work at more than one job.

As indicated in Table 4, total employment in the Region was 1,222,800 jobs in 2000, compared to 1,062,600 jobs in 1990. The increase of 160,200 jobs during the 1990s compares to 114,400 during the 1980s, 163,300 during the 1970s, 111,900 during the 1960s, and 99,500 during the 1950s. In relative terms, employment in the Region grew at a somewhat slower rate than both the State and the Nation during the 1990s. As a result, the Region's share of total State employment decreased from about 38 percent to about 36 percent, and the Region's share of national employment also decreased slightly.

Historically, employment levels tend to fluctuate in the short-term, rising and falling in accordance with business cycles, both nationally and within the Region. The long period of nearly uninterrupted job growth between 1983 and 2000 is unusual in this respect. Nationally and within the Region, total employment increased each year during that time, with the exception of a slight decrease in 1991. The extended period of employment growth in the Region beginning in 1983 ended after 2000. Total employment in the Region decreased from 2000 to 2003. Estimated total employment in the Region was at 1,179,000 jobs in 2003, about 4 percent below the 2000 level.

During the 1990s, the regional economy continued a long-term shift from a manufacturing to a service orientation. Manufacturing employment in the Region was virtually unchanged during the 1990s, following decreases during the 1970s and 1980s, while service-related employment increased substantially during each of the past three decades. Due to these differential growth rates, the proportion of manufacturing jobs relative to total jobs in the Region decreased from 32 percent in 1970 to 18 percent in 2000, while service-related employment increased from 18 percent in 1970 to 33 percent in 2000. In comparison to the manu-

facturing and services industry groups, other major industry groups—including wholesale trade, retail trade, government, and finance, insurance and real estate—have been relatively stable in terms of their share of total regional employment over the last three decades, as indicated in Figure 8. Wisconsin and the United States have likewise experienced a similar major shift from manufacturing to service-related employment.

### *Regional Employment Projections to the Year 2035*

Procedurally, the Commission utilized a disaggregate approach to the preparation of employment projections. As applied by the Commission, this approach involves the explicit consideration of employment in "dominant" and "subdominant" industry groups and the preparation of projections for those groups. Dominant industries, as defined by the Regional Planning Commission, are those industries that account for 4.0 percent or more of the total regional employment, while subdominant industries are those that account for 2.0 percent to 3.9 percent.

Employment-level projections were developed for each dominant and subdominant industry based upon a consideration of past industry trends, available indicators of future trends nationally and in the State and Region, and relative industry and sector strength in the Region as compared to State and national industries and sectors. Projections by State agencies and other recently published projections were consulted. The projected employment levels take into account the employment declines of the 2001 recession and use 2003 data estimates as the last historical data points.

The future available labor force in the Region was also an important consideration in the preparation of the employment projections. Commission population projections indicate that a leveling-off in the regional labor force may be expected, particularly toward the middle of the projection period, as much of the baby-boom generation (those born from 1946 through 1964) reaches retirement age. This leveling-off in the labor force may be expected to moderate the number of jobs able to be accommodated in the Region.

The intermediate employment projection for the Region assumes that the regional economy would generally maintain its competitive position, but would not significantly increase or decrease in strength relative to the rest of the State and Nation. The high projection, on the other hand, would be expected to be achieved only if

Table 3

## CIVILIAN LABOR FORCE IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2000

Year	Region			Wisconsin			United States			Regional Labor Force as a Percent of:	
	Persons in the Labor Force	Change from Preceding Year		Persons in the Labor Force	Change from Preceding Year		Persons in the Labor Force	Change from Preceding Year			
		Number	Percent		Number	Percent		Number	Percent		
1950	538,716	--	--	1,396,383	--	--	59,303,720	--	--	38.6	0.91
1960	636,901	98,185	18.2	1,527,722	131,339	9.4	68,144,079	8,840,359	14.9	41.7	0.93
1970	736,078	99,177	15.6	1,774,008	246,286	16.1	80,051,046	11,906,967	17.5	41.5	0.92
1980	876,152	140,074	19.0	2,263,413	489,405	27.6	104,449,817	24,398,771	30.5	38.7	0.84
1990	934,153	58,001	6.6	2,517,238	253,825	11.2	123,473,450	19,023,633	18.2	37.1	0.76
2000	1,008,394	74,241	7.9	2,869,236	351,998	14.0	137,668,798	14,195,348	11.5	35.1	0.73

NOTE: The 1950 and 1960 censuses defined the labor force as those persons age 14 and older who were employed or temporarily unemployed. The 1970, 1980, 1990, and 2000 censuses defined the labor force as those persons age 16 and older who were employed or temporarily unemployed.

Table 4

## EMPLOYMENT IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2000

Year	Region			Wisconsin			United States			Regional Employment as a Percent of:	
	Jobs	Change from Preceding Year		Jobs	Change from Preceding Year		Jobs	Change from Preceding Year			
		Number	Percent		Number	Percent		Number	Percent	Wisconsin	United States
1950	573,500	--	--	1,413,400	--	--	61,701,200	--	--	40.6	0.93
1960	673,000	99,500	17.3	1,659,400	246,000	17.4	72,057,000	10,355,800	16.8	40.6	0.93
1970	784,900	111,900	16.6	1,929,100	269,700	16.3	88,049,600	15,992,600	22.2	40.7	0.89
1980	948,200	163,300	20.8	2,429,800	500,700	26.0	111,730,200	23,680,600	26.9	39.0	0.85
1990	1,062,600	114,400	12.1	2,810,400	380,600	15.7	136,708,900	24,978,700	22.4	37.8	0.78
2000	1,222,800	160,200	15.1	3,421,800	611,400	21.8	165,209,800	28,500,900	20.8	35.7	0.74

Figure 7

## CIVILIAN LABOR FORCE PARTICIPATION RATES IN THE REGION: 1950-2000

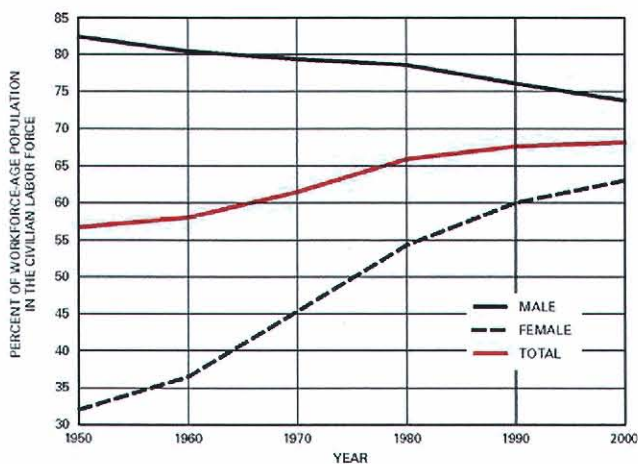
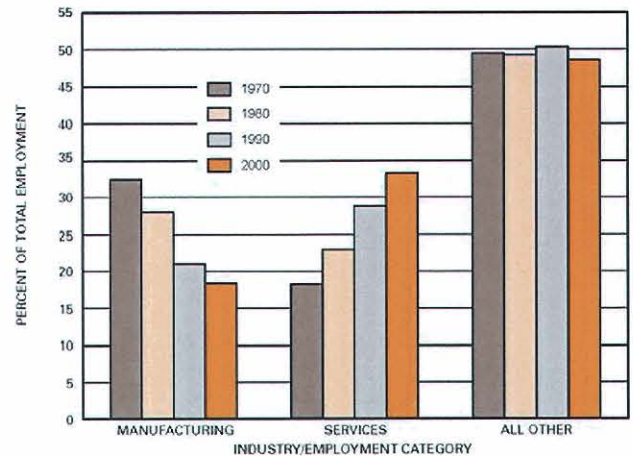


Figure 8

## PERCENT OF TOTAL EMPLOYMENT FOR MANUFACTURING, SERVICES, AND ALL OTHER INDUSTRIES IN THE REGION, 1970-2000





the regional economy were to become significantly more competitive relative to the State and Nation, resulting in the creation of a significantly greater number of employment opportunities, and inducing a substantial net in-migration of workers to fill those jobs. Conversely, the low projection would be expected to be achieved only with a stagnating regional economy that becomes substantially less competitive in relation to the rest of the State and Nation in the coming decades.

Under the Commission's intermediate projection, total employment in the Region would recover from the reduced levels of the early 2000s, experiencing fairly strong growth until about the middle of the projection period. At that time, employment growth is projected to moderate, coinciding with the anticipated leveling-off in the labor force, particularly as large numbers of baby-boomers retire. Relatively modest employment growth is envisioned over the last 10 years of the projection period. As indicated in Table 5 and Figure 9, the intermediate projection envisions total employment of 1,368,300 jobs in the Region in 2035, an increase of 145,500 jobs, or 12 percent, over the 2000 level of 1,222,800 jobs. Under the high projection, employment in the Region could be as high as 1,509,600 jobs in 2035, an increase of about 286,800 jobs, or 24 percent, over the 2000 level. Under the low projection, employment in the Region could be as low as 1,267,500 jobs in 2035, about 44,700 jobs, or 4 percent, over the 2000 level.

The sectoral changes—particularly, a shift from a goods producing economy to a services providing economy—that have occurred in the Region in recent decades are projected to continue. Under the intermediate projection, total manufacturing employment in the Region is projected at 160,400 jobs in 2035, compared to 224,300 jobs in 2000, never recovering from job losses of the recent recession. Conversely, service sector employment would experience substantial growth, from 406,000 jobs in 2000 to 590,000 jobs in 2035. By 2035, manufacturing employment would comprise 12 percent of total employment in the Region, compared to 18 percent in 2000 (see Table 6 and Figure 10). Service sector employment would comprise 43 percent of all jobs in the Region in 2035, compared to 33 percent in 2000. Similar sectoral changes are expected under the high and low projections.

Under the intermediate projection, employment in Kenosha, Ozaukee, Walworth, Washington, and

Waukesha Counties would increase by 20 to 30 percent between 2000 and 2035. Employment in Racine County would increase by 10 percent, and employment in Milwaukee County would approximate the year 2000 level.

## **The Population of Southeastern Wisconsin**

To provide a basis for the development of population and household projections, the recently completed demographic study included an analysis of changes in the population and its characteristics and changes in households and their characteristics.

### *Changes in Population*

As indicated in Table 7, the resident population of the Region was 1,931,200 persons in 2000, compared to 1,810,400 in 1990. The increase of 120,800 persons, or 6.7 percent, during the 1990s is substantially larger than the increases experienced during the 1970s (8,700 persons) and 1980s (45,600 persons), but less than the increases of 333,000 persons and 182,500 persons experienced during the 1950s and 1960s, respectively. In relative terms, the Region's population grew at a somewhat slower rate than the population of Wisconsin overall and the population of the United States during the 1990s. As a result, the Region's share of Wisconsin's population decreased slightly, from 37 percent to 36 percent, and the Region's share of the national population also declined.

Growth in the regional population over the past decade was accompanied by a change in the age composition. Among the five-year age groups, growth over the past ten years in the Region is most evident in the 40- to 44-year, the 45- to 49-year, and the 50- to 54-year age groups, largely reflecting the aging of baby-boomers. Conversely, the largest decreases in population between 1990 and 2000 occurred in the 25- to 29-year and 30- to 34-year age groups, a reflection of baby-boomers moving out of those age groups.

The 1990s saw an increase in the foreign-born population of the Region. The foreign-born population in the Region was about 101,500 persons in 2000, representing about 5 percent of the total regional population. The foreign-born population of the Region increased by 33,800 persons, or 50 percent, between 1990 and 2000, following decreases over the prior two decades. This increase in the foreign-born population included a significant Hispanic component.



Table 5

## ACTUAL AND PROJECTED EMPLOYMENT IN THE REGION BY COUNTY: 2000-2035

County	Employment 2000	Projected Employment: 2035								
		High Projection			Intermediate Projection			Low Projection		
		Employment 2035	Change: 2000-2035		Employment 2035	Change: 2000-2035		Employment 2035	Change: 2000-2035	
			Number	Percent		Number	Percent		Number	Percent
Kenosha .....	68,700	93,700	25,000	36.4	85,000	16,300	23.7	78,700	10,000	14.6
Milwaukee .....	624,600	689,500	64,900	10.4	624,900	300	0.0	578,900	-45,700	-7.3
Ozaukee .....	50,800	68,100	17,300	34.1	61,700	10,900	21.5	57,200	6,400	12.6
Racine .....	94,400	114,700	20,300	21.5	104,000	9,600	10.2	96,300	1,900	2.0
Walworth .....	51,800	73,800	22,000	42.5	66,900	15,100	29.2	62,000	10,200	19.7
Washington .....	61,700	86,700	25,000	40.5	78,600	16,900	27.4	72,800	11,100	18.0
Waukesha .....	270,800	383,100	112,300	41.5	347,200	76,400	28.2	321,600	50,800	18.8
Region	1,222,800	1,509,600	286,800	23.5	1,368,300	145,500	11.9	1,267,500	44,700	3.7

Table 6

## PROJECTED EMPLOYMENT BY INDUSTRY GROUP IN THE REGION: 2035

Industry	2000 Employment		Projected 2035 Employment					
			High		Intermediate		Low	
	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total	Number of Jobs	Percent of Total
Manufacturing:								
Printing and Publishing .....	24,500	2.0	27,900	1.8	24,700	1.8	22,800	1.8
Fabricated Metal Products .....	25,600	2.1	12,800	0.9	11,600	0.9	10,700	0.9
Industrial Machinery and Equipment .....	48,000	3.9	27,800	1.8	24,900	1.8	22,900	1.8
Electronic and Other Electrical Equipment .....	27,000	2.2	16,800	1.1	15,300	1.1	14,100	1.1
All Other Manufacturing .....	99,200	8.1	89,400	5.9	83,900	6.1	77,600	6.1
Subtotal Manufacturing	224,300	18.3	174,700	11.5	160,400	11.7	148,100	11.7
Construction .....	53,800	4.4	62,600	4.1	57,100	4.2	53,200	4.2
Retail Trade .....	193,700	15.8	223,900	14.8	205,400	15.0	190,600	15.0
Wholesale Trade .....	64,400	5.3	68,800	4.6	64,400	4.7	59,600	4.7
Transportation, Communication, and Utilities .....	54,800	4.5	56,700	3.8	51,100	3.7	47,800	3.8
Services:								
Business Services .....	102,800	8.4	188,200	12.5	164,600	12.0	152,500	12.0
Health Services .....	97,700	8.0	148,100	9.8	132,000	9.7	122,400	9.7
Social Services .....	34,300	2.8	69,900	4.6	62,100	4.5	57,400	4.5
All Other Services .....	171,200	14.0	257,500	17.1	231,300	16.9	213,300	16.8
Subtotal Services	406,000	33.2	663,700	44.0	590,000	43.1	545,600	43.0
Finance, Insurance, and Real Estate .....	93,700	7.7	113,200	7.5	103,600	7.6	96,400	7.6
Government and Government Enterprises .....	114,400	9.3	123,100	8.2	115,300	8.4	106,900	8.4
Agriculture .....	6,000	0.5	5,200	0.3	4,800	0.4	4,500	0.4
Other .....	11,700	1.0	17,700	1.2	16,200	1.2	14,800	1.2
Total Regional Employment	1,222,800	100.0	1,509,600	100.0	1,368,300	100.0	1,267,500	100.0

*Components of Population Change*

The population of the Region is constantly changing as a result of births and deaths and through the inflow and outflow of persons migrating from one area to

another. Population increases result from births and in-migration of persons; population decreases result from deaths and out-migration of persons. The balance between births and deaths is termed "natural increase" and the balance between in-migration and out-migration is termed "net migration."

Figure 9

ACTUAL AND PROJECTED  
EMPLOYMENT IN THE REGION: 1970-2035

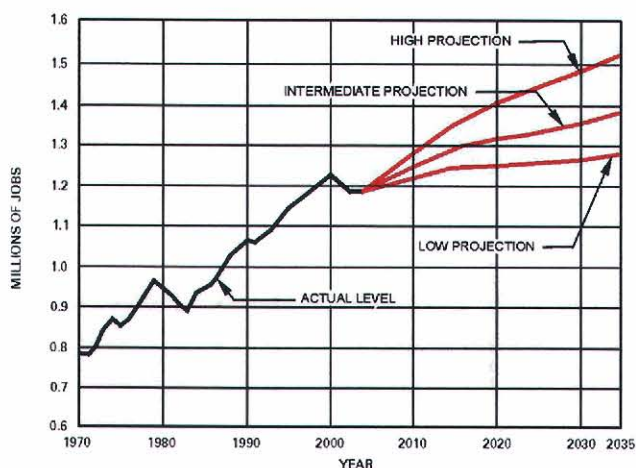
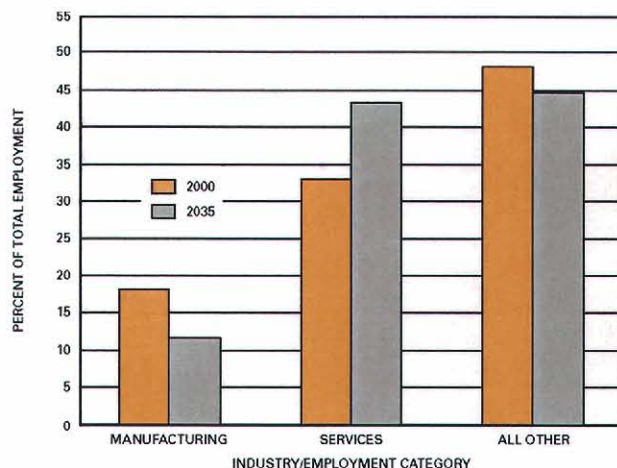


Figure 10

PROJECTED PERCENT OF TOTAL EMPLOYMENT  
FOR MANUFACTURING, SERVICES, AND ALL OTHER  
INDUSTRIES IN THE REGION: 2000 AND 2035



Of the total population increase of 120,800 persons in the Region between 1990 and 2000, 116,900 can be attributed to natural increase. As indicated in Figure 11, the level of natural increase in the Region has been relatively stable over the past three decades, averaging about 119,000 per decade. This is significantly lower than the levels experienced during the 1950s and 1960s—which include much of the post-World War II baby-boom era—when natural increase in the Region exceeded 200,000 per decade.

Net migration of population into and out of the Region has fluctuated substantially over the past five decades. As indicated in Figure 11, the Region experienced a modest net in-migration of 3,900 persons during the 1990s, the first time since the 1950s that the Region as a whole experienced net in-migration. This followed three decades of net out-migration, including 81,800 persons during the 1980s, 104,400 persons during the 1970s, and 19,900 persons during the 1960s.

It should be noted that immigration from abroad is an important component of the Region's net migration pattern. According to the 2000 U.S. Census, about

45,400 of the foreign-born residents of the Region entered the United States between 1990 and 2000. That 1990s level is significantly more than the corresponding per-decade figures ranging from roughly 12,000 to 18,000 reported in previous censuses for the 1960s, 1970s, and 1980s. Assuming that migration from the Region to other countries is negligible, the 45,400 foreign-born persons in the Region reported as entering the country during the 1990s may be considered a reasonable approximation of immigration from other countries into the Region.

#### *Changes in Households*

In addition to total population, the number of households, or occupied housing units, is of importance in land use and public facility planning. Households greatly influence the demand for urban land and transportation and other public facilities and services. As indicated in Table 8, the number of households in the Region was about 749,000 in 2000, an increase of 72,900, or 11 percent, over the 1990 level.

Table 7

## POPULATION TRENDS IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-2000

Year	Region			Wisconsin			United States			Regional Population as a percent of:	
	Population	Change from Preceding Year		Population	Change from Preceding Year		Population	Change from Preceding Year			
		Absolute	Percent		Absolute	Percent		Absolute	Percent	Wisconsin	United States
1950	1,240,618	--	--	3,434,575	--	--	151,325,798	--	--	36.1	0.82
1960	1,573,614	332,996	26.8	3,951,777	517,202	15.1	179,323,175	27,997,377	18.5	39.8	0.88
1970	1,756,083	182,469	11.6	4,417,821	466,044	11.8	203,302,031	23,978,856	13.4	39.7	0.86
1980	1,764,796	8,713	0.5	4,705,642	287,821	6.5	226,504,825	23,202,794	11.4	37.5	0.78
1990	1,810,364	45,568	2.6	4,891,769	186,127	4.0	249,632,692	23,127,867	10.2	37.0	0.73
2000	1,931,165	120,801	6.7	5,363,675	471,906	9.6	281,421,906	31,789,214	12.7	36.0	0.69

Table 8

## HOUSEHOLDS, HOUSEHOLD POPULATION, AND HOUSEHOLD SIZE IN THE REGION: 1950-2000

Year	Households	Change from Preceding Year		Household Population	Change from Preceding Year		Household Size	Change from Preceding Year	
		Absolute	Percent		Absolute	Percent		Absolute	Percent
1950	354,544	--	--	1,190,193	--	--	3.36	--	--
1960	465,913	111,369	31.4	1,537,235	347,042	29.2	3.30	-0.06	-1.8
1970	536,486	70,573	15.1	1,714,200	176,965	11.5	3.20	-0.10	-3.0
1980	627,955	91,469	17.0	1,724,567	10,367	0.6	2.75	-0.45	-14.1
1990	676,107	48,152	7.7	1,769,120	44,553	2.6	2.62	-0.13	-4.7
2000	749,039	72,932	10.8	1,885,300	116,180	6.6	2.52	-0.10	-3.8

In relative terms, the rate of growth in households in the Region during the 1990s of 11 percent exceeded the rate of growth in the total population of 7 percent. Similar patterns were observed over each of the four previous decades. For the past 50 years overall, the number of households in the Region increased by 111 percent, while the total population increased by 56 percent. These differential growth rates between households and population are reflected in a declining average household size in the Region.

As indicated in Table 8, the average household size for the Region was 2.52 persons in 2000, which represents a decrease of about 0.10 person per household, or about 4 percent, from the 1990 figure of 2.62 persons. The decrease in household size during the 1990s was a continuation of a long-term trend in declining average household size for the Region over the past 50 years. It reflects continued change in household types, including increases in single-person households and smaller nonfamily households.

## Regional Population Projections to the Year 2035

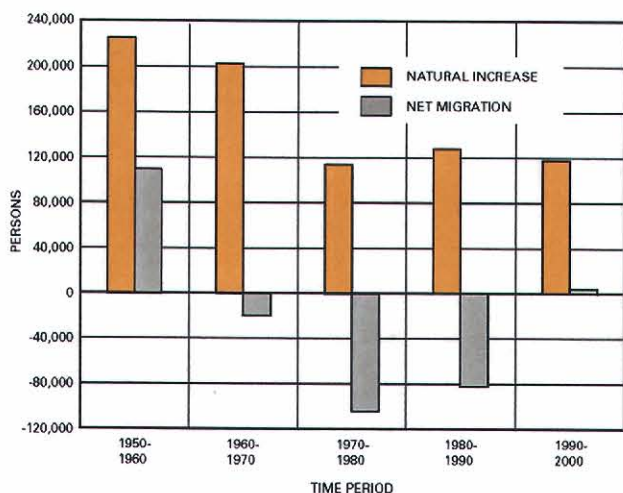
The Commission employed a widely used population modeling technique known as the cohort-component method to develop the intermediate population projection. This method involved disaggregating the population into cohorts, or subgroups, based upon age and gender, and explicitly considering the three components of population change—births, deaths, and migration—with respect to each cohort throughout the projection period from 2000 to 2035. Specific assumptions were made regarding births, deaths, and migration. In general, the intermediate population projection envisions a modest increase in fertility rates, a modest improvement in life expectancy, and a relatively stable migration pattern for the Region overall in the coming decades.

Under the intermediate projection, it was assumed that the Region's total fertility rate would increase slightly over the projection period, from 2.04 in 2000 to 2.12



Figure 11

### COMPONENTS OF POPULATION CHANGE IN THE REGION: 1950-2000



by the end of the projection period (see Figure 12). With regard to mortality, the intermediate population projection assumed a modest improvement in life expectancy, with male life expectancy increasing by 2.9 years, and with female life expectancy increasing by 2.6 years, between 2000 and the end of the projection period (see Figure 13).

The migration assumptions underlying the Commission intermediate population projection were developed within the context of what is considered to be the most likely economic growth scenario for the Region. Under the concurrent Commission economic study, it was concluded that a significant increase or decrease in economic strength relative to other areas of the State or Nation is not likely. Thus, major changes in net migration patterns for the Region from the recent past would not be expected, and total regional net migration for each 5-year period was assumed to be within the range of -3,000 to +3,000 persons.

Following development of the intermediate population projection, high and low population projections were developed, based upon consideration of factors having the potential to augment or dampen future population growth in the Region—the relative strength of the regional economy being the primary factor. Thus, the high projection was developed under an assumption that the regional economy would become significantly more competitive, creating an increased demand for

Figure 12

### HISTORIC AND PROJECTED TOTAL FERTILITY RATE FOR THE REGION

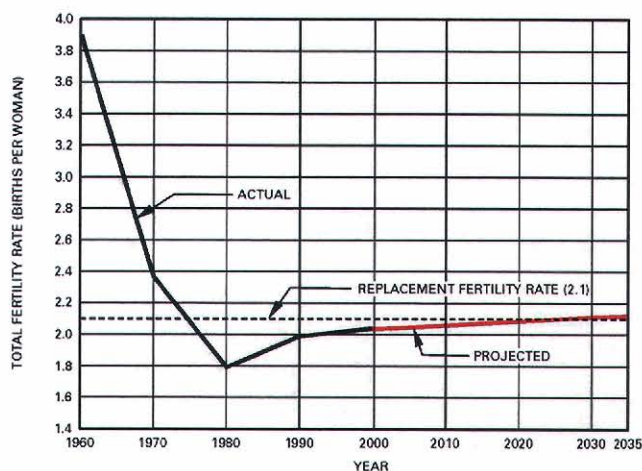
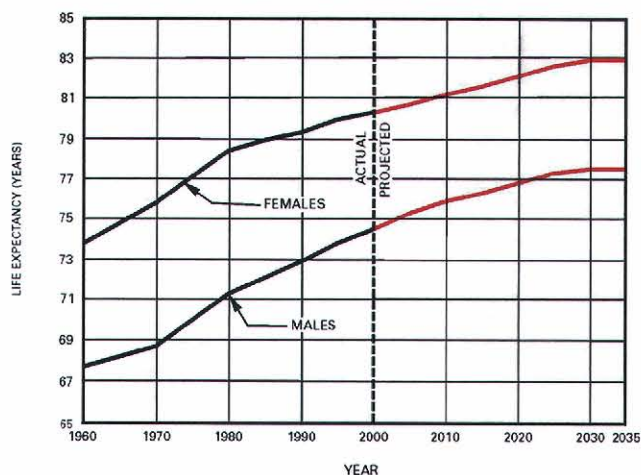


Figure 13

### HISTORIC AND PROJECTED LIFE EXPECTANCY FOR THE REGION



workers and inducing a substantial net in-migration of people to meet that demand. The low projection was developed under the assumption of a significantly less competitive regional economy, resulting in an out-migration of population, as workers move to areas experiencing stronger economic growth.

Table 9

## ACTUAL AND PROJECTED POPULATION IN THE REGION BY COUNTY: 2000-2035

County	Population 2000	Projected Population: 2035								
		High Projection			Intermediate Projection			Low Projection		
		Population 2035	Change: 2000-2035		Population 2035	Change: 2000-2035		Population 2035	Change: 2000-2035	
			Number	Percent		Number	Percent		Number	Percent
Kenosha .....	149,600	235,300	85,700	57.3	210,100	60,500	40.4	191,200	41,600	27.8
Milwaukee.....	940,200	1,077,600	137,400	14.6	1,007,100	66,900	7.1	926,600	-13,600	-1.4
Ozaukee.....	82,300	115,300	33,000	40.1	101,100	18,800	22.8	93,000	10,700	13.0
Racine .....	188,800	243,500	54,700	29.0	213,600	24,800	13.1	200,800	12,000	6.4
Walworth .....	92,000	148,400	56,400	61.3	140,000	48,000	52.2	123,200	31,200	33.9
Washington .....	117,500	176,100	58,600	49.9	157,300	39,800	33.9	144,700	27,200	23.1
Waukesha .....	360,800	504,900	144,100	39.9	446,800	86,000	23.8	411,000	50,200	13.9
Region	1,931,200	2,501,100	569,900	29.5	2,276,000	344,800	17.9	2,090,500	159,300	8.2

Figure 14

## ACTUAL AND PROJECTED POPULATION IN THE REGION: 1950-2035

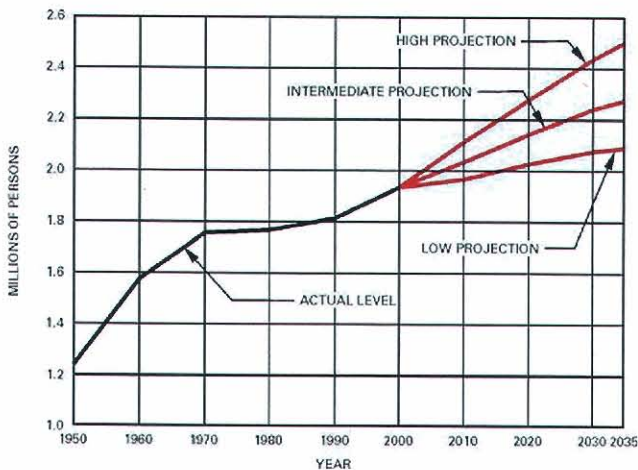
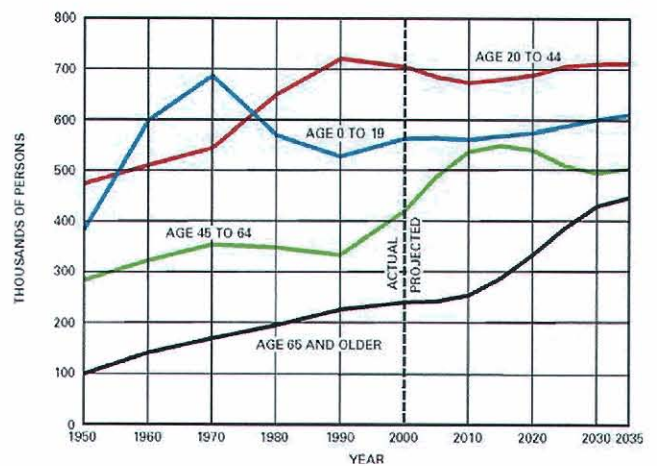


Figure 15

## ACTUAL AND PROJECTED POPULATION THE REGION BY GENERAL AGE GROUP: 1950-2035



Under the intermediate projection, the regional population would increase by 344,800 persons, or 18 percent, from 1,931,200 persons in 2000 to 2,276,000 persons in 2035, as indicated in Table 9 and Figure 14. Under the high projection, the population of the Region could be as high as 2,501,100 persons in 2035, an increase of about 569,900 persons, or 30 percent, over the 2000 level, and exceeding the intermediate projection by about 10 percent. Under the low projection, the regional population could be as low as 2,090,500 persons in 2035, an increase of 159,300 persons, or 8 percent, over the 2000 level, and about 8 percent less than the intermediate projection.

Under the intermediate projection, the population of Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties would increase by roughly 20 to 38

50 percent between 2000 and 2035. The population of Racine County would increase by 13 percent and the population of Milwaukee County would increase by 7 percent. Under the intermediate projection, population increases would range from 18,800 persons in Ozaukee County to 86,000 in Waukesha County. It should be noted that the Commission projections envision the continuation of an "Illinois influence" on future population growth in Kenosha and Walworth Counties, characterized by persons from Northeastern Illinois seeking residences in Wisconsin.

The Commission population projections anticipate changes in the age structure of the population over the course of the projection period (see Figure 15). The most significant changes, in the projections as in the historic data, can be attributed to the aging of the



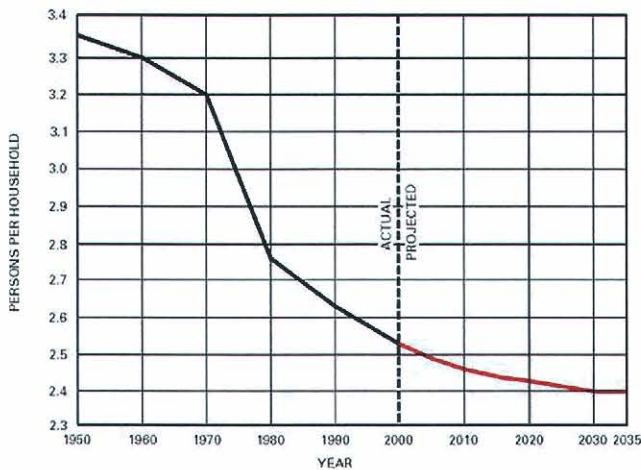
Table 10

## ACTUAL AND PROJECTED HOUSEHOLDS IN THE REGION BY COUNTY: 2000-2035

County	Households 2000	Projected Households: 2035								
		High Projection			Intermediate Projection			Low Projection		
		Households 2035	Change: 2000-2035		Households 2035	Change: 2000-2035		Households 2035	Change: 2000-2035	
			Number	Percent		Number	Percent		Number	Percent
Kenosha .....	56,100	92,900	36,800	65.6	82,900	26,800	47.8	75,500	19,400	34.6
Milwaukee.....	377,700	457,400	79,700	21.1	427,500	49,800	13.2	393,300	15,600	4.1
Ozaukee.....	30,900	45,600	14,700	47.6	40,000	9,100	29.4	36,800	5,900	19.1
Racine .....	70,800	95,700	24,900	35.2	84,000	13,200	18.6	78,900	8,100	11.4
Walworth .....	34,500	57,700	23,200	67.2	54,400	19,900	57.7	47,900	13,400	38.8
Washington .....	43,800	70,400	26,600	60.7	62,800	19,000	43.4	57,800	14,000	32.0
Waukesha .....	135,200	196,700	61,500	45.5	174,100	38,900	28.8	160,200	24,900	18.4
Region	749,000	1,016,400	267,400	35.7	925,700	176,700	23.6	850,300	101,300	13.5

Figure 16

## ACTUAL AND PROJECTED HOUSEHOLD SIZE FOR THE REGION



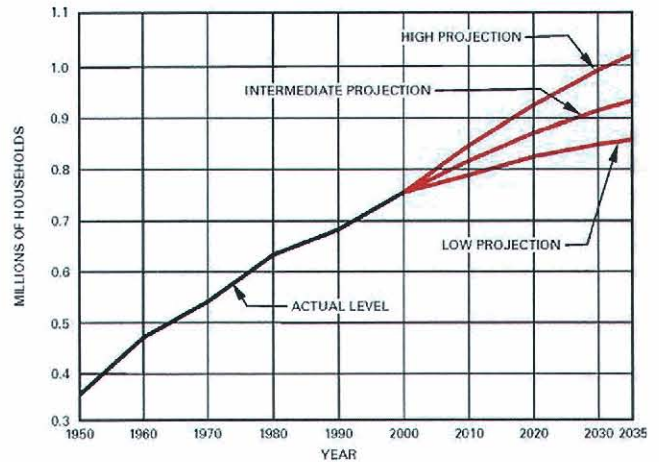
baby-boom generation. Changes in the age composition may be expected to have a range of impacts, including, importantly, impacts on the available labor force, as baby-boomers move into their retirement years.

*Regional Household Projections to the Year 2035*

Commission projections to the year 2035 envision a continued decrease in average household size, although the rate of change may be expected to be moderated somewhat. Under the Commission projections, the average household size would decrease by just over 5 percent during the 35-year projection period, from 2.52 persons in 2000 to 2.39 persons in 2035 (see Figure 16). This household size decrease may be anticipated as a result of a combination of factors, including a continued change in household types, as well as the projected increase in the older population age groups for which

Figure 17

## ACTUAL AND PROJECTED HOUSEHOLDS IN THE REGION: 1950-2035



average household sizes tend to be smaller than for the total population.

Under the Commission's intermediate projection, the number of households in the Region would increase by 176,700, or 24 percent, from 749,000 households in 2000 to 925,700 households in 2035, as indicated in Table 10. The projected 24 percent relative increase in households under the intermediate projection exceeds the projected relative increase in population of 18 percent. Under the high projection, the number of households in the Region could be as high as 1,016,400 in 2035, an increase of 267,400 households, or 36 percent, over the 2000 level, and 10 percent above the intermediate projection (see Figure 17). Under the low projection, the number of households could be as low as 850,300 in 2035, an increase of 101,300 households, or 14 percent, over the 2000 level, and 8 percent below the intermediate projection.

Under the intermediate projection, the number of households would increase in all counties of the Region. Households in Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties would increase by roughly 30 to 60 percent between 2000 and 2035. The number of households in Racine County would increase by 19 percent and the number of households in Milwaukee County would increase by 13 percent. Under the intermediate projection, household increases would range from 9,100 in Ozaukee County to 49,800 in Milwaukee County.

#### *Relationship Between Employment Projections and Population Projections*

The processes of preparing projections of future population and employment levels for the Region were closely coordinated in order to ensure consistency between the resulting projections. Of primary concern in this regard is that labor force trends which may be expected in light of projected changes in the regional population are consistent with the projected employment trends.

As part of the Commission's forecasting efforts, the regional labor force was projected based upon high, intermediate, and low population projections and anticipated future labor force participation rates. The projected relative growth in the labor force under each scenario closely approximates the projected relative growth in employment for each scenario, indicating basic conformity between the regional population and employment projections.

### **Monitoring Employment**

#### *Current Employment Levels*

As noted above, the number and type of jobs available are important measures of economic activity within the Region. 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 a given job is held by a resident of the jurisdiction in which the job is enumerated or by a commuter. The information regarding employment levels presented in this report is drawn from secondary data sources. Future editions of the Commission's *Annual Report* may present slightly revised employment levels for the year 2004 and previous years in order to reflect new releases of

secondary source employment data as they become available.

The number of jobs in the Region in 2004 was estimated at 1,188,100. Despite a modest increase during the past year, the number of jobs in the Region remained 34,700 jobs, or 2.8 percent, below the 2000 level of 1,222,800 jobs. Year 2004 manufacturing employment in particular was an estimated 42,000 jobs less than the 2000 level (see Table 11).

Estimated employment levels by county in 2004 are indicated in Table 12. In Kenosha, Walworth, Washington, and Waukesha Counties, the number of jobs in 2004 was slightly greater than in 2000. In Ozaukee and Racine Counties, 2004 employment levels remained slightly below the 2000 level. Employment in Milwaukee County in 2004 remained about 38,000 jobs below the 2000 level.

#### *Comparison of Actual and Projected Employment Levels*

As previously noted, in 2004, the Commission prepared a new set of employment level projections for the Region to the year 2035. The intermediate projection is considered the most likely to be achieved for the Region overall. The high and low projections are intended to provide an indication of the range of employment levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

Employment in the Region in 2004 was anticipated to total 1,182,900 jobs under the high-growth scenario; 1,180,400 jobs under the intermediate-growth scenario; and 1,177,700 jobs under the low-growth scenario. The estimated 2004 level of 1,188,100 jobs, lies less than 1 percent above each of these anticipated employment levels. The 2004 employment levels projected for the Region and each of its seven counties, along with the 2004 estimated actual employment levels, are set forth in Table 13 and Figure 18.

### **Monitoring Population**

#### *Current Population Levels*

Each year, the Wisconsin Department of Administration prepares estimates of resident population levels for communities and counties in Wisconsin. These estimates are based upon symptomatic indicators of



Table 11

## REGIONAL EMPLOYMENT BY CATEGORY: 1990, 2000, AND 2004

Employment Category	Number of Jobs			1990-2000 Change		2000-2004 Change	
	1990	2000	2004 Estimate	Number	Percent	Number	Percent
Agriculture, Forestry, Fishing, and Mining <sup>a</sup> .....	14,300	17,600	17,500	3,300	23.1	-100	-0.6
Construction .....	45,100	53,800	53,900	8,700	19.3	100	0.2
Manufacturing .....	223,500	224,400	182,400	900	0.4	-42,000	-18.7
Transportation, Communication, and Utilities ...	46,300	54,800	50,600	8,500	18.4	-4,200	-7.7
Wholesale Trade .....	55,300	64,400	59,600	9,100	16.5	-4,800	-7.5
Retail Trade .....	185,400	193,700	194,200	8,300	4.5	500	0.3
Services <sup>b</sup> .....	386,500	499,700	514,700	113,200	29.3	15,000	3.0
Government and Government Enterprises <sup>c</sup> .....	106,200	114,400	115,200	8,200	7.7	800	0.7
<b>Total Jobs</b>	<b>1,062,600</b>	<b>1,222,800</b>	<b>1,188,100</b>	<b>160,200</b>	<b>15.1</b>	<b>-34,700</b>	<b>-2.8</b>

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

<sup>b</sup>Includes services and finance, insurance, and real estate.

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

Table 12

## REGIONAL EMPLOYMENT BY COUNTY: 1990, 2000, AND 2004

County	Number of Jobs			1990-2000 Change		2000-2004 Change	
	1990	2000	2004 Estimate	Number	Percent	Number	Percent
Kenosha .....	52,200	68,700	71,600	16,500	31.6	2,900	4.2
Milwaukee .....	609,800	624,600	586,600	14,800	2.4	-38,000	-6.1
Ozaukee .....	35,300	50,800	49,500	15,500	43.9	-1,300	-2.6
Racine .....	89,600	94,400	92,300	4,800	5.4	-2,100	-2.2
Walworth .....	39,900	51,800	53,400	11,900	29.8	1,600	3.1
Washington .....	46,100	61,700	63,300	15,600	33.8	1,600	2.6
Waukesha .....	189,700	270,800	271,400	81,100	42.8	600	0.2
<b>Region</b>	<b>1,062,600</b>	<b>1,222,800</b>	<b>1,188,100</b>	<b>160,200</b>	<b>15.1</b>	<b>-34,700</b>	<b>-2.8</b>

Table 13

## ACTUAL AND PROJECTED NUMBER OF AVAILABLE JOBS BY COUNTY: 2004

County	Estimated 2004 Jobs	Projected 2004 Jobs		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	71,600	70,400	70,200	70,000
Milwaukee .....	586,600	587,800	586,600	585,200
Ozaukee .....	49,500	50,100	50,000	49,900
Racine .....	92,300	90,700	90,500	90,300
Walworth .....	53,400	52,800	52,700	52,600
Washington .....	63,300	62,600	62,500	62,400
Waukesha .....	271,400	268,500	267,900	267,300
<b>Region</b>	<b>1,188,100</b>	<b>1,182,900</b>	<b>1,180,400</b>	<b>1,177,700</b>

Figure 18

ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2035

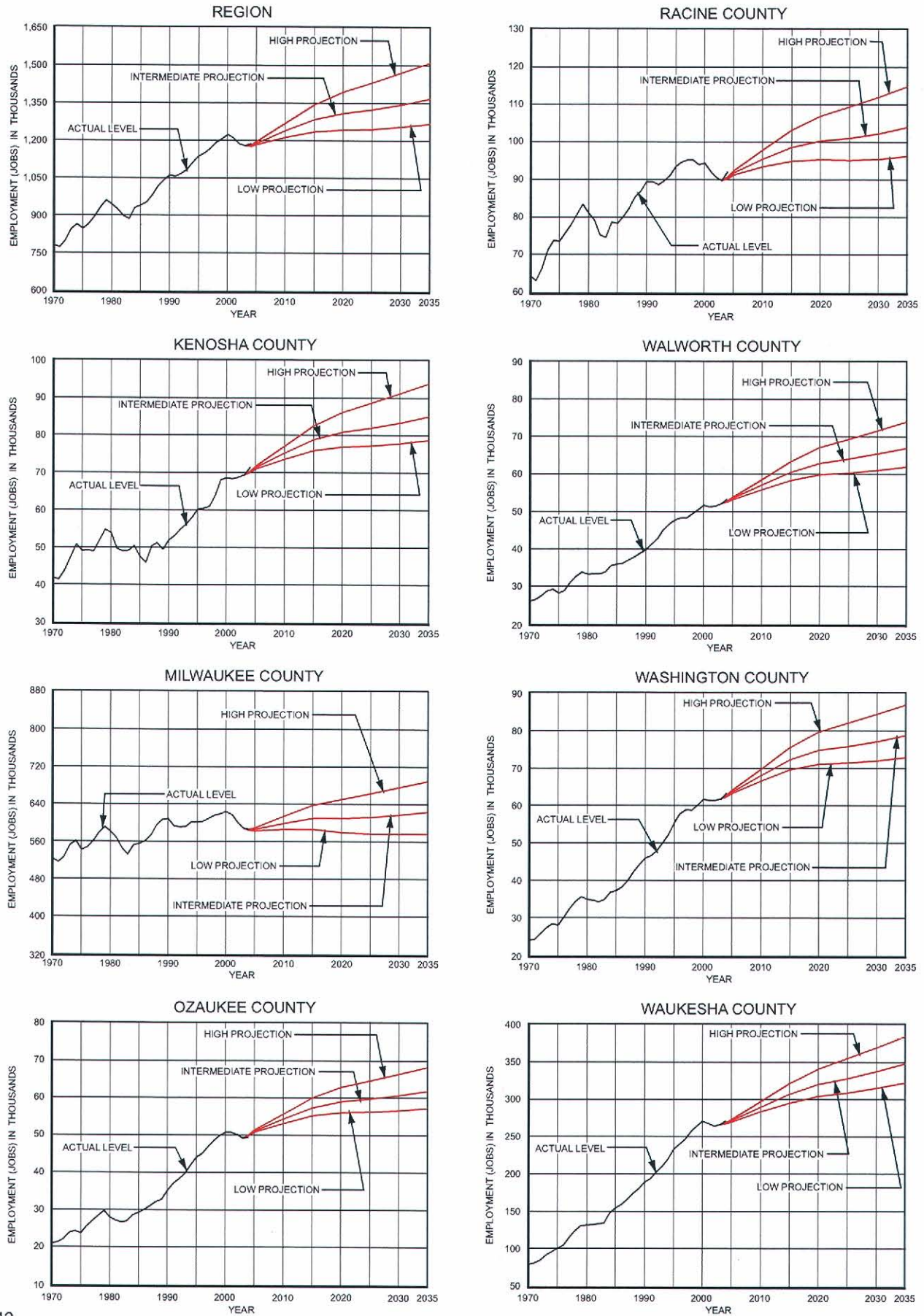


Table 14

## POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1990, 2000, AND 2004

County	Population			1990-2000 Change		2000-2004 Change	
	1990 Census	2000 Census	2004 Estimate	Number	Percent	Number	Percent
Kenosha .....	128,200	149,600	156,100	21,400	16.7	6,500	4.3
Milwaukee .....	959,300	940,200	939,300	-19,100	-2.0	-900	-0.1
Ozaukee .....	72,800	82,300	85,200	9,500	13.0	2,900	3.5
Racine .....	175,100	188,800	191,800	13,700	7.8	3,000	1.6
Walworth .....	75,000	92,000	97,100	17,000	22.7	5,100	5.5
Washington .....	95,300	117,500	123,600	22,200	23.3	6,100	5.2
Waukesha .....	304,700	360,800	373,300	56,100	18.4	12,500	3.5
Region	1,810,400	1,931,200	1,966,400	120,800	6.7	35,200	1.8

population change, including automobile registrations, the number of persons filing income tax returns, and the number of dependents claimed on income tax returns. Department estimates of the resident population for the Region in 2004, along with the estimated change from the year 2000 Census population, are presented in Table 14.

As indicated in Table 14, the 2004 resident population of the Region was estimated by the Department of Administration to be about 1,966,400 persons, an increase of about 35,200 persons, or about 1.8 percent, over 2000. Every county in the Region, except Milwaukee County, was estimated to have experienced population increases between 2000 and 2004, ranging from a low of about 2,900 persons, or about 3.5 percent, in Ozaukee County, to a high of about 12,500 persons, or about 3.5 percent, in Waukesha County. Milwaukee County population was estimated to have declined by about 900 persons, or 0.1 percent.

Between the Census date of April 1, 2000, and January 1, 2004, the total population increase of about 35,200 persons is estimated to have resulted from a natural increase of about 39,600 persons and a net out-migration of about 4,400 persons. During this time, Milwaukee County and Racine County experienced net out-migration, while the remaining counties in the Region experienced net in-migration, ranging from about 1,800 persons in Ozaukee County to 6,600 persons in Waukesha County.

#### *Comparison of Actual and Projected Population Levels*

As previously noted, in 2004, the Commission prepared a new set of population projections for the Region to the year 2035. The intermediate projection is considered the most likely to be achieved for the Region overall. The high and low projections are intended to provide an indication of the range of population levels which could conceivably be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region. The high, intermediate, and low population projections are consistent with the corresponding employment projections for the year 2035.

Under the high-growth scenario, the population level of the Region was anticipated to reach about 2,009,700 persons in 2004. The actual 2004 regional population level of 1,966,400 persons was about 2 percent below this anticipated level. Under the low-growth scenario, the population level of the Region was anticipated to be about 1,942,600 persons in 2004. The actual 2004 population level was about 1 percent above this level. Under the intermediate-growth scenario, the population level of the Region was anticipated to reach about 1,971,800 persons in 2004. The actual 2004 population level was less than 1 percent below this level. The 2004 population levels projected for the Region and each of its seven counties, along with the 2004 estimated actual population levels are set forth in Table 15 and Figure 19.

Table 15

## ACTUAL AND PROJECTED POPULATION LEVELS BY COUNTY: 2004

County	2004 Population	Projected 2004 Population		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	156,100	159,800	156,000	153,100
Milwaukee .....	939,300	958,000	944,800	932,500
Ozaukee .....	85,200	87,500	85,000	83,700
Racine .....	191,800	195,400	191,300	189,600
Walworth .....	97,100	98,700	97,100	94,800
Washington .....	123,600	126,500	123,500	120,900
Waukesha .....	373,300	383,800	374,100	368,000
Region	1,966,400	2,009,700	1,971,800	1,942,600

Table 16

HOUSEHOLDS IN THE SOUTHEASTERN WISCONSIN  
REGION BY COUNTY: 1990, 2000, AND 2004

County	Households			1990-2000 Change		2000-2004 Change	
	1990 Census	2000 Census	2004 Estimate	Number	Percent	Number	Percent
Kenosha .....	47,000	56,100	60,100	9,100	19.4	4,000	7.1
Milwaukee .....	373,100	377,700	382,200	4,600	1.2	4,500	1.2
Ozaukee .....	25,700	30,900	33,200	5,200	20.2	2,300	7.4
Racine .....	63,700	70,800	73,900	7,100	11.1	3,100	4.4
Walworth .....	27,600	34,500	37,500	6,900	25.0	3,000	8.7
Washington .....	33,000	43,800	47,800	10,800	32.7	4,000	9.1
Waukesha .....	106,000	135,200	144,500	29,200	27.5	9,300	6.9
Region	676,100	749,000	779,200	72,900	10.8	30,200	4.0

## Monitoring Household Levels

*Current Household Levels*

Each year, the Wisconsin Department of Administration prepares estimates of the number of total housing units and occupied housing units—or households—in Wisconsin counties. Estimates of housing units are based upon housing unit counts from the year 2000 Census, updated by the Department's annual housing survey of all cities, villages, and towns in Wisconsin through which it obtains data on changes in the housing stock. Estimates of households are based upon the updated estimates of housing units and year 2000 Census housing vacancy rates.

As indicated in Table 16, the number of households in the Region is estimated by the Department of Admin-

istration to have increased from about 749,000 in 2000 to about 779,200 in 2004, an increase of about 30,200 households, or 4 percent. Each county in the Region is estimated to have experienced an increase in household levels from 2000 to 2004, ranging from about 2,300 households, or 7.4 percent, in Ozaukee County, to about 9,300 households, or 6.9 percent, in Waukesha County.

*Comparison of Actual and  
Projected Household Levels*

In conjunction with the afore-referenced population projections, the Commission prepared a new set of household projections for the Region to the year 2035. Under the high-growth scenario, it was anticipated that there would be 789,100 households in the Region in 2004. The 2004 regional household level of 779,200

Figure 19

ACTUAL AND PROJECTED REGIONAL AND COUNTY POPULATION LEVELS: 1950-2035

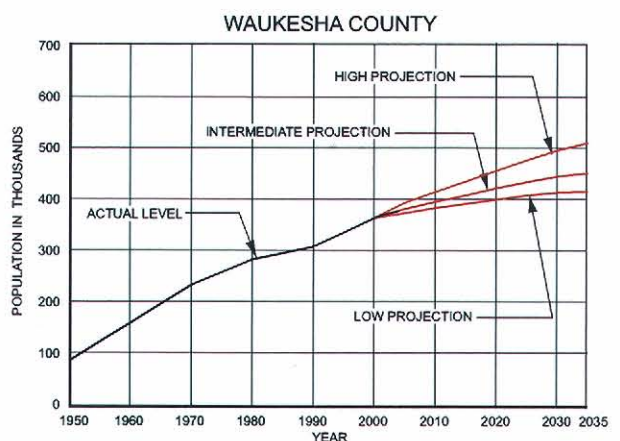
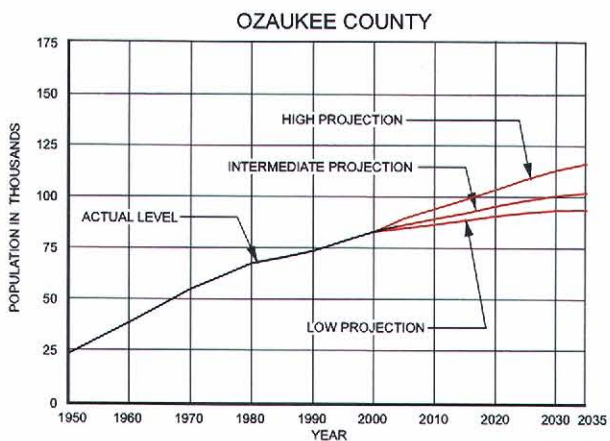
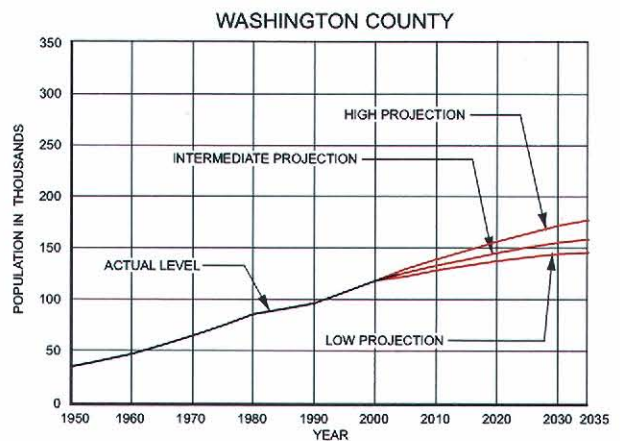
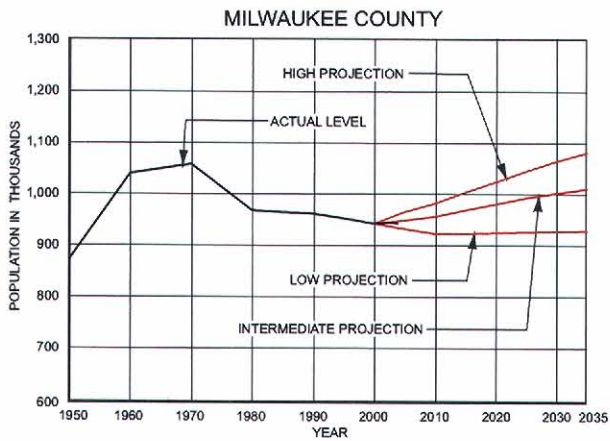
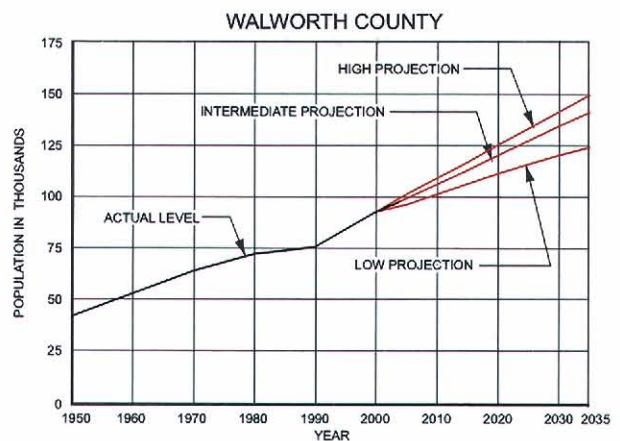
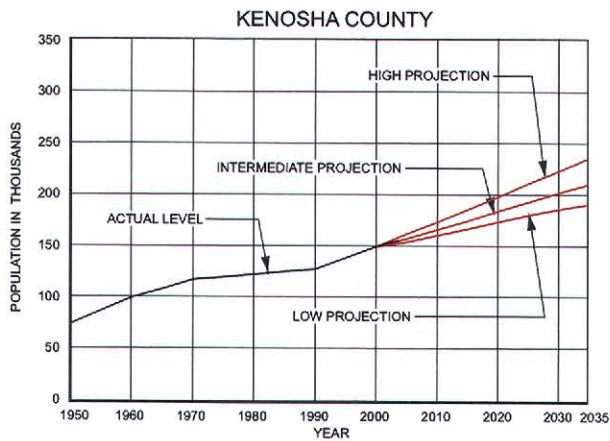
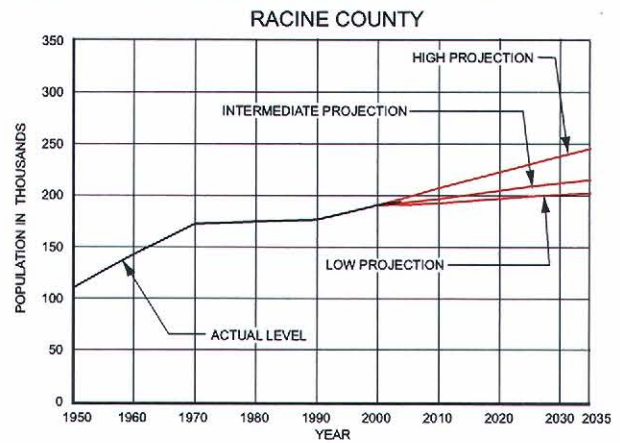
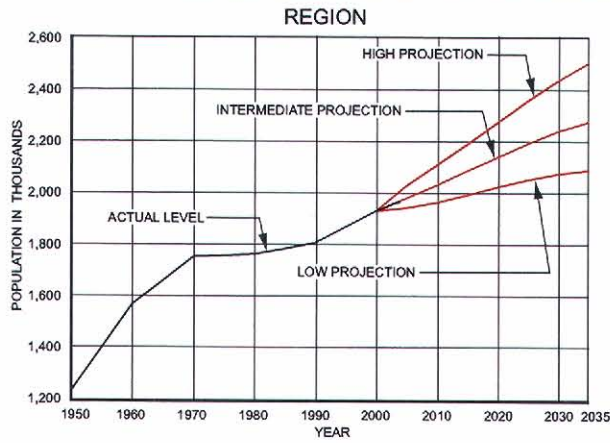




Table 17

**ACTUAL AND PROJECTED HOUSEHOLD LEVELS BY COUNTY: 2004**

County	2004 Households	Projected 2004 Households		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	60,100	60,500	59,100	58,000
Milwaukee.....	382,200	389,400	384,000	379,000
Ozaukee.....	33,200	33,200	32,300	31,800
Racine.....	73,900	74,200	72,600	72,000
Walworth .....	37,500	37,600	37,000	36,100
Washington .....	47,800	48,000	46,800	45,800
Waukesha .....	144,500	146,200	142,500	140,200
Region	779,200	789,100	774,300	762,900

is about 1 percent below this anticipated level. Under the low-growth scenario, it was anticipated that there would be 762,900 households in the Region in 2004. The 2004 regional household level is about 2 percent above this level. Under the intermediate-growth scenario, it was anticipated that there would be 774,300 households in the Region in 2004. The 2004 regional household level is less than 1 percent above this level. The projected 2004 household levels for the Region and each of its seven counties, along with the 2004 estimated actual household levels, are set forth in Table 17 and Figure 20.

### Census Coordination

During 2004, the Commission continued to participate 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 Census statistical tabulating and reporting unit boundaries for the Region is maintained by the Commission. Included in the Census material held by the Commission are all published reports, maps, DVDs, and CD-ROMs containing data for the Southeastern Wisconsin Region. Assistance is provided to local units of government, the public, and local businesses in accessing these materials

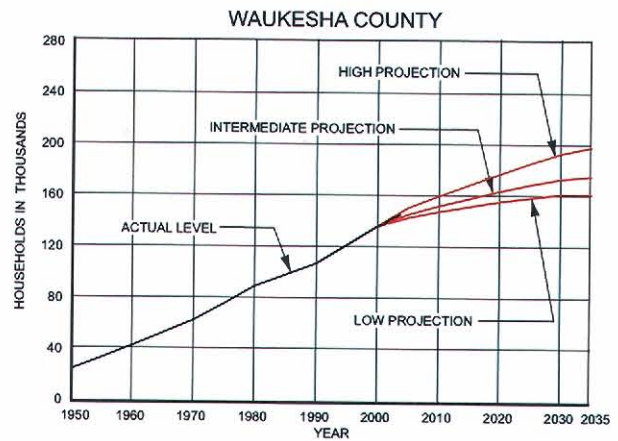
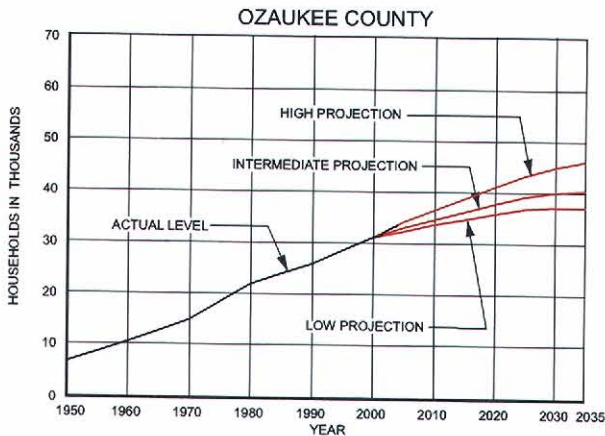
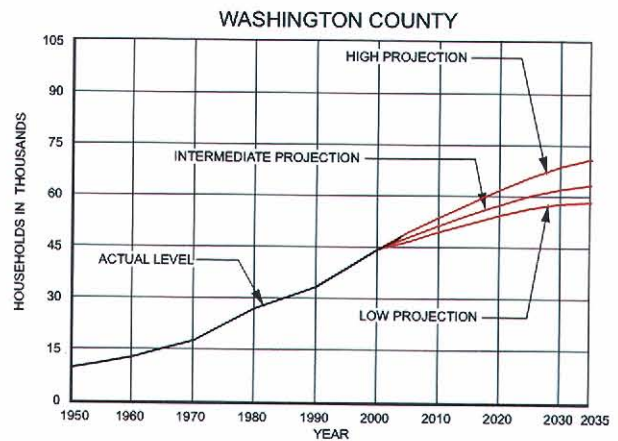
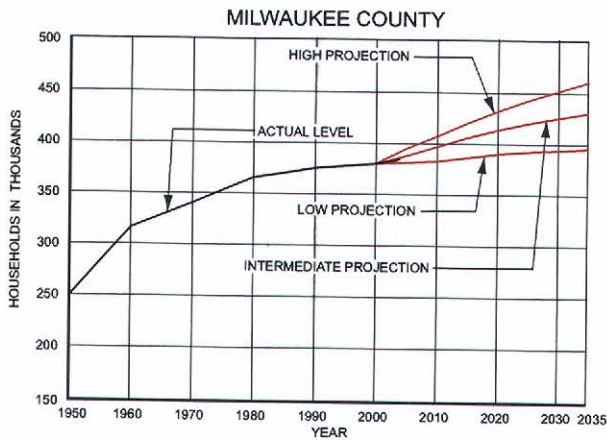
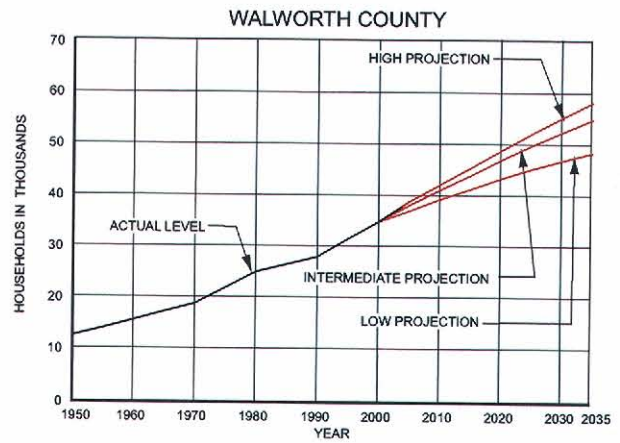
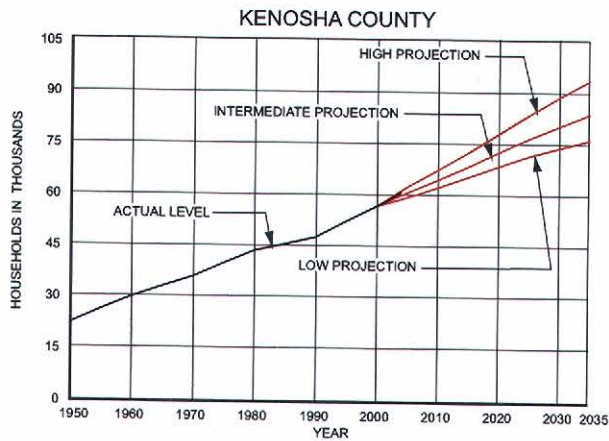
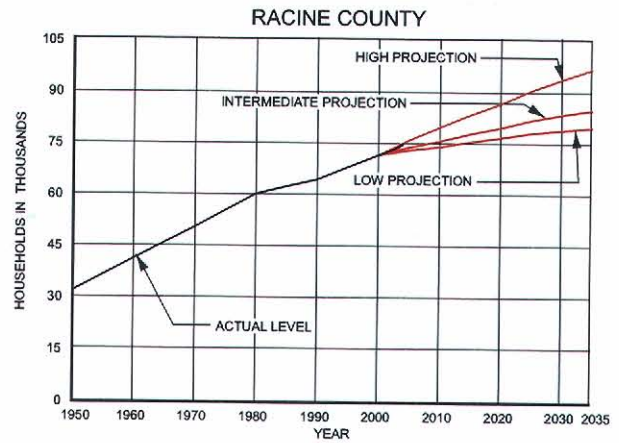
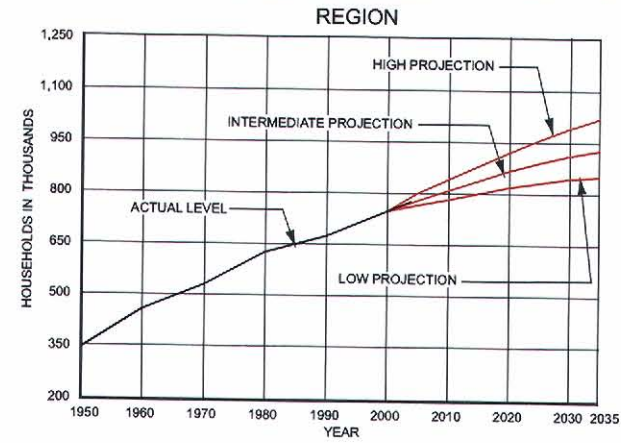
### PARK AND OPEN SPACE PLANNING

#### 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 recreation 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

Figure 20

# ACTUAL AND PROJECTED REGIONAL AND COUNTY HOUSEHOLD LEVELS: 1950-2035



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-level 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.

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 4.<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 2004, the Commission staff completed an update and extension of the park and open space plan for Washington County and continued work on an update and extension of the park and open space plan for Milwaukee County. The updated Washington County park and open space plan is documented in SEWRPC Community Assistance Planning Report No. 136 (3rd Edition), *A Park and Open Space Plan for Washington County*. A summary of this plan follows.

#### *Washington County Park and Open Space Plan*

---

<sup>1</sup>Map 4 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 (2nd Edition), *A Park and Open Space Plan for Ozaukee County, June 2001*; SEWRPC Community Assistance Planning Report No. 134 (2nd Edition), *A Park and Open Space Plan for Racine County, July 2001*; SEWRPC Community Assistance Planning Report No. 135 (2nd Edition), *A Park and Open Space Plan for Walworth County, September 2000*; SEWRPC Community Assistance Planning Report No. 136 (3rd Edition), *A Park and Open Space Plan for Washington County, March 2004*; 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 2004, 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 2004.

The new Washington County park and open space plan envisions a total of 12 major parks in the County—including one State park, 10 County parks, and one municipal park—through the year 2020 (see Map 5). Of the 12 major parks, nine are existing parks and three would be new major parks to be developed by Washington County. Specifically, the plan recommends expansion of five of the existing major County parks to include adjacent lands with important natural resource values; additional recreational facilities to be developed at all seven existing major County parks; and the acquisition and development of three new major County parks including a park in the northwestern portion of the County, a park in the northern portion of the Village of Germantown, and a park in the southwestern portion of the County. In addition, the County would provide two new smaller parks—one to the west of the Village of Jackson on Tilly Lake and one on Big Cedar Lake—and a dog park to serve residents in the central portion of the County.

The plan envisions a system of 52 miles of areawide recreation trails in the County. A total of 37 miles of this areawide trail system would be provided by the Wisconsin Department of Natural Resources and the Ice Age Park and Trail Foundation as part of the Ice Age trail, including 12 miles of proposed new trails and 25 miles of existing trails. A total of 12 miles would be provided by Washington County and three miles (including 2 existing miles) by the City of West Bend as part of the Milwaukee River Corridor. In addition, a 12-



Map 4

**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, 2004**

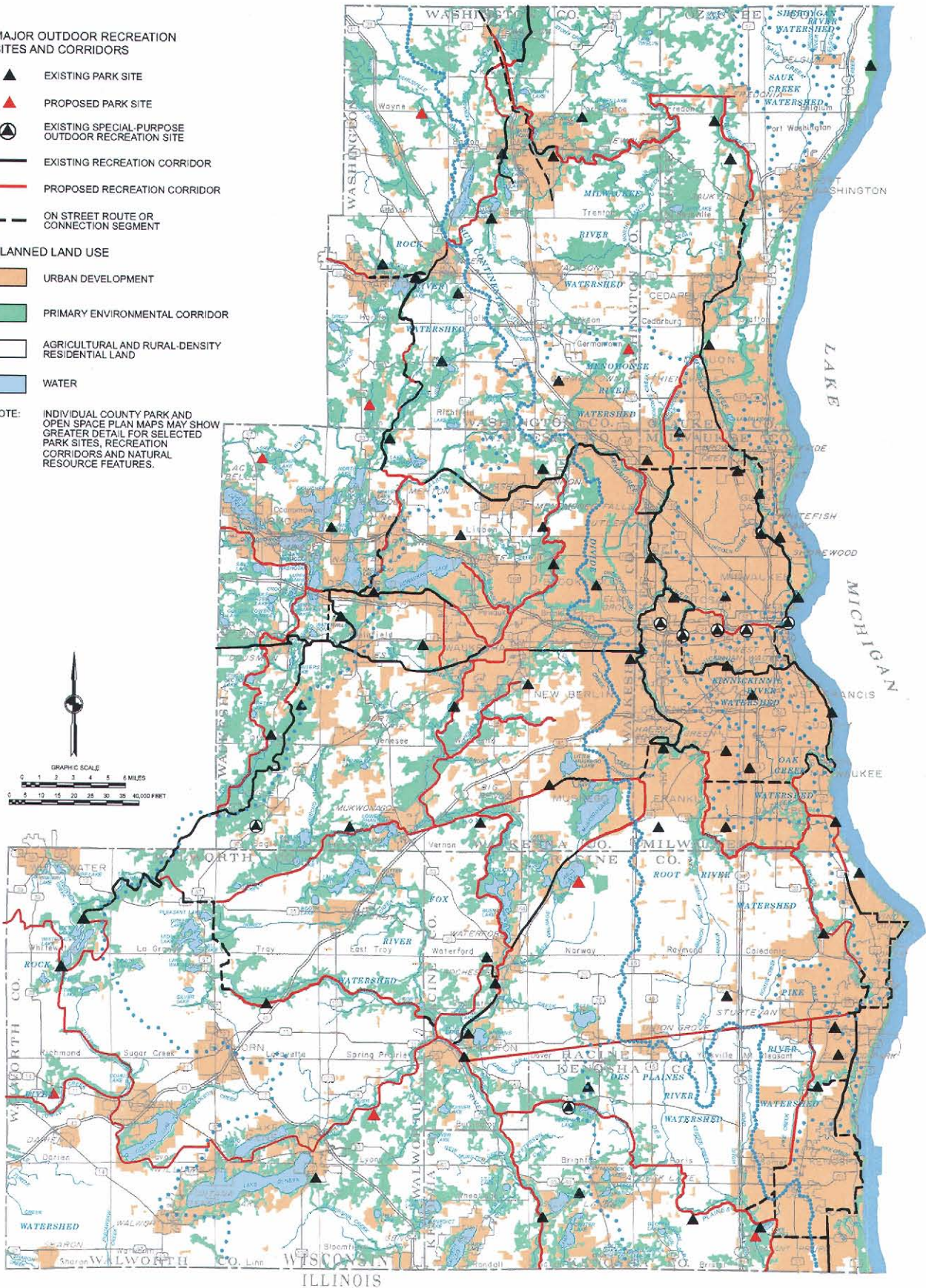
**MAJOR OUTDOOR RECREATION SITES AND CORRIDORS**

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

**PLANNED LAND USE**

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

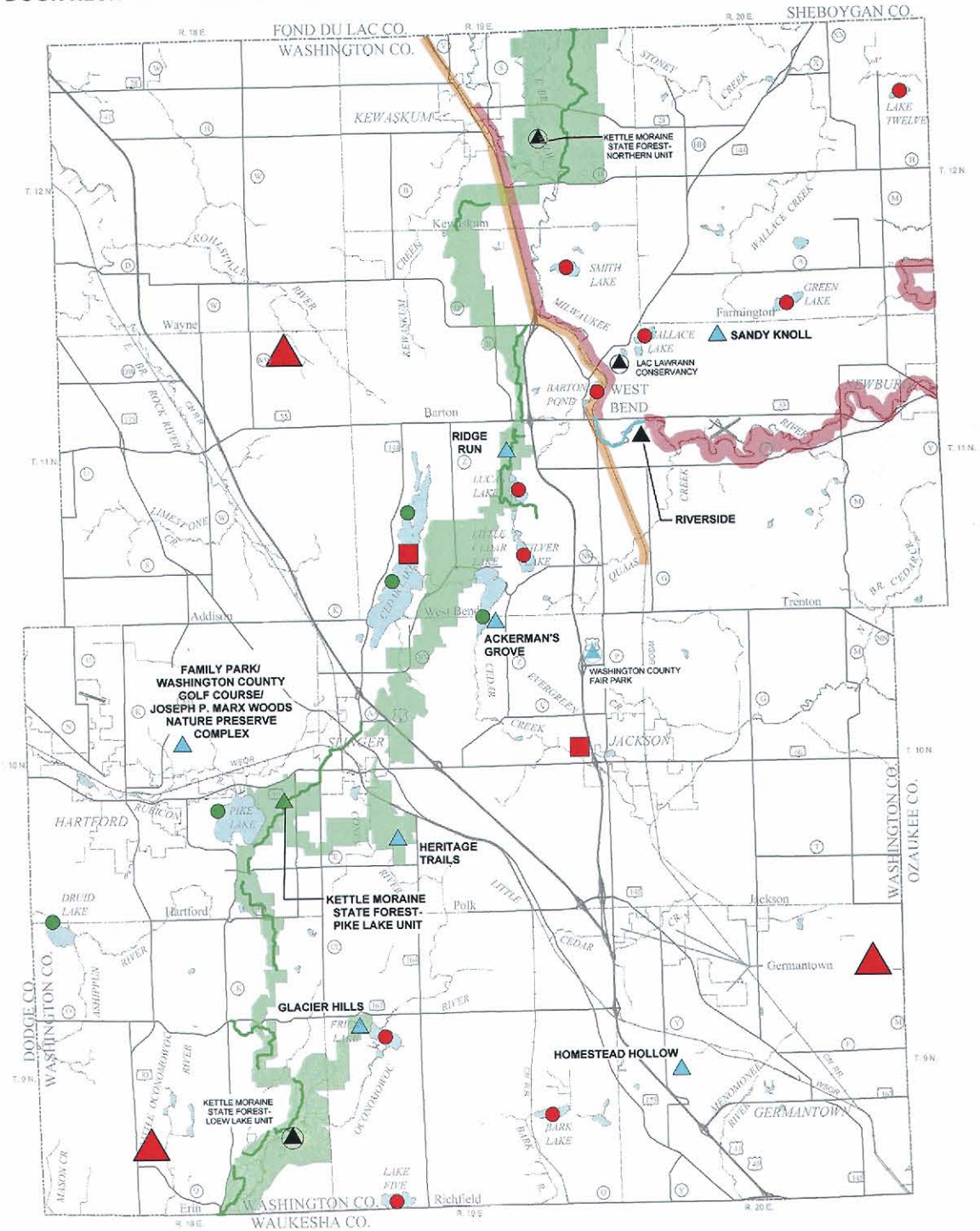
NOTE: INDIVIDUAL COUNTY PARK AND OPEN SPACE PLAN MAPS MAY SHOW GREATER DETAIL FOR SELECTED PARK SITES, RECREATION CORRIDORS AND NATURAL RESOURCE FEATURES.





Map 5

OUTDOOR RECREATION ELEMENT OF THE WASHINGTON COUNTY PARK AND OPEN SPACE PLAN: 2020



- MAJOR PARKS**
- ▲ STATE
  - ▲ COUNTY
  - ▲ LOCAL
  - ▲ PROPOSED COUNTY
- OTHER PARKS AND OUTDOOR RECREATION SITES**
- PROPOSED OTHER COUNTY

- SPECIAL OUTDOOR RECREATION SITE**
- WASHINGTON COUNTY FAIR PARK
- RECREATION CORRIDORS**
- EXISTING MILWAUKEE RIVER TRAIL
  - EXISTING ICE AGE TRAIL
  - PROPOSED MILWAUKEE RIVER TRAIL
  - ICE AGE TRAIL CORRIDOR

- OTHER TRAILS**
- PROPOSED CANADIAN NATIONAL RAILWAY TRAIL
- BOAT ACCESS FACILITIES**
- EXISTING FACILITY MEETING WISCONSIN DEPARTMENT OF NATURAL RESOURCES STANDARDS
  - LAKE NEEDING NEW OR EXPANDED FACILITY
- NOTE:** OTHER EXISTING COUNTY PARKS NOT SPECIFICALLY RECOMMENDED FOR IMPROVEMENT OR EXPANSION UNDER THE PLAN ARE NOT SHOWN.



mile trail along the former Canadian National Railway would be developed by Washington County. Approximately eight miles of this trail coincides with the proposed Milwaukee River Corridor trail.

The new County park and open space plan reaffirms the recommendations of the previous plan regarding the preservation of environmental corridors and isolated natural resource areas. In addition, the plan incorporates recommendations for the preservation of natural areas and critical species habitat sites set forth in the regional natural areas and critical species habitat protection and management plan. The Washington County plan also recommends the preservation of lands within the project boundaries of the Wisconsin Department of Natural Resources located outside environmental corridors and isolated natural resource areas. Together, these open spaces, excluding surface water, encompass about 120.8 square miles. In 2002, about 27.7 square miles, or about 23 percent of this area, were under public or quasi-public ownership or in compatible outdoor recreational use. The plan recommends that an additional 25.4 square miles, or about 21 percent of the proposed open space lands, be acquired in the public interest. The plan envisions that the remaining 67.7 square miles, or 56 percent of the proposed open space lands, would be retained in private ownership and protected through conservancy zoning.

The primary differences between the new Washington County park and open space plan and the previous plan include the following: 1) the elimination of a recommendation made in the previous plan for a major park near the Village of Newburg because it was determined that this area is served by Hawthorne Hills County Park in Ozaukee County; 2) a change in the recommended location of a proposed major park—from a site near the Village of Jackson to a site in the northern portion of the Village of Germantown; 3) the addition of a recommendation for a nature center at Glacier Hills Park; 4) the addition of recommendations for three new County parks—the dog park in the central portion of the County, the park west of the Village of Jackson on Tilly Lake, and the park on Big Cedar Lake; and 5) the addition of a recommendation for the development of a new recreation trail along the former Canadian National railway in the north central part of the County.

### *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 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 2004, 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.

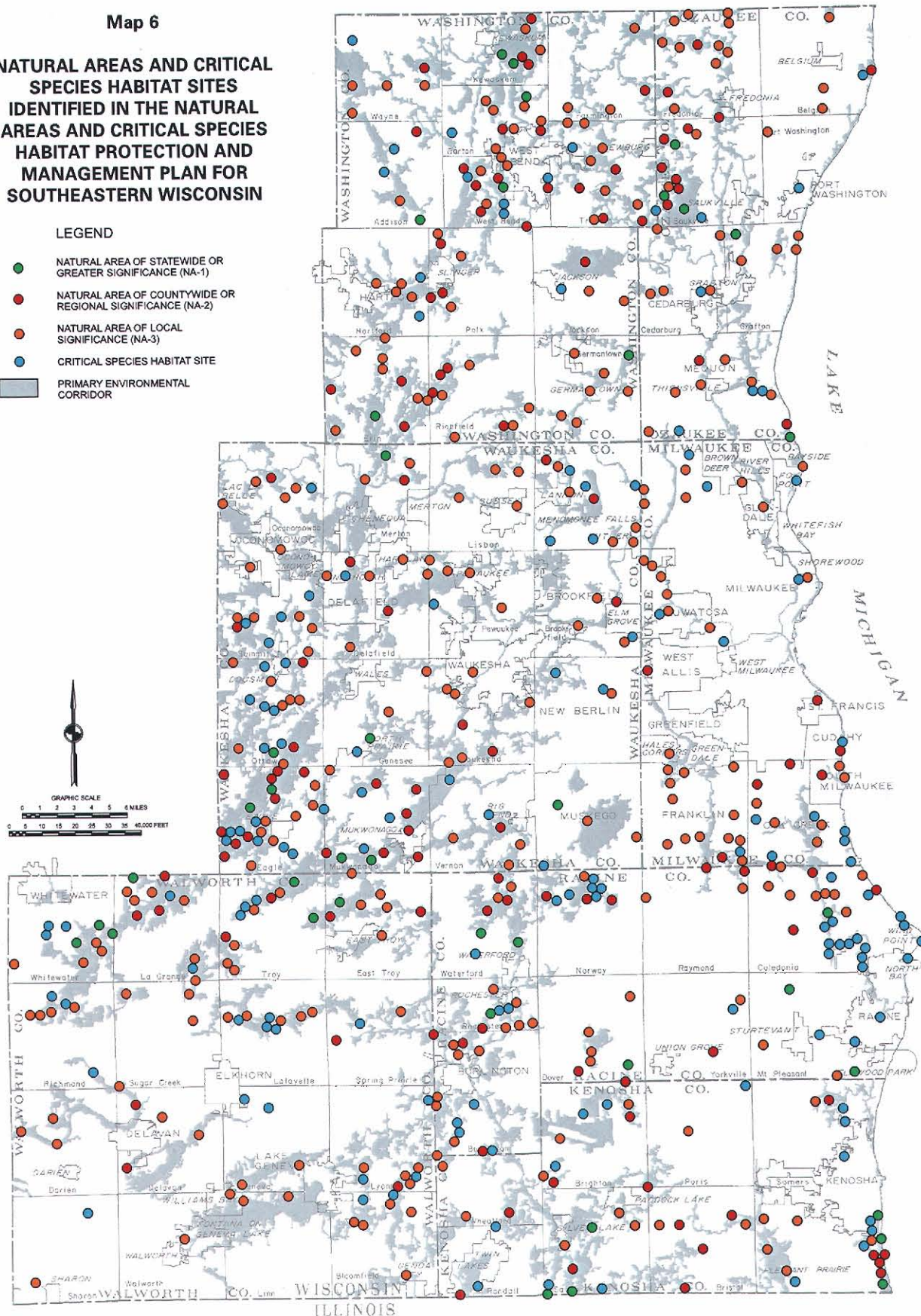


Map 6

**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



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 2004, the natural areas and critical species habitat protection and management plan had been adopted by all seven counties in the Region, 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, the Wisconsin Natural Resources Board has created a committee to investigate the implementation of those portions of the natural areas plan which pertain to the Wisconsin Department of Natural Resources. During 2004, the Commission staff assisted the Department's committee with its investigation. In addition, during 2004 there were several additions made to natural areas. The Wisconsin Department of Natural Resources acquired three lots totaling 15 acres in the Chiwaukee Prairie/Carol Beach area of Kenosha County. The Waukesha County Land Conservancy acquired 75 acres of the Menomonee Falls Tamarack Swamp Natural Area, and the Ozaukee/Washington Land Trust acquired 20 acres of the Blue Hills Natural Area in Washington County.

## **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 2004, the Division responded to about 100 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 2004 in performing the data provision and technical assistance function:

- Provision of existing and planned population and household levels, along with existing residential

and commercial land area, to the City of Brookfield for use in a study on potential shared fire and emergency medical service delivery with the City of Pewaukee.

- Provision of year 2000 population and housing data by U.S. Public Land Survey quarter section to a professor at the University of Wisconsin-Milwaukee, for use in a study on groundwater issues.
- Provision of Census 2000 data, including population by age group, for selected minor civil divisions in Kenosha County, to the National Council on Aging for use in planning for the development of senior centers.
- Provision of Census 2000 population counts within a radius of an industrial firm in Milwaukee County for inclusion in the firm's risk management plan.

### **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 2004, the Division responded to 227 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 2004 include the following:

- Provision of 2000 land use inventory and environmental corridor data for the Milwaukee River watershed to the Wisconsin Department of Natural Resources for water quality management planning.
- Provision of 2000 environmental corridor inventory data to the City of Wauwatosa for ongoing land use planning.
- Provision of information on existing and proposed trails in the Region to the Rails-to-Trails Conservancy.
- Provision of historic and existing land use data to the Wisconsin Geological and Natural History Survey for use in a groundwater study for Waukesha County.

## **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 2004, the Commission fulfilled a total of 209 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 2004, 72 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 2004, such requests were fulfilled for a total of 71 sites located throughout the Region (see Map 7). Once delineated in the field by the Commission 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 2004, 35 such project-related requests were fulfilled in response to requests by the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, the Waukesha County Department of Transportation, the Washington County Highway Committee, the Kenosha County Division of Highways, the City of Lake Geneva, the City of Milwaukee, the City of New Berlin, the City of West Allis, the Town of Merton, the Village of Hartland, the Village of Mukwonago, the Village of Rochester, and the Village of Waterford (see Map 7).
- Requests for the field identification and evaluation of environmentally sensitive areas, including wetlands, associated with municipal and private utility and community facility development projects. During 2004, 13 such requests were fulfilled in Kenosha, Milwaukee, Ozaukee, 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 2004, eight such requests were fulfilled in Kenosha, Milwaukee, Ozaukee, Washington, 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 2004, 10 such requests by State agencies, as well as county and local governments, were fulfilled in Milwaukee, Ozaukee, Walworth, Washington, and Waukesha Counties (see Map 7).

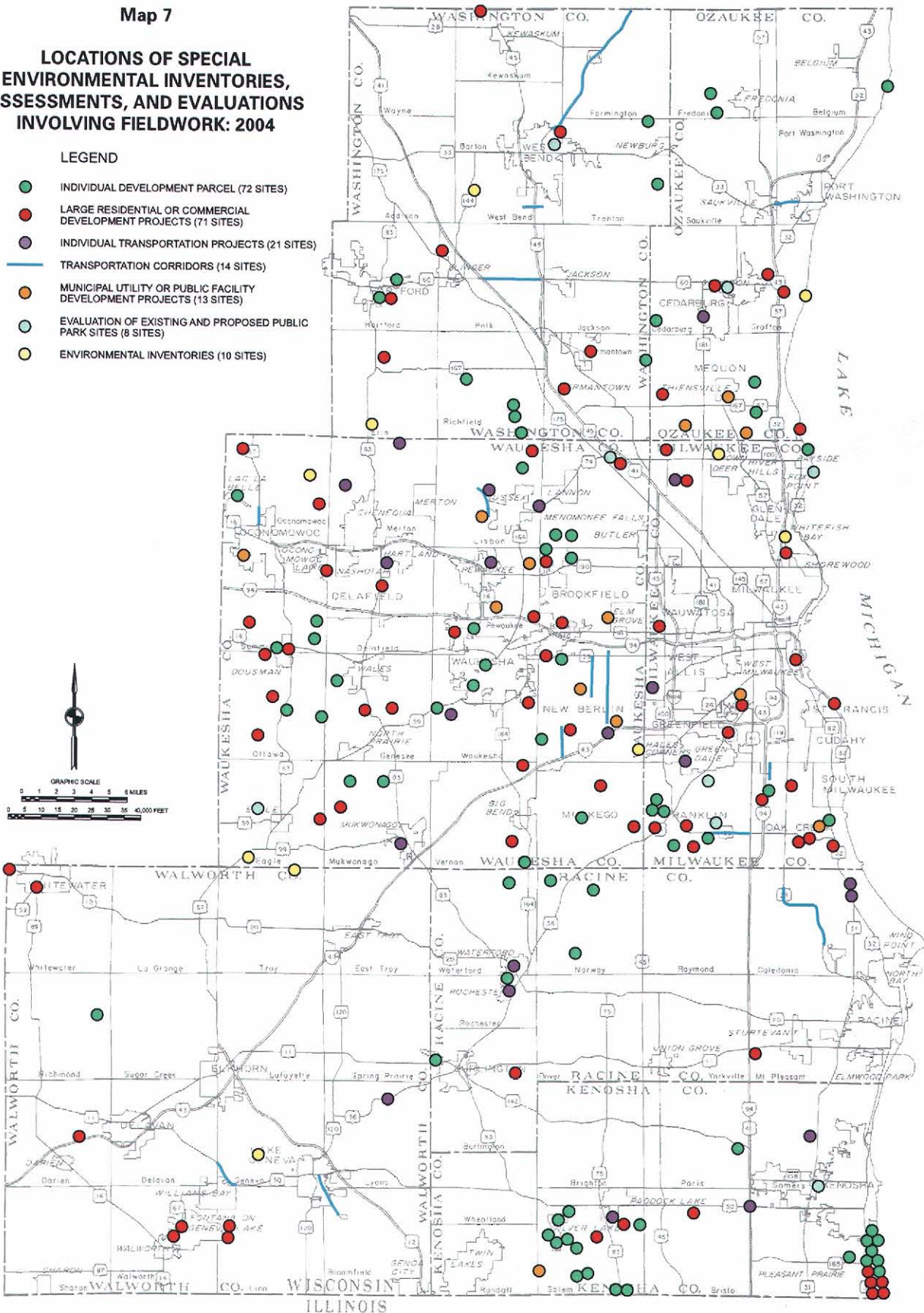


Map 7

**LOCATIONS OF SPECIAL  
ENVIRONMENTAL INVENTORIES,  
ASSESSMENTS, AND EVALUATIONS  
INVOLVING FIELDWORK: 2004**

**LEGEND**

- INDIVIDUAL DEVELOPMENT PARCEL (72 SITES)
- LARGE RESIDENTIAL OR COMMERCIAL DEVELOPMENT PROJECTS (71 SITES)
- INDIVIDUAL TRANSPORTATION PROJECTS (21 SITES)
- TRANSPORTATION CORRIDORS (14 SITES)
- MUNICIPAL UTILITY OR PUBLIC FACILITY DEVELOPMENT PROJECTS (13 SITES)
- EVALUATION OF EXISTING AND PROPOSED PUBLIC PARK SITES (8 SITES)
- ENVIRONMENTAL INVENTORIES (10 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 2004 conducted a number of activities in four major areas: transportation planning support and assistance, which includes data collection and development, model refinement, and technical assistance; transportation systems management and programming; long-range planning; and detailed corridor study projects.

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 2004, 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.

## TRANSPORTATION PLANNING SUPPORT AND ASSISTANCE

### Data Collection and Development

During 2004, 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 2004 totaled about 1,334,760. This represents an increase of 5,820, or about 0.4 percent, over the 2003 level of 1,328,940 (see Table 18). Increases in personal-use vehicle availability in 2004 occurred in all counties in the Region except Milwaukee and Racine Counties. Over the past 40 years,

---

<sup>1</sup>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.

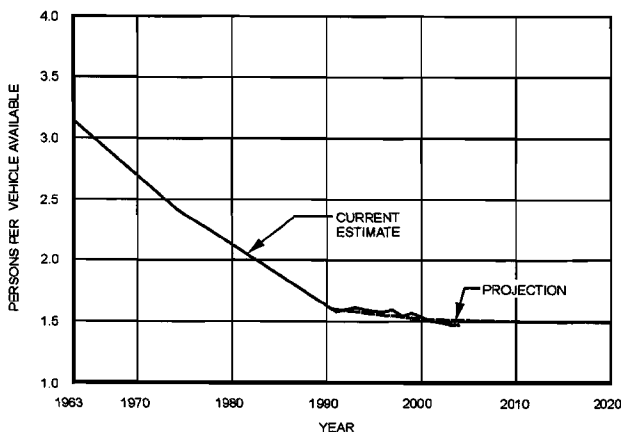
Table 18

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

County	1963	1972	2003	2004
Kenosha .....	37,240	51,100	110,440	112,780
Milwaukee .....	316,350	392,000	557,130	554,180
Ozaukee .....	16,780	28,030	64,240	65,180
Racine .....	52,040	73,350	138,490	138,320
Walworth .....	22,220	33,450	-77,830	80,440
Washington .....	18,340	30,390	93,450	95,420
Waukesha .....	69,390	114,450	287,270	288,440
Total	532,360	722,770	1,328,940	1,334,760

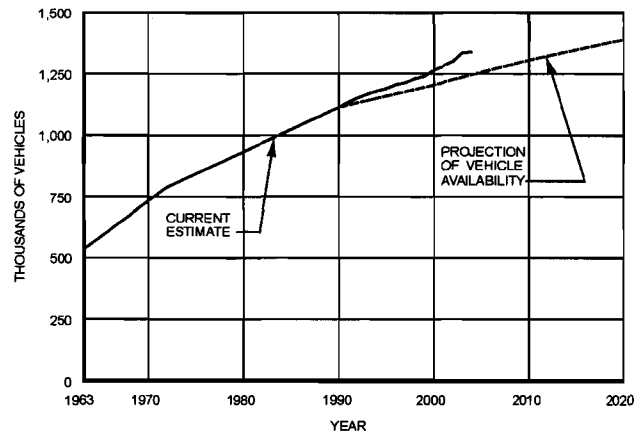
<sup>a</sup> The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, page 57.

Figure 22

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 ON PAGE 57.

Figure 23

PERSONAL-USE VEHICLE AVAILABILITY<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, PAGE 57.

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 2004 was 2.2 percent.

The number of persons per personal-use vehicle within the Region was estimated to be 1.47 in 2004, the same as the 1.47 estimated for 2003, as shown in Figure 22. The estimated number of personal-use vehicles available within the Region may be compared to the

forecast of personal-use vehicle availability developed under the long-range regional transportation system plan, as shown in Figure 23, which depicts the historical year-to-year estimate of personal-use vehicle availability and the forecast growth in personal-use vehicle availability. The 2004 forecast personal-use vehicle availability level was 1,240,900 under the adopted regional transportation system plan. Thus, the estimated 2004 regional personal-use vehicle availability level of 1,334,760 was 93,860 vehicles, or about 7.6 percent, higher than the personal-use vehicle availability level envisioned under the adopted regional transportation system plan.

Table 19

COMMERCIAL TRUCK AVAILABILITY IN THE REGION<sup>a</sup>

County	1963	1972	2003	2004
Kenosha.....	4,370	4,490	10,680	10,970
Milwaukee.....	25,910	26,710	46,780	46,980
Ozaukee.....	2,270	2,550	6,340	6,410
Racine.....	5,670	6,460	14,510	13,820
Walworth.....	4,190	4,840	10,160	10,580
Washington.....	3,210	4,080	10,100	10,390
Waukesha.....	7,780	10,280	34,210	32,600
Total	53,400	59,410	132,780	131,750

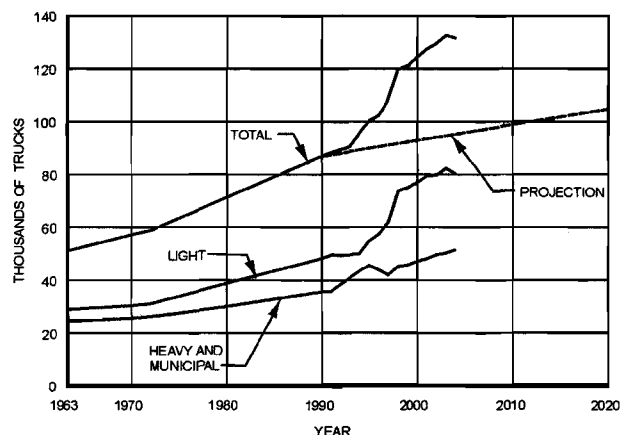
<sup>a</sup>The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, page 57.

The number of commercial and municipal trucks available in the Region during 2004 totaled about 131,750, a decline of about 1,030, or about 0.7 percent, below the 2003 level of 132,780 trucks (see Table 19 and Figure 24). In 2004, increases in commercial motor-truck availability occurred in all counties of the Region from 2003 levels with the exception of Racine and Waukesha Counties where the level declined. Light commercial trucks accounted for about 54 percent of all commercial trucks in 1963, 56 percent of all commercial trucks in 1972, 62 percent of all commercial trucks in 2003, and 61 percent of all commercial trucks in 2004. The number of commercial trucks available in 2004 totaled about 80,220, a decrease of 2,190, or about 2.7 percent, below the 2003 level of 82,410. The number of heavy trucks and municipal trucks totaled 51,530 in 2004, an increase of about 1,160 trucks, or about 2.3 percent from the 2003 level of 50,370. The average annual rate of growth in commercial motor-truck availability within the Region from 1963 through 2004 was 2.1 percent.

### Public Transit Ridership

Publicly owned mass transit service was provided in the Region in 2004 through 10 intracounty systems and four intercounty systems (see Table 20 and Figures 25 and 26). As shown in Table 20, the total reported ridership on public transit services in the Region decreased from about 52.3 million revenue passengers in 2003 to about 51.0 million revenue passengers in 2004, a decrease of about 3 percent. While this decrease is attributable primarily to the

Figure 24

COMMERCIAL-USE TRUCK AVAILABILITY<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, PAGE 57.

2004 decrease in ridership on the transit system operated by Milwaukee County, ridership decreases also occurred on 6 of the other 13 systems within the Region operating in 2003 and 2004.

### Intracounty Services

#### Milwaukee County

Ridership on the Milwaukee County Transit System, decreased during 2004 for the fifth consecutive year to about 46.6 million revenue passengers from about



**Table 20**  
**REPORTED PUBLIC TRANSIT REVENUE RIDERSHIP**

Transit Services	Revenue Passengers <sup>a</sup>					Percent Change 2003-2004
	1963	1972	1991	2003	2004	
<b>Intracounty Systems</b>						
Milwaukee County .....	88,546,000	52,141,000	53,025,000	47,952,300	46,585,300	-2.9
City of Racine .....	2,907,000	526,000	1,829,000	1,162,900	1,100,500	-5.4
City of Kenosha .....	1,876,000	503,000	1,128,000	1,512,600	1,502,100	-0.7
City of Waukesha .....	451,000	227,000	434,000	619,100	594,600	-4.0
City of Whitewater .....	--	--	38,000	19,600	19,800	1.0
City of Hartford .....	--	--	8,000	18,600	20,400	9.7
City of West Bend .....	--	--	--	131,600	130,200	-1.1
City of Port Washington .....	--	--	--	19,900	20,200	1.5
Ozaukee County .....	--	--	--	65,300	70,300	7.7
Washington County .....	--	--	--	63,000	70,000	11.1
<b>Subtotal</b>	<b>93,780,000</b>	<b>53,397,000</b>	<b>56,462,000</b>	<b>51,564,900</b>	<b>50,113,400</b>	<b>-2.8</b>
<b>Intercounty Systems</b>						
Waukesha-Milwaukee Counties .....	534,000 <sup>b</sup>	240,000	290,000	547,500	617,600	12.8
Kenosha-Racine-Milwaukee Counties .....	230,000 <sup>b</sup>	153,000	82,000	71,600	71,100	-0.7
Ozaukee-Milwaukee Counties .....	127,000	64,000	--	106,700	94,500	-11.4
Washington-Milwaukee Counties .....	--	--	--	46,600	66,300	42.3
<b>Subtotal</b>	<b>891,000</b>	<b>457,000</b>	<b>372,000</b>	<b>772,400</b>	<b>849,500</b>	<b>10.0</b>
<b>Region Total</b>	<b>94,671,000</b>	<b>53,854,000</b>	<b>56,834,000</b>	<b>52,337,300</b>	<b>50,962,900</b>	<b>-2.6</b>

<sup>a</sup>The ridership figures shown in this table reflect transit revenue passengers as reported to the Wisconsin Department of Transportation by each transit operator. Since 1978, the annual revenue ridership figures reported to the State by the urban bus systems have included transfer trips made by passengers using a transit pass instead of a transfer slip to transfer between bus routes. The bus ridership figures shown here are somewhat higher than the estimates of linked transit passenger trips shown in Figure 15 and reported in other published Commission documents and reports. Linked passenger trips approximate the number of one-way trips made on the transit system between specific origins and destinations with transit passengers being counted only once for each origin and destination. Transfers between bus routes are not counted as they are a continuation of a single trip. By way of comparison with the transit revenue passengers shown in this table, the Commission estimated the total annual linked transit passenger trips in the Region at about 41,626,900 in 2004, about 42,990,500 in 2003, and about 48,350,000 in 1991.

<sup>b</sup>Estimated.

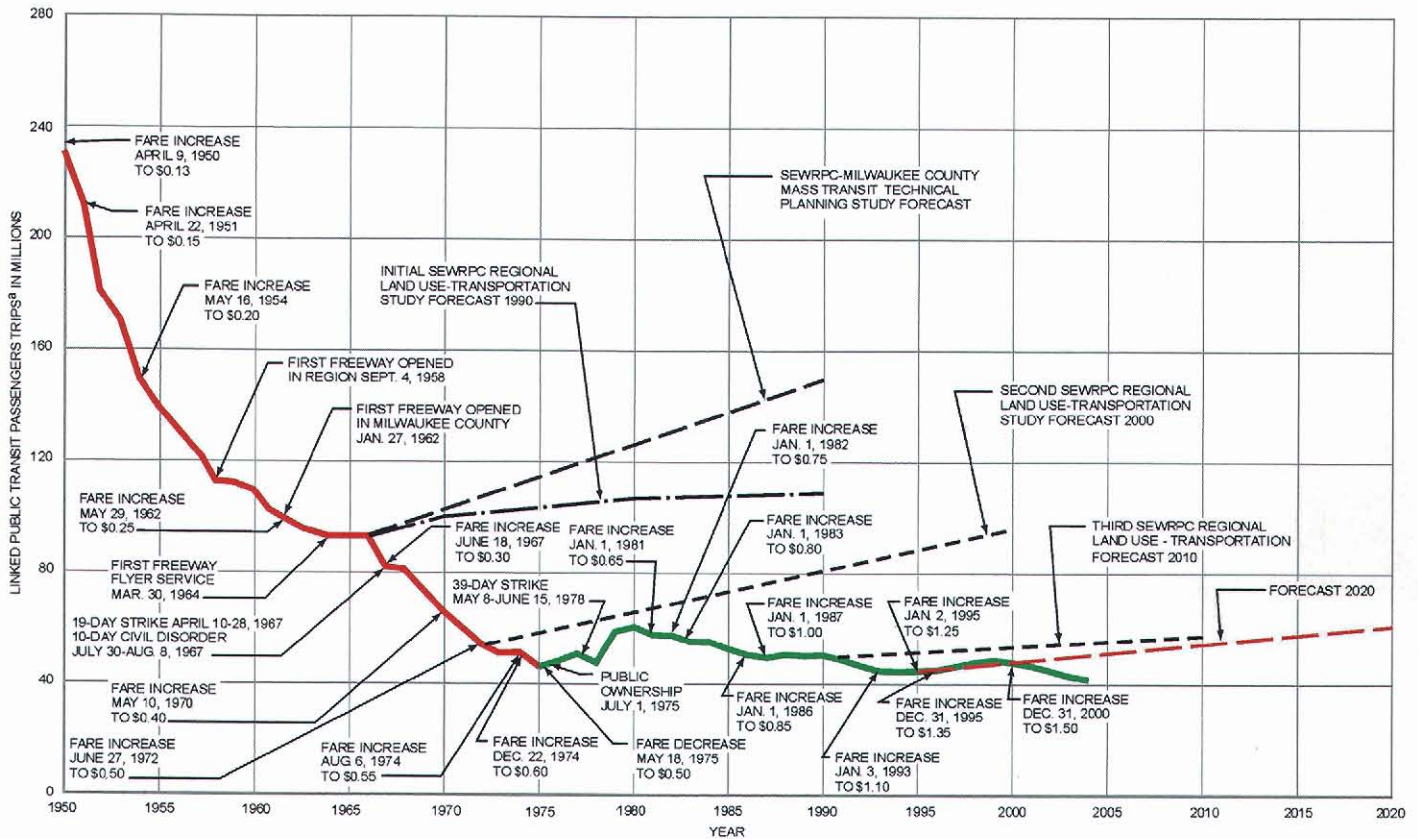
48.0 million revenue passengers in 2003, or by about 3 percent (see Figure 27). This decrease in ridership may be attributed to the combined effects of a reduction in service and an increase in passenger fares implemented to keep transit system expenditures within the constraints of the Milwaukee County budget. The number of bus-miles operated by the Milwaukee County Transit System decreased by about 2 percent during 2004, from about 17.4 million bus-miles in 2003 to about 17.1 million bus-miles in 2004. The service reductions in 2004 followed similar reductions implemented in 2001, 2002, and 2003. During 2004, the basic cash fare for the Milwaukee County Transit System was increased from the 2003 fare of \$1.50 per one-way trip to \$1.75 per one-way trip, and fares for freeway flyer bus service were increased from \$1.80

per one-way trip in 2003 to \$2.05 per one-way trip. The price of an adult weekly bus pass also was raised from \$12.00 in 2003 to \$13.00 in 2004.

During 2004, freeway flyer bus service was operated by Milwaukee County from 12 outlying parking terminals, the same number as in 2003, to either the Milwaukee central business district or the University of Wisconsin-Milwaukee (UWM). Ridership on the freeway flyer bus service totaled about 761,800 revenue passengers in 2004, an increase of about 4 percent over the 735,300 revenue passengers carried in 2003 (see Figure 28). This increase may be attributed largely to higher ridership during 2004 on the freeway flyer routes providing service to students attending the University of Wisconsin-Milwaukee.

Figure 25

## HISTORICAL TREND IN TRAVEL BY PUBLIC TRANSIT IN THE REGION



\*LINKED TRANSIT PASSENGER TRIPS APPROXIMATE THE NUMBER OF ONE-WAY TRIPS MADE ON THE TRANSIT SYSTEM BETWEEN SPECIFIC ORIGINS AND DESTINATIONS. PASSENGERS ARE COUNTED ONLY ONCE FOR EACH ORIGIN AND DESTINATION, AND TRANSFERS BETWEEN ROUTES ARE NOT COUNTED AS THEY ARE A CONTINUATION OF A SINGLE TRIP. THE ANNUAL LINKED TRANSIT PASSENGER FIGURES REPRESENTED IN THIS GRAPH DIFFER SOMEWHAT FROM THE ANNUAL REVENUE RIDERSHIP FIGURES REPORTED TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION BY THE PUBLIC TRANSIT OPERATORS IN THE REGION AS SHOWN IN TABLE 13. THE RIDERSHIP SHOWN IN TABLE 13 FOR THE URBAN BUS SYSTEMS FOR 1991 AND SUBSEQUENT YEARS INCLUDES A LIMITED NUMBER OF PASSENGERS THAT USED A TRANSIT PASS INSTEAD OF TRANSFER SLIP TO TRANSFER BETWEEN BUS ROUTES. CONSEQUENTLY, THE BUS RIDERSHIP FIGURES SHOWN IN TABLE 13 FOR 1991, 2003, AND 2004 ARE SOMEWHAT HIGHER THAN THE ESTIMATES OF LINKED TRANSIT PASSENGER TRIPS SHOWN IN THIS FIGURE.

To comply with Federal regulations implementing the requirements of the American's with Disabilities Act (ADA) of 1990, the Milwaukee County transit system includes a paratransit service component provided through the Transit Plus program. The paratransit service provided through the program was available to disabled users through private van service providers and taxicab operators. Accessible van service was provided by 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 was provided by American United Taxi Cab Company. Several private, nonprofit agencies serving disabled persons also provide service under the program for agency clients. During 2004, about 1,003,400 one-way trips were made on the Transit Plus paratransit service, a decrease of about 5 percent from the 1,060,500 one-way trips made on the service during 2003. Fares for the Transit Plus program were also increased during 2004 to \$3.25 per one-way trip compared with \$3.00 per one-way trip during 2003.

## City of Racine

During 2004, ridership on the public transit system serving the City of Racine and environs decreased by about 5 percent, from the 2003 level of approximately 1,162,900 revenue passengers to about 1,100,500 revenue passengers in 2004 (see Figure 29). The ridership decline reflects a significant reduction in service during 2004 as the City implemented service cuts to keep system expenditures within City budget constraints. The total number of bus-miles operated in revenue service decreased by about 20 percent during 2004, from about 1,486,700 bus miles in 2003 to about 1,191,300 bus-miles in 2004. The adult base cash fare remained unchanged at \$1.25 per one-way trip in 2004. In July 2004, the transit system began operation from a new off-street transit center located near the intersection of State Street and Memorial Drive in the northwest portion of the Racine central business district, making minor adjustments to several bus routes to serve the transit center.



Figure 26

# HISTORICAL TREND IN PUBLIC TRANSIT VEHICLE-MILES OF SERVICE IN THE REGION

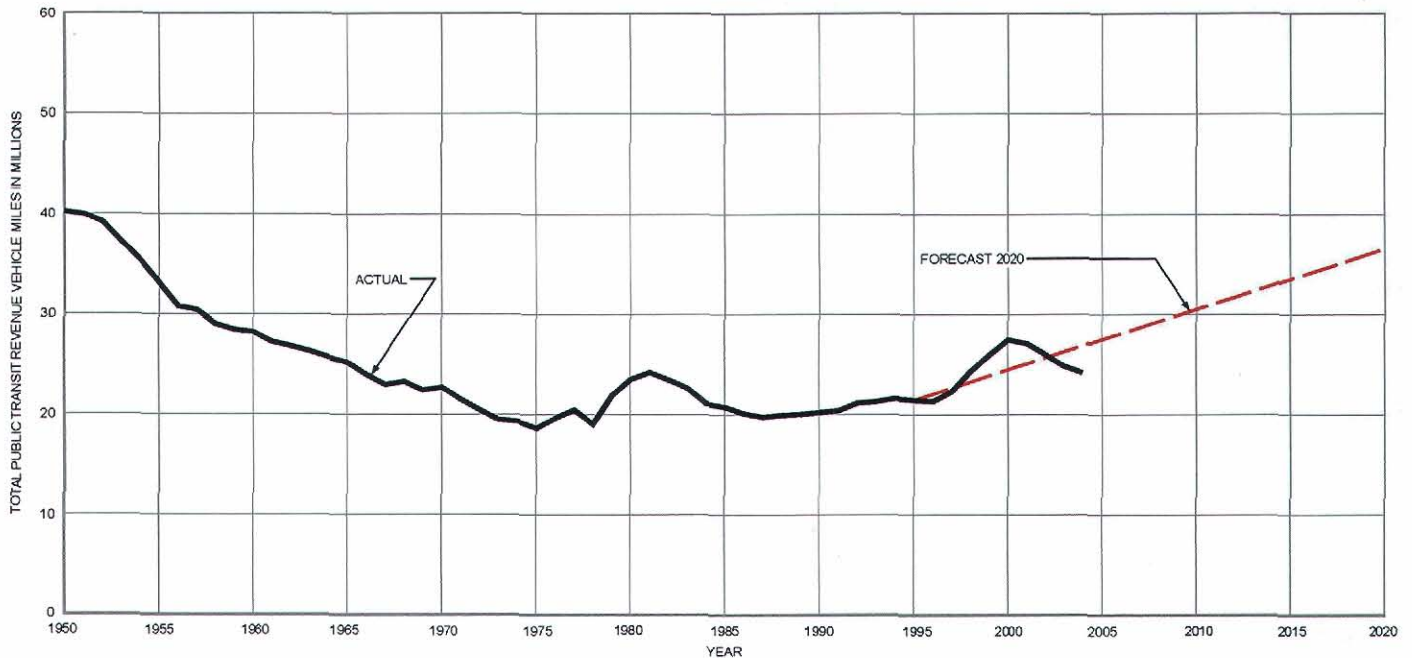


Figure 27

## TRANSIT REVENUE RIDERSHIP MILWAUKEE COUNTY TRANSIT SYSTEM

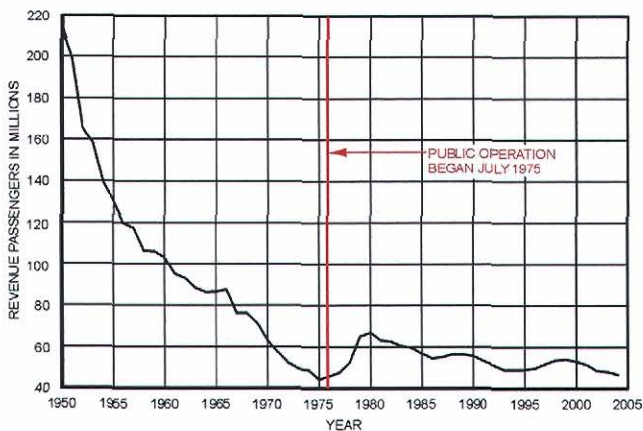
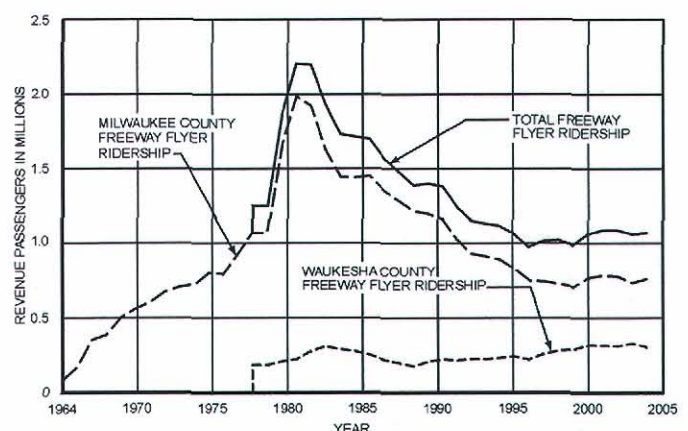


Figure 28

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



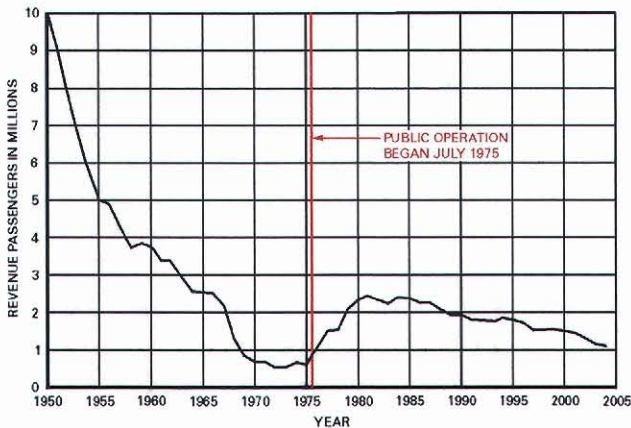
The City of Racine also provides a paratransit service for disabled individuals to comply with Federal ADA regulations. The paratransit service is designed to provide door-to-door transportation to disabled individuals who are unable to use the City's fixed-route bus service. The City's paratransit service serves travel by eligible disabled persons to and from locations within three-quarters of a mile of a City bus route, including to the University of Wisconsin-Parkside in Kenosha County. To provide the service, the City contracts directly with a private transit operator, Laidlaw Transit, Inc.

During 2004, about 19,900 one-way trips were made on the paratransit service, a decrease of about 20 percent from the 24,900 one-way trips made on the service in 2003.

To assist in the public operation of the system, the Commission, at the request of the City of Racine, has routinely prepared short-range transit system development plans setting forth recommendations for service changes and capital improvements. Each such plan has covered a five-year period. The current plan

Figure 29

### TRANSIT REVENUE RIDERSHIP CITY OF RACINE TRANSIT SYSTEM



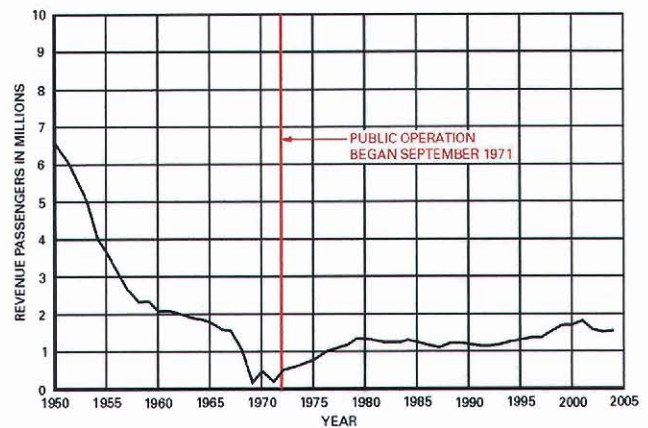
for the Racine transit system is documented in SEWRPC Community Assistance Planning Report No. 233, *Racine Area Transit System Development Plan: 1998-2002*, City of Racine, Wisconsin, October 1997, and was summarized in the Commission's 1997 *Annual Report*. The Commission adopted this plan as an updated element of the comprehensive regional plan in September 1998. Most of the service changes recommended under the transit system development plan were implemented in May 1998.

#### City of Kenosha

Ridership on the fixed-route public transit system serving the City of Kenosha decreased during 2004 (see Figure 30) to approximately 1,502,100 revenue passengers, a decrease of about 1 percent from the 2003 ridership level of about 1,512,600 revenue passengers. The transit system provides fixed-route service within the city and environs and electric streetcar service within the downtown business district and the Harbor Park development on the lakefront. The total number of vehicle-miles operated in revenue service totaled about 1,169,100, representing a decrease of about 2 percent over the 1,187,800 vehicle-miles operated during 2003. The basic cash fare for the Kenosha system remained at \$1.00 per one-way trip for bus service and \$0.25 per one-way trip for street car service in 2004, unchanged from 2002. However, the cost for a monthly transit pass was increased from \$22 in 2003 to \$24 in 2004.

Figure 30

### TRANSIT REVENUE RIDERSHIP CITY OF KENOSHA TRANSIT SYSTEM

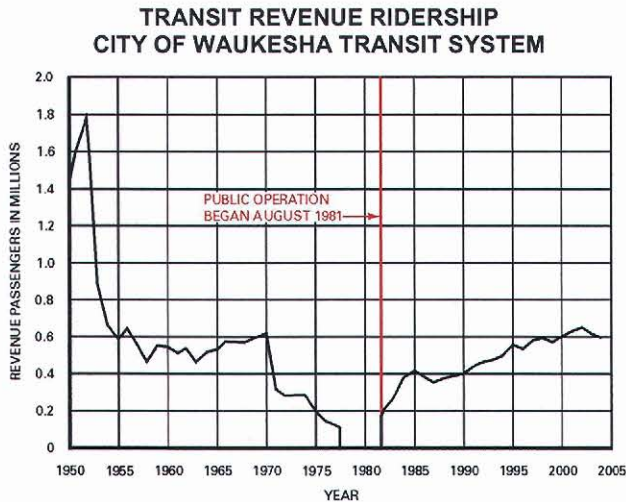


To comply with Federal ADA paratransit regulations, the City of Kenosha participates in the Kenosha County Care-A-Van program. This paratransit service provides door-to-door transportation to disabled individuals in eastern Kenosha County. The City annually contributes funds to the Care-A-Van program, which is 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 City funds annually contributed to the program, 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 total area served is somewhat larger than the service area for the City's fixed-route transit system. During 2004, about 17,400 one-way trips were made on the paratransit service, an increase of about 16 percent from the 15,000 one-way trips made on the service during 2003.

The Commission, at the request of the City, has routinely prepared short-range transit system development plans setting forth recommendations for service changes and capital improvements. Each such plan has covered a five-year period. The current plan for the Kenosha transit system is documented in SEWRPC Community Assistance Planning Report No. 231,



Figure 31



*Kenosha Area Transit System Development Plan: 1998-2002*, City of Kenosha, Wisconsin, April 1998, and was summarized in the Commission's 1998 Annual Report. The Commission adopted this plan as an updated element of the comprehensive regional plan on March 3, 2000. Most of the recommended changes to the City's local bus routes were implemented in August 1998. The Commission staff also provided assistance in developing the restructuring of the City's west side bus routes implemented in late 2002.

#### City of Waukesha

During 2004, the fixed-route public transit system serving the City of Waukesha carried approximately 594,600 revenue passengers, a decrease of about 4 percent from the 619,100 revenue passengers carried on the system during 2003 (see Figure 31). The number of bus-miles operated in revenue service during 2004 totaled about 837,900, a decrease of about 7 percent from the 904,000 bus-miles operated in 2003. The decrease in ridership and service reflects the continued effects of a reduction in service implemented in June 2003 when headways on two routes were reduced from 30 minutes to 60 minutes during weekday middays during the summer months, and weekday midday headways on a third route were reduced from 30 to 60 minutes during the entire year. During 2004, the transit system also made cutbacks in night service on weekdays over most routes, eliminated night service over three routes on Saturdays, and eliminated Sunday service over three routes. The basic

cash fare for the City transit system remained stable at \$1.25 per one-way trip in 2004. In October 2004, the transit system began operating from its new Downtown Transit Center located at 212 E. St. Paul Avenue, making minor routing changes to all routes to serve the transit center.

Paratransit service was also provided by the City of Waukesha to comply with the Federal ADA paratransit regulations. This service was provided through the City's Metrolift program, which is designed to provide curb-to-curb transportation to disabled individuals who are unable to use the City's fixed-route bus service. The service offered under the Metrolift program is provided using employees of the private firm with which the City contracts to manage and operate its fixed-route bus system. During 2004, about 18,800 one-way trips were made on the paratransit service, compared with about 17,400 trips made on the service during 2003, and increase of about 11 percent.

Short-range transit system development plans, which each include recommendations for service changes and capital improvements for a five-year period, have been routinely prepared for the City transit system by the Commission when requested by the City. During 2003, the Commission completed work on a new updated plan for the City transit system which is documented in SEWRPC Community Assistance Planning Report No. 246, *Waukesha Area Transit System Development Plan: 2003-2007*, October 2003. This new, updated plan for the City transit system was described in a section of the 2003 Annual Report.

#### City of Whitewater

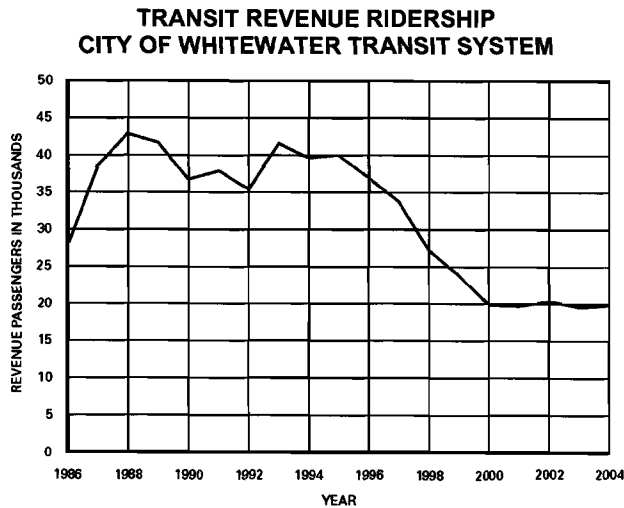
Ridership on the shared-ride public taxicab system serving the City of Whitewater increased during 2004. Operated on a contract basis by Brown's Cab Service, which is based in Fort Atkinson, the Whitewater taxicab service carried approximately 19,800 revenue passengers in 2004, an increase of about 1 percent from the 19,600 revenue passengers carried in 2003 (see Figure 32). It operated about 57,900 total vehicle-miles during 2004, about 3 percent more than the 56,400 total vehicle-miles operated in 2003. During 2004, adult fares for the service remained unchanged at \$2.75 per one-way trip.

#### City of Hartford

Publicly operated transit service was also provided during 2004 by the City of Hartford, which operated



Figure 32



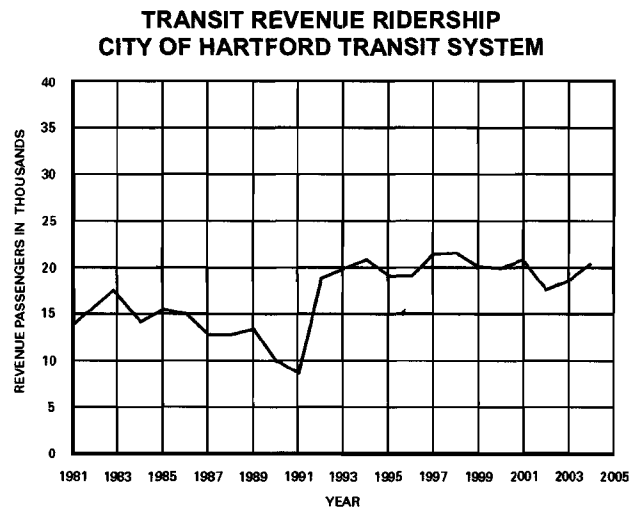
a shared-ride taxicab service through its Municipal Recreation Department. During the year, the Hartford taxicab service carried approximately 20,400 revenue passengers, an increase of about 10 percent from the 18,600 revenue passengers carried in 2003 (see Figure 33). The service operated about 53,300 total vehicle-miles, an increase of about 10 percent from the 48,500 total vehicle-miles operated during 2003. Base cash passenger fares remained stable at \$2.00 per one-way trip in 2004.

#### City of West Bend

During 2004, the City of West Bend taxicab service carried approximately 130,200 revenue passengers, about a 1 percent decrease from the 131,600 revenue passengers carried in 2003 (see Figure 34). Total vehicle-miles of service of approximately 424,300 decreased by less than 1 percent from the 427,900 total vehicle-miles operated during 2003. The taxi system increased base adult cash fares to \$2.50 per one-way trip in 2004, up from \$2.25 per one-way trip in 2003.

The West Bend taxicab system was initiated based on the recommendations of a transit system development plan prepared by the Regional Planning Commission in 1991 at the request of the City. This plan is documented in SEWRPC Community Assistance Planning Report No. 189, *A Transit System Feasibility Study and Development Plan for the City of West*

Figure 33



Bend: 1992-1996, February 1991, and was described in the Commission's *1991 Annual Report*. The plan was adopted by the Commission as an element of the comprehensive regional plan in March 1992. The taxicab service is operated on a contract basis by Specialized Transport Services, Inc.

#### City of Port Washington

During 2004, the City of Port Washington taxicab service carried approximately 20,220 revenue passengers and operated about 89,300 total vehicle-miles of service. These figures represent increases of about 2 percent from the 19,900 revenue passengers carried in 2003 (see Figure 35) and about 3 percent from the 86,800 total vehicle-miles operated during 2003. The taxicab service in 2004 increased the base adult cash fare for taxicab service to \$2.50 per one-way trip, up from the fare in 2003 of \$2.00 per one-way trip.

The institution of publicly subsidized shared-ride taxicab service in the City of Port Washington was guided by an analysis completed by the Regional Planning Commission in 1993 at the request of the City. The analysis, described in the Commission's *1993 Annual Report*, 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 City system is operated on a contract basis by Specialized Transport Services, Inc.

Figure 34

**TRANSIT REVENUE RIDERSHIP  
CITY OF WEST BEND TRANSIT SYSTEM**

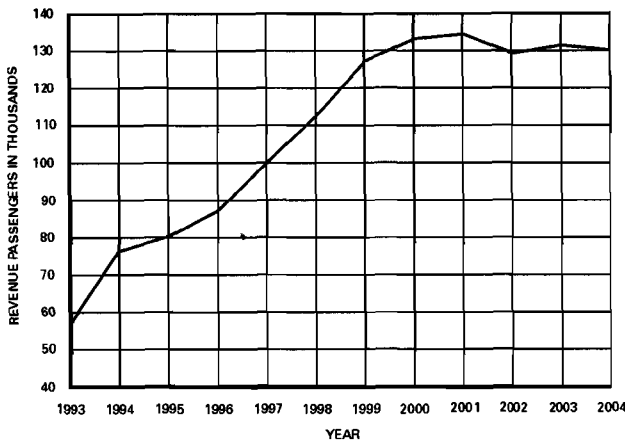
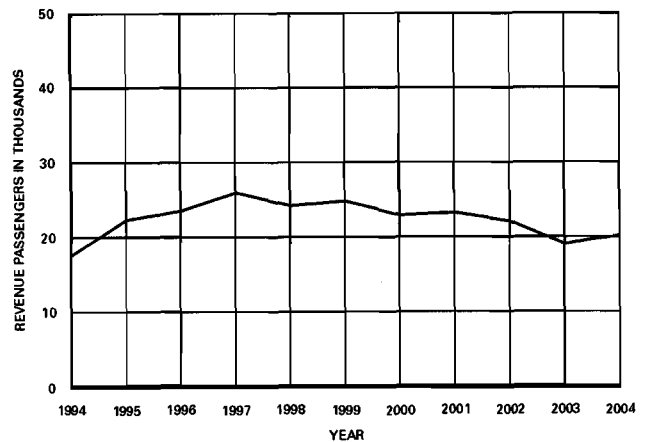


Figure 35

**TRANSIT REVENUE RIDERSHIP  
CITY OF PORT WASHINGTON TRANSIT SYSTEM**



#### Ozaukee County

During 2004, about 70,300 revenue passengers were carried on the Ozaukee County taxicab system, which operated a total of about 703,100 total vehicle-miles. These figures represent an increase of about 8 percent from the 65,300 revenue passengers carried in 2003 (see Figure 36) and an increase of about 7 percent from the 660,300 total vehicle-miles operated in 2003. The ridership increase may be explained by the continued growth in the taxi service for local travel. Fares for the service in 2004 remained unchanged from 2003 with the base adult cash fare ranging from \$2.75 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, G & G Enterprises, Inc., to provide the taxicab service. The Ozaukee County system does not serve trips that can be made on the Port Washington taxicab system.

The institution of the Ozaukee County taxi service was guided by a transit service plan prepared by the Regional Planning Commission in 1995 at the request of the County and described in the Commission's *1995 Annual Report*. Work on a new, updated plan for the County was completed in 2002. The new plan is documented in SEWRPC Community Assistance Planning Report No. 265, *Ozaukee County Transit System Development Plan: 2002-2006*, October 2002, and is described in the Commission's *2002 Annual Report*. The new plan was adopted by the Commission

as an element of the comprehensive regional plan in June 2003.

#### Washington County

During 2004, about 70,000 revenue passengers were carried on the Washington County taxi system, which operated a total of about 990,600 total vehicle-miles. These figures represent increases of about 11 percent from the 63,000 revenue passengers carried in 2003 and about 4 percent from the 957,200 total (see Figure 37) vehicle-miles operated in 2003. Fares for the service in 2004 were increased from 2003, with the base adult cash fare that ranged from \$2.00 per trip for travel within one zone to \$6.50 per trip for cross-County travel encompassing four or more zones increasing to \$2.50 and \$7.00, respectively. The County contracts with a private for-profit transit operator, G&G Enterprises, Inc., to provide the taxicab service. The Washington County system does not serve trips that can be made using the Hartford or West Bend taxi-cab systems.

The institution of the Washington County taxi service was guided by a transit service plan prepared by the Regional Planning Commission in 1996 at the request of the County. The plan is documented in SEWRPC Community Assistance Planning Report No. 223, *A Public Transit Service Plan for Washington County: 1998-2002*, November 1996. 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.

Figure 36

### TRANSIT REVENUE RIDERSHIP OZAUKEE COUNTY TAXI SYSTEM

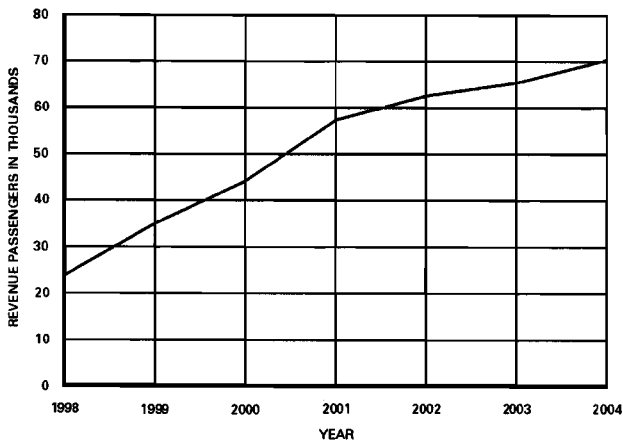
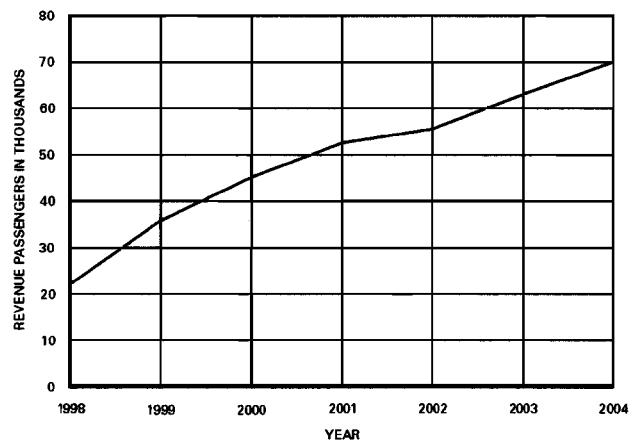


Figure 37

### TRANSIT REVENUE RIDERSHIP WASHINGTON COUNTY TAXI SYSTEM



## Intercounty Services

### Waukesha County

During 2004, total ridership on the Waukesha County transit system increased by about 12 percent, from about 547,500 revenue passengers in 2003 to about 617,600 revenue passengers in 2004 (see Figure 38). Waukesha County contracts with Wisconsin Coach Lines, Inc.; the Milwaukee County Transit System; and the City of Waukesha Metro Transit System for the operation of the routes comprising the Waukesha County system.

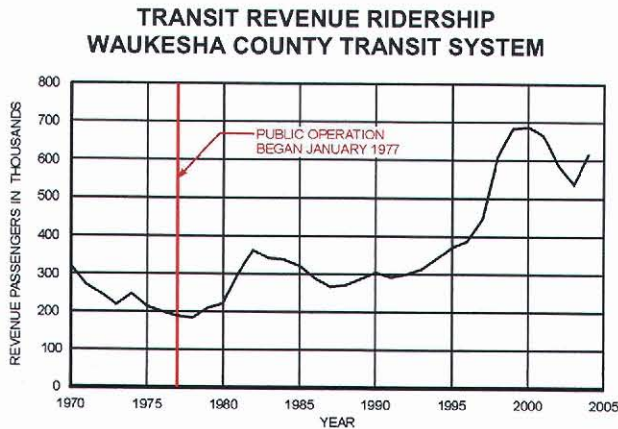
Transit fares on the Waukesha County transit system bus routes operated by the Milwaukee County Transit System were increased during 2004. Adult cash fares on the local bus routes were increased from \$1.50 to \$1.75 per one-way trip when fares for all Milwaukee County Transit System local routes were increased in January 2004. Adult cash fares for the freeway flyer service operated between Menomonee Falls and downtown Milwaukee were increased from \$2.10 to \$2.40 per one-way trip at the same time. The fares charged on the routes operated by Wisconsin Coach Lines, Inc., and the City of Waukesha Metro Transit System remained unchanged during 2004, with adult cash fares ranging from \$2.25 to \$2.75 per one-way trip charged for Wisconsin Coach Lines, Inc., bus service and an adult cash fare of \$1.25 per one-way trip charged for

Waukesha Metro Transit System bus service. During 2004, Waukesha County contracted for the administration and management of the transit system, using the staff of the City of Waukesha Metro Transit System and the Waukesha Transit Commission. The number of bus-miles operated in revenue service increased from about 828,600 bus-miles in 2003 to about 889,100 bus-miles in 2004, or by about 7 percent.

As shown in Figure 28, total ridership on freeway flyer routes operated by Waukesha County in 2004 was about 306,800 revenue passengers, a decrease of about 6 percent from the estimated 326,900 revenue passengers carried on Waukesha County-operated freeway flyer routes in 2003. The freeway flyer service in Waukesha County served a total of 10 outlying parking terminals in 2004.

To comply with the Federal ADA paratransit regulations Waukesha County also operated the parallel commuter bus program. This program provided paratransit service for disabled persons unable to use the vehicles that provide the County's fixed-route bus service in the corridor between the City of Waukesha and downtown Milwaukee. The program offers door-to-door lift-equipped van service to disabled individuals for trips with origins and destinations within one mile on either side of the noncommuter

Figure 38



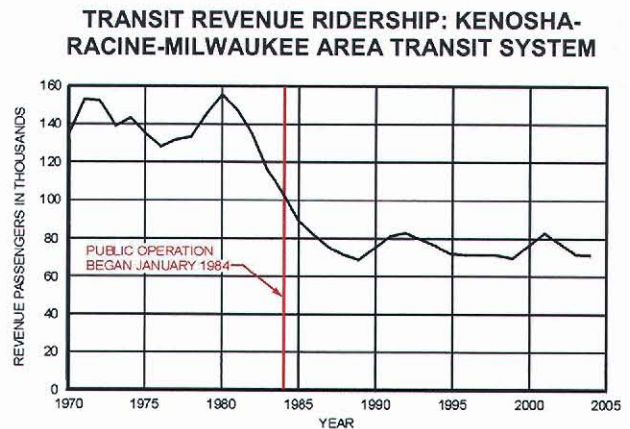
bus route that is subsidized by Waukesha County in this major travel corridor. The paratransit service is also administered by the staff of the Waukesha Metro Transit System and the Waukesha Transit Commission, and provided through contracts with a private transit operator, Curative Transportation Services, Inc. and the Milwaukee County Transit Plus program. During 2004, about 10,200 one-way trips were made under the program, an increase of about 2 percent from the 10,000 one-way trips made under the program during 2003.

The Commission, at the request of the County, has routinely prepared short-range transit system development plans for the County transit system, each setting forth recommendations for service changes and capital improvements for a five-year period. A new plan for the Waukesha County transit system was completed by the Commission in November 2001 and is documented in SEWRPC Community Assistance Planning Report No. 245, *Waukesha County Transit System Development Plan: 2002-2006*, November 2001. That plan is summarized in the Commission's *2001 Annual Report*.

#### Kenosha-Racine-Milwaukee Service

During 2003, 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 was provided through a contract with a private transit operator, Wisconsin Coach Lines, Inc.

Figure 39



Ridership on the service approximated 71,100 revenue passengers during 2004, a decrease of less than 1 percent from the 2003 ridership level of about 71,600 revenue passengers (see Figure 39). The number of bus-miles operated in revenue service decreased, from about 259,400 bus-miles in 2003 to about 258,500 bus-miles in 2004, a decrease of less than 1 percent. Transit fares for the express commuter bus service, which are distance-related, ranged from \$1.00 to \$4.00 per one-way trip, unchanged from 2003.

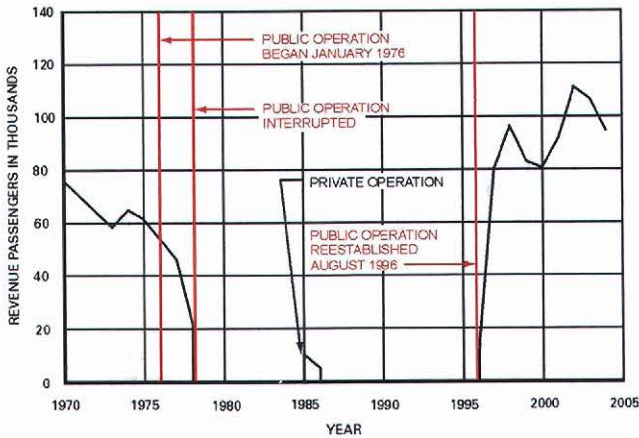
#### Ozaukee County

Ridership decreased during 2004 on the commuter-oriented express bus and shuttle service between Milwaukee and Ozaukee Counties sponsored by Ozaukee County. During 2004, a total of about 94,500 revenue passengers were carried on the Ozaukee County commuter bus service, a decrease of about 11 percent from the 106,700 revenue passengers carried in 2003 (see Figure 40). The ridership decrease may be attributed, in part, to reduced service and lower ridership over the special service operated for festivals at the Milwaukee lakefront and a reduced demand for service from Ozaukee County employers. Fares for the express bus services remained unchanged during 2004 at \$2.25 per one-way trip from bus service and \$0.75 per one-way trip for the shuttle service. The County's commuter bus and shuttle system operated a total of about 200,000 revenue vehicle-miles in 2004, a decrease of about 6 percent from the 213,700 vehicle-miles operated in 2003. The County contracted with the Milwaukee County Transit System to operate the express bus service using buses owned by Ozaukee County.



Figure 40

# TRANSIT REVENUE RIDERSHIP OZAUKEE COUNTY EXPRESS BUS SYSTEM



NOTE: THE GRAPH REFLECTS TWO PERIODS OF PUBLIC OPERATION: FROM JANUARY 1976 THROUGH JUNE 1978 DURING WHICH OZAUKEE COUNTY PROVIDED STATE AND COUNTY FUNDS TO A PRIVATE TRANSIT OPERATOR, WISCONSIN COACH LINES, INC., FOR AN EXISTING COMMUTER BUS ROUTE BETWEEN OZAUKEE AND MILWAUKEE COUNTIES; AND FROM AUGUST 1996 FORWARD DURING WHICH THE COUNTY HAS PROVIDED FEDERAL, STATE AND COUNTY FUNDS FOR A NEW COMMUTER BUS SERVICE BETWEEN THE TWO COUNTIES. FOR ABOUT NINE MONTHS IN 1985 AND 1986, A DIFFERENT PRIVATE COMPANY, OZAUKEE METROPOLITAN TRANSIT, PROVIDED COMMUTER BUS SERVICE BETWEEN THE TWO COUNTIES WITHOUT ANY PUBLIC SPONSORSHIP OR FUNDING.

The implementation of the Ozaukee County commuter bus and shuttle service was guided by a transit service plan prepared by the Commission in 1995. Work on a new, updated plan for the County system was completed during 2002 and is documented in SEWRPC Community Assistance Planning Report No. 265, *Ozaukee County Transit System Development Plan: 2002-2006*, October 2002. The plan is described in a section of the Commission's 2002 *Annual Report*.

## Washington County

During 2004, about 66,300 revenue passengers were carried on the Washington County commuter bus service, an increase of about 42 percent from the approximately 46,600 revenue passengers carried on the service during 2003. The County's commuter bus system operated a total of about 242,800 revenue vehicle-miles in 2004, down by about 35 percent from the 371,300 vehicle-miles operated in 2003. The increase in ridership during 2004 may be attributed in part to the growth in ridership on the new express bus service added in 2003 that operated largely during weekday middays to serve Washington County residents commuting to and from the Milwaukee County Regional Medical Complex and the Mayfair during 2004 shopping center. Fares on the express bus routes

remained unchanged from 2003 at \$2.50 per one-way trip, and \$1.00 per one-way trip on the connecting shuttle service provided by the Washington County Taxi System. Fares remained at \$1.00 per one-way trip on the Germantown Industrial Park shuttle.

The County contracts with Riteway Bus Service, Inc., for the operation of the express bus service and with G & G enterprises, Inc., for the connecting taxi shuttle service. The institution of the services was guided by a transit service plan prepared by the Regional Planning Commission in 1996 at the request of the County. The plan is documented in SEWRPC Community Assistance Planning Report No. 223, *A Public Transit Service Plan for Washington County: 1998-2002*, November 1996. 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.

## Park-Ride Facilities

Progress in providing the park-ride lots recommended in the adopted year 2020 transportation plan is summarized on Map 8. During 2004, no new publicly constructed or shared use park-ride lots were constructed to add to the 48 park-ride lots existing in 2003. Of these 48 park-ride lots, 35 were served by freeway flyer transit service and 13 were not served by transit and were used exclusively by carpoolers. Nine of the 48 park-ride lots were shared-use facilities that were not specifically constructed to serve as a park-ride lot such as a parking lot at a private retail business or a municipal parking lot or garage.

Table 21 provides data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 2004 at all park-ride lots by patrons of freeway flyer bus service and carpoolers. The total number of spaces available at park-ride lots in the Region remained at 6,265 in 2004, including 5,595 at park-ride lots served by transit, and 670 at the lots not served by transit.






Of the 5,595 spaces available at the 35 park-ride lots served by transit, 2,314 spaces were used on an average weekday during 2004, a utilization rate of about 41 percent. Of the 670 spaces available at the lots not served by transit, 251 spaces were utilized during 2004, a utilization rate of about 37 percent. In total, about 41 percent of all available parking spaces were used on an average weekday during 2004.



Map 8

# EXISTING AND PROPOSED PARK-RIDE LOTS LOCATED WITHIN

## EXISTING 2004

-  PARK-RIDE LOT SERVED BY TRANSIT - EXCLUSIVE CONSTRUCTION AND USE
-  PARK-RIDE LOT SERVED BY TRANSIT - SHARED USE
-  PARK-RIDE LOT NOT SERVED BY TRANSIT - EXCLUSIVE CONSTRUCTION AND USE
- 20 PARK-RIDE LOT NUMBER (SEE TABLE 14)
-  RAPID BUS-ON-FREEWAY TRANSIT ROUTE
-  NONFREEWAY EXTENSION OF RAPID TRANSIT ROUTE

## PROPOSED UNDER 2020 ADOPTED TRANSPORTATION SYSTEM PLAN

-  PARK-RIDE LOT SERVED BY TRANSIT - EXCLUSIVE CONSTRUCTION AND USE
-  TRANSIT STATION WITHOUT PARKING - EXCLUSIVE CONSTRUCTION AND USE
-  PARK-RIDE LOT NOT SERVED BY TRANSIT - EXCLUSIVE CONSTRUCTION AND USE
-  EXPRESS BUS-ON-FREEWAY TRANSIT ROUTE
-  NONFREEWAY EXTENSION

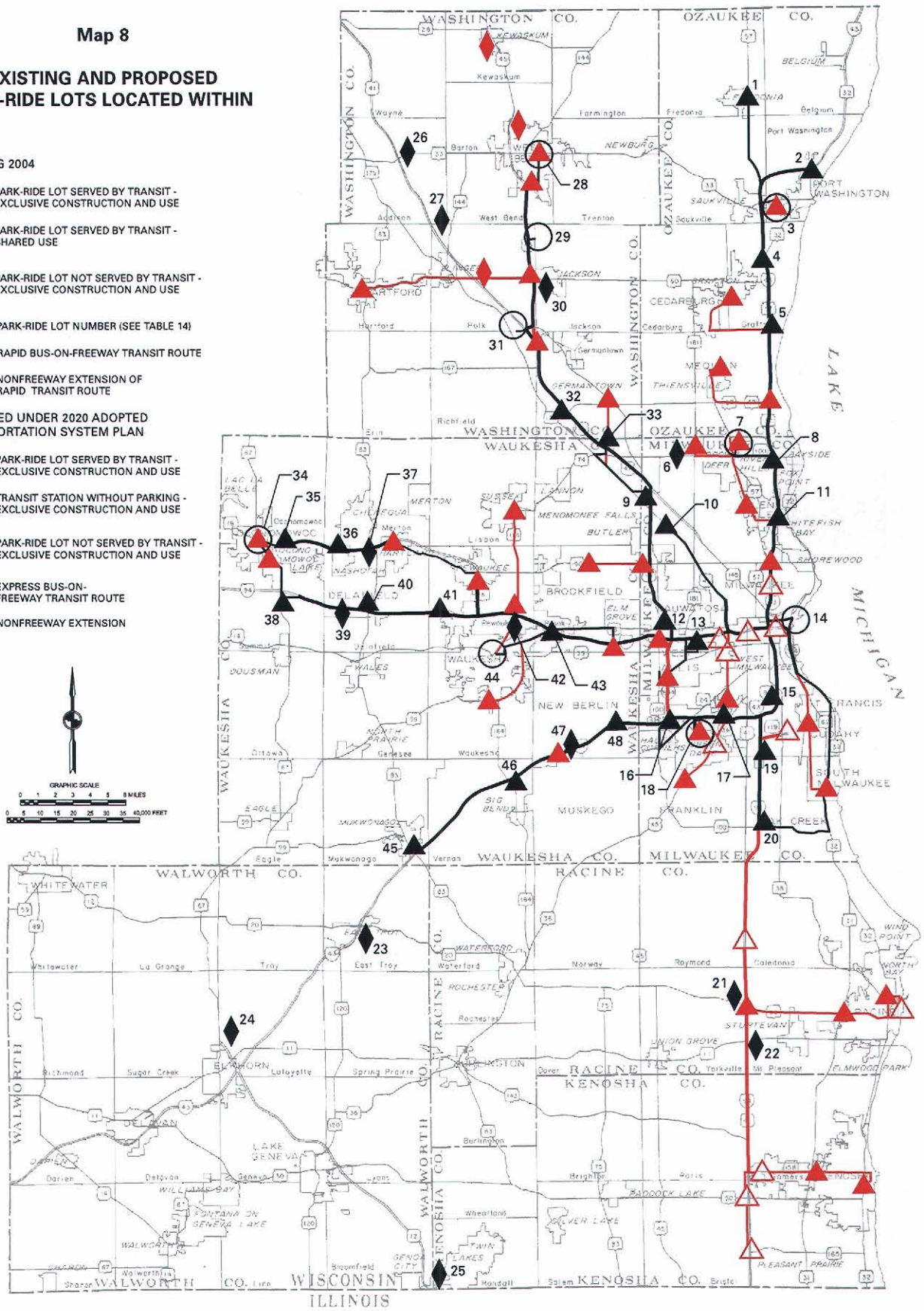
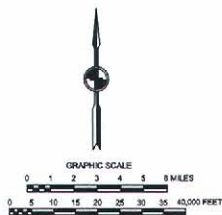


Table 21

## AVERAGE WEEKDAY USE OF PARK-RIDE LOTS: 2004

Number <sup>a</sup>	Location	Served by Transit	Not served by Transit	Shared Use	Available Parking Spaces	Autos Parked on an Average Weekday: 2004	Percent of Spaces Used
<u>Ozaukee County</u>							
1	STH 57 and CTH H (Fredonia)	X			60	6	10
2	IH 43 and STH 32-CTH H (Port Washington)	X			50	19	38
3	Wal-Mart (Saukville)	X		X	50	-- <sup>b</sup>	-- <sup>b</sup>
4	IH 43 and CTH V (Grafton)	X			85	30	35
5	IH 43 and CTH C (Grafton)	X			65	47	72
<u>Milwaukee County</u>							
6	STH 100 and N. 85th Street (Milwaukee)		X		100	-- <sup>b</sup>	-- <sup>b</sup>
7	Kohl's (Brown Deer)	X			100	60	60
8	Brown Deer (River Hills)	X		X	360	80	22
9	W. Good Hope Road (Milwaukee)	X			135	33	24
10	Timmerman Field (Milwaukee)	X			140	51	36
11	North Shore (Glendale)	X			195	87	45
12	W. Watertown Plank Road (Wauwatosa)	X			240	131	55
13	State Fair Park (Milwaukee)	X			285	176	62
14	Milwaukee County Transit System						
	Downtown Transit Center (Milwaukee)	X		X	-- <sup>b</sup>	-- <sup>b</sup>	-- <sup>b</sup>
15	W. Holt Avenue (Milwaukee)	X			230	103	45
16	Whitnall (Hales Corners)	X			360	202	56
17	W. Loomis Road (Greenfield)	X			410	97	24
18	Southridge (Greendale)	X		X	80	65	81
19	W. College Avenue (Milwaukee)	X			650	286	44
20	W. Ryan Road (Oak Creek)	X			305	137	45
<u>Racine County</u>							
21	IH 94 and STH 20 (Ives Grove)		X		75	59	79
22	IH 94 and STH 11 (Mount Pleasant)		X		65	20	31
<u>Walworth County</u>							
23	East Troy Municipal Airport (East Troy)		X		40	14	35
24	USH 12 and STH 67 (Elkhorn)		X		40	9	23
25	USH 12 and CTH P (Genoa City)		X		40	6	15
<u>Washington County</u>							
26	USH 41 and STH 33 (Allenton)		X		35	27	77
27	USH 41 and CTH K (Addison)		X		50	9	18
28	Field's Furniture (West Bend)	X		X	50	-- <sup>b</sup>	-- <sup>b</sup>
29	Washington County Fair Park (Polk)	X		X	100	-- <sup>b</sup>	-- <sup>b</sup>
30	STH 60 and CTH P (Jackson)		X		30	27	90
31	Pioneer Plaza (Polk)	X		X	25	-- <sup>b</sup>	-- <sup>b</sup>
32	USH 41 and Lannon Road (Germantown)	X			100	49	49
<u>Waukesha County</u>							
33	Pilgrim Road (Menomonee Falls)	X			70	56	80
34	Collins Street Parking Lot (Oconomowoc)	X		X	-- <sup>b</sup>	-- <sup>b</sup>	-- <sup>b</sup>
35	STH 16 and CTH P (Oconomowoc)	X			45	-- <sup>b</sup>	-- <sup>b</sup>
36	STH 16 and CTH C (Nashotah)	X			60	7	12
37	STH 16 and STH 83 (Chenequa)		X		35	11	31
38	STH 67 and CTH DR (Summit)	X			100	51	51
39	IH 94 and CTH C (Delafield)		X		30	20	67
40	IH 94 and STH 83 (Delafield)	X			200	65	33
41	IH 94 and CTH G/CTH SS (Pewaukee)	X			245	54	22
42	IH 94 and STH 164 (Pewaukee)		X		85	33	39
43	Goerke's Corners (Brookfield)	X			315	249	79
44	Waukesha Metro Transit System						
	Downtown Transit Center (Waukesha)	X		X	-- <sup>b</sup>	-- <sup>b</sup>	-- <sup>b</sup>
45	IH 43 and Moorland Road (New Berlin)	X			175	60	34
46	IH 43 and CTH Y (New Berlin)		X		45	16	36
47	IH 43 and STH 164 (Big Bend)	X			145	51	35
48	IH 43 and STH 83 (Mukwonago)	X			165	62	38
--	Total	--	--	--	6,265	2,565	41

<sup>a</sup>See Map 8.<sup>b</sup>Data not available.

## *Public Transit Operating Subsidies*

Information on transit operating subsidies in the Region is shown in Table 22. Because 2004 year-end financial data for most transit systems were not available at the time data were compiled for this *2004 Annual Report*, such information is reported for calendar years 2002 and 2003. Transit operating subsidies approximated \$114.2 million during 2001 in the Region, compared with about \$110.6 million in 2002. The per-ride operating subsidies for the individual public transit operators in the Region operating in 2002 and 2003 were for those years, respectively, as follows: Milwaukee County, \$1.87 and \$1.93; City of Racine, \$3.80 and \$4.74; City of Kenosha, \$2.45 and \$3.14; City of Waukesha/Waukesha County, \$5.40 and \$5.80; City of Whitewater, \$5.19 and \$4.98; City of Hartford, \$5.30 and \$5.65; City of West Bend, \$4.42 and \$3.24; and City of Port Washington, \$5.07 and \$6.63. For the taxi transit services in Ozaukee County and Washington County, the per-ride operating subsidies for the years 2002 and 2003 were \$12.89 and \$13.13, and \$16.93 and \$13.75, respectively. For the Kenosha-Racine-Milwaukee Counties transit service, the per-ride operating subsidy was \$13.52 in 2002 and \$9.58 in 2003; and for the Ozaukee County inter-county bus transit service, the per-ride operating subsidy was \$5.91 in 2002 and \$6.41 in 2003; and for the Washington County intercounty bus service, the per-ride operating subsidy was \$6.11 in 2002 and \$11.42 in 2003.

## *Traffic Count Data*

During the year, the Commission conducted traffic counts for use in the analysis and planning activities conducted as part 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.

## **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 2004:

- Commission staff assisted in the development of the 2004 application for Federal and State transit assistance funds available through the Wisconsin Employment Transportation Assistance Program (WETAP) for the four-county Milwaukee area. The work entailed meeting with a special workgroup convened by Commission staff that included representatives from the existing transit operators in the Milwaukee area as well as the various agencies and organizations in the area that had an interest in assisting low-income, unemployed, and at-risk individuals with obtaining or getting access to jobs, retaining jobs, or advancing to better-paying jobs. This special work group met three times between February and April 2004 to develop the application for the 2004 WETAP grant cycle. This included identifying and reviewing the employment transportation projects to be advanced for funding in the 2004 application and developing the final 2004 WETAP grant application.
- The Commission staff continued to serve on the Wisconsin Department of Transportation's Project Advisory committee for the STH 241 Corridor Study. The corridor extends from Milwaukee/Racine County line to College Avenue in Milwaukee County.
- The Commission staff is also serving on the Wisconsin Department of Transportation's Project Advisory committee for the STH 38 Corridor Study. The corridor extends from CTH K in Racine County to Oakwood Road in Milwaukee County.
- The Commission staff prepared year 2025 traffic volume forecasts for various roadway segments throughout the Region in response to requests either directly from the State, the counties or local units of government, or from a consultant working for a unit of government. Traffic volume forecasts were provided for fifteen roadway segments in Kenosha, Milwaukee, Racine, Washington and Waukesha Counties.

Table 22

## PUBLIC TRANSIT OPERATING SUBSIDIES WITHIN THE REGION: 2002-2003

Transit Services	Public Transit Operating Assistance (dollars)							
	2002 Actual				2003 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
<b>Intracounty Systems</b>								
Milwaukee County .....	13,595,500	59,260,600	17,587,900	90,444,000	16,663,700	59,945,100	16,164,100	92,772,900
City of Racine .....	1,910,700	1,939,000	1,163,300	5,013,000	2,012,200	1,978,100	1,525,900	5,516,200
City of Kenosha .....	1,634,700	1,583,800	614,000	3,832,500	1,852,600	1,636,600	1,253,800	4,743,000
City of Waukesha .....	1,427,800	3,347,300	1,899,300	6,674,400	1,812,400	3,140,400	1,815,900	6,768,700
City of Whitewater .....	46,500 <sup>a</sup>	51,300 <sup>a</sup>	7,600 <sup>a</sup>	105,400 <sup>a</sup>	42,500	48,000	6,800	97,300
City of Hartford .....	40,600	44,800	7,800	93,200	38,300	57,500	9,300	105,100
City of West Bend .....	254,700 <sup>a</sup>	281,000 <sup>a</sup>	36,000 <sup>a</sup>	571,700 <sup>a</sup>	197,000	222,400	6,400	425,800
City of Port Washington .....	47,900 <sup>a</sup>	52,900 <sup>a</sup>	11,200 <sup>a</sup>	112,000 <sup>a</sup>	51,400	58,000	22,600	132,000
Ozaukee County .....	154,900	502,000	148,700	805,600	326,300	368,400	201,600	896,300
Washington County .....	210,900 <sup>a</sup>	686,000 <sup>a</sup>	37,400 <sup>a</sup>	934,300 <sup>a</sup>	310,100	350,100	206,200	866,400
Subtotal	19,324,200	67,748,700	21,513,200	108,586,100	23,306,500	67,804,600	21,212,600	112,323,700
<b>Intercounty Systems</b>								
Waukesha-Milwaukee Counties .....	_ _b	_ _b	_ _b	_ _b	_ _b	_ _b	_ _b	_ _b
Kenosha-Racine-Milwaukee Counties .....	334,500	619,700	97,800	1,052,000	--	539,800	145,800	685,600
Ozaukee-Milwaukee Counties .....	146,400	441,100	70,200	657,700	267,900	302,400	113,200	683,500
Washington-Milwaukee Counties .....	153,700	116,300	68,000	338,000	194,000	219,100	119,200	532,300
Subtotal	634,600	1,177,100	236,000	2,047,700	461,900	1,061,300	378,200	1,901,400
<b>Region Total</b>	19,958,800	68,925,800	21,749,200	110,633,800	23,768,400	68,865,900	21,590,800	114,225,100

Transit Services	Operating Subsidy per Ride (dollars)							
	2002 Actual				2003 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
<b>Intracounty Systems</b>								
Milwaukee County .....	0.28	1.22	0.37	1.87	0.35	1.25	0.33	1.93
City of Racine .....	1.45	1.47	0.88	3.80	1.73	1.70	1.31	4.74
City of Kenosha .....	1.04	1.01	0.40	2.45	1.22	1.08	0.84	3.14
City of Waukesha .....	1.16	2.71	1.53	5.40	1.55	2.69	1.56	5.80
City of Whitewater .....	2.28 <sup>a</sup>	2.53 <sup>a</sup>	0.38 <sup>a</sup>	5.19 <sup>a</sup>	2.17	2.45	0.34	4.96
City of Hartford .....	2.31	2.55	0.44	5.30	2.06	3.09	0.50	5.65
City of West Bend .....	1.97 <sup>a</sup>	2.17 <sup>a</sup>	0.28 <sup>a</sup>	4.42 <sup>a</sup>	1.50	1.69	0.05	3.24
City of Port Washington .....	2.17 <sup>a</sup>	2.39 <sup>a</sup>	0.51 <sup>a</sup>	5.07 <sup>a</sup>	2.58	2.91	1.14	6.63
Ozaukee County .....	2.48	8.03	2.38	12.89	5.00	5.64	3.09	13.73
Washington County .....	3.82 <sup>a</sup>	12.43 <sup>a</sup>	0.68 <sup>a</sup>	16.93 <sup>a</sup>	4.92	5.56	3.27	13.75
Average	0.37	1.28	0.40	2.05	0.45	1.30	0.41	2.16
<b>Intercounty Systems</b>								
Waukesha-Milwaukee Counties .....	_ _b	_ _b	_ _b	_ _b	_ _b	_ _b	_ _b	_ _b
Kenosha-Racine-Milwaukee Counties .....	4.30	7.97	1.25	13.52	--	7.54	2.04	9.58
Ozaukee-Milwaukee Counties .....	1.32	3.96	0.63	5.91	2.51	2.83	1.07	6.41
Washington-Milwaukee Counties .....	2.78 <sup>a</sup>	2.10 <sup>a</sup>	1.23 <sup>a</sup>	6.11 <sup>a</sup>	4.16	4.70	2.56	11.42
Average	2.60	4.82	0.96	8.38	2.05	4.72	1.68	8.45
<b>Region Average</b>	0.38	1.30	0.40	2.08	0.45	1.32	0.41	2.18

<sup>a</sup>Estimated

<sup>b</sup>During 2003, Waukesha County began contracting for the administration and management of the Waukesha County contract transit services, using the staff of the City of Waukesha Metro Transit System and the Waukesha Transit Commission. Separate financial data for the City and County bus systems was not available for this Annual Report. The financial information for the Waukesha County intercounty bus services has been included in the figures shown above for the City of Waukesha transit system.

## TRANSPORTATION SYSTEMS MANAGEMENT AND PROGRAMMING

### Transportation Systems Management Planning and Traffic Engineering

During 2004, the Commission continued a work effort to carry out transportation systems management or

traffic engineering studies for communities in Southeastern Wisconsin. A transit system development plan for the City of Waukesha was completed, as described in this section. A draft scope of work for a Milwaukee County transit development plan was prepared and transmitted to the County for its review. In addition, other local-level studies were initiated or completed during the year.

Such local-level studies were requested by the Village of Genoa City and Waterford; and the Town of Delafield. Work also continued on a study requested by Milwaukee County in 2003.

The Village of Genoa City requested a traffic impact study to determine the feasibility of constructing a new interchange on USH 12 at CTH B. A range of alternatives to be considered including a “no build” alternative and construction of a new interchange were presented to an Intergovernmental Working Group along with a set of criteria to be utilized in the evaluation of the alternatives. A letter report documenting the findings and recommendations of the study will be prepared for consideration by the Intergovernmental Working Group prior to being forwarded to Village officials.

Village of Waterford officials requested a traffic engineering study of Main Street through the Village. The study is to determine whether short-range traffic engineering actions may be warranted to improve traffic flow and to determine the amount of traffic traveling through the Village on STH 20 and from which direction the through traffic had entered the Village. Analysis of a special 12 hour license plate survey was completed to determine the volume of STH 20 traffic through the Village on an average weekday. An analysis of selected intersections on Main Street was initiated to determine whether traffic engineering actions may be warranted. The findings and recommendations of the study will be forwarded to Village officials in a letter report.

Town of Delafield officials requested a traffic study to address a perceived traffic safety problem owing to vehicular speeding on Imperial Drive. A letter report documenting the findings of the study was forwarded to Town officials.

Milwaukee County requested that traffic volumes be projected for selected arterial facilities serving the Milwaukee County grounds adjacent to the USH 45 and Watertown Plank Road. Following a meeting of representatives of State, County and impacted units of local government, a revised Commission Staff Memorandum entitled *Milwaukee County Grounds Traffic Projection Study* was prepared and distributed to those units of government. The memorandum documents the estimated average weekday traffic volumes that were projected for full buildout conditions, including redevelopment of existing lands, and distributed those volumes to the adjacent arterial system.

## Transportation Improvement Programming

In December 2004, the Commission and the appropriate Commission Advisory Committees adopted an updated three-year transportation improvement program (TIP) for Southeastern Wisconsin, as required by the U.S. Department of Transportation. The program was set forth in a Commission document titled *A Transportation Improvement Program for Southeastern Wisconsin: 2005-2007*. The new program was 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 2005-2007 TIP 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.

The total potential investment in transportation improvements and services over the programming period is about \$1.83 billion. Of this total, \$846 million, or about 46 percent, is proposed to be provided in Federal funds; \$697 million, or about 38 percent, in State funds; and \$290 million, or about 16 percent, in local funds. Proposed expenditures for 2005 total about \$878 million. A cost summary for these projects is shown in Table 23.

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



Table 23

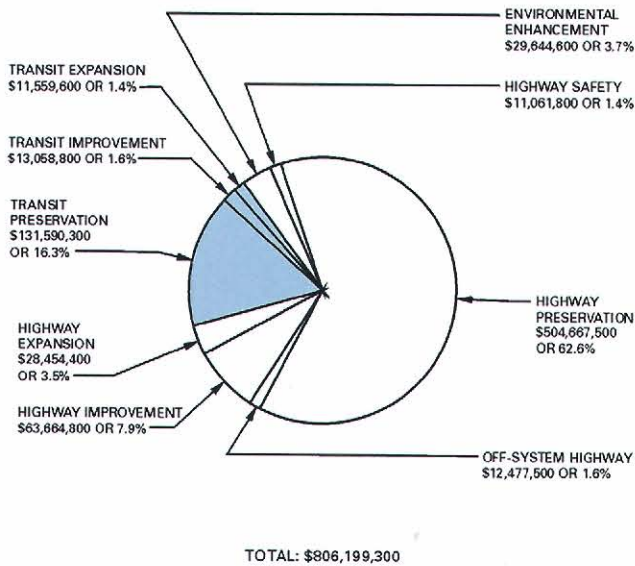
**COST SUMMARY OF PROJECTS WITHIN 2005 OF THE 2005-2007 TRANSPORTATION  
IMPROVEMENT PROGRAM BY TRANSPORTATION MANAGEMENT AREA, COUNTY, AND FUNDING SOURCE**

Transportation Management Area	Proposed 2005 Expenditures
<b>Milwaukee Area</b>	
<b>Milwaukee County</b>	
Federal .....	\$305,075,600
State .....	330,616,900
Local .....	67,324,400
Total	\$703,016,900
<b>Ozaukee County</b>	
Federal .....	\$ 7,166,300
State .....	2,029,700
Local .....	1,412,800
Total	\$ 10,608,800
<b>Washington County</b>	
Federal .....	\$ 8,993,200
State .....	2,725,100
Local .....	1,534,000
Total	\$ 13,252,300
<b>Waukesha County</b>	
Federal .....	\$ 31,669,000
State .....	28,091,600
Local .....	19,473,200
Total	\$ 79,233,800
<b>Milwaukee Area Subtotal</b>	
Federal .....	\$352,904,100
State .....	363,463,300
Local .....	89,744,400
Total	\$806,111,800
<b>Kenosha-Racine-Walworth Area</b>	
<b>Kenosha County</b>	
Federal .....	\$ 28,396,100
State .....	8,017,300
Local .....	7,867,400
Total	\$ 44,280,800
<b>Racine County</b>	
Federal .....	\$ 9,971,700
State .....	5,120,500
Local .....	2,827,900
Total	\$ 17,920,100
<b>Walworth County</b>	
Federal .....	\$ 3,000,000
State .....	6,769,200
Local .....	388,300
Total	\$ 10,157,500
<b>Kenosha-Racine-Walworth Area Subtotal</b>	
Federal .....	\$ 41,367,800
State .....	19,907,000
Local .....	11,083,600
Total	\$ 72,358,400
<b>Region Total</b>	
Federal .....	\$394,271,900
State .....	383,370,300
Local .....	100,828,000
Total	\$878,470,200

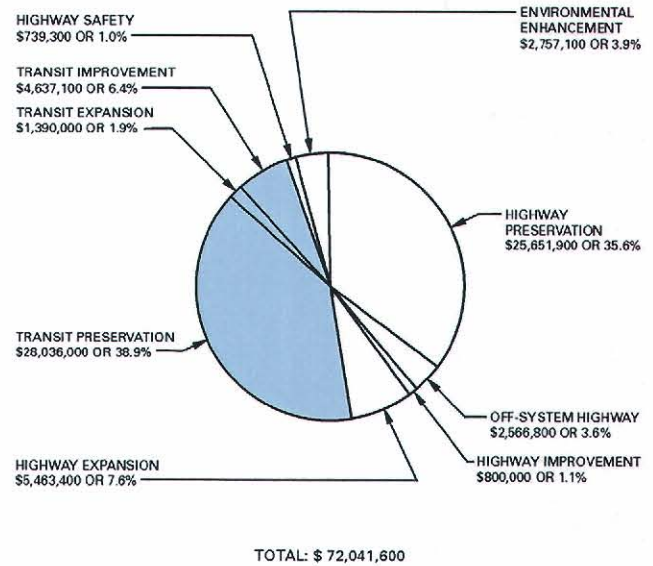
Figure 41

# DISTRIBUTION OF EXPENDITURES IN 2005 OF THE 2005-2007 TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY

MILWAUKEE TRANSPORTATION MANAGEMENT AREA



KENOSHA-RACINE-WALWORTH  
TRANSPORTATION MANAGEMENT AREA



expansion projects. Figure 41 reflects graphically the proposed expenditures in 2005 for these nine project categories for each of the two transportation management areas. At least three of the expenditure patterns apparent from this figure 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 78 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 \$33.9 million, or about 4 percent of total programmed expenditures in the Region. The expenditures for highway improvement to increase present highway capacities total approximately \$64.5 million, or 7 percent of total expenditures. This compares to the \$530.3 million programmed for expenditures on highway preservation, or about 60 percent of total expenditures.
- A significant proportion of total financial resources is devoted to public transit projects,

which account for about 22 percent of programmed resources for 2005. Of the total programmed resources for public transit, 84 percent is for preservation, 9 percent is for service improvement, and 7 percent is for service expansion.

## LONG-RANGE PLANNING

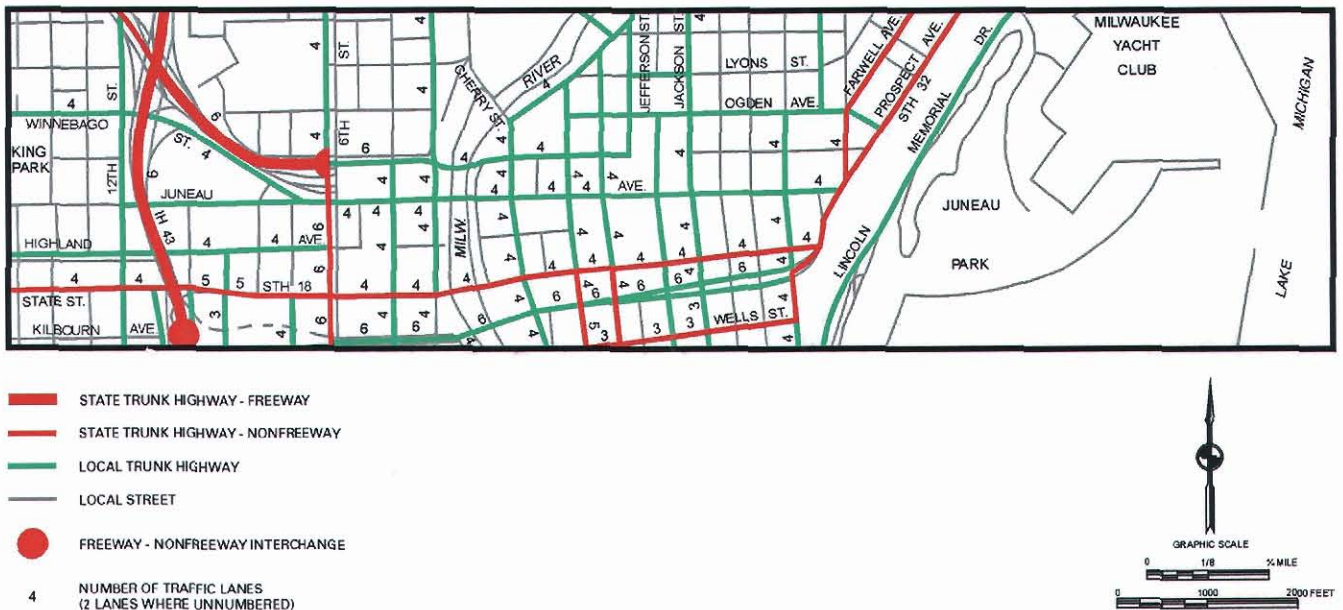
### Regional Transportation System Plan

In April 2003, the Commission published and formally adopted a review and reaffirmation of the design year 2020 regional transportation system plan, with an extension of the plan design year to 2025. This review and reaffirmation with extension of the design year is documented in SEWRPC Memorandum Report No. 157, *Review and Reaffirmation of the Year 2020 Regional Land Use and Transportation Plans and Extension of Plan Design Year to 2025*. The extension of the plan design year takes into account the continuing changes in population, household, and employment levels in the Region, as well as progress towards implementation of planned transportation system improvements. The year 2025 transportation plan extension is designed to serve and support the year 2025 regional land use plan, and the attendant travel demand.



Map 9

**THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE MCKINLEY AVENUE-KNAPP STREET CORRIDOR UNDER THE AMENDED YEAR 2020 REGIONAL TRANSPORTATION SYSTEM PLAN**



The adopted regional transportation system plan reflects amendments made by the Commission, including the following:

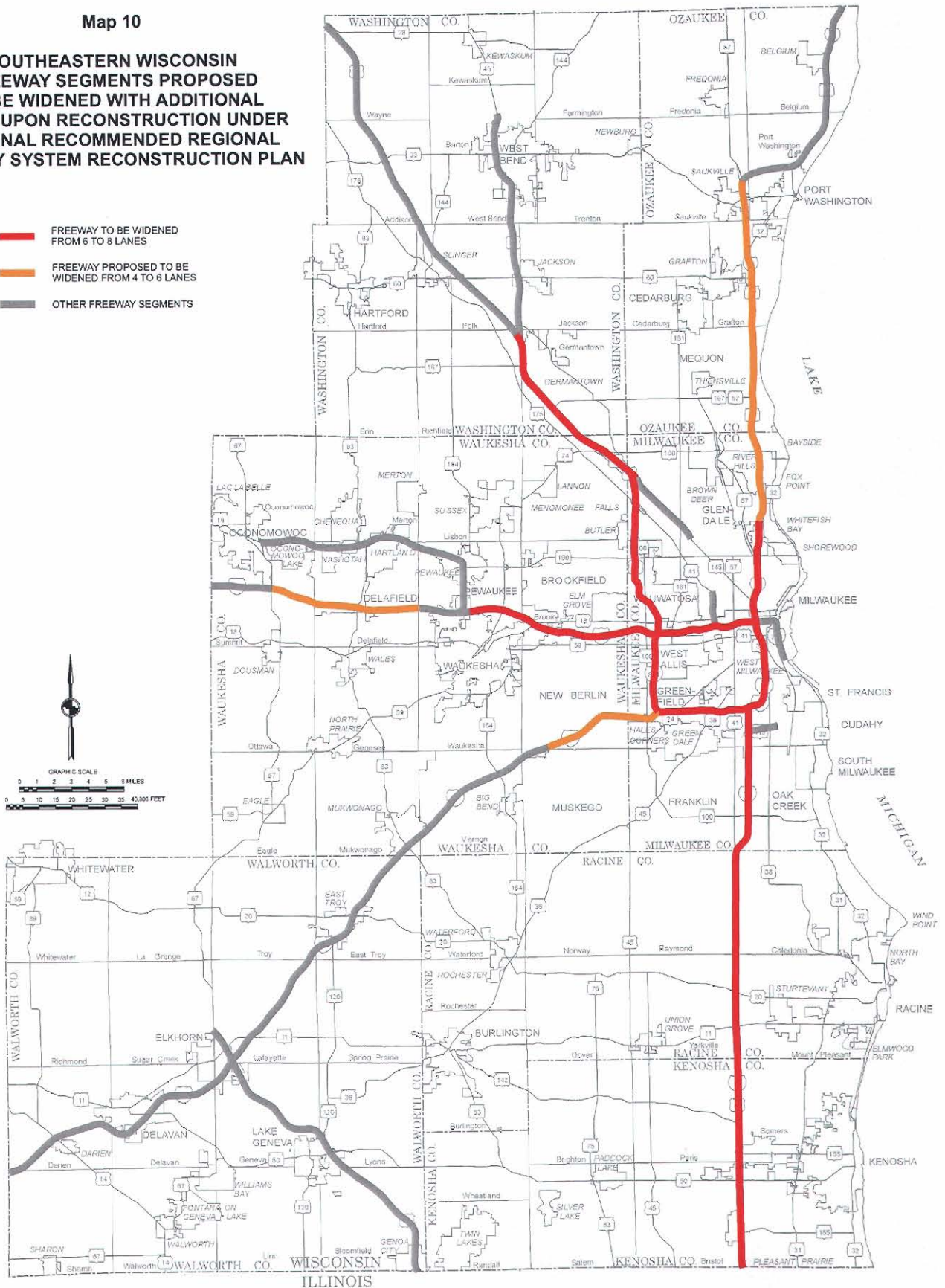
- The adopted regional transportation system plan was amended during 2001 at the request of the City of Milwaukee, Milwaukee County, and the Wisconsin Department of Transportation. Under this plan amendment, the Park East Freeway between approximately N. 8th Street and Jefferson Street was removed from the arterial street and highway system element of the plan and replaced with a standard arterial including a new bridge over the Milwaukee River in the McKinley Avenue-Knapp Street corridor. The plan as amended in the McKinley Avenue-Knapp Street Corridors is shown in Map 9, and documented in SEWRPC report, *Amendment to the Regional Transportation Plan—2020, Park East Freeway Corridor*.
- Following the plan extension to the year 2025, the adopted regional transportation system plan was amended in 2003 as a result of the Regional Freeway System Reconstruction Study for

Southeastern Wisconsin. This effort was intended to develop a broad understanding of freeway system needs; develop and evaluate alternative freeway reconstruction plans, and build a regional consensus on the desirable scope of a freeway reconstruction plan and program. The plan was amended to reflect the recommendations to rebuild the regional freeway system to meet modern design standards and to add lanes to 127 miles of the freeway system (see Map 10). The plan amendment is documented in SEWRPC Planning Report No. 47, *A Regional Freeway System Reconstruction Plan for Southeastern Wisconsin*. The plan also included ancillary recommendations attendant to the reconstruction of the regional freeway system related to how the Wisconsin Department of Transportation conducts preliminary engineering and environmental impact assessment studies; to the potential construction of freeway noise barriers; to the management of stormwater from freeway facilities; to the participation of minority-owned businesses and minority workers in the freeway reconstruction effort; to local government cost-share in the freeway reconstruction program; to

Map 10

**SOUTHEASTERN WISCONSIN  
FREEWAY SEGMENTS PROPOSED  
TO BE WIDENED WITH ADDITIONAL  
LANES UPON RECONSTRUCTION UNDER  
THE FINAL RECOMMENDED REGIONAL  
FREEWAY SYSTEM RECONSTRUCTION PLAN**

- FREEWAY TO BE WIDENED  
FROM 6 TO 8 LANES
- FREEWAY PROPOSED TO BE  
WIDENED FROM 4 TO 6 LANES
- OTHER FREEWAY SEGMENTS





the funding of freeway law enforcement patrols in Milwaukee County; and to the preparation by the Department of freeway financing plans.

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 regional transportation system plan, was prepared and adopted in 1995 as a separate element of the comprehensive regional plan. This bicycle and pedestrian facilities plan was amended and extended in 2001 as 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 ride-sharing, transit use, bicycle use, and pedestrian movement, together with telecommuting and work-time rescheduling; preparation and implementation of detailed, 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 Maps 11 and 12—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 93 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 3,600-mile arterial street and highway system recommended for the Region is graphically summarized by county on Map 13. 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 532 route-miles of existing facilities, often including widening to provide additional capacity, and the resurfacing and reconstruction of 2,944 route-miles necessary to maintain the remaining existing facilities,

including the reconstruction and modernization of the Milwaukee area freeway system to current freeway design standards.

About 241 miles of the planned 3,600 mile regional arterial street and highway system, or nearly 7 percent, may be expected to operate under congested conditions by the year 2025, 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.

### **New Travel Survey for Southeastern Wisconsin**

The Commission has completed a comprehensive travel survey to assist in the reevaluation of the existing regional transportation system plan and to aid in the design of a fifth-generation transportation system plan to serve transportation needs beyond the year 2020. Information collected as part of the new travel survey was compared to data obtained during similar surveys conducted by the Commission in 1963, 1972, and in 1991. Such a comparison has allowed for the identification of long-term trends in travel characteristics and patterns. The survey consisted of four major elements. In 2001, two major elements of the survey were completed. The survey of public transit travel was conducted in the spring and the survey of resident household travel was conducted in the fall. In the fall of 2002 the two remaining elements were conducted specifically, the external cordon survey and the internal truck survey.

The data collected through the survey will be used to update, test, and if necessary, recalibrate the travel simulation models for the Region. These models are essential for the preparation of forecasts of travel patterns and traffic volumes that may be expected to be carried on each existing and proposed highway and transit facility in the Region. Some of the major findings of the fourth comprehensive travel survey conducted in the Region are described below.

### *Total Trip Making*

Approximately 6.8 million internal and external person-trips were made within the Region on an average weekday in 2001. This represents an increase of about 2.6 million person-trips, or about 63 percent, since 1963; an increase of 1.6 million person-trips, or about 32 percent, since 1972; and an increase of 0.6 million, or about 10 percent since 1991. About 94 percent of all person-trips had both trip origin and destination within

Map 11

**PUBLIC TRANSIT ELEMENT  
OF THE ADOPTED REGIONAL  
TRANSPORTATION SYSTEM PLAN  
FOR SOUTHEASTERN WISCONSIN: 2025**

**RAPID TRANSIT SERVICE**

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

**EXPRESS TRANSIT SERVICE**

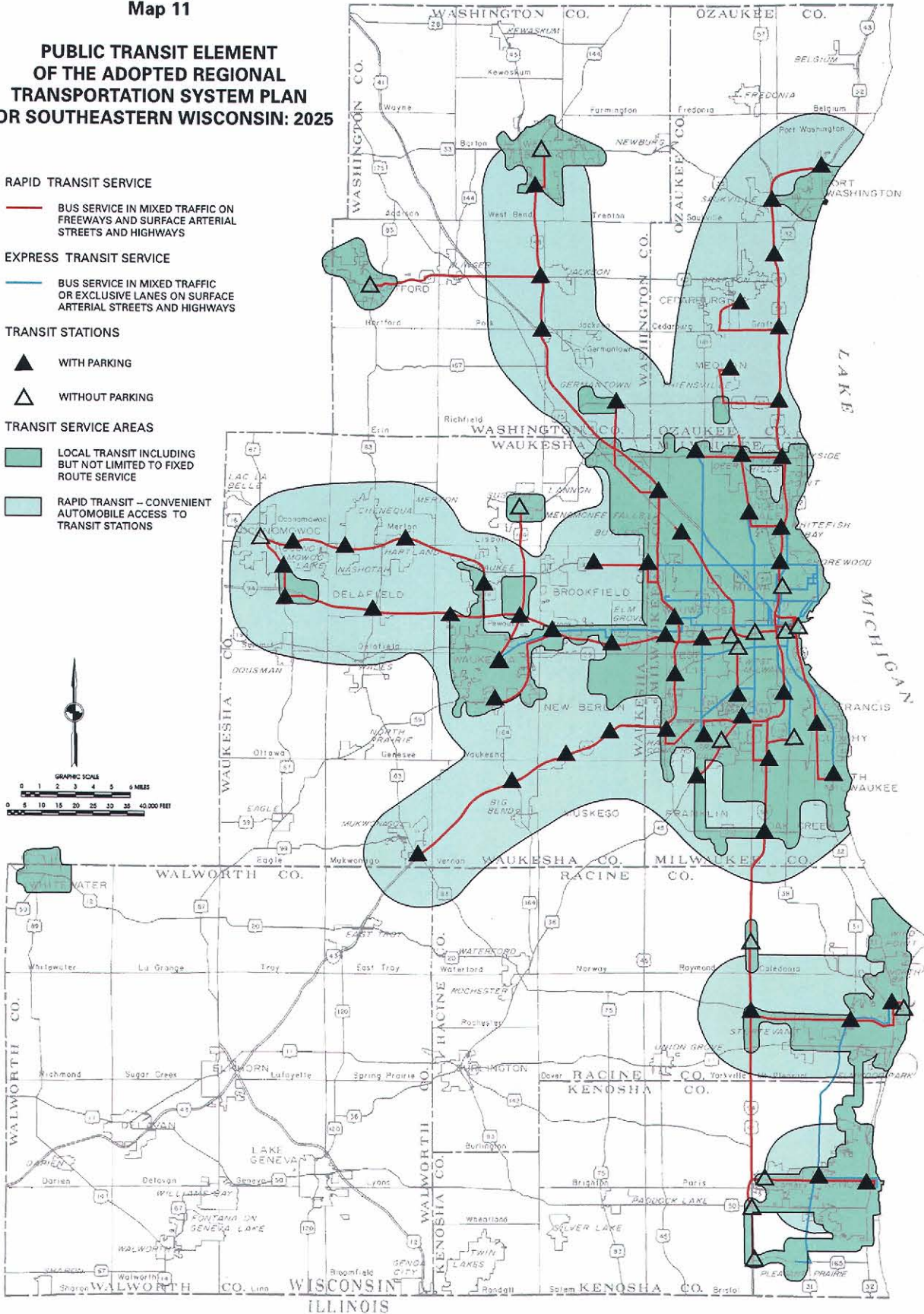
— BUS SERVICE IN MIXED TRAFFIC  
OR EXCLUSIVE LANES ON SURFACE  
ARTERIAL STREETS AND HIGHWAYS

**TRANSIT STATIONS**

- ▲ WITH PARKING
- △ WITHOUT PARKING

**TRANSIT SERVICE AREAS**

- LOCAL TRANSIT INCLUDING  
BUT NOT LIMITED TO FIXED  
ROUTE SERVICE
- RAPID TRANSIT – CONVENIENT  
AUTOMOBILE ACCESS TO  
TRANSIT STATIONS



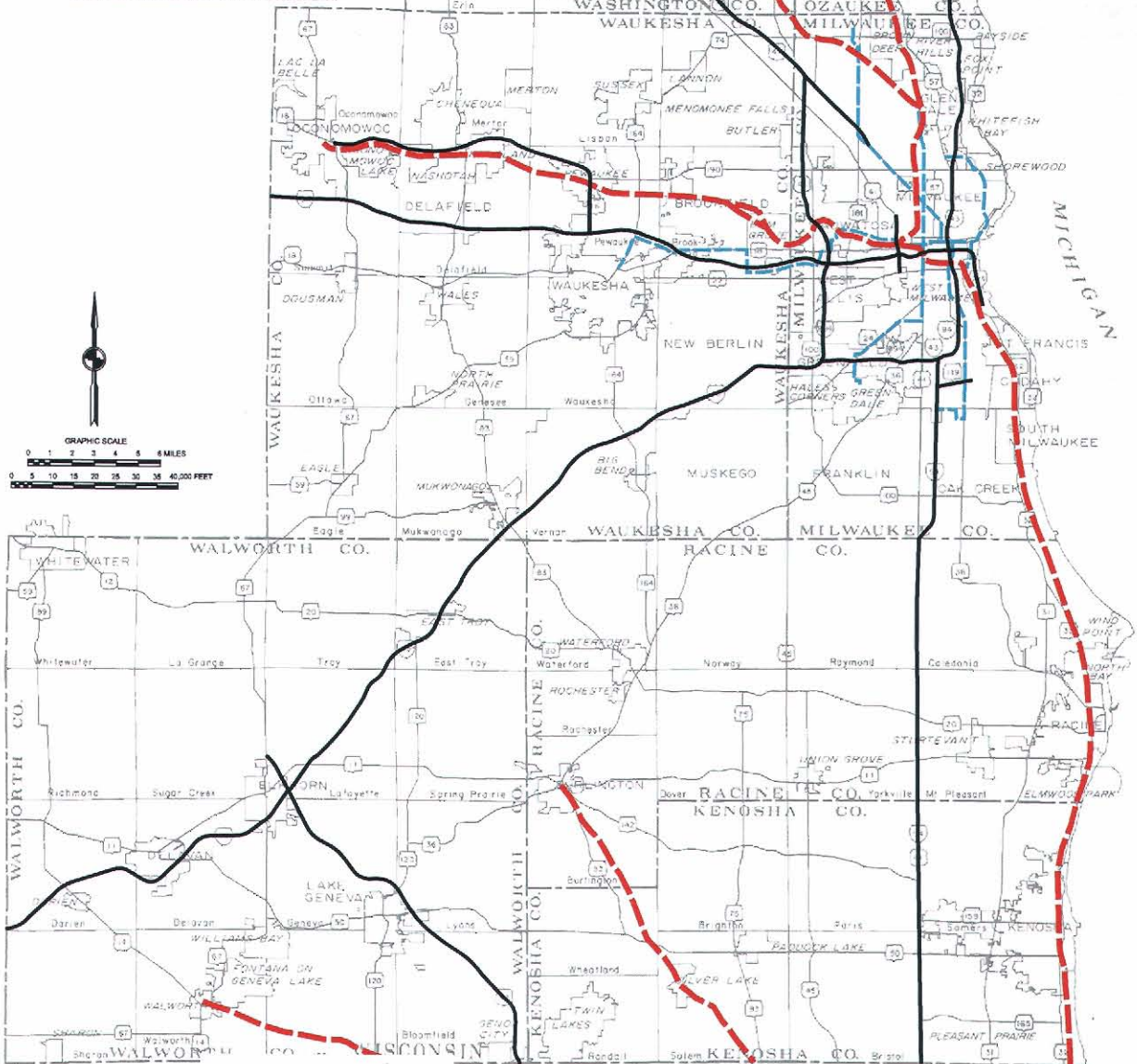


Map 12

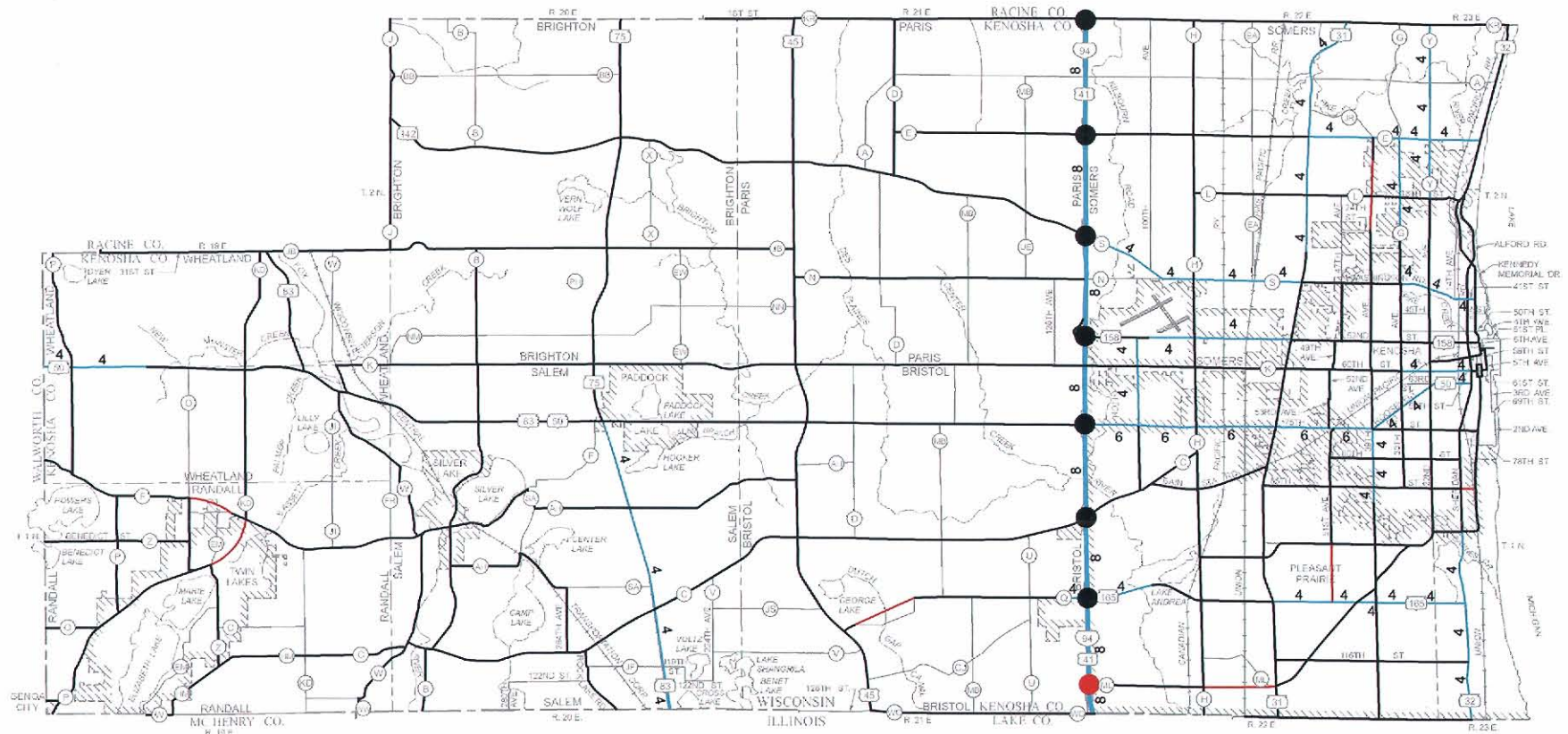
**POTENTIAL LIGHT RAIL/EXPRESS BUS  
GUIDEWAY AND COMMUTER RAIL  
FACILITIES IDENTIFIED IN YEAR 2025  
REGIONAL TRANSPORTATION SYSTEM PLAN**

- POTENTIAL LIGHT RAIL/BUS GUIDEWAY  
FACILITY — TO BE CONSIDERED IN  
CORRIDOR STUDIES
- - - POTENTIAL COMMUTER RAIL — TO BE  
CONSIDERED IN CORRIDOR STUDIES
- FREEWAY

NOTE: LIGHT RAIL/BUS GUIDEWAY FACILITY ALIGNMENTS SHOWN ON MAP ARE CONCEPTUAL. CORRIDOR STUDIES WOULD BE CONDUCTED TO DETERMINE WHETHER TO IMPLEMENT GUIDEWAYS AND TO SELECT A PREFERRED ALIGNMENT. UPON COMPLETION OF EACH CORRIDOR STUDY, THE LOCAL UNITS OF GOVERNMENT CONCERNED—SPECIFICALLY, THE TRANSIT OPERATOR CONCERNED—THE WISCONSIN DEPARTMENT OF TRANSPORTATION AND THE REGIONAL PLANNING COMMISSION WOULD HAVE TO AFFIRM THE STUDY FINDINGS, DETERMINE TO PURSUE GUIDEWAY IMPLEMENTATION, AND, AS NECESSARY, AMEND THE REGIONAL TRANSPORTATION SYSTEM PLAN.



## ARTERIAL STREET AND HIGHWAY SYSTEM PLAN ELEMENT IN KENOSHA COUNTY: 2025\*



## 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)

## FREEWAY INTERCHANGE

- NEW
- EXISTING

## THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. SUFFICIENT RIGHT-OF-WAY SHOULD BE RESERVED ALONG STH 158 FROM IH 94 TO STH 31 TO ACCOMMODATE ITS ULTIMATE IMPROVEMENT TO SIX TRAVEL LANES.
2. SUFFICIENT RIGHT-OF-WAY SHOULD BE RESERVED ALONG CTH K FROM IH 94 TO STH 31 TO ACCOMMODATE ITS ULTIMATE IMPROVEMENT TO SIX TRAVEL LANES.
3. AS IMPROVEMENTS ARE MADE TO IH 94, THE FRONTAGE ROADS ALONG IH 94, AND THE HIGHWAY FACILITIES WHICH INTERCHANGE WITH OR CROSS IH 94, THE ULTIMATE IMPROVEMENT OF IH 94 TO EIGHT TRAVEL LANES SHOULD BE TAKEN INTO CONSIDERATION.
4. AS IMPROVEMENTS ARE MADE TO IH 94 AND THE FRONTAGE ROADS ALONG IH 94 IN THE VICINITY OF CTH K, THE ULTIMATE PROVISION OF AN INTERCHANGE WITH CTH K SHOULD BE TAKEN INTO CONSIDERATION.
5. AS URBAN DEVELOPMENT PROCEEDS ON LANDS ABUTTING CTH KR BETWEEN IH 94 AND STH 32, SUFFICIENT RIGHT-OF-WAY SHOULD BE RESERVED FOR THE ULTIMATE IMPROVEMENT OF CTH KR TO FOUR TRAVEL LANES.

\* Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible state, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible state, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.



Map 13 (continued)

**ARTERIAL STREET AND HIGHWAY  
SYSTEM PLAN ELEMENT IN  
MILWAUKEE COUNTY: 2025\***

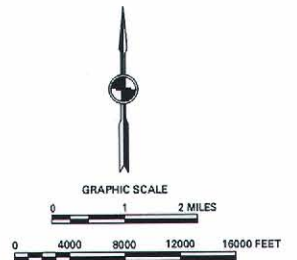
**ARTERIAL STREET OR HIGHWAY**

- 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)

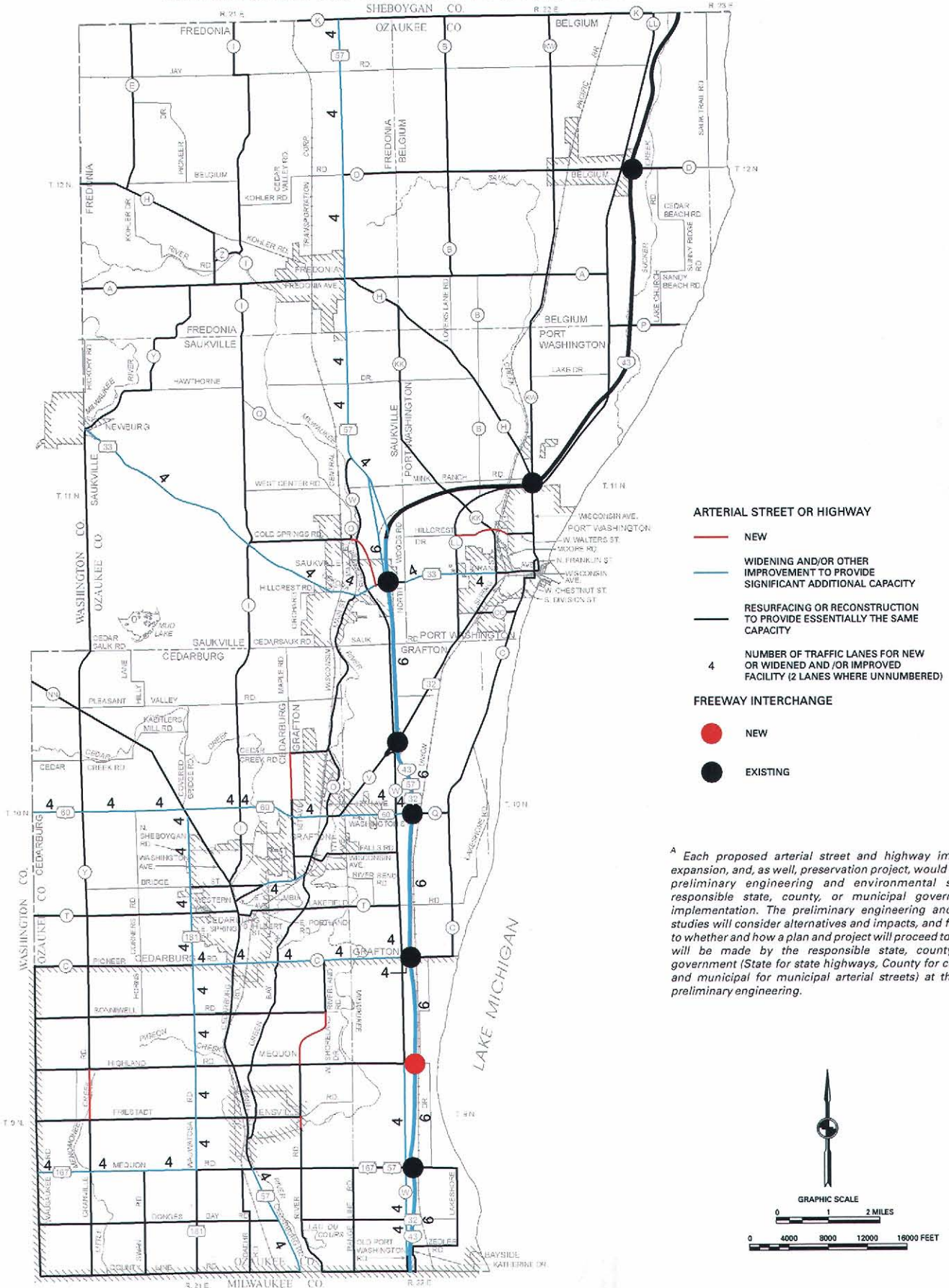
**FREEWAY INTERCHANGE**

- EXISTING

\* Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible state, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible state, county, or municipal government (State for state highways, County for county highways, and municipal for municipal streets) at the conclusion of preliminary engineering.



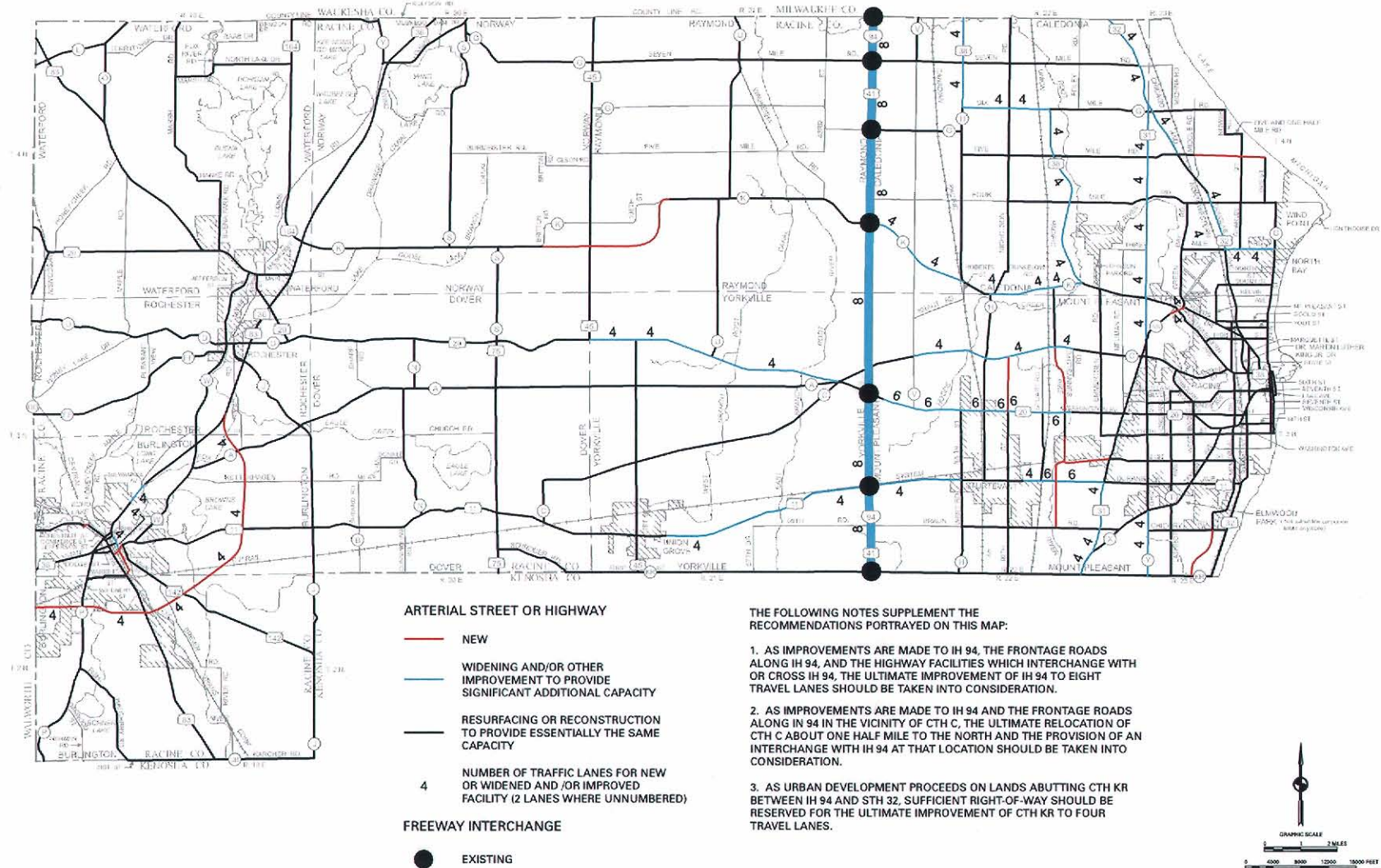
ARTERIAL STREET AND HIGHWAY SYSTEM PLAN ELEMENT IN OZAUKEE COUNTY: 2025\*





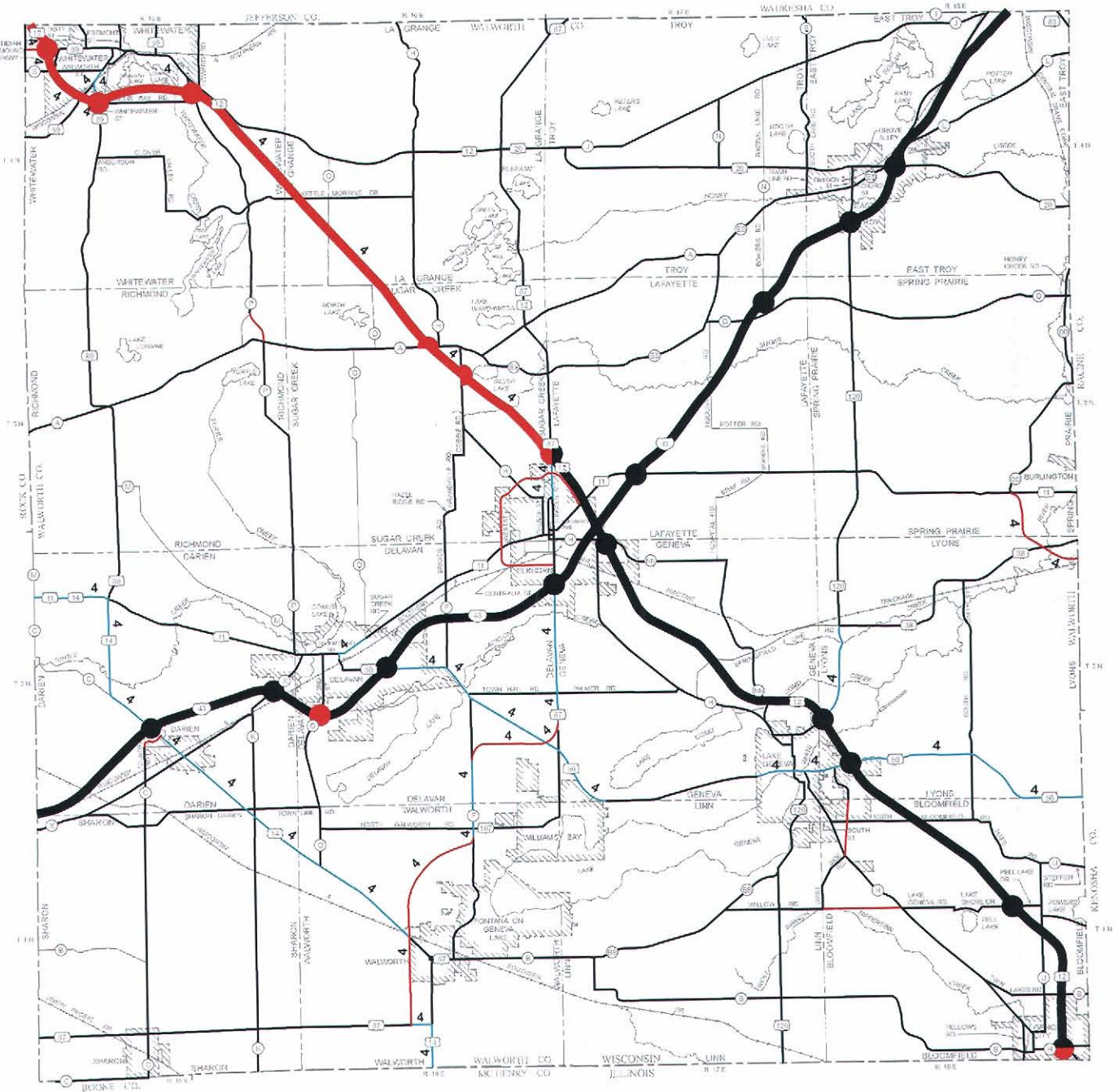
Map 13 (continued)

ARTERIAL STREET AND HIGHWAY SYSTEM PLAN ELEMENT IN RACINE COUNTY: 2025\*



\* Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible state, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible state, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

ARTERIAL STREET AND HIGHWAY SYSTEM PLAN ELEMENT IN WALWORTH COUNTY: 2025\*



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)

FREWAY INTERCHANGE

- NEW INTERCHANGE
- ◐ NEW HALF INTERCHANGE
- EXISTING

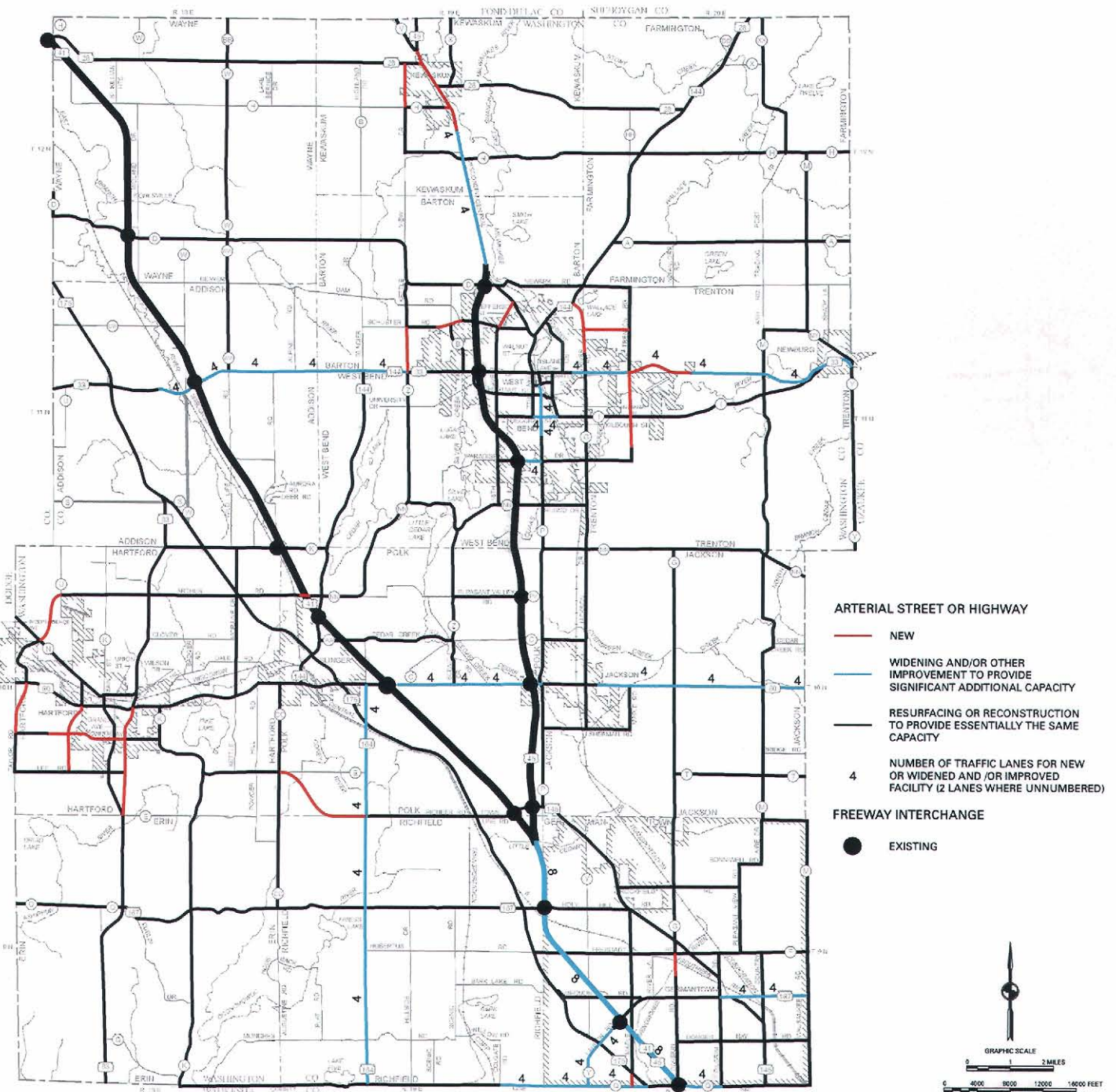


\* Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible state, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible state, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.



# Map 13 (continued)

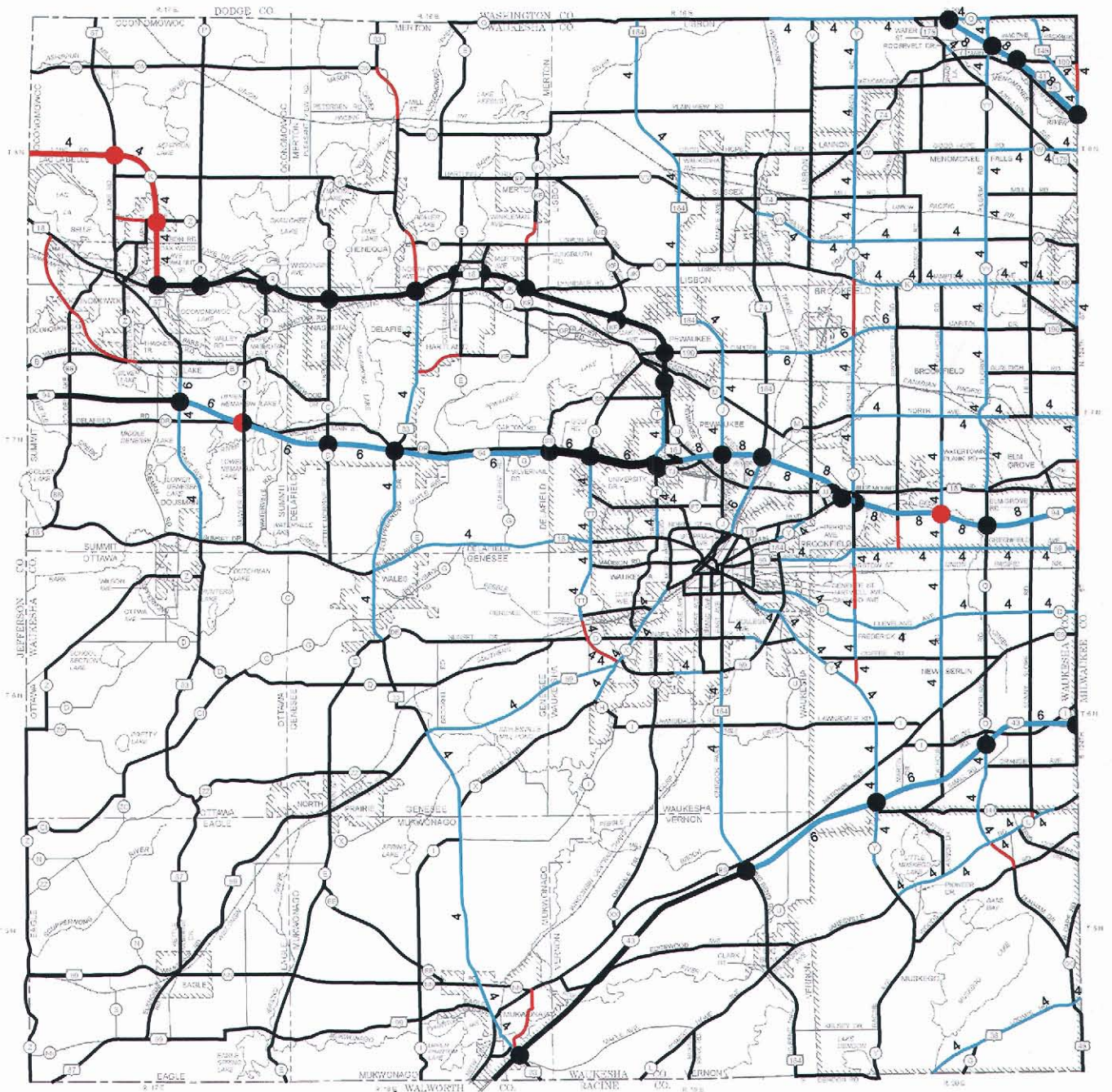
## ARTERIAL STREET AND HIGHWAY SYSTEM PLAN ELEMENT IN WASHINGTON COUNTY: 2025\*



\* Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible state, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible state, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.



ARTERIAL STREET AND HIGHWAY SYSTEM PLAN ELEMENT IN WAUKESHA COUNTY: 2025\*

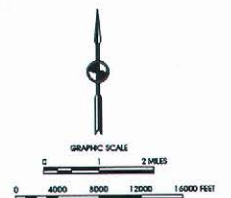


ARTERIAL STREET OR HIGHWAY

- 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)

FREWAY INTERCHANGE

- NEW INTERCHANGE
- ◐ NEW HALF INTERCHANGE
- EXISTING



\* Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible state, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible state, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

the Region. Such internal travel patterns, therefore, represent one of the primary determinants of the need for, and location and capacity of, future transportation facilities and services within the Region. While total trip making has increased by about 63 percent since 1963, the resident population has increased only about 15 percent. Since 1963, however, the number of households and the number of jobs Regionwide has increased by about 58 percent and 71 percent, respectively. These findings indicate that increases in trip making within the Region are more closely related to increases in households and jobs than to increases in resident population.

### *Vehicle Use*

Approximately 5.5 million vehicle-trips were made within the Region on an average weekday in 2001, representing increases of about 2.9 million vehicle-trips, or 113 percent since 1963; about 2.1 million vehicle trips, or about 61 percent since 1972; and about 0.6 million vehicle-trips, or about 12 percent since 1991. Of these 5.5 million vehicle-trips, about 5.1 million, or 94 percent, were made internal to the Region. Vehicle-trips made within the Region have increased faster than person-trips. Between 1991 and 2001, the percent increase in vehicle-trips was 12 percent compared to an increase of 10 percent in person trips. Between 1972 and 1991, vehicle-trips increased by 44 percent compared with 20 percent for person-trips. In 1963, 1972, 1991, and in 2001, approximately 89 percent of the total internal vehicle trips were made by personal vehicles, and the remaining 11 percent were made by commercial vehicles.

### *Daily Travel Patterns*

The hourly distributional patterns of internal person-trips observed in 1963, 1972, 1991, and 2001 indicated that, despite substantial increases in total trip volumes, the regular ebb and flow of travel remained very similar both in the proportion of trips by trip purpose and in the proportion and times of peak periods. Approximately 33 percent of daily travel within the Region occurred in the two morning and the two afternoon peak travel hours. Of the peak hour trips, trips to and from work comprised 47 percent in 1963, 44 percent in 1972, 41 percent in 1991, and 39 percent in 2001. These findings indicate that one of the primary transportation problems within the Region continues to be meeting the peak demand of trips to and from work.

### *Mode of Internal Person-Trips*

The proportion of total travel made by personal vehicles—automobiles and personal use truck—within the Region has remained relatively stable since 1991, increasing only slightly since 1963. Personal vehicle trips accounted for 89 percent of all internal trips in 1991 and 2001, about 84 percent in 1972 and 79 percent in 1963. Personal vehicle travel is, however, becoming increasingly no passenger, drive alone travel. Drive alone trips increased from 2.9 million in 1972, or 70 percent of personal vehicle travel to about 4.5 million, or 80 percent of personal vehicle travel in 2001, an increase of 55 percent since 1972.

The trend to drive alone is reflected in the decreasing average vehicle occupancy rate, that is, the number of vehicle occupants per vehicle-trip, which declined from 1.42 persons in 1963 to 1.39 persons in 1972 to 1.22 persons in 1991 to 1.20 persons in 2001. Average weekday public transit ridership has also shown successive decreases over the benchmark years; 320,500 revenue passenger trips in 1963, 184,200 in 1972, 172,200 in 1991, and 142,200 in 2001. The proportion of total trips made by transit has also declined over time from 8 percent in 1963 to 4 percent in 1972 to 3 percent in 1991 and to 2 percent in 2001. The decline in transit use occurred despite a 60 percent increase in total internal person-trips on an average weekday between 1963 and 2001. In 2001, bicycle and pedestrian trips represented less than 5 percent of the total internal person-trips compared to 9 percent in 1963 and 1972, and 4 percent in 1991.

### *Trip Purpose*

Trips having either an origin or destination at home comprised about 80 percent of the total internal person-trips in each of the survey benchmark years emphasizing the importance of the home as a trip generator. Thus, future requirements for transportation facilities and services within the Region will largely be determined by the amount and location of future residential development.

In all four survey years, home-based work trips comprised slightly less than 25 percent of total internal person-trips. Home-based shopping trips comprised about 15 percent of the total internal person-trips in 1963, 1972, and 1991, but slightly less than 13 percent in 2001. Other home-based trips comprised about 33

percent of total internal person-trips in each survey year, and school trips ranged from about 9 percent in 1963 and 1972 to about 11 percent in 1991 and 2001. The distribution of trips among trip purposes was found to be quite similar in each of the four survey years. This stability demonstrates that travel is orderly and regular over time.

### **Review, Update, and Extension to the Year 2035 of the Current Regional Transportation System Plan**

The Commission staff initiated the review, update, and extension to the year 2035 of the current regional transportation plan by reviewing and revising the public involvement process as it pertains to both the regional transportation plan and other Commission transportation planning and programming efforts. The revised public involvement process is documented in a Commission Staff Memorandum entitled, *Public Involvement Process for Transportation Planning Conducted by the Southeastern Wisconsin Regional Planning Commission*.

Extensive inventories of existing transportation system facilities and services and operating conditions were completed or are underway. An assessment of progress toward implementation of the currently adopted plan indicates that about 16 percent of the planned increase in off-street bicycle facilities has been completed; about 15 percent of the planned increase in transit service has been implemented; and about 17 percent of the planned highway widening and expansion has been implemented.

Analyses and evaluation of current operating conditions were undertaken. Vehicle miles of travel on the Region's arterial street and highway system during an average weekday increased from about 13.1 million in 1963 to about 20.1 million in 1972, about 33.1 million, and about 40.0 million in 2001, or about 205 percent.

About 37 percent of all arterial street and highway system travel was on the Region's freeway system in 2001. The miles of arterials carrying traffic volumes exceeding design capacity and experiencing traffic congestion declined from 217 miles in 1963 to 160 miles in 1972, even though traffic grew during that period by over 50 percent. The decline in traffic congestion may be attributed to the completion of the freeway system during that period. Between 1972 and 1991, the miles of arterials carrying traffic volumes exceeding their design capacity and experiencing traffic

congestion is estimated to have increased from 160 miles to 273 miles, as traffic grew during that period by nearly 65 percent, as Regional employment and households increased by about 30 percent, and vehicle occupancy and carpooling significantly declined. The miles of arterials carrying traffic volumes exceeding their design capacity and experiencing traffic congestion is estimated to have increased modestly from 273 miles in 1991 to 290 miles in 2001. During that period, traffic is estimated to have increased by about 21 percent. The modest increase in traffic congestion from 1991 to 2001 may be attributed to the implementation of an extensive number of significant surface arterial street and highway widening and new construction projects between 1991 and 2001. The estimated modest increase in congestion between 1991 and 2001 is not uniform systemwide, as for example, the extent and severity of congestion on the Milwaukee area freeway system is estimated to have substantially increased between 1991 and 2001 from 46 miles to 64 miles of congested facilities.

Public transit vehicle miles of service is a measure of the extent of transit routes, and the amount of service provided on those routes. Between 1991 and 2001 the average weekday vehicle-miles of fixed route transit service provided within the Region increased significantly, from 63,300 to 79,600, or by about 26 percent. The 79,600 vehicle miles of transit service provided within the Region on an average weekday in 2001 was also greater than the 64,000 provided in 1972, or about 24 percent, but about 6 percent less than the 84,900 provided in 1963. Since 2001, the extent of fixed-route service provided within the Region has been reduced to an estimated 71,900 vehicle miles of service on an average weekday in 2003, due to an economic downturn following September 11, 2001, reduced Federal funding, and State and local budget problems.

Public transit ridership within the Region on fixed-route services has declined significantly over time. In 1963, over 320,500 transit trips<sup>2</sup> were made on an average weekday on fixed-route public transit services within the Region, representing about 8 percent of average weekday regional travel. In 1972, about 184,200 transit trips were made on an average weekday on fixed-route

---

<sup>2</sup>The transit trips discussed in this section approximate the number of one-way trips made on the transit system between specific origins and destinations. Passengers are counted only once for each origin and destination, and transfers between routes are not counted as they are a continuation of a single trip.



services, representing about 4 percent of average weekday regional travel; in 1991, about 172,200 transit trips were made on an average weekday on fixed-route services, representing about 3 percent of average weekday regional travel. In 2001, about 142,200 transit trips were made on an average weekday on fixed-route services, about 17 percent less than in 1991, 23 percent less than in 1972, and 44 percent less than in 1963. The 2001 transit trips represented about 2 percent of average weekday regional travel.

Preparation of draft chapters for the planning report documenting the review and update of the current regional transportation plan and its extension to the year 2035 transportation plan was initiated. Drafts of Chapter I, *Introduction*, Chapter II, *Review of the Current Adopted Regional Transportation Plan*; Chapter III, *Inventory of Transportation Facilities and Services*; Chapter IV, *Travel Habits and Patterns*, Chapter V, *Anticipated Regional Growth and Change*; and, Chapter VII, *Objectives, Principles, and Standards* were completed.

#### **Preparation of New Jurisdictional Highway System Plan for Waukesha County Initiated**

Although preparation of a new, third-generation jurisdictional highway system plan for Waukesha County was initiated in 2003, it was determined to coordinate this work effort with the preparation of the new year 2035 regional transportation system plan. Thus, rather than preparing a new jurisdictional highway system plan based on the 2020 land use plan which would have been out of date by mid-2005, the new jurisdictional highway plan will respond to planned changes in land use within the County to the year 2035 along with the traffic patterns attendant to the new 2035 regional land use plan. Each of the six specific issues for analysis and evaluation previously identified by the Commission's 38-member Waukesha County Jurisdictional Highway Planning Committee will be explicitly considered along with any other issues which may arise as a result of the new regional land use plan and the traffic patterns attendant to it. In 2005, the preparation of updated jurisdictional highway system plans for the other six counties of the Region will be initiated.

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

The Commission staff began work on the update to the regional bicycle and pedestrian facilities plan element as

part of the update to the regional transportation system plan for Southeastern Wisconsin, moving the current design year of 2020 out to the year 2035.

The current year 2020 regional bicycle and pedestrian system plan element was completed and adopted in December 2001. The plan is set forth in a SEWRPC document titled *Amendment to the Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2020*, December 2001.

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.

The regional bicycle and pedestrian plan recommends the construction of 575 miles of off-street bicycle and pedestrian facilities, as shown on Map 14. The plan further recommends that bicycle accommodations should be considered and implemented, where feasible, along the entire 3,300-mile surface arterial street and highway system as it is resurfaced and reconstructed, segment by segment, either through the provision of bicycle lanes, widened outside travel lanes, widened shoulders, or separate bicycle paths.

#### **Air Transportation Planning**

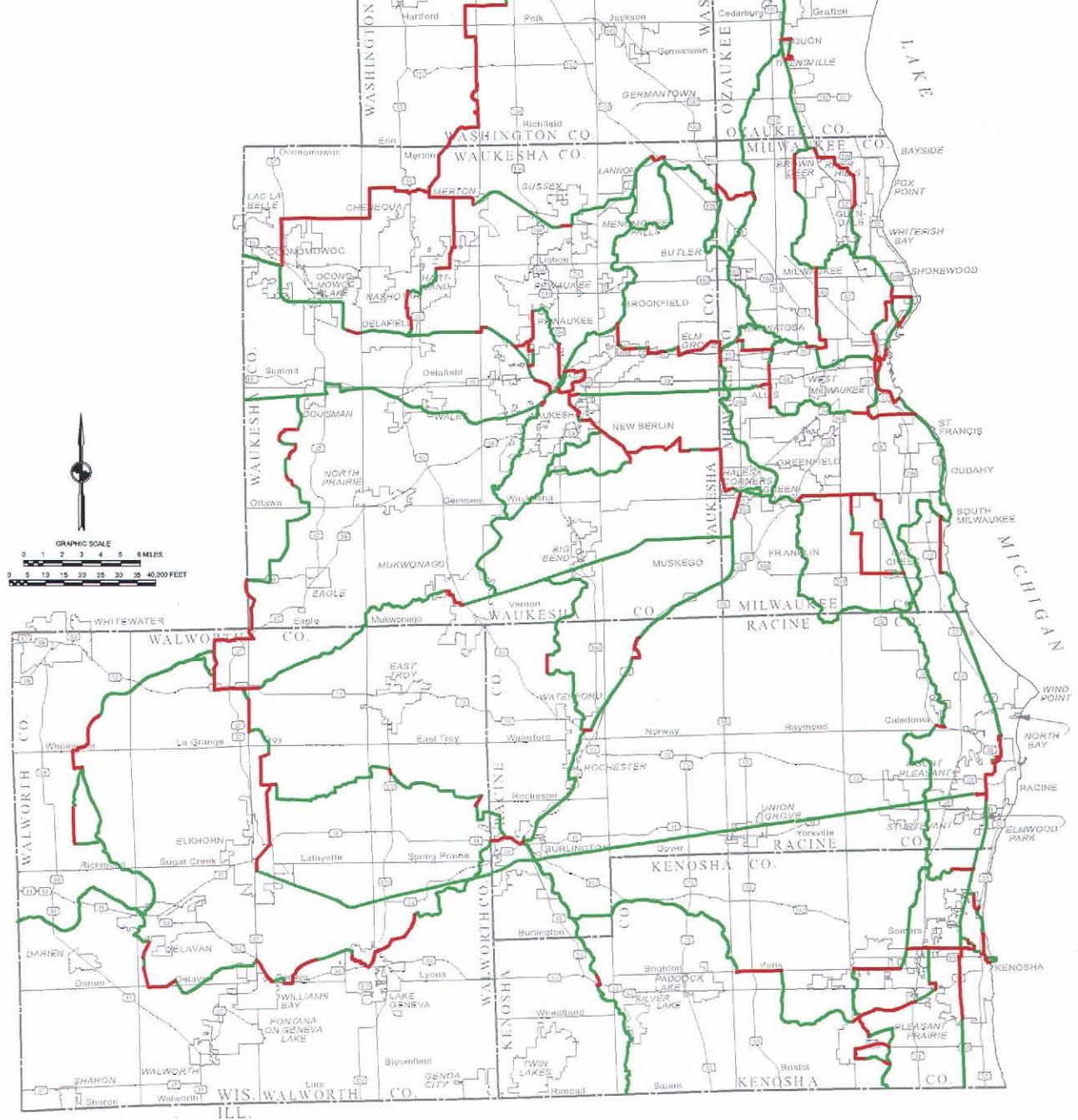
The Commission monitors aviation activities within and surrounding the Region and provides technical assistance for airport master planning activities that implement the regional airport system plan. The adopted regional airport system plan is described in SEWRPC Planning Report No. 38 (2nd Edition), *A Regional Airport System Plan for Southeastern Wisconsin: 2010*, November 1996.

General trends in the level of aviation activity within Southeastern Wisconsin are indicated by the numbers of aircraft operations at, and of passengers using, Milwaukee County's General Mitchell International Airport, as well as by the number of aircraft based within the Region. In 2004, total aircraft operations at Mitchell International totaled about 215,200, representing about a 2 percent increase from 2003. The 2004 total is about 4 percent below the 224,500 operations forecast to occur at Mitchell International during that year under the adopted regional airport system plan.

Map 14

**RECOMMENDED OFF-STREET  
BICYCLE AND PEDESTRIAN WAY  
SYSTEM PLAN FOR SOUTHEASTERN  
WISCONSIN: 2020**

- OFF-STREET BICYCLE WAY  
IN UTILITY OR NATURAL  
RESOURCE CORRIDOR
- STREET CONNECTION TO  
OFF-STREET BICYCLE WAY SYSTEM



From 2003 to 2004, the number of air carrier enplaning and deplaning passengers at Mitchell International increased by about 519,100, to about 6,661,100 passengers, or about 8 percent above the 2003 level of about 6,142,100 passengers. The 2004 level was about 319,000, or about 5 percent, less than the 6,980,000 passengers forecast for that year under the adopted regional airport system plan. This difference can be attributed to recent sluggish economic conditions as well as the reduction in commercial air travel following the September 11, 2001 terrorist attack.

General aviation activity can be measured in terms of the total number of general aviation aircraft operations—that is, takeoffs and landings—occurring on an annual basis at selected public-use airports in southeastern Wisconsin as reported by those airports. At all of the public airports other than General Mitchell International Airport, general aviation accounts for almost all activity. At Waukesha County-Crites Field, there were about 89,800 total operations during 2004, representing about a three percent decrease from the 92,200 total operations in 2003. At Kenosha Regional Airport, there were about 81,600 total operations during 2004, representing about a one percent increase from the 80,900 total operations in 2003. At Lawrence J. Timmerman Airport, there were about 68,800 total operations during 2004, representing about a five percent decrease from the 72,500 total operations in 2003. At General Mitchell International Airport, where general aviation accounts for only a small portion of all activity, there were about 24,000 general aviation operations reported for 2004, representing about an 18 percent decrease from the 29,300 general aviation operations reported for 2003.

#### *Review and Update of Regional Airport System Forecasts*

During 2004, work was completed on a review and update to the year 2030 of the regional airport system aviation activity forecasts for southeastern Wisconsin. The most recent such forecasts were previously prepared for the year 2010 in 1996 as part of a review and update of the regional airport system plan. This review and update was requested by the Wisconsin Department of Transportation, Bureau of Aeronautics as part of an aviation forecast update effort for the entire State of Wisconsin. Forecasts were prepared for General Mitchell International Airport and for the ten general aviation airports in the regional airport system

plan. Forecasts included commercial aviation enplaning passengers and aircraft operations and general aviation based aircraft and operations. A final version of the new forecasts was published as SEWRPC Memorandum Report No. 133, *Review and Update of Regional Airport System Plan Forecasts*, and final copies of the printed report, as well as an electronic version of the report were transmitted to the Bureau.

#### **Rail Transportation Planning**

The Regional Planning Commission monitors the status of rail service within the Southeastern Wisconsin Region, proposals for service changes, and related issues, and provides technical assistance to local communities as requested. As of December 31, 2004, rail freight service was being provided within Southeastern Wisconsin over a total of about 480 miles of active main line, as shown on Map 15.

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 north-eastern Illinois.

#### *Kenosha-Racine-Milwaukee Corridor Transit Study*

During 2004, the Commission staff worked on technical, sponsorship, and organizational issues intended to move the Kenosha-Racine-Milwaukee commuter rail extension project from the alternatives analysis phase to the next phase of project development. This work was conducted on behalf of, and for, the Counties of Kenosha, Milwaukee, and Racine, the Cities of Kenosha, Milwaukee, and Racine, and the Wisconsin Department of Transportation. The alternatives analysis study phase of work was completed in 2003 and recommended that the commuter rail alternative with a medium level of service be implemented.

The Wisconsin Department of Transportation requested that a review of the estimated capital and operating costs for the proposed Kenosha-Racine-Milwaukee commuter rail extension be undertaken. A staff memorandum entitled *Review of Estimated*



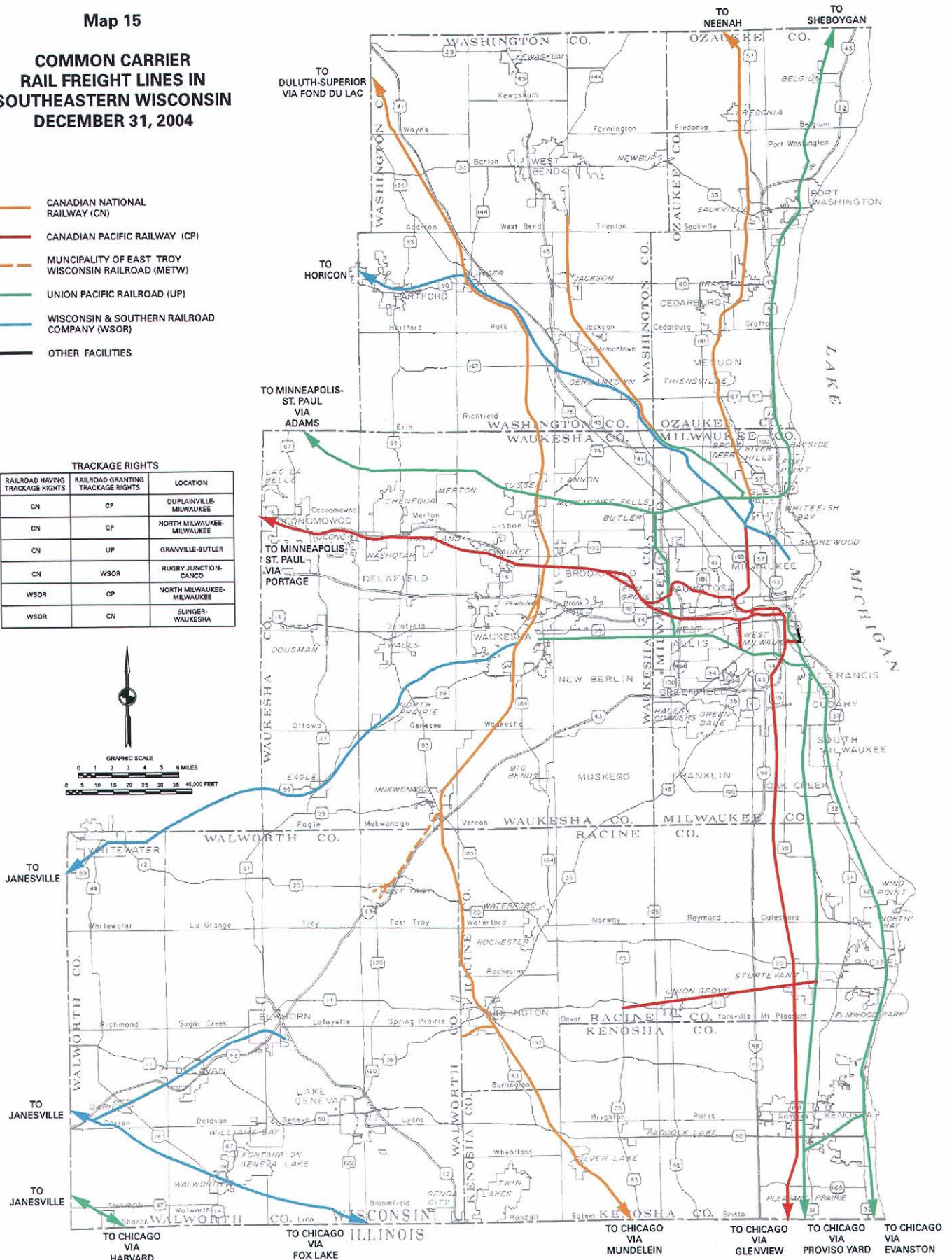
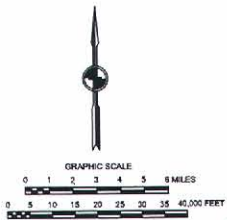
Map 15

**COMMON CARRIER  
RAIL FREIGHT LINES IN  
SOUTHEASTERN WISCONSIN  
DECEMBER 31, 2004**

- CANADIAN NATIONAL RAILWAY (CN)
- CANADIAN PACIFIC RAILWAY (CP)
- MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD (METW)
- UNION PACIFIC RAILROAD (UP)
- WISCONSIN & SOUTHERN RAILROAD COMPANY (WSOR)
- OTHER FACILITIES

**TRACKAGE RIGHTS**

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





*Capital and Operating Costs of Proposed Kenosha-Racine-Milwaukee Commuter Rail Extension* was completed by the Commission staff which documented the review of, and reaffirmed, the capital and operating costs. The memorandum also included an assessment of the possible impacts of the proposed commuter rail extension on the capacity and operations of the existing Chicago-Kenosha Metra commuter rail line as such impacts could affect capital and operating costs. The memorandum was transmitted to the Wisconsin Department of Transportation.

The Commission staff also proceeded with numerous other related efforts including:

- Worked with the study consultant to finish various study deliverables and other materials, completing the study consultant contract.
- Responded to Federal Transit Administration (FTA) requests for materials as well as to comments and questions regarding the findings and conclusions of the alternatives analysis study.
- Prepared materials outlining a structure and process for local sponsorship and funding of the next phase of project development and worked to determine what work will be permissible by FTA under the next phase.
- Prepared grant application materials for both the Federal and State shares of funding for this next phase of work on behalf of the local involved units of government. These materials were submitted and both the Federal and State grant applications were approved.
- Held discussions and briefings pertaining to advancing this project as well as sponsorship and funding matters with officials and staff from the involved local governments and the Department.
- Organized and prepared materials for major meetings of chief public officials to discuss, evaluate, and come to agreement regarding these issues.
- Continued to provide information and status reports to local officials, businesses, news media, consulting firms, and other interested individuals and groups.

At the end of this year, the Commission staff continued to assist local governments and officials and the Wisconsin Department of Transportation with cooperatively addressing the steps necessary to sponsor, fund, and begin the next step of project development.

(This page intentionally left blank)

# 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 2004 in four identifiable program areas: water quality management planning; water supply planning; watershed, floodland, and stormwater management planning; and coastal management planning.

## WATER QUALITY MANAGEMENT PLANNING

During 2004, Commission water quality management planning efforts continued to be focused primarily on activities relating to implementation and updating of the adopted regional water quality management plan. Such activities included providing assistance in the preparation of inland lake management plans; preparing local sanitary sewer service area plans; and assisting counties and other local units of government in the Region in completing nonpoint source pollution abatement system plans, and sewerage facilities plans in preparation for the construction of point source pollution abatement facilities. 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 (WDNR), for the review and approval of public sanitary sewer extensions by that Department, and 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.

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 updated 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.

During 2004, the Commission continued work on an update of the regional water quality management plan for the Kinnickinnic River, Menomonee River, Milwaukee River, Root River, and Oak Creek watersheds, the Milwaukee Harbor estuary, and the adjacent nearshore Lake Michigan area. As set forth on

Map 16, the study area encompasses 1,127 square miles, and it contains all or part of 88 local municipalities and nine counties, including Dodge, Fond du Lac, and Sheboygan Counties which are outside the Southeastern Wisconsin Region. This effort is being coordinated with a parallel sewerage facilities planning program being carried out by the Milwaukee Metropolitan Sewerage District (MMSD) which has been designed to utilize the watershed approach consistent with evolving U.S. Environmental Protection Agency (USEPA) policies. The MMSD planning area is shown on Map 16. The approach of developing the regional water quality management plan in coordination with the MMSD facilities plan represents good public planning and administration, as well as being consistent with the requirements of Section 208 of the Federal Clean Water Act.

The approach to carrying out the regional water quality management plan update and the MMSD facilities planning program in a coordinated manner was developed cooperatively by the WDNR, the MMSD, and SEWRPC. The regional water quality management plan update will result in the reevaluation and, as necessary, revision of the three major elements comprising the original plan—the land use element, the point source pollution abatement element, and the nonpoint source pollution abatement element. In addition, a groundwater element will be added based largely upon companion work programs. Consistent with the MMSD commitments for the completion of a new facilities plan, the plan update will be largely completed in approximately 30 months, ending by the middle of 2006, with selected elements being completed earlier as may be required by the MMSD facilities planning effort schedule. Plan documentation, public involvement, and continuing support for the MMSD facilities planning will be carried out in 2006 and early 2007.

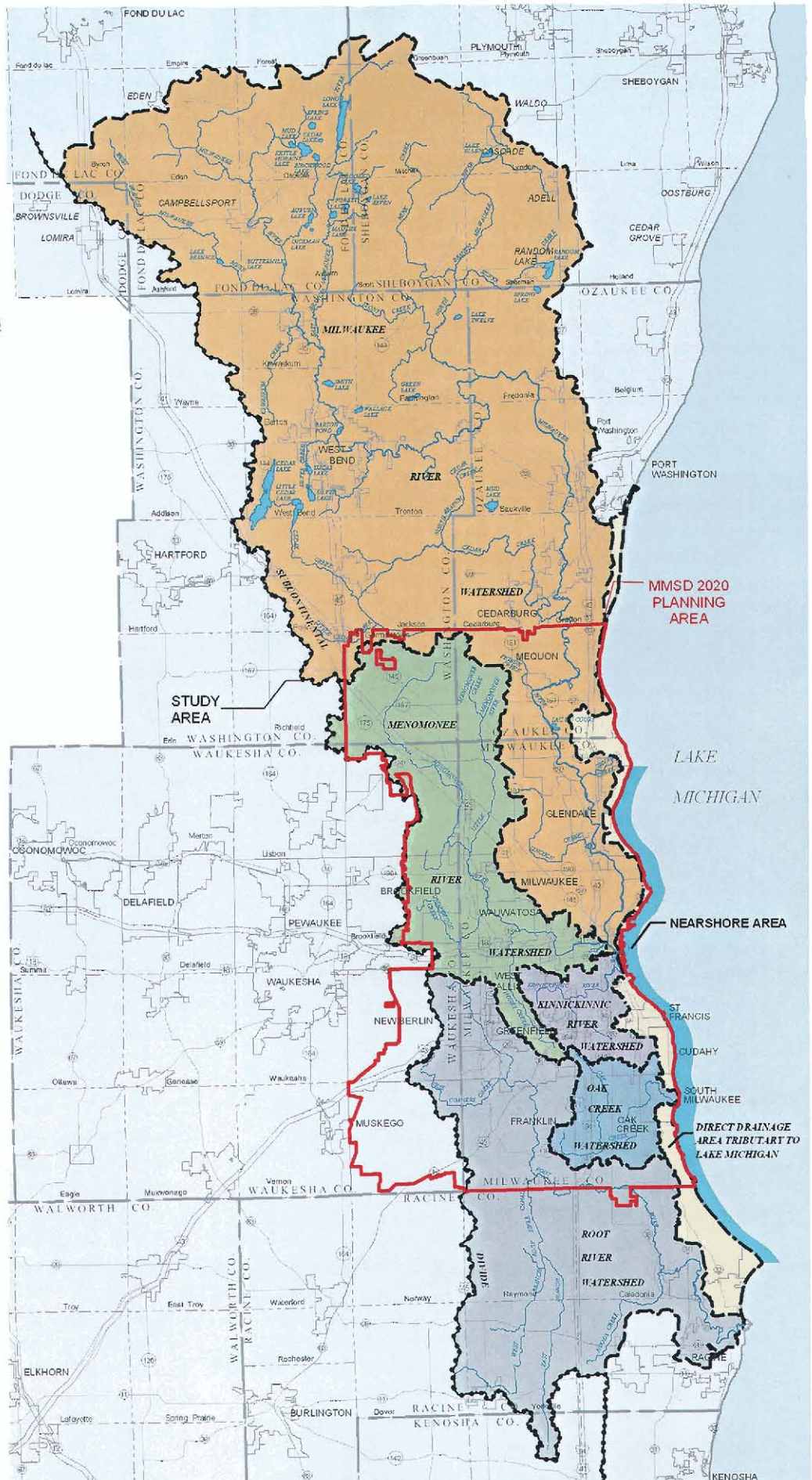
### **Nonpoint Source Pollution Abatement Planning**

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

Map 16

**REGIONAL WATER  
QUALITY MANAGEMENT  
PLAN UPDATE/MMSD 2020  
FACILITIES PLAN STUDY AREA**

<u>WATERSHED</u>	<u>AREA (SQUARE MILES)</u>
KINNICKINNIC RIVER	24.7
MENOMONEE RIVER	135.8
MILWAUKEE RIVER	700.0
OAK CREEK	28.2
ROOT RIVER	197.6
LAKE MICHIGAN DIRECT DRAINAGE AREA	40.7
<b>TOTAL</b>	<b>1,127.0</b>
 NUMBER OF COUNTIES	 9
NUMBER OF LOCAL MUNICIPALITIES	88
 MMSD PLANNING AREA	 
NUMBER OF COUNTIES	5
NUMBER OF LOCAL MUNICIPALITIES	29
<b>TOTAL AREA (SQUARE MILES)</b>	<b>411</b>



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 programs administered by the WDNR and the Wisconsin Department of Agriculture, Trade and Consumer Protection, which provide cost-sharing funds for individual projects or land management practices to local governments and private landowners; the stormwater discharge permit system administered by the WDNR; and local-level stormwater management and land and water resource management planning programs. During 2004, 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 measures incorporating nonpoint source pollution control measures attendant to site development plans for 18 development projects, eight in the Town of Salem, four in the Town of Somers, two each in the Towns of Paris and Wheatland, and one each in the Towns of Bristol and Randall.
- The Commission staff continued to provide overall coordination for the preparation of a joint State of Wisconsin stormwater discharge permit application involving certain Upper Fox River watershed communities, including the Cities of Pewaukee and Waukesha; the Villages of Pewaukee and Sussex; and the Towns of Brookfield, Delafield, Lisbon, and Waukesha. During the year, the permits for each community were issued by the WDNR.

### **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 and for selected smaller lakes in the Region.

The Commission and the WDNR work with local lake community organizations, including lake management associations and public inland lake protection and rehabilitation districts, to complete the preparation of such lake management plans. These lake management plans are documented in Commission community assistance planning reports. These reports describe the existing chemical, biological, and physical water quality conditions in 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 2004, 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, Keesus, Lac La Belle, Little Muskego, Nagawicka, North, Oconomowoc, Okauchee, and Pewaukee, all in Waukesha County. Of these, the comprehensive lake management plans for Friess Lake in Washington County, and for Okauchee and Pewaukee Lakes in Waukesha County have been updated and refined, and published as second editions of these comprehensive plans, prior to 2004.

In addition, prior to 2004, a number of other, more narrowly focused plans and related reports were prepared. These plans and reports are published as Commission memorandum reports. These plans and reports include 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 and recreational use management plan for Booth Lake in Walworth County; aquatic plant management plans for Crooked Lake, Fowler Lake, and the Phantom Lakes in Waukesha County; an aquatic plant inventory for Pine Lake in Waukesha County; lake protection plans for Benedict and Tombeau Lakes in Walworth and Kenosha Counties and for Middle Genesee Lake, Silver Lake, Pretty Lake, and the Kelly Lakes in Waukesha County; a public boating access and waterway protection plan for Big Muskego Lake in Waukesha County; watershed inventory reports for Nagawicka and Upper Nemahbin



Lakes in Waukesha County; lake protection and recreational use plans for Silver Lake in Washington County and Hunters Lake in Waukesha County; a lake protection and stormwater management plan for Big Cedar Lake in Washington County; 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; and an environmental analysis of lands at the headwaters of Gilbert Lake and Big Cedar Lake in Washington 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. In addition, the Commission staff assisted a number of communities in the conduct of questionnaire-based lake-use surveys, including the communities on, and adjacent to, the Phantom Lakes and Eagle Spring Lake in Waukesha County, and Powers Lake in Kenosha and Walworth Counties. The results of these surveys were reported to the communities in the form of Commission letter reports.

During 2004, the Commission participated in lake-management-related meetings convened by the University of Wisconsin-Extension, the WDNR, and the Wisconsin Association of Lakes, Inc., collectively, the Wisconsin Lakes Partnership. These meetings included the quarterly statewide meetings of the Wisconsin Lakes Partnership. In addition, the Commission assisted in the development and conduct of the 2004 Lakes Convention, an annual informational and educational program of the Wisconsin Lakes Partnership, and of the 2004 South East Wisconsin Lakes Workshop, focusing on the specific concerns of lake-oriented communities within and adjacent to the Commission's planning region.

Also during 2004, the Commission continued to provide technical assistance to certain municipalities, lake management associations, lake protection and rehabilitation districts, and town sanitary districts. Technical assistance relating to specific lake management needs was provided to municipalities, lake associations and districts, and sanitary districts for George and Voltz Lakes in Kenosha County; Tichigan Lake and the Waterford Impoundment and Waubeesee Lake in Racine County; Beulah, Booth, East Troy, Geneva, Pleasant, and Potter Lakes, all in Walworth County; Little Cedar, Pike, and Silver Lakes in Washington County; and Ashippun, Eagle Spring, Fowler, Upper Kelly, Lower Nemahbin, Little Muskego, Middle and Lower Genesee, Nagawicka, Upper Nemahbin, Oconomowoc, Okauchee, Pewaukee, Upper

and Lower Phantom, Pretty, School Section, Spring, and Willow Spring Lakes, and Lac La Belle, all in Waukesha County.

Assistance in preparing applications for State grants in partial support of lake protection and management planning was also provided during 2004 for several lakes. Over the years 1992 through 2004, the Commission assisted in preparing grant applications in support of about 70 lake-management-related projects on nearly 55 of the Region's lakes.

#### *An Aquatic Plant Management Plan for Little Cedar Lake*

During 2004, the Commission completed an aquatic plant management plan for Little Cedar Lake. This plan, documented in SEWRPC Memorandum Report No. 146, *An Aquatic Plant Management Plan for Little Cedar Lake, Washington County, Wisconsin*, May 2004, was prepared by the Commission for the Little Cedar Lake Protection and Rehabilitation District. This plan documents existing and anticipated conditions and potential lake management concerns of Little Cedar Lake and presents a recommended plan for the resolution of these problems. The Little Cedar Lake aquatic plant management plan recommends only limited aquatic plant management actions, including selected manual removal and surveillance activities at this time, mainly in the cases where purple loosestrife and Eurasian water milfoil are present, with the limited use of chemical treatment only to treat such species, if needed. Additional and periodic future fishery surveys are also recommended. The recommended plan includes continuation of an ongoing program of public information and education provided to riparian residents and lake users. For example, additional options regarding household chemical usage, lawn and garden care, shoreland protection and maintenance, and recreational usage of the Lakes should be made available to riparian householders, thereby providing riparian residents with alternatives to traditional methods and activities.

#### *A Lake Protection Plan for Spring Lake and Willow Spring Lake*

During 2004, the Commission completed a lake protection plan for Spring and Willow Spring Lakes. This plan, documented in SEWRPC Memorandum Report No. 149, *A Lake Protection Plan for Spring Lake*



and Willow Spring Lake, Waukesha County, Wisconsin, August 2004, was prepared by the Commission for the Spring Brook Watershed Lake Management District and Spring Lake of Waukesha County Property Owners Association, Inc. This plan documents existing and anticipated conditions and potential lake management concerns of Spring and Willow Spring Lakes and presents a recommended plan for the resolution of these problems. The Spring and Willow Spring Lakes protection and recreational use plan recommends actions be taken to limit further human impacts on the in-lake macrophyte beds and reduce human impacts on the ecologically valuable areas adjacent to the Lake and in its watershed. The development of adequate public parking to the public recreational boating access sites serving Spring Lake is also recommended. The plan recommends limited aquatic plant management action, including selected manual removal and surveillance activities and biological control in the cases where purple loosestrife and Eurasian water milfoil are present. Limited use of chemical treatment methods should be considered only to treat nonnative invasive species, and only if needed. Consideration of public and/or private acquisition of, or acquisition of conservation easements over, lands within the primary environmental corridors to ensure the protection and preservation of these ecologically valuable areas in a manner consistent with the adopted regional natural areas and critical species habitat protection and management plan and county land and water resource management plan is also recommended. The recommended plan includes continuation of an ongoing program of public information and education providing riparian residents and lake users.

#### *An Aquatic Plant Management Plan for Little Muskego Lake*

During 2004, the Commission completed an aquatic plant management plan for Little Muskego Lake. This plan, documented in SEWRPC Memorandum Report No. 155, *An Aquatic Plant Management Plan for Little Muskego Lake, Waukesha County, Wisconsin*, January 2004, was prepared by the Commission for the Little Muskego Lake Management District. This plan is a refinement of the aquatic plant management measures recommended in the adopted comprehensive lake management plan for Little Muskego Lake, documented in SEWRPC Community Assistance Planning Report No. 222, *A Management Plan for Little Muskego Lake, Waukesha County, Wisconsin*, published in June 1996. The refined Little Muskego Lake aquatic plant

management plan recommends continued reliance on aquatic plant harvesting as the primary aquatic plant management measure employed on Little Muskego Lake. In addition to aquatic plant harvesting, the plan recommends only limited additional aquatic plant management actions, including selected manual removal and surveillance activities at this time, mainly in the cases where purple loosestrife, curly-leaf pondweed and Eurasian water milfoil are present, with the limited use of chemical treatment only to treat such species, if needed. The plan also recommends the use of demarcated boating lanes to limit motorized boating traffic through macrophyte beds that contain Eurasian water milfoil (*Myriophyllum spicatum*) and curly-leaf pondweed (*Potamogeton crispus*) to attenuate the further proliferation of this plant. Support for the conservation of lands within the primary environmental corridors to ensure the protection and preservation of ecologically valuable areas within the drainage area tributary to Little Muskego Lake is also recommended.

Finally, the recommended plan includes the continuation of an ongoing program of public information and education being provided to both riparian residents and lake users. For example, additional options regarding household chemical usage, lawn and garden care, shoreland protection and maintenance, and recreational usage of the Lake should be made available to riparian householders, thereby providing riparian residents with alternatives to traditional methods and activities. Informational programming on the control of nonnative or exotic species, such as Eurasian water milfoil and zebra mussel, designed to limit their spread and onward transmission from Little Muskego Lake to other lakes within the southeastern Wisconsin region, is also recommended.

#### *An Aquatic Plant Management Plan for Voltz Lake*

During late 2004, the Commission completed an aquatic plant management plan for Voltz Lake. This plan, documented in SEWRPC Memorandum Report No. 159, *An Aquatic Plant Management Plan for Voltz Lake, Kenosha County, Wisconsin*, January 2005, was prepared by the Commission for the Voltz Lake Management District. The Voltz Lake protection plan recommends only limited aquatic plant management actions, including selected manual removal and surveillance activities at this time, mainly in the cases where purple loosestrife and Eurasian water milfoil are present, with the limited use of chemical treatment only to treat such species, if needed. Additional and periodic future fishery surveys are also recommended. The

recommended plan includes continuation of an ongoing program of public information and education being provided to both riparian residents and lake users. Periodic, ongoing monitoring of lake water quality is recommended as part of this program.

#### *A Lake Management Plan for Okauchee Lake*

During late 2003, the Commission completed an updated comprehensive lake management plan for Okauchee Lake. The plan, documented in SEWRPC Community Assistance Planning Report No. 53, 2nd Edition, *A Lake Management Plan for Okauchee Lake, Waukesha County Wisconsin*, December 2003, was prepared by the Commission at the request of the Okauchee Lake Management District, in cooperation with the Wisconsin Department of Natural Resources. The plan is intended to serve as a guide to the making of decisions concerning the use and management of Okauchee Lake. For the purposes of this planning program, Okauchee Lake was considered to consist of a single large main basin surrounded by a number of embayments, some of which, Tierney Lake, Upper Oconomowoc Lake, and Lower Okauchee Lake, have been identified at times as individual waterbodies. The study area, which is coterminous with the total tributary drainage area of the Lake, encompasses about 81 square miles in south-central Washington County and north-western Waukesha County.

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

- Maintenance of the historic lake front residential dwelling densities along the Lake shores to extent practicable.
- Establishment of adequate protection of wetlands and shorelands, and other environmental corridor lands and isolated natural features, and consideration of public or private acquisition of natural area features of local or greater significance, as set forth in the regional natural areas and critical species habitat protection and management plan and county land and water resource management plan.
- Continued implementation of the recommendations set forth in the regional water quality

management plan to provide sanitary sewerage services, at the City of Oconomowoc and Delafield-Hartland Water Pollution Control Commission treatment facilities, for selected urban areas of the Lake drainage area.

- Promotion of sound rural land management practices to reduce soil loss and contaminant loadings through preparation of farm conservation plans in accordance with the county land and water resource management plan.
- Promotion of sound urban housekeeping and yard care practices through informational programming, and including consideration of the development of lawn care management and shoreland protection ordinances and stormwater management systems where appropriate densities exist.
- Development and enforcement of construction site erosion control and stormwater management ordinances, and the review of existing ordinances for consistency with Chapters NR 151 and 152 of the *Wisconsin Administrative Code*.
- Preparation and implementation of detailed local level stormwater management plans to minimize contaminant loadings. For the four stormwater management "hot spots" identified in this analysis: STH 16 at Jaeckles Boulevard, Lake Drive at the intersection of W. Lake Drive and N. Lake Drive, Lake Drive between Road B and Point Comfort Drive, and Wisconsin Avenue at Shady Lane.
- Continued participation in the WDNR Self-Help Monitoring Program, including enrollment in the Expanded/Trophic Status Index (TSI) Self-Help Monitoring Program and participation in U.S. Geological Survey or University of Wisconsin-Stevens Point Environmental Task Force TSI monitoring programs.
- Continued maintenance of the outlet structure and monitoring of water levels.
- Periodic conduct of fish surveys to determine management and stocking needs, and including the conduct of periodic creel censuses.
- Continued management of aquatic plants utilizing mechanical harvesting, pursuant to Chapter NR

109 requirements, as the primary aquatic plant management practice, with consideration being given to limited chemical treatments in accordance with Chapter NR 107 requirements as may be necessary for the control of non-native invasive aquatic plant species, specifically targeting Eurasian water milfoil, curly-leaf pondweed, garlic mustard, and purple loosestrife infestations.

- Restriction of aquatic plant harvesting in spring and autumn to avoid disturbances in fish breeding areas and WDNR-delineated sensitive areas; collection of floating plant fragments from shoreland areas to minimize rooting of Eurasian water milfoil and deposition of organic materials in the Lake.
- Ongoing maintenance of existing shoreline structures and conduct of repairs as necessary using vegetative means insofar as practicable.
- Maintenance of recreational boating access from the public access sites pursuant to Chapter NR 7 guidelines, and enforcement and periodic review of recreational boating (summer) and vehicular use (winter) ordinances.
- Continued conduct of public awareness and informational programming, and inclusion of lake studies in environmental curricula (e.g., Project WET, Adopt-A-Lake, and Waukesha Water Walk).

Map 17 presents a graphic summary of the recommended management plan for Okauchee Lake.

### **Stream Management Planning**

The Commission works with local units of government and the Wisconsin Departments of Natural Resources and Transportation to develop localized stream system management guidance and assistance. This work is often documented in reports which describe the existing chemical, biological, and physical water quality conditions of each stream reach in question; existing and proposed uses of the stream and attendant water quality objectives and standards; recommended pollution abatement measures required in each watershed to protect and enhance stream water quality and biological integrity and function; recommended fisheries man-

agement; and other appropriate measures needed to provide for a range of suitable uses of the stream.

Prior to 2004, the Commission provided technical assistance related to stream system management to the Wisconsin Departments of Natural Resources and Transportation, and certain municipalities and other organizations for: Rosenow Creek, a tributary to Lac La Belle and the Oconomowoc River in Waukesha County; Nippersink Creek and an unnamed tributary to Galloway Creek, both of which are tributary to the Fox River in Walworth County; an unnamed tributary to Sugar Creek, a tributary to the Fox River in Walworth County; Karcher Creek, a tributary to the Fox River in Kenosha County; and Quaas Creek and two unnamed tributary streams, all tributary to the Milwaukee River in Washington County. The results of these investigations were reported to the communities in the form of Commission staff memoranda and letter reports.

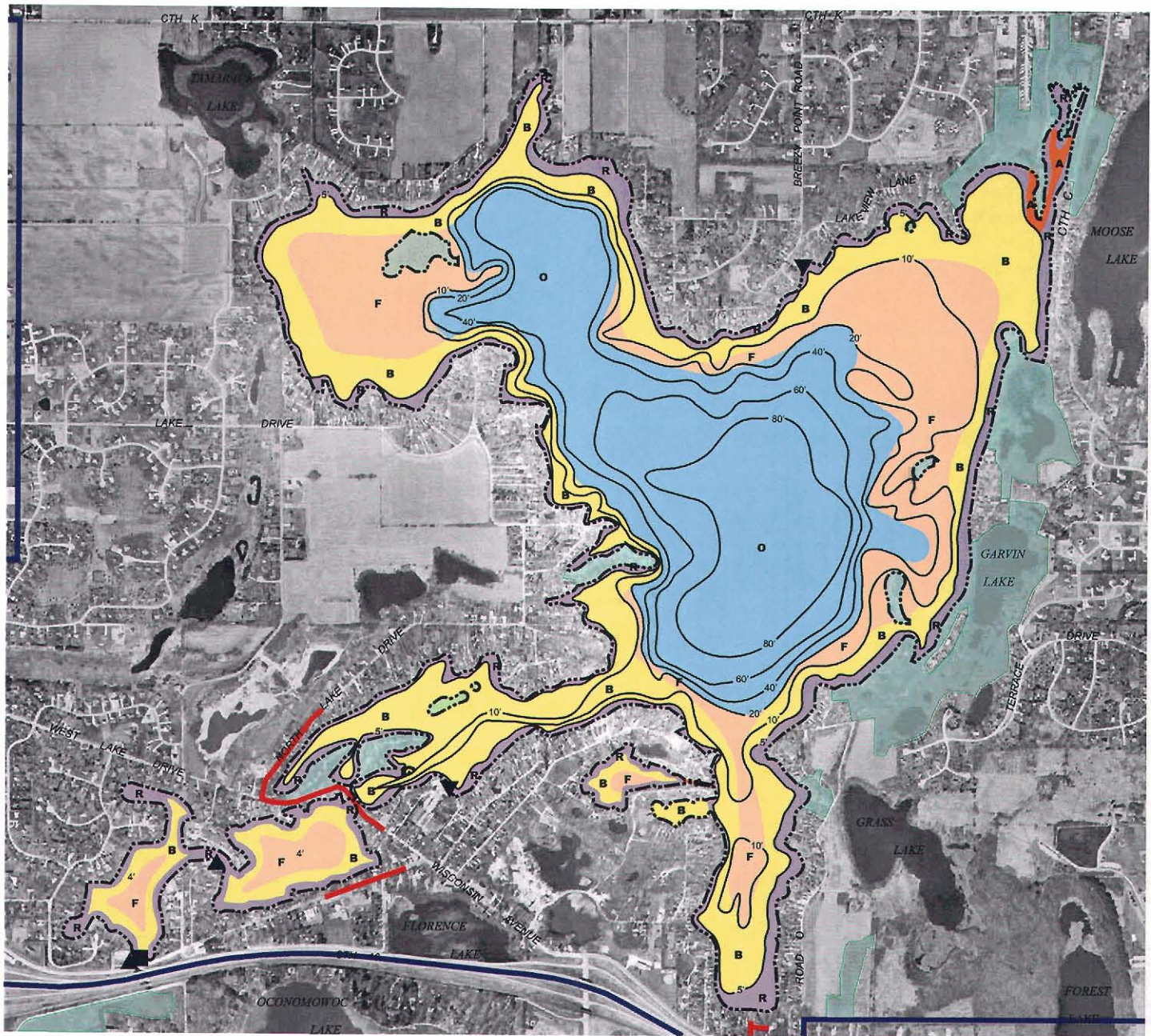
During 2004, the Commission continued to provide technical assistance related to stream system management to the Wisconsin Departments of Natural Resources and Transportation, and certain municipalities and other organizations. Technical assistance relating to specific stream management needs with respect to planning for, and the potential consequences of, the removal of existing impoundments on major streams also was provided to municipalities, lake associations, and lake districts for East Troy Pond in Walworth County and Eagle Spring Lake and Roller Mill Dam in Waukesha County. Commission staff continued to provide assistance to the Milwaukee Metropolitan Sewerage District (MMSD) as they developed their online water quality data management system which is part of their Corridor Study Project. The corridor study also includes the SEWRPC floodplain mapping for the Milwaukee County Automated Mapping and Land Information System Steering Committee and MMSD and MMSD watercourse system planning, sediment transport studies, stream rehabilitation studies and projects, conservation easement program, stormwater rules, and stream maintenance.

Also during 2004, the Commission provided technical assistance to the City of New Berlin and the Kelly Lakes Association, Inc., in the implementation of recommended lake protection measures set forth in SEWRPC Memorandum Report No. 135, *A Lake Protection Plan for the Kelly Lakes, Milwaukee and Waukesha Counties, Wisconsin*, published during October 2000. The assistance provided related to stream system



Map 17

# RECOMMENDED LAKE MANAGEMENT PLAN FOR OKAUCHEE LAKE



DATE OF PHOTOGRAPHY: MARCH 2000

- 20' — WATER DEPTH CONTOUR IN FEET
- WATER LEVEL CONTROL STRUCTURE
- ▲ PUBLIC ACCESS SITE AND HARVESTER OFF-LOAD AREA
- ▼ PRIVATE ACCESS SITE
- AQUATIC PLANT MANAGEMENT**
- A** ACCESS: HARVEST RECREATIONAL BOATING ACCESS CHANNELS APPROXIMATELY 50 FEET WIDE
- B** BOATING / RECREATION: SURFACE CUT OF EURASIAN WATER MILFOIL, HARVESTING MODERATE PRIORITY
- R** RIPARIAN ZONE: MAINTAIN SHORELINE PROTECTION STRUCTURES AS NECESSARY, INSTALL VEGETATIVE BUFFERS, MANUALLY HARVEST AQUATIC PLANTS AROUND PIERS AND DOCKS
- F** FISH BREEDING AND HABITAT/ANGLING AREAS - NO AQUATIC PLANT MANAGEMENT MEASURES RECOMMENDED DURING FISH BREEDING SEASON
- O** OPEN WATER: DEPTH GREATER THAN 20 FEET - NO AQUATIC MANAGEMENT MEASURES RECOMMENDED

## LAND USE MANAGEMENT

- PROTECT ENVIRONMENTAL CORRIDOR LANDS
- OBSERVE GUIDELINES SET FORTH IN THE WAUKESHA COUNTY DEVELOPMENT PLAN, MAINTAIN HISTORIC LAKEFRONT RESIDENTIAL DWELLING DENSITIES
  - PROMOTE GOOD HOUSEKEEPING PRACTICES IN URBAN AREAS
- BOUNDARY OF SANITARY SEWER SERVICE AREA: OKAUCHEE LAKE. PROVIDE PUBLIC SANITARY SEWERAGE SERVICES, REFINES AS NECESSARY

## WATER QUALITY MANAGEMENT

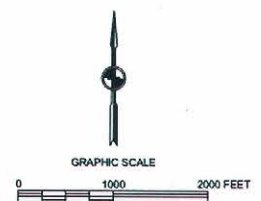
- CONTINUE PARTICIPATION IN WISCONSIN DEPARTMENT OF NATURAL RESOURCES SELF-HELP MONITORING PROGRAM
- IMPLEMENT RUNOFF MANAGEMENT PRACTICES

## FISHERIES MANAGEMENT

- CONTINUE TO MONITOR FISH POPULATIONS, MODIFY STOCKING/ HARVESTING PROGRAM AND REGULATIONS, AS NECESSARY

## PUBLIC INFORMATION AND EDUCATION

- CONTINUE PUBLIC AWARENESS PROGRAM





management for the Upper Kelley Lake Tributary which flows into Upper Kelly Lake.

The SEWRPC staff memorandum report entitled "Hydraulic Analysis, Data Analysis and Recommendations Relating to the Proposed Phase 2 Wetland Restoration Project for Upper Kelly Lake in Milwaukee and Waukesha Counties," detailed the results of the hydraulic analysis to evaluate the impacts of the proposed Phase 2 Wetland Restoration Project for Upper Kelly Lake as well as prepared design recommendations regarding the proposed wetland restoration and stream relocation project for the Kelly Lakes and was published April 22, 2004.

These recommendations established design criteria for a restored stream reach incorporating a restored "riffle-run" channel, recreated shoreland wetlands, and restored meanders within the channel, essentially reconnecting the stream to its floodlands.

### **Sewerage Facilities Planning**

During 2004, 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 WDNR, and good engineering practice. Work activities during 2004 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 2004:

- Continued assistance to local units of government within the Region in developing facility plans for modifications to existing public sewerage systems. During 2004, local sewerage facilities plans were completed for the Village of Sussex in Waukesha County and the Town of Bristol in Kenosha County. These plans set forth recommendations for the expansion and upgrading of

existing sewerage facilities in accordance with the recommendations of the adopted regional water quality management plan.

- The Commission continued to work cooperatively with the MMSD and the WDNR to carry out the next round of MMSD facility planning in a coordinated manner with the ongoing updating of the regional water quality management plan for the Milwaukee area watersheds.

### **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 WDNR, 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 WDNR 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 then 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, involving intergovernmental meetings with the affected units of government for each area 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 WDNR 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 2004, this work effort included the following:

- Completion and adoption by the Commission of a second-generation sanitary sewer service area plan for the Village of Fredonia and environs in Ozaukee County and the Allenton area in Washington County.
- Adoption by the Commission of amendments to the sanitary sewer service areas for the Village of Twin Lakes in Kenosha County; the City of Burlington in Racine County; the City of Lake Geneva and that portion of the Walworth County Metropolitan Sewerage District in the Delavan/Delavan Lake area, both in Walworth County; the Villages of Jackson and Kewaskum, both in Washington County; and the City of Waukesha and the Villages of Menomonee Falls and Pewaukee, all in Waukesha County.

By the end of 2004, as a result of the refinement and detailing process, a total of 73 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 73 originally defined areas are represented by a total of 57 redefined areas.

In addition, the refinement and detailing process sometimes has resulted in the recognition of new sanitary sewer service areas that 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 2004, 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 (MMSD), 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 Mallard Ridge 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 24 and on Map 18. The table identifies the 85 initially identified sewer service areas; the 73 initially identified sewer service areas for which the recommended plan refinement process was completed at the end of 2004; and the 57 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 basis for reviewing and commenting on individual proposed sanitary sewer extensions.

During 2004, review comments were provided on 214 proposed public sanitary sewer extensions and 94 proposed private main sewer or building sewer extensions, distributed by county as shown in Table 25.

## **WATER SUPPLY PLANNING**

During 2004, Commission water supply planning was focused primarily on groundwater management activities and on developing support and study organization for a regional water supply planning program.

### **Groundwater Management**

Two major groundwater management studies were previously completed for the Southeastern Wisconsin Region: a regional groundwater resources inventory and analysis and the development of a regional groundwater aquifer simulation model. These two work efforts represent the first two of the three elements of the planned regional water supply planning program for the Southeastern Wisconsin Region, considering both surface and groundwater systems. These elements involve interagency partnership agreements with the U.S. Geological Survey, the Wisconsin Geological and Natural History Survey (WGNHS), the University of Wisconsin-Milwaukee, the Wisconsin Department of Natural Resources (WDNR), and many of the water supply utilities serving the Region.

The first of these two efforts involved completing a regional groundwater resource inventory and analysis program. The primary purpose of this effort was the development of hydrogeologic data that can be used to support the preparation of a regional groundwater modeling program and to provide information useful for land use and related planning efforts. The groundwater-related inventories developed under this effort were reported on in the Commission's *2002 Annual Report*.

The second of these two efforts was the completion, in 2003, of the development of a three-dimensional regional groundwater model to represent the aquifer system in Southeastern Wisconsin (model nearfield area). The work was carried out under the guidance of the SEWRPC Technical Advisory Committee on Groundwater Resources.

There are several timely needs for the model. One is determining the zone of contribution, or area of land surface contributing water to a well, for each public water supply in the region. The WDNR substantially accomplished this in 2004, with partial support from the WDNR Source Water Protection Program. For larger wells, the model was adequate for this purpose, but for many of the smaller capacity wells, it serves as the framework for more refined models of specific small areas around communities.

The model will enable the agency and resource managers to define wellhead protection zones for over 200 public wells. With this information in hand, water utility managers will be able to delineate critical recharge areas for protection from contamination and adverse land uses.

Other anticipated uses of the model include:

- Prediction of long- and short-range water levels in the aquifers,
- Groundwater quality evaluations—as one tool to help understand the reasons for increases in radium and salinity in deep aquifer wells,
- Preliminary well siting evaluations,
- Water supply facility optimization analyses, and
- Evaluation of groundwater conservation and recharge strategies.

Table 24

## PLANNED SANITARY SEWER SERVICE AREAS IN THE REGION: 2004

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	December 5, 2001	Amendment to the Regional Water Quality Management Plan, Greater Kenosha Area, December 2001
	Bristol-George Lake	Bristol	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, 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
	Camp-Center Lakes Cross Lake Rock Lake Wilmet Hooker-Montgomery Lakes	Salem	March 7, 2001	Amendment to the Regional Water Quality Management Plan, Town of Salem, March 2001
	Paddock Lake	Paddock Lake	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, 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
	--	Powers-Benedict-Tombeau Lakes	December 7, 1994	Amendment to the Regional Water Quality Management Plan—2000, Pell Lake Area and Powers-Benedict-Tombeau Lakes Area, Kenosha and Walworth Counties, December 1994
	Silver Lake	Silver Lake	December 2, 1998	SEWRPC Community Assistance Planning Report No. 119, 2nd Edition, Sanitary Sewer Service Area for the Village of Silver Lake and Environs, Kenosha County, Wisconsin, December 1998
	Twin Lakes	Twin Lakes	June 15, 1987	SEWRPC Community Assistance Planning Report No. 149, Sanitary Sewer Service Area for the Village of Twin Lakes, Kenosha County, Wisconsin, May 1987
Milwaukee	Milwaukee Metropolitan Sewerage District (portion)	Franklin	December 5, 1990	SEWRPC Community Assistance Planning Report No. 176, Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, October 1990
	Milwaukee Metropolitan Sewerage District (portion)	Oak Creek	September 7, 1994	SEWRPC Community Assistance Planning Report No. 213, Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin, July 1994
	Milwaukee Metropolitan Sewerage District (portion)	--	--	--
	South Milwaukee	--	--	--
Ozaukee	Belgium	Belgium	September 15, 1993	SEWRPC Community Assistance Planning Report No. 97, 3rd Edition, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, August 1993
	Cedarburg Grafton	Cedarburg Grafton	June 19, 1996	SEWRPC Community Assistance Planning Report No. 91, 2nd Edition, Sanitary Sewer Service Areas for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, June 1996
	Fredonia Waubeka	Fredonia Waubeka	March 3, 2004	SEWRPC Community Assistance Planning Report No. 96, 2nd Edition, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, March 2004



**Table 24 (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 (continued)	Lake Church	--	--	--
	Mequon Thiensville	Mequon Thiensville	January 15, 1992	SEWRPC Community Assistance Planning Report No. 188, Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin, January 1992
	Port Washington	Port Washington	December 6, 2000	SEWRPC Community Assistance Planning Report No. 95, 2nd Edition, Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, December 2000
	Saukville	Saukville	December 1, 1983	SEWRPC Community Assistance Planning Report No. 90, Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983
Racine	Burlington Bohner Lake	Burlington	December 5, 2001	SEWRPC Community Assistance Planning Report No. 78, 2nd Edition, Sanitary Sewer Service Area for the City of Burlington and Environs, Racine County, Wisconsin, December 2001
	Eagle Lake	Eagle Lake	January 18, 1993	SEWRPC Community Assistance Planning Report No. 206, Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin, December 1992
	Racine Caddy Vista	Racine Caddy Vista	June 18, 2003	SEWRPC Community Assistance Planning Report No. 147, 2nd Edition, Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin, June 2003
	Southern Wisconsin Center	Southern Wisconsin Center	September 12, 1990	SEWRPC Community Assistance Planning Report No. 180, Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990
	Union Grove	Union Grove	September 12, 1990	SEWRPC Community Assistance Planning Report No. 180, Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990
	Waterford/Rochester Tichigan Lake	Waterford/Rochester	April 24, 1996	SEWRPC Community Assistance Planning Report No. 141, 2nd Edition, Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, April 1996
	Wind Lake	Norway	June 16, 1999	SEWRPC Community Assistance Planning Report No. 247, Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, Racine and Waukesha Counties, Wisconsin, June 1999
	Yorkville	--	--	--
Walworth	Darien	Darien	September 23, 1992	SEWRPC Community Assistance Planning Report No. 123, 2nd Edition, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, July 1992

Table 24 (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)	Delavan Delavan Lake Elkhorn Walworth County Institutions Williams Bay Lake Como --	Delavan-Delavan Lake  Elkhorn  Williams Bay-Geneva National-Lake Como Mallard Ridge Landfill	December 4, 1991	SEWRPC Community Assistance Planning Report No. 56, 2nd Edition, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, November 1991
	East Troy Potter Lake Alpine Valley	East Troy	December, 2000	SEWRPC Community Assistance Planning Report No. 112, 3rd Edition, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, December 2000
	Fontana Walworth	Fontana-Walworth	June 21, 1995	SEWRPC Community Assistance Planning Report No. 219, Sanitary Sewer Service Area for the Villages of Fontana and Walworth and Environs, Walworth County, Wisconsin, June 1995
	Genoa City	Genoa City	June 19, 1996	SEWRPC Community Assistance Planning Report No. 175, 2nd Edition, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, May 1996
	Lake Geneva	Lake Geneva	January 18, 1993	SEWRPC Community Assistance Planning Report No. 203, Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin, December 1992
	Lyons --	Lyons Country Estates Sanitary District	September 15, 1993	SEWRPC Community Assistance Planning Report No. 158, 2nd Edition, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, August 1993
	--	Pell Lake	June 19, 1996	SEWRPC Community Assistance Planning Report No. 225, Sanitary Sewer Service Area for the Pell Lake Sanitary District No. 1, Walworth County, Wisconsin, June 1996
	Sharon	--	--	--
	Whitewater	Whitewater	March 1, 1995	SEWRPC Community Assistance Planning Report No. 94, 2nd Edition, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, March 1995
Washington	Allenton	Allenton	March 3, 2004	SEWRPC Community Assistance Planning Report No. 103, 2 <sup>nd</sup> Edition, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, March 2004
	Germantown	Germantown	September 8, 1983	SEWRPC Community Assistance Planning Report No. 70, Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983
	Hartford	Hartford	September 12, 2001	SEWRPC Community Assistance Planning Report No. 92, 3rd Edition, Sanitary Sewer Service Area for the City of Hartford and Environs, Washington County, Wisconsin, September 2001
	Jackson	Jackson	September 10, 1997	SEWRPC Community Assistance Planning Report No. 124, 2nd Edition, Sanitary Sewer Service Area for the Village of Jackson and Environs, Washington County, Wisconsin, September 1997

**Table 24 (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
Washington (continued)	Kewaskum	Kewaskum	March 7, 1988	SEWRPC Community Assistance Planning Report No. 161, Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin, December 1988
	Newburg	Newburg	March 3, 1993	SEWRPC Community Assistance Planning Report No. 205, Sanitary Sewer Service Area for the Village of Newburg, Ozaukee and Washington Counties, Wisconsin, March 1993
	Slinger	Slinger	December 2, 1998	SEWRPC Community Assistance Planning Report No. 128, 3rd Edition, Sanitary Sewer Service Area for the Village of Slinger and Environs, Washington County, Wisconsin, December 1998
	West Bend	West Bend	June 17, 1998	SEWRPC Community Assistance Planning Report No. 35, 2nd Edition, Sanitary Sewer Service Area for the City of West Bend and Environs, Washington County, Wisconsin, 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, Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, November 1991
	Butler	Butler	March 1, 1984	SEWRPC Community Assistance Planning Report No. 99, Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin, February 1984
	Delafield-Nashotah Nashotah-Nemahbin Lakes	Delafield-Nashotah	January 18, 1993	SEWRPC Community Assistance Planning Report No. 127, Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, November 1992
	Dousman	Dousman	March 1, 2000	SEWRPC Community Assistance Planning Report No. 192, 2nd Edition, Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin, March 2000
	--	Eagle Spring Lake	December 2, 1985	Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District, December 1985
	Hartland	Hartland	June 17, 1985	SEWRPC Community Assistance Planning Report No. 93, Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin, April 1985
	Menomonee Falls --	Menomonee Falls Lannon	June 16, 1993	SEWRPC Community Assistance Planning Report No. 208, Sanitary Sewer Service Areas for the Villages of Lannon and Menomonee Falls, Waukesha County, Wisconsin, June 1993
	Mukwonago	Mukwonago	December 5, 1990	SEWRPC Community Assistance Planning Report No. 191, Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin, November 1990
	--	Mukwonago County Park	June 21, 1984	Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago, June 1984

**Table 24 (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)	Muskego	Muskego	December 3, 1997	SEWRPC Community Assistance Planning Report No. 64, 3rd Edition, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, December 1997
	New Berlin	New Berlin	December 7, 1987	SEWRPC Community Assistance Planning Report No. 157, Sanitary Sewer Service Area for the City of New Berlin, Waukesha County, Wisconsin, November 1987
	North Lake	--	--	--
	North Prairie	--	--	--
	Oconomowoc-Lac La Belle Silver Lake	Oconomowoc	September 15, 1999	SEWRPC Community Assistance Planning Report No. 172, 2nd Edition, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, September 1999
	Oconomowoc Lake	--	--	--
	Okauchee Lake	--	--	--
	Pewaukee	Pewaukee	June 17, 1985	SEWRPC Community Assistance Planning Report No. 113, Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin, June 1985
	Pine Lake	--	--	--
	--	Rainbow Springs	June 21, 1984	Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago, June 1984
	Sussex-Lannon	Sussex	September 7, 1994	SEWRPC Community Assistance Planning Report No. 84, 2nd Edition, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, September 1994
	Wales	--	--	--
	Waukesha	Waukesha	March 3, 1999	SEWRPC Community Assistance Planning Report No. 100, 2nd Edition, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, March 1999

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

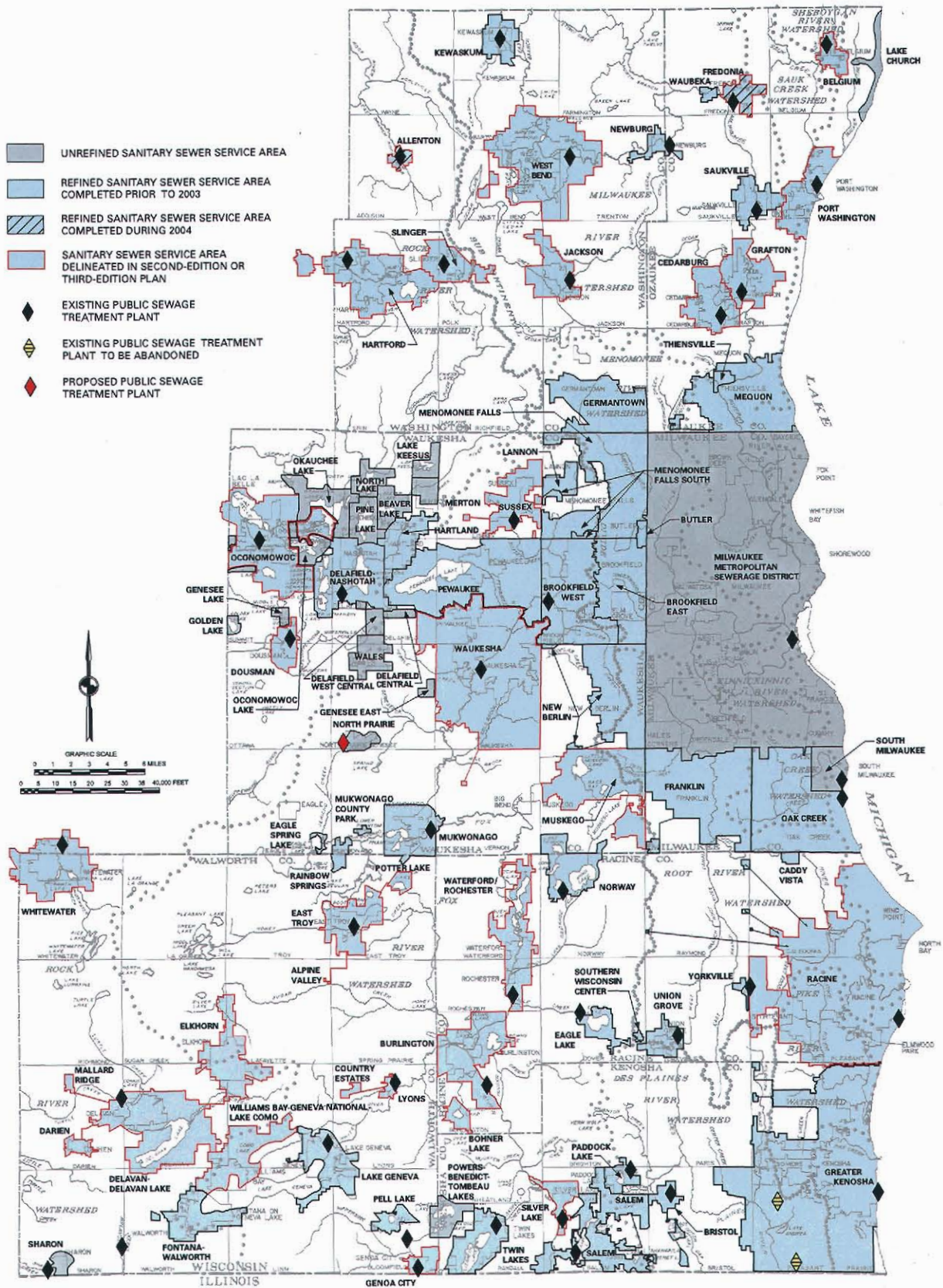
## Regional Water Supply Plan

Prior to 2004, the Commission completed a prospectus describing the need for, scope, costs, and schedule for a regional water supply planning program. That proposed planning program is described in a document entitled *Regional Water Supply Planning Program Prospectus*. This document was prepared under the guidance of the SEWRPC Regional Water Supply

Advisory Committee whose membership includes knowledgeable and concerned representatives of the constituent counties and municipalities, of concerned State and Federal agencies, of the academic community, and of concerned businesses and industry. During 2004, the Commission worked toward developing the funding support and study organization needed to initiate the regional water supply planning program.



## RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 2004



**Table 25****SANITARY SEWER EXTENSION REVIEWS: 2004**

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Kenosha.....	15	6	21
Milwaukee.....	31	25 <sup>a</sup>	56
Ozaukee .....	10	7	17
Racine.....	34	12	46
Walworth.....	21	12	33
Washington.....	27	11	38
Waukesha.....	76	21	97
Total	214	94	308

<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 2004, 482 reviews of building sewer extensions were conducted by the City.

## WATERSHED, FLOODLAND, AND STORMWATER MANAGEMENT PLANNING

During 2004, Commission efforts in watershed, floodland, and stormwater management planning consisted of continuing work on programs to update floodland maps for all of Milwaukee County and portions of Ozaukee, Washington, and Waukesha Counties adjacent to Milwaukee County; coordinating with the U.S. Army Corps of Engineers to ensure that the results of the Des Plaines River watershed study are incorporated into that agency's Upper Des Plaines River Illinois/Wisconsin Phase 2 Feasibility Study; coordinating with the Federal Emergency Management Agency (FEMA) on the development of digital floodplain maps for the portion of the Village of Pleasant Prairie in the Des Plaines River watershed; completing a stormwater and floodland management plan for the Butler Ditch subwatershed; completing a hazard mitigation plan for Racine County, which was approved by the Wisconsin Department of Military Affairs, Wisconsin Emergency Management; completing the second draft of an all hazards mitigation plan for the City of Milwaukee, in response to all agency comments; preparing a final scope of work for updating floodplain delineations throughout all of Ozaukee County under the Federal Emergency Management Agency (FEMA) Map Modernization Initiative; preparing a detailed inventory, and accompanying survey specifications, for bridges, culverts, and dams to be surveyed for use in computing flood profiles along Ozaukee County streams that are to be studied under the FEMA Map Modernization Initiative; providing technical assistance to local governmental units in the development and implementation of floodland and stormwater management 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

The Commission staff continued work on a project to prepare updated, digital floodplain and floodway maps for all of Milwaukee County and portions of Ozaukee, Washington, and Waukesha Counties that are adjacent to Milwaukee County. The project is being performed for the Milwaukee County Automated Land Information System Steering Committee (MCAMLIS) and the Milwaukee Metropolitan Sewerage District (MMSD), with assistance from the Wisconsin Land Information Program. Under the first phase of the project, updated floodland maps are being prepared for streams in the Kinnickinnic, Menomonee, and Milwaukee River watersheds; the Oak Creek watershed; and the Legend Creek subwatershed. In 2004, hydrologic and/or hydraulic modeling was performed and digital floodplain maps were prepared in the Menomonee and Milwaukee River watersheds. The streams for which such work was conducted include the main stem of the Milwaukee River, Beaver Creek, Lincoln Creek, and Southbranch Creek. In addition, work continued on streams in the Kinnickinnic and Menomonee River watersheds.

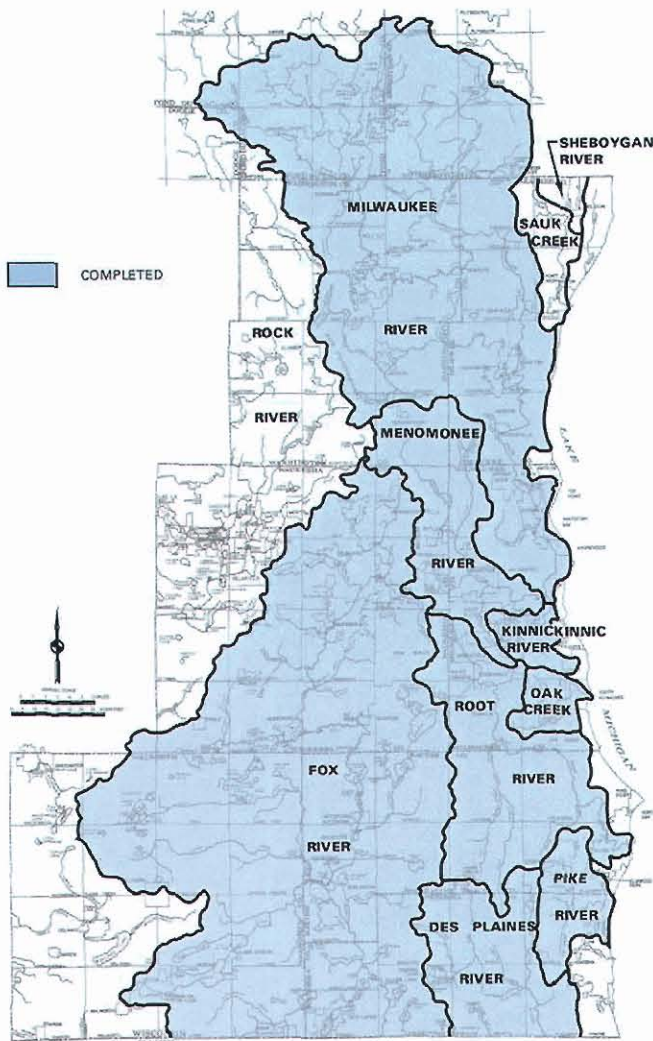
The Commission staff also completed joint FEMA/WDNR floodplain data and map submittals 1) for the City of Brookfield, including the Fox River, Deer Creek, and Poplar Creek, as well as Underwood Creek, the North and South Branches of Underwood Creek, Dousman Ditch, Butler Ditch, the South Branch of Butler Ditch, and an Unnamed Tributary to Butler Ditch which were studied under the MCAMLIS/MMSD project described above and 2) for the City of Milwaukee, incorporating the features of the Milwaukee Metropolitan Sewerage District's recently completed Lincoln Creek stream restoration and flood mitigation project.

The Des Plaines River watershed study was published in June 2003 as SEWRPC Planning Report No. 44, *A Comprehensive Plan for the Des Plaines River Watershed*. The plan, which was formally adopted not only by the Commission, but also by Kenosha and Racine Counties, can be accessed on the Commission website. A summary of the plan is included in SEWRPC *Newsletter*, Vol. 41, No. 1, 2003. The implementation phase of the Des Plaines River watershed study began in



Map 19

**SEWRPC WATERSHED STUDIES  
COMPLETED: 2004**



2004 and the Commission staff continued to coordinate with the U.S. Army Corps of Engineers and local sponsors in Illinois 1) in developing the "Upper Des Plaines River and Tributaries Phase II, Illinois and Wisconsin Multi-Purpose Feasibility Study" and 2) initiating a pilot project to implement watershed study recommendations related to the Kilbourn Road Ditch subwatershed. The Commission staff served on the Hydrology and Hydraulics, Environmental Restoration, and Plan Formulation Subcommittees that are involved in various aspects of that feasibility study. The feasibility study will utilize the products of the SEWRPC Des Plaines River watershed study and will provide Kenosha County with over \$500,000 in credits

toward participation in the Phase II planning for their portion of the project cost based on work performed under the watershed study.

The Commission staff coordinated with FEMA on the detailed review of preliminary digital Flood Insurance Rate Maps for over 30 miles of streams in the portion of the Village of Pleasant Prairie in the Des Plaines River watershed. The digital floodplain and floodway delineations used for the maps and the supporting hydrologic and hydraulic analyses were developed under the Des Plaines River watershed study.

The Racine County and City of Milwaukee hazard mitigation planning process involves the all hazards approach to mitigation which is being promoted by FEMA.

Map 19 indicates the coverage of the watershed studies conducted by the Commission through 2004.

### **Stormwater and Floodland Management Planning**

During 2004, the Commission staff provided technical assistance to State and local governmental agencies in resolving stormwater and floodland management problems.

In 2004, the Commission undertook a number of stormwater and floodland management planning activities at the request of local units of government and State of Wisconsin agencies. The following are examples of such work:

- At the request of Kenosha County, the Commission staff reviewed 18 stormwater management plans for new development proposals within the County, eight in the Town of Salem, four in the Town of Somers, two in the Towns of Paris and Wheatland, and one each in the Towns of Bristol and Randall. The reviews included consideration of stormwater drainage, nonpoint source pollution control, and construction erosion control. Where appropriate, the reviews were conducted within the broader context of the adopted watershed studies and the regional water quality management plan.
- At the request of Milwaukee County, the Commission staff performed a hydraulic analysis

of a proposed replacement for a pedestrian bridge over the Kinnickinnic River in the City of Milwaukee.

- At the request of the MMSD and the City of West Allis, the Commission staff completed a study which resulted in classification of Hale Creek as a perennial stream.
- At the request of the communities, the Commission staff reviewed floodplain and stormwater aspects of a proposed development in the Legend Creek subwatershed in the City of Franklin and floodplain issues related to the proposed construction of a house along the Milwaukee River in the City of Glendale.
- At the request of the City of Milwaukee, the Commission staff prepared additional hydraulic and scour analyses for the proposed W. Bradley Road replacement bridge over the Little Menomonee River.
- At the request of Ozaukee County, the Commission staff completed a project to prepare digital floodplain maps for all unincorporated areas of the County.
- At the request of Racine County, the Commission staff reviewed the floodplain aspects of proposed activities along Brown's Lake in the Town of Burlington, the Goose Lake Branch Canal in the Town of Norway, and Unnamed Tributary No. 2A to the West Branch of the Root River Canal in the Town of Raymond.
- At the request of the City of Hartford, the Commission staff reviewed the floodplain aspects of a proposed development along the Rubicon River.
- At the request of Waukesha County, the Commission staff reviewed the floodplain aspects of proposed activities along Pebble Creek at two locations in the City of Waukesha, along Poplar Creek in the Town of Brookfield, along an unnamed tributary to the Fox River in the Town of Lisbon, and along the Oconomowoc River in the Town of Oconomowoc.
- The Commission staff, in conjunction with Ruekert & Mielke, Inc., published a stormwater and floodland management plan for the Butler Ditch subwatershed in the City of Brookfield and the Village of Menomonee Falls.
- The Commission staff served on the infiltration standards committee assembled by the State of Wisconsin Standards Oversight Council. That committee is charged with developing statewide standards for various stormwater infiltration practices.
- 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 and other facilities and improvements along streams in the Region, in the facilities design phases of projects recommended under Commission plans, and in other water resource and environmental projects. During 2004, data were provided for the following: 1) subbasin, subwatershed, and watershed boundaries for the entire Region; 2) the Des Plaines River and Center Creek in the Town of Bristol; 3) Brighton Creek in the Town of Salem; 4) the Pike River in the Town of Somers; 5) river mile data for selected streams in Milwaukee County; 6) the Milwaukee River, Lincoln Creek, and the Dretzka Park Tributary in the City of Milwaukee; 7) the Lower Menomonee River in the Cities of Milwaukee and Wauwatosa; 8) the North Branch of Oak Creek in the City of Oak Creek; 9) Underwood Creek in the City of Wauwatosa; 10) the North Branch of the Root River in the City of West Allis; 11) the Lake Michigan bluff in the Village of Bayside; 12) the Root River in the Village of Greendale; 13) the Lake Michigan bluff in the City of Racine; 14) the Root River and Husher Creek in the Town of Caledonia; 15) watershed and subwatershed boundaries in the Town of Raymond; 16) the Rubicon River in the City of Hartford; 17) a tributary to the East Branch of the Rock River in the Town of Addison; 18) the Fox River in the City of Brookfield; 19) the Pewaukee Lake outlet structure in the Village of Pewaukee; 20) Poplar Creek in the Town of Brookfield; 21) Willow Springs Creek in the Town of Lisbon; and 22) Lower Phantom Lake in the Town of Mukwonago.



## **Floodplain Data Availability**

The availability of flood hazard data within the Region is shown on Map 20. The Commission has completed comprehensive watershed plans for the Des Plaines, Fox (Illinois), Kinnickinnic, Menomonee, Milwaukee, Pike, and Root River watersheds, and for the Oak Creek 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 744 miles of stream channel, not including stream channels in the Milwaukee River watershed lying outside the Region in Sheboygan and Fond du Lac Counties. That represents an increase in stream miles of about 3 percent relative to 2002. In addition, special Commission floodland management studies have resulted in the development of definitive flood hazard data for a total of about 85 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 676 miles of stream.

## **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. FEMA is proceeding with the conduct and periodic updating of such studies throughout the United States. While the Commission has not directly contracted with FEMA for the conduct of such studies, the Commission does assist communities in obtaining updated FEMA Flood Insurance Rate Maps that incorporate Commission floodplain studies conducted for those communities. The Commission also cooperates with 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 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 FEMA 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.

In the past, Federal flood insurance studies were generally carried out individually for incorporated cities and villages and for the unincorporated areas of counties; however, recent FEMA policies encourage development of such studies on a countywide basis. The status of flood insurance rate studies in the Region at the end of 2004 is shown on Map 21.

As shown on Map 21, as of 2004, there were 21 cities or villages in the Region for which the Federal Emergency Management Agency had not conducted a flood insurance rate study. In seven cases, FEMA has, instead, published a “flood hazard boundary map,” which shows the approximate location of floodlands without the support of detailed engineering studies. The remaining 14 cities or villages in the Region are not considered by FEMA to contain flood hazard areas. In one of those 14, 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 floodplains and attends meetings with local officials and other 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 National Flood Insurance Program. In 2004, the Commission staff assisted the WDNR and FEMA in coordinating the FEMA Map Modernization Program in Milwaukee, Ozaukee, and Waukesha Counties. That assistance included community coordination and development of project scope of work information.

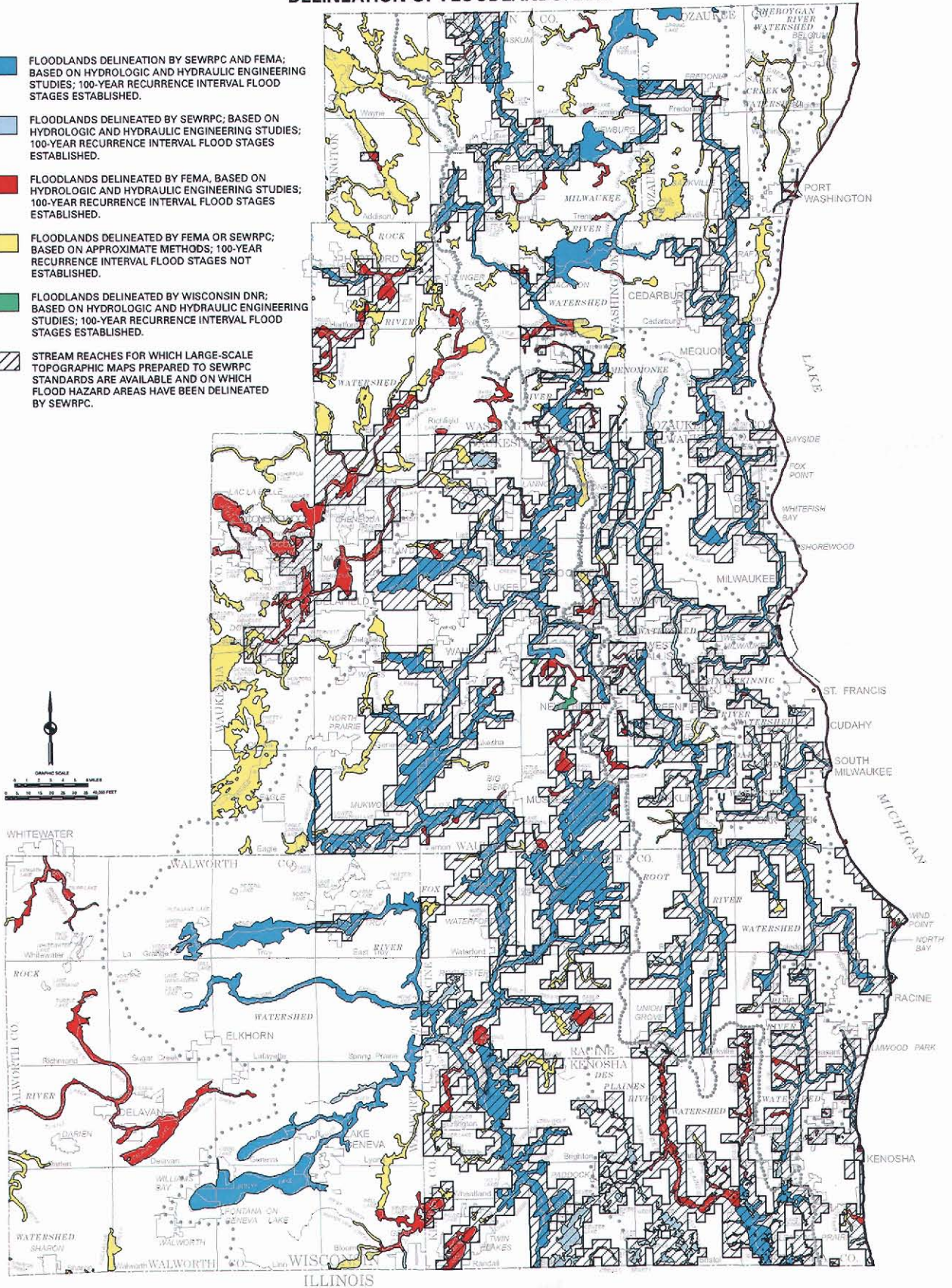
## **Stream-Gaging Program**

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 instru-

Map 21

DELINEATION OF FLOODLANDS: 2003

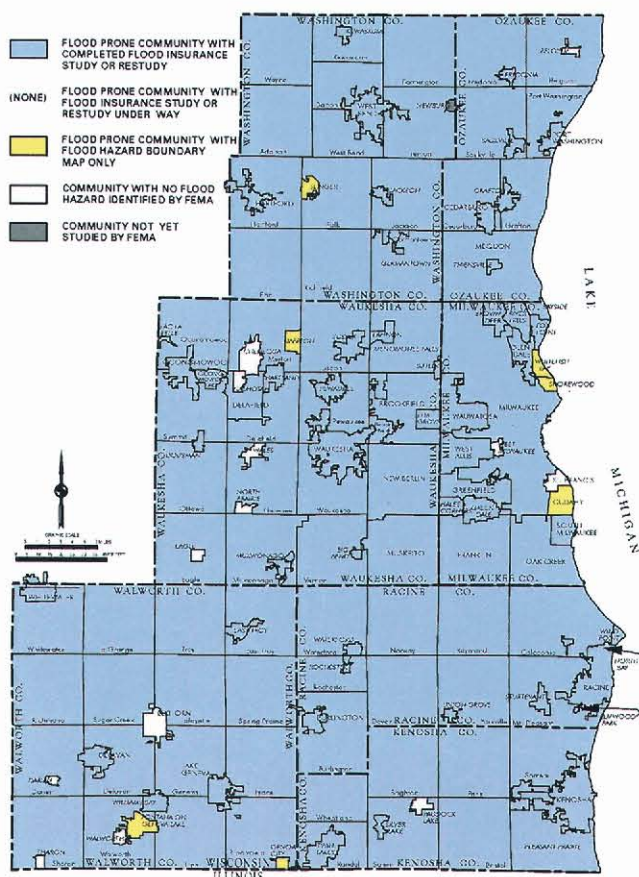
- FLOODLANDS DELINEATED BY SEWRPC AND FEMA; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
- FLOODLANDS DELINEATED BY SEWRPC; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
- 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.





Map 21

# STATUS OF FLOOD INSURANCE STUDIES: 2004



mental in establishing, through cooperative, voluntary, intergovernmental action, a more adequate streamflow-gaging program (see Map 22). The USGS assists in the funding of the stream gages, operates the gages, and annually publishes the data collected under the streamflow-monitoring program. In 2004, there were 32 continuous-recording streamflow gages in operation on stream reaches entering, lying within, or originating within the Region. Of the 32 gages, 14 were financially supported by the Waukesha County Board of Supervisors, the MMSD, the City of Racine and the Racine Water and Wastewater Utilities, and the Kenosha Water Utility under the Commission's cooperative program. In addition, four gages were supported by Milwaukee County, one gage was supported by the Fontana-Walworth Water Pollution Control Commission, two gages were supported by the WDNR, 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, one gage was supported by the Geneva Lake Environmental Agency and the WDNR, two gages were supported by the City of Delafield, and two gages were supported by the Illinois Department of Transportation.

In addition, in 2004 there were five gages at which water levels but not streamflow, were continuously recorded. These included one at Nagawicka Lake in the City of Delafield, one at Delavan Lake near the City of Delavan, one at Geneva Lake in the City of Lake Geneva; one at Wind Lake in the Town of Norway, and one at Big Muskego Lake in the City of Muskego.

## COASTAL MANAGEMENT PLANNING

During 2004, the Regional Planning 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, the Commission has formed 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 to assist the Wisconsin Coastal Management Program in the designation of special coastal areas. In 2004, no additional areas in the Region were formally designated as special coastal areas. The existing Lake Michigan shoreline special coastal areas are shown on Map 23. 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.

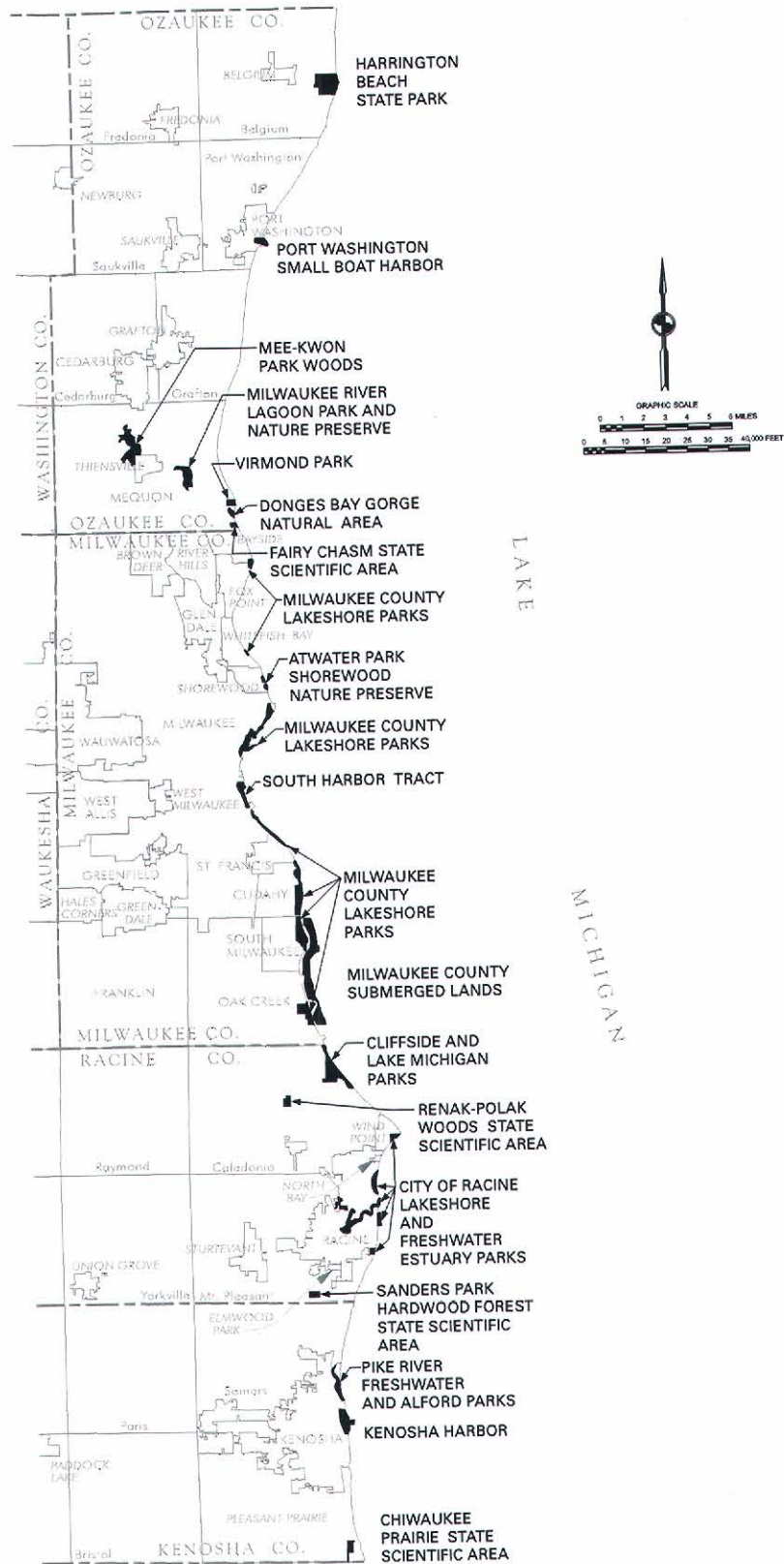






Map 23

DESIGNATED COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 2004



# TELECOMMUNICATIONS PLANNING DIVISION

## DIVISION FUNCTIONS

The Telecommunications Planning Division makes studies and recommendations relating to the development of telecommunications infrastructure and services within the Region. Its role differs somewhat depending on whether the telecommunications system involved is primarily within the public or private sector. For public sector applications and networks, the Division functions consist of direct support to constituent county and local units of government in formulating advisory plans and providing information services. For private sector applications, the Division functions consist of determining the status of current telecommunication networks within the Region through infrastructure inventories and network performance monitoring systems, and developing advisory plans for advanced wireless and wireline networks that can serve as guidelines for private service providers. In either case, the goal is the same, to provide regional leadership in developing the most advanced telecommunications systems in Southeastern Wisconsin to promote the socioeconomic development of, and enhance the quality of life within, the Region.

## BACKGROUND

In Fall 2004, the Commission initiated the conduct of a regional telecommunications planning program. The program is following a work scope identified in a Commission Prospectus published in December 2003. The new planning program is being guided by a Regional Telecommunications Planning Advisory Committee comprised of representatives from local and state governments, wireline and wireless service providers, and other interested parties. The Committee membership is listed in Appendix B.

The Commission recognized that following the breakup of the Bell System and the American Telephone and Telegraph Company, and with the subsequent rapid advances in communications technology, telecommunications, while becoming increasingly important in the local, national, and global economies, also was becoming increasingly difficult to understand by those outside the telecommunications industry. The Federal Telecommunications Act of 1996, intended to further encourage local

competition, has led to the development of a "network of networks" largely beyond the regulatory purview of any level of government.

These networks also have become national in scope, organized and operated by corporations outside of Wisconsin, with priorities not necessarily coincident with the social and economic development aspirations of the Region. The nonregional character of these networks is reflected in the traffic patterns that primarily are routed outside Wisconsin even for local calls within the Region. This network structure, developed for the new packet-switched networks, is in sharp contrast to the older circuit-switched voice and data telephone networks that were highly integrated through switching centers located within the Region. The regional telecommunications planning program will explore the potential development of integrated telecommunication networks within the Region. Such networks can have a significant impact on both the economic development and the security of the Region.

A major objective of the program relates to the provision of high speed, broadband telecommunication services throughout the Region. Currently, the first generation of broadband services in the form of telephone company DSL (digital subscriber line) and cable company hybrid fiber-coaxial cable (cable modem) are available in most urban and suburban areas of the Region. These services typically have capabilities to rapidly download web pages and other large files, particularly those with high video content for residential users and to expedite large data file transfers of all kinds for businesses and other enterprise organizations. Neither of these asymmetrical technologies has strong upload capabilities for applications such as video conferencing. Fixed wireless broadband is also available in some areas of the Region. The goal of the regional telecommunications planning program, however, is to range out beyond the current networks to help plan for the next generation of broadband service capabilities (10 to 100 megabits per second for homes, and one to ten gigabits per second for businesses and industries) that will be required to compete in the global economy. Such planning must also identify the broadband infrastructure required for public needs in such areas as healthcare, education, public safety, and the environment.

Accordingly, the end products of the regional telecommunications planning process in Southeastern Wisconsin are envisioned to be three plans:

- Regional Wireless Antenna Siting and Related Infrastructure Plan
- A Comprehensive Regional Wireline-Wireless Telecommunications Network or Universal Broadband Access Plan
- A set of proposals to identify potential public enterprise networks.

## **ANTENNA SITING AND RELATED INFRASTRUCTURE**

The regional antenna siting and related infrastructure plan is intended to provide guidance to county and local units of government and to service providers operating within the Region on the location of antenna structure sites for mobile and fixed wireless networks. This plan will also be used in the preparation of the wireless component of the regional network plan. The antenna base station site is the basic element of any wireless network. The antenna and supporting electronic equipment at a particular site provide the means for communication with remote mobile and fixed location users. Wireless service providers seek to locate antenna sites so as to maximize their return on investment. They seek locations that will lead to new subscribers and increased revenues. The antenna site location process can be lengthy and costly for both the provider and the county and local units of government concerned. Site installation delays of several years are not uncommon.

The primary objective of the antenna structure site location plan is to provide a rational basis for antenna site location in the form of a set of site locations that provide adequate coverage and network capacity while minimizing the number of sites required to provide the needed service. The antenna site planning process will make extensive use of mathematical modeling software for both delineating antenna site coverage and for determining the best combination of sites necessary to provide the needed wireless services within the Region. The antenna site structure plan will be prepared in cooperation with the wireless service providers.

## **Regional Telecommunications Network Plan**

The comprehensive regional wireline-wireless telecommunications, or universal broadband access plan, is intended to provide a set of technologies and a network structure believed to best serve the Region for the target year 2015. This plan will be selected from a set of alternative regional network plans prepared for objective evaluation by the Advisory Committee. Each alternative plan will be evaluated on the basis of agreed upon service objectives and standards and presented to the Advisory Committee for final plan selection and recommendation to the Commission for adoption. A series of public hearings will facilitate citizen input to the plan selection and adoption process.

Initial network design planning efforts will be focused on the wireless portion of the future regional telecommunications systems. As a continuation and direct outgrowth of the antenna siting and related infrastructure plan, a set of regional wireless network plans based on WiMAX and other advanced technologies will be prepared as the first element of a comprehensive regional wireless-wireline network plan.

## **PUBLIC ENTERPRISE TELECOMMUNICATION NETWORKS PROPOSALS**

The term public enterprise networks within the context of the regional telecommunications planning program refers to telecommunications networks that perform public functions in such areas as public safety, transportation, environmental monitoring, and public health. These functions all represent public sector applications of the telecommunication networks. They may or may not require new network infrastructure. Some public networks could operate as applications on existing physical networks. Others may require augmentations of existing physical networks, and still others may require new network infrastructure.

The public networks proposals will take the form of initial findings and recommendations relating to a series of potential public networks such as:

- Public Safety, Emergency Response, and Homeland Security
- Public Health and Environmental Monitoring
- Transportation System Control
- Public Administration



The findings and recommendations will reflect the attitudes and viewpoints of the various interests that would be involved in the implementation and operation of these public networks. The prospects and procedures for moving to the next stage of development along with possible sources of funding will be documented. Efforts would be made to convene stakeholder-based committees to stimulate initiation of public network projects aimed at the further identification and possible deployment and operation of these networks.

## **INITIAL ACTIVITY IN REGIONAL TELECOMMUNICATIONS PLANNING**

Initial staff and Advisory Committee efforts related to the preparation of six study design memoranda that detailed planning procedures to be applied in the telecommunications planning program. Work efforts were then focused on the development and startup of a regional network monitoring system which will measure network performance in terms of connection speed, response time, transmission rates, and accuracy on a continuing basis. Such monitoring will allow for an assessment of the quality of the regional network and the identification of “bottlenecks” that limit network performance.

The Commission staff also began in 2004 to develop an inventory of the current telecommunications infrastructure within the Region—both wireline and wireless. Infrastructure data will be compiled partly from public information at the Public Service Commission of Wisconsin, partly from Federal data banks, partly from individual service providers, and additionally from “trace route” programs that scan the Internet and identify transmission routes from all parts of the Region. Such trace routes allow for the identification of the nodes and links making up the regional packet-switched network.

During 2005, work will focus on the regional antenna siting plan. Starting with an inventory of existing antenna sites in the Region related to mobile cellular or fixed wireless communications, a set of preferred antenna site locations for existing and future wireless communications in the Region will be developed. A mathematical model will be used to determine a best set of antenna site locations that will provide the necessary coverage and capacity while minimizing the number of antenna structure sites required. A major goal is to expedite the antenna site approval process for the benefit of both service providers and local communities.

(This page intentionally left blank)

# **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 five basic types of services: local economic development program planning; economic development data and information provision; economic development project planning services; Federal and State grant-in-aid procurement and administration; and revolving loan fund administration.

## **LOCAL ECONOMIC DEVELOPMENT PROGRAM PLANNING**

The Commission provides economic development program planning services that assist communities with a range of local economic development measures. These include identifying the types of economic development compatible with overall community development goals and objectives and promoting economic development activities that have such compatibility. This function is intended to address a variety of local and regional economic development problems, including the following: 1) structural changes in the economy, as evidenced by a declining proportion of manufacturing employment and an increasing proportion of retail trade and service employment; 2) the lack of adequate community facilities and services to support local economic development; 3) the need to provide workers for the full range of employment opportunities, 4) the decisions by local businesses and industries to relocate to, or expand in, areas outside the Region, and 5) the need to assist local entrepreneurs with the start-up of new business enterprises. During 2004, the Commission engaged in the following local economic development program planning efforts:

- Provision of the demographic and socioeconomic data necessary to enable the preparation of an overall economic development program plan annual report for Kenosha County. This report serves 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, We Energies, the Metropolitan Milwaukee Association of Commerce, and the Commission. Activities undertaken by the Partnership in 2004 included the following: 1) maintaining a site on the Internet that identifies the competitive advantages of the Southeastern Wisconsin Region as a business location, provides information on applying for tax credits through the Metropolitan Milwaukee Technology Zone and the Southeast Tri-County Technology Zone; and provides links to the home pages of Partnership members and community economic profiles that are prepared by the Commission in cooperation with the Regional Economic Partnership, as noted below; 2) employing, in partnership with the TechStar Foundation, a staff person to work with companies on gaining access to the Small Business Innovation Research (SBIR) Program and other technology-based Federal grant programs; 3) securing two grants in support of the SBIR staff position—a \$50,000 grant from the Helen Bader Foundation, Inc., and a \$15,000 grant from the University of Wisconsin-Extension, Federal and State Technology (FAST) Partnership Program; 4) providing technical assistance to companies interested in obtaining tax credits through the Metropolitan Milwaukee Technology Zone and the Southeast Tri-County Technology Zone that are administered by the Partnership; 5) obtaining approval for eight technology development zone applications totaling \$1,832,300 that were prepared with the assistance of Commission staff; 6) identifying initiatives for cluster-based economic development projects; 7) conducting periodic educational forums that provided economic development professionals, local officials, and businesses in the Region with information on important economic development issues; and 8) collaborating with the Wisconsin Department of Commerce in hosting quarterly meetings with representatives from the Partnership, the Department of Commerce, and representatives of eco-



conomic development agencies in Dane, Jefferson, and Rock Counties. A Commission staff member chairs the Partnership effort.

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

Considerable Commission staff effort is directed at responding to requests for economic development-related data and information. 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 2004, the Division prepared written responses from the Commission files to requests for economic development-related data and information. In addition, the Division responded to 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 2004:

- 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, not-for-profit development corporations, and other organizations

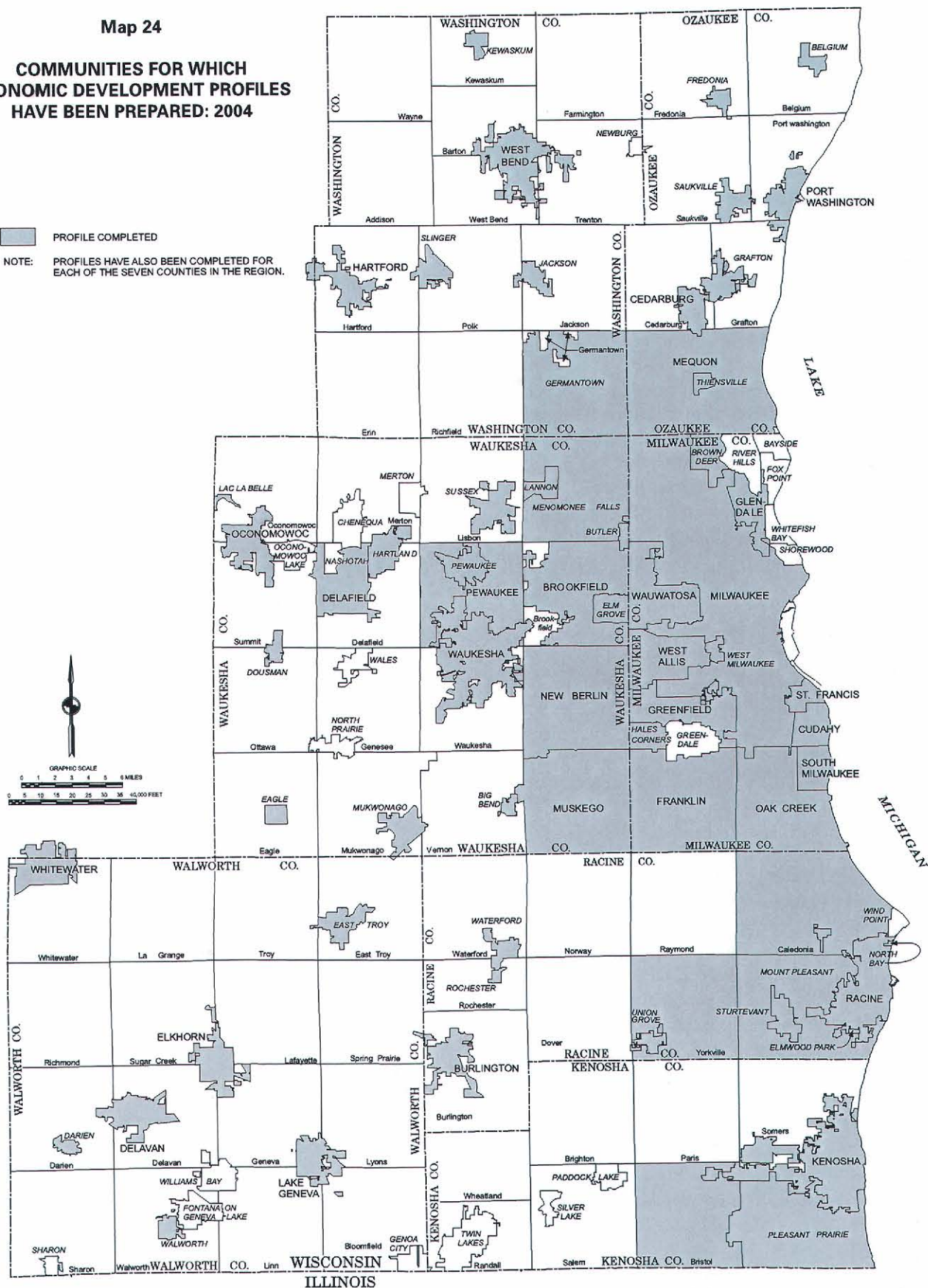
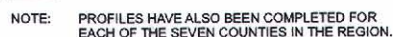
concerned with economic development and seeking Commission assistance. During 2004, the following representative project planning services were provided:

- Economic profiles were maintained for 62 cities, villages, and towns within the Region, along with profiles for Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties. These profiles are part of a series of economic profiles originally prepared in 1984 and updated periodically with the assistance of the Regional Economic Partnership. The profiles are available on the Regional Economic Partnership website ([www.wisrep.org](http://www.wisrep.org)) and can be printed by individual users. The communities for which profiles were maintained in 2004 are shown on Map 24.
- Completed work on SEWRPC Community Assistance Planning Report No. 278, *Kenosha County Hazard Mitigation Plan*. The Plan will be presented to the County Board of Supervisors and local units of government within the County for adoption in 2005.
- Assistance was provided to the Burlington Area Chamber of Commerce in the data analysis for a wage survey of local businesses.
- Data collection was initiated for a project sponsored by the Racine County Economic Development Corporation and University of Wisconsin-Parkside to evaluate the success of the County's strategic economic development planning process.
- Assistance was provided to the Racine County Economic Development Corporation in initiating the process of updating SEWRPC Memorandum Report No. 136, *Racine County Industrial Park Land Absorption Study*.

## **FEDERAL AND STATE GRANT-IN-AID PROCUREMENT AND ADMINISTRATION OF GRANT-IN-AID AWARDS**

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.

**COMMUNITIES FOR WHICH  
ECONOMIC DEVELOPMENT PROFILES  
HAVE BEEN PREPARED: 2004**



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 2004, the Commission assisted local units of government in obtaining the following grant awards:

- Kenosha County received approval for a \$109,000 Wisconsin Community Development Block Grant-Emergency Assistance Program (CDBG-EAP) application that was prepared with the assistance of Commission staff. The resulting grant award will be used to finance the acquisition and removal of residential structures located in the 100-year recurrence interval floodplain of the Fox River.
- The Village of Mt. Pleasant received approval for a \$325,500 Wisconsin Department of Transportation (WisDOT) Transportation Economic Assistance (TEA) application that was prepared with the assistance of Commission staff. The resulting grant award will be used to construct a rail spur for the expansion of Big Buck Building Centers, Inc., in the Village.
- The Racine County Economic Development Corporation received approval for a \$125,270 U.S. Economic Development Administration (EDA) application that was prepared with the assistance of Commission staff. The resulting grant award will be used for the funding of a technology development initiative by the Center for Advanced Technology & Innovation, Inc. (CATI).

The Commission staff completed work on the following grant applications during 2004 for submission to the concerned funding agency for consideration in 2005:

- A Kenosha County application to the Federal Emergency Management Agency-Hazard Mitigation Grant Program (HMGP) to finance the acquisition and removal of residential structures

located in the 100-year recurrence interval floodplain of the Fox River.

- A City of Racine pre-application to the U.S. Economic Development Administration (EDA) for a Public Works and Economic Development grant to fund infrastructure improvements for the former Jacobsen-Extron industrial site in the City.

### **Administration of Grant-in-Aid Awards**

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. 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 2004, the Commission provided contract services to administer the following grant awards:

- A Wisconsin Community Development Block Grant-Economic Development grant award totaling \$746,000 obtained by the City of Cedarburg in 1998 with the assistance of Commission staff. This grant award was 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 \$206,000 obtained by Ozaukee County in 2001 with the assistance of Commission staff. This grant award was used to provide a low-interest loan to assist Cedarburg Pharmaceuticals, LLC, 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-Economic Development grant award totaling \$172,400 that was prepared with the assistance of Commission staff. This grant award is being used by the Kohler Company to train workers at its new manufacturing facility in the Village of Saukville.
- A Federal Emergency Management Agency-Hazard Mitigation Grant Program (HMGP) award

totaling \$577,378 obtained by Kenosha County in 2001 with the assistance of Commission staff. This grant award is being used to finance the acquisition and removal of residential dwellings that are located in the 100-year recurrence interval floodplain of the Fox River.

- A Federal Emergency Management Agency-Hazard Mitigation Grant Program (HMGP) award totaling \$371,978 grant award obtained by Kenosha County in 2002 with the assistance of Commission staff. This grant award is being used to finance the acquisition and removal of residential dwellings that are located in the 100-year recurrence interval floodplain of the Fox River.
- A Wisconsin Division of Emergency Management-Pre-Disaster Mitigation Program grant award totaling \$16,500 obtained by Kenosha County in 2002 with the assistance of the Commission staff. This grant award is being used to finance the preparation of an All-Hazards Mitigation Plan for the County.
- A Wisconsin Community Development Block Grant-Emergency Assistance Program (CDBG-EAP) grant award totaling \$109,000 obtained by Kenosha County in 2004 with the assistance of Commission staff. This grant award is being used to finance the acquisition and removal of residential structures located in the 100-year recurrence interval floodplain of the Fox River.

## REVOLVING LOAN FUND ADMINISTRATION

The Commission, upon request, also assists in the administration of local revolving loan fund programs. These loan programs are established through repayments on Wisconsin Community Development Block Grant awards and through the appropriation of local funds. A number of activities are involved in administering these programs, including ensuring that the terms of each grant award or funding program are met. The Commission provided technical assistance in the utilization and administration of revolving loan fund programs during 2004 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 one loan totaling \$100,000; and 2) provision of assistance in the preparation of two semi-annual reports to the Wisconsin Department of Commerce.

- Provision of assistance to the Village of Menomonee 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 24 loans totaling \$2,362,800 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of three new loans totaling \$27,000; and 3) provision of assistance in the preparation of two semi-annual 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 completing the following activities: 1) provision of assistance in the servicing of one loan totaling \$152,500 that was provided with the assistance of the Commission; and 2) provision of assistance in revising the City's policies and procedures manual.
- 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 the provision of assistance in the servicing of one loan totaling \$322,000 that was provided with the assistance of the Commission.
- 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 providing assistance in the servicing of



three loans totaling \$30,300 that were provided with the assistance of the Commission.

- 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 two loans totaling \$276,400 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of two new loans totaling \$100,000; and 3) provision of assistance in the preparation of two semi-annual 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 three loans totaling \$543,500 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of four new loans totaling \$365,000; 3) provision of assistance in revising the City's policies and procedures manual; and 4) provision of assistance in the preparation of two semi-annual reports to the Wisconsin Department of Commerce.
- Provision of assistance to Ozaukee County in providing information to businesses interested in obtaining financing from the County'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 one loan totaling \$100,000 that was provided with the assistance of

the Commission; 2) provision of assistance in the packaging, closing, and servicing of two new loans totaling \$152,000; and 3) provision of assistance in the preparation of two semi-annual reports to the Wisconsin Department of Commerce.

- Provision of assistance to the City of Cudahy in providing information to businesses interested in obtaining financing from the City's economic development master fund program and in the provision of assistance in the servicing of four loans totaling \$42,450 that were provided with the assistance of the Commission.
- Provision of assistance to Washington County in providing information to businesses interested in obtaining financing from the County'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 five loans totaling \$648,300 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of two new loans totaling \$76,000; and 3) provision of assistance in the preparation of two semi-annual reports to the Wisconsin Department of Commerce.
- 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 24 loan applications to the Kenosha County Housing Authority for review and approval; 2) conduct of closings for 10 revolving loan fund loans totaling \$76,004; 3) provision of information to 83 residents interested in borrowing funds from the revolving loan fund program; and 4) servicing of 181 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, and assisting County and local governments in the preparation of multi-jurisdictional comprehensive plans. Such assistance promotes coordination between local and regional plans and plan implementation actions, resulting in good public administration as well as sound physical development within the Region. In 2004, the Division provided four basic types of services: educational, advisory, review, and County and local project planning.

## EDUCATIONAL SERVICES

Educational services are provided by Commission staff to local units of government, citizen groups, and local colleges and universities 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. Examples of educational efforts carried out in 2004 include the following:

- The Commission staff made a number of presentations regarding the update of the regional land use and transportation system plans. Presentations were made to the Fond-du-lac/North Avenue Business Association, the City of Mequon, the City of Franklin, the Public Policy Forum, the Local Roads and Street Council, the American Subcontractors Association of Greater Milwaukee, the West Allis Rotary Club, an Ozaukee County First Friday Forum, and classes at Gateway Technical College and the University of Wisconsin-Milwaukee.

Individual meetings were conducted with the following organizations that represent minority, low-income, and special needs populations, to present and discuss

information and obtain comments regarding the update of the regional land use and transportation system plans: Association for Rights of Citizens with Handicaps, Avalon Square Senior Independent and Assisted Living, Children's Health Education Center and its Injury Free Coalition for Kids, Community Brainstorming Conference, Esperanza Unida, Hmong-American Friendship Association, National Association of Minority Contractors-Wisconsin Chapter, Racine/Kenosha Economic Inclusion Coalition, and the Salvation Army of Waukesha.

- A presentation on a potential Regional Transportation Authority was given at a meeting of the Southeast Wisconsin Municipal Executives.
- A presentation about the Commission's work and intergovernmental cooperation was made at an Advisory Board meeting of Sustainable Racine.
- A presentation on current regional initiatives and perspectives was made at a Milwaukee Athletic Club Roundtable.
- The Commission staff made a number of presentations on the Regional Water Quality Management Plan Update and the Milwaukee Metropolitan Sewerage District (MMSD) 2020 Facilities Plan for the Greater Milwaukee Watersheds, which are currently underway. Presentations were made at a meeting of the Wisconsin Rural Leadership Program, at a meeting of the Milwaukee River Basin Partnership, and via individual or small group explanations at four public open houses for the interagency Water Quality Initiative. Several technical presentations were made to the MMSD Commission and the MMSD Operations Committee, Citizens Advisory Committee, and Technical Advisory Team.
- The Commission co-sponsored with MMSD a watershed planning conference entitled "Clean Rivers, Clean Lakes". Coordination for the event

was led by the Commission to facilitate public outreach and involvement for the Regional Water Quality Management Plan Update while also participating in the Lake Michigan Watershed Academy, an interagency educational effort funded by the U.S. Environmental Protection Agency under partnership agreement with the Northeastern Illinois Planning Commission. The day-long conference drew some 270 attendees comprised of local elected and appointed officials, water resource teams and councils, public and consulting agency staff, and environmental group members/interested citizens from throughout Southeastern Wisconsin. The agenda featured three presentations by the Commission designed to set the stage, update attendees on the planning process, and synthesize discussions toward future needs and actions.

- A number of presentations were also made regarding the Southeastern Wisconsin Regional Water Supply Planning Program, including information about the study and related issues at a meeting of Racine County Elected Officials, meetings of the Watershed Officials Forum, an MMSD Regional Conference, and to the Waukesha Environmental Action League. A presentation on "Water Supply Issues Facing the Southeastern Wisconsin Region" was made to the Wisconsin Chapter of the American Public Works Association at its spring conference, and a presentation on "Smart Growth and Water Supply Planning," was made at the Wisconsin Water Association Annual Meeting. A presentation on "Water Supply Resources, Systems, and Issues in Southeastern Wisconsin," was made at a Milwaukee School of Engineering Environmental Science Seminar.
- The Commission staff held a series of workshops relating to the delineation of environmental corridors. The purpose of the workshops was to educate interested citizens, private consultants, and State, County, and local officials on the history, mapping criteria, and field delineation of environmental corridors in Southeastern Wisconsin.
- A presentation on "Addressing Water Supply and Groundwater Challenges," was made by Commission staff at a UW-Extension workshop focused on the Mukwonago River. A presentation on "Basic Groundwater and Water Supply Background," was made at the Phantom Lakes

Management District Annual Meeting, and a presentation on groundwater in Southeastern Wisconsin was made to the Friends of Phantom Lakes.

- Two presentations were made by Commission staff at the "Reporting Critical Issues of Suburban and City Growth Seminar for Journalists" conference: "Water Supply Issues and Initial Groundwater Modeling Results: Focus on Southeastern Wisconsin," and "A Historical Perspective and the Next Steps for Selected Watershed Areas."
- A presentation on "Water Supply Issues and Initial Groundwater Modeling Results: Focus on Southeastern Wisconsin," was made at a meeting of the Metropolitan Builders Association and at a Carroll College Symposium.
- A presentation on the "Effects of Conventional Development on Water Resources" was made at a workshop on low impact development sponsored by the National Association of Home Builders Research Center and the National Association of Counties.
- Co-sponsorship, planning committee co-chairmanship, and formal evaluation were provided for the Annual Conference of the Wisconsin Association of Floodplain, Stormwater, and Coastal Managers. Two presentations were also made: "Characterization of Long-term May 2004 Rainfalls in Southeastern Wisconsin," and "Collaborative Development of Watercourse Models for Southeastern Wisconsin."
- Two presentations were made to a real estate records class at Waukesha County Technical College; the first on regional plans prepared by the Commission and the second on automated land information systems.
- A presentation on park and open space planning was made at the annual conference of the Wisconsin Park and Recreation Association and to a green infrastructure planning class at the University of Wisconsin-Milwaukee.
- A presentation on fisheries, recreational use, and riparian stewardship and a presentation on 2003 Wisconsin Act 118 were made at the Southeast Wisconsin Lakes Workshop.

- Presentations on assessing, restoring, and protecting fisheries habitat in streams, and on waterbody classifications were made at the Wisconsin Land Conservation Employees Association annual meeting.
- A presentation was made at a Lake Park Friends meeting on the "Lake Park Bluff Stability and Plant Community Assessment" prepared by the Commission in cooperation with Milwaukee County, Lake Park Friends, and University of Wisconsin-Madison.
- A presentation was made to a citizens group concerning the natural and geological values of Lime Kiln Park at the request of the Village of Menomonee Falls.
- A presentation on wetlands and endangered and threatened species in Wisconsin was given at a continuing education workshop organized by CLE International.
- A tour of calcareous fens and low prairies in Southeastern Wisconsin was conducted as part of a Prairie Conference held in Madison.
- A presentation was made to the University of Wisconsin-Milwaukee Department of Conservation and Environmental Science on water resources planning and watershed science.
- Commission staff helped coordinate, develop, and host sessions focusing on lake associations and fisheries management and habitat protection, managing plants to enhance fisheries, and fishing tournament impacts on lakes at the Wisconsin Lakes Convention in Green Bay.
- Presentations were made on the USH 45 Stream Relocation/Restoration Project, and on major planning activities of the Commission impacting upon natural resources of the Region, during the Southeast Area Land and Water Conservation Association Fall Tour.
- Commission staff continued to serve as program committee co-chairs for the 2005 North American Lake Management Society (NALMS) Symposium, to be held in Madison, Wisconsin, in November 2005. In addition, Commission staff continued in 2004 to serve as Chair of the Continuing Education Committee for the Wisconsin Chapter of the American Fisheries Society.
- A presentation was made to Doris Duke Fellowship recipients on careers in environmental planning and management at the Central Wisconsin Environment Station.
- Lake management related presentations included a presentation to the Friess Lake Advancement Association on aquatic plant management; a Waterford Pontoon Classroom presentation on aquatic plants; a presentation to Muskies Inc. on the Pewaukee Lake management plan; and a presentation on the link between land and water to the organization Positively Pewaukee.
- A presentation to the United Nations Association of Waukesha, part one of which was on the World Lake Vision and part two on the work of the Commission and lake organizations in Southeastern Wisconsin.
- Participation in a panel discussion on the benefits and consequences of dam removal in the Village of East Troy.
- A presentation on Eurasian water milfoil management was given at a Statewide meeting hosted by the Wisconsin Association of Lakes in Wisconsin Dells.
- A presentation on land use management for environmental protection was given at the annual conference of the Soil Science Society of America.
- A presentation on "Changes in Plant, Bird, Reptile and Amphibian Diversity in Milwaukee County" was made during a meeting at University of Wisconsin-Madison entitled "The Vanishing Present: Perspectives on Ecological Change in Wisconsin."
- A presentation on economic development planning was given to a graduate class in the University of Wisconsin-Milwaukee Department of Urban Planning, and a presentation on the Commission's approach to regional planning was made to a University of Wisconsin-Madison graduate planning class.



- Commission staff continued to serve as Coordinator for the Southeast Area Land and Water Conservation Association. In that capacity relevant Commission efforts were routinely discussed with the Board and an educational program on conservation subdivisions was arranged, which included a staff presentation on the importance of conservation design from a regional perspective.
- Commission staff continued to serve on the Steering Committee for the interagency consortium known as "Testing the Waters", which has trained scores of teachers and over 12,000 high school students over the years, most from within the watersheds tributary to the Milwaukee Harbor Estuary. In 2004, staff worked with the Washington County Land Conservation Department to plan and conduct four watershed bus tours for 125 students and their teachers, to view land use changes, water quality problems, and solutions; particularly in the rural landscape.
- A presentation on geographical information system data and its applications for planning and understanding historic changes was given to eighth grade classes at Steffen Middle School in Mequon.
- The Great Lakes Nonpoint Abatement Coalition was advised regarding water resource planning programs of the Commission, involved as a cooperator in the Clean Rivers, Clean Lakes conference noted above, and assisted in the matter of by-law revisions.
- A public informational meeting was conducted jointly with the Town of LaFayette, featuring a Commission presentation describing the results of the Town's Master Plan Community Survey, which had been prepared and administered to broaden involvement and objectively gauge land owner preferences.

## ADVISORY SERVICES

Advisory services consist of providing 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 2004 included the following:

- Participated on the Advisory Committee and provided data and review comments for development of the City of West Bend 2020 comprehensive plan. The plan was adopted in April 2004.
- At the request of the City of Franklin, prepared a draft Request for Proposal (RFP) for consultant services to assist the City in preparing a comprehensive plan. Commission staff also served on the consultant selection committee.
- Provided information and examples of zoning and subdivision ordinance requirements to several local governments, including stream setbacks in downtown areas to the City of Waukesha, recommended setbacks from streams and wetlands to the Village of Germantown, regulations for second-hand business to the City of Cudahy, and information on subdivision lot layouts to the Town of Fredonia.
- Provided a model ordinance and related information to the Town of Richmond for establishing a town plan commission.
- Attended a Town of Lyons Plan Commission meeting to discuss potential design guidelines for parking, landscaping, and building exteriors, and the potential for incorporating design requirements into a Town ordinance.
- Provided information about conservation subdivisions and the conservation design process in response to requests from a number of local governments, students, and citizens.
- Provided census information and information regarding natural areas and regional plan recommendations to the Town of Burlington for use in updating the Town land use plan.

- Provided maps and information about existing and planned trails in the Region to the Rails to Trails program in Washington, DC.
- Provided examples of floodplain zoning ordinances and maps developed by the Commission for local governments in the Region to the Lake County (Illinois) Stormwater Management Commission.
- Provided assistance in response to various inquiries about the National Flood Insurance Program and flood insurance rate maps for the Region.

## REVIEW SERVICES

Review services are intended to encourage the incorporation of regional studies and plans into local planning programs, plans, and plan implementation devices, such as zoning and subdivision control ordinances. 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 by Commission staff: 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 performed during 2004 included reviews of the Town of Burlington Land Use Plan update, the Town of Richfield comprehensive plan, three neighborhood plans for the Town of Salem, and the Town of Genesee outdoor recreation plan. Commission staff also reviewed 59 preliminary land subdivision plats in 27 local governments within the Region.

Commission activities regarding the review of Federal and State grant applications during 2004 are summarized in Table 26. Review comments were provided for 109 applications for Federal and State grants, loans, or mortgage insurance guarantees requesting in the aggregate about \$203 million in Federal and State financial assistance. Of the 109 requests, one was found to be in conformance with, and to serve to implement, the adopted regional plan elements. The remaining 108 were found to be not in conflict with the adopted regional plan elements. No environmental assessments or impact statements were submitted for review by the Commission in 2004.

## PROJECT PLANNING SERVICES

Project planning services generally involve the conduct for member units of government of detailed planning studies resulting in the preparation of County and local plans and plan implementation ordinances. During 2004, the Commission's project planning efforts included the following:

### Comprehensive and Master Plans

- Completed work, including report production, on a master plan for the Village of Wales.
- Completed work on a master plan for the Village of Hartland. The plan was adopted by the Village in late 2004. The plan report will be published in 2005.
- Continued work on a master plan for the Town of Lafayette.
- Continued work on a multi-jurisdictional comprehensive plan for Ozaukee County and 14 participating local governments. Following approval of a comprehensive planning grant award in early 2004, work during the year focused on preparing and adopting a public participation plan, developing a public opinion survey questionnaire, and beginning work on base maps and plan inventories.
- Coordinated with County staff in Kenosha, Racine, Walworth, and Washington Counties to conduct workshops in each County on a proposed County-local partnership to produce County and local comprehensive plans to meet the requirements of the State's comprehensive planning law. Commission staff also prepared a work program detailing the roles and responsibilities of County, local, and SEWRPC staff in each of the Counties, and assisted in preparing three-party agreements committing partners to the planning process. Commission staff also helped prepare grant applications for State funds to assist in the planning efforts, which were submitted in October 2004.
- During 2004, Commission staff served on the Advisory Committee and two of the work-groups established to help prepare the Waukesha County multi-jurisdictional comprehensive plan, made

Table 26

## STATE AND FEDERAL GRANT REVIEWS: 2004

Review Category	Number of Reviews	Aggregate Amount of Federal and State Grant, Loan, or Mortgage Insurance Requests
Community Action .....	37	\$54,427,502
Community Development .....	4	4,337,440
Community Facilities .....	1	450,101
Conservation .....	58	133,666,469
Historical Preservation .....	1	1,131,252
Housing .....	4	6,431,224
Land and Water Conservation .....	1	28,000
Law Enforcement .....	2	1,671,689
Transportation .....	1	573,000
<b>Total</b>	<b>109</b>	<b>\$202,716,677</b>

presentation to the plan Advisory Committee about the regional land use plan update, and provided review comments and planning data as requested by the County.

### Park and Open Space Plans

- Planning work was completed in 2004 on a new park and open space plan for the Town of Salem. The plan will be considered for approval in early 2005.
- Work continued on an update to the City of West Bend park and open space plan.

### Zoning Ordinances and Maps

- Work was completed on an updated zoning ordinance and map for the Village of Kewaskum and digital zoning maps for Walworth County and the Towns of Jackson and Polk.
- Work continued on an updated zoning ordinance and map for the Town of Belgium. Work also continued on an update to the shoreland zoning ordinance and maps for Ozaukee County.
- Work was initiated on a digital zoning map for the Town of Addison.

### Other Project Planning Efforts

- Work continued on a design plan for the north segment of State Trunk Highway (STH) 36 in Racine County. The design plan will be comprised of two key elements. The first element is a planned land use map reflecting a composite of local land use plans where such plans have been adopted; and the preparation of a planned land use map, based on the regional land use plan, existing zoning, and/or existing land uses, for areas where no local land use plan is in place. The second element will consist of a set of recommended urban and rural design guidelines. Work during 2004 focused on the preparation and review of design guidelines by the Advisory Committee. The plan will be completed in 2005.
- Work was completed on a Hartland-Merton Cluster Development Plan, in response to a request from the Villages of Hartland and Merton and the Town of Merton. The plan recommends detailed street and lot layouts with inter-connecting open space preservation areas and trails. The report will be published in 2005.
- Completion of work on a land use plan implementation strategy for the rural area of the Town of Caledonia. The plan was adopted by the Town Board in March 2004, and the report documenting the plan was published in mid-2004.

# **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 2004, work continued on the updating of the Commission's one-inch-equals-2,000-foot-scale county planning base maps, using Commission orthophotography and Wisconsin Department of Transportation state aid mileage summary maps. In 2004, 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-foot-scale and one-inch-equals-200-foot-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.

As shown on Map 25 and in Table 27, a total of 11,753 U.S. Public Land Survey corners in the Region as of the end of 2004 had been relocated, monumented, and coordinated, representing 100 percent of all such corners in the Region. Map 26 shows those areas of the Region for which, as of the end of 2004, large-scale topographic maps had been or were being prepared to Commission-recommended standards. As shown in Table 27, the area thus completed totals about 2,181 square miles, or about 81 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 42 and 43 and on Map 28. Map 27 shows those areas of the Region for which, as of the end of 2004, 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 2,041 square miles, or about 76 percent of the total area of the Region. A sample of a completed cadastral map is shown on Map 29.



Map 25

RELOCATION, MONUMENTATION,  
AND COORDINATION OF U.S. PUBLIC  
LAND SURVEY CORNERS: 2004

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

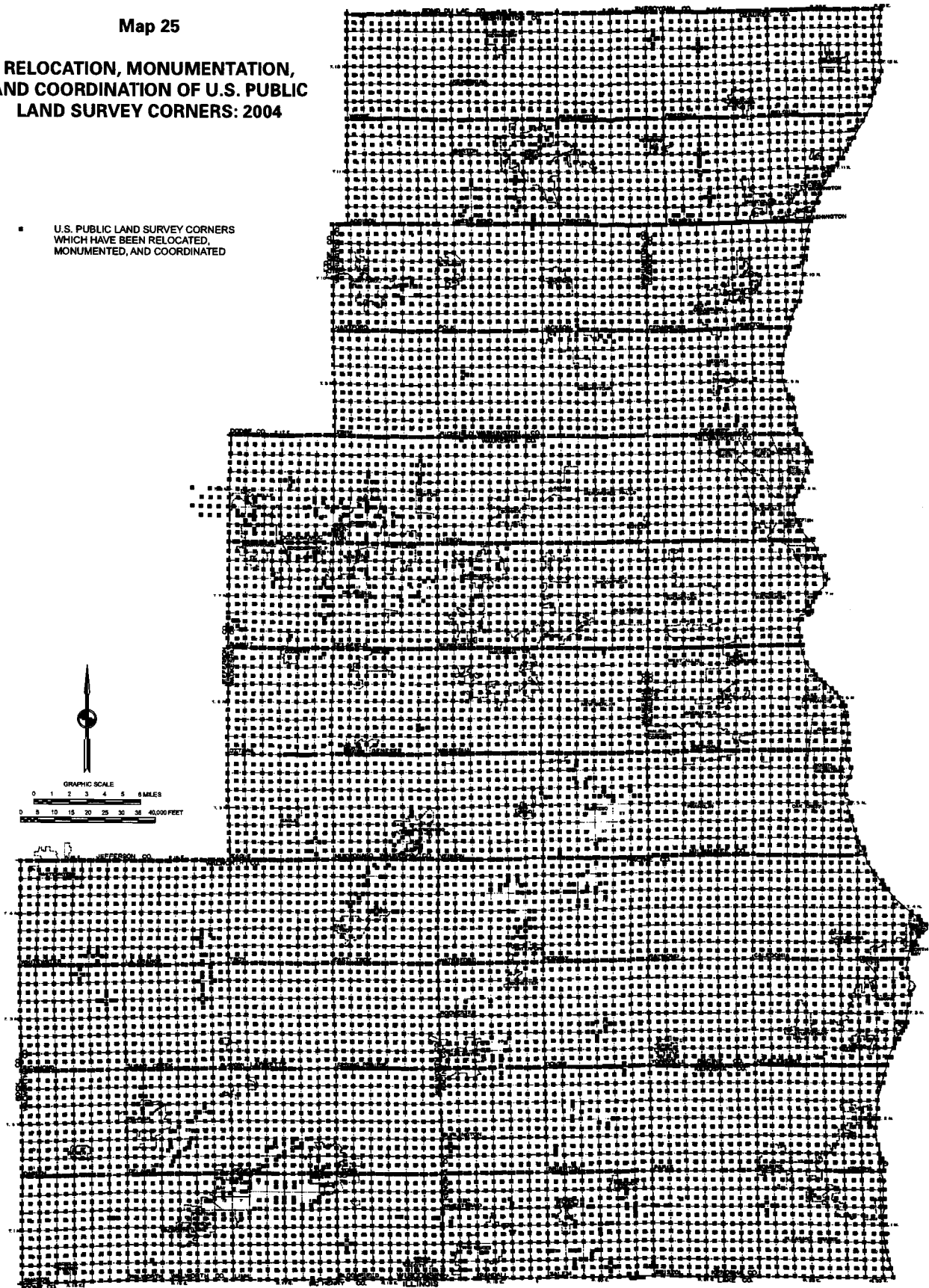


Table 27

**RELOCATION, MONUMENTATION, AND COORDINATION OF U.S. PUBLIC LAND  
SURVEY CORNERS AND COMPLETION OF LARGE-SCALE TOPOGRAPHIC MAPPING: 2004**

County	Estimated Total Corners <sup>a</sup>	Number of U.S. Public Land Survey Corners Which Have Been Relocated, Monumented, and Coordinated							
		Wisconsin Department of Transportation	SEWRPC	County	Milwaukee Metropolitan Sewerage District	Local <sup>b</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	629	3	110	--	1,064	100.00
Racine .....	1,478	--	172	1,306	--	--	--	1,478	100.00
Walworth .....	2,503	315	--	2,056	--	121	11	2,503	100.00
Washington .....	1,905	150	164	1,112	--	428	51	1,905	100.00
Waukesha .....	2,535	78	463	1,398	--	596	--	2,535	100.00
Region	11,753	816	1,330	7,547	162	1,810	88	11,753 <sup>c</sup>	100.00

<sup>a</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>b</sup>Includes 22 cities, 21 villages, and four towns.

<sup>c</sup>Because of the need to set witness corners, these 11,753 U.S. Public Land Survey corners, including the centers of the sections, are marked by 11,985 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	192.25	--	17.50	--	234.00	100.00
Racine .....	340	25.50	314.50	--	--	--	340.00	100.00
Walworth .....	578	--	346.50	--	27.50	--	374.00	64.71
Washington .....	436	22.75	60.75	--	89.25	9.00	181.75	41.69
Waukesha .....	581	78.75	307.00	--	145.25	--	531.00	91.39
Region	2,689	190.00	1,559.25	49.50	370.50	11.50	2,180.75	81.10

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, 141.50 square miles have been updated by other agencies. Of the 1,491.75 square miles originally mapped under county programs, 47.00 square miles have been updated by other agencies. Of the 370.50 square miles originally mapped under local programs, 251.50 square miles have been updated by other agencies.

<sup>a</sup>Large-scale topographic mapping is being extended into an additional 204.00 square miles of area.

<sup>b</sup>Includes 22 cities, 21 villages, and four towns.

## COUNTY SURVEYING ACTIVITIES







In 1984, State legislation was enacted which in part requires that in a county having a population of 500,000 or more (Milwaukee County), 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 direc-

tor 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 maybe 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.



# Map 26

## LARGE-SCALE TOPOGRAPHIC MAPPING PREPARED TO COMMISSION-RECOMMENDED SPECIFICATIONS: 2004





-  DIGITAL TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 100'
-  DIGITAL TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 200'
-  ANALOG TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 100'
-  ANALOG TOPOGRAPHIC MAPPING COMPLETED AT A SCALE OF 1" = 200'
-  DIGITAL TOPOGRAPHIC MAPPING UNDER PREPARATION AT A SCALE OF 1" = 100'
-  DIGITAL TOPOGRAPHIC MAPPING UNDER PREPARATION AT A SCALE OF 1" = 200'





Map 27

**LARGE-SCALE CADASTRAL MAPPING  
PREPARED TO COMMISSION-RECOMMENDED  
SPECIFICATIONS UNDER PROGRAMS  
ADMINISTERED BY THE COMMISSION: 2004**

-  DIGITAL CADASTRAL MAPPING COMPLETED  
AT A SCALE OF 1" = 100'
-  DIGITAL CADASTRAL MAPPING COMPLETED  
AT A SCALE OF 1" = 200'
-  DIGITAL CADASTRAL MAPPING UNDER  
PREPARATION AT A SCALE OF 1" = 100'
-  DIGITAL CADASTRAL MAPPING UNDER  
PREPARATION AT A SCALE OF 1" = 200'

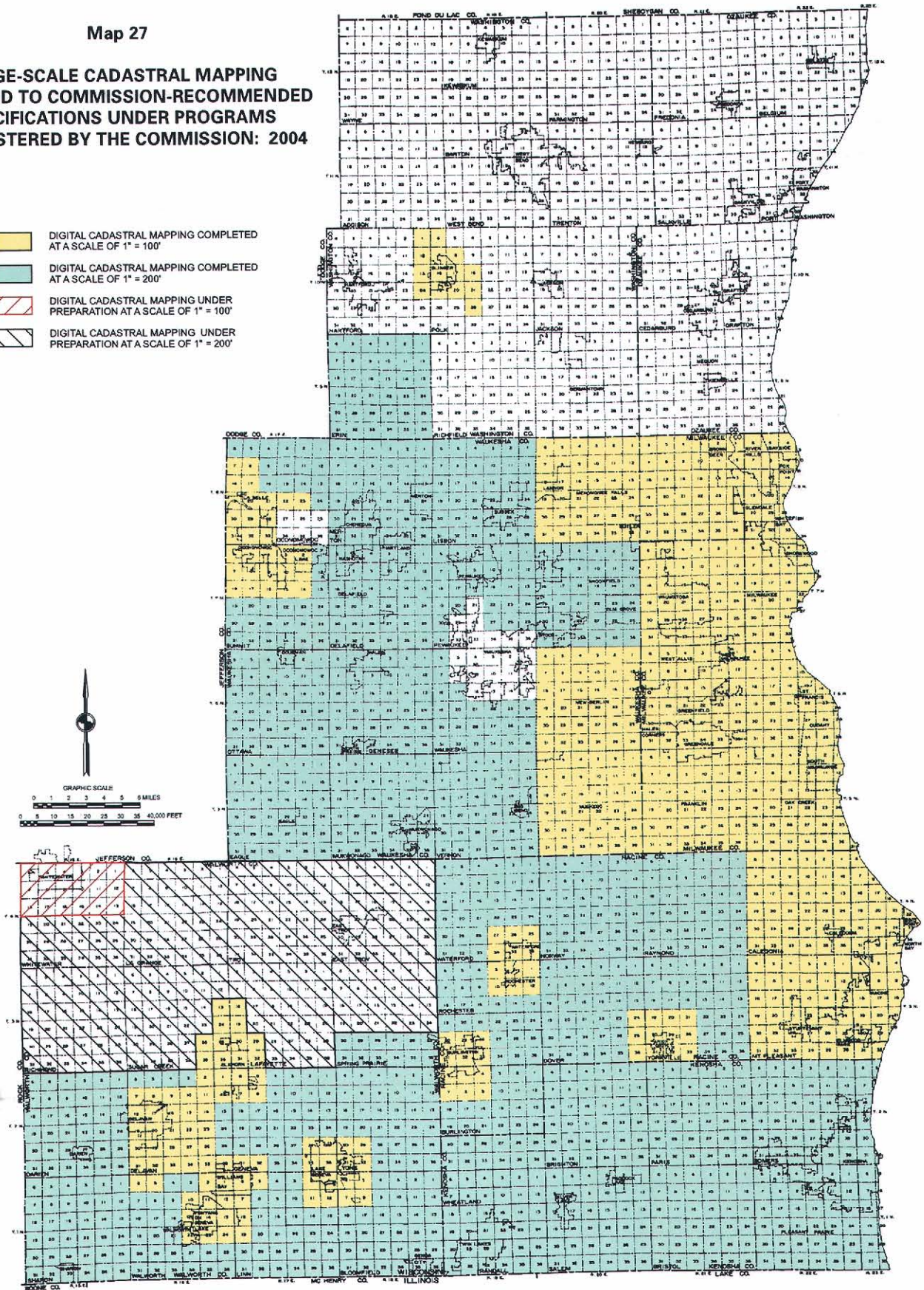




Figure 42

# **RECORD OF U.S. PUBLIC LAND SURVEY CONTROL STATIONS**

RECORD OF U. S. PUBLIC LAND SURVEY CONTROL STATION			
U. S. PUBLIC LAND SURVEY CORNER	181 15 211 22	T. S. N. R. 21 E. MILWAUKEE	COUNTY, WISCONSIN
HORIZONTAL CONTROL SURVEY BY:	AERO-METRIC ENGINEERING, INC.		YEAR: 1993
VERTICAL CONTROL SURVEY BY:	AERO-METRIC ENGINEERING, INC./SEWRPC		YEAR: 1993/1999
STATE PLANE COORDINATES OF:	SECTION CORNER		
NORTH	329,685.22		
EAST	2,533,357.57		
ELEVATION OF STATION:	781.897		
HORIZONTAL DATUM: WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NORTH AMERICAN DATUM OF 1927			
VERTICAL DATUM: NATIONAL GEODETTIC VERTICAL DATUM OF 1929			
CONTROL ACCURACY:		THETA ANGLE: +01-22-03	
HORIZONTAL: THIRD ORDER, CLASS I		VERTICAL: SECOND ORDER, CLASS II	

LOCATION SKETCH:

As Milwaukee 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-398, 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 cut limestone monument set to mark this corner in 1878 by Jonathan C. Croline, Surveyor; replacing in turn a wood post set to mark this corner in June 1838 by Elisha Dwell, Deputy United States Surveyor, in the conduct of the original United States Public Land Survey; that I referenced the same as shown herein; and that this record is correct and complete to the best of my knowledge and belief.

DATE OF SURVEY: 7 May 1992  
 REVISÉ: 30 September 1999  
 12 March 2001

Kurt D. Brown  
 REGISTERED LAND SURVEYOR

S - 157

FORM PREPARED BY SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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 been responsible for the perpetuation of the U.S. Public Land Survey System in Milwaukee County. Since 1999, the Commission has been responsible for the remonumentation and perpetuation of the U.S. Public Land Survey System in Walworth County. Since 2000, the Commission has been responsible for the perpetuation of the U.S. Public Land Survey System in Waukesha County. In both Walworth and Waukesha Counties, the Commission performs the duties of County Surveyor under agreements with those Counties.

## **REGIONAL LAND INFORMATION INTERNET SITE**

In 2003, the Commission completed the development of an internet site which provides access to land survey and control survey documents, aerial orthophotography, and planning related mapping for the Southeastern Wisconsin Region. The land survey and control survey documents—see samples shown in Figures 42 and 43—are updated on the internet site as new or revised data becomes available. The internet site can be accessed at [www.sewrpc.org/regionallandinfo/](http://www.sewrpc.org/regionallandinfo/).

In 2004, under the requirements of this legislation, the Division received, indexed, and filed 1,524 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 38,764.

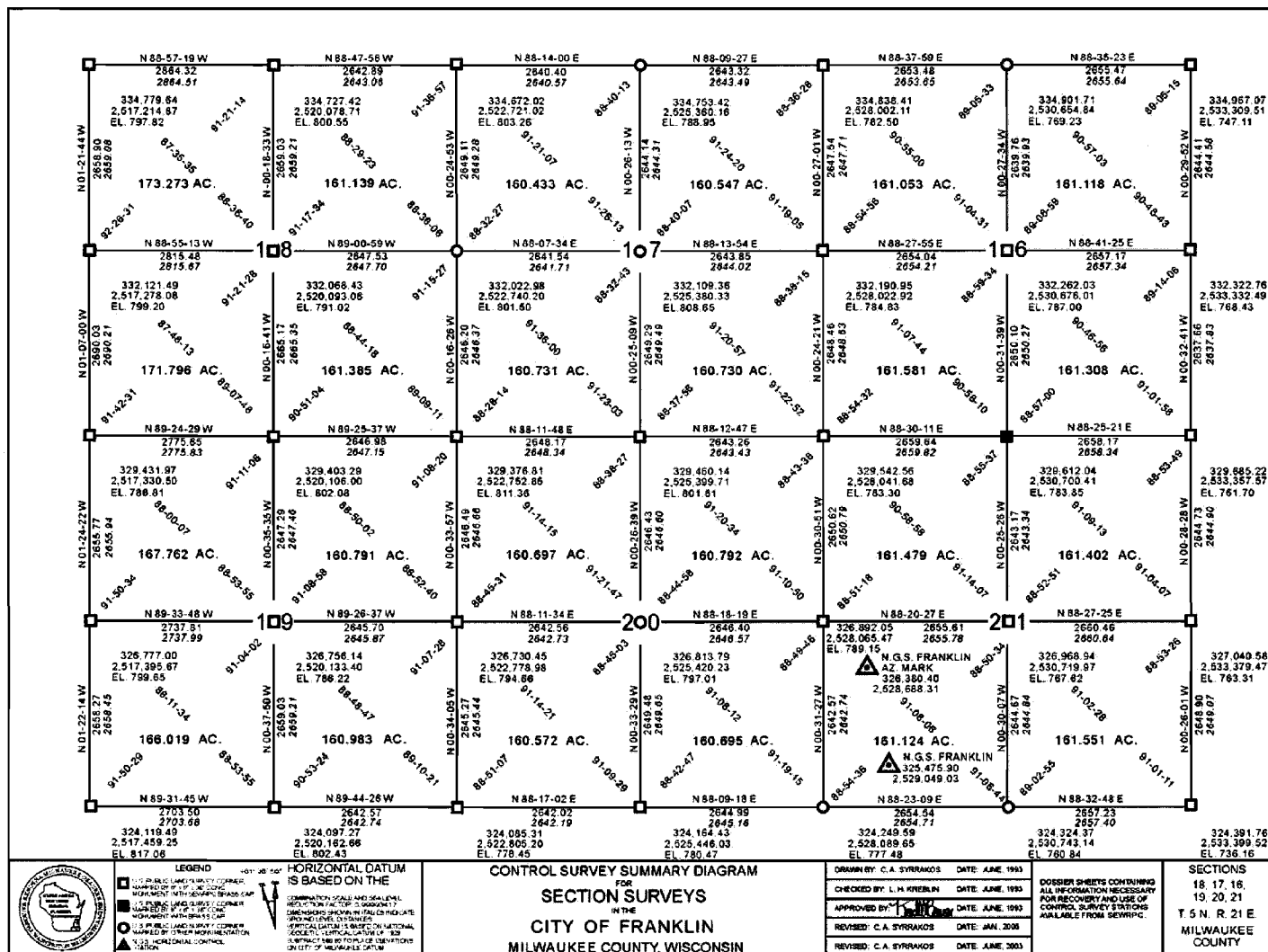
Updated digital lists of the filed survey records are transmitted to the Milwaukee County Director of Public Works, the Milwaukee County Register of Deeds, city and village engineers within the County, and all land

## **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 2004, a total of 2,768 prints of aerial photographs of portions of the Region were reproduced, along with 12 soil map prints and 21 prints of maps in the Commission base map series.

Figure 43

## TYPICAL CONTROL SURVEY SUMMARY DIAGRAM



## FINAL REPORT PRODUCTION

The Commission produces most of its documents using in-house staff and equipment. During 2003, the Cartographic and Graphic Arts Division was responsible for the production of the following Commission publications:

## TECHNICAL REPORTS

- No. 10, 4th Edition, *The Economy of Southeastern Wisconsin*, July 2004, 70 pages
- No. 11, 4th Edition, *The Population of Southeastern Wisconsin*, July 2004, 104 pages



### TYPICAL CADASTRAL MAP





## ANNUAL REPORTS

- 2003 Annual Report, June 2004, 196 pages

## COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 96, 2nd Edition, *Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin*, March 2004, 36 pages
- No. 103, 2nd Edition, *Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin*, March 2004, 28 pages
- No. 136, 3rd Edition, *A Park and Open Space Plan for Washington County*, March 2004, 189 pages
- No. 256, *A Master Plan for the Village of Wales: 2020, Waukesha County, Wisconsin*, April 2004, 244 pages
- No. 260, *A Stormwater and Floodland Management Plan for the Butler Dutch Subwatershed, City of Brookfield and Village of Menomonee Falls, Waukesha County, Wisconsin*, July 2004, 246 pages
- No. 266, *Racine County Hazard Mitigation Plan*, August 2004, 391 pages
- No. 272, *A Land Use Plan Implementation Strategy for the Rural Area of the Town of Caledonia, Racine County, Wisconsin*, March 2004, 96 pages
- No. 274, *Flood Mitigation Plan for the City of Oak Creek, Milwaukee County, Wisconsin*, April 2004, 244 pages

## MEMORANDUM REPORTS

- No. 142, *Identifying and Delineating Problem Wetlands in the Lake Michigan Basin Using an Integrated Approach: A Case Study of Two Seasonal Wetland Types, Kenosha County, Wisconsin*, September 2004, 77 pages

- No. 146, *An Aquatic Plant Management Plan for Little Cedar Lake, Washington County, Wisconsin*, May 2004, 103 pages
- No. 149, *A Lake Protection Plan for Spring Lake and Willow Spring Lake, Waukesha County, Wisconsin*, August 2004, 126 pages
- No. 155, *An Aquatic Plant Management Plan for Little Muskego Lake, Waukesha County, Wisconsin*, January 2004, 73 pages
- No. 156, *Lake Park Bluff Stability and Plant Community Assessment: 2003, Milwaukee County, Wisconsin*, September 2004, 88 pages

## NEWSLETTERS

- Vol. 42, No. 1, 24 pages
- *Review and Update of Regional Land Use and Transportation System Plans for Southeastern Wisconsin*, July 2004, 12 pages

## OTHER

- *Staff Memorandum, Scope of Work, Milwaukee County Transit System Development Plan: 2005-2009*, January 2004, 19 pages
- *Record of Public Comments, Review and Update of Region Land Use and Transportation System Plans for Southeastern Wisconsin*, October 2004, 78 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Pewaukee*, March 2004, 3 pages
- *Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area*, March 2004, 9 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls*, June 2004, 4 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Jackson*, June 2004, 7 pages

- *Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District-Lake Como Sanitary Sewer Service Area, June 2004, 5 pages*
- *Amendment to the Regional Water Quality Management Plan, City of Waukesha, September 2004, 3 pages*
- *Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District-Williams Bay-Geneva National-Lake Como Sanitary Sewer Service Area, September 2004, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Twin Lakes, September 2004, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, City of Burlington/Bohner Lake Sanitary Sewer Service Areas, December 2004, 6 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Kewaskum, December 2004, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, City of Lake Geneva, December 2004, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District-Delavan/Delavan Lake Sewer Service Area, December 2004, 4 pages*

(This page intentionally left blank)

# GEOGRAPHIC INFORMATION SYSTEMS DIVISION

## DIVISION FUNCTIONS

The Commission's Geographic Information Systems Division provides basic support and mapping services to the Commission's planning divisions, provides assistance to county and local governments in the development of automated land information systems, and distributes digital and hardcopy map products to requesting clients. In the mid-1970s, the Commission began collecting map information in digital format and has developed a computer mapping capability that incorporates large-scale base maps, planning data, and resource inventories into a regional geographic information system (GIS). A GIS is a collection of computer hardware, software, and geographic data for capturing, storing, updating, analyzing, and displaying geographically-referenced information, such as topographic mapping, land use, soils, floodplain boundaries, and associated attribute data. A geographic information system links information to location. In the Commission's GIS, the various planning and resource data sets are geographically-referenced to a framework provided by the U.S. Public Land Survey System (USPLSS) tied to the State Plane Coordinate System by accurate horizontal control surveys. This framework of survey control allows the wide variety of base maps and planning data sets in the Commission's geographic information system to be integrated together for regional planning activities.

A land information system (LIS) is similar to a GIS, but this information system has the added component of real-property boundary maps with ownership and parcel data. The maps and data sets in an LIS are therefore directly related, and geographically-referenced, to parcels and property information. With the inclusion of parcel information, land information systems have become an important administrative and decision-making tool for municipalities. At the local level, every county and many city, village, and town governments in the Southeastern Wisconsin Region have developed land information system capabilities as part of their planning activities. Many municipalities have expanded their LIS functionality to provide essential services, such as assistance with zoning decisions, public works inventories and maintenance,

and access to public records. Since nearly all local land information systems use the common framework of survey control advocated by the Commission, regional planning data from the Commission's GIS has been distributed and integrated into a number of municipal land information systems. Similarly, the Commission has been able to acquire and incorporate large-scale parcel and topographic data sets from county and other land information systems to augment its GIS. Sharing data between GIS and LIS systems provides users with a wide range of planning-related information about the physical, cultural, and ownership characteristics of land—all important factors in the planning process.

## 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 layers of geographically-referenced 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 ArcInfo and ArcView GIS software and AutoCAD and MicroStation CAD software. The ArcInfo and ArcView software supports a wide variety of data collection, map analysis, and map production tasks. To supplement this GIS functionality, the AutoCAD and 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.



## DEVELOPMENT OF A REGIONAL GEOGRAPHIC INFORMATION SYSTEM

Since 1976, the Commission has developed 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 hardcopy form. Over the years, the Commission has continued these map conversion efforts to build a large inventory of planning data sets covering the Southeastern Wisconsin 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, 2000
- Land Use: 1963, 1970, 1980, 1985, 1990, 1995, 2000
- Soil Mapping Units
- Historical Urban Growth: 1995, 2000
- Vegetation: 1985
- Wildlife Habitat: 1985
- Inventory Environmental Corridors: 1990, 1995, 2000
- Planned Environmental Corridors
- Floodplain Boundaries
- Pre-European-Settlement Vegetation: 1836
- County Base Maps: 1985, 1990, 1995, 2000
- Natural Areas and Critical Species Habitats
- Civil Division Boundaries: 1985, 1990, 1995, 2000
- Regional Land Use Plans: 2010, 2020
- Watershed, Subwatershed, and Subbasin Boundaries
- Park and Open Space Sites
- Sewer Service Areas
- Depth to Bedrock
- Depth to Water Table
- Water Table Elevation
- Contaminant Attenuation Potential of Soils
- Groundwater Contamination Potential

The Commission continues to work annually toward building and enhancing the regional geographic information system. 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.

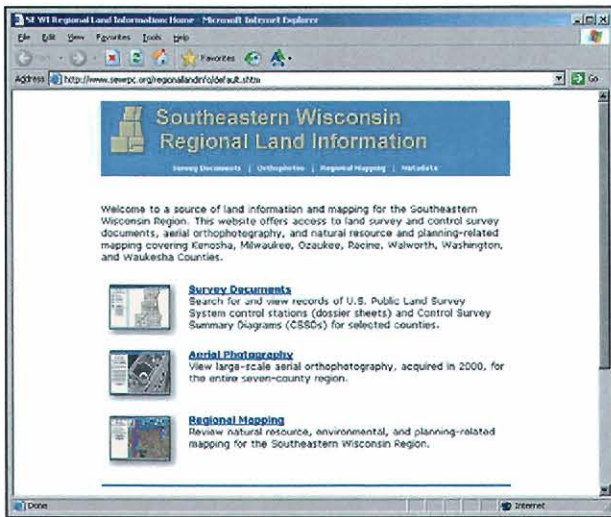
## DEVELOPMENT OF A REGIONAL LAND INFORMATION WEBSITE

In 2003, the Commission continued the development of a regional geographic information system with the creation of a land information website (see Figure 44). The Southeastern Wisconsin Regional Land Information website (<http://www.sewrpc.org/regional/landinfo>) is a cooperative effort between the Commission and the Land Information Officers and staffs of the seven counties. Partially funded by grants from the Wisconsin Land Information Program, the website provides access to land and control survey documents, aerial orthophotography, and regional planning maps. The website also offers access to parcel maps maintained and contributed by participating counties.

One important function of the website is online access to current land and control survey documents. Users can search for two types of survey documents: control station (dossier) sheets and Control Survey Summary Diagrams (CSSDs). A dossier sheet is a record of a USPLSS control station, generally a section corner, quarter-section corner, center of section, or witness corner. Each sheet contains an identification of the corner, a sketch of the location, witness monuments and ties, monument coordinates and elevations, and other surveyor's information. CSSDs summarize horizontal and vertical control survey information obtained from the high-order control surveys carried out within the Southeastern Wisconsin Region. Each Control Survey Summary Diagram covers six USPLSS sections and shows the location and type of corner monuments; coordinates and elevations of the located corners; and grid distances, bearings, and interior angles of all USPLSS section and quarter-section lines.

Figure 44

## REGIONAL LAND INFORMATION WEBSITE



The dossiers and CSSDs are maintained in digital format (Internet standard PDF format) on the regional land information website. To access the documents, users can search by location on an index map, or can enter the township, range, section, and corner information on a web page form. Either search method will present a list of one or more documents which can then be viewed and printed. As survey documents are updated, the revised dossiers and CSSDs are placed on the website to insure that the regional land information site is the best source for current survey documentation of the Southeastern Wisconsin Region.

The aerial photography portion of the website allows users to view recent aerial photo images of the seven-county Region. Acquired by the Commission in 2000, the aerial photography is a special type known as orthophotography, in which distortions in the original photography have been corrected to generate an image product that accurately shows the locations of features on the ground. On the regional land information website, users can examine images of the Region and find out how the orthophotography is organized into digital files for distribution. An order form on the website can be used to request digital orthophoto files from the Commission for a nominal fee.

Another portion of the website, the Regional Map Server, is a mapping application providing access to planning and natural resource maps of the Region.

This application allows users to select and view different types of planning data sets, including detailed and generalized land use maps, environmental corridor maps, soils maps obtained from the Natural Resources Conservation Service, and parcel mapping contributed by participating counties. Municipal boundaries and orthophotography are also accessible on the mapping application. Metadata, providing detailed information about the origin, lineage, and content of the data sets, is available for the map layers displayed on the Regional Map Server.

The Southeastern Wisconsin Regional Land Information website has been developed to provide basic planning information to interested users. For surveyors, the site serves as the most current source of control survey documents in the Region. For land owners and developers, the website can answer property-related questions about surrounding land uses, proximity to environmental corridors, and soil types. The Commission, with the assistance of the counties, intends to continually enhance the regional land information website with the addition of new orthophotography, updated resource inventories, and additional planning-related mapping.

## 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 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 and meander corners, 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 hardcopy form at one-inch-equals-100-foot or one-inch-equals-200-foot scales, with two-foot contour intervals. Recently, the acquisition of digital terrain model files (DTMs) has been included in this component.

4. The completion of cadastral overlay maps in digital and hardcopy 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.
5. 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 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 in 1990 by the initiation 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 information system plans.

By the end of 1992, the Commission had assisted all seven counties in the Region in preparing initial county land information system plans. Subsequently, all counties in the Region have revised their initial plans on approximately five-year intervals and have submitted the resulting updated land information system plans to the WLIB. Each revised plan updates and extends the recommendations set forth in its corresponding initial county-level plan.

The Commission has continued to assist the seven counties in the implementation of their initial and updated land information plans. In 2004, the Commission carried out the following major activities in support of development of the county-based land information systems:

#### **Kenosha County**

- Two large-scale topographic mapping projects were completed in Kenosha County. The Commission assisted the County in acquiring digital and hardcopy topographic mapping—with supplemental floodplain boundary mapping—and digital terrain model files for a total area of approximately 23 square miles.

#### **Milwaukee County**

- The Commission completed a multi-year cadastral mapping transformation project in Milwaukee County. Land information system planning in this county is facilitated by a public-private partnership known as the Milwaukee County Automated Mapping and Land Information System (MCAMLIS), which jointly manages the base mapping. This latest MCAMLIS project involved the transformation of existing City of Milwaukee digital cadastral map files to conform to current control survey information. Commission staff worked with City of Milwaukee staff to provide quality control and review of approximately 78 square miles of digital cadastral mapping during the five-year duration of this project.
- The Commission continued work on a floodland mapping project in Milwaukee County as part of the MCAMLIS program. This project will prepare a detailed floodplain and floodway boundary data set that can be used for local floodplain zoning and in updating Federal Emergency Management Agency



flood insurance rate maps. Upon completion of this project, floodplain boundaries will be accurately delineated and added to all digital topographic maps which have been prepared under the MCAMLIS program.

- The Commission provided staff assistance to the MCAMLIS Steering Committee in designing a multi-year program to replace all existing Milwaukee County digital topographic mapping, some of which is as much as twenty years or more out of date. During the year, project specifications for this Program were reviewed with the assistance of a group of users. Recommendations from that group were presented to, and adopted by, the MCAMLIS Steering Committee. By the close of the year, the Commission had prepared a program budget and a multi-year funding plan to complete the desired new topographic mapping. The Commission and the MCAMLIS Steering Committee executed an Agreement to carry out this program, and the Commission, acting as agent for the Steering Committee in this matter, had selected a photogrammetric engineering firm to carry out the digital topographic mapping program. Work will begin in 2005.
- Also during 2004, the Commission continued in its role of providing assistance and administration to the MCAMLIS program, preparing progress and financial reports and administering grant awards and related contracts for Wisconsin Land Information Board grant award projects. The Commission staff also provided a liaison between the MCAMLIS Steering Committee and the Milwaukee County Department of Administration concerning budgeting, fiscal administration, and program audit issues.
- Effective January 1, 2005, responsibility for the day-to-day management of the MCAMLIS Program will be assumed by the Milwaukee County Department of Parks and Public Infrastructure. During 2004, staff level meetings were held to plan for this transfer and to make the necessary fiscal, budgeting, and contract arrangements to effect this change.

#### **Ozaukee County**

- The Commission continued to work with Ozaukee County staff on a shoreland and floodplain zoning mapping project. This project involves the preparation of digital and hardcopy shoreland zoning maps covering all Towns in the County. The mapping will contain floodplain and floodway boundaries, navigable

water features, shoreland boundaries, wetlands, and related features.

#### **Racine County**

- The Commission assisted in the completion of one large-scale topographic mapping project and the initiation of another similar project in Racine County. The completed project acquired digital and hardcopy topographic mapping and digital terrain model files for a 12-square-mile area. A similar large-scale topographic mapping project was started that will extend the topographic mapping coverage in the County for an area of approximately 11 square miles.
- The Commission staff completed a project that acquired selected elevation features—contour and depression lines, spot elevations, and related text—in digital format from large-scale hardcopy topographic maps for an area of 45 square miles. This project was funded by a grant from the Wisconsin Land Information Board. A similar project that will collect digital elevation features for an area of 54 square miles for Racine County was also started during 2004.
- Commission staff continued to provide technical assistance to Racine County in 2004 by attending the County's regularly scheduled GIS Advisory Committee meetings.

#### **Walworth County**

- The Commission completed a large zoning mapping project for Walworth County. This project prepared zoning maps, containing zoning boundaries, floodplain and shoreland boundaries, and related text, for the entire unincorporated area of the County. The deliverable products consisted of a complete set of 576 hardcopy zoning maps and accompanying digital map files covering the entire County. Walworth County intends to maintain the digital zoning mapping to facilitate its planning activities.
- The Commission worked on several additional projects that contributed to the implementation of the County plan. Mapping projects in the County are fully integrated, with initial work consisting of land and control surveys, followed by the acquisition of aerial photography for preparation of digital terrain model files and digital topographic mapping, and completed with the creation of digital cadastral mapping. Following this procedure, topographic mapping and digital terrain model files were completed for



approximately 76 square miles and cadastral mapping was completed for about 79 square miles in 2004. Work was completed on the land and control surveys in the County, and efforts continued on the remaining topographic and cadastral mapping. The integrated mapping in Walworth County is scheduled to be completed by the end of 2005.

#### **Washington County**

- In 2004, the Commission worked on several projects with Washington County that will contribute to implementation of the County's land records modernization plan. The Commission completed a mapping project that acquired new large-scale digital and hardcopy topographic mapping and digital terrain model files for an area of approximately 18 square miles in the Towns of Polk and Richfield. A related

project will conduct structure surveys and prepare detailed hydrologic and hydraulic analysis and floodplain mapping for an area of approximately 30 square miles along the Oconomowoc River.

- The Commission continued work on a vertical control survey project that will obtain elevations for a total of 863 U.S. Public Land Survey System corners and their attendant reference benchmarks in the County. This project was 95 percent complete at the end of 2004.

#### **Waukesha County**

- During 2004, the Commission continued to provide technical assistance to Waukesha County by attending regularly scheduled meetings of the County Land Information Technical Working Group.

# **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 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 2004 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 2004, 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. Applicant flow is monitored 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 2004, the Division distributed a total of 5,841 copies of Commission publications. These included the following: 38 prospectuses, 484 planning reports,

317 amendments to planning reports, 28 technical reports, 1,188 community assistance planning reports, 189 memorandum reports, five technical records, 473 annual reports, 3,008 newsletters, 30 transportation improvement programs and 81 planning guides. In addition, the Division distributed 2,768 aerial photographs, 12 soils maps, 90 topographic maps, and 21 maps from the Commission's base map series.

## **APPENDICES**



(This page intentionally left blank)

## Appendix A

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: DECEMBER 2004

#### COMMISSIONERS

	Term Expires
<b>KENOSHA COUNTY</b>	
*** Leon T. Dreger .....	2006
* Thomas J. Gorlinski.....	2004
** Adelene Robinson .....	2010
<b>MILWAUKEE COUNTY</b>	
*** William R. Drew, Vice-Chairman .....	2008
** Lee Holloway.....	2010
* Linda J. Seemeyer .....	2008
<b>OZAUKEE COUNTY</b>	
* Robert A. Brooks .....	2008
** Thomas H. Buestrin, Chairman .....	2008
*** Gustav W. Wirth, Jr, Secretary.....	2006
<b>RACINE COUNTY</b>	
*** Richard A. Hansen, Treasurer.....	2010
* Michael J. Miklasevich.....	2008
** James E. Moyer .....	2006
<b>WALWORTH COUNTY</b>	
*** Anthony F. Balestrieri.....	2006
** Gregory L. Holden .....	2008
* Allen L. Morrison .....	2006
<b>WASHINGTON COUNTY</b>	
* Kenneth F. Miller .....	2008
** Daniel S. Schmidt.....	2010
*** David L. Stroik .....	2006
<b>WAUKESHA COUNTY</b>	
* Kenneth C. Herro .....	2006
*** Anselmo Villareal.....	2010
** Paul G. Vrakas .....	2010

\* Elected by County Board or appointed by County Executive and confirmed by County Board.

\*\* Appointed by the Governor from a County-supplied .. list of candidates.

\*\*\* Appointed by the Governor on his own motion without reference to any County-supplied list.

#### COMMITTEES

##### EXECUTIVE COMMITTEE

Thomas H. Buestrin, Chairman  
William R. Drew, Vice-Chairman  
Richard A. Hansen  
Allen L. Morrison  
Daniel S. Schmidt  
Linda J. Seemeyer  
Paul G. Vrakas  
Gustav W. Wirth, Jr.

##### ADMINISTRATIVE COMMITTEE

Paul G. Vrakas, Vice-Chairman  
Thomas H. Buestrin  
William R. Drew  
Richard A. Hansen  
Allen L. Morrison  
Daniel S. Schmidt  
Linda J. Seemeyer  
Gustav W. Wirth, Jr.

##### INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE

Allen L. Morrison, Chairman  
Kenneth C. Herro, Vice-Chairman  
Robert A. Brooks  
Thomas H. Buestrin  
Thomas J. Gorlinski  
Richard A. Hansen  
Lee Holloway  
Michael J. Miklasevich  
Kenneth F. Miller

##### PLANNING AND RESEARCH COMMITTEE

Daniel S. Schmidt, Chairman  
David L. Stroik, Vice-Chairman  
Anthony F. Balestrieri  
Robert A. Brooks  
Thomas H. Buestrin  
Leon T. Dreger  
Thomas J. Gorlinski  
Kenneth C. Herro  
Gregory L. Holden  
Lee Holloway  
Michael J. Miklasevich  
Kenneth F. Miller  
James E. Moyer  
Paul G. Vrakas

(This page intentionally left blank)

## Appendix B

### COMMISSION ADVISORY COMMITTEES: 2004

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

Duane H. Bluemke ..... Former Commissioner, Southeastern  
Chairman Wisconsin Regional Planning Commission  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
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  
Thomas E. Carlsen ..... Director, Department of Parks and  
Public Infrastructure, Milwaukee County  
Justin Drew ..... City Planner, City of Hartford  
Major Steven Ford ..... Base Civil Engineer, Wisconsin National Guard  
Thomas J. Gorlinski ..... Supervisor, Kenosha County Board  
David M. Greene ..... Director, Bureau of Aeronautics,  
Wisconsin Department of Transportation  
N. David Mann ..... Vice President and General Manager,  
Batten Airport, Racine  
Keith Markano ..... Airport Manager, Waukesha County-Crites Field  
George E. Melcher ..... Director, Department of Planning and,  
Development, Kenosha County  
Daniel J. Millenacker ..... Community Planner,  
U.S. Department of Transportation,  
Federal Aviation Administration  
Lois Mitchell ..... Owner, Capitol Airport, City of Brookfield  
Paul M. Roback ..... Community Resource Development Educator,  
University of Wisconsin-Extension,  
Ozaukee County  
Douglas Seymour ..... Director of Community Development,  
City of Oak Creek  
Albert Stanek ..... Chief of Intercity Planning,  
Bureau of Planning, Division of Transportation,  
Investment Management, Wisconsin  
Department of Transportation  
Earl E. Vorpapel, Jr. .... Former Chairman, Airport Commission,  
City of Burlington  
Judy Weter ..... Administrator, Village of East Troy

#### KENOSHA COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Frederick J. Patrie ..... Director of Public Works,  
Chairman Kenosha County  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Jeff Albrecht ..... President, Village of Silver Lake  
John M. Antaramian ..... Mayor, City of Kenosha  
Nicholas E. Arnold ..... Administrator, City of Kenosha  
David Buehn ..... President, Village of Paddock Lake  
David Cox ..... Administrator, Village of Twin Lakes  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Carol J. Fischer ..... Chairman, Town of Somers  
Raymond A. Forgianni, Jr. .... Director, Department of City Development,  
City of Kenosha  
Lauren A. Fox ..... Chairman, Town of Randall  
Virgil Gentz ..... Chairman, Town of Paris  
Barry S. Goad ..... President, Village of Genoa City  
Richard Gossling ..... Chairman, Town of Bristol  
Thomas W. Kerkman ..... Chairman, Town of Brighton  
Dwight E. McComb ..... Planning and Program  
Development Engineer,  
Federal Highway Administration,  
U.S. Department of Transportation  
George E. Melcher ..... Director, Department of Planning and  
Development, Kenosha County  
Douglas Noble ..... Chairman, Kenosha County  
Highway and Parks Committee  
Michael R. Pollocoff ..... Administrator, Village of Pleasant Prairie  
Donald Smits ..... Chairman, Town of Wheatland  
Tom Walsh ..... Chairman, Town of Salem

#### RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Glenn M. Lampark ..... Director of Public Works,  
Chairman Racine County  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Julie A. Anderson ..... Director of Planning and Development,  
Racine County

#### RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE (continued)

Norman A. Anderson ..... Chairman, Town of Raymond  
Gary J. Beck ..... Chairman, Town of Rochester  
Gary Becker ..... Mayor, City of Racine  
Christopher Denman ..... President, Village of Rochester  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Susan Greenfield ..... Chairman, Town of Caledonia  
Steven Jansen ..... President, Village of Sturtevant  
Richard M. Jones ..... Commissioner of Public Works,  
City of Racine  
Gerald M. Kaul ..... Chairman, Town of Burlington  
John W. Knuteson ..... President, Village of Wind Point  
Robert E. Langmesser ..... Chairman, Town of Waterford  
Thomas P. Lembecke ..... Chairman, Town of Dover  
Claude Lois ..... Mayor, City of Burlington  
Dennis C. Mahoney ..... President, Village of North Bay  
John L. Malchine ..... Chairman, Town of Norway  
Dwight E. McComb ..... Planning and Program Development Engineer,  
Federal Highway Administration,  
U.S. Department of Transportation  
Cecil F. Mehring ..... Manager of Planning and Engineering Services,  
Public Works Division, Racine County  
James E. Moyer ..... Chairman, Town of Yorkville  
Robert Orre ..... President, Village of Union Grove  
David Richmond ..... President, Village of Waterford  
Michael Andreasen ..... President, Village of Mt. Pleasant  
Audrey Viau ..... President, Village of Elmwood Park

#### OZAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Robert R. Dreblow ..... Highway Commissioner,  
Chairman Ozaukee County  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Lester A. Bartel, Jr. .... Chairman, Town of Grafton  
James Brunnquell ..... President, Village of Grafton  
Barbara Dickman ..... President, Village of Saukville  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Robert M. Gehrke ..... Public Works Director/  
Weed Commissioner,  
Village of Thiensville  
Walter B. Grotelueschen, Jr. .... President, Village of Newburg  
Terry Hoffman ..... Chairman, Town of Saukville  
Frederick Kaul ..... Chairman, Ozaukee County  
Highway Committee  
Francis J. Kleckner ..... Chairman, Town of Belgium  
Dwight E. McComb ..... Planning and Program  
Development Engineer,  
Federal Highway Administration,  
U.S. Department of Transportation  
Gregory P. Meyers ..... Mayor, City of Cedarburg  
Richard Mueller ..... Chairman, Town of Fredonia  
Christine Nuernberg ..... Mayor, City of Mequon  
William Rathack ..... President, Village of Fredonia  
Lee E. Schlenvogt ..... Chairman, Town of Port Washington  
Donald J. Schommer ..... President, Village of Belgium  
Robert Vanden Noven ..... City Engineer/Public Works Director,  
City of Port Washington  
Jerold F. Voigt ..... Chairman, Town of Cedarburg

#### WALWORTH COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Shane Crawford ..... Director of Public Works, Walworth County  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Gary W. Boden ..... City Manager, City of Whitewater  
David Bollweg ..... Chairman, Town of Linn  
Donna L. Brown ..... Systems Planning Manager, District 2,  
Wisconsin Department of Transportation  
Robert Carlson ..... President, Village of Sharon  
Allen Curler ..... Chairman, Town of Troy  
Barry S. Goad ..... President, Village of Genoa City  
David Heilmeier ..... Chairman, Town of LaGrange  
Marvin Herman ..... Chairman, Town of Delavan  
Joseph F. Kopecky ..... Chairman, Town of Geneva  
Richard Lauderdale ..... Chairman, Town of LaFayette  
William Loesch ..... President, Village of East Troy



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

Cecil R. Logterman ..... Chairman, Town of Darien  
William R. Mangold ..... Chairman, Town of Lyons  
Dwight E. McComb ..... Planning and Program Development Engineer,  
Federal Highway Administration,  
U.S. Department of Transportation  
Kenneth Monroe ..... Chairman, Town of Bloomfield  
Robert R. Mueller ..... Chairman, Town of East Troy  
Allan Polyock ..... Supervisor, Walworth County Board;  
Chairman, Walworth County  
Transportation & Parks Committee  
Wayne Redenius ..... Chairman, Town of Richmond  
Michael Roberts ..... Mayor, City of Elkhorn  
Sheldon Shepstone ..... Mayor, City of Lake Geneva  
James C. Simons ..... Chairman, Town of Spring Prairie  
Edward Vander Veen ..... Chairman, Town of Sharon  
Diane Voss ..... Chairman, Town of Walworth  
James O. Wagner ..... President, Village of Mukwonago  
Loren E. Waite ..... Chairman, Town of Sugar Creek  
Todd V. Watters ..... President, Village of Walworth  
Mark E. Wendorf ..... Director of Public Works, City of Delavan  
Robert Wenzel ..... President, Village of Darien  
Donald Weyhrauch ..... President, Village of Williams Bay  
Thomas Whowell ..... President, Village of Fontana-on-Geneva Lake

**WASHINGTON COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Kenneth M. Pesch ..... Highway Commissioner,  
Chairman Washington County  
Kenneth R. Yunker ..... Deputy Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Russell C. Abel ..... Chairman, Town of Barton  
Jerry Becker ..... Chairman, Town of Richfield  
Robert A. Bingen ..... Chairman, Town of Addison  
Donna L. Brown ..... Systems Planning Manager, District 2,  
Wisconsin Department of Transportation  
Bert Caverson ..... Director of Public Works,  
Village of Germantown  
John B. Capelle ..... Director of Community Development,  
City of West Bend  
Patrick A. Degrave ..... Administrator, Village of Slinger  
Jim Dieringer ..... Chairman, Town of Farmington  
Justin Drew ..... City Planner, City of Hartford  
Joseph C. Gonnering ..... Chairman, Town of Trenton  
Peter L. Gonnering ..... Supervisor, Washington County Board  
Walter B. Grotelueschen, Jr. .... President, Village of Newburg  
Charles J. Hargan ..... President, Village of Germantown  
Scott M. Henke ..... Mayor, City of Hartford  
Willard F. Heppe ..... Chairman, Town of Polk  
Leander Herriges ..... Chairman, Town of Wayne  
Patricia Hoerth ..... Chairman, Town of Hartford  
Dennis Kenealy ..... Chairman, Town of Erin  
Donald O. Klug ..... Chairman, Town of Jackson  
Michael Lettow ..... Chairman, Town of Kewaskum  
Dwight E. McComb ..... Planning and Program Development Engineer,  
U.S. Department of Transportation,  
Federal Highway Administration  
Paul J. Metz ..... Chairman, Town of Germantown  
Kenneth F. Miller ..... Chairman, Washington County Board  
Michael R. Miller ..... Mayor, City of West Bend  
Scott A. Mittelsteadt ..... President, Village of Jackson  
Paul E. Mueller ..... Administrator, Washington County  
Land Use and Park Department  
Judith A. Neu ..... City Engineer, City of West Bend  
Evan Nickodem ..... Village Engineer, Village of Germantown  
Thomas J. Sackett ..... Supervisor, Washington County Board  
Daniel S. Schmidt ..... Administrator, Village of Kewaskum  
Robert Seebach ..... Chairman, Town of West Bend

**WAUKESHA COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Richard L. Manke ..... Supervisor, Waukesha County Board;  
Chairman Chairman, Waukesha County Public Works Committee  
Kenneth R. Yunker ..... Deputy Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Richard A. Bolte ..... Director of Transportation, Waukesha County  
Thomas Calder ..... President, Village of Pewaukee  
Harlan E. Clinkenbeard ..... Administrator/Planner, City of Pewaukee  
Paul Craig ..... Mayor, City of Delafield  
Jefferson E. Davis ..... President, Village of Menomonee Falls  
David Dubey ..... Chairman, Town of Mukwonago  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Paul A. Feller ..... Director of Public Works, City of Waukesha  
Jeffery A. Flaws ..... President, Village of Wales  
Raymond O. Foster, Jr. .... President, Village of Oconomowoc Lake  
Susan Freedy ..... President, Village of Elm Grove

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

Keith Henderson ..... Chairman, Town of Brookfield  
Brian Hense ..... President, Village of Big Bend  
Vytautas P. Janusonis ..... Chairman, Town of Ottawa  
Paul Kanter ..... Chairman, Town of Delafield  
Gregory W. Kessler ..... Director, Department of Development,  
City of New Berlin  
Michael M. Knapp ..... President, Village of Sussex  
Alan Kunert ..... Chairman, Town of Vernon  
David C. Lamerand ..... President, Village of Hartland  
Richard Lartz ..... President, Village of Nashotah  
Sharon L. Leair ..... Chairman, Town of Genesee  
Dan Martin ..... President, Village of Lannon  
Dwight E. McComb ..... Planning and Program  
Development Engineer,  
Federal Highway Administration,  
U.S. Department of Transportation  
Richard Morris ..... Chairman, Town of Merton  
Joseph St. Thomas ..... Chairman, Town of Oconomowoc  
Gerald J. Schmitz ..... Chairman, Town of Lisbon  
Mark Slocum ..... Mayor, City of Muskego  
Jeff R. Speaker ..... Mayor, City of Brookfield  
Richard Spurrell ..... President, Village of Eagle  
Rodney T. Stilwell ..... Chairman, Town of Waukesha  
George Stumpf ..... President, Village of Lac La Belle  
Bryce P. Styza ..... President, Village of Chenequa  
Maury Sullivan ..... Mayor, City of Oconomowoc  
Leonard Susa ..... Chairman, Town of Summit  
James O. Wagner ..... President, Village of Mukwonago  
Robert W. Weber ..... President, Village of Merton  
Joseph L. Whitmore ..... President, Village of North Prairie  
Donald Wilton ..... Chairman, Town of Eagle  
Walter J. Woloszyk ..... President, Village of Butler  
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,  
Chairman Racine County  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Sandra K. Beaupre ..... Director, Bureau of Planning, Division of  
Transportation Investment Management,  
Wisconsin Department of Transportation  
James J. Blazek ..... City Engineer, City of Racine  
Steven P. Compton ..... Administrator, Village of Sturtevant  
Jon J. Dederich ..... Plan Commissioner,  
Village of Elmwood Park  
Joel P. Ettinger ..... Area Director, Federal  
Transit Administration,  
U.S. Department of Transportation  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Michael J. Glasheen ..... Transit Planner, City of Racine  
Frederick A. Haerter ..... Town Engineer, Town of Caledonia  
John W. Knuteson ..... President, Village of Wind Point  
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  
Bruce E. Matzke ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
Peter T. McMullen ..... Program and Planning Analyst,  
Bureau of Air Management,  
Wisconsin Department of Natural Resources  
Cheryl L. Newton ..... Environmental Protection  
Specialist, Region V,  
U.S. Environmental Protection Agency  
Kevin O'Donnell ..... Administrator, Town of Mt. Pleasant  
Michael Pjevach ..... President, Wisconsin Coach Lines, Inc.

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

Frederick J. Patrie ..... Director of Public Works,  
Chairman Kenosha County  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Sandra K. Beaupre ..... Director, Bureau of Planning, Division of  
Transportation Investment Management,  
Wisconsin Department of Transportation

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

Ronald L. Bursek ..... Director, Public Works Department,  
City of Kenosha  
Joel P. Ettinger ..... Area Director, Federal Transit Administration,  
U.S. Department of Transportation  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Raymond A. Forgianni, Jr. .... Director, Department of City Development,  
City of Kenosha  
Michael J. Lemens ..... Director of Engineering, City of Kenosha  
Linda A. Lovejoy ..... Chief, Public Transit Section,  
Bureau of Transit and Local Roads,  
Wisconsin Department of Transportation  
Bruce E. Matzke ..... Wisconsin Division Administrator,  
Peter T. McMullen ..... Program and Planning Analyst,  
Bureau of Air Management,  
Wisconsin Department of Natural Resources  
Cheryl L. Newton ..... Environmental Protection Specialist, Region V,  
U.S. Environmental Protection Agency  
Michael Pjevach ..... President, Wisconsin Coach Lines, Inc.  
Michael R. Pollocoff ..... Administrator, Village of Pleasant Prairie

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

Thomas E. Carlsen ..... Director, Department of Parks and  
Chairman ..... Public Infrastructure, Milwaukee County  
Richard A. Bolte ..... Director of Transportation, Waukesha County  
Robert R. Dreblow ..... Highway Commissioner, Ozaukee County  
Thomas M. Grisa ..... Director, Public Works, City of Brookfield  
Robert C. Johnson ..... Transit Coordinator, City of Waukesha  
William A. Kappel ..... Engineering Administrator,  
City of Wauwatosa  
Michael G. Lewis ..... City Engineer, City of West Allis  
Jeffrey J. Mantes ..... Commissioner of Public Works,  
Department of Public Works,  
City of Milwaukee  
Michael J. Martin ..... Director of Public Works,  
Village of Hales Corners  
Jeffrey S. Polenske ..... City Engineer, City of Milwaukee  
Scott K. Walker ..... Milwaukee County Executive  
Dr. James G. White ..... Supervisor, Milwaukee County Board

**Nonvoting Technical Staff Members**

Philip C. Evenson ..... Executive Director, Southeastern  
Secretary ..... Wisconsin Regional Planning Commission  
Sandra K. Bupreau ..... Director, Bureau of Planning,  
Division of Transportation Investment,  
Wisconsin Department of Transportation  
Joel P. Ettinger ..... Area Director, Federal Transit Administration,  
U.S. Department of Transportation  
Leslie J. Fafard ..... District Director, Wisconsin  
Department of Transportation  
Linda A. Lovejoy ..... Chief, Public Transit Section,  
Bureau of Transit and Local Roads,  
Wisconsin Department of Transportation  
Bruce E. Matzke ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
Peter T. McMullen ..... Program and Planning Analyst,  
Bureau of Air Management,  
Wisconsin Department of Natural Resources  
Michael Pjevach ..... President, Wisconsin Coach Lines, Inc.  
Kenneth J. Warren ..... Managing Director, Milwaukee  
County Transit System

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

Frederick J. Patrie ..... Director of Public Works,  
Chairman ..... Kenosha County  
Sandra K. Beaupre ..... Director, Bureau of Planning,  
Division of Transportation Investment Management,  
Wisconsin Department of Transportation  
John M. Bennett ..... City Engineer, City of Franklin  
Donna L. Brown ..... Systems Planning Group Manager,  
District 2, Wisconsin Department of Transportation

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON REGIONAL TRANSPORTATION SYSTEM PLANNING  
(continued)**

Allison Bussler ..... Chief of Staff,  
Waukesha County Executive's Office  
Thomas E. Carlsen ..... Director Department of Parks and  
Public Infrastructure, Milwaukee County  
Shane Crawford ..... Public Works Director, Walworth  
Public Works Department  
Robert R. Dennik ..... Deputy Chief of Staff, Ozaukee County  
Executive's Office  
Robert R. Dreblow ..... Highway Commissioner, Ozaukee County  
Lloyd L. Eagan ..... Director, Bureau of Air Management,  
Wisconsin Department of Natural Resources  
Joel P. Ettinger ..... Regional Administrator, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation  
Paul A. Feller ..... Director of Public Works, City of Waukesha  
Thomas M. Grisa ..... Director of Public Works, City of Brookfield  
Richard M. Jones ..... Commissioner Public Works, City of Racine  
William Kappel ..... Director of Public Works, City of Wauwatosa  
Glenn M. Lampark ..... Director of Public Works, Racine County  
Michael M. Lemens ..... Director of Engineering, City of Kenosha  
Michael K. Lynett ..... Village Engineer/Commissioner of  
Public Works, Village of Fox Point  
Jeffrey J. Mantes ..... Commissioner of Public Works,  
City of Milwaukee  
Bharat Mathur ..... Acting Regional Administrator, Region 5,  
U.S. Environmental Protection Agency  
U.S. Department of Transportation  
Dwight E. McComb ..... Planning and Program Development  
Engineer, Federal Highway Administration,  
U.S. Department of Transportation  
Gloria L. McCutcheon ..... Southeast Region Director, Wisconsin  
Department of Natural Resources  
Kenneth M. Pesch ..... Highway Commissioner, Washington County  
Jeffrey S. Polenske ..... City Engineer, City of Milwaukee  
Wallace Thiel ..... Village Administrator, Village of Hartland  
Kenneth J. Warren ..... Managing Director, Milwaukee  
County Transit System

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

Thomas W. Meaux ..... Administrator, Ozaukee County  
Chairman  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary ..... Wisconsin Regional Planning Commission  
Robert Dreblow ..... Highway Commissioner,  
Ozaukee County Highway Department  
Paul A. Feller ..... Director of Public Works, City of Waukesha  
Thomas P. Huber ..... State Bicycle and Pedestrian  
Program Coordinator, Wisconsin  
Department of Transportation  
Richard A. Jones ..... Director of Public Works, City of Racine  
James W. Kavemeier ..... Parks System Manager, Waukesha County  
Department of Parks and Land Use  
Vivian M. Keller ..... Public Policy Consultant  
Jaclyn D. Lawton ..... Environmental Coordinator,  
Federal Highway Administration  
Randal LeClaire ..... Traffic Engineer, City of Kenosha  
Jeffrey J. Mantes ..... Commissioner, City of Milwaukee  
Department of Public Works  
Raymond G. Meyer ..... Public Member, Ozaukee County  
Steve Mokrohisky ..... Deputy Chief of Staff, Milwaukee County  
Kenneth Neitzke ..... Government Relations Committee Chairman,  
Waukesha County Chapter,  
Ice Age Trail Committee  
Robert F. Pfeiffer ..... Project Development Chief, District 2,  
Wisconsin Department of Transportation  
Mark A. Piotrowicz ..... Assistant Director of Community Development,  
City of West Bend  
Jeffrey S. Polenske ..... City Engineer, City of Milwaukee  
Linda Roessi ..... President, Bay View Bicycle Club  
Ronald J. Rutkowski ..... Director, Transportation Planning  
and Development, Milwaukee  
Department of Public Works  
Paul S. Sandgren ..... Forest Superintendent, Kettle Moraine  
State Forest, Southern Unit  
Karen Springob ..... Project Engineer, City of Brookfield  
Robert Wagler ..... Safety Specialist Senior,  
City of Milwaukee Police Department  
William R. Waldron ..... Planning Analyst, Milwaukee County  
Department of Parks,  
Recreation and Culture

# **KENOSHA-RACINE-MILWAUKEE CORRIDOR TRANSIT STUDY ADVISORY COMMITTEE**

Frederick J. Patrie .....	Director of Public Works, Kenosha County Chairman
Philip C. Evenson .....	Executive Director, Southeastern Wisconsin Regional Planning Commission Secretary
Victor M. Austin .....	Community Planner, Federal Transit Administration, U.S. Department of Transportation
John Bechler .....	President, Kenosha Area Business Alliance, Inc.
Gary Becker .....	Mayor, City of Racine
Peter Beitzel .....	Vice President, International Trade, Transportation, and Business Development, Metropolitan Milwaukee Association of Commerce
Leonard Brandrup .....	Director, Department of Transportation, City of Kenosha
Donna L. Brown .....	Systems Planning Manager, District 2, Wisconsin Department of Transportation
Sandra K. Bupreau .....	Director, Bureau of Planning Division of Transportation Investment Management, Wisconsin Department of Transportation
Thomas E. Carlsen .....	Director, Department of Parks and, Public Infrastructure, Milwaukee County
Roger Caron .....	Executive Director, Racine Area Manufacturers and Commerce
E. Craig Faucett .....	Director of Engineering, City of Cudahy
Carol Fischer .....	Chairman, Town of Somers
Gary A. Foyle .....	Director of Planning and Analysis, Metra
Mark M. Gleason .....	Chairman, Town of Mt. Pleasant
Susan S. Greenfield .....	Supervisor, Town of Caledonia
Donald Kopec .....	Associate Executive Director, Chicago Area Transportation Study
Glenn M. Lampark .....	Director of Public Works, Racine County
Jeffrey J. Mantes .....	Commissioner, Department of Public Works, City of Milwaukee
Dwight E. McComb .....	Planning and Program Development Engineer, Federal Highway Administration U. S. Department of Transportation
Judith A. Mitchell .....	Manager, Commercial Development, Canadian Pacific Railway
Micheal W. Payette .....	Assistant Vice President, Government Affairs: Central Region Union Pacific Railroad
Michael Pjevach .....	President, Wisconsin Coach Lines
Jeff T. Plale .....	State Senator, District 7
Jack Schultz .....	City Engineer, City of St. Francis
Michael J. Sullivan .....	Design Engineer, City of Oak Creek
Kyle E. Vandercar .....	City Engineer, City of South Milwaukee
Kenneth J. Warren .....	Managing Director, Milwaukee County Transit System
Dr. James G. White .....	1st District Supervisor, Milwaukee County Board of Supervisors

## **PIKE RIVER WATERSHED COMMITTEE**

George E. Melcher .....	Director of Planning and Development, Kenosha County Chairman
Sonny K. Havn .....	President, Mt. Pleasant Vice-Chairman
Philip C. Evenson .....	Executive Director, Southeastern Wisconsin Regional Planning Commission Secretary
Julie A. Anderson .....	Director of Planning and Development, Racine County
Michael Andreasen .....	President, Village of Mt. Pleasant
Michael Callawaert .....	Director of Public Works, Village of Mt. Pleasant
Carol J. Fischer .....	Chairman, Town of Somers
Raymond A. Forgianni, Jr. ....	Director of City Development, City of Kenosha
Gerald L. Hebard .....	District Conservationist, U.S. Natural Resources Conservation Service, Racine County
Steven Jansen .....	President, Village of Sturtevant
Charles J. Krohn .....	Regional Water Leader, Southeast Region, Wisconsin Department of Natural Resources
Mary Lichter .....	Director, Division of Golf, Public Works Department, Kenosha County
Chelvadurai Manogaran .....	Associate Professor, Department of Geography, University of Wisconsin-Parkside
Edward St. Peter .....	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

# **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
Julie A. Anderson .....	Director of Planning and Development, Racine County
Nancy C. Braker .....	Director of Science and Stewardship, The Nature Conservancy
David C. Buehn .....	President, Village of Paddock Lake
John F. Burke .....	Manager, Halter Wildlife Area
James D'Antuono .....	Basin Supervisor Illinois/Fox Team, Wisconsin Department of Natural Resources
Carol J. Fischer .....	Chairman, Town of Somers
Raymond A. Forgianni, Jr. ....	Director of City Development, City of Kenosha
Virgil Gentz .....	Chairman, Town of Paris
Richard J. Gossling .....	Chairman, Town of Bristol
Ronald L. Johnson .....	Chairman, Kenosha County Land and Water Conservation Committee; Supervisor, Kenosha County Board
Wayne E. Koessl .....	Representative, WISPAK Corporation
Ward S. Miller .....	Executive Director, Lake County Stormwater Management Commission
Douglas J. Noble .....	Supervisor, Kenosha County Board
Michael R. Pollocoff .....	Administrator, Village of Pleasant Prairie
Edward St. Peter .....	General Manager, City of Kenosha Water Utility
Phil H. Sander .....	Member, Des Plaines Wetland Conservancy, Inc.
Ronald L. Thomas .....	Executive Director, Northeastern Illinois Planning Commission

## **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 Black .....	Superintendent, Parks System Administration Vice-Chairman
Dr. Donald M. Reed .....	Chief Biologist, Southeastern Wisconsin Regional Planning Commission Secretary
Hubert J. Albert .....	Representative, Port Washington Yacht Club
E. Craig Faucett .....	Director of Engineering, City of Cudahy
Scott A. Huebner .....	Mayor, City of Port Washington
Tammy LaBorde .....	Administrative Coordinator, City of South Milwaukee
Jeffrey J. Mantes .....	Commissioner of Public Works, Department of Public Works, City of 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
C. William Nelson .....	Member, Great Lakes Sports Fisherman's Club
Susan E. Robertson .....	Manager, Village of Fox Point
Phil H. Sander .....	Representative, Southeastern Wisconsin Sportsmen's Federation
Charles L. Seeger .....	County Conservationist, Racine County
Kevin L. Shafer, P.E. ....	Executive Director, Milwaukee Metropolitan Sewerage District
Kenneth J. Szallai .....	Municipal Port Director, Port of Milwaukee

## **TECHNICAL ADVISORY COMMITTEE ON REGIONAL GROUNDWATER RESOURCES**

Brian S. Barrett .....	BSB Technical Services Chairman
Philip C. Evenson .....	Executive Director, Southeastern Wisconsin Regional Planning Commission Secretary
Julie A. Anderson .....	Director, Racine County Planning and Development Division
Douglas S. Cherkauer .....	Professor of Hydrogeology, University of Wisconsin-Milwaukee
Daniel S. Duchniak .....	Director of Public Works, Water Utility, Vehicle Maintenance, City of Waukesha
Francis G. Fuja .....	Water Supply Municipal Engineer, Wisconsin Department of Natural Resources
Ronald G. Hennings .....	Assistant Director Emeritus, Wisconsin Geological and Natural History Survey

**TECHNICAL ADVISORY COMMITTEE ON  
REGIONAL GROUNDWATER RESOURCES  
(continued)**

James P. Hurley ..... Assistant Director for Research,  
University of Wisconsin—  
Water Resources Institute  
Marlin R. Johnson ..... Associate Professor Emeritus,  
Department of Biological  
Sciences, University of Wisconsin—Waukesha  
Terrance H. Kiekhaefer ..... Director, Public Works, Water Utility,  
Vehicle Maintenance, City of West Bend  
Thomas J. Krueger ..... Water and Wastewater Utility Director,  
Village of Grafton  
Michael D. Lemcke ..... Chief, Groundwater Management Section,  
Wisconsin Department of Natural Resources  
George E. Melcher ..... Director, Kenosha County Department  
of Planning and Development  
Daniel Naze ..... Village Engineer, Village of Germantown  
Charles A. Peters ..... District Chief, U.S. Geological Survey  
Michael P. Rau ..... General Manager, We Energies-Water Services  
Thomas Rossmiller ..... Director of Public Works, Village of East Troy  
Shuichi Sasaki ..... Production Manager, Kikkoman Foods, Inc.  
Steven H. Schultz ..... Manager, Water Supply Department,  
Ruekert & Mielke, Inc.  
Mark D. Simon ..... Water Superintendent, City of Brookfield  
Larry R. Wilms ..... Division Engineer—Utilities, City of New Berlin  
Constance R. Wilson ..... Utility Manager, Burlington Water Utility

**ADVISORY COMMITTEE ON  
REGIONAL WATER QUALITY MANAGEMENT PLAN  
UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS**

Daniel S. Schmidt ..... Administrator, Village of Kewaskum  
Chairman SEWRPC Commissioner  
Robert P. Biebel ..... Chief Environmental Engineer, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Julie A. Anderson ..... Director, Planning and Development Division,  
Racine County  
Michael Ballweg ..... Crops and Soils Agent,  
University of Wisconsin-Extension, Sheboygan County  
John R. Behrens ..... Commissioner-Secretary, Silver Lake  
Protection and Rehabilitation District  
John M. Bennett ..... City Engineer, City of Franklin  
Thomas J. Bunker ..... General Manager, City of Racine  
Water and Wastewater Utility  
David E. Carpenter ..... Director of Planning and Development,  
Dodge County  
Diane M. Georgetta ..... Coordinator, Town and County Resource  
Conservation and Development, Inc.  
Shaw Graff ..... Executive Director, The Ozaukee  
Washington Land Trust, Inc.  
Shannon K. Haydin ..... Director of Planning and Resources,  
Sheboygan County  
Andrew A. Holschbach ..... Director, Ozaukee County Planning,  
Resources, and Land Management Department  
William J. Hoppe ..... City Engineer, City of Mequon  
William A. Kappel ..... Director of Public Works, City of Wauwatosa  
Kristine M. Krause ..... Vice-President, Environmental  
Department, We Energies  
Charles J. Krohn ..... Regional Water Leader, Wisconsin  
Department of Natural Resources  
James Lubner ..... Sea Grant Advisory Services Specialist,  
University of Wisconsin Sea Grant Institute  
Daniel J. Lynch ..... District Conservationist, Natural Resources  
Conservation Service, Ozaukee County  
Jeffrey Mantes ..... Commissioner of Public Works,  
City of Milwaukee  
Lynn Mathias ..... County Land Conservationist  
Fond du Lac County  
Charles S. Melching ..... Associate Professor, Civil and Environmental  
Engineering, Marquette University  
Gary A. Mick ..... Director of Environmental Services,  
Milwaukee County  
Cheryl Moran ..... Corporate Environmental, Quad Graphics  
Matthew Moroney ..... Executive Director, Metropolitan  
Builders Association  
Paul E. Mueller ..... Administrator, Washington County  
Planning and Parks Department  
Patrick A. Murphy ..... State Resource Conservationist,  
Natural Resources Conservation Service  
Cheryl Nenn ..... Riverkeeper/Project Director,  
Friends of Milwaukee's Rivers  
Jeffrey S. Nettesheim ..... Senior Utility Engineer,  
Village of Menomonee Falls  
Judith A. Neu ..... City Engineer, City of West Bend  
Charles A. Peters ..... District Chief, U.S. Geological Survey  
Gretchen Sawtelle ..... Executive Director, Farm Services Agency,  
Ozaukee and Washington Counties  
Kevin L. Shafer ..... Executive Director, Milwaukee  
Metropolitan Sewerage District

**ADVISORY COMMITTEE ON  
REGIONAL WATER QUALITY MANAGEMENT PLAN  
UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS  
(continued)**

Dale R. Shaver ..... Director, Waukesha County  
Parks and Land Use Department  
Peter G. Swenson ..... Program Manager,  
U.S. Environmental Protection Agency  
Sam Tobias ..... Director of Planning and Parks,  
Fond du Lac County  
Thomas A. Wiza ..... Director of Engineering and Public Works,  
City of Cedarburg

**ADVISORY COMMITTEE ON  
REGIONAL LAND USE PLANNING**

George E. Melcher ..... Director, Department of Planning and  
Chairman Development, Kenosha County  
Julie A. Anderson ..... Director, Planning and Development Department,  
Racine County  
Susan Black ..... Superintendent, Parks System Administration,  
Milwaukee County Department of  
Parks and Public Infrastructure  
Donna L. Brown ..... Systems Planning Group Manager, District 2,  
Wisconsin Department of Transportation  
Martha L. Brown ..... Deputy Commissioner, Department of  
City Development, City of Milwaukee  
John B. Capelle ..... Director of Community Development,  
City of West Bend  
Harlan E. Clinkenbeard ..... Administrator-Planner, City of Pewaukee,  
and Planner, Town of Somers  
Michael P. Cotter ..... Director, Walworth County Land Use and  
Resource Management Department  
Steven Crandell ..... Director of Community Development,  
City of Waukesha  
Henry Elling ..... Town Manager/Planner, Town of Summit  
Charles Erickson ..... Director of Planning and Economic  
Development, City of Greenfield  
Daniel F. Ertl ..... Director of Community Development,  
City of Brookfield  
Raymond A. Forgianni, Jr. ..... Director of City Development,  
City of Kenosha  
Robert Greenstreet ..... Planning Director, Department of  
City Development, City of Milwaukee  
Gregory I. Igl ..... District Conservationist, Elkhorn Service Center  
U.S. Natural Resources Conservation Service  
Peter McMullen ..... Program and Planning Analyst,  
Wisconsin Department of Natural Resources  
Paul E. Mueller ..... Administrator, Washington County  
Planning and Parks Department  
Brian F. O'Connell ..... Director of City Development, City of Racine  
Karen L. Sands ..... Watershed Planning Manager,  
Milwaukee Metropolitan Sewerage District  
Douglas Seymour ..... Director of Community Development,  
City of Oak Creek  
Dale R. Shaver ..... Director, Waukesha County Parks  
and Land Use Department  
John F. Stibal ..... Director of Community Development,  
City of West Allis  
Andrew T. Struck ..... Assistant Director/County Planner,  
Ozaukee County Planning, Resources  
and Land Management Department  
Randy L. Tetzlaff ..... Director of Planning and Development,  
City of Port Washington  
and Supervisor, Town of Summit  
Nancy L. Welch ..... Director of Community Development,  
City of Wauwatosa

**ADVISORY COMMITTEE ON  
REGIONAL POPULATION AND ECONOMIC FORECASTS**

Paul E. Mueller ..... Administrator,  
Chairman Washington County Planning  
and Parks Department  
Kenneth R. Yunker ..... Deputy Director  
Vice Chairman Southeastern Wisconsin  
Regional Planning Commission  
Sandra K. Beaupre ..... Director, Bureau of Planning,  
Division of Transportation  
Investment Management,  
Wisconsin Department of Transportation  
Nickolas C. George ..... Executive Director of Public Affairs,  
Wisconsin Manufacturers and Commerce  
Roger B. Hammer ..... Assistant Professor,  
Department of Rural Sociology,  
University of Wisconsin-Madison



**ADVISORY COMMITTEE ON  
REGIONAL POPULATION AND ECONOMIC FORECASTS  
(continued)**

Donald Harrier, Jr.	Chief, Demographic Services Center, Wisconsin Department of Administration
Dale A. Landgren	Vice President and Chief Strategic Officer, American Transmission Company
Terry F. Ludeman	Chief of the Office of Economic Advisors, Wisconsin Department of Workforce Development
Bret J. Mayborne	Director of Economic Research, Metropolitan Milwaukee Association of Commerce
Richard Nestor	Senior Economist, We Energies
David Peterson	Lead Economist, Division of Research and Policy, Wisconsin Department of Revenue
Andrew T. Struck	Assistant Director/County Planner, Ozaukee County Planning, Resources, and Land Management Department

**TECHNICAL ADVISORY COMMITTEE FOR THE  
PROTECTION AND MANAGEMENT OF NATURAL  
AREAS IN SOUTHEASTERN WISCONSIN**

Kurt W. Bauer	Executive Director Emeritus, Southeastern Wisconsin Chairman Regional Planning Commission
Dr. Donald M. Reed	Chief Biologist, Southeastern Wisconsin Secretary Regional Planning Commission
John E. Bielefeldt	Naturalist, Racine County Parks Department
Dr. Martyn J. Dibben	Former Executive Director, Schlitz Audubon Center
Andrew A. Holschbach	Director, Ozaukee County Planning, Resources, and Land Management Department
Marlin P. Johnson	Associate Professor Emeritus, Department of Biological Sciences, University of Wisconsin- Waukesha Center
G. Andrew Larsen	Executive Director Emeritus Riveredge Nature Center, Ozaukee County
Dr. Diane S. Lindsley	Horticulture Director, Milwaukee County Department of Parks, Recreation and Culture
Paul E. Matthiae	Former Chief, Natural Areas Section, Wisconsin Department of Natural Resources-Madison
Peter E. McKeever	Former State Director, The Nature Conservancy, Wisconsin Chapter
James P. Morrissey	Land/Facilities Supervisor, Wisconsin Department of Natural Resources-Southeast Region
Paul E. Mueller	Administrator, Washington County Land Use and Park Department
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	Community Development Educator/ Department Head, University of Wisconsin-Extension, Washington County

**REGIONAL WATER SUPPLY PLANNING  
ADVISORY COMMITTEE**

Kurt W. Bauer, Chairman	Executive Director Emeritus, SEWRPC
Robert P. Biebel, Secretary	Chief Environmental Planner, SEWRPC
Brian S. Barrett	Chairman, SEWRPC Technical Advisory Committee for Groundwater Resources
Daniel A. Barthold	Environmental and Energy Engineering Director, Miller Brewing Company
Lee H. Boushon	Chief, Drinking Water Systems Section, Wisconsin Department of Natural Resources, Madison

**REGIONAL WATER SUPPLY PLANNING  
ADVISORY COMMITTEE  
(continued)**

Thomas J. Bunker	General Manager, Water and Wastewater Utility, City of Racine
Douglas S. Cherkauer	Professor of Hydrogeology, University of Wisconsin-Milwaukee
Charles A. Czarkowski	Regional Water Program Expert, Wisconsin Department of Natural Resources, Southeast Region
Frank A. Ericson	Manager, Environmental Operations, S. C. Johnson & Son, Inc.
David Ewig	Water Superintendent, City of Port Washington
Ronald G. Hennings	Assistant Director Emeritus, Wisconsin Geological and Natural History Survey
Roger Johnson	Manager, North Shore Water Commission
Terrence H. Kiekhaefer	Director, Public Works, Water Utility, Vehicle Maintenance, City of West Bend
Lawrie J. Kobza	Attorney at Law, Boardman Law Firm, Madison
James T. Krohelski	Hydrologist, U.S. Geological Survey
Thomas J. Krueger	Water and Wastewater Utility Director, Village of Grafton
Michael P. Rau	General Manager, We Energies-Water Services
Thomas Roberts	District Manager, Layne Christiansen Company Layne Northwest Division
Edward St. Peter	General Manager, Water Utility, City of Kenosha
Jeffrey J. Mantes	Commissioner, Department of Public Works, City of Milwaukee
Steven H. Schultz	Manager, Water Supply Department, Ruekert & Mielke, Inc.
Mark D. Simon	Water Superintendent, City of Brookfield
Daniel Warren	President, Water Utility Commission, City of Waukesha
Daniel S. Winkler	Director of Public Works and Utilities, City of Lake Geneva
Telesfore P. Wysocki	Mayor, City of New Berlin
Steve Yttri	General Manager, Water and Sewer Utility, City of Oak Creek

**ADVISORY COMMITTEE ON REGIONAL  
TELECOMMUNICATIONS PLANNING**

Kurt W. Bauer	Executive Director Emeritus, SEWRPC Chairman
William R. Drew	Vice-Chairman, SEWRPC, and Vice-Chairman Executive Director, Milwaukee County Research Park
Kenneth Brown	RF Engineer, Nextel Communications, Inc.
Roger Caron	President, Racine Area Manufacturers and Commerce
Bob Chernow	Chairman, Regional Telecommunications Commission
David L. DeAngelis	Village Manager, Village of Elm Grove
David L. DeAngelis	Village Manager, Village of Elm Grove
Michael Falaschi	President, Wisconsin Internet
Brahim Gaddour	Director of Network Operations, Time Warner Telecom of Wisconsin
Barry Gatz	Network Supervisor, CenturyTel
Michael E. Klasen	Director of Regulatory Affairs, SBC
J. Michael Long	Attorney at Law, Murn and Martin, SC
Jeff Mantes	Commissioner of Public Works, City of Milwaukee
Jody McCann	Network Domain Manager, Wisconsin Department of Administration, BadgerNet
George E. Melcher	Director, Office of Planning and Development, Kenosha County
Paul E. Mueller	Administrator, Washington County Planning and Parks Department
Steven L. Ritt	Attorney at Law, Michael Best & Friedrich
James W. Romlein	Managing Director, MVLabs, LLC
Bennett Schliesman	Director, Kenosha County Emergency Management/Homeland Security
Paul R. Schumacher	Program Manager, Tricounty Business Partnerships
Dale R. Shaver	Director, Waukesha County Department of Parks and Land Use
Michael Ulicki	Vice President and Chief Technology Officer, Norlight Telecommunications
Darryl Winston	Director of Data Services, City of Milwaukee Police Department
Gustav W. Wirth, Jr.	SEWRPC Commissioner

## Appendix C

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 2004

#### EXECUTIVE DIVISION

Philip C. Evenson, AICP  
Executive Director

Kenneth R. Yunker, PE  
Deputy Director

Loretta Watson  
Executive Secretary

Kurt W. Bauer, PE, RLS, AICP  
Executive Director Emeritus

#### GEOGRAPHIC INFORMATION SYSTEMS DIVISION

John G. McDougall  
Geographic Information  
Systems Manager

Thomas D. Patterson  
MCAMLIS Project Manager

Paul J. Clavette  
John D. Harasha  
Principal Systems Analysts

Michael G. Gosetti  
Geographic Information  
Systems Supervisor

Bradley T. Subotnik  
Senior GIS Applications  
Specialist

Patricia L. Bouchard  
David M. Schulze  
Michael B. Scott  
Bradley J. Thomann  
GIS Application Specialists

Timothy R. Gorsegner  
Jean M. Roman  
Rosemary K. Wilcenski  
Geographic Information  
Systems Technicians

James M. Kocher  
Web Technician

Sandra L. Wasson  
Clerk

#### COMMUNITY ASSISTANCE PLANNING DIVISION

Nancy M. Anderson  
Chief Community  
Assistance Planner

Richard R. Kania, AICP, RLA  
Principal Planner

Benjamin R. McKay  
Robbie L. Robinson  
Planners

Joyce A. Gramz  
GIS Planning Specialist

#### LAND USE PLANNING DIVISION

William J. Stauber, AICP  
Chief Land Use Planner

David A. Schilling  
Timothy J. McCauley  
Principal Planners

Kathryn E. Sobottke  
Senior Specialist

Heather M. Nemoir  
James P. Siegler  
Planners

Jeffrey A. McVay, AICP  
Specialist

Frank G. Fierek, Jr.  
Land Use Mapping  
Specialists

Nicola E. Hopp  
Research Analyst

#### TELECOMMUNICATIONS PLANNING DIVISION

Kenneth J. Schlager, PE  
Chief Telecommunications  
Engineer

Jason W. Zehrung  
Senior Telecommunications  
Planner

#### ADMINISTRATIVE SERVICES DIVISION

Elizabeth A. Larsen  
Business Manager

Marcia L. Hayd  
Linette G. Heis  
Secretaries

Kathleen A. Lisota  
Bookkeeper

Sylvia Carlson  
Receptionist

Robert J. Klatkiewicz  
Office Clerk

#### TRANSPORTATION PLANNING DIVISION

Robert E. Beglinger  
Chief Transportation Engineer

Albert A. Beck  
Otto P. Dobnick  
Principal Planners

John L. Zastrow  
Principal Specialist

Christopher T. Hiebert  
David M. Jolicoeur  
Senior Engineers

Patrick A. Pittenger  
Senior Planner

Rebecca K. Horne  
Planner

Reginald L. Mason  
Stephen W. Waldorf  
Research Analysts

#### CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Leland H. Kreblin, RLS  
Chief Planning Illustrator

Jean C. Johnson  
Nancee A. Nejedlo  
Donald P. Simon  
Principal Planning Draftsmen

LuAnn Sakale  
Senior Planning Draftsman

Christel A. Syrrakos  
Planning Draftsman

John T. Washburn, RLS  
Senior Specialist-  
Land Surveyor

David J. Schopp  
Andrew J. Traeger  
Land Survey Assistants

Richard J. Wazny  
Print Shop Supervisor

Holly V. Halbrucker  
Secretary

#### ENVIRONMENTAL PLANNING DIVISION

Robert P. Biebel, PE, PH  
Chief Environmental Engineer

Dr. Donald M. Reed  
Chief Specialist-Biologist

Michael G. Hahn, PE, PH  
Ronald J. Printz, PE  
Principal Engineers

Joshua A. Murray  
Senior Engineer

Jeffrey A. Thornton, CLM, PH  
Principal Planner

Joseph E. Boxhorn  
Thomas M. Slawski  
Senior Planners

Lawrence A. Leitner  
Senior Specialist

Daniel R. Treloar  
Land and Water  
Conservation Specialist

Tae I. Kim  
Dhruva N. Vangipuram  
Engineers

Christopher J. Jors  
Specialist

Jennifer J. Rodwell  
Edward J. Schmidt  
Research Analysts

Patricia M. Kokan  
Secretary

#### ECONOMIC DEVELOPMENT PLANNING DIVISION

John R. Meland  
Chief Economic  
Development Planner

Tina M. Chitwood  
Planner

(This page intentionally left blank)

## Appendix D

### PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-2004

#### 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



## PROSPECTUSES—continued

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  
Regional Water Supply Planning Program Prospectus, September 2002  
Prospectus for a Regional Telecommunications Planning Program, December 2003

## 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  
Overall Work Program—1981, Southeastern Wisconsin Regional Planning Commission, November 1980  
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  
Overall Work Program—2000, Southeastern Wisconsin Regional Planning Commission, October 1999  
Overall Work Program—2001, Southeastern Wisconsin Regional Planning Commission, October 2000  
Overall Work Program—2002, Southeastern Wisconsin Regional Planning Commission, October 2001  
Overall Work Program—2003, Southeastern Wisconsin Regional Planning Commission, October 2002  
Overall Work Program—2004, Southeastern Wisconsin Regional Planning Commission, December 2003  
Overall Work Program—2005, Southeastern Wisconsin Regional Planning Commission, November 2004

## 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 DESIGNS—continued

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\*
- 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

## PLANNING REPORTS—continued

- 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
- No. 35 - A Comprehensive Plan for the Pike River Watershed, June 1983
- No. 36 - A Comprehensive Plan for the Oak Creek Watershed, August 1986
- No. 37 - A Water Resources Management Plan for the Milwaukee Harbor Estuary  
Volume 1 - Inventory Findings, March 1987  
Volume 2 - Alternative and Recommended Plans, December 1987
- No. 38 - A Regional Airport System Plan for Southeastern Wisconsin: 2010, May 1987
- No. 38 - 2nd Edition, A Regional Airport System Plan for Southeastern Wisconsin: 2010, November 1996\*
- No. 39 - A Freeway Traffic Management System Plan for the Milwaukee Area, November 1988\*
- No. 40 - A Regional Land Use Plan for Southeastern Wisconsin—2010, January 1992
- No. 41 - A Regional Transportation System Plan for Southeastern Wisconsin: 2010, December 1994
- No. 42 - A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin, September 1997
- No. 43 - A Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2010, December 1994
- No. 44 - A Comprehensive Plan for the Des Plaines River Watershed, June 2003
- No. 45 - A Regional Land Use Plan for Southeastern Wisconsin: 2020, December 1997
- No. 46 - A Regional Transportation System Plan for Southeastern Wisconsin: 2020, December 1997
- No. 47 - A Regional Freeway System Reconstruction Plan for Southeastern Wisconsin, May 2003

## PLANNING GUIDES

- No. 1 - Land Development Guide, November 1963\*
- No. 1 - Second Edition, Land Division Control Guide, July 2001
- No. 2 - Official Mapping Guide, February 1964
- No. 2 - 2nd Edition, Official Mapping Guide, June 1996
- No. 3 - Zoning Guide, April 1964\*
- No. 4 - Organization of Planning Agencies, June 1964\*
- No. 5 - Floodland and Shoreland Development Guide, November 1968
- No. 6 - Soils Development Guide, August 1969\*
- No. 7 - Rural Cluster Development Guide, December 1996

## TECHNICAL REPORTS

- No. 1 - Potential Parks and Related Open Spaces, September 1965\*
- No. 2 - Water Law in Southeastern Wisconsin, January 1966\*
- No. 2 - 2nd Edition, Water Law in Southeastern Wisconsin, December 1977\*
- No. 3 - A Mathematical Approach to Urban Design, January 1966\*
- No. 4 - Water Quality and Flow of Streams in Southeastern Wisconsin, November 1966\*
- No. 5 - Regional Economic Simulation Model, October 1966\*
- No. 6 - Planning Law in Southeastern Wisconsin, October 1966\*
- No. 6 - 2nd Edition, Planning Law in Southeastern Wisconsin, April 1977
- No. 7 - Horizontal and Vertical Survey Control in Southeastern Wisconsin, July 1968\*
- No. 7 - 2nd Edition, Horizontal and Vertical Survey Control in Southeastern Wisconsin, August 1990
- No. 7 - 3rd Edition, Horizontal and Vertical Survey Control in Southeastern Wisconsin, August 1996\*
- No. 8 - A Land Use Design Model
  - Volume 1 - Model Development, January 1968
  - Volume 2 - Model Test, October 1969
  - Volume 3 - Final Report, April 1973
- No. 9 - Residential Land Subdivision in Southeastern Wisconsin, September 1971
- No. 10 - The Economy of Southeastern Wisconsin, December 1972\*
- No. 10 - 2nd Edition, The Economy of Southeastern Wisconsin, May 1984
- No. 10 - 3rd Edition, The Economy of Southeastern Wisconsin, October 1995
- No. 10 - 4th Edition, The Economy of Southeastern Wisconsin, July 2004
- No. 11 - The Population of Southeastern Wisconsin, December 1972\*
- No. 11 - 2nd Edition, The Population of Southeastern Wisconsin, June 1984
- No. 11 - 3rd Edition, The Population of Southeastern Wisconsin, October 1995
- No. 11 - 4th Edition, The Population of Southeastern Wisconsin, July, 2004
- No. 12 - A Short-Range Action Housing Program for Southeastern Wisconsin: 1972 and 1973, June 1972
- No. 13 - A Survey of Public Opinion in Southeastern Wisconsin, September 1974
- No. 14 - An Industrial Park Cost-Revenue Analysis in Southeastern Wisconsin: 1975, June 1975
- No. 15 - Household Response to Motor Fuel Shortages and Higher Prices in Southeastern Wisconsin, August 1976
- No. 16 - Digital Computer Model of the Sandstone Aquifer in Southeastern Wisconsin: April 1976
- No. 17 - Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975, June 1978
- No. 18 - State of the Art of Water Pollution Control in Southeastern Wisconsin
  - Volume 1 - Point Sources, July 1977
  - Volume 2 - Sludge Management, August 1977
  - Volume 3 - Urban Storm Water Runoff, July 1977
  - Volume 4 - Rural Storm Water Runoff, December 1976
- No. 19 - A Regional Population Projection Model, October 1980
- No. 20 - Carpooling in the Metropolitan Milwaukee Area, March 1977
- No. 21 - Sources of Water Pollution in Southeastern Wisconsin: 1975, September 1978\*
- No. 22 - Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977, September 1979
- No. 23 - Transit-Related Socioeconomic, Land Use, and Transportation Conditions and Trends in the Milwaukee Area, December 1980
- No. 24 - State-of-the-Art of Primary Transit System Technology, February 1981
- No. 25 - Alternative Futures for Southeastern Wisconsin, December 1980
- No. 26 - Milwaukee Area Alternative Primary Transit System Plan Preparation, Test, and Evaluation, March 1982
- No. 27 - Milwaukee Area Work Time Rescheduling Study, August 1981
- No. 28 - Evaluation of the Milwaukee Area Rideshare Program: 1972-1982, May 1983
- No. 29 - Industrial Land Use in Southeastern Wisconsin, November 1984\*



## TECHNICAL REPORTS—continued

- No. 30 - The Development of an Automated Mapping and Land Information System: A Demonstration Project for the Town of Randall, Kenosha County, Wisconsin, December 1985
- No. 31 - Costs of Urban Nonpoint Source Water Pollution Control Measures, June 1991\*
- No. 32 - General Mitchell International Airport Enplaning Passenger Survey Findings: 1989, August 1990
- No. 33 - Integration of the Computer-Assisted Management and Planning System with a Parcel-Based Land Information System: A Demonstration Project in Kenosha County, September 1992
- No. 34 - A Mathematical Relationship between NAD27 and NAD83(91) State Plane Coordinates in Southeastern Wisconsin, December 1994
- No. 35 - Vertical Datum Differences in Southeastern Wisconsin, December 1995
- No. 36 - Lake Michigan Shoreline Recession and Bluff Stability in Southeastern Wisconsin: 1995, December 1997
- No. 37 - Groundwater Resources of Southeastern Wisconsin, June 2002
- No. 40 - Rainfall Frequency in the Southeastern Wisconsin Region, April 2000

## COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 1 - Residential, Commercial, and Industrial Neighborhoods, City of Burlington and Environs, February 1973
- No. 2 - Alternative Land Use and Sanitary Sewerage System Plans for the Town of Raymond: 1990, January 1974
- No. 3 - Racine Area Transit Development Program: 1975-1979, June 1974
- No. 4 - Floodland Information Report for the Rubicon River, City of Hartford, Washington County, Wisconsin, December 1974
- No. 5 - Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed, May 1975
- No. 6 - A Uniform Street Naming and Property Numbering System for Racine County, Wisconsin, November 1975\*
- No. 7 - Kenosha Area Transit Development Program: 1976-1980, March 1976
- No. 8 - Analysis of the Deployment of Paramedic Emergency Medical Services in Milwaukee County, April 1976
- No. 9 - Floodland Information Report for the Pewaukee River, Village of Pewaukee, Waukesha County, Wisconsin, October 1976
- No. 9 - 2nd Edition, Floodland Information Report for the Pewaukee River, Village of Pewaukee, Waukesha County, Wisconsin, March 1985
- No. 10 - Land Use and Arterial Street System Plans, Village of Jackson, Washington County, Wisconsin, December 1976
- No. 11 - Floodland Information Report for Sussex Creek and Willow Springs Creek, March 1977\*
- No. 12 - Waukesha Area Transit Development Program: 1977-1981, January 1977\*
- No. 13 - Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1977
- No. 13 - 2nd Edition, Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1982\*
- No. 14 - Floodland Management Plan for the Village of Pewaukee, February 1978
- No. 15 - Off-Airport Land Use Development Plan for General Mitchell Field and Environs: 1977, May 1977\*
- No. 16 - A Plan for the Whittier Neighborhood, City of Kenosha and Town of Pleasant Prairie, Kenosha County, Wisconsin, June 1977\*
- No. 17 - A Plan for the Jefferson Park Neighborhood, Village of Germantown, Washington County, Wisconsin, March 1978
- No. 18 - A Land Use Plan for the Town of Erin: 2000, July 1978\*

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 19 - Storm Water Storage Alternatives for the Crossway Bridge and Port Washington-Bayfield Drainage Area in the Village of Fox Point, August 1977\*
- No. 20 - A Rail Transportation Service Plan for the East Troy Area, September 1977
- No. 21 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978, December 1977\*
- No. 22 - Alternative and Recommended Land Use Plans for the Town of Genesee: 2000, February 1978
- No. 23 - A Park and Recreation Plan for Ozaukee County, August 1978
- No. 24 - A Park and Open Space Plan for the Village of Darien, December 1978\*
- No. 25 - A Plan for the Delrock Neighborhood, City of Delavan, Walworth County, Wisconsin, January 1979\*
- No. 26 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 1978
- No. 27 - A Park and Open Space Plan for the Town of Eagle, April 1979
- No. 28 - Oconomowoc Area Traffic Management Plan, City of Oconomowoc, Waukesha County, Wisconsin, December 1979
- No. 29 - A Development Plan for the Quarry Ridge Neighborhood, City of Burlington, Racine County, Wisconsin, July 1979\*
- No. 30 - Whitewater Area Rail Service Plan, August 1979\*
- No. 31 - Waukesha Area Transit Development Program: 1981-1985, February 1980\*
- No. 32 - Recommended Electronic Data Processing and Transmittal System for Criminal Justice Agencies in Southeastern Wisconsin, September 1979\*
- No. 33 - A Land Use Plan for the Town of Fredonia: 2000, September 1979
- No. 33 - 2nd Edition, A Land Use Plan for the Town of Fredonia: 2010, Ozaukee County, Wisconsin, January 1999
- No. 34 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980, December 1979\*
- No. 35 - Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin, December 1982
- No. 35 - 2nd Edition, Sanitary Sewer Service Area for the City of West Bend and Environs, Washington County, Wisconsin, June 1998
- No. 36 - A Land Use Plan for the Village of Germantown: 2000, Village of Germantown, Washington County, Wisconsin, July 1980\*
- No. 37 - A Nonpoint Source Water Pollution Control Plan for the Root River Watershed, March 1980\*
- No. 38 - A Land Use and Traffic Circulation Plan for the Village of Fredonia: 2000, Ozaukee County, Wisconsin, September 1980\*
- No. 39 - A Public Transit System Accessibility Plan
  - Volume 1 - Kenosha Urbanized Area, June 1980
  - Volume 2 - Milwaukee Urbanized Area, Milwaukee County, May 1980
  - Volume 3 - Racine Urbanized Area, June 1980
  - Volume 4 - Milwaukee Urbanized Area, Waukesha County, June 1980
- No. 40 - Recommended Locations for Motor Vehicle Inspection and Emissions Test Facilities in the Southeastern Wisconsin Region, October 1980\*
- No. 41 - A Park and Open Space Plan for the Kenosha Planning District, December 1980\*
- No. 42 - A Park and Open Space Plan for the Town and Village of Pewaukee, Waukesha County, Wisconsin, October 1980
- No. 43 - A Development Plan for the Woodview Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1980\*
- No. 44 - Proposed Public Transit Service Improvements: 1980, Waukesha County, Wisconsin, July 1980\*
- No. 45 - A Farmland Preservation Plan for Kenosha County, Wisconsin, June 1981\*

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 46 - A Farmland Preservation Plan for Racine County, Wisconsin, August 1981\*
- No. 47 - A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin, December 1980\*
- No. 48 - A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin, January 1982
- No. 49 - A Land Use and Traffic Circulation Plan for the Village of Hartland: 2000, Waukesha County, Wisconsin, July 1981
- No. 50 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981, June 1981
- No. 51 - A Land Use Plan for the Village of Sussex: 2000, Waukesha County, Wisconsin, January 1982\*
- No. 52 - Housing Opportunities Guide for the Southeastern Wisconsin Region, December 1980
- No. 53 - A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin, August 1981
- No. 53 - 2nd Edition, A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin, December 2003
- No. 54 - A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin, July 1982\*
- No. 55 - A Land Use Plan for the Village of Darien: 2000, Walworth County, Wisconsin, December 1981
- No. 56 - Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, August 1981
- No. 56 - 2nd Edition, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, Walworth County, Wisconsin, November 1991
- No. 57 - A Development Plan for the Forest Hills Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1983\*
- No. 58 - A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin, March 1984
- No. 58 - 2nd Edition, A Lake Management Plan for Pewaukee Lake, Waukesha County, Wisconsin, May 2003
- No. 59 - A Development Plan for the Whitnall Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1985\*
- No. 60 - A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin, October 1985
- No. 61 - A Public Transportation Service Plan for Washington County, October 1981\*
- No. 62 - A Traffic Circulation Plan for the West Bend Central Business District, August 1981\*
- No. 63 - A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1982\*
- No. 63 - 2nd Edition, A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1984\*
- No. 64 - Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, February 1982\*
- No. 64 - 2nd Edition, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, March 1986
- No. 64 - 3rd Edition, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, December 1997
- No. 65 - A Public Transportation Service Plan for Walworth County, January 1982
- No. 66 - A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, October 1981
- No. 66 - 2nd Edition, A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, June 1995\*
- No. 66 - 3rd Edition, A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, May 2003
- No. 67 - A Traffic Circulation Plan for Lac La Belle, Waukesha County, Wisconsin, March 1982\*

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 68 - Upland Disposal Area Siting Study for Dredged Materials from the Port of Milwaukee, December 1981\*
- No. 69 - A Land Use and Urban Design Plan for the City of Elkhorn: 2000, Walworth County, Wisconsin, January 1985
- No. 70 - Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983\*
- No. 71 - A Park and Open Space Plan for the Town of Waterford, Racine County, Wisconsin, January 1990
- No. 72 - A Park and Open Space Plan for the City of Oconomowoc, Waukesha County, Wisconsin, November 1987
- No. 73 - A Shoreland Development Management Study for Racine County, Wisconsin, January 1982
- No. 74 - Kenosha County Overall Economic Development Program (OEDP) Update-1981, April 1982\*
- No. 74 - 2nd Edition, Kenosha County Overall Economic Development Program (OEDP) Plan-1986 Update, September 1986
- No. 75 - A Solid Waste Management Plan for Walworth County, Wisconsin, September 1982
- No. 75 - 2nd Edition, A Solid Waste Management Plan for Walworth County, Wisconsin, December 1994
- No. 76 - A Land Use Plan for the Town and Village of Pewaukee: 2000, December 1982\*
- No. 77 - A Wetland Protection and Management Plan for the City of Waukesha and Environs, February 1983\*
- No. 78 - Sanitary Sewer Service Area for the City of Burlington, April 1986\*
- No. 78 - 2nd Edition, Sanitary Sewer Service Area for the City of Burlington and Environs, Racine County Wisconsin, December 2001
- No. 79 - Racine Area Transit System Plan and Program: 1984-1988, May 1984
- No. 80 - A Lake Michigan Public Access Study for Racine County, Wisconsin, September 1982\*
- No. 81 - Hartford Area Traffic Management Plan, June 1983\*
- No. 82 - A Central Transfer Site Location and Design Analysis for the City of Waukesha Transit System, December 1982
- No. 83 - A Transit System Operations Analysis for the City of Waukesha Transit System, February 1983
- No. 84 - Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, February 1983\*
- No. 84 - 2nd Edition, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, September 1994
- No. 85 - A Land Use Plan for the Village of Eagle: 2000, Waukesha County, Wisconsin, September 1983
- No. 86 - A Lake Michigan Coastal Erosion Management Study for Racine County, Wisconsin, October 1982
- No. 87 - A Farmland Preservation Plan for Ozaukee County, Wisconsin, May 1983
- No. 88 - A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin, February 1985\*
- No. 89 - A Stormwater Management Plan for the Village of Sussex, Waukesha County, Wisconsin, October 1983
- No. 90 - Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983
- No. 91 - Sanitary Sewer Service Area for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, May 1987
- No. 91 - 2nd Edition, Sanitary Sewer Service Areas for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, June 1996
- No. 92 - Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, March 1984
- No. 92 - 2nd Edition, Sanitary Sewer Service Area for the City of Hartford and Environs, Washington County, Wisconsin, June 1995



COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 92 - 3rd Edition, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, September 2001\*
- No. 93 - Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin, April 1985\*
- No. 94 - Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, September 1987
- No. 94 - 2nd Edition, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, March 1995
- No. 95 - Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983
- No. 95 - 2nd Edition, Sanitary Sewer Service Area for the City of Port Washington and Environs, Ozaukee County, Wisconsin, December 2000\*
- No. 96 - Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, July 1984
- No. 96 - 2nd Edition, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, March 2004
- No. 97 - Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, November 1984\*
- No. 97 - 2nd Edition, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, June 1987
- No. 97 - 3rd Edition, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, August 1993
- No. 98 - A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin, August 1983
- No. 98 - 2nd Edition, A Lake Management Plan for Friess Lake, Washington County, Wisconsin, November 1997
- No. 99 - Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin, February 1984
- No. 100 - Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, June 1985\*
- No. 100 - 2nd Edition, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, March 1999\*
- No. 101 - Kenosha Area Transit System Plan and Program: 1984-1988, June 1984
- No. 102 - City of Whitewater Overall Economic Development Program Plan, January 1985
- No. 103 - Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, September 1984
- No. 103 - 2nd Edition, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, March 2004
- No. 104 - A Park and Open Space Plan for the City of West Bend, Washington County, Wisconsin, June 1985
- No. 105 - Waukesha County Transit Plan: 1988-1992, September 1988
- No. 106 - Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin, November 1985
- No. 107 - East Moreland Boulevard Short-Range and Long-Range Highway Improvement Plan, April 1984
- No. 108 - A Park and Open Space Plan for the City of Brookfield, Waukesha County, Wisconsin, August 1991
- No. 108 - 2nd Edition, A Park and Open Space Plan for the City of Brookfield, Waukesha County, Wisconsin, March 2001
- No. 109 - Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, November 1991
- No. 110 - A Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis, Wisconsin, August 1984
- No. 111 - Land Use and Urban Design Plan for the City of New Berlin: 2010, April 1987

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 112 - Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, August 1984
- No. 112 - 2nd Edition, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, June 1993
- No. 112 - 3rd Edition, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, December 2000
- No. 113 - Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin, June 1985\*
- No. 114 - Village of Shorewood Comprehensive Traffic Plan, Milwaukee County, Wisconsin, September 1984
- No. 115 - A Fire Station Building Program and Site Analysis, Village of Sturtevant, Racine County, Wisconsin, September 1984
- No. 116 - Milwaukee County Overall Economic Development Program Plan, October 1985
- No. 117 - Washington County Overall Economic Development Program Plan, December 1985\*
- No. 118 - Waukesha County Overall Economic Development Program Plan, December 1985\*
- No. 119 - Sanitary Sewer Service Area, Village of Silver Lake, Kenosha County, Wisconsin, May 1987
- No. 119 - 2nd Edition, Sanitary Sewer Service Area for the Village of Silver Lake and Environs, Kenosha County, Wisconsin, December 1998
- No. 120 - A Solid Waste Management Plan for Milwaukee County, Wisconsin, July 1987\*
- No. 121 - A Stormwater Management Plan for the Village of Hales Corners, Milwaukee County, Wisconsin, March 1986
- No. 122 - A Park and Open Space Plan for the Town of Vernon, Waukesha County, Wisconsin, March 1985
- No. 123 - Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, May 1988
- No. 123 - 2nd Edition, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, July 1992
- No. 124 - Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin, May 1985
- No. 124 - 2nd Edition, Sanitary Sewer Service Area for the Village of Jackson and Environs, Washington County, Wisconsin, September 1997\*
- No. 125 - A Transportation Plan for the Village of Germantown: 2000, Washington County, Wisconsin, October 1985
- No. 126 - A Development Plan for Kenosha County, Wisconsin, Volume One, Inventory Findings, May 1987
- No. 127 - Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, November 1992\*
- No. 128 - Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin, November 1985
- No. 128 - 2nd Edition, Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin, September 1993
- No. 128 - 3rd Edition, Sanitary Sewer Service Area for the Village of Slinger and Environs, Washington County, Wisconsin, December 1998
- No. 129 - A Solid Waste Management Plan for Kenosha County, Wisconsin, May 1989
- No. 130 - A Stormwater Drainage and Flood Control Policy Plan for the Milwaukee Metropolitan Sewerage District, March 1986\*
- No. 131 - A Park and Open Space Plan for Kenosha County, November 1987\*
- No. 132 - A Park and Open Space Plan for Milwaukee County, November 1991\*
- No. 133 - A Park and Open Space Plan for Ozaukee County, July 1987
- No. 133 - 2nd Edition, A Park and Open Space Plan for Ozaukee County, June 2001

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 134 - A Park and Open Space Plan for Racine County, September 1988
- No. 134 - 2nd Edition, A Park and Open Space Plan for Racine County, July 2001
- No. 135 - A Park and Open Space Plan for Walworth County, February 1991
- No. 135 - 2nd Edition, A Park and Open Space Plan for Walworth County, September 2000
- No. 136 - A Park and Open Space Plan for Washington County, March 1989
- No. 136 - 2nd Edition, A Park and Open Space Plan for Washington County: 2010, August 1997
- No. 136 - 3rd Edition, A Park and Open Space Plan for Washington County, March 2004
- No. 137 - A Park and Open Space Plan for Waukesha County, December 1989\*
- No. 138 - A Development Plan for the Franklin Industrial Park Neighborhood, City of Franklin, Milwaukee County, Wisconsin, July 1988
- No. 139 - A Land Information System Plan for Walworth County, September 1991
- No. 140 - A Park and Open Space Plan for the Town of Jackson, Washington County, Wisconsin, September 1986
- No. 141 - Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, May 1986
- No. 141 - 2nd Edition, Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, April 1996\*
- No. 142 - A Land Information System Plan for Ozaukee County, April 1992
- No. 143 - Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin, February 1986
- No. 144 - A Development Plan for the City of Cedarburg: 2010, February 1991\*
- No. 145 - 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
- No. 146 - A Wildlife Habitat Management Plan for the Nicholson Wildlife Center, Town of Caledonia, Racine County, Wisconsin, May 1986\*
- No. 147 - Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin, November 1986\*
- No. 147 - 2nd Edition, Sanitary Sewer Service Area for the City of Racine and Environs, Racine and Kenosha Counties, Wisconsin, June 2003
- No. 148 - A Park and Open Space Plan, Village of Walworth, Walworth County, Wisconsin, November 1986
- No. 149 - Sanitary Sewer Service Area, Village of Twin Lakes, Kenosha County, Wisconsin, May 1987
- No. 150 - A Rapid Transit Facility Plan for the Milwaukee Northwest Corridor, January 1988
- No. 151 - A Transportation System Plan for the Blue Mound Road (USH 18) Corridor, December 1987
- No. 152 - A Stormwater Drainage and Flood Control System Plan for the Milwaukee Metropolitan Sewerage District, December 1990\*
- No. 153 - Traffic Management and Control Plan for the Village of Whitefish Bay, July 1988\*
- No. 154 - A Transit System Development Plan for the City of Waukesha: 1988-1992, December 1989
- No. 155 - A Lake Michigan Shoreline Erosion Management Plan for Northern Milwaukee County, Wisconsin, December 1988
- No. 156 - Waukesha County Animal Waste Management Plan, August 1987
- No. 157 - Sanitary Sewer Service Area, City of New Berlin, Waukesha County, Wisconsin, November 1987\*
- No. 158 - Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, November 1987
- No. 158 - 2nd Edition, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, August 1993
- No. 159 - Waukesha County Agricultural Soil Erosion Control Plan, June 1988
- No. 160 - Racine County Agricultural Soil Erosion Control Plan, July 1988

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 161 - Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin, March 1988
- No. 162 - A Land Use and Transportation System Plan for the Village of Menomonee Falls: 2010, April 1990
- No. 163 - A Lake Michigan Shoreline Erosion Management Plan for Milwaukee County, Wisconsin, October 1989\*
- No. 164 - Kenosha County Agricultural Soil Erosion Control Plan, April 1989
- No. 165 - A Development Plan for the Burlington Industrial Park Neighborhood, City of Burlington, Racine County, Wisconsin, January 1991
- No. 166 - A Park and Open Space Plan for the Village of Sussex, Waukesha County, Wisconsin, September 1988
- No. 167 - A Land Use Plan for the City of West Bend: 2010, Washington County, Wisconsin, July 1992\*
- No. 168 - A Land Use Plan for the Town of LaGrange: 2010, March 1991\*
- No. 169 - A Land Use Plan for the City of Waukesha Planning Area: 2010, Waukesha County, Wisconsin, September 1993\*
- No. 170 - Washington County Agricultural Soil Erosion Control Plan, March 1989
- No. 171 - Ozaukee County Agricultural Soil Erosion Control Plan, February 1989
- No. 172 - Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, February 1989\*
- No. 172 - 2nd Edition, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, September 1999\*
- No. 173 - A Stormwater Management Plan for the City of West Bend, City of West Bend, Washington County, Wisconsin
  - Volume 1 - Inventory Findings, Forecasts, Objectives, and Design Criteria, October 1989\*
  - Volume 2 - Alternatives and Recommended Plan for the Silver Creek Subwatershed, June 1990
  - Volume 3 - Alternatives and Recommended Plan for the Milwaukee River Drainage Area, June 1995
  - Volume 4 - Alternatives and Recommended Plan for the Quaas Creek Subwatershed, July 1996
- No. 174 - An Evaluation of Alternative Means for the Governance of the Delavan Lake Area, Walworth County, Wisconsin, March 1989
- No. 175 - Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, February 1989
- No. 175 - 2nd Edition, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, May 1996
- No. 176 - Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, October 1990
- No. 177 - Feasibility Study for a Milwaukee County Automated Mapping and Land Information System, October 1989\*
- No. 178 - A Park and Open Space Plan for the Village of Grafton, Ozaukee County, Wisconsin, March 1989
- No. 179 - A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin, November 1989
- No. 179 - 2nd Edition, A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin, April 2000
- No. 180 - Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990
- No. 181 - A Water Quality Management Plan for Oconomowoc Lake, Waukesha County, Wisconsin, March 1990
- No. 182 - A Water Use Management Plan for Waubeesee Lake and the Anderson Canal, Racine County, Wisconsin, December 1990\*



## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 183 - Kenosha Transit System Development Plan: 1991-1995, City of Kenosha, Wisconsin, September 1991\*
- No. 184 - A Land Information System Plan for Washington County, March 1992
- No. 185 - A Plan for the Creation of an Automated Mapping and Parcel-Based Land Information System for Kenosha County, August 1990
- No. 186 - A Land Use and Street System Plan for the Village of Slinger: 2010, Washington County, Wisconsin, August 1995\*
- No. 187 - A Management Plan for Fowler Lake, Waukesha County, Wisconsin, March 1994
- No. 188 - Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin, January 1992
- No. 189 - A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996, February 1991
- No. 190 - A Stormwater Management and Flood Control Plan for the Lilly Creek Subwatershed, Village of Menomonee Falls, Waukesha County, Wisconsin, February 1993
- No. 191 - Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin, November 1990\*
- No. 192 - Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin, December 1990
- No. 192 - 2nd Edition, Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin, March 2000
- No. 193 - A Land Information System Plan for Waukesha County, April 1991\*
- No. 194 - A Land Information System Plan for Racine County, August 1991
- No. 195 - A Land Use, Urban Design, and Transportation Plan for Selected Arterial Street Corridors in the Village of Hales Corners, Milwaukee County, Wisconsin, May 1993
- No. 196 - A Management Plan for Powers Lake, Kenosha and Walworth Counties, Wisconsin, November 1991
- No. 197 - A Wildlife Habitat Management Plan for the General Electric Company, Medical Systems Group, Lands, City of Waukesha and Town of Pewaukee, Waukesha County, Wisconsin, June 1991
- No. 198 - A Management Plan for Wind Lake, Racine County, Wisconsin, December 1991
- No. 199 - A Park and Open Space Plan for the Town of Mt. Pleasant, Racine County, Wisconsin, November 1991
- No. 199 - 2nd Edition, A Park and Open Space Plan for the Town of Mt. Pleasant, Racine County, Wisconsin, April 2003
- 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\*

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- 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
- 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. 229 - A Land Use Plan for the Town of Troy: 2020, Walworth County, Wisconsin, January 1999
- No. 231 - Kenosha Area Transit System Development Plan: 1998-2002, City of Kenosha, Wisconsin, April 1998\*
- No. 232 - A Land Use Plan for the Town of Saukville: 2010, Ozaukee County, Wisconsin, September 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. 235 - A Land Use Plan for the Town of Wayne: 2020, Washington County, Wisconsin, February 1999
- No. 236 - A Stormwater and Floodland Management Plan for the Dousman Ditch and Underwood Creek Subwatersheds in the City of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, February 2000
- No. 237 - A Land Use Plan for the Town and Village of Rochester: 2020, Racine County, Wisconsin, November 1999
- 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. 240 - Walworth-Fox Lake Corridor Commuter Service Feasibility Study, August 2001
- No. 241 - Burlington-Antioch Corridor Commuter Rail and Bus Service Feasibility Study, April 2002
- No. 242 - A Park and Open Space Plan for the City of Lake Geneva, Walworth County, Wisconsin, April 1999\*
- No. 243 - A Land Use Plan for the Town of Dover: 2020, Racine County, Wisconsin, August 1999
- No. 244 - A Park and Open Space Plan for the Village of Jackson, Washington County, Wisconsin, November 1998

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 245 - Waukesha County Transit System Development Plan: 2002-2006, November 2001\*
- No. 246 - Waukesha Area Transit System Development Plan: 2003-2007, October 2003
- No. 247 - Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, Racine and Waukesha Counties, Wisconsin, June 1999\*
- No. 248 - A Master Plan for the Town of Belgium: 2020, Ozaukee County, Wisconsin, October 2000
- No. 249 - A Land Use Plan for the Town of Lyons: 2020, Walworth County, Wisconsin, December 2000
- No. 250 - A Park and Open Space Plan for the City of West Bend: 2020, Washington County, Wisconsin, April 1999
- No. 251 - A Master Plan for the Town of Spring Prairie: 2020, Walworth County, Wisconsin, January 2001
- No. 252 - A Land Use Plan for Walworth County, Wisconsin, April 2001
- No. 253 - A Lake Management Plan for Delavan Lake, Walworth County, Wisconsin, May 2002
- No. 255 - A Land and Water Resource Management Plan for Kenosha County: 2000-2004, September 2000
- No. 256 - A Master Plan for the Village of Wales: 2020, Waukesha County, Wisconsin, April 2004
- No. 257 - Flood Mitigation Plan for the City of Brookfield, Waukesha County, Wisconsin, October 2000
- No. 258 - A Park and Open Space Plan for the Town of Ottawa, Waukesha County, Wisconsin, November 2001
- No. 259 - A Land and Water Resource Management Plan for Racine County: 2000-2004, September 2000
- No. 260 - A Stormwater and Floodland Management Plan for the Butler Ditch Subwatershed, City of Brookfield and Menomonee Falls, Waukesha County, Wisconsin, July 2004
- No. 261 - Flood Mitigation Plan for the City of Milwaukee, Milwaukee County, Wisconsin, October 2000
- No. 262 - A Lake Management Plan for Nagawicka Lake, Waukesha County, Wisconsin, March 2001\*
- No. 265 - Ozaukee County Transit System Development Plan—2002-2005, October 2002\*
- No. 266 - Racine County Hazard Mitigation Plan, August 2004
- No. 268 - A Land Use Plan for the Town of Bloomfield: 2020, Walworth County, Wisconsin, August 2003
- No. 269 - A Flood Mitigation Plan for Kenosha County, Kenosha County, Wisconsin, September 2001
- No. 270 - A Park and Open Space Plan for the City of Racine, Racine County, Wisconsin, July 2003
- No. 271 - A Park and Open Space Plan for the Village of Union Grove, Racine County, Wisconsin, July 2003
- No. 272 - A Land Use Plan Implementation Strategy for the Rural Area of the Town of Caledonia, Racine County, Wisconsin, March 2004
- No. 274 - Flood Mitigation Plan for the City of Oak Creek, Milwaukee County, Wisconsin, April 2004
- No. 276 - Kenosha-Racine-Milwaukee Corridor Transit Study Summary Report and Recommended Plan, August 2003
- No. 277 - A Land Use Plan for the Village of Union Grove and the Town of Yorkville: 2020, Racine County, Wisconsin, December 2003

## MEMORANDUM REPORTS

- 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

MEMORANDUM REPORTS—continued

- 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
- 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



MEMORANDUM REPORTS—continued

- 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. Montclair 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
- 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. 55 - 2nd Edition, Traffic Engineering Study of Keup Road between Columbia Road and STH 60 in the City and Town of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, November 2000
- 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

MEMORANDUM REPORTS—continued

- 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\*
- 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\*

MEMORANDUM REPORTS—continued

- 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\*
- 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. 112 - An Aquatic Plant Management Plan for Crooked Lake, Waukesha County, Wisconsin, April 2000
- 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

MEMORANDUM REPORTS—continued

- 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
- 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. 130 - A Lake and Watershed Inventory for Nagawicka Lake, Waukesha County, Wisconsin, March 1999\*
- No. 131 - Environmental Analysis of the Lands at the Headwaters of Gilbert Lake and Big Cedar Lake, Washington County, Wisconsin, March 1999
- No. 132 - Highway Maintenance Facility Location Study, Washington County, Wisconsin, December 1998
- No. 134 - An Aquatic Plant Management Plan for Fowler Lake, Waukesha County, Wisconsin, October 2000
- No. 135 - A Lake Protection Plan for the Kelly Lakes, Milwaukee and Waukesha Counties, Wisconsin, October 2000
- No. 136 - Racine County Industrial Park Land Absorption Study, July 1999
- No. 137 - A Water Quality Protection and Stormwater Management Plan for Big Cedar Lake, Volumes I and II, August 2001
- No. 138 - Assessment of Conformity of the Year 2000-2002 Transportation Improvement Program and Year 2020 Regional Transportation System Plan with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Severe Ozone Nonattainment Area, March 2000
- No. 139 - Surface-Water Resources of Washington County, Wisconsin, Lake and Stream Classification Project: 2000, September 2001
- No. 140 - A Lake Protection Plan for Benedict and Tombeau Lakes, Kenosha and Walworth Counties, Wisconsin, May 2001
- No. 141 - Analysis of Alternative Plans for Removal of the Concrete Lining in Underwood Creek in the City of Wauwatosa, Milwaukee County, Wisconsin, November 2000
- No. 142 - Identifying and Delineating Problem Wetlands in the Lake Michigan Basin using an Integrated Approach: A Case Study of Two Seasonal Wetland Types, Kenosha County, Wisconsin, September 2004.
- No. 143 - An Aquatic Plant Management Plan for the Lauderdale Lakes, Walworth County, Wisconsin, August 2001
- No. 144 - An Aquatic Plant and Recreational Use Management Plan for Booth Lake, Walworth County, Wisconsin, September 2003
- No. 146 - An Aquatic Plant Management Plan for Little Cedar Lake, Washington County, Wisconsin, May 2004



MEMORANDUM REPORTS—continued

- No. 147 - Assessment of Conformity of the Amended Year 2000-2002 Transportation Improvement Program and Amended Year 2020 Regional Transportation system Plan with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Severe ozone Nonattainment Area and Walworth County Ozone Maintenance Area, January 2001
- No. 148 - A Lake Protection Plan for Middle Genesee Lake, Waukesha County, Wisconsin, August 2003
- No. 149 - A Lake Protection Plan for Spring Lake and Willow Spring Lake, Waukesha County, Wisconsin, August 2004
- No. 150 - Assessment of Conformity of the Year 2002-2004 Transportation Improvement Program and Year 2020 Regional Transportation System Plan with Respect to State of Wisconsin Air Quality Implementation Plan—Six-County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, April 2002
- No. 151 - Stream Channel Stability and Biological Assessment of Quaas Creek: 2002, Washington County, Wisconsin, July 2002
- No. 152 - A Greenway Connection Plan for the Milwaukee Metropolitan Sewerage District, December 2002
- No. 153 - Results of Survey of Attitudes of Southeastern Wisconsin Residents Regarding Freeway Traffic Congestion and Freeway System Reconstruction: 2002, September 2002
- No. 154 - Assessment of Conformity of the Year 2002-2004 Transportation Improvement Program and the Regional Transportation Plan System Plan with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, March 2003
- No. 155 - An Aquatic Plant Management Plan for Little Muskego Lake, Waukesha County, Wisconsin, January 2004
- No. 156 - Lake Park Bluff Stability and Plant Community Assessment: 2003, Milwaukee County, Wisconsin, September 2004
- No. 157 - Review and Reaffirmation of Year 2020 Regional Land Use and Transportation Plans and Extension of Plan Design Year to 2025, April 2003
- No. 160 - Assessment of Conformity of the Year 2002-2004 Transportation Improvement Program and the Regional Transportation System Plan as Amended with Respect to State of Wisconsin Air Quality Implementation Plan—Six-County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, October 2003

## 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 Pewaukee  
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

## 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\*

### 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\*

### 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

## TECHNICAL RECORDS

### Volume 1-No. 1, October-November 1963\*

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



## TECHNICAL RECORDS—continued

### Volume 1-No. 5, June-July 1964

- 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

### Volume 1-No. 6, August-September 1964

- 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

### Volume 2-No. 1, October-November 1964\*

- 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

## TECHNICAL RECORDS—continued

### Volume 2-No. 5, June-July 1965

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, 1997, 1998, 1999, 2000, 2001, 2002, and 2003



## 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

SEWRPC Newsletter, Volume 2 through Volume 41, Number 1  
SEWRPC Freeway System Study Newsletter, Nos. 1 through 5  
SEWRPC Review and Update of Regional Land Use and  
Transportation System plans for Southeastern Wisconsin No. 1

## 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\*

## TRANSPORTATION IMPROVEMENT PROGRAMS—continued

- 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
- 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
- A Transportation Improvement Program for Southeastern Wisconsin: 2000-2002, February 2000
- A Transportation Improvement Program for Southeastern Wisconsin: 2002-2004, February 2002
- A Transportation Improvement Program for Southeastern Wisconsin: 2004-2006, December 2003

## 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
- Scope of Work, A Regional Freeway System Reconstruction Study for Southeastern Wisconsin, December 2000

\*Out of print.

(This page intentionally left blank)

## Appendix E

**DAVID L. SCRIMA, S.C.**

CERTIFIED PUBLIC ACCOUNTANTS

328 WEST SUNSET DRIVE

WAUKESHA, WISCONSIN 53189

TELEPHONE  
(262) 542-8401  
FAX 542-8713

MEMBER  
WISCONSIN INSTITUTE CPA'S  
AMERICAN INSTITUTE OF  
CERTIFIED PUBLIC ACCOUNTANTS

### 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 Southeastern Wisconsin Regional Planning Commission, as of and for the year ended December 31, 2004, as listed in the table of contents. These general purpose financial statements are the responsibility of 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 and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the general purpose financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and the disclosures in the general purpose financial statements. An audit also includes 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 Southeastern Wisconsin Regional Planning Commission, as of December 31, 2004, and the results of its operations for the year then ended in conformity with generally accepted accounting principles.

In accordance with Government Auditing Standards, we have also issued our report dated March 16, 2005, on our consideration of Southeastern Wisconsin Regional Planning Commission's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants.

Our audit was performed for the purpose of forming an opinion on the general purpose financial statements taken as a whole. The accompanying schedule of expenditures of federal and state of Wisconsin awards is presented for purposes of additional analysis as required by U.S. Office of Management and Budget Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations, and is not a required part of the general purpose financial statements of Southeastern Wisconsin Regional Planning Commission. Such information has been subjected to the auditing procedures applied in the audit of the general purpose financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the general purpose financial statements taken as a whole.

*David L. Scrima, S.C.*

David L. Scrima, S.C.  
Waukesha, Wisconsin  
March 16, 2005



**Southeastern Wisconsin Regional Planning Commission**  
**Combined Balance Sheet - All Fund Types and Account Groups**  
**December 31, 2004**

	Governmental Fund Types			Account Groups		(Memorandum Only)	
	General	Special Revenue	Debt Service	General Fixed Assets	General Long-Term Debt	2004 Total	2003 Total
<b>Assets</b>							
Pooled cash and cash equivalents	\$ 3,008,354	\$	\$	\$	\$	\$ 3,008,354	\$ 3,122,958
Grants receivable		585,247				585,247	718,405
Contracts and service agreements receivable	778,622					778,622	585,873
Interest receivable	7,394					7,394	
Prepaid expense	213,274					213,274	136,734
Property and equipment				4,953,768		4,953,768	4,892,268
Deferred bond expenses			100,562			100,562	106,906
Due from other funds	833,314					833,314	994,445
Amount to be provided for retirement of bonds					2,810,000	2,810,000	2,910,000
Restricted assets:							
Cash with fiscal agent			232,925			232,925	236,850
<b>Total Assets</b>	<b>\$ 4,840,958</b>	<b>\$ 585,247</b>	<b>\$ 333,487</b>	<b>\$ 4,953,768</b>	<b>\$ 2,810,000</b>	<b>\$ 13,523,460</b>	<b>\$ 13,704,439</b>
<b>Liabilities</b>							
State sales tax	\$ 160	\$	\$	\$	\$	\$ 160	\$ 148
Accounts payable	537,924	40,453				578,377	725,064
Vacation accrual	202,895					202,895	192,610
Deferred revenue	725,418					725,418	689,054
Sick pay accrual	100,476					100,476	58,578
Due to other funds		544,794	288,520			833,314	994,445
Accrued payroll and taxes	108,814					108,814	206,120
Deposits and advance rents	3,333					3,333	3,333
General long-term debt					2,810,000	2,810,000	2,910,000
Accrued interest payable			44,967			44,967	46,267
<b>Total Liabilities</b>	<b>1,679,020</b>	<b>585,247</b>	<b>333,487</b>		<b>2,810,000</b>	<b>5,407,754</b>	<b>5,825,619</b>
<b>Fund Equity</b>							
Investments in fixed assets				4,953,768		4,953,768	4,892,268
Fund Balances - designated	2,036,552					2,036,552	1,610,747
- undesignated	1,125,386					1,125,386	1,375,805
<b>Total Fund Equity</b>	<b>3,161,938</b>			<b>4,953,768</b>		<b>8,115,706</b>	<b>7,878,820</b>
<b>Total Liabilities and Fund Equity</b>	<b>\$ 4,840,958</b>	<b>\$ 585,247</b>	<b>\$ 333,487</b>	<b>\$ 4,953,768</b>	<b>\$ 2,810,000</b>	<b>\$ 13,523,460</b>	<b>\$ 13,704,439</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, 2004**

	Governmental Fund Types			
	General	Special Revenue	Total (Memorandum Only)	
			2004	2003
<b>Revenues</b>				
Contributions from counties	\$ 2,317,515	\$	\$ 2,317,515	\$ 2,317,515
Grant revenues		2,952,590	2,952,590	2,917,502
Contract and service grants	1,073,015	476,730	1,549,745	2,520,035
Pass-through grants	1,160,726		1,160,726	1,449,537
Interest on invested funds	45,796		45,796	35,506
Other income	60,358		60,358	119,439
Rental income	48,406		48,406	46,038
<b>Total Revenues</b>	<b>4,705,816</b>	<b>3,429,320</b>	<b>8,135,136</b>	<b>9,405,572</b>
<b>Expenditures</b>				
Salaries and fringe benefits	2,953,382	2,048,366	5,001,748	4,852,495
Office and other expenses:				
Technical consultants	540,736	141,554	682,290	1,397,512
Technical consultants - pass-through	1,160,726		1,160,726	1,449,537
Office supplies	79,850	1,127	80,977	78,235
Insurance, audit, legal fees	70,297	637	70,934	59,428
Library acquisition and dues	12,151	4,796	16,947	59,106
Printing and graphics supplies	63,089	5,055	68,144	89,410
Public information	4,332		4,332	117
Postage expense	18,556	605	19,161	10,124
Travel expense	26,490	19,756	46,246	37,559
Telephone expense	31,059	7,801	38,860	47,230
Building expense	308,788		308,788	307,460
Annual report	8,225		8,225	12,876
Other operating expenses	29,816	12,266	42,082	179,379
Unemployment compensation expense	14,281		14,281	19,996
Auto, office equipment, maintenance	196,869	3,721	200,590	159,672
Capital outlay	60,328		60,328	80,778
Interest expense	135,091		135,091	138,853
<b>Total Expenditures</b>	<b>5,714,066</b>	<b>2,245,684</b>	<b>7,959,750</b>	<b>8,979,767</b>
<b>Excess (Deficit) Revenues Over Expenditures</b>	<b>(1,008,250)</b>	<b>1,183,636</b>	<b>175,386</b>	<b>425,805</b>
<b>Indirect Expense Allocation</b>	<b>1,183,636</b>	<b>(1,183,636)</b>		
<b>Fund Balance - beginning of year</b>	<b>2,986,552</b>	<b>-0-</b>	<b>2,986,552</b>	<b>2,560,747</b>
<b>Fund Balance - end of year</b>	<b>\$ 3,161,938</b>	<b>\$ -0-</b>	<b>\$ 3,161,938</b>	<b>\$ 2,986,552</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 - Budget and Actual - All Governmental Fund Types  
For the Year Ended December 31, 2004

Revenues	Budget	Actual	Variance Favorable (Unfavorable)
Contributions from counties	\$ 2,317,515	\$ 2,317,515	\$
Grant revenues	2,916,250	2,952,590	36,340
Contract and service grants	1,596,500	1,549,745	(46,755)
Pass-through grants		1,160,726	1,160,726
Interest on invested funds		45,796	45,796
Other income		60,358	60,358
Rental income	47,420	48,406	986
<b>Total Revenues</b>	<b>6,877,685</b>	<b>8,135,136</b>	<b>1,257,451</b>
<b>Expenditures</b>			
Salaries and fringe benefits	5,271,585	5,001,748	269,837
Office and other expenses:			
Technical consultants	511,520	682,290	(170,770)
Technical consultants - pass-through		1,160,726	(1,160,726)
Office supplies	80,000	80,977	(977)
Insurance, audit, legal fees	65,400	70,934	(5,534)
Library acquisition and dues	35,000	16,947	18,053
Printing and graphics supplies	100,000	68,144	31,856
Public information	25,000	4,332	20,668
Postage expense	30,000	19,161	10,839
Travel expense	45,000	46,246	(1,246)
Telephone expense	40,000	38,860	1,140
Building expense	225,000	308,788	(83,788)
Annual report	6,500	8,225	(1,725)
Other operating expenses	25,000	42,082	(17,082)
Unemployment compensation expense	10,000	14,281	(4,281)
Auto, office equipment, maintenance	169,455	200,590	(31,135)
Capital outlay	101,375	60,328	41,047
Interest expense	136,850	135,091	1,759
<b>Total Expenditures</b>	<b>6,877,685</b>	<b>7,959,750</b>	<b>(1,082,065)</b>
<b>Excess Revenues Over Expenditures</b>	<b>\$ -0-</b>	<b>175,386</b>	<b>\$ 175,386</b>
Fund Balance - beginning of year		2,986,552	
Fund Balance - end of year		<u>\$ 3,161,938</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 the Financial Statements  
For the Year Ended December 31, 2004

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.

Basis 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, 2004

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.  
**General Long-Term Debt** - Used to account for long-term liabilities, which are 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, 2004 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 the Financial Statements

For the Year Ended December 31, 2004

Note 1 - Summary of Significant Accounting Policies (Cont'd)

Deferred Debt Expense and Bond Discount

Bond issuance costs and bond discount costs are capitalized and amortized over the terms of the bonds.

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.

	2004	2003
Land and improvements	\$ 377,900	\$ 377,900
Building and improvements	3,211,582	3,211,582
Office furniture	268,844	259,191
Computers and related equipment	530,372	458,176
Office equipment	336,145	356,658
Automobiles	191,220	191,220
Field equipment	37,705	37,541
	<u>\$ 4,953,768</u>	<u>\$ 4,892,268</u>

## Combined Notes to the Financial Statements

## Combined Notes to the Financial Statements

For the Year Ended December 31, 2004

For the Year Ended December 31, 2004

## Note 3 – Employer 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, 2004 was \$3,695,580, the employer's total payroll was \$3,824,213.

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 5.4% of their salary (2.6% for Executives and Elected Officials, 4.0% for Protective Occupations with Social Security, and 2.4% 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. Total contributions for the years ending December 31, 2004 and 2003 were \$363,050 and \$331,492, 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 as 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 a 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 vested.

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 "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.

## 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 CDs	\$ 1,349,091
Temporary cash investments	<u>1,659,263</u>
	<u>\$ 3,008,354</u>

The temporary cash investments are invested in the Wisconsin Investment Pool. The pool was paying 1.90% as of December 31, 2004.

## Note 5 – Cognizant Agency

The cognizant agency for the Single Audit report is the Wisconsin Department of Transportation.

## Note 6 – Designated Funds

The Commission has designated the following funds for future purposes:

Equipment replacement	\$ 175,000
Errors and Omissions Insurance	300,000
Building Improvement & Maintenance	286,552
Bond Redemption	700,000
Program Development Fund	<u>575,000</u>
	<u>\$ 2,036,552</u>

## Southeastern Wisconsin Regional Planning Commission

## Combined Notes to the Financial Statements

For the Year Ended December 31, 2004

## Note 7 – Long-Term Debt

The City of Pewaukee issued \$3,000,000 of Industrial Revenue bonds on March 1, 2001. These bonds are to be repaid within 20 years from the date of issue. The interest rate varies from 3.85% to 5.25%. The following is a schedule of principal and interest payments over the next five years:

	Principal	Interest
2005	\$ 100,000	\$ 132,925
2006	110,000	128,750
2007	115,000	124,193
2008	120,000	119,315
2009	130,000	113,968
2010	135,000	108,136
2011 and thereafter	<u>2,100,000</u>	<u>647,886</u>
Total	<u>\$ 2,810,000</u>	<u>\$ 1,375,173</u>

The commission has an option to prepay the balance of the bonds, at par, commencing March 1, 2011.

## Note 8 – Cash Risks

As of the balance sheet date, balances of cash at a financial banking institution exceeded the federally insured limit of \$100,000 by \$617,110. These balances fluctuate greatly during the year and can exceed this \$100,000 limit. Management monitors, regularly, the financial condition of the banking institution, and tries to keep this potential risk to a minimum.