

# 2007 ANNUAL REPORT



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



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REGIONAL PLANNING COMMISSION**

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## **FORTY-SEVENTH ANNUAL REPORT**

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

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**September 2008**

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Outside Region	\$4.00



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# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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Serving the Counties of:

KENOSHA  
MILWAUKEE  
OZAUKEE  
RACINE  
WALWORTH  
WASHINGTON  
WAUKESHA



September 2, 2008

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 47th annual report of the Commission, summarizes the work of the Commission in calendar year 2007 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 2007 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 2007. The Commission looks forward to continuing to serve its constituent counties and local units of government, as well as the State and Federal agencies concerned, by providing the planning services required to address the areawide environmental and developmental problems facing Southeastern Wisconsin and by promoting the intergovernmental cooperation needed to resolve those problems.

Very truly yours,

Thomas H. Buestrin  
Chairman



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# ABOUT THE COMMISSION

## AUTHORITY

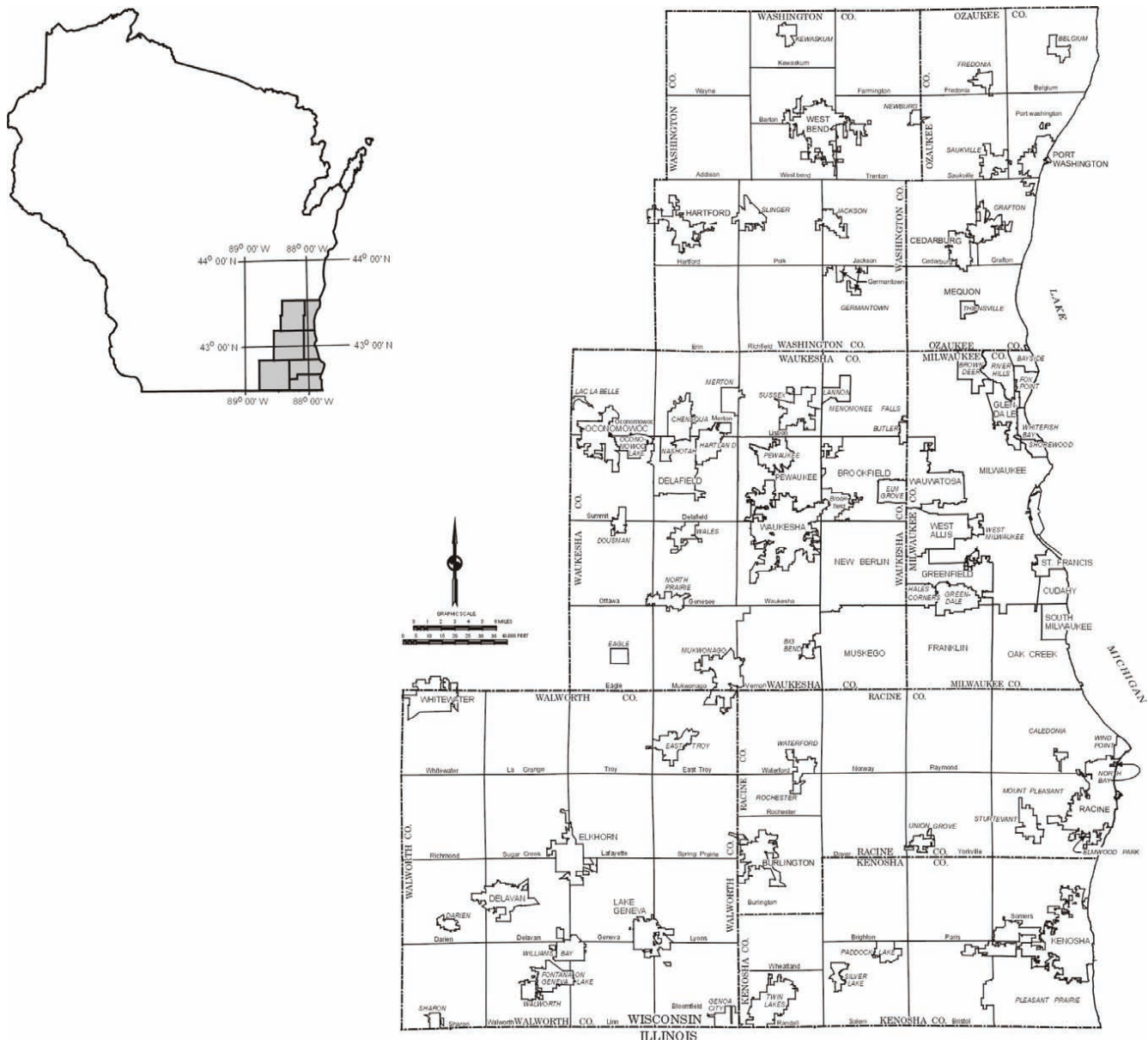
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.0309 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning 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 1.99 million persons, or about 35 percent of the total population of the State. The seven counties provide about 1.25 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 \$189.0 billion as measured in equalized valuation, or about 38 percent of all the tangible wealth of the State as measured by such valuation. There are 154 general-purpose local units of government in the seven-county Region, all of which participate in the work of the Commission.

## **BASIC CONCEPTS**

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

As used by the Commission, the term “region” means an area larger than a county but smaller than a state, united by economic interests, geography, and common developmental and environmental problems. A regional basis is necessary to provide a meaningful technical approach to the proper planning and design of such systems of public works as highway and transit and sewerage and water supply, and of park and open space facilities. A regional basis is also essential to provide a sound approach to the resolution of such environmental problems as flooding, air and water pollution, natural resource base deterioration, and changing land use.

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

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 2007, the Commission staff totaled 77, including 69 full-time and seven part-time employees.

As shown in Figure 1 and in Appendix C, the Commission was in 2007 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 six 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 2007 totaled about \$9.5 million. County tax levies in 2007 totaled about \$2.3 million, or about \$1.16 per capita. The sources of this revenue for 2007 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 2007 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**

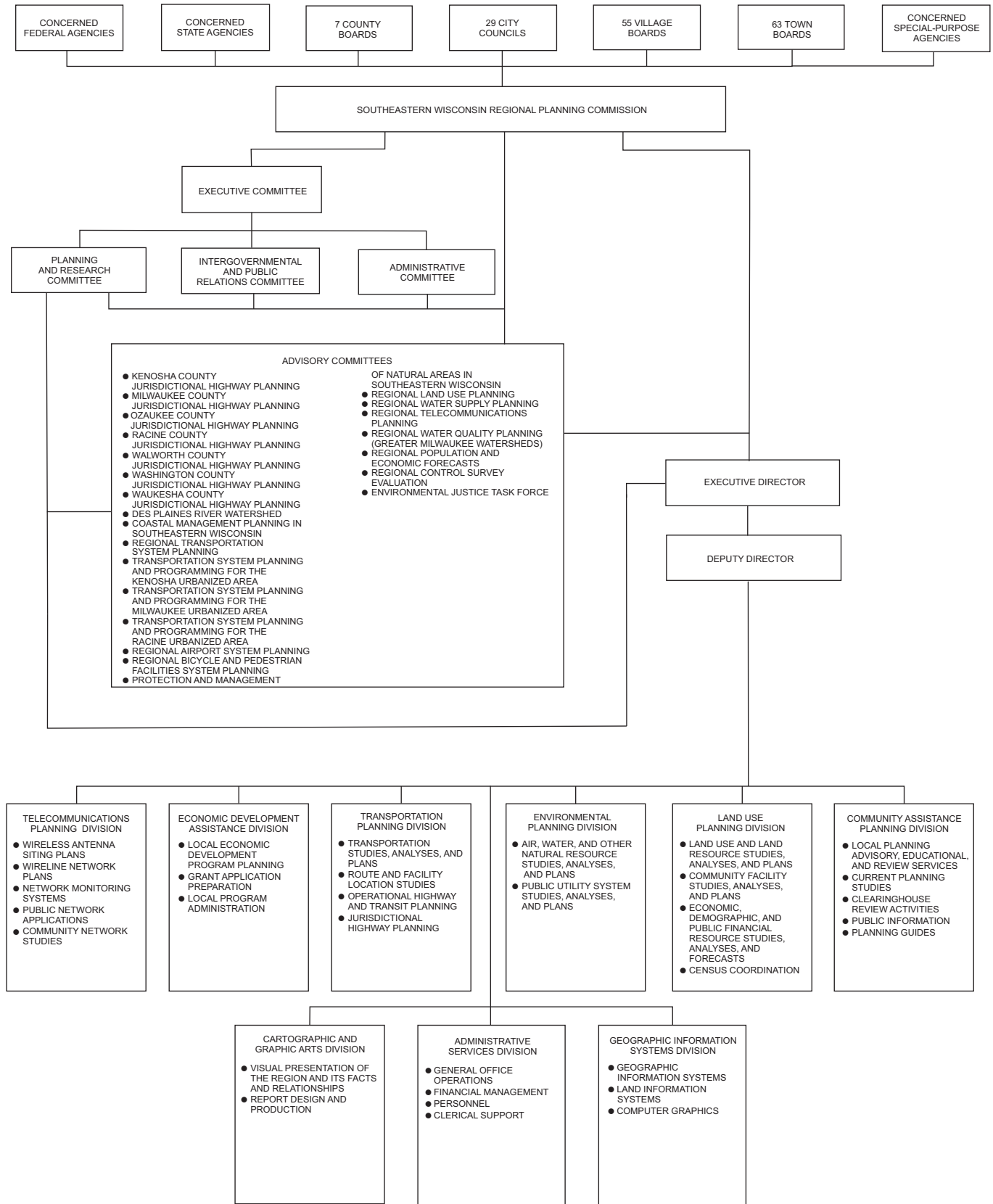
Documentation in the form of published reports is considered very important, if not absolutely essential, to any public planning effort. Printed planning reports represent the best means for disseminating inventory data that have permanent historical value and for promulgating plan recommendations and 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: 2007





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.

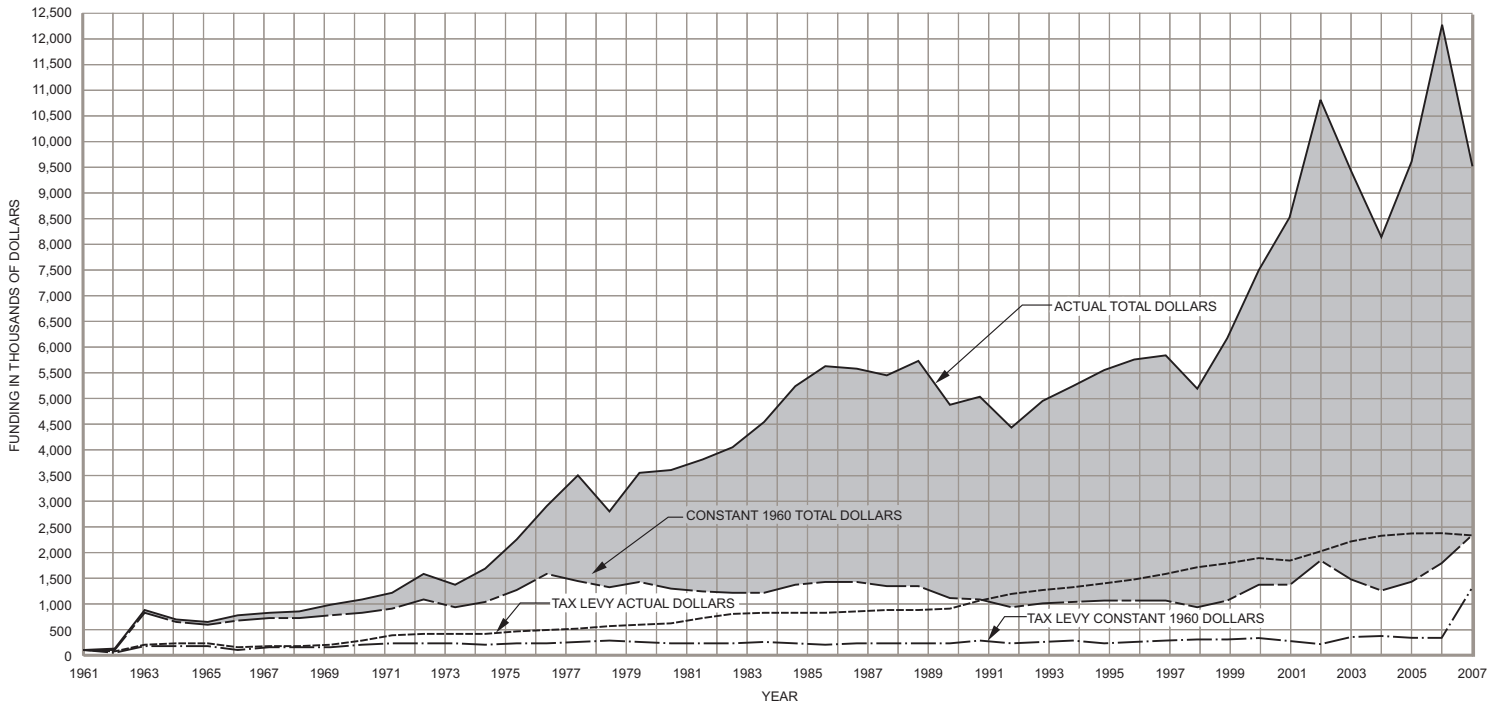
The seventh type of report in the series is the annual report. The annual report has served an increasing number of functions over the period of the Commission's existence. Originally, and most importantly, the Commission's annual report was, and still is, intended to satisfy a very sound legislative 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.

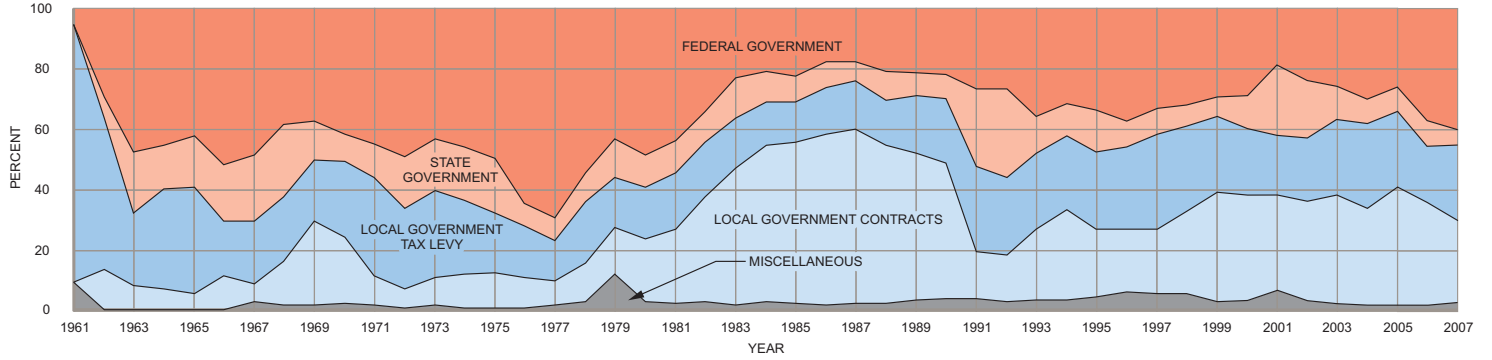
In addition to the eight basic types of reports described above, the Commission documents its work in certain miscellaneous publications, including a newsletter, regional planning conference proceedings, study designs, public hearing and public informational meeting minutes, transportation improvement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



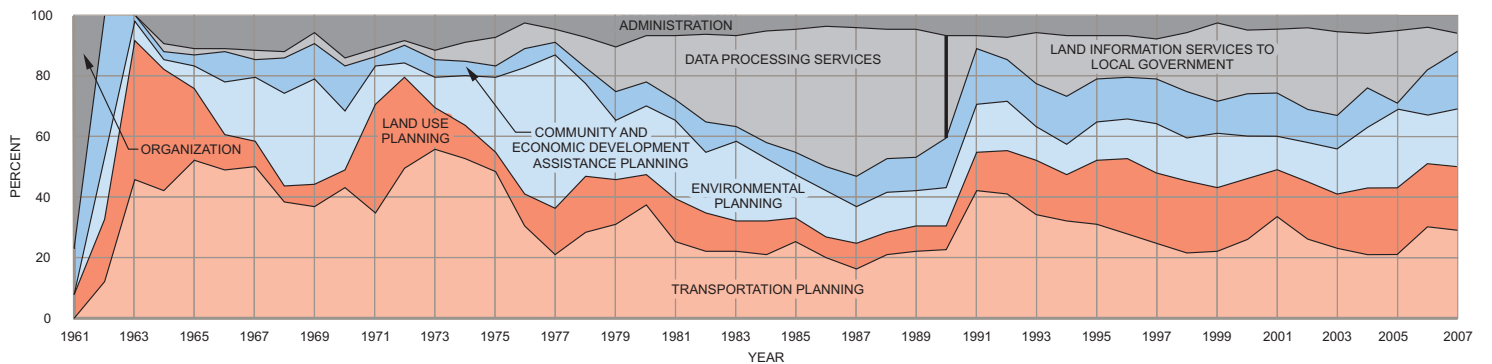
**Figure 2**  
**FUNDING TREND: 1961-2007**



**Figure 3**  
**SOURCES OF REVENUES TREND: 1961-2007**



**Figure 4**  
**EXPENDITURES TREND: 1961-2007**





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

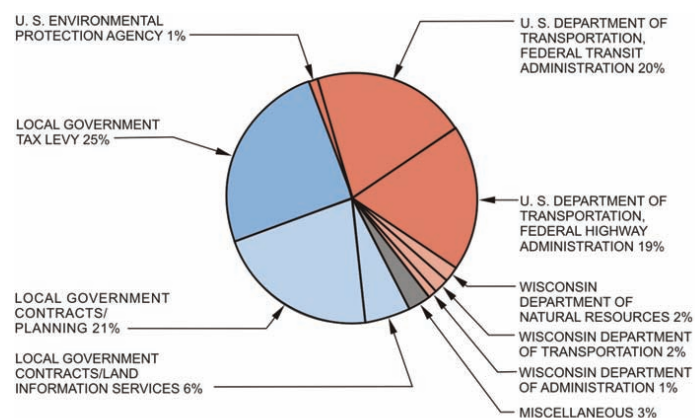
to comprehend fully the scope and complexity of the areawide developmental and environmental problems and of the Commission's recommendations for the resolution of those problems. A complete publication list is set forth in Appendix D.

**Figure 5**

**REVENUES AND EXPENDITURES: 2007**

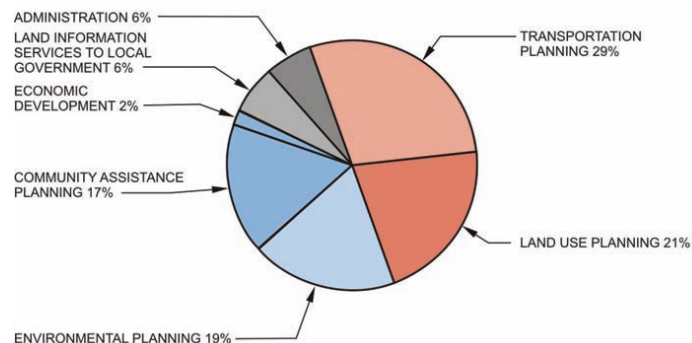
Federal Government .....	\$ 3,790,786	40%
State Government .....	492,960	5%
Local Government Tax Levy .....	2,370,245	25%
Local Government Contracts .....	2,593,874	27%
Miscellaneous .....	265,980	3%
<b>Total</b>	<b>\$9,513,845</b>	<b>100%</b>

**REVENUES**



Transportation Planning .....	\$ 2,644,550	29%
Land Use Planning .....	1,886,565	21%
Environmental Planning .....	1,758,366	19%
Community Assistance Planning .....	1,526,828	17%
Economic Development Assistance .....	166,850	2%
Land Information Services to Local Governments .....	525,482	6%
Administration .....	545,257	6%
<b>Total</b>	<b>\$9,053,898</b>	<b>100%</b>

**EXPENDITURES**





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# 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: 2007

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 2007, the adopted regional plan consisted of 30 individual plan elements. These plan elements are identified in Table 1. Five of these elements are land use-related: the regional land use plan, the regional housing plan, the regional library facilities and services plan, the regional park and open space plan, and the regional telecommunications plans.

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



Table 1

## THE ADOPTED REGIONAL PLAN: DECEMBER 31, 2007

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. 48, <i>A Regional Land Use Plan for Southeastern Wisconsin: 2035</i>	June 21, 2006
	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
	Regional Telecommunications Plans	Planning Report No. 51, <i>A Wireless Antenna Siting and Related Infrastructure Plan for Southeastern Wisconsin</i>	September 13, 2006
		Planning Report No. 53, <i>A Regional Broadband Telecommunications Plan for Southeastern Wisconsin</i>	December 5, 2007
Transportation Planning	Regional Transportation Plan <sup>b</sup>	Planning Report No. 49, <i>A Regional Transportation System Plan for Southeastern Wisconsin: 2035</i>	June 21, 2006
	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
	Amendment—Racine Area	SEWRPC Resolution No. 78-17	December 7, 1978
	Amendment—Kenosha Area	Memorandum Report No. 107, <i>A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Kenosha Transit System</i>	January 24, 1996
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	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>g</sup>	Community Assistance Planning Report No. 265, <i>Ozaukee County Transit System Development Plan: 2002-2006</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
	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>n</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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	Amendment—Town of Darien	<i>Amendment to the Regional Water Quality Management Plan—2000, Town of Darien/ Walworth County Metropolitan Sewerage District</i>	June 20, 1988
	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex</i>	June 20, 1988
	Amendment—Village of Darien	Community Assistance Planning Report No. 123, (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin</i>	September 23, 1992
	Amendment—West Bend Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/ Town of West Bend</i>	September 12, 1988
	Amendment—Hartford Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</i>	September 12, 1988
	Amendment—Town of Waterford	<i>Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District</i>	September 12, 1988
	Amendment—Hartford Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</i>	December 5, 1988
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha</i>	December 5, 1988



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Oconomowoc Area	Community Assistance Planning Report No. 172, (2nd Edition), <i>Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin</i>	September 15, 1999
	Amendment—Village of Genoa City	Community Assistance Planning Report No. 175, (2nd Edition), <i>Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin</i>	June 19, 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	Community Assistance Planning Report No. 180, <i>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	Community Assistance Planning Report No. 176, <i>Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin</i>	December 5, 1990
	Amendment—Village of Mukwonago	Community Assistance Planning Report No. 191, <i>Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin</i>	December 5, 1990
	Amendment—Dousman Area	Community Assistance Planning Report No. 192, (3rd Edition), <i>Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin</i>	March 7, 2007
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Walworth County Metropolitan Sewerage District	<i>Amendment to the Regional Water Quality Management Plan—2000, Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Sanitary Sewer Service Area</i>	March 9, 1994
	Amendment—Village of Fontana	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Fontana</i>	March 9, 1994
	Amendment—Village of Hartland/Lake Pewaukee Sanitary District	<i>Amendment to the Regional Water Quality Management Plan—2000, Village of Hartland and Lake Pewaukee Sanitary District</i>	March 9, 1994
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha</i>	June 15, 1994
	Amendment—City of Burlington/Bohner Lake Area	<i>Amendment to the Regional Water Quality Management Plan—2000, City of Burlington/Bohner Lake Sanitary Sewer Service Areas</i>	June 15, 1994
	Amendment—City of Oak Creek	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
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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</i>	June 18, 2003
	Amendment—City of Racine	<i>Amendment to the Regional Water Quality Management Plan, City of Racine Sewer Service Area</i>	June 18, 2003
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan, Town of Salem Sewer Service Area</i>	September 10, 2003
	Amendment—City of Whitewater	<i>Amendment to the Regional Water Quality Management Plan, City of Whitewater Sanitary Sewer Service Area</i>	September 10, 2003
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, City of Waukesha Sanitary Sewer Service Area</i>	September 10, 2003
	Amendment—Village of Mukwonago	<i>Amendment to the Regional Water Quality Management Plan, Village of Mukwonago Sanitary Sewer Service Area</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</i>	September 10, 2003
	Amendment—Village of Slinger	<i>Amendment to the Regional Water Quality Management Plan, Village of Slinger Sewer Service Area</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—Waterford and Rochester Area	<i>Amendment to the Regional Water Quality Management Plan, Waterford-Rochester Area Sewer Service Area</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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	Amendment—Village of Dousman	<i>Amendment to the Regional Water Quality Management Plan, Village of Dousman</i>	March 2, 2005
	Amendment—City of Oconomowoc	<i>Amendment to the Regional Water Quality Management Plan, City of Oconomowoc</i>	March 2, 2005
	Amendment—Village of Mukwonago	<i>Amendment to the Regional Water Quality Management Plan, Village of Mukwonago</i>	March 2, 2005
	Amendment—City of Hartford	<i>Amendment to the Regional Water Quality Management Plan, City of Hartford</i>	June 15, 2005
	Amendment—City of New Berlin	<i>Amendment to the Regional Water Quality Management Plan, City of New Berlin</i>	June 15, 2005
	Amendment—Waterford-Rochester Area	<i>Amendment to the Regional Water Quality Management Plan, Waterford-Rochester Area</i>	June 15, 2005
	Amendment—Village of Paddock Lake	<i>Amendment to the Regional Water Quality Management Plan, Village of Paddock Lake</i>	June 15, 2005
	Amendment—Caddy Vista Sanitary District	<i>Amendment to the Regional Water Quality Management Plan, Caddy Vista Sanitary District</i>	June 15, 2005
	Amendment—City of Muskego	<i>Amendment to the Regional Water Quality Management Plan, City of Muskego</i>	June 15, 2005
	Amendment—City of Oconomowoc	<i>Amendment to the Regional Water Quality Management Plan, City of Oconomowoc</i>	September 14, 2005
	Amendment—City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, City of Waukesha</i>	September 14, 2005
	Amendment—Town of Bristol Utility District No. 1	<i>Amendment to the Regional Water Quality Management Plan, Town of Bristol Utility District No. 1</i>	December 7, 2005
	Amendment—Village of Twin Lakes	<i>Amendment to the Regional Water Quality Management Plan, Village of Twin Lakes</i>	December 7, 2005
	Amendment—City of Hartford	<i>Amendment to the Regional Water Quality Management Plan, City of Hartford</i>	December 7, 2005
	Amendment—Village of Dousman	<i>Amendment to the Regional Water Quality Management Plan, Village of Dousman</i>	December 7, 2005
	Amendment—Village of Union Grove	<i>Amendment to the Regional Water Quality Management Plan, Village of Union Grove</i>	December 7, 2005
	Amendment—City of Pewaukee	<i>Amendment to the Regional Water Quality Management Plan, City of Pewaukee</i>	December 7, 2005
	Amendment—Village of Darien	<i>Amendment to the Regional Water Quality Management Plan, Village of Darien</i>	December 7, 2005
	Amendment—Town of Caledonia	<i>Amendment to the Regional Water Quality Management Plan, Town of Caledonia</i>	December 7, 2005
	Amendment—Village of Kewaskum	<i>Amendment to the Regional Water Quality Management Plan, Village of Kewaskum</i>	December 7, 2005
	Amendment—Village of Menomonee Falls	<i>Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls</i>	December 7, 2005
	Amendment—Greater Kenosha Area/Town of Somers	<i>Amendment to the Regional Water Quality Management Plan, Greater Kenosha Area/Town of Somers</i>	December 7, 2005
	Amendment—Village of Mukwonago	<i>Amendment to the Regional Water Quality Management Plan, Village of Mukwonago</i>	March 1, 2006



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan, Village of Sussex</i>	March 1, 2006
	Amendment—City of Mequon	<i>Amendment to the Regional Water Quality Management Plan, City of Mequon</i>	March 1, 2006
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan, Town of Salem</i>	June 21, 2006
	Amendment—City of Muskego	<i>Amendment to the Regional Water Quality Management Plan, City of Muskego</i>	June 21, 2006
	Amendment—City of Hartford	<i>Amendment to the Regional Water Quality Management Plan, City of Hartford</i>	September 13, 2006
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan, Town of Salem</i>	September 13, 2006
	Amendment—Town of Bristol/ Utility District No. 1	<i>Amendment to the Regional Water Quality Management Plan, Town of Bristol/Utility District No. 1</i>	September 13, 2006
	Amendment—Village of Grafton	<i>Amendment to the Regional Water Quality Management Plan, Village of Grafton</i>	September 13, 2006
	Amendment—City of Waukesha/ Village of Wales	<i>Amendment to the Regional Water Quality Management Plan, City of Waukesha/Village of Wales</i>	September 13, 2006
	Amendment—Village of Caledonia	<i>Amendment to the Regional Water Quality Management Plan, Village of Caledonia</i>	December 6, 2006
	Amendment—Village of Sussex	<i>Amendment to the Regional Water Quality Management Plan, Village of Sussex</i>	December 6, 2006
	Amendment—Town of Bristol/Utility District No. 1	<i>Amendment to the Regional Water Quality Management Plan, Town of Bristol/Utility District No. 1</i>	March 7, 2007
	Amendment—City of Brookfield	<i>Amendment to the Regional Water Quality Management Plan, City of Brookfield</i>	March 7, 2007
	Amendment—Town of Salem	<i>Amendment to the Regional Water Quality Management Plan, Town of Salem</i>	March 7, 2007
	Amendment—Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area</i>	March 7, 2007
	Amendment—Village of Caledonia/Village of Mount Pleasant	<i>Amendment to the Regional Water Quality Management Plan, Villages of Caledonia and Mount Pleasant</i>	June 20, 2007
	Amendment—Greater Kenosha Area	<i>Amendment to the Regional Water Quality Management Plan, Greater Kenosha Area</i>	June 20, 2007
	Amendment—Village of Twin Lakes	<i>Amendment to the Regional Water Quality Management Plan, Village of Twin Lakes</i>	June 20, 2007
	Amendment—Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area	<i>Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area</i>	June 20, 2007
	Amendment—City of Burlington	<i>Amendment to the Regional Water Quality Management Plan, City of Burlington</i>	September 12, 2007
	Amendment—City of Oak Creek	<i>Amendment to the Regional Water Quality Management Plan, City of Oak Creek</i>	September 12, 2007
	Amendment—Village of Sussex and Environs	<i>Amendment to the Regional Water Quality Management Plan, Village of Sussex and Environs</i>	September 12, 2007
	Amendment—City of Muskego	<i>Amendment to the Regional Water Quality Management Plan, City of Muskego</i>	December 5, 2007
	Amendment—Village of Wales/City of Waukesha	<i>Amendment to the Regional Water Quality Management Plan, Village of Wales/City of Waukesha</i>	December 5, 2007
	Amendment—Greater Milwaukee Watersheds	<i>Planning Report No. 50 A Regional Water Quality Management Plan for the Greater Milwaukee Watersheds</i>	December 5, 2007
	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



Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Upper Pike River, Lower Pike River, Pike Creek, Airport Branch, and Tributary to Airport Branch	<i>Amendment to the Pike River Watershed Plan, Kenosha and Racine Counties</i>	March 6, 1996
	Oak Creek Watershed Plan	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 fifth-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*. The fourth-generation regional land use plan was adopted by the Commission on December 3, 1997, and documented in SEWRPC Planning Report No. 45, *A Regional Land Use Plan for Southeastern Wisconsin: 2020*, and was subsequently amended by the adoption on June 20, 2001, of a land use plan for Walworth County, documented in SEWRPC Community Assistance Planning Report No. 252, *A Land Use Plan for Walworth County, Wisconsin: 2020*.

<sup>b</sup>The regional transportation plan is a fifth-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



**Table 1 Footnotes (continued)**

*Waukesha County, documented in SEWRPC Community Assistance Planning Report No. 201, A Land Use and Transportation System Development Plan for the IH 94 West Freeway Corridor: 2010, Waukesha County, Wisconsin; the adoption on December 6, 1995, of an updated jurisdictional highway system plan for Waukesha County, set forth in a Commission document entitled Amendment to the Waukesha County Jurisdictional Highway System Plan—2010; and the adoption on December 4, 1996, of a development plan for Waukesha County, documented in SEWRPC Community Assistance Planning Report No. 209, A Development Plan for Waukesha County, Wisconsin. The fourth-generation regional transportation system plan was adopted by the Commission on December 3, 1997, and documented in SEWRPC Planning Report No. 46, A Regional Transportation System Plan for Southeastern Wisconsin: 2020, and was subsequently amended by the adoption on February 1, 2001, of the 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; the adoption on June 19, 2002, of the Amendment to the Washington County Jurisdictional Highway System Plan: 2020; the adoption on March 20, 2003, of the Affirmation of Year 2020 Regional Transportation System Plan and Extension of Plan Design Year to 2025; and the adoption on May 21, 2003, of the Amendment to the Regional Transportation Plan (Regional Freeway System).*

<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.*

regional bicycle and pedestrian facilities system plan, and detailed transit development plans for the Kenosha, Racine, Waukesha, and West Bend urban areas and for Ozaukee, 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 2007, the Commission adopted a regional broadband telecommunications plan; 13 amendments to the regional water quality management plan dealing with changes to planned sanitary sewer service areas at various locations throughout the Region; and a major amendment to the regional water quality management plan pertaining to the greater Milwaukee watersheds. These actions are reported in more detail in appropriate sections of this 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 implemen-

tation 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. In December 1994, the Commission adopted a third-generation regional transportation system plan as part of this review and reappraisal process. In December 1997, the Commission adopted fourth generation design year 2020 regional land use and regional transportation system plans. As noted above, fifth generation regional land use and regional transportation system plans were adopted in 2006.

The fifth-generation, design year 2035 regional land use plan is based upon the same three basic concepts underlying the prior 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 fifth-generation regional land use plan is thus conceptually identical to the four previous regional land use plans.

The fifth-generation regional transportation system plan, which also has a design year of 2035, is designed to serve and support the adopted regional land use plan. The regional transportation system plan builds upon four earlier plans. The year 2035 plan embodies the basic structure of the year 2020 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 2020 plan.

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 2007, 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 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 a regional water supply system plan.

- The preparation of an update to the regional natural areas and critical species habitat protection and management plan.

## **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.



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# 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 2007, 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 2007, 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 2007.

### Regional Land use Plan—An Overview

The regional land use plan for the year 2035 was adopted by the Commission in 2006. It is documented in SEWRPC Planning Report No. 48, *A Regional Land Use Plan for Southeastern Wisconsin: 2035*. The year 2035 regional land use plan is a fifth generation plan. The Commission adopted the first regional land use plan for Southeastern Wisconsin in 1966; that plan had a design year of 1990. In subsequent planning efforts the Commission updated and extended the land use plan to 2000 (adopted in 1977), to 2010 (adopted in 1992), and to 2020 (adopted in 1997).

The regional land use plan provides a long-range guide to land use development and open space preservation in the Region. The plan provides a basis for other elements of the regional plan, including the regional transportation plan, park and open space plan, water quality management plan, and water supply plan. The regional land use plan is also intended to serve as a framework for county and local comprehensive planning within the Region.



The year 2035 regional land use plan is presented graphically on Map 2. The key features of the plan are described below.

### *Urban Land Use*

Under the regional plan, urban lands—including land devoted to high, medium, and low density residential uses as well as to commercial, industrial, governmental, institutional, recreational, and transportation, communication, and utility uses—would increase by 93 square miles, or 13 percent, from 732 square miles in 2000 to 825 square miles in 2035. Urban development would occur within urban service areas served by public sanitary sewers and other public utilities and services. New urban land would be provided through the infilling and renewal of existing urban service areas and through the orderly expansion of such areas. Urban residential development and redevelopment would occur in a variety of residential neighborhood types and in mixed uses settings. About 88 percent of all new housing would occur at a medium density—averaging about four dwelling units per acre—or at a higher density. Under the plan, growth in the economic base would be accommodated through the development and redevelopment of major economic activity centers as well as community-level and neighborhood-level centers.

### *Sub-urban Density Residential Land*

The regional plan discourages sub-urban density residential development, defined as a density of 0.2 to 0.6 dwelling unit per acre, with a typical lot size of 2-3 acres. Such development is neither truly urban nor rural in character. Development at this density generally precludes the provision of centralized sanitary sewer and water supply services. The plan recommends that additional sub-urban density residential development be confined to areas that have already been committed to such use through subdivision plats and certified surveys.

### *Environmentally Significant Lands*

Under the regional plan, the land development needs of the Region would be met while preserving the best remaining elements of the natural resource base—most of which are located within environmental corridors and isolated natural resource areas. The plan recommends the preservation of primary environmental corridors—large, elongated areas in the

landscape encompassing many of the best remaining woodlands, wetlands, prairies, wildlife habitat, and surface water and associated shorelands and floodlands, along with many related historic, scenic, and recreational sites. The plan recommends that these corridors be preserved in essentially natural, open use, recognizing, however, that certain limited development may be accommodated in upland corridor areas without jeopardizing their overall integrity; guidelines in this respect are included in the plan. The planned primary environmental corridors encompass 18 percent of the Region.

In addition to primary environmental corridors, other smaller concentrations of natural resources—referred to as secondary environmental corridors and isolated natural resource areas—have been identified as warranting strong consideration for preservation. The planned secondary environmental corridors encompass 3 percent of the Region while the planned isolated natural resource areas encompass 2 percent. The regional plan recommends that these areas be retained in natural, open use as determined in county and local plans.

The regional plan also recommends the preservation of all sites identified as natural areas or critical species habitat sites in the regional natural areas and critical species habitat inventory, described later in this section. Most of these sites are located within environmental corridors or isolated natural resource areas.













### *Prime Agricultural Lands and Other Rural Lands*

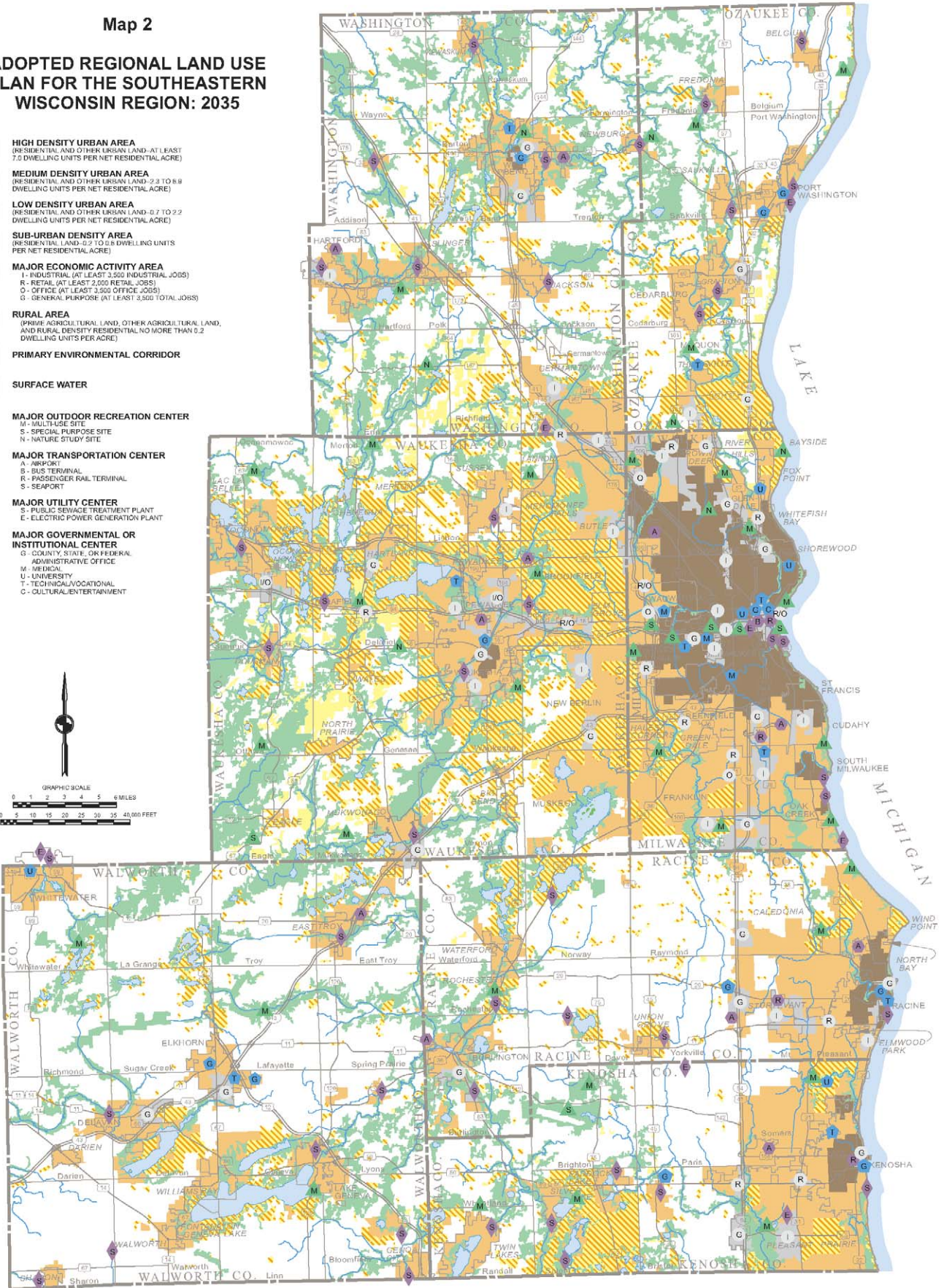
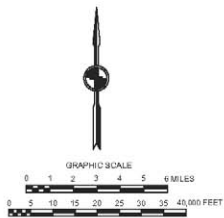
The area shown in white on the regional land use plan map is recommended to remain in essentially rural use—primarily agriculture and rural density residential use. Prime agricultural land in this area—the land best suited for agriculture—is recommended to be preserved for farming, with residential development generally limited to no more than one dwelling unit per 35 acres. The regional plan recommends that counties in the Region, in cooperation with the concerned local units of government, carry out planning programs to identify prime agricultural land. The regional plan holds out the preservation of the most productive soils—soils in U.S. Natural Resources Conservation Service Agricultural Capability Class I and Class II—as a key consideration in the identification of prime farmland, recognizing that other factors, such as farm size and the overall size of the farming area, may also be considered.



Map 2

# ADOPTED REGIONAL LAND USE PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035

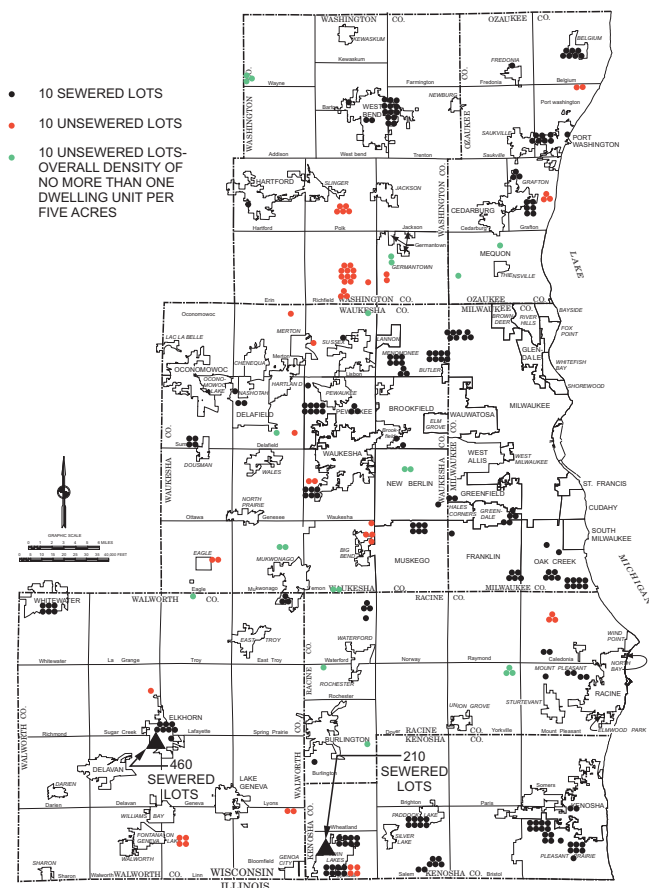
-  **HIGH DENSITY URBAN AREA**  
(RESIDENTIAL AND OTHER URBAN LAND - AT LEAST 7.0 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **MEDIUM DENSITY URBAN AREA**  
(RESIDENTIAL AND OTHER URBAN LAND - 2.3 TO 6.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **LOW DENSITY URBAN AREA**  
(RESIDENTIAL AND OTHER URBAN LAND - 0.7 TO 2.2 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **SUB-URBAN DENSITY AREA**  
(RESIDENTIAL LAND - 0.2 TO 0.6 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **MAJOR ECONOMIC ACTIVITY AREA**  
I - INDUSTRIAL (AT LEAST 3,500 INDUSTRIAL JOBS)  
R - RETAIL (AT LEAST 2,000 RETAIL JOBS)  
O - OFFICE (AT LEAST 3,500 OFFICE JOBS)  
G - GENERAL PURPOSE (AT LEAST 3,500 TOTAL JOBS)
-  **RURAL AREA**  
(PRIME AGRICULTURAL LAND, OTHER AGRICULTURAL LAND, AND RURAL DENSITY RESIDENTIAL NO MORE THAN 0.2 DWELLING UNITS PER ACRE)
-  **PRIMARY ENVIRONMENTAL CORRIDOR**
-  **SURFACE WATER**
-  **MAJOR OUTDOOR RECREATION CENTER**  
M - MULTI-USE SITE  
S - SPECIAL PURPOSE SITE  
N - NATURE STUDY SITE
-  **MAJOR TRANSPORTATION CENTER**  
A - AIRPORT  
B - BUS TERMINAL  
R - PASSENGER RAIL TERMINAL  
S - SEAPORT
-  **MAJOR UTILITY CENTER**  
S - PUBLIC SEWAGE TREATMENT PLANT  
E - ELECTRIC POWER GENERATION PLANT
-  **MAJOR GOVERNMENTAL OR INSTITUTIONAL CENTER**  
G - COUNTY, STATE, OR FEDERAL ADMINISTRATIVE OFFICE  
M - MEDICAL  
U - UNIVERSITY  
T - TECHNICAL/VOCATIONAL  
C - CULTURAL/ENTERTAINMENT





Map 3

### RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 2007



The regional plan also encourages the preservation of nonprime farmland for agricultural use. This could be in the form of traditional agriculture or alternative agricultural uses such as smaller hobby farms or specialty farms including community supported agricultural operations. The regional plan recognizes the potential for limited residential development on nonprime farmland in planned rural areas, recommending that any such development be limited to a density of no more than one dwelling unit per five acres. Where such development is accommodated, the plan encourages the use of conservation subdivision designs.

#### Residential Subdivision Platting Activity

The Commission annually monitors land subdivision activity within the Region. In all, 3,442 residential lots were created within the Region during 2007 by subdivision plat, compared with 4,841 lots so created in 2006 (see Table 2 and Map 3). In the seven counties

in Southeastern Wisconsin, the number of residential lots created through subdivision plats in 2007 ranged from a low of 207 lots in Racine County to a high of 771 lots in Kenosha 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 2007, 2,763 lots, or 80 percent, were to be served by public sanitary sewers; the remaining 679 lots, or 20 percent, were to be served by onsite sewage disposal systems. Of the 679 lots to be served by onsite sewage disposal systems, 205 lots, or 30 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 2007, the Division 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, Telecommunications, and Community Assistance Planning Divisions.

#### Monitoring Employment

##### *Current Employment Levels*

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 2007 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 2007 was estimated at 1,255,800, about 33,000 jobs, or 3 percent, above the 2000 level of 1,222,800 jobs.



Table 2

## RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 2007

County	Sewered Lots		Unsewered Lots <sup>a</sup>		Total Lots	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha .....	733	95.1	38	4.9	771	22.4
Milwaukee .....	359	100.0	0	0.0	359	10.4
Ozaukee .....	248	80.0	62	20.0	310	9.0
Racine .....	122	58.9	85	41.1	207	6.0
Walworth .....	616	89.5	72	10.5	688	20.0
Washington .....	169	39.9	255	60.1	424	12.3
Waukesha .....	516	75.5	167	24.5	683	19.9
Region	2,763	80.3	679	19.7	3,442	100.0

<sup>a</sup>Of the 679 lots to be served by onsite sewage disposal systems, 205 lots, or 30 percent, occurred at a rural density of no more than one dwelling unit per five acres. This includes 22 such lots in Ozaukee County, 59 in Racine County, 5 in Walworth County, 50 in Washington County, and 69 in Waukesha County.

Table 3

## REGIONAL EMPLOYMENT BY CATEGORY: 1990, 2000, AND 2007

Employment Category	Number of Jobs			1990-2000 Change		2000-2007 Change	
	1990	2000	2007 Estimate	Number	Percent	Number	Percent
Agriculture, Forestry, Fishing, and Mining <sup>a</sup> .....	14,300	17,600	19,300	3,300	23.1	1,700	9.7
Construction.....	45,100	53,800	57,900	8,700	19.3	4,100	7.6
Manufacturing .....	223,500	224,400	183,500	900	0.4	-40,900	-18.2
Transportation, Communication, and Utilities .....	46,300	54,800	52,500	8,500	18.4	-2,300	-4.2
Wholesale Trade.....	55,300	64,400	65,400	9,100	16.5	1,000	1.6
Retail Trade .....	185,400	193,700	205,700	8,300	4.5	12,000	6.2
Services <sup>b</sup> .....	386,500	499,700	554,800	113,200	29.3	55,100	11.0
Government and Government Enterprises <sup>c</sup> .....	106,200	114,400	116,700	8,200	7.7	2,300	2.0
Total Jobs	1,062,600	1,222,800	1,255,800	160,200	15.1	33,000	2.7

<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.

However, year 2007 manufacturing employment was still an estimated 40,900 jobs less than the 2000 level (see Table 3).

Estimated employment levels by county in 2007 are indicated in Table 4. Every county in the Region, except Milwaukee County, was estimated to have experienced employment increases between 2000 and 2007, ranging from a low of about 900 jobs in Racine County, to a high of 20,600 jobs in Waukesha County.

Milwaukee County employment was estimated to have declined by about 11,400 jobs, or 1.8 percent.

#### Comparison of Actual and Projected Employment Levels

In 2004, the Commission prepared a new set of employment level projections for the Region to the year 2035. These projections are documented in SEWRPC Technical Report No. 10 (4<sup>th</sup> Edition), *The*



Figure 6

RESIDENTIAL LOTS PLATTED IN THE REGION AND ITS COUNTIES: 1960-2007

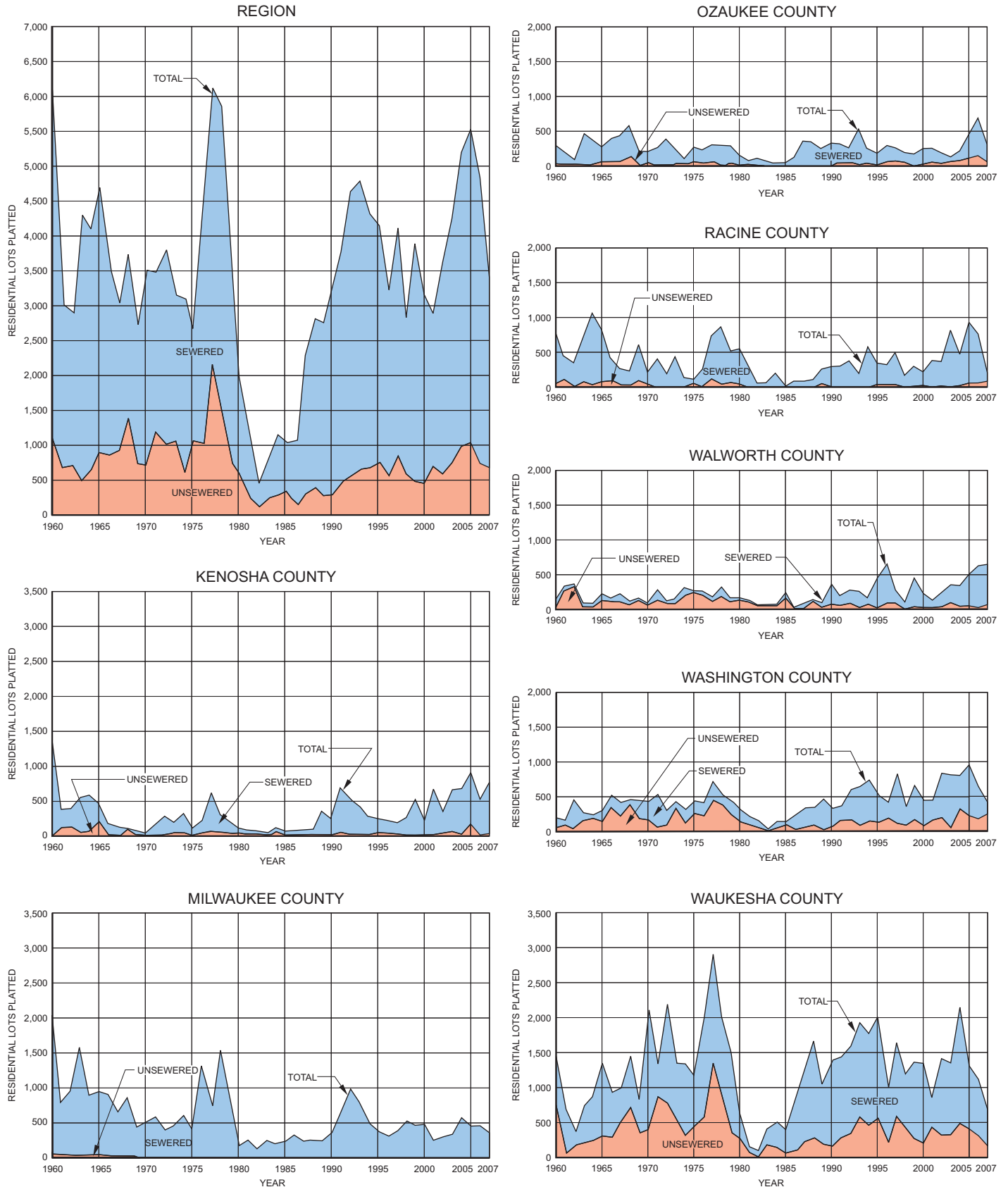




Table 4

## REGIONAL EMPLOYMENT BY COUNTY: 1990, 2000, AND 2007

County	Number of Jobs			1990-2000 Change		2000-2007 Change	
	1990	2000	2007 Estimate	Number	Percent	Number	Percent
Kenosha.....	52,200	68,700	76,100	16,500	31.6	7,400	10.8
Milwaukee.....	609,800	624,600	613,200	14,800	2.4	-11,400	-1.8
Ozaukee.....	35,300	50,800	54,600	15,500	43.9	3,800	7.5
Racine.....	89,600	94,400	95,300	4,800	5.4	900	1.0
Walworth.....	39,900	51,800	55,900	11,900	29.8	4,100	7.9
Washington.....	46,100	61,700	69,300	15,600	33.8	7,600	12.3
Waukesha.....	189,700	270,800	291,400	81,100	42.8	20,600	7.6
Region	1,062,600	1,222,800	1,255,800	160,200	15.1	33,000	2.7

*Economy of Southeastern Wisconsin*, July 2004. Because of the uncertainty surrounding future employment levels, the Commission projected a range of future employment levels—high, intermediate, and low—for the Region. 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. The intermediate employment level projected for the Region was used as a basis for the preparation of the year 2035 regional land use plan. In the preparation of the regional land use plan, adjustments were made to the projected county-level employment levels presented in Technical Report No. 10, based upon a consideration of the local land use plans of communities within the Region. The intermediate employment projection used in the regional land use plan, along with the high-growth and low-growth employment projections, are presented on Figure 7.

Employment in the Region in 2007 was anticipated to total 1,226,600 jobs under the high-growth scenario; 1,210,300 jobs under the intermediate-growth scenario; and 1,195,700 jobs under the low-growth scenario. The estimated 2007 level of 1,255,800 jobs exceeds the high, intermediate, and low growth projections by 2 percent, 4 percent, and 5 percent, respectively (see Table 5 and Figure 7).

### 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 population change, including automobile registrations, residential electric meters, 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 2007, along with the estimated change from the year 2000 Census population, are presented in Table 6.

As indicated in Table 6, the 2007 resident population of the Region was estimated by the Department of Administration to be about 1,992,200 persons, an increase of about 61,000 persons, or about 3.2 percent, over 2000. Every county in the Region, except Milwaukee County, was estimated to have experienced population increases between 2000 and 2007, ranging from a low of about 4,400 persons, or about 5.3 percent, in Ozaukee County, to a high of about 20,900 persons, or about 5.8 percent, in Waukesha County. Milwaukee County population was estimated to have declined by about 2,900 persons, or 0.3 percent.

Between the Census date of April 1, 2000, and January 1, 2007, the total population increase of about 61,000 persons is estimated to have resulted from a natural increase of about 72,500 persons and a net out-migration of about 11,500 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 2,600 persons in Ozaukee County to 10,900 persons in Waukesha County.



Table 5

**ACTUAL AND PROJECTED NUMBER OF AVAILABLE JOBS BY COUNTY: 2007**

County	Estimated 2007 Jobs	Projected 2007 Jobs		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	76,100	73,900	73,300	72,000
Milwaukee .....	613,200	600,900	593,300	585,800
Ozaukee .....	54,600	53,100	52,500	51,800
Racine .....	95,300	94,600	93,600	92,200
Walworth .....	55,900	55,700	55,200	54,300
Washington .....	69,300	66,200	65,400	64,600
Waukesha .....	291,400	282,200	277,000	275,000
Region	1,255,800	1,226,600	1,210,300	1,195,700

Table 6

**POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1990, 2000, AND 2007**

County	Population			1990-2000 Change		2000-2007 Change	
	1990 Census	2000 Census	2007 Estimate	Number	Percent	Number	Percent
Kenosha .....	128,200	149,600	161,400	21,400	16.7	11,800	7.9
Milwaukee .....	959,300	940,200	937,300	-19,100	-2.0	-2,900	-0.3
Ozaukee .....	72,800	82,300	86,700	9,500	13.0	4,400	5.3
Racine .....	175,100	188,800	195,100	13,700	7.8	6,300	3.3
Walworth .....	75,000	92,000	100,700	17,000	22.7	8,700	9.5
Washington .....	95,300	117,500	129,300	22,200	23.3	11,800	10.0
Waukesha .....	304,700	360,800	381,700	56,100	18.4	20,900	5.8
Region	1,810,400	1,931,200	1,992,200	120,800	6.7	61,000	3.2

*Comparison of Actual and  
Projected Population Levels*

In 2004, the Commission prepared a new set of population projections for the Region to the year 2035. The projections are documented in SEWRPC Technical Report No. 11 (4<sup>th</sup> Edition), *The Population of Southeastern Wisconsin*, July 2004. As in the preparation of employment projections, the Commission projected a range of future population levels 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. The

intermediate population projection was used as a basis for the preparation of the year 2035 regional land use plan. The intermediate population projection, along with the high-growth and low-growth population projections, are presented for the Region and each county on Figure 8.

Under the high-growth scenario, the population level of the Region was anticipated to reach about 2,060,800 persons in 2007. The actual 2007 regional population level of 1,992,200 persons was about 3 percent below this anticipated level. Under the low-growth scenario, the population level of the Region was anticipated to be about 1,953,700 persons in 2007. The actual 2007 population level was about 2 percent above this level. Under the intermediate-growth scenario, the population level of the Region was anticipated to reach about 2,002,200 persons in 2007. The actual 2007 population level was less than 1 percent below this level (see Table 7 and Figure 8).



Figure 7

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

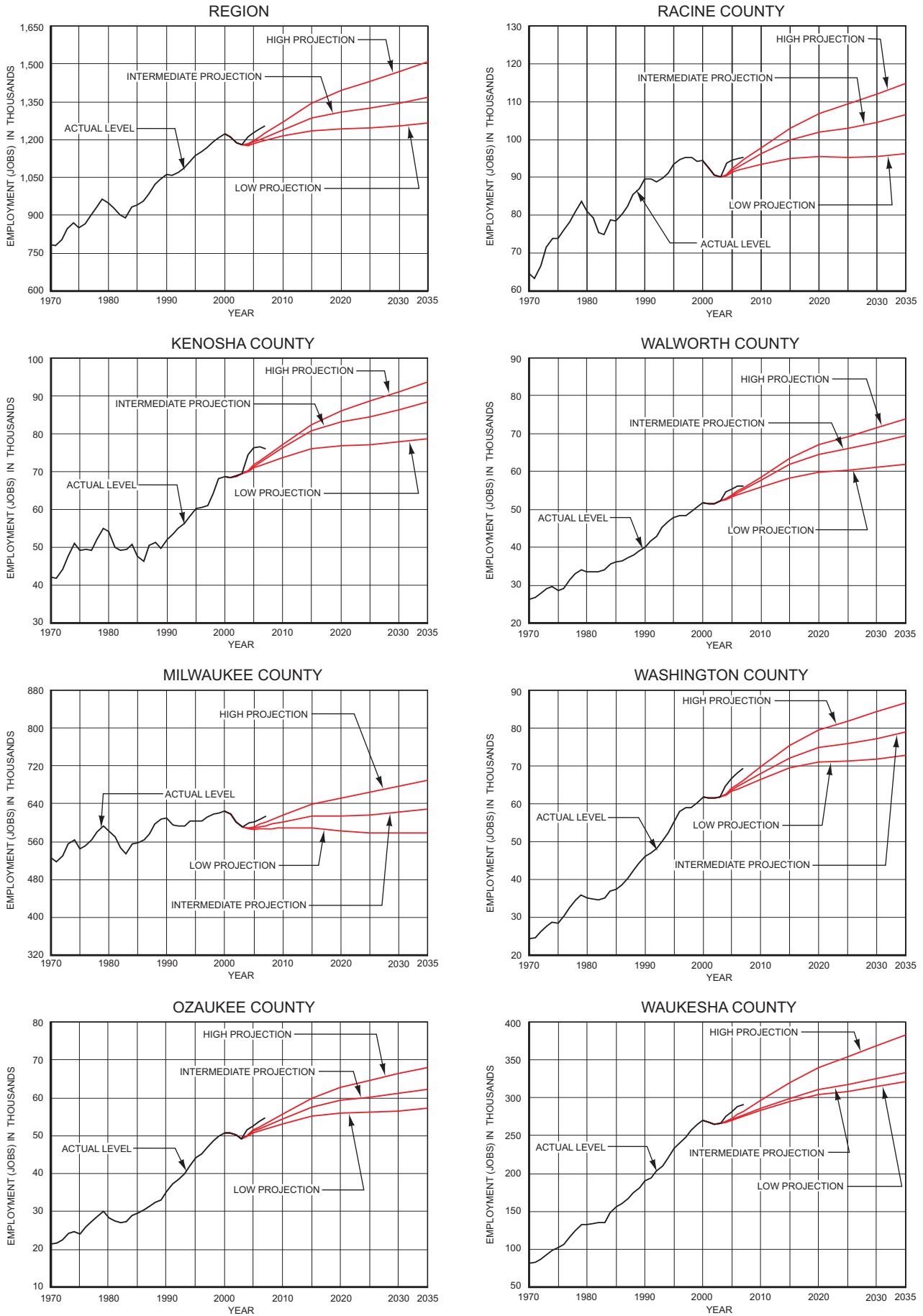




Table 7

## ACTUAL AND PROJECTED POPULATION LEVELS BY COUNTY: 2007

County	2007 Population	Projected 2007 Population		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha.....	161,400	166,800	161,000	156,600
Milwaukee.....	937,300	969,100	949,200	926,800
Ozaukee.....	86,700	90,600	86,900	84,900
Racine.....	195,100	200,400	193,200	190,200
Walworth.....	100,700	103,500	101,200	97,500
Washington.....	129,300	132,400	127,700	123,900
Waukesha.....	381,700	398,000	383,000	373,800
Region	1,992,200	2,060,800	2,002,200	1,953,700

Table 8

HOUSEHOLDS IN THE SOUTHEASTERN WISCONSIN  
REGION BY COUNTY: 1990, 2000, AND 2007

County	Households			1990-2000 Change		2000-2007 Change	
	1990 Census	2000 Census	2007 Estimate	Number	Percent	Number	Percent
Kenosha.....	47,000	56,100	63,000	9,100	19.4	6,900	12.3
Milwaukee.....	373,100	377,700	388,500	4,600	1.2	10,800	2.9
Ozaukee.....	25,700	30,900	34,300	5,200	20.2	3,400	11.0
Racine.....	63,700	70,800	76,700	7,100	11.1	5,900	8.3
Walworth.....	27,600	34,500	39,600	6,900	25.0	5,100	14.8
Washington.....	33,000	43,800	51,000	10,800	32.7	7,200	16.4
Waukesha.....	106,000	135,200	150,000	29,200	27.5	14,800	10.9
Region	676,100	749,000	803,100	72,900	10.8	54,100	7.2

## Monitoring Household Levels

*Current Household Levels*

Each year, the Wisconsin Department of Administration prepares estimates of the number of total housing units 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. The estimate of occupied housing units—or households—for 2007 presented herein is based upon the Department's estimates of housing units for 2007 and year 2000 Census housing vacancy rates.

As indicated in Table 8, the number of households in the Region is estimated to have increased from about 749,000 in 2000 to about 803,100 in 2007, an increase of about 54,100 households, or 7.2 percent. Each county in the Region is estimated to have experienced an increase in household levels from 2000 to 2007,

ranging from about 3,400 households, or 11 percent, in Ozaukee County, to about 14,800 households, or 11 percent, in Waukesha County.

*Comparison of Actual and  
Projected Household Levels*

In conjunction with the aforementioned population projections, the Commission in 2004 prepared a new set of household projections for the Region to the year 2035. These projections are also documented in SEWRPC Technical Report No. 11 (4<sup>th</sup> Edition), *The Population of Southeastern Wisconsin*, July 2004. The Commission prepared high, intermediate, and low household projections, corresponding to the high, intermediate, and low population projections. The intermediate household projection was used as a basis for the preparation of the year 2035 regional land use plan. The intermediate household projection, along with the high-growth and low-growth household projections, are presented for the Region and each county on Figure 9.



Figure 8

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

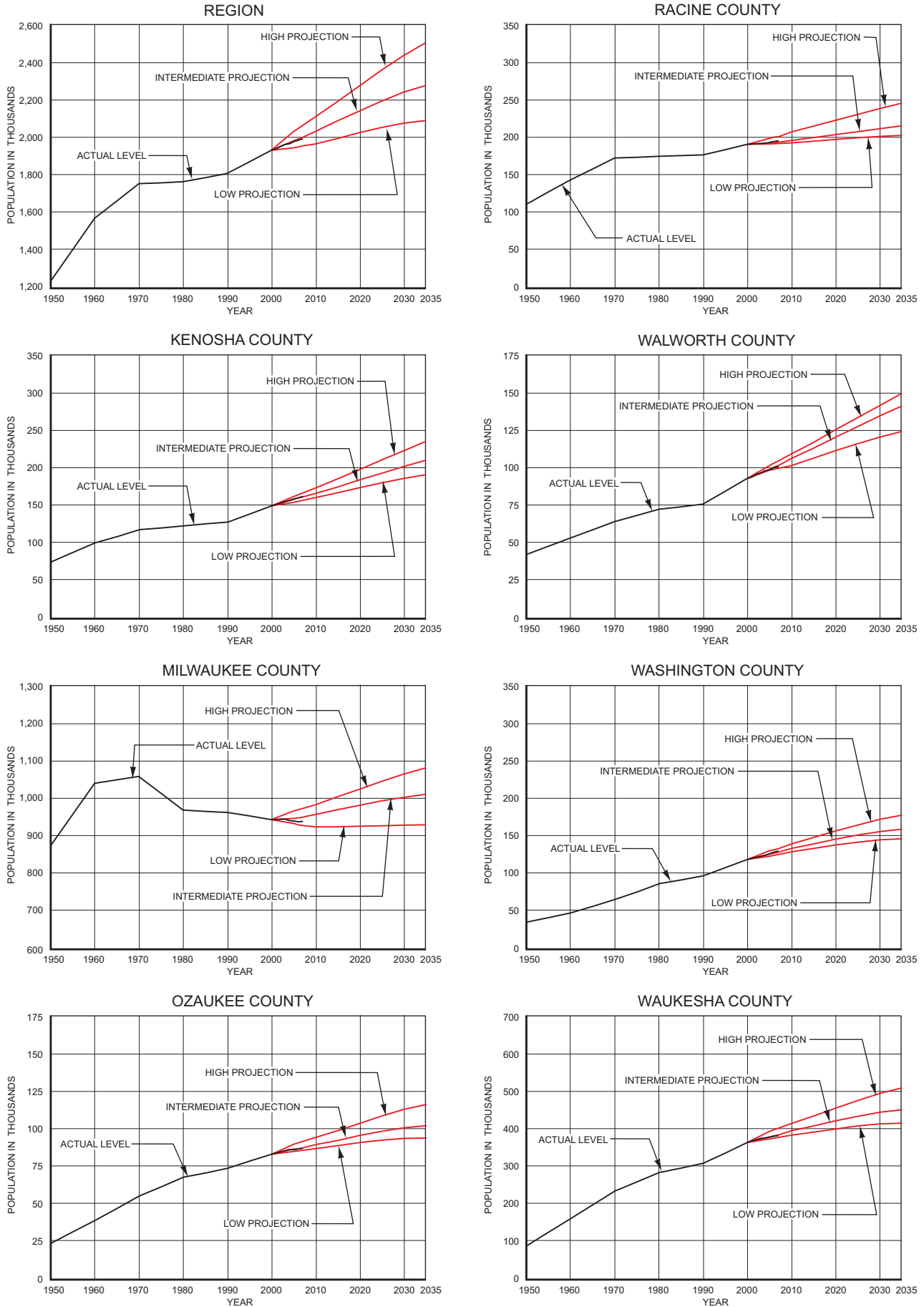




Figure 9

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

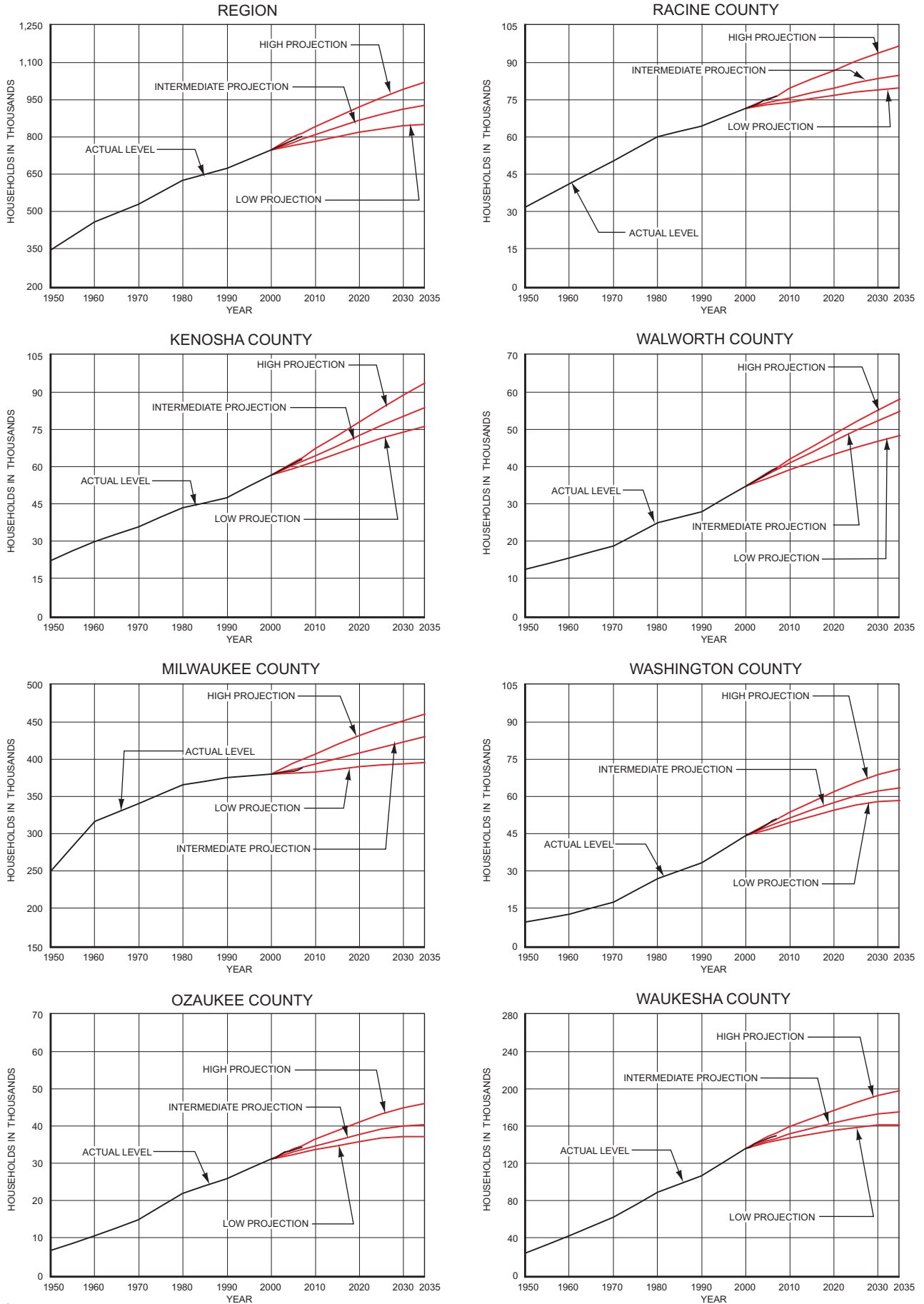




Table 9

**ACTUAL AND PROJECTED HOUSEHOLD LEVELS BY COUNTY: 2007**

County	2007 Households	Projected 2007 Households		
		High-Growth Scenario	Intermediate-Growth Scenario	Low-Growth Scenario
Kenosha .....	63,000	63,500	61,300	59,700
Milwaukee .....	388,500	397,100	388,900	379,700
Ozaukee .....	34,300	34,700	33,300	32,500
Racine .....	76,700	76,600	73,800	72,700
Walworth .....	39,600	39,700	38,800	37,400
Washington .....	51,000	50,700	48,900	47,400
Waukesha .....	150,000	152,600	146,900	143,300
Region	803,100	814,900	791,900	772,700

Under the high-growth scenario, it was anticipated that there would be 814,900 households in the Region in 2007. The 2007 regional household level of 803,100 is about 1 percent below this anticipated level. Under the low-growth scenario, it was anticipated that there would be 772,700 households in the Region in 2007. The 2007 regional household level is about 4 percent above this level. Under the intermediate-growth scenario, it was anticipated that there would be 791,900 households in the Region in 2007. The 2007 regional household level is about 1 percent above this level (see Table 9 and Figure 9).

### Census Coordination

During 2007, 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



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 2007, the Commission staff continued work on an update and extension of the park and open space plan for Milwaukee 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 5.

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.

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<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, as amended, 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, as amended*; SEWRPC Community Assistance Planning Report No. 136 (3rd Edition), *A Park and Open Space Plan for Washington County, March 2005*; and SEWRPC Community Assistance Planning Report No. 209, *A Development Plan for Waukesha County, Wisconsin, August 1996. Certain plan amendments for Kenosha and Walworth Counties were awaiting Commission adoption at the end of 2007.*



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, 2007**

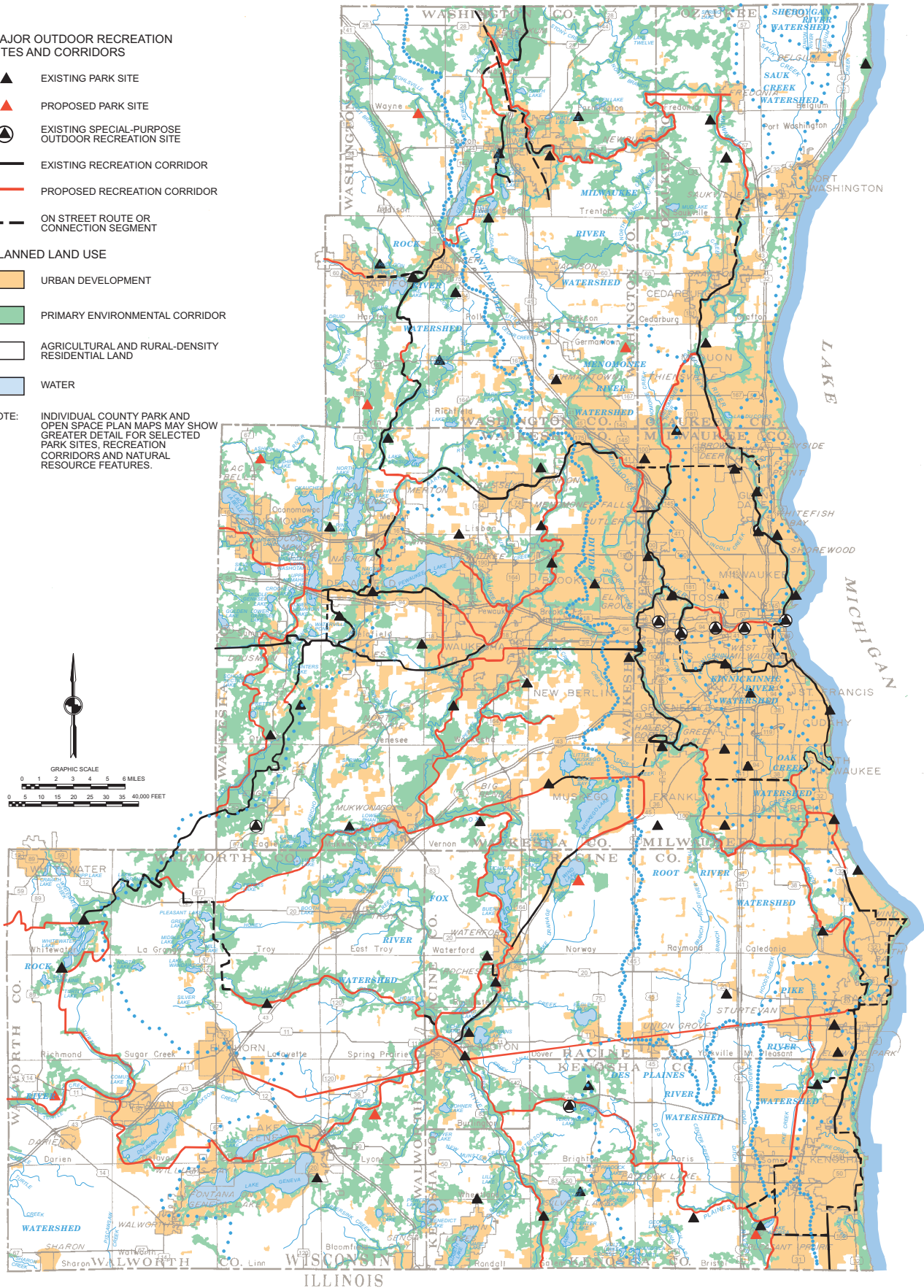
**MAJOR OUTDOOR RECREATION SITES AND CORRIDORS**

- ▲ 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

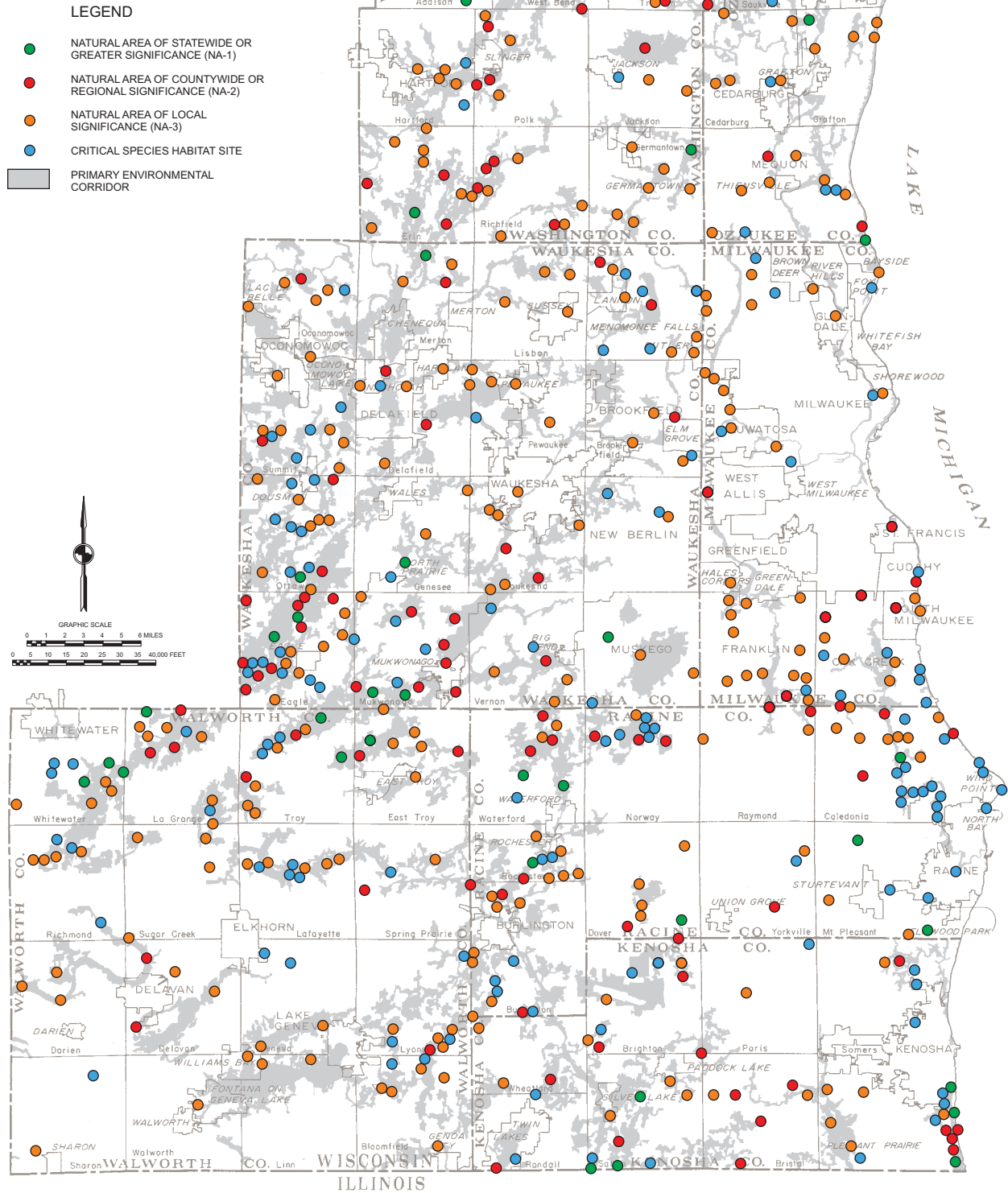
NOTE: INDIVIDUAL COUNTY PARK AND OPEN SPACE PLAN MAPS MAY SHOW GREATER DETAIL FOR SELECTED PARK SITES, RECREATION CORRIDORS AND NATURAL RESOURCE FEATURES.





Map 5

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





The plan, as amended through the end of 2007, recommends that 539 sites, or 92 percent of the total, be placed in public or private protective conservation ownership and that the other 50 sites be protected, insofar as it is possible, through zoning and other regulatory means without protective ownership.

Descriptive information for each natural area and critical species habitat site, along with the recommended means for preservation, is presented in SEWRPC Planning Report No. 42, as amended.

As of the end of 2007, 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. The Commission staff assisted the Department's committee with its investigation, which has now been completed. In addition, during 2007, the Wisconsin Department of Natural Resources acquired 0.8 acre in the Chiwaukee Prairie/Carol Beach area of Kenosha County, and the Waukesha Land Conservancy added 35 acres to the CTH ZC wetlands, an NA-3 quality natural area.

In 2007, the Commission staff continued work on an update to the regional natural areas and critical species habitat protection and management plan for Southeastern Wisconsin.

## **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 2007, the Division responded to about 55 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 2007 in performing the data provision and technical assistance function:

- Provided existing and planned population, households, and employment by U.S. Public Land Survey one-quarter section to the City of Brookfield for use in local planning efforts.
- Provided a map showing the distribution of employment in Racine County to the Wisconsin Department of Workforce Development for use in the Department's ongoing planning efforts.
- Provided existing and planned population, households, and jobs within selected areas in Milwaukee County to an engineering firm working for the County for use in planning road improvements.
- Provided existing and planned population within the Elmbrook School District to the District for facilities planning.
- Provided Waukesha County population projections by age group to the Village of Hartland for use in planning recreational facilities.

### **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 2007, the Division responded to 251 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 2007 include the following:

- Provided park facility information for public park/school sites in Kenosha County to the Kenosha County Parks Department for use in ongoing park planning activity.
- Provided historic and existing land use data relating to orchards in the Southeastern Wisconsin Region to the Wisconsin Department



of Agriculture, Trade, and Consumer Protection for use in identifying potential locations of pesticide contamination.

- Provided a map of historic urban growth to the Town of Burlington for use in the development of a long range land use plan for the Town.
- Provided a map of environmental corridors and public parks along a portion of the Milwaukee River in the City of Milwaukee to the Urban Ecology Center for use in resource preservation planning along the River.

### **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 2007, the Commission fulfilled a total of 126 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 2007, 34 such requests were fulfilled for sites located throughout the Region (see Map 6). 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 environ-

mental 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 2007, such requests were fulfilled for a total of 44 sites located throughout the Region (see Map 6). 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 2007, 22 such project-related requests were fulfilled in response to requests by the Wisconsin Department of Transportation, Kenosha County, the Washington County Highway Department, the Waukesha County Department of Public Works, the City of Delavan, the City of Milwaukee, the City of Oconomowoc, the Village of River Hills, the Village of Sussex, and the Village of Menomonee Falls (see Map 6).
- 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 2007, 12 such requests were fulfilled in Kenosha, Milwaukee, Racine, Walworth, and Waukesha Counties (see Map 6).
- 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 2007, 12 such requests were

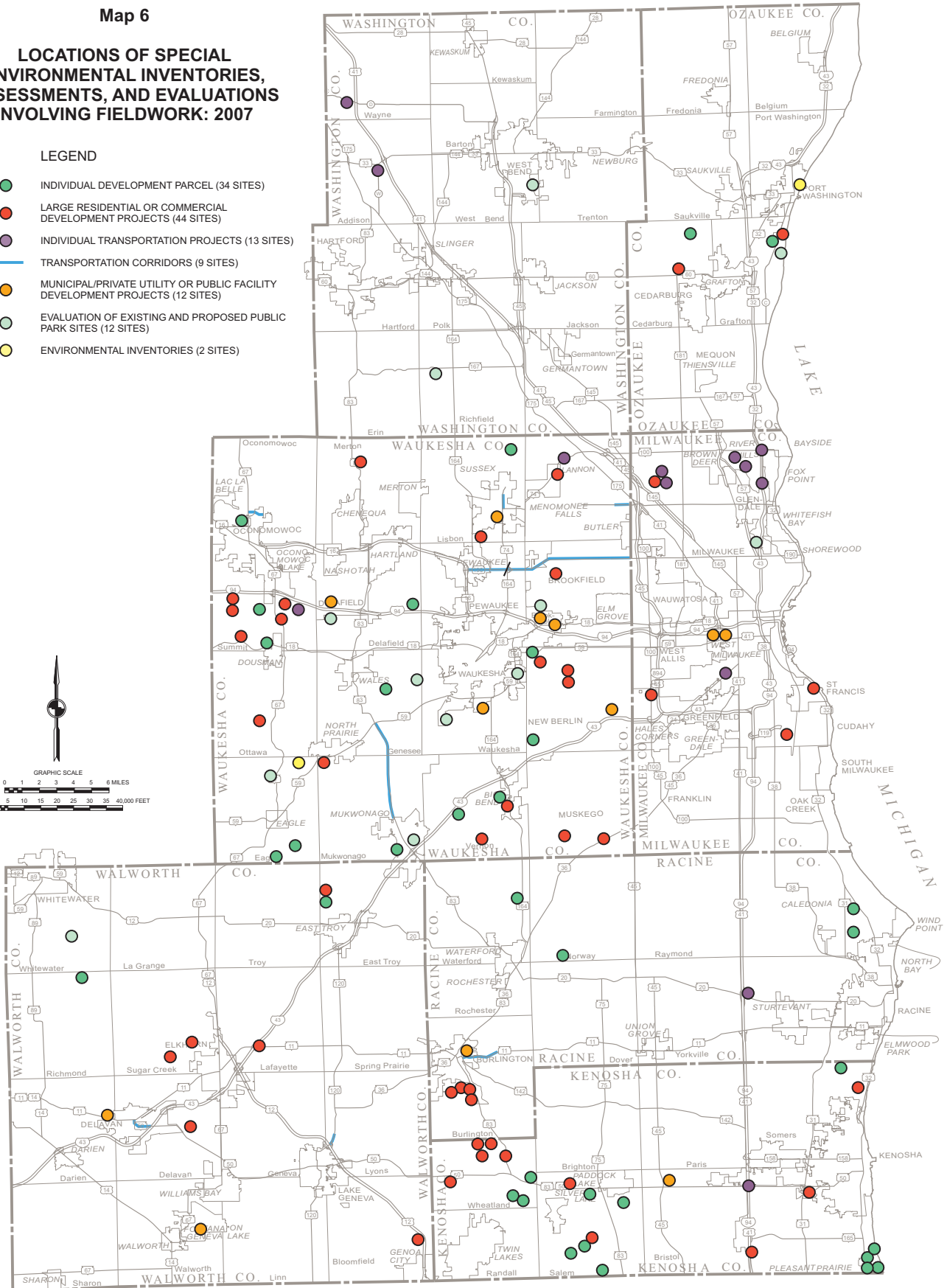
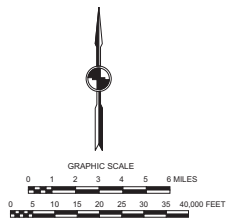


Map 6

**LOCATIONS OF SPECIAL  
ENVIRONMENTAL INVENTORIES,  
ASSESSMENTS, AND EVALUATIONS  
INVOLVING FIELDWORK: 2007**

**LEGEND**

- INDIVIDUAL DEVELOPMENT PARCEL (34 SITES)
- LARGE RESIDENTIAL OR COMMERCIAL DEVELOPMENT PROJECTS (44 SITES)
- INDIVIDUAL TRANSPORTATION PROJECTS (13 SITES)
- TRANSPORTATION CORRIDORS (9 SITES)
- MUNICIPAL/PRIVATE UTILITY OR PUBLIC FACILITY DEVELOPMENT PROJECTS (12 SITES)
- EVALUATION OF EXISTING AND PROPOSED PUBLIC PARK SITES (12 SITES)
- ENVIRONMENTAL INVENTORIES (2 SITES)





fulfilled in Milwaukee, Ozaukee, Walworth, Washington, and Waukesha Counties (see Map 6).

- 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 2007, two such requests were fulfilled in Ozaukee and Waukesha Counties (see Map 6).



# TRANSPORTATION PLANNING DIVISION

## DIVISION FUNCTIONS

The Commission is the official metropolitan transportation planning agency for the Southeastern Wisconsin Region. The Commission's Transportation Planning Division conducts studies and 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 2007 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.

## TRANSPORTATION PLANNING SUPPORT AND ASSISTANCE

### Data Collection and Development

During 2007, 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 2007 totaled about 1,353,300. This represents an increase of 5,050, or about 0.4 percent, compared to the 2006 level of 1,348,250 (see Table 10). Increases in personal-use vehicle availability in 2007 occurred in all counties in the Region except Milwaukee County, which experienced a decrease of about 2,400 vehicles or about 0.4 percent from 2006 levels. Over the past 40 years, 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 2007 was 2.2 percent.

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<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.*



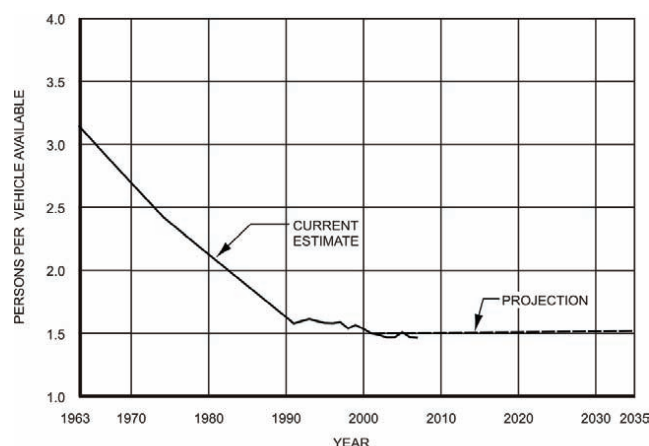
Table 10

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

County	1963	1972	2006	2007
Kenosha .....	37,240	51,100	116,100	116,260
Milwaukee .....	316,350	392,000	548,360	545,970
Ozaukee .....	16,780	28,030	66,700	66,970
Racine .....	52,040	73,350	138,960	142,510
Walworth .....	22,220	33,450	84,020	84,030
Washington .....	18,340	30,390	98,410	99,620
Waukesha .....	69,390	114,450	295,700	297,940
Total	532,360	722,770	1,348,250	1,353,300

<sup>a</sup>The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, page 47.

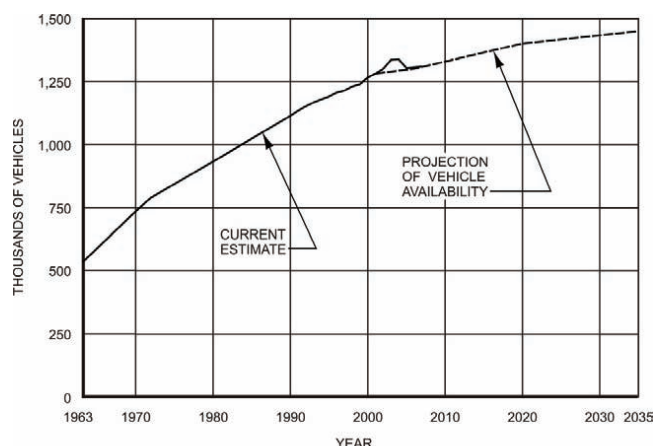
Figure 10

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 47.

The number of persons per personal-use vehicle within the Region was estimated to be 1.47 in 2007, no change from the 1.47 estimated for 2006, as shown in Figure 10. The number of persons per personal-use vehicle has been relatively stable for over a decade, with minor fluctuations up and down annually. The forecast of the number of persons per personal-use vehicle expects long term stability as well. The forecast of total personal-use vehicle availability developed under

Figure 11

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 47.

the long-range regional transportation system plan, is shown in Figure 11, along with historic annual personal-use vehicle availability. The 2007 forecast personal-use vehicle availability level was 1,324,700 under the adopted regional transportation system plan. The estimated 2007 regional personal-use vehicle availability level of 1,353,300 was 28,600 vehicles, or about 2.2 percent, higher than the personal-use vehicle availability level envisioned under the adopted regional transportation system plan.

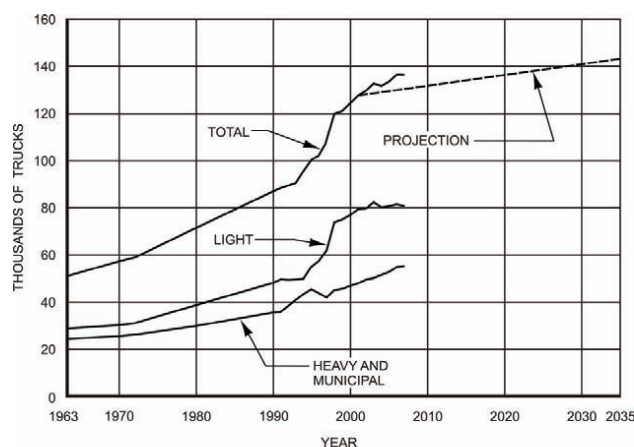


Table 11

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

County	1963	1972	2006	2007
Kenosha.....	4,370	4,490	11,290	11,300
Milwaukee.....	25,910	26,710	48,210	48,110
Ozaukee.....	2,270	2,550	6,510	6,470
Racine.....	5,670	6,460	15,060	14,950
Walworth.....	4,190	4,840	11,000	12,430
Washington.....	3,210	4,080	10,760	9,520
Waukesha.....	7,780	10,280	33,680	33,330
Total	53,400	59,410	136,510	136,110

<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 47.

**Figure 12****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 47.

The number of commercial and municipal trucks available in the Region during 2007 totaled about 136,110, a decrease of about 400, or about 0.3 percent, below the 2006 level of 136,510 trucks (see Table 11 and Figure 12). In 2007, an increase in commercial motor-truck availability occurred in Walworth County, while Kenosha County remained virtually unchanged, and the other counties of the Region decreased from 2006 levels. Light commercial trucks accounted for about 54 percent of all commercial trucks in 1963, 56 percent of all commercial trucks in 1972, 60 percent of

all commercial trucks in 2006, and 59 percent of all commercial trucks in 2007. The number of light commercial trucks available in 2007 totaled about 80,870, a decrease of 680, or about 0.8 percent, from the 2006 level of 81,550. The number of heavy trucks and municipal trucks totaled 55,240 in 2007, an increase of about 280 trucks, or about 0.5 percent from the 2006 level of 54,960. The average annual rate of growth in commercial motor-truck availability within the Region from 1963 through 2007 was 2.1 percent.

**Public Transit Ridership**

Publicly owned mass transit service was provided in the Region in 2007 through 10 intracounty systems and five intercounty systems (see Table 12 and Figures 13 and 14). As shown in Table 12, the total reported ridership on public transit services in the Region fell from about 52.3 million revenue passengers in 2006 to about 48.2 million revenue passengers in 2007, a decrease of about 7.7 percent. This decrease is attributable primarily to the 2007 drop in ridership on the transit system operated by Milwaukee County; however, seven of the other 13 systems within the Region operating in 2006 and 2007 also experienced ridership decreases.

**Intracounty Services****Milwaukee County**

Ridership on the Milwaukee County Transit System decreased during 2007 to about 43.6 million revenue passengers from about 47.7 million revenue passengers



Table 12

## REPORTED PUBLIC TRANSIT REVENUE RIDERSHIP

Transit Services	Revenue Passengers <sup>a</sup>					
	1963	1972	1991	2006	2007	Percent Change 2006-2007
<b>Intracounty Systems</b>						
Milwaukee County .....	88,546,000	52,141,000	53,025,000	47,660,200	43,623,500	-8.5
City of Racine .....	2,907,000	526,000	1,829,000	1,165,000	1,175,900	0.9
City of Kenosha .....	1,876,000	503,000	1,128,000	1,488,600	1,539,400	3.4
City of Waukesha.....	451,000	227,000	434,000	595,100	651,200	9.4
City of Whitewater.....	--	--	38,000	25,100	26,600	6.0
City of Hartford.....	--	--	8,000	18,700	19,100	2.1
City of West Bend .....	--	--	--	124,400	119,000	-4.3
City of Port Washington .....	--	--	--	20,800	19,600	-5.8
Ozaukee County .....	--	--	--	70,500	73,000	3.5
Washington County .....	--	--	--	75,800	97,600	28.8
Subtotal	93,780,000	53,397,000	56,462,000	51,244,200	47,344,900	-7.6
<b>Intercounty Systems</b>						
Waukesha-Milwaukee Counties .....	534,000 <sup>b</sup>	240,000	290,000	731,700	612,200	-18.0
Kenosha-Racine-Milwaukee Counties .....	230,000 <sup>b</sup>	153,000	82,000	84,800	83,200	-1.9
Ozaukee-Milwaukee Counties .....	127,000	64,000	--	119,100	114,000	-4.3
Washington-Milwaukee Counties.....	--	--	--	94,300	90,600	-3.9
Western Kenosha County .....	--	--	--	--	800 <sup>b</sup>	--
Subtotal	891,000	457,000	372,000	1,029,900	900,800	-12.5
<b>Region Total</b>	<b>94,671,000</b>	<b>53,854,000</b>	<b>56,834,000</b>	<b>52,274,100</b>	<b>48,245,700</b>	<b>-7.7</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 13 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 39,870,100 in 2007, about 42,563,600 in 2006, and about 48,350,000 in 1991.

<sup>b</sup>Estimated.

in 2006, or by about 9 percent (see Figure 15). This decrease is due in part to continued service cuts and increases in the price of weekly and monthly bus passes. The number of bus-miles operated by the Milwaukee County Transit System decreased by 2 percent during 2007, from about 16.7 million bus-miles in 2006 to about 16.4 million bus-miles in 2007. The service reduction in 2007 continued the trend of reductions in service that have occurred annually on the system since 2001. During 2007, the basic cash fare for the Milwaukee County Transit System remained unchanged at \$1.75 per one-way trip. Fares for freeway flyer bus service also remained unchanged at \$2.25 per one-way trip. However, the price of an adult weekly bus pass rose from \$14.00 to \$16.00 at the start of 2007.

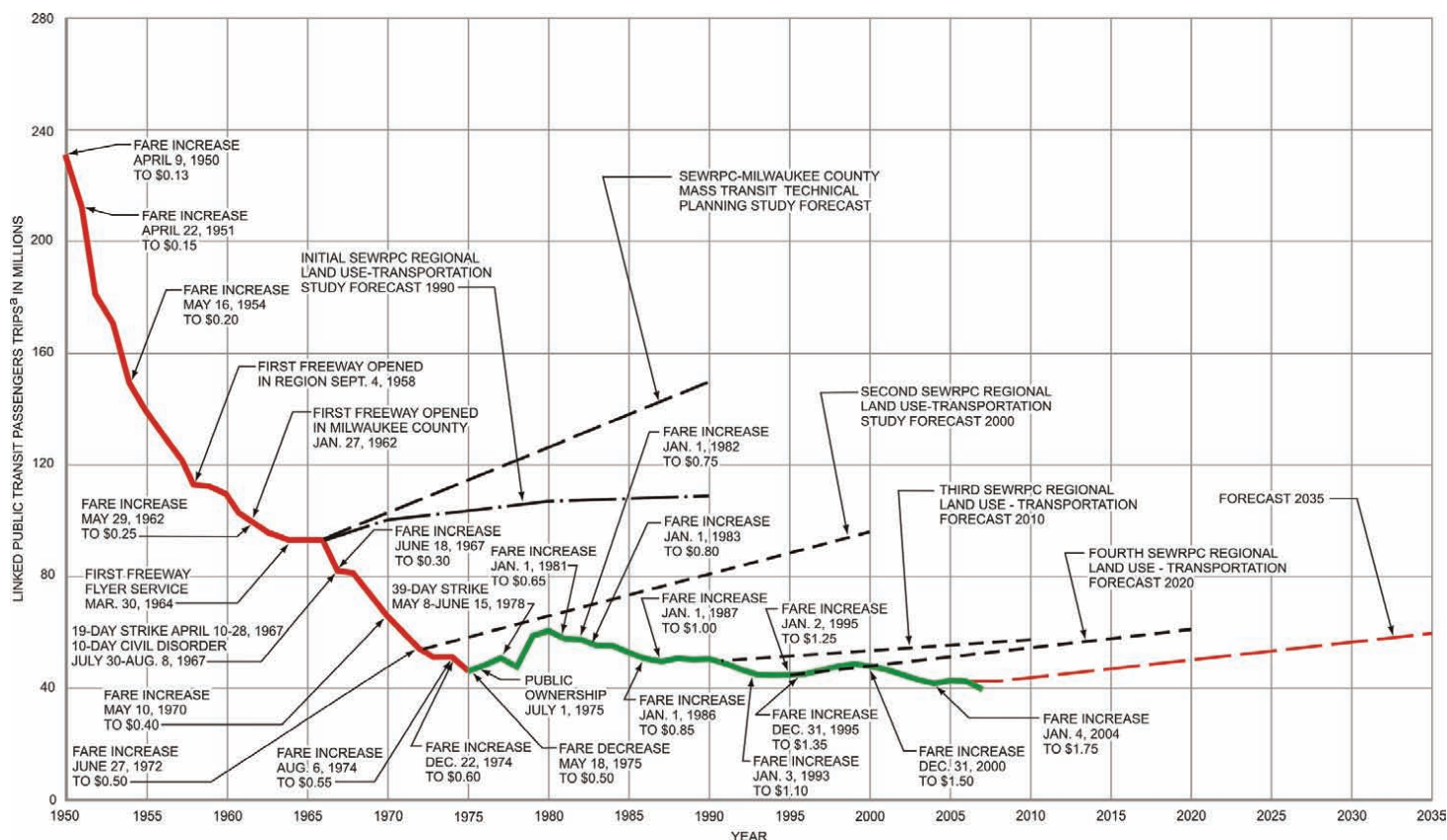
During 2007, Milwaukee County operated freeway flyer bus service from 12 outlying parking terminals, the same number as in 2006, to either the Milwaukee central business district or the University of Wisconsin-Milwaukee (UWM). Ridership on the freeway flyer bus service totaled about 929,900 revenue passengers in 2007, a decrease of about 12 percent over the 1,053,200 revenue passengers carried in 2006 (see Figure 16). This decrease may be attributed to a price increase in weekly bus passes which are used by most passengers commuting to work.

To comply with Federal regulations implementing the requirements of the American's with Disabilities Act (ADA) of 1990, the Milwaukee County Transit System



Figure 13

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



<sup>a</sup>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 14. THE RIDERSHIP SHOWN IN TABLE 12 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 12 FOR 1991, 2006, AND 2007 ARE SOMEWHAT HIGHER THAN THE ESTIMATES OF LINKED TRANSIT PASSENGER TRIPS SHOWN IN THIS FIGURE.

includes a paratransit service component called Transit Plus. The paratransit service provided through Transit Plus was available to disabled users through private van service providers and taxicab operators. Two private carriers, Laidlaw Transit Services, Inc. (which became First Transit in October of 2007), and Transit Express, Inc., provided accessible van service to the northern and the southern halves of the County, respectively. American United Taxi Cab Company provided taxicab service under the program throughout the County. Several private, non-profit agencies serving disabled persons also provided service under the program for agency clients. During 2007, about 1,091,800 one-way trips were made on the Transit Plus paratransit service, an increase of about 6 percent from the 1,033,000 one-way trips made on the service during 2006. Fares for the Transit Plus program remained the same, at \$3.25 per one-way trip during 2007.

To assist in the public operation of the system, the Commission, at the request of Milwaukee County, is preparing a short-range transit system development plan for the Milwaukee County Transit System. The plan is the first transit system development plan prepared by the Commission for Milwaukee County and will recommend service changes and capital improvements for the transit system covering the period 2009-2013. The current planning effort is described in a later section of this *Annual Report*.

## City of Racine

During 2007, ridership on the public transit system serving the City of Racine and environs increased by about 1 percent from approximately 1,165,000 revenue passengers in 2006 to about 1,175,900 revenue passengers in 2007 (see Figure 17). The increase reflects



Figure 14

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

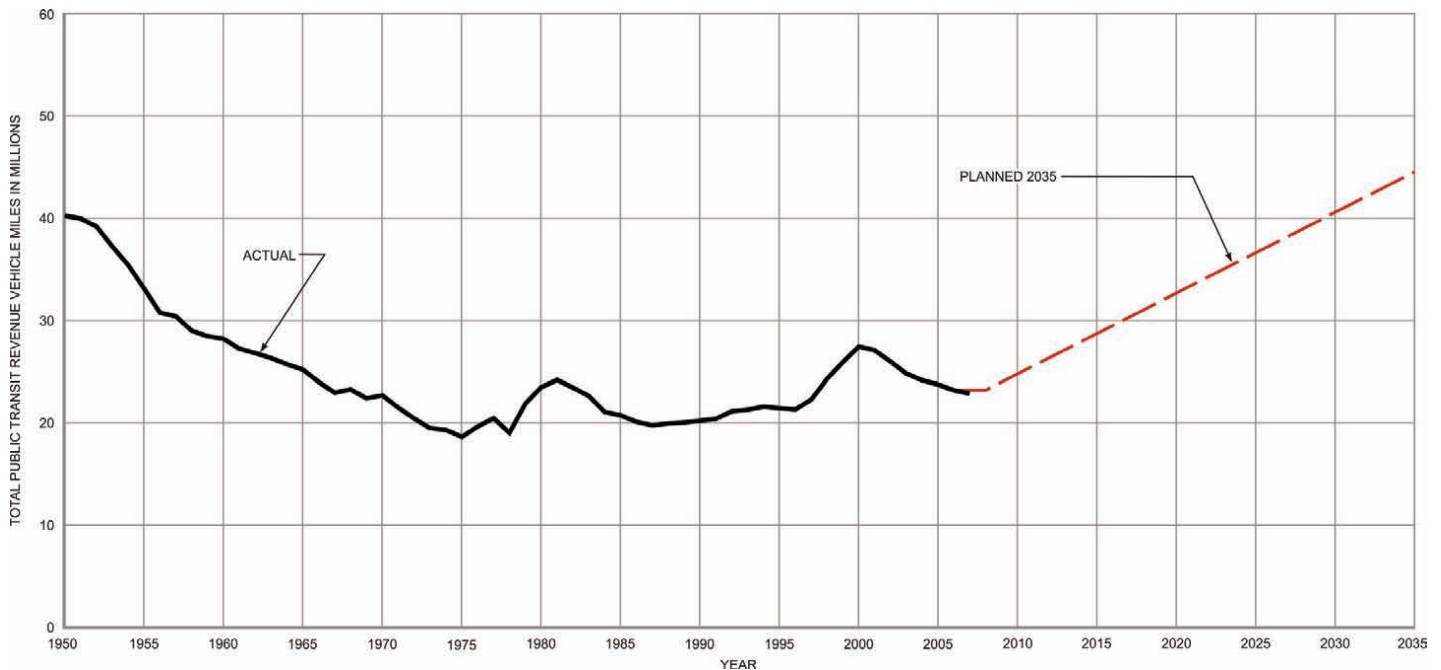


Figure 15

### TRANSIT REVENUE RIDERSHIP MILWAUKEE COUNTY TRANSIT SYSTEM

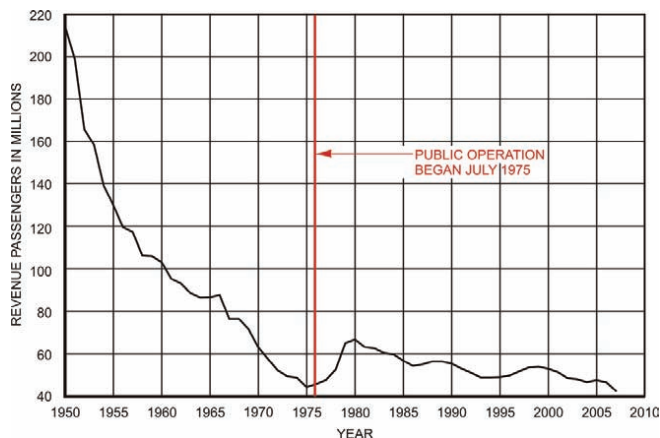
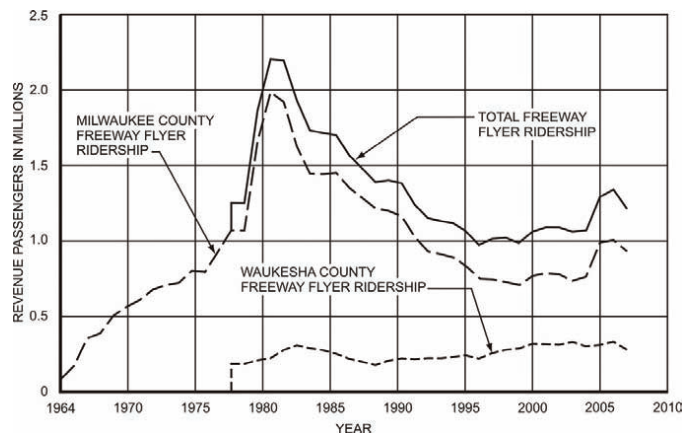


Figure 16

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



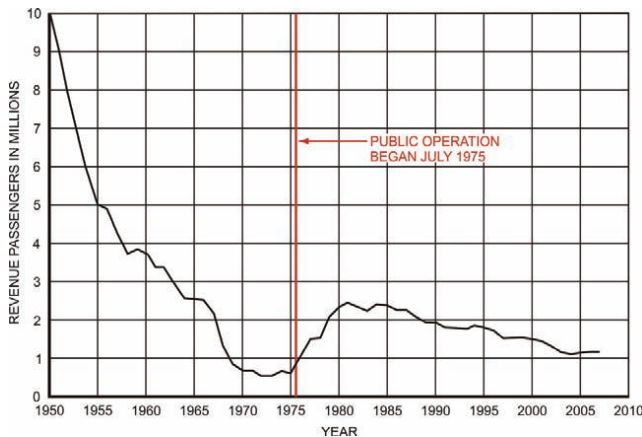
the third consecutive year of growth in ridership since 2004, when ridership dropped after the City implemented significant service cuts. The total number of bus-miles operated in revenue service decreased by about 2 percent, from about 1,106,700 bus-miles in 2006 to about 1,086,900 bus-miles in 2007. The adult base cash fare rose from \$1.25 to \$1.50 per one-way trip in 2007.

The City of Racine also provides a paratransit service for disabled individuals to comply with Federal ADA regulations. The paratransit service provides door-to-door transportation to disabled individuals who are unable to use the City's fixed-route bus service. The Belle Urban System provides paratransit service for eligible disabled persons – Dial-a-Ride Transportation (DART) – to areas within three-quarters of a mile of a City bus route.



Figure 17

**TRANSIT REVENUE RIDERSHIP  
CITY OF RACINE TRANSIT SYSTEM**



During 2007, about 16,500 one-way trips were made on the paratransit service, an increase of about 13 percent from the 14,600 one-way trips made on the service in 2006.

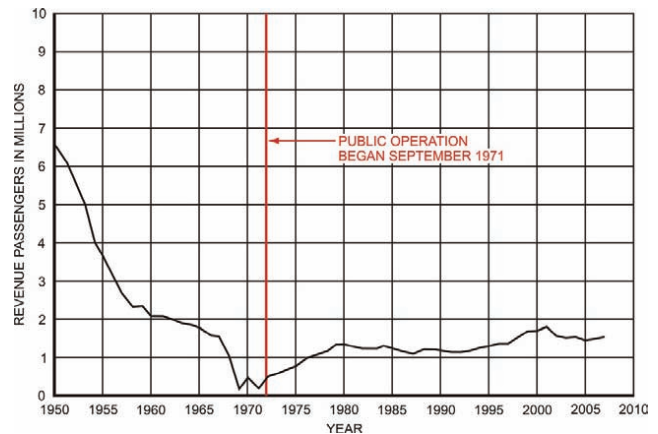
To assist in the public operation of the system, the Commission, at the request of the City of Racine, has routinely prepared short-range transit system development plans setting forth recommendations for service changes and capital improvements. Each such plan has covered a five-year period. The current plan 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 increased during 2007 (see Figure 18) to approximately 1,539,400 revenue passengers, about 3 percent more than the 2006 ridership of about 1,488,600 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

Figure 18

**TRANSIT REVENUE RIDERSHIP  
CITY OF KENOSHA TRANSIT SYSTEM**



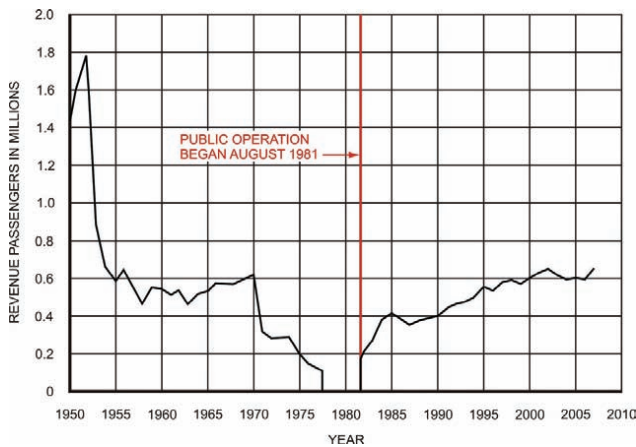
Park development on the lakefront. The total number of vehicle-miles operated in revenue service totaled about 1,073,700, representing an increase of less than 1 percent over the 1,066,700 vehicle-miles operated during 2006. The basic cash fare for the Kenosha system remained at \$1.00 per one-way trip for bus service and \$0.25 per one-way trip for street car service in 2007, unchanged from 2006.

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 at the IH 94-STH 50 interchange. During 2007, about 17,000 one-way trips were made on the paratransit service, an increase of about 11 percent from the 15,400 one-way trips made on the service during 2006.



Figure 19

**TRANSIT REVENUE RIDERSHIP  
CITY OF WAUKESHA TRANSIT SYSTEM**



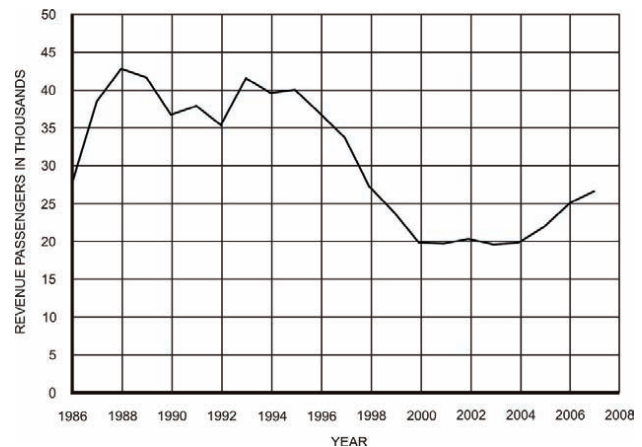
The Commission, at the request of the City, has routinely prepared short-range transit system development plans setting forth recommendations for service changes and capital improvements. Each such plan has covered a five-year period. The current plan for the Kenosha transit system is documented in SEWRPC Community Assistance Planning Report No. 231, *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 2007, the fixed-route public transit system serving the City of Waukesha carried approximately 651,200 revenue passengers, an increase of about 9 percent from the 595,100 revenue passengers carried on the system during 2006 (see Figure 19). The number of bus-miles operated in revenue service during 2007 totaled about 696,600, a decrease of about 7 percent from the 748,700 bus-miles operated in 2006. The increase in ridership may be partly attributed to increased fuel prices in 2007 which encouraged more people to use public transit. The adult base cash fare increased from \$1.50 per one-way trip in 2006 to \$1.75 per one-way trip in 2007.

Figure 20

**TRANSIT REVENUE RIDERSHIP  
CITY OF WHITEWATER TRANSIT SYSTEM**



Paratransit service was also provided by the City of Waukesha to comply with the Federal ADA paratransit regulations. The City's Metrolift program provides curb-to-curb transportation to disabled individuals who are unable to use the City's fixed-route bus service and is operated by the private firm with which the City contracts to manage and operate its fixed-route bus system. During 2007, the paratransit service made about 20,100 one-way trips, the same as in 2006.

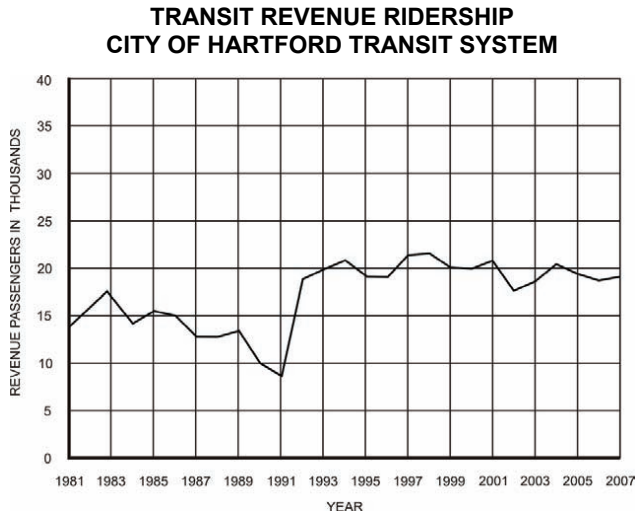
Short-range transit system development plans, which each include recommendations for service changes and capital improvements for a five-year period, have been routinely prepared for the City transit system by the Commission when requested by the City. The current plan for the City transit system is documented in SEWRPC Community Assistance Planning Report No. 246, *Waukesha Area Transit System Development Plan: 2003-2007*, October 2003.

**City of Whitewater**

The shared-ride public taxicab system serving the City of Whitewater is operated on a contract basis by Brown Cab Service of Fort Atkinson. The Whitewater taxicab service carried approximately 26,600 revenue passengers in 2007, an increase of about 6 percent from the 25,100 revenue passengers carried in 2006 (see Figure 20). It operated about 72,400 total vehicle-miles during 2007, about 8 percent more than the 67,300 total vehicle-miles operated in 2006. During 2007, adult fares for the service remained unchanged at \$3.00 per one-way trip.



Figure 21



#### City of Hartford

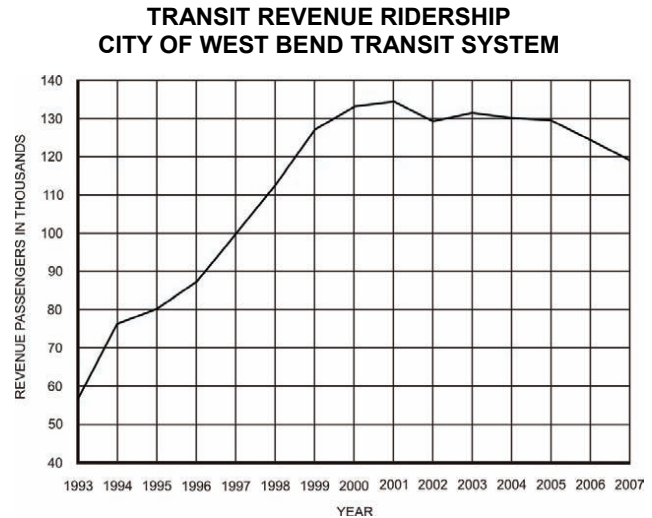
Publicly operated transit service was also provided during 2007 by the City of Hartford, which operated a shared-ride taxicab service through its Municipal Recreation Department. During the year, the Hartford taxicab service carried approximately 19,100 revenue passengers, an increase of about 2 percent from the 18,700 revenue passengers carried in 2006 (see Figure 21). The service operated about 55,700 total vehicle-miles, an increase of about 2 percent from the 54,400 total vehicle-miles operated during 2006. Base cash passenger fares remained at \$2.25 per one-way trip in 2007.

#### City of West Bend

During 2007, the City of West Bend taxicab service carried approximately 119,000 revenue passengers, a decrease of 4 percent from the 124,400 revenue passengers carried in 2006 (see Figure 22). The total vehicle-miles of service also decreased by about 4 percent to approximately 399,800, from the 416,800 total vehicle-miles operated during 2006. The City raised the base adult cash fare to \$3.00 per one-way trip in January 2007.

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

Figure 22



Planning Report No. 189, *A Transit System Feasibility Study and Development Plan for the City of West 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 2007, the City of Port Washington taxicab service carried approximately 19,600 revenue passengers, representing a decrease of about 6 percent from the 20,800 revenue passengers carried in 2006 (see Figure 23). In 2007, the taxi service operated about 85,900 total vehicle-miles, down 7 percent from 92,600 vehicle-miles operated during 2006. Base adult cash fares remained at \$2.75 per one-way trip in 2007.

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 23

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

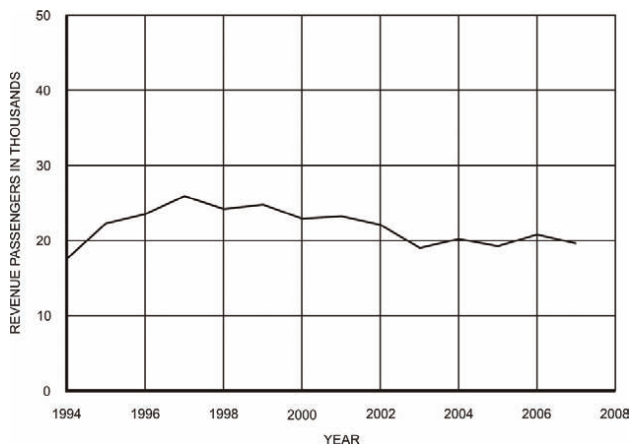
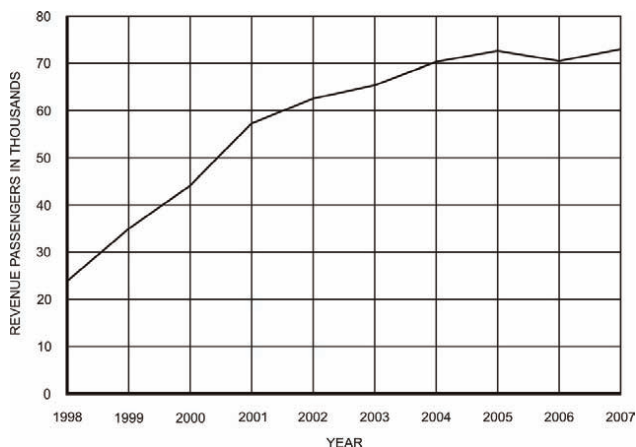


Figure 24

**TRANSIT REVENUE RIDERSHIP  
OZAUKEE COUNTY TAXI SYSTEM**

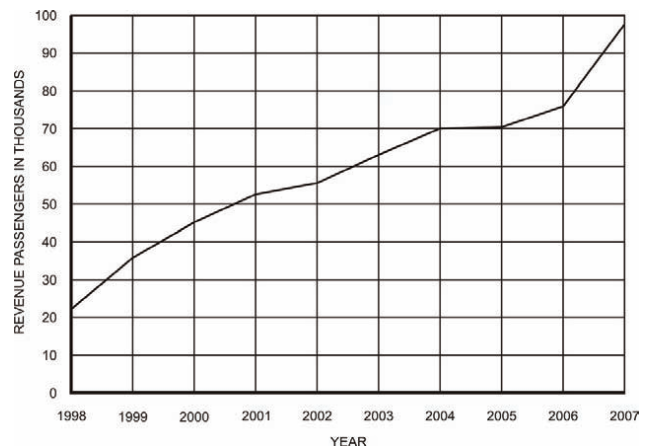


**Ozaukee County**

During 2007, about 73,000 revenue passengers were carried on the Ozaukee County taxicab system, an increase of about 4 percent from 2006 when 70,500 revenue passengers were carried (see Figure 24). The system operated a total of about 771,500 total vehicle-miles, a 10 percent increase from the 703,900 total vehicle-miles in 2006. Fares for the service in 2007 remained unchanged from 2006, 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

Figure 25

**TRANSIT REVENUE RIDERSHIP  
WASHINGTON COUNTY TAXI SYSTEM**



with Specialized Transportation Services, Inc., to provide the taxicab service. The Ozaukee County system does not serve trips that can be made on the Port Washington taxi-cab 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.

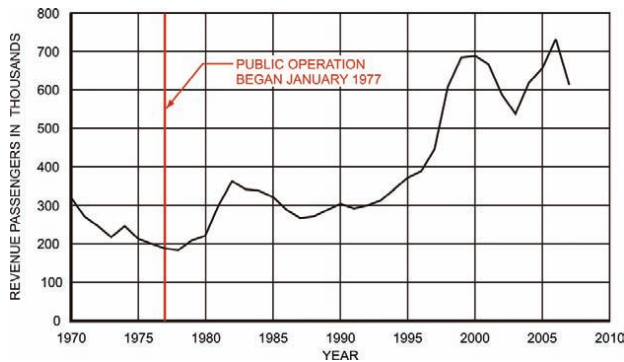
**Washington County**

During 2007, about 97,600 revenue passengers were carried on the Washington County taxi system, which operated about 1,065,300 total vehicle-miles. These figures represent an increase of 29 percent from the 75,800 revenue passengers carried in 2006 and an increase of about 51 percent from the 706,300 total vehicle-miles operated in 2006 (see Figure 25). The increases in revenue passengers and vehicle-miles may be attributed to improved marketing of the taxi service, health care facilities moving from urban to rural areas, and the general population growth in Washington County. Fares for the service in 2007 stayed the same as in 2006, with the base adult cash fare ranging from



Figure 26

**TRANSIT REVENUE RIDERSHIP  
WAUKESHA COUNTY TRANSIT SYSTEM**



\$2.50 per trip for travel within one zone, to \$7.00 per trip for cross-county travel encompassing four or more zones. The County contracts with Specialized Transportation Services, Inc., to provide the taxicab service. The Washington County system does not serve trips that can be made using the Hartford or West Bend taxicab 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.

#### Intercounty Services

##### Waukesha County

During 2007, total ridership on the Waukesha County transit system decreased by about 16 percent, from about 731,700 revenue passengers in 2006 to about 612,200 revenue passengers in 2007 (see Figure 26). The number of bus-miles operated in revenue service dropped from about 744,400 bus-miles in 2006 to about 661,100 bus-miles in 2007, or by about 11 percent. The decreases may be attributed to service reductions on routes between Waukesha and Milwaukee Counties and the elimination of Route 311 in mid-2006. 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. The

County also contracts for the administration and management of the transit system, using the staff of the City of Waukesha Metro Transit System.

Adult cash fares on the Waukesha County transit system local bus routes operated by the Milwaukee County Transit System remained stable during 2007 at \$1.75 per one-way trip. Adult cash fares for the freeway flyer service operated between Menomonee Falls and downtown Milwaukee remained unchanged at \$2.60 per one-way trip. The fares charged on the routes operated by Wisconsin Coach Lines, Inc. increased during 2007, with adult cash fares ranging from \$2.75 to \$3.25 per one-way trip.

Adult cash fares on the three routes operated by the City of Waukesha Metro Transit System also rose \$0.25 from \$1.50 to \$1.75.

As shown in Figure 16, total ridership on freeway flyer routes operated by Waukesha County in 2007 was about 280,100 revenue passengers, a decrease of about 16 percent from the estimated 332,500 revenue passengers carried on Waukesha County-operated freeway flyer routes in 2006. The decrease may be attributed to the fare increase on the routes operated by Wisconsin Coach Lines, Inc. The freeway flyer service in Waukesha County served a total of 12 outlying terminals in 2007.

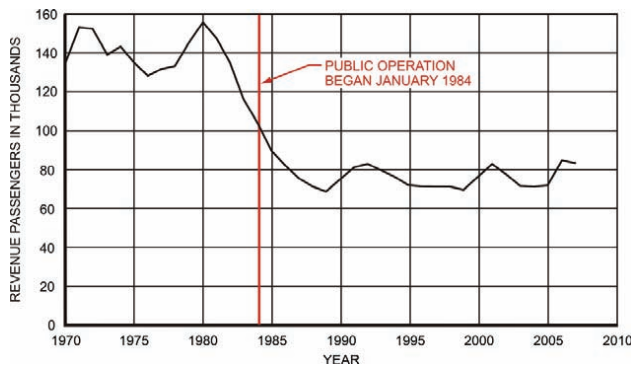
To comply with the Federal ADA paratransit regulations, Waukesha County also operated the parallel commuter bus program. This program provided paratransit service for disabled persons unable to use the vehicles that provide the County's fixed-route bus service in the corridor between the City of Waukesha 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 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 provided through contracts with a private transit operator, Curative Transportation Services, Inc. and the Milwaukee County Transit Plus program. During 2007, about 12,200 one-way trips were made under the program, an increase of about 5 percent from the 11,600 one-way trips made under the program during 2006.

The Commission, at the request of the County, has routinely prepared short-range transit system devel-



Figure 27

**TRANSIT REVENUE RIDERSHIP: KENOSHA-RACINE-MILWAUKEE AREA TRANSIT SYSTEM**



opment 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 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 2007, 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./Coach USA.

Ridership on the service approximated 83,200 revenue passengers during 2007, a decrease of about 2 percent from the 2006 ridership level of about 84,800 revenue passengers (see Figure 27). The number of bus-miles operated in revenue service decreased less than 1 percent in 2007 to 254,400 bus-miles, from about 256,100 bus-miles in 2006. Transit fares for the rapid commuter bus service, which are distance-related, ranged from \$1.00 to \$4.00 per one-way trip, unchanged from 2006.

#### Western Kenosha County

In September 2007, the Kenosha County Human Services Department initiated operation of four bus routes to provide public transit service in western

Kenosha County. The bus routes operated each weekday within the Twin Lakes, Silver Lake, and Paddock Lake areas. Two routes had extensions to provide daily service to locations on the western edge of the City of Kenosha, and to the Metra station in the City of Antioch, Illinois. The other two routes had extensions on alternating weekdays to serve locations in Burlington in Racine County and Lake Geneva in Walworth County.

From September to December 2007, the service carried about 800 trips and operated a total of about 40,000 revenue bus miles. The base adult cash fare was \$2.00. The County contracted with the Kenosha Achievement Center, Inc., a non-profit organization, to operate the service.

#### Ozaukee County

Ridership decreased during 2007 on the commuter-oriented rapid bus and shuttle service between Milwaukee and Ozaukee Counties sponsored by Ozaukee County. During 2007, a total of about 114,000 revenue passengers were carried on the Ozaukee County commuter bus service, down 4 percent from the 119,100 revenue passengers carried in 2006 (see Figure 28). Fares remained unchanged during 2007 at \$2.25 per one-way trip for express bus service and \$1.00 per trip on the connecting shuttle service provided by the County's shared-ride taxi system. The County's commuter bus and shuttle system operated a total of about 219,300 revenue vehicle-miles in 2007, a decrease of about 10 percent from the 242,400 vehicle-miles operated in 2006. This decrease may be attributed to service changes.

The County contracted with the Milwaukee County Transit System to operate the rapid bus service using buses owned by Ozaukee County.

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*.

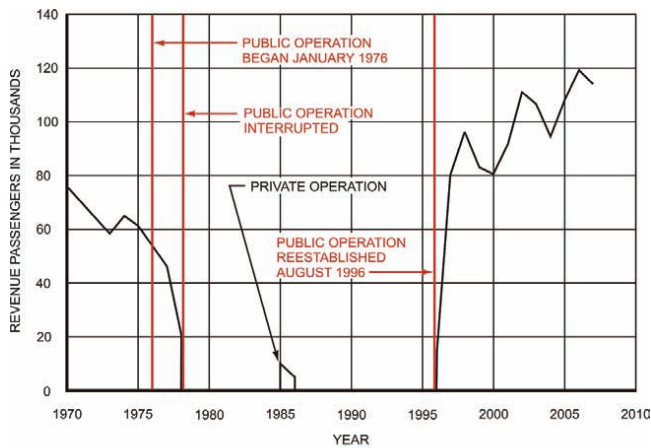
#### Washington County

During 2007, about 90,600 revenue passengers were carried on the Washington County commuter bus



Figure 28

### TRANSIT REVENUE RIDERSHIP OZAUKEE COUNTY EXPRESS BUS SYSTEM



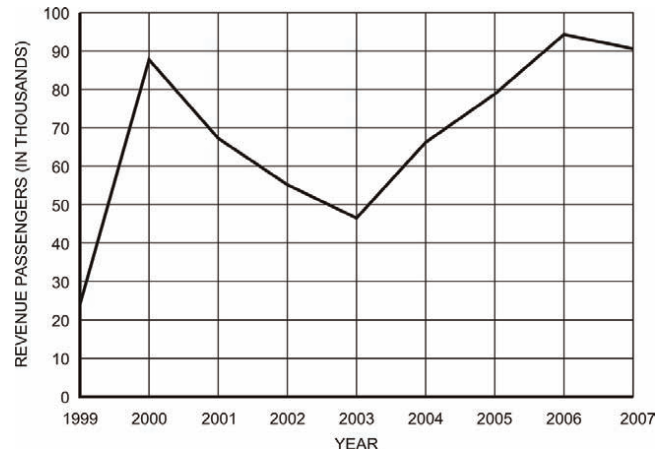
NOTE: THE GRAPH REFLECTS TWO PERIODS OF PUBLIC OPERATION: FROM JANUARY 1976 THROUGH JUNE 1978 DURING WHICH OZAUKEE COUNTY PROVIDED STATE AND COUNTY FUNDS TO A PRIVATE TRANSIT OPERATOR, WISCONSIN COACH LINES, INC., FOR AN EXISTING COMMUTER BUS ROUTE BETWEEN OZAUKEE AND MILWAUKEE COUNTIES; AND FROM AUGUST 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.

service, a decrease of about 4 percent from the 94,300 revenue passengers carried on the service during 2006 (see Figure 29). The County's commuter bus system operated a total of about 226,210 revenue vehicle-miles in 2007, down 10 percent from the 250,900 vehicle-miles operated in 2006. The decrease in vehicle-miles and ridership during 2007 may be attributed to scheduling changes, the relocation of the downtown West Bend park-ride lot and fare increases that occurred in 2007. The fare on the County express bus route, which was \$2.50 per one-way trip in 2006, increased twice in 2007. The fare increased to \$3.00 in January 2007 and to \$3.25 in August 2007. The fare on the connecting shuttle service provided by the Washington County Taxi System remained at \$1.00 per one-way trip.

The County contracts with Riteway Bus Service, Inc., for the operation of the express bus 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.

Figure 29

### TRANSIT REVENUE RIDERSHIP WASHINGTON COUNTY EXPRESS BUS SYSTEM



#### *Park-Ride Facilities and Transit Stations*

Progress in providing the park-ride lots and transit stations recommended in the adopted year 2035 transportation plan is summarized on Map 7. The map shows two additional park-ride lots from those shown in the 2006 *Annual Report*. Two publicly-constructed park-ride lots were built in 2006 and 2007: a lot at Lang Road and STH 67 north of Oconomowoc which opened in late 2006, and a lot at Paradise Drive and USH 45 in West Bend which opened in 2007.

Of the 52 existing park-ride lots and transit stations, 37 were served by rapid transit service and 15 were not served by transit and were used exclusively by carpoolers. Eight of the 52 park-ride lots and transit stations 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 13 provides data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 2007 at all park-ride lots and transit stations by patrons of freeway flyer bus service and carpoolers. The total number of spaces available at park-ride lots in the Region was 6,635 in 2007, including 5,775 at park-ride lots served by transit, and 860 at the lots not served by transit.








Map 7

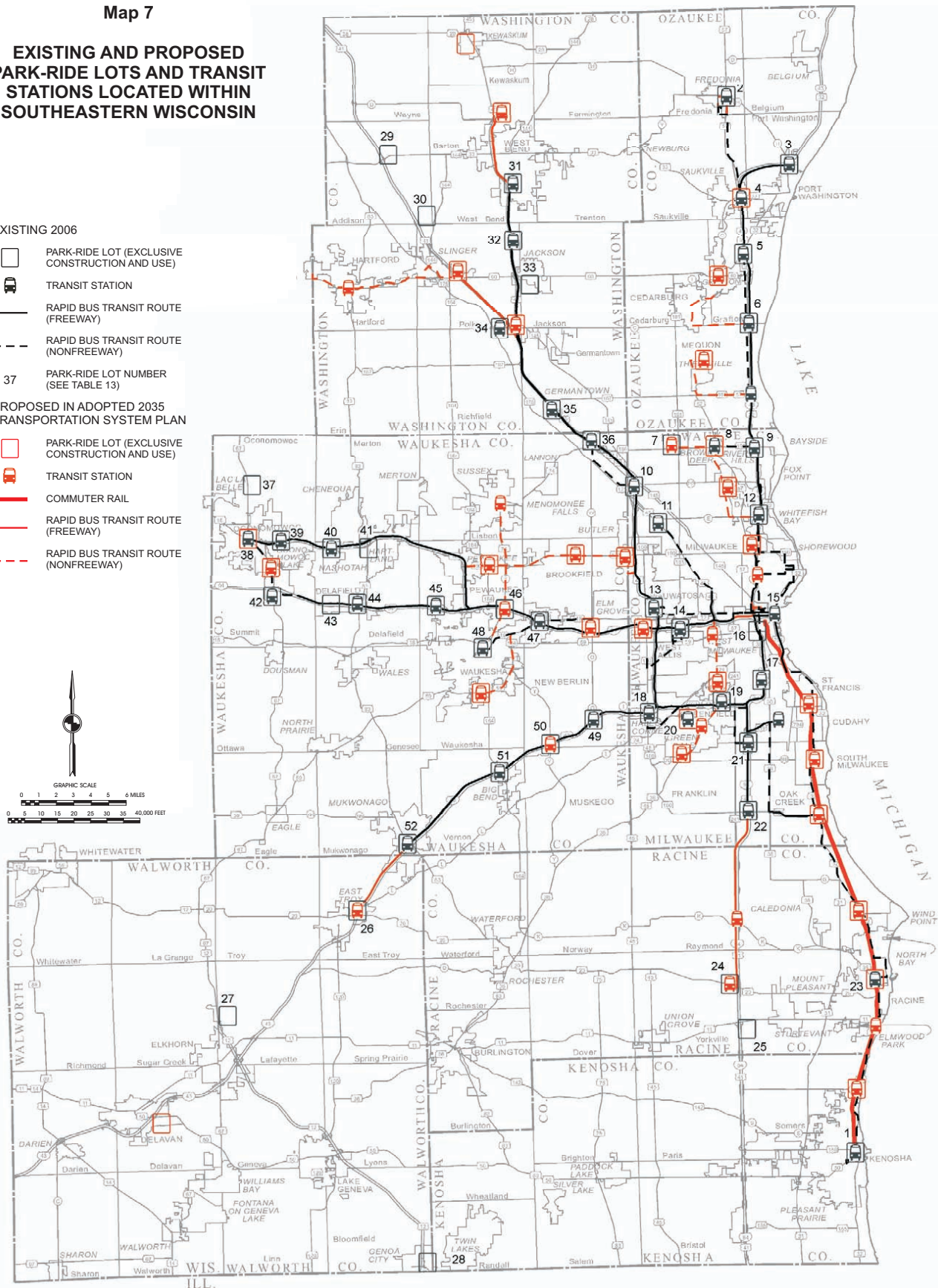
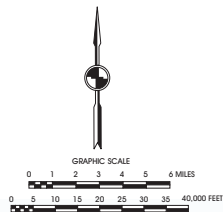
# **EXISTING AND PROPOSED PARK-RIDE LOTS AND TRANSIT STATIONS LOCATED WITHIN SOUTHEASTERN WISCONSIN**

## EXISTING 2006

-  PARK-RIDE LOT (EXCLUSIVE CONSTRUCTION AND USE)
-  TRANSIT STATION
-  RAPID BUS TRANSIT ROUTE (FREEWAY)
-  RAPID BUS TRANSIT ROUTE (NONFREEWAY)
- 37 PARK-RIDE LOT NUMBER (SEE TABLE 13)

## PROPOSED IN ADOPTED 2035 TRANSPORTATION SYSTEM PLAN

-  PARK-RIDE LOT (EXCLUSIVE CONSTRUCTION AND USE)
-  TRANSIT STATION
-  COMMUTER RAIL
-  RAPID BUS TRANSIT ROUTE (FREEWAY)
-  RAPID BUS TRANSIT ROUTE (NONFREEWAY)





**Table 13**  
**AVERAGE WEEKDAY USE OF PARK-RIDE LOTS AND TRANSIT STATIONS: 2007**

Number <sup>a</sup>	Location	Served by Transit	Not served by Transit	Shared Use	Available Parking Spaces	Autos Parked on an Average Weekday: 2007	Percent of Spaces Used
1	<u>Kenosha County</u> Metra Station (Kenosha)	X		X	145	-- <sup>b</sup>	-- <sup>b</sup>
2	<u>Ozaukee County</u> STH 57 and CTH H (Fredonia)	X			60	15	25
3	IH 43 and STH 32-CTH H (Port Washington)	X			50	29	58
4	Wal-Mart (Saukville)	X		X	50	-- <sup>b</sup>	-- <sup>b</sup>
5	IH 43 and CTH V (Grafton)	X			85	41	48
6	IH 43 and CTH C (Grafton)	X			65	75	115
7	<u>Milwaukee County</u> STH 100 and N. 85th Street (Milwaukee)		X		100	-- <sup>b</sup>	-- <sup>b</sup>
8	Kohl's (Brown Deer)	X			130	68	52
9	Brown Deer (River Hills)	X		X	360	108	30
10	W. Good Hope Road (Milwaukee)	X			135	41	30
11	Timmerman Field (Milwaukee)	X			140	47	34
12	North Shore (Glendale)	X			195	92	47
13	W. Watertown Plank Road (Wauwatosa)	X			240	107	45
14	State Fair Park (Milwaukee)	X			285	193	68
15	Milwaukee County Transit System Downtown Transit Center (Milwaukee)	X		X	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
16	National Avenue and IH 43 (Milwaukee)		X		160	128	80
17	W. Holt Avenue (Milwaukee)	X			235	107	46
18	Whitnall (Hales Corners)	X			360	205	57
19	W. Loomis Road (Greenfield)	X			410	111	27
20	Southridge (Greendale)	X		X	170	82	48
21	W. College Avenue (Milwaukee)	X			650	366	56
22	W. Ryan Road (Oak Creek)	X			305	163	53
23	<u>Racine County</u> Racine Metro Transit Center (Racine)	X			--	--	--
24	IH 94 and STH 20 (Ives Grove)		X		75	61	81
25	IH 94 and STH 11 (Mount Pleasant)		X		60	37	62
26	<u>Walworth County</u> East Troy Municipal Airport (East Troy)		X		40	14	35
27	USH 12 and STH 67 (Elkhorn)		X		40	17	43
28	USH 12 and CTH P (Genoa City)		X		40	12	30
29	<u>Washington County</u> USH 41 and STH 33 (Allenton)		X		35	50	143
30	USH 41 and CTH K (Addison)		X		50	19	38
31	USH 45 and Paradise Drive (West Bend) <sup>d</sup>	X			100	73	73
32	Washington County Fair Park (Polk)	X		X	100	29	29
33	STH 60 and CTH P (Jackson)		X		30	29	97
34	Pioneer Road and Mayfield Road (Richfield)	X			30	25	83
35	USH 41 and Lannon Road (Germantown)	X			100	101	101
36	<u>Waukesha County</u> Pilgrim Road (Menomonee Falls)	X			70	51	73
37	STH 67 and Lang Road (Oconomowoc)		X		35	-- <sup>b</sup>	-- <sup>b</sup>
38	Collins Street Parking Lot (Oconomowoc)	X		X	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
39	STH 16 and CTH P (Oconomowoc)	X			45	18	40
40	STH 16 and CTH C (Nashotah)	X			60	10	17
41	STH 16 and STH 83 (Chenequa)		X		35	13	37
42	STH 67 and CTH DR (Summit)	X			100	54	54
43	IH 94 and CTH C (Delafield)		X		30	25	83
44	IH 94 and STH 83 (Delafield)	X			200	69	35
45	IH 94 and CTH G/CTH SS (Pewaukee)	X			245	57	23
46	IH 94 and CTH F (Pewaukee)		X		85	41	48
47	Goerke's Corners (Brookfield)	X			315	261	83
48	Waukesha Metro Transit System Downtown Transit Center (Waukesha)	X		X	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
49	IH 43 and Moorland Road (New Berlin)	X			175	49	28
50	IH 43 and CTH Y (New Berlin)		X		45	22	49
51	IH 43 and STH 164 (Big Bend)	X			145	65	45
52	IH 43 and STH 83 (Mukwonago)	X			165	73	44
--	Total	--	--	--	6,635	3,253	49

<sup>a</sup>See Map 7.

<sup>b</sup>Data not available.

<sup>c</sup>Parking available within larger public lot or structure.

<sup>d</sup>The Wisconsin Department of Transportation (WisDOT) officially opened the lot for public use in July of 2007; Washington County Commuter Express (WCCE) buses began using the lot on July 30, 2007.



Of the 5,775 spaces available at the 37 park-ride lots served by transit, 2,785 spaces were used on an average weekday during 2007, a utilization rate of about 48 percent. Of the 860 spaces available at the lots not served by transit, 468 spaces were utilized during 2007, a utilization rate of about 54 percent. Three lots had utilization rates of 100 percent or higher.

### *Public Transit Operating Subsidies*

Information on transit operating subsidies in the Region is shown in Table 14. Because 2007 year-end financial data for most transit systems were not available at the time data were compiled for this *2007 Annual Report*, such information is reported for calendar years 2005 and 2006. Transit operating subsidies approximated \$121.0 million during 2006 in the Region, compared with about \$121.2 million in 2005.

### *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 2007:

- At the request of the Wisconsin Department of Transportation, Commission staff reviewed corridor maps to be included in the Corridors 2030 document for consistency with the Commission's year 2035 regional transportation system plan.
- At the request of the City of Elkhorn, Commission staff began providing assistance to City staff in reviewing and identifying the potential impacts related to the proposed East Elkhorn development on the existing and planned arterial street and highway system within and near the City of Elkhorn
- At the request of the Wisconsin Department of Natural Resources, Commission staff provided forecast years 2012 and 2018 vehicle miles of travel under a high growth scenario. This data was to be used in preparation of the department's maintenance plan and request to the U.S. Environmental Protection Agency for redesignation of the six-county Southeastern Wisconsin nonattainment area from non-attainment to attainment of the eight-hour ozone National Ambient Air Quality Standard (NAAQS) based on monitor data showing attainment. This application was subsequently withdrawn due to monitored exceedances of the eight-hour ozone NAAQS during the 2007 ozone season.
- At the request of local municipalities, Commission staff provided year 2035 forecasts in support of engineering studies throughout the region.
- At the request of local municipalities, Commission staff provided assistance in analyzing and rating the pavement conditions of municipal roadways and entered the roadway condition data into the Wisconsin Information System for Local Roads (WISLR) maintained by the Wisconsin Department of Transportation.
- At the request of the Wisconsin Department of Transportation, Commission staff provided year 2035 forecast volumes along USH 41 between the Zoo Interchange and the Washington County/Fond du Lac County line in support of the USH 41 interstate conversion study. This forecast data included mainline, ramp, and cross street volumes.
- The Commission staff, at the request of the Wisconsin Department of Transportation, provided additional forecast data at selected locations in support of the Department's ongoing IH 94 North-South corridor preliminary engineering study.



Table 14

## PUBLIC TRANSIT OPERATING SUBSIDIES WITHIN THE REGION: 2005-2006

Transit Services	Public Transit Operating Assistance (dollars)							
	2005 Actual				2006 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
<b>Intracounty Systems</b>								
Milwaukee County .....	19,626,000	58,012,200	20,282,200	97,920,400	20,590,200	59,798,800	17,907,400	98,296,400
City of Racine .....	1,827,800	1,931,300	1,799,500	5,558,600	2,183,500	1,802,400	1,479,600	5,465,500
City of Kenosha .....	1,747,400	1,665,100	1,708,700	5,121,200	1,996,296	1,661,998	1,331,006	4,989,300
City of Waukesha .....	623,300	1,915,300	1,339,800	3,878,400	1,072,400	1,605,900	1,031,500	3,709,800
City of Whitewater .....	71,100	44,400	20,200	135,700	53,400	51,100	2,300	106,800
City of Hartford .....	63,200	39,500	5,600	108,300	54,500	52,200	1,900	108,600
City of West Bend .....	388,000	242,500	86,100	716,600	326,800	313,000	63,400	703,200
City of Port Washington .....	81,700	51,100	32,900	165,700	70,900	68,000	19,000	157,900
Ozaukee County .....	137,600	600,800	177,900	916,300	45,900	623,400	269,200	938,500
Washington County .....	184,000	774,900	238,600	1,197,500	195,600	861,700	193,400	1,250,700
Subtotal	24,750,100	65,277,100	25,691,500	115,718,700	26,589,496	66,838,498	22,298,706	115,726,700
<b>Intercounty Systems</b>								
Waukesha-Milwaukee Counties .....	823,700	1,560,100	992,800	3,376,600	839,600	1,613,200	625,400	3,078,200
Kenosha-Racine-Milwaukee Counties .....	0	577,100	160,700	737,800	0	618,100	159,200	777,300
Ozaukee-Milwaukee Counties .....	117,200	441,000	161,100	719,300	190,800	462,300	96,800	749,900
Washington-Milwaukee Counties .....	328,800	321,100	36,500	686,400	131,200	451,800	123,600	706,600
Subtotal	1,269,700	2,899,300	1,351,100	5,520,100	1,161,600	3,145,400	1,005,000	5,312,000
<b>Region Total</b>	<b>26,019,800</b>	<b>68,176,400</b>	<b>27,042,600</b>	<b>121,238,800</b>	<b>27,751,096</b>	<b>69,983,898</b>	<b>23,303,706</b>	<b>121,038,700</b>

Transit Services	Operating Subsidy per Ride (dollars)							
	2005 Actual				2006 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
<b>Intracounty Systems</b>								
Milwaukee County .....	0.40	1.20	0.42	2.02	0.43	1.25	0.38	2.06
City of Racine .....	1.61	1.70	1.59	4.90	1.87	1.55	1.27	4.69
City of Kenosha .....	1.19	1.13	1.17	3.49	1.34	1.12	0.89	3.35
City of Waukesha .....	1.03	3.17	2.21	6.41	1.80	2.70	1.73	6.23
City of Whitewater .....	3.25	2.03	0.92	6.20	2.13	2.04	0.08	4.25
City of Hartford .....	3.26	2.04	0.28	5.58	2.91	2.79	0.11	5.81
City of West Bend .....	2.99	1.87	0.66	5.52	2.63	2.52	0.50	5.65
City of Port Washington .....	4.26	2.66	1.71	8.63	3.41	3.27	0.91	7.59
Ozaukee County .....	1.90	8.29	2.45	12.64	0.65	8.84	3.82	13.31
Washington County .....	2.62	11.04	3.40	17.06	2.58	11.37	2.55	16.50
Average	0.48	1.25	0.49	2.22	0.52	1.30	0.44	2.26
<b>Intercounty Systems</b>								
Waukesha-Milwaukee Counties .....	1.25	2.37	1.51	5.14	1.15	2.20	0.85	4.21
Kenosha-Racine-Milwaukee Counties .....	- -	7.63	2.13	9.76	- -	7.29	1.88	9.17
Ozaukee-Milwaukee Counties .....	1.08	4.08	1.49	6.65	1.60	3.88	0.82	6.30
Washington-Milwaukee Counties .....	4.17	4.07	0.46	8.70	1.39	4.79	1.31	7.49
Average	1.49	3.15	1.36	6.00	1.26	3.05	0.85	5.16
<b>Region Average</b>	<b>0.49</b>	<b>1.29</b>	<b>0.51</b>	<b>2.29</b>	<b>0.53</b>	<b>1.34</b>	<b>0.45</b>	<b>2.32</b>

- The Commission staff, at the request of the Wisconsin Department of Transportation, prepared origin/destination trip tables for existing year 2001 and the forecast year 2035 no-build and various build scenario traffic volume forecasts and origin/destination trip tables in support of the Department's microsimulation modeling of the Zoo Interchange alternatives being considered during the preliminary engineering study of the interchange.
- Commission staff helped facilitate several planning meetings for the coordination of public transit and human services transportation in Racine County. The meetings were requested by WisDOT to comply with recently-enacted requirements stipulating that projects funded under the Federal Transit Administration (FTA) New Freedom, Job Access and Reverse Commute (JARC), and Elderly and Disabled Transportation Programs must be included in a locally-developed plan for coordinating public



transit and human services transportation in order to be eligible for funding in 2007 and later years. One of the outcomes of the Racine planning meetings was an application from Racine County to hire a County mobility manager under the Federal JARC funding program.

- Commission staff assisted in the development of the 2007 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.

#### *Staffing of the Southeastern Wisconsin Regional Transit Authority*

A major effort of the Commission staff in 2007 was to continue to serve as the staff to the Southeastern Wisconsin Regional Transit Authority (RTA) created by the Wisconsin State Legislature and Governor. The RTA is charged with making recommendations to the Legislature and the Governor by November 2008 addressing public transit and commuter rail transit in Kenosha, Racine, and Milwaukee Counties including: on the establishment of a permanent regional funding source to provide local funds for the operating and capital costs of both commuter rail and public transit; on whether the responsibilities of the RTA should be limited to transit funding or should also include transit operations; on how any regional funding should be distributed among the transit operators in the three RTA Counties; on how coordination of public transit, commuter rail, and passenger rail services in the region could be improved; on the use of bonding for commuter rail and public transit in the region and the role of the RTA in such bonding; and on whether the authority should continue in existence after September 30, 2009. Working with the RTA, the Commission staff has performed the following activities:

- Assisted with organizational activities at the initiation of RTA operations. These activities

included drafting a set of by-laws; proposing a meeting schedule for completing the required work of the RTA; briefing the Board on requirements governing the scheduling and conduct of public meetings as specified under State regulations and in the RTA enabling legislation; and assisting with initiating the collection of the \$2.00 rental car fee by the Wisconsin Department of Revenue and the establishment of appropriate fiscal management procedures addressing the collection, record keeping, and expending of these funds. Commission staff assumed responsibility for publishing the minutes of Board meetings and also maintains a website ([www.sewisrta.org](http://www.sewisrta.org)) on behalf of the RTA to provide comprehensive information regarding the RTA and its meetings and also to provide the opportunity for interested persons and groups to comment on the RTA's work.

- Prepared materials for RTA review describing the existing public transit systems, including their organizational structure and the services provided, and the current approach to funding public transit services in the three RTA counties, in particular, the heavy dependence of State and Federal funding, and the financial crisis facing the region's transit systems, and particularly the Milwaukee County Transit System. Staff also briefed the Board on the public transit services recommended in Kenosha, Racine, and Milwaukee Counties under the Commission's adopted regional transportation system plan for the year 2035. Presentations were arranged from Milwaukee County and the City of Milwaukee staffs on separate proposals advanced by each entity to provide major express bus and bus rapid transit service and a downtown Milwaukee streetcar circulator in Milwaukee County.
- Provided briefings on the benefits of public transit and commuter rail for the RTA counties and southeastern Wisconsin. Staff also arranged for briefings on the benefits of public transit from each of the public transit operators in the RTA counties and from other important agencies and organizations identified by the Board including: the Southeastern Wisconsin Coalition for Transit Now; S. C. Johnson & Son, Inc.; the Milwaukee Public Schools (MPS); Mr. Darryl Johnson from the Riverworks Development Corporation; the Milwaukee branch of the



NAACP; the Cultural Alliance of Greater Milwaukee; the Regional Transportation Committee of the Greater Milwaukee Committee; and the Milwaukee County Wisconsin Works W2 agencies.

- Conducted comparative reviews of the three public transit systems in the RTA counties with systems in other major metropolitan areas in the United States (see Table 15) and of the Kenosha-Racine-Milwaukee (KRM) commuter rail project with existing and proposed commuter rail services in similar sized areas (see Table 16). The transit system comparison concluded that the existing public transit systems in the RTA counties compared well to other systems in terms of the efficiency and effectiveness of the service; that almost all the comparable systems are governed by an RTA serving multiple jurisdictions; and that most of the RTAs in comparable areas had dedicated local funding, typically a sales tax. The comparative review of commuter rail services concluded that the proposed KRM service compares well to recent and proposed new commuter rail lines in terms of area size, length, station spacing, service schedule, and ridership: that almost all commuter rail lines are operated by an RTA, with a few operated by a State; and that almost all commuter rail lines have dedicated local funding, usually a sales tax.
- Assisted with the solicitation of proposals for consultant services to develop and implement a strategy to communicate and promote the recommendations of the RTA to local and State officials, business leaders, and the general public; and to research and evaluate alternative funding mechanisms for both commuter rail and public transit in the RTA counties. Commission staff worked with the team of consultants ultimately selected—Transit Advocacy and Communications Team (TACT)—to develop estimates of the funds that could be generated through potential alternative local revenue sources. Using this analysis of revenue sources, the Board made a preliminary local funding recommendation that endorsed levying a regional sales tax over all three RTA counties in an amount up to 0.05 percent to support commuter rail operations and up to 0.45 percent to support local public transit systems. After

consulting with their appointing entities and elected officials, the Board modified its preliminary recommendation to, instead, provide local funding for the KRM project by increasing the rental car fee from the current \$2 to \$15, and to continue to study and discuss potential local revenue sources to provide local funding for public transit.

- Assisted the consultant team and the RTA in preparing the request to Governor Doyle for legislation to be included in the 2007-2009 State Budget Act. The proposed legislation would provide the RTA with the authority in several areas needed for it to complete its work on the KRM project and for public transit and included a proposed increase in the rental car fee collected for the RTA from the current \$2 to \$15 per transaction. The proposed RTA legislation was not included in the State budget bill.
- Provided regular briefings to the Board on the progress and findings of the work being performed for the KRM project including the review and refinement of capital and operating costs. Staff assisted with the preparation of the Request to Initiate Preliminary Engineering (RIPE) for the KRM project that was submitted to the Federal Transit Administration (FTA) by the RTA in September 2007. The RTA subsequently asked the FTA to put the RIPE on hold after needed legislation was not included in the 2007-2009 State Budget Act. After discussing the RIPE with FTA staff, the Commission staff was working with the consultant for the KRM project—Earth Tech, Inc.—at the end of 2007 to prepare a scope of work for refining the RIPE to improve its rating by the FTA when it is resubmitted in mid 2009.
- Prepared and submitted, on behalf of the RTA, appropriations requests to the offices of Representative Gwen Moore and Senator Herb Kohl for consideration of future Federal funding for the Muskego Yard Freight Rail Bypass project located in the City and County of Milwaukee; and an application for Federal Congestion Mitigation and Air Quality (CMAQ) Improvement Program funds to cover a portion of the construction costs of the KRM project in the future.



Table 15

## COMPARISON OF PUBLIC TRANSIT SYSTEMS IN METROPOLITAN AREAS SIMILAR IN POPULATION TO THE MILWAUKEE AREA: 2004

				Year 2000 Population (millions)	Year 2004 Transit Service		Financial Information for All Services Provided by Transit System <sup>a</sup>									
					Types of Transit Service	Annual Revenue Vehicle Miles of Service (millions)	Annual Ridership <sup>b</sup> (millions)	Total Operating Cost (millions)	Farebox Revenue (millions)	Net Operating Cost (millions)	Federal Share (millions)	State Share (millions)	Local Share (millions)	Source of Dedicated Local Funding		
Metropolitan Area	Transit Operator	Service Area														
St. Louis, MO	Bi-State Development Agency (Metro)	1 county plus portions of 2 other counties in 2 states	2.08	Bus and Light Rail	21.7	44.8	\$168.4	\$36.5	\$131.9	\$15.2	\$1.5	\$115.2	0.25% Sales tax			
Denver, CO	Regional Transportation District	4 counties plus portions of 3 other counties	1.98	Bus and Light Rail	42.9	81.3	\$288.0	\$74.1	\$213.9	\$39.4	\$0.2	\$174.3	0.6% Sales tax			
Cleveland, OH	Greater Cleveland Regional Transit Authority	1 county plus portions of 4 other counties	1.79	Bus, Heavy Rail, and Light Rail	23.9	57.5	\$214.3	\$39.1	\$175.2	\$16.5	\$4.2	\$154.5	1.0% Sales tax			
Pittsburgh, PA	Port Authority of Allegheny County	1 county plus portions of 4 other counties	1.75	Bus, Light Rail, and Inclined Plane	29.5	66.1	\$289.0	\$71.8	\$217.2	\$38.3	\$151.5	\$27.4	Sales tax <sup>c</sup>			
Portland, OR	Tri-County Metropolitan Transportation District of Oregon (Tri-Met)	Portions of 3 counties	1.58	Bus and Light Rail	30.0	97.4	\$282.7	\$72.1	\$210.6	\$46.8	\$2.5	\$161.3	.6618% payroll tax (1/01/08)			
Cincinnati, OH	Southwest Ohio Regional Transit Authority	1 county plus portions of 3 other counties	1.50	Bus	11.3	23.1	\$71.9	\$21.4	\$50.4	\$12.6	\$1.3	\$36.5	0.3% payroll tax			
Norfolk, VA	Hampton Roads Transit	7 cities in one county	1.39	Bus and Ferryboat	10.6	19.6	\$50.2	\$15.5	\$34.7	\$15.0	\$10.1	\$9.6	--			
Sacramento, CA	Sacramento Regional Transit District	4 cities in one county	1.39	Bus and Light Rail	10.5	30.5	\$119.9	\$25.5	\$94.4	\$15.1	\$2.5	\$76.8	0.5% Sales tax			
Kansas City, MO	Kansas City Area Transportation Authority	7 counties in 2 states	1.36	Bus	7.9	12.9	\$51.1	7.0	\$44.1	\$9.9	--	\$34.2	0.375% Sales tax			
San Antonio, TX	VIA Metropolitan Transit	1 county	1.33	Bus	17.8	42.2	\$103.2	\$18.3	\$84.9	10.2	--	74.7	0.5% Sales tax			
Las Vegas, NV	Regional Transportation Commission of Southern Nevada	Portions of 1 county	1.31	Bus	14.8	50.6	\$99.5	\$42.4	\$57.1	\$2.2	--	\$54.9	0.25% Sales tax			
Milwaukee, WI	Milwaukee County Transit System	1 county	1.31	Bus	17.5	53.7	\$141.3	\$45.8	\$95.5	\$16.9	\$57.9	\$20.7	--			



**Table 15 (continued)**

	Metropolitan Area	Transit Operator	Service Area	Year 2000 Population (millions)	Year 2004 Transit Service			Financial Information for All Services Provided by Transit System <sup>a</sup>						
					Types of Transit Service	Annual Revenue Miles of Vehicle Service (millions)	Annual Ridership <sup>b</sup> (millions)	Total Operating Cost (millions)	Farebox Revenue (millions)	Net Operating Cost (millions)	Federal Share (millions)	State Share (millions)	Local Share (millions)	Source of Dedicated Local Funding
	Indianapolis, IN	Indianapolis Public Transportation Corporation	1 county	1.22	Bus	6.2	9.0	\$39.9	\$9.6	\$30.3	\$10.2	\$8.6	\$11.5	--
	Providence, RI	Rhode Island Public Transit Authority	Statewide	1.18	Bus	7.5	16.4	\$74.5	15.3	\$59.2	\$13.3	\$37.4	\$8.5	6.25 cents per gallon gas tax
	Columbus, OH	Central Ohio Transit Authority	1 county plus portions of 3 other counties	1.13	Bus	8.3	14.5	\$71.5	12.9	\$58.4	\$10.7	\$0.9	\$46.8	0.25% Sales tax
	New Orleans, LA	New Orleans Regional Transit Authority	Portions of 1 parish	1.01	Bus and Light Rail	10.7	47.1	\$108.4	\$36.2	\$72.2	\$14.9	\$2.3	\$55.0	1.0% Sales tax <sup>d</sup>
	Buffalo, NY	Niagara Frontier Transportation Authority	1 county	0.98	Bus and Light Rail	9.2	23.1	\$89.5	\$23.0	\$66.5	\$8.3	\$25.8	\$32.4	0.125% Sales tax
	Memphis, TN	Memphis Area Transit Authority	Portions of 3 counties in 2 states	0.97	Bus and Light Rail	9.2	11.7	\$46.6	\$10.7	\$35.9	\$8.1	\$8.8	\$19.0	--
	Austin, TX	Capital Metropolitan Transportation Authority	Portions of 3 counties	0.90	Bus	13.8	35.1	\$139.5	\$15.8	\$123.7	\$12.3	--	\$111.4	1.0% Sales tax
	Salt Lake City, UT	Utah Transit Authority	Portions of 6 counties	0.89	Bus and Light Rail	19.7	26.6	\$141.5	\$23.6	\$117.9	\$30.5	--	\$87.4	Sales tax <sup>e</sup>
	Jacksonville, FL	Jacksonville Transportation Authority	1 county	0.88	Bus and Automated Guideway	10.2	9.6	\$66.3	\$20.4	\$45.9	\$1.8	\$4.3	\$39.8	1.0% Sales tax
	Louisville, KY	Transit Authority of River City	1 county plus portions of 4 other counties in 2 states	0.86	Bus	7.5	15.2	\$52.1	\$6.8	\$45.3	\$11.2	\$1.2	\$32.9	0.2% payroll tax
	Charlotte, NC	Charlotte Area Transit System	1 county plus portions of 4 other counties in two states	0.76	Bus	10.1	18.4	\$68.9	\$10.2	\$58.7	--	\$12.5	\$46.2	0.5% Sales tax

<sup>a</sup>Financial data include figures for transit services not listed including paratransit services for the disabled and vanpool programs. These services make up a small part of total service and ridership for the transit system.

<sup>b</sup>Total boarding passengers including those transferring between routes.

<sup>c</sup>Portion of State 1.22% Sales tax, and \$1 per tire, \$2 per vehicle rental, and 3% of vehicle lease.

<sup>d</sup>Also 0.6% hotel room tax.

<sup>e</sup>0.4375% in Salt Lake County, 0.5% in 2 counties, and 0.25% in 3 Counties.

Source: Milwaukee County Transit System, 2004 National Transit Database, and SEWRPC.



Table 16

## SELECTED OPERATING CHARACTERISTICS OF RECENT AND NEW-START COMMUTER RAIL SYSTEMS IN THE UNITED STATES

Name of Service	Services and Characteristics							Total Expenses and Revenues for Commuter Rail Mode							Local Funding Source	
	System			Service			Ridership		Operating Expenses (millions)	Farebox and Other Revenues (millions)	Net Operating Expenses (millions)	Share of Operating Subsidy				
	Primary Urbanized Area	Population (millions)	Operator	Year Open	Routes - Length (miles) - Stations	Amount of Weekday Service	Other Service	Weekday Trips				Annual Passenger-Miles (millions)	Federal Share (millions)	State Share (millions)		Local Share (millions)
Altamont Commuter Express (ACE)	San Jose	2.0	ACE Joint Powers Authority	1998	1 - 86 - 10	3 RT PP PD only	Weekdays only	3,600	29.5	\$ 11.3	\$ 2.9	\$ 8.3	\$ 0.7	\$ - -	\$ 7.6	Dedicated sales taxes from 3 counties; varies from 1/4 to 1/2-cent.
Coaster	San Diego	3.4	North County Transit District	1995	1 - 42 - 8	12 RT	Additional Fri evening RT; 4 RT on Sat	5,400	40.4	14.0	5.2	8.7	1.0	- -	7.7	Dedicated sales taxes from north half of San Diego County.
Metrolink	Los Angeles	10.5	Southern California Regional Rail Authority	1992	7 - 512 - 54	71 RT	Sat - 12 RT on 2 lines Sun/Hol - 4 RT on 1 line	41,300	364.5	130.8	74.8	55.9	- -	- -	55.9	Dedicated sales taxes from 5 counties; varies from 1/4 to 1/2 cent.
Sounder	Seattle	2.7	Central Puget Sound Regional Transit Authority	2000	2 - 73 - 9	4 RT PP PD on Tacoma line 2 RT PP PD on Everett line	Weekdays only	4,200	24.0	16.0	2.4	13.6	- -	- -	13.6	Dedicated sales tax of 0.4% from 5 subareas in 3 counties. Also motor vehicle excise tax and rental car tax.
Shore Line East	New Haven	1.5	Connecticut DOT	1990	1 - 51 - 8	10 RT PP	Weekdays only	1,800	8.1	7.2	1.2	6.0	- -	6.0	- -	None.
Trinity River Express	Dallas - Ft. Worth	4.1	Fort Worth Transportation Authority (FWTA) and Dallas Area Rapid Transit (DART)	1996	1 - 34 - 9	24 RT	11 RT on Sat	7,600	28.3	25.0	4.3	20.7	- -	- -	20.7	Dedicated sales taxes of 1% through DART and 0.5% through FWTA.
Tri-Rail	Miami	4.9	South Florida Regional Transportation Authority	1989	1 - 71 - 18	20 RT	8 RT on Sat 7 RT on Sun/Hol	10,100	84.8	25.2	6.4	18.8	7.1	6.4	5.3	Each of 3 counties contributes equal amount of local share from general funds. No dedicated local funding.
Virginia Railway Express	Washington	2.4	Northern Virginia Transportation Commission and Potomac and Rappahannock Transportation Commission	1992	2 - 89 - 18	6 RT PP PD on Fredericksburg line 8 RT PP mostly PD on Manassas line	Weekdays only	14,600	103.7	37.4	17.1	20.3	6.2	7.5	6.4	Each jurisdiction contributes a share from general funds based on a population/ridership formula. No dedicated local funding.



Table 16 (continued)

Name of Service	Services and Characteristics					Total Expenses and Revenues for Commuter Rail Mode										Local Funding Source
	System		Service		Ridership		Operating Expenses (millions)	Farebox and Other Revenues (millions)	Net Operating Expenses (millions)	Share of Operating Subsidy						
	Primary Urbanized Area	Population (millions)	Operator	Year Open	Routes - Length (miles) - Stations	Amount of Weekday Service				Other Service	Weekday Trips	Annual Passenger-Miles (millions)	Federal Share (millions)	State Share (millions)	Local Share (millions)	
NEW COMMUTER RAIL SYSTEMS UNDER DEVELOPMENT																
FrontRunner	Salt Lake City	0.9	Utah Transit Authority	2008 estimated	1 - 44 - 8	31 RT	28 RT on Sat	5,800 in 2008 11,800 in 2025	--	18.0	3.6	14.4	--	--	14.4	Dedicated sales taxes from 5 counties; varies from 0.25% to 0.5%.
KRM Commuter Link	Milwaukee	1.3	Southeastern Wisconsin Regional Transit Authority	?	1- 33 - 9	7 RT	3 RT on weekends	4,100 in 2020	30.8	18.6	3.2	15.4 <sup>a</sup>	5.0	8.4	2.0	?
Music City Star	Nashville	0.7	Regional Transportation Authority	2006 estimated	1 - 32 - 6	3 RT PP PD 2 RT PP RD	Weekdays only	1,500 in 2008 1,900 in 2012	--	3.0	1.1	1.9	0.7	0.5	0.7	RTA fees from member counties.
Northstar	Minneapolis	2.5	Northstar Corridor Development Authority	2011 estimated	1 - 40 - 6	5 RT PP PD 1 RT PP RD	3 RT on weekends	4,000 in 2009 5,600 in 2025	--	12.0	4.0	8.0	4.0	2.0	2.0	Regional property taxes from 7 counties.
Rail Runner <sup>b</sup>	Albuquerque	0.6	New Mexico DOT	2006 estimated	1 - 51 - 9	7 RT	Weekdays only	-- <sup>b</sup>	--	9.0	0.9	8.1 <sup>b</sup>	--	6.3	1.8	Freight railroad usage fees.
Sprinter	Oceanside	3.4	North County Transit District	2007 estimated	1 - 22 - 15	32 RT	Also weekends	10,300 in 2008 19,000 in 2020	--	N/A	N/A	N/A	N/A	N/A	N/A	Dedicated sales taxes from north half of San Diego County.
Washington County	Portland	1.3	Tri-County Metropolitan Transportation District of Oregon	2008 estimated	1 - 15 - 5	21 RT	N/A	1,600 in 2008 3,000 in 2020	--	8.8	N/A	N/A	N/A	N/A	N/A	Dedicated payroll tax from district within 3 counties. Also cigarette tax.

Note - N/A indicates data not available, RT indicates Round Trip, PP indicates Peak Period, PD indicates Peak Direction, and RD indicates Reverse Direction.

<sup>a</sup> The total operating costs shown include the costs of all new commuter rail service provided under the project. This includes service within southeastern Wisconsin, and as well, some new service within northeastern Illinois. Much of this new service within northeastern Illinois is reverse-commuter service, including service in the morning outbound from the Chicago Loop and in the afternoon, inbound to the Chicago Loop. Approximately \$4.5 million of the \$18.6 million annual total operating cost shown are due to this service entirely within northeastern Illinois. It is reasonable to expect that negotiations would occur to allocate the costs of this new service between northeastern Illinois and southeastern Wisconsin. The farebox revenue attributable to trips made entirely within northeastern Illinois on this new service have not been estimated or included in these estimates. Potential allocation of the costs of that portion of the new commuter rail service in northeastern Illinois may be expected to reduce the net annual operating expense by 10 to 20 percent and may be expected to increase the corresponding farebox recovery ratio from between 15 and 20 percent to between 20 and 25 percent.

<sup>b</sup> The New Mexico Rail Runner Express will operate with no fares upon start-up, and then with reduced fares. Following an initial three-year period, a permanent fare and funding structure that includes a dedicated local funding source will be put in place.



## **TRANSPORTATION SYSTEMS MANAGEMENT AND PROGRAMMING**

### **Transportation Systems Management Planning and Traffic Engineering**

During 2007, the Commission continued a work effort to carry out transportation systems management or traffic engineering studies for communities in Southeastern Wisconsin. The Commission continued the preparation of a new transit system development plan for the Milwaukee County Transit System. The new plan is intended to provide direction in the operation and development of the County transit system through the year 2012 in much the same way that the previous plan prepared by the transit system provided direction during the mid 1990s. The new plan will be the first transit system development plan prepared by the Commission for Milwaukee County. At year's end, the performance evaluation of the transit system had been completed and was scheduled to be reviewed by the study Advisory Committee. The evaluation identified areas of excellent performance for the transit system, as well as areas of travel needs not being met by existing transit services provided both within and to areas outside the County. The work also examined the financial condition of the transit system, and identified the serious fiscal problems which the transit system may be expected to face by the year 2010. Work on the Milwaukee County Transit System development plan is expected to be completed during 2008.

### **Transportation Improvement Programming**

In December 2006, 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: 2007-2010*. 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 2007-2010 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 \$2.59 billion. Of this total, \$1.38 billion, or about 54 percent, is proposed to be provided in Federal funds; \$805 million, or about 31 percent, in State funds; and \$398 million, or about 15 percent, in local funds. Proposed expenditures for 2007 total about \$837 million. A cost summary for these projects is shown in Table 17.

In order to provide a basis for a better understanding of the types of transportation improvements proposed to be undertaken in the Region, projects have been grouped into nine categories: 1) highway preservation, or reconstruction of existing facilities to maintain present capacities; 2) highway improvement, or reconstruction of existing facilities to increase present capacities; 3) highway expansion, or construction of new facilities; 4) highway safety; 5) highway-related environmental enhancement projects; 6) highway improvement off the Federal aid system; 7) transit preservation; 8) transit improvement; and 9) transit expansion projects. Figure 30 reflects graphically the proposed expenditures in 2007 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 79 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 \$34.8 million, or about 4 percent of total programmed expenditures in the Region.



Table 17

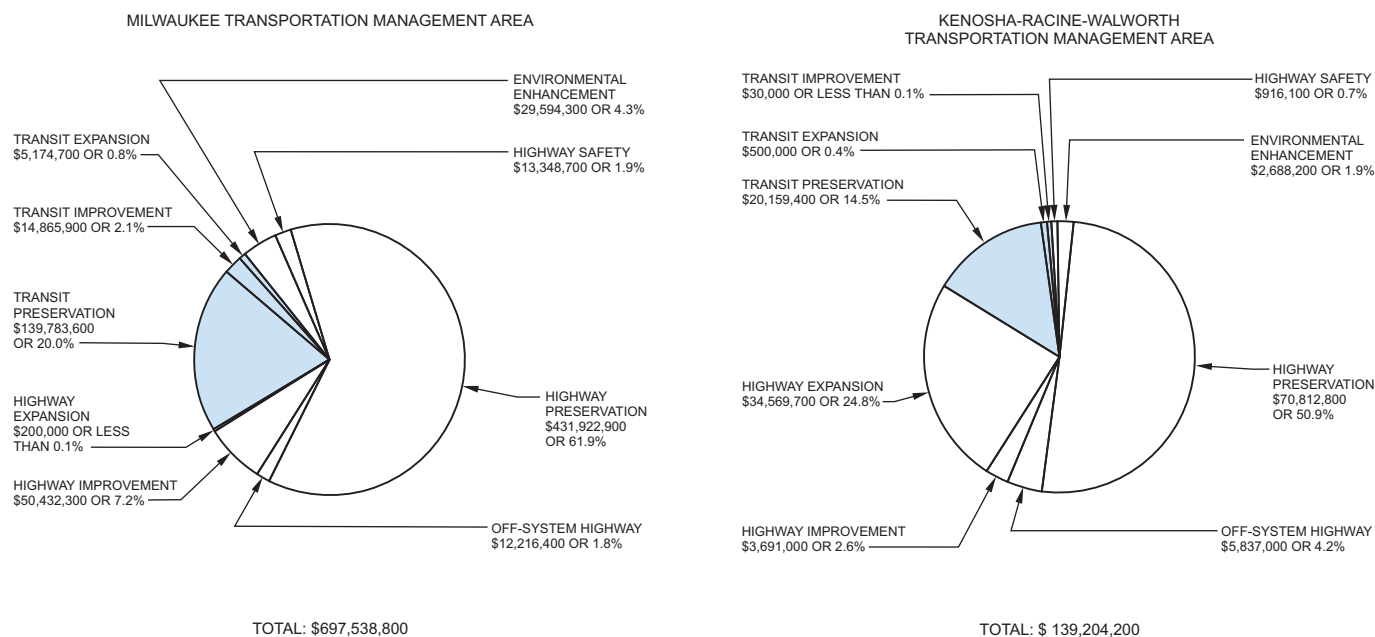
**COST SUMMARY OF PROJECTS WITHIN 2007 OF THE 2007 THROUGH 2010 TRANSPORTATION  
IMPROVEMENT PROGRAM BY TRANSPORTATION MANAGEMENT AREA, COUNTY, AND FUNDING SOURCE**

Transportation Management Area	Proposed 2007 Expenditures
<b>Milwaukee Area</b>	
Milwaukee County	
Federal.....	\$245,421,600
State.....	245,682,500
Local .....	68,864,800
Total	559,968,900
Ozaukee County	
Federal.....	18,088,000
State.....	3,863,000
Local .....	4,985,300
Total	26,936,300
Washington County	
Federal.....	11,495,100
State.....	3,464,600
Local .....	1,674,800
Total	16,634,500
Waukesha County	
Federal.....	41,587,900
State.....	17,104,200
Local .....	35,307,000
Total	93,999,100
Milwaukee Area Subtotal	
Federal.....	316,592,600
State.....	270,114,300
Local .....	110,831,900
Total	\$697,538,800
<b>Kenosha-Racine-Walworth Area</b>	
Kenosha County	
Federal.....	\$16,049,400
State.....	12,460,600
Local .....	10,025,000
Total	38,535,000
Racine County	
Federal.....	27,128,500
State.....	39,886,300
Local .....	7,732,100
Total	74,746,900
Walworth County	
Federal.....	18,957,500
State.....	5,309,300
Local .....	1,655,500
Total	25,922,300
Kenosha-Racine-Walworth Area Subtotal	
Federal.....	62,135,400
State.....	57,656,200
Local .....	19,412,600
Total	\$139,204,200
<b>Region Total</b>	
Federal.....	\$378,728,000
State .....	327,770,500
Local .....	130,244,500
Total	\$836,743,000



Figure 30

### DISTRIBUTION OF EXPENDITURES IN 2007 OF THE 2007-2010 TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY



The expenditures for highway improvement to increase present highway capacities total approximately \$54.1 million, or 7 percent of total expenditures. This compares to the \$502.7 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 2007. Of the total programmed resources for public transit, 89 percent is for preservation, 8 percent is for service improvement, and 3 percent is for service expansion.

## LONG-RANGE PLANNING

### Regional Transportation System Plan

In June 2006 the Commission published and formally adopted the year 2035 regional transportation system plan, the fifth generation of such plans in the Region. The adopted regional transportation plan is documented in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*. At the request of the Southeastern Wisconsin Regional Transit Authority following the

completion of a corridor study, the plan was amended in June 2007 to incorporate the recommendations of the Kenosha-Racine-Milwaukee commuter rail study, as shown on Map 8. The development of the plan was guided by the following vision for the transportation system of southeastern Wisconsin:

*A multimodal transportation system with high-quality public transit, bicycle and pedestrian, and arterial street and highway elements which add to the quality of life of Region residents and support and promote expansion of the Region's economy, by providing for convenient, efficient, and safe travel by each mode, while protecting the quality of the Region's natural environment, minimizing disruption of both the natural and manmade environment, and serving to support implementation of the regional land use plan, while minimizing the capital and annual operating costs of the transportation system.*

The adopted year 2035 regional transportation system plan is designed to serve, and to be consistent with, the year 2035 regional land use plan. Projections of future growth in population, households, and employment from the 2035 regional land use plan were used to develop forecast travel on the planned year 2035 regional transportation system plan. Consistency between the regional transportation plan and the regional land use plan was evaluated by comparing the



Map 8

**PUBLIC TRANSIT ELEMENT OF  
THE RECOMMENDED REGIONAL  
TRANSPORTATION SYSTEM  
PLAN: YEAR 2035**

**RAPID/EXPRESS ROUTE**

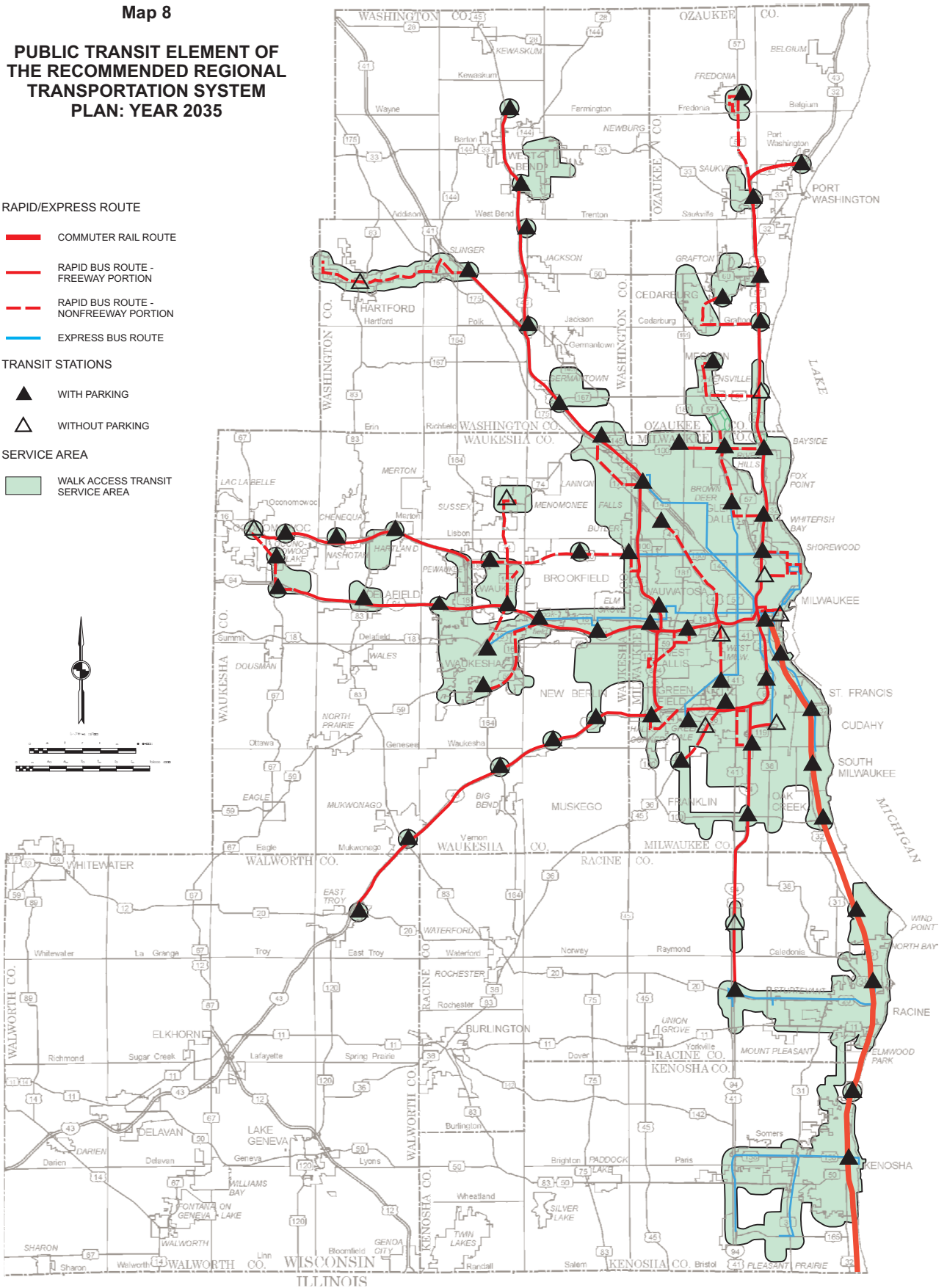
- COMMUTER RAIL ROUTE
- RAPID BUS ROUTE - FREEWAY PORTION
- - - RAPID BUS ROUTE - NONFREEWAY PORTION
- EXPRESS BUS ROUTE

**TRANSIT STATIONS**

- ▲ WITH PARKING
- △ WITHOUT PARKING

**SERVICE AREA**

- WALK ACCESS TRANSIT SERVICE AREA





accessibility and location of improvements proposed under the transportation plan to the location of development and redevelopment proposed under the land use plan.

The development of each element of the 2035 regional transportation system plan—public transit, bicycle and pedestrian, travel demand management, transportation system management, and arterial streets and highways—builds upon the former year 2020 regional transportation plan, recognizing the successful implementation of approximately 15 to 20 percent of each element of the year 2020 plan since 1997.

The transportation system planning process began by consideration and development of the public transit, bicycle and pedestrian facilities, transportation systems management, and travel demand management elements of the plan. Arterial street and highway improvement and expansion were only then considered to address any residual congestion—highway traffic volumes and congestion which would not be expected to be alleviated by the recommended public transit, bicycle and pedestrian, transportation systems management, and travel demand management improvements. The five elements of the year 2035 regional transportation plan—public transit, bicycle and pedestrian facilities, transportation systems management, travel demand management, and arterial streets and highways—are summarized below.

#### *Public Transit Element*

The public transit element of the year 2035 transportation plan recommends a doubling of transit service from 69,000 vehicle-miles of service on an average weekday in 2005, to 138,000 in the year 2035. The plan also recommends development of true rapid and express transit systems, and expansion of transit service to serve the entire metropolitan region, to serve travel on weekdays and weekends, to provide service in both traditional and reverse commute directions, and to provide service throughout the day and evening at convenient service frequencies. Map 8 displays the proposed transit system coverage for each of the three transit system components described below:

- Rapid transit (shown in red on the map) operates over freeways between urban centers and outlying areas with stops every three to five

- miles. The plan proposes increasing weekday vehicle-miles of rapid transit service by over 200 percent and operating throughout the day and evening in both directions, at convenient frequencies, to facilitate both the traditional and reverse direction commute to work travel.
- Express transit (shown in blue on the map) would operate as higher-speed limited-stop bus routes with frequent service and stops every one-quarter to one-half mile. The plan envisions express transit as being initially provided with buses operating over arterial streets in mixed traffic, and would over time be upgraded to buses on reserved street lanes with priority treatment at traffic signals.
- Local transit (shown as the green service area on the map) operates with frequent stops over arterial and collector streets in the Kenosha, Milwaukee, and Racine urbanized areas. The plan proposes an approximate 59 percent increase in weekday vehicle-miles of service. The expanded service area and service hours would require an increase in paratransit service, which would be provided consistent with the Federal Americans with Disabilities Act (ADA) of 1990.

In addition to the rapid, express, and local transit service recommendations, the plan recommends conducting corridor studies to consider upgrading bus rapid transit service to commuter rail service, and express bus service to bus guideway or light rail service. Map 9 displays three potential future commuter rail lines and six potential future light rail/bus guideway lines within southeastern Wisconsin. At the request of the responsible transit operator or government entity, the Commission would amend the regional plan to include the study recommendations. In 2007, there was one effort underway in southeastern Wisconsin considering an upgrade to fixed guideways: the Milwaukee downtown connector study.

Implementation of the proposed expansion of public transit service in southeastern Wisconsin will require funding at sufficient levels to allow the transit system to expand, which will be dependent on both the continued commitment of the State to fund public transit, and on obtaining dedicated local funding for transit.



### *Bicycle and Pedestrian Facilities Element*

The bicycle and pedestrian facility element of the recommended plan is intended to promote safe accommodation of bicycle and pedestrian travel and encourage it as an alternative to personal vehicle travel. The plan recommends that bicycle accommodation—paved and widened shoulders, widened outside travel lanes, bicycle lanes, or separate bicycle paths—should be considered as each segment of the 3,300-mile surface arterial street system is resurfaced, reconstructed, or constructed. The plan also recommends expanding the existing 203 miles of off-street bicycle paths to a planned 575-mile system of off-street bicycle paths that would connect the cities and villages within the Region having populations over 5,000. The proposed system of on-and off-street bicycle ways is shown on Map 10.

The pedestrian facilities portion of the bicycle and pedestrian facilities element is a policy, rather than a system, plan. It recommends that southeastern Wisconsin units of government adopt and follow a set of recommended standards and guidelines with regard to the development of those facilities. The recommended guidelines and standards are designed to facilitate safe and efficient pedestrian travel.

### *Transportation Systems Management Element*

The transportation systems management element recommends a number of measures to operate and manage the existing street and highway facilities to their maximum capacity and efficiency. The proposed measures are described below:

- Freeway traffic management: There are three classes of recommended measures to improve the operation and management of regional freeway system: operational control, advisory information, and incident management. The proposed operational control measures include maintaining existing freeway system traffic detectors and installing additional detectors on most segments of the regional freeway system at one-half-mile intervals; installing ramp meters on all freeway on-ramps within the Region with some exceptions; and expanding the ramp meter control strategy of varying vehicle release rates based on adjacent freeway traffic volume and congestion. The proposed advisory information measures include maintaining the existing variable message signs and providing additional variable message signs on the entire freeway

system and on surface arterials leading to the most heavily-used freeway on-ramps; and consideration of a regional traveler information system which would allow the public to dial “511” and receive automated messages about current travel conditions. The proposed incident management measures include maintaining and expanding the network of closed circuit television cameras which allow for the rapid detection of, and appropriate response to, an incident; expanding the provision of enhanced reference markers to be placed at one-tenth mile intervals along the entire regional freeway system; and expanding freeway service patrols to aid in the rapid removal of disabled vehicles and assist in incident clearance.

- Surface arterial street and highway management: Proposed measures to improve the operation of the regional surface arterial street and highway system include improving and expanding coordinated traffic signal systems; implementing intersection improvements, such as adding right- and/or left-turn lanes, or upgrading the type of traffic control at the intersection; implementing curb-lane parking restrictions during peak traffic periods as needed; applying access management standards for the location, spacing, and operation of driveways, median openings, and street connections; and expanding the advisory information network to include surface arterial street and highway travel.
- Major activity center parking management and guidance: This recommended transportation system management measure would attempt to improve traffic operation conditions by reducing the traffic circulation of motorists seeking parking in major activity centers through the use of static and dynamic signing that would indicate the location of parking structures and the availability of parking in those structures.
- Regional Transportation Operations Program (RTOP): The Wisconsin Department of Transportation (WisDOT) in cooperation with SEWRPC and all transportation system operators in the Region would work to prepare a program of high priority short-range operational improvement projects for implementation, in part, based upon the transportation systems management recommendations in the regional transportation system plan.

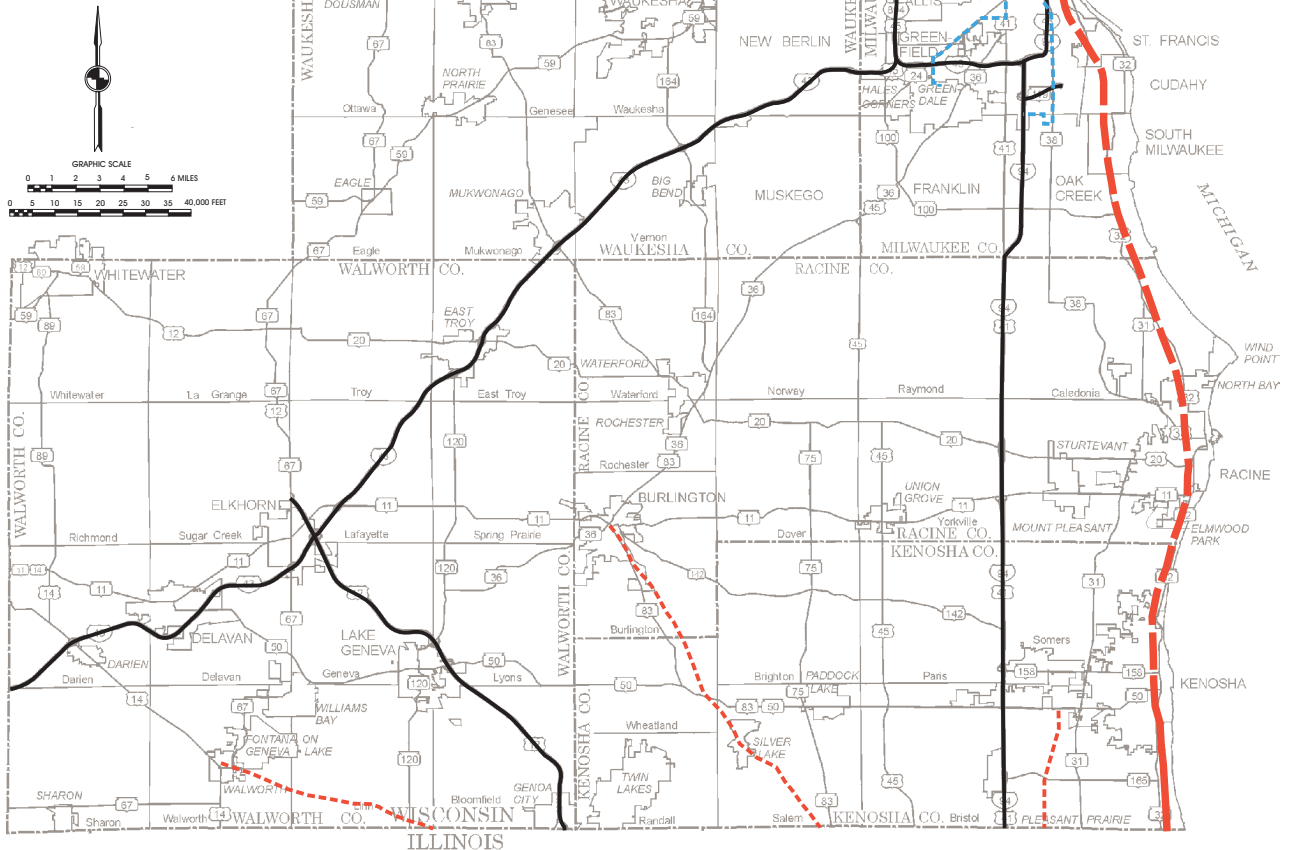


Map 9

**POTENTIAL RAPID TRANSIT  
COMMUTER RAIL AND EXPRESS  
TRANSIT BUS GUIDEWAY/LIGHT  
RAIL LINES UNDER THE  
RECOMMENDED YEAR 2035  
REGIONAL TRANSPORTATION PLAN**

- POTENTIAL ELECTRIC BUS GUIDEWAY FACILITY—CORRIDOR STUDY UNDERWAY
- POTENTIAL BUS GUIDEWAY/LIGHT RAIL FACILITY—TO BE CONSIDERED IN CORRIDOR STUDIES
- EXISTING COMMUTER RAIL
- POTENTIAL COMMUTER RAIL—CORRIDOR STUDY COMPLETED, TO BE ADVANCED INTO PRELIMINARY ENGINEERING
- POTENTIAL COMMUTER RAIL—TO BE CONSIDERED IN CORRIDOR STUDIES
- FREEWAY

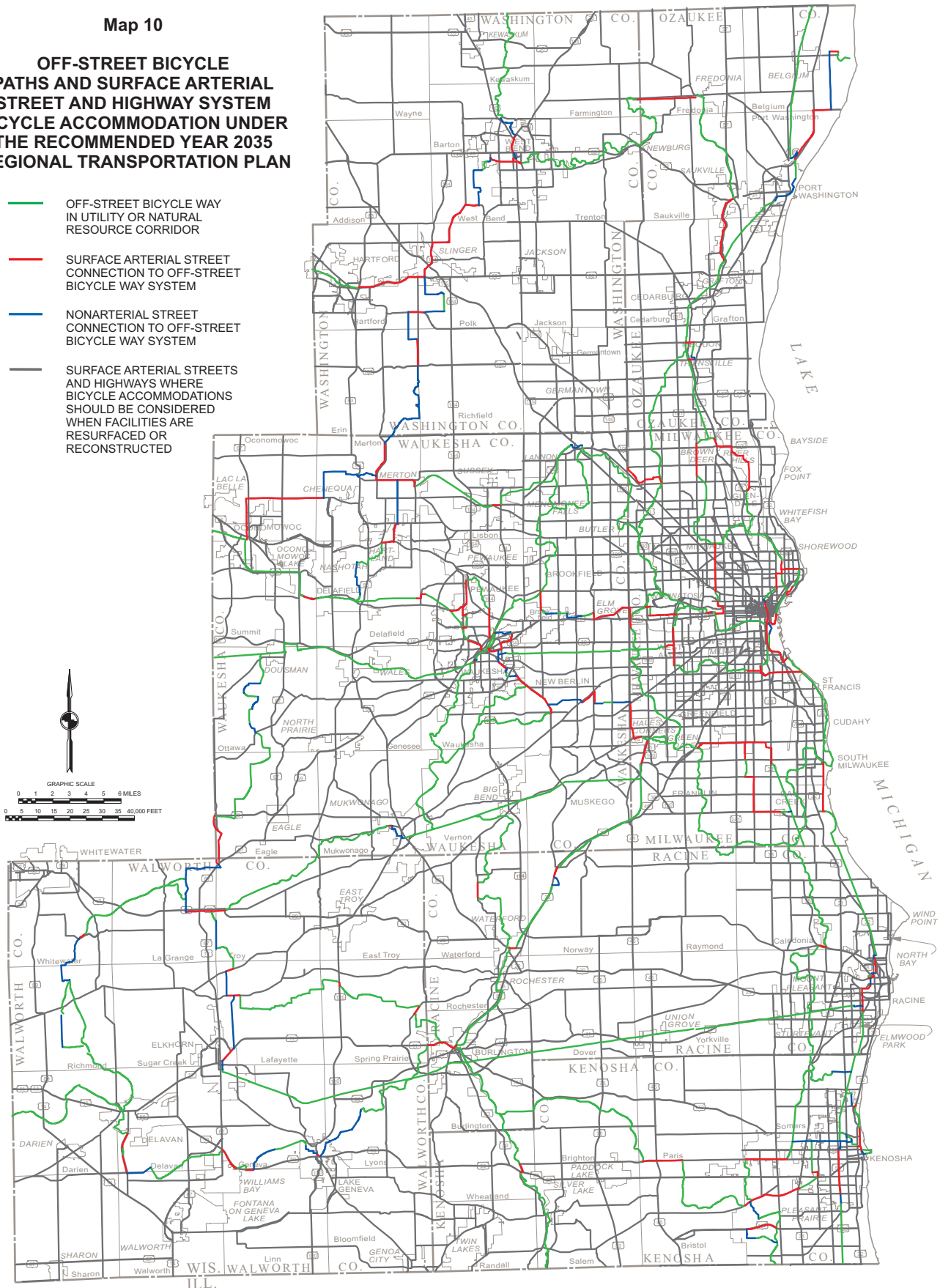
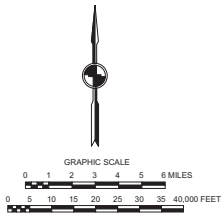
NOTE: BUS GUIDEWAY/LIGHT RAIL FACILITY ALIGNMENTS SHOWN ON MAP ARE CONCEPTUAL. CORRIDOR STUDIES WOULD BE CONDUCTED TO DETERMINE WHETHER TO IMPLEMENT GUIDEWAYS AND TO SELECT A PREFERRED ALIGNMENT. UPON COMPLETION OF EACH CORRIDOR STUDY, THE TRANSIT OPERATOR CONCERNED—LOCAL GOVERNMENT OR REGIONAL TRANSIT AUTHORITY—WOULD DETERMINE WHETHER TO IMPLEMENT EXCLUSIVE FIXED GUIDEWAY TRANSIT—COMMUTER RAIL OR LIGHT RAIL/BUS GUIDEWAY—AND TO PROCEED TO PRELIMINARY ENGINEERING. AT THE REQUEST OF THE TRANSIT SPONSOR AND OPERATOR, THE COMMISSION WOULD THEN FORMALLY AMEND THE REGIONAL PLAN TO INCLUDE THE FIXED GUIDEWAY.



<sup>a</sup>Corridor feasibility studies have been completed for the Chicago-based commuter rail extensions to the Village of Walworth in Walworth County and the City of Burlington in Racine County. The conclusion of the Walworth extension study was that it was potentially feasible and cost-effective, but should be deferred and considered again when a Metra extension from its current terminus in Fox Lake, Illinois is considered to Richmond, Illinois near the Wisconsin-Illinois Stateline. The conclusion of the Burlington extension study was that it was not feasible or cost-effective at that time, but could be considered again in the future.



**OFF-STREET BICYCLE  
PATHS AND SURFACE ARTERIAL  
STREET AND HIGHWAY SYSTEM  
BICYCLE ACCOMMODATION UNDER  
THE RECOMMENDED YEAR 2035  
REGIONAL TRANSPORTATION PLAN**





### *Travel Demand Management Element*

The travel demand management element includes measures intended to reduce personal and vehicular travel, or to shift travel to alternative times and modes. Seven categories of travel demand management measures are proposed in the plan:

- Preferential treatment for high-occupancy vehicles is recommended through the provision of high-occupancy vehicle queue bypass lanes at metered freeway on-ramps in the Region; expansion of the use of reserved bus lanes along congested surface arterial streets and highways; inclusion of transit priority signal systems along all express and major local transit routes; and voluntary employer-provided preferential parking for employees who carpool or vanpool.
- Park-ride lots are recommended along all major routes at their major intersections and interchanges where sufficient demand may be expected to warrant provision of an off-street parking facility. Map 7 on page 60 shows the proposed system of 75 park-ride lots including the existing 50 park-ride lots.
- Transit pricing programs are recommended to encourage greater use of transit and vanpool programs. The plan recommends that the annual transit pass program negotiated between the Milwaukee County Transit System and four colleges and universities be expanded to include the other local public transit operators in the Region and additional colleges and universities within the Region. The plan also recommends the annual pass program be expanded to employers, who could negotiate the cost of providing each employee an annual transit pass, or discounted monthly and weekly passes. The plan also proposes expansion of the existing vanpool program currently operated by the Milwaukee County Transit System, in which a group of employees who live in the same general area split the operation, maintenance, and a portion of the capital costs of a van.
- Personal vehicle pricing which would allocate more of the full construction and maintenance costs of parking, street and highway facilities to personal vehicle users is recommended. Proposed vehicle pricing measures include cash-out of employer paid parking, in which employers currently providing free/subsidized parking to employees would voluntarily begin charging their employees the market value of parking (and offset this charge through an increase in salary); and continued and expanded use of user fees which currently primarily include motor fuel tax and vehicle registration fees.
- Aggressive promotion of transit use, bicycle use, ridesharing, pedestrian travel, telecommuting, and work-time rescheduling.
- Transit information and marketing is proposed, including the continuation and expansion of the joint marketing efforts of the transit operators within southeastern Wisconsin, and the development of a single website where potential transit users could enter information such as the starting and ending points of a desired trip within the Region, and obtain the most feasible transit routing of the desired trip including all fares, transfers, and schedules. The plan also proposes that transit operators utilize global positioning system (GPS) data to provide real-time transit information to transit riders at transit centers and transit stops.
- Detailed site-specific neighborhood and major activity center land use plans are recommended to be prepared and implemented by local governmental units as recommended in the regional land use plan, in order to facilitate travel by transit, bicycle, and pedestrian movement, and reduce dependence on automobile travel.

### *Arterial Street and Highway Element*

The arterial street and highway element of the year 2035 transportation plan totals 3,637 route miles. Highway improvements were recommended to address the residual congestion which may not be expected to be alleviated by recommended land use, public transit, bicycle and pedestrian facilities, systems management, and travel demand management measures in the recommended plan.

Approximately 3,191 miles, or 88 percent of these route miles, are recommended to be resurfaced and reconstructed to their same capacity. Approximately 358 route miles, or less than 10 percent, of the total



recommended year 2035 arterial street and highway system are recommended for widening to provide additional through-traffic lanes, including 127 miles of freeways. The remaining 88 route miles, or 2 percent, are proposed new arterial facilities. Thus, the plan includes recommendations for a capacity expansion of 12 percent of the total arterial system over the next 30 years, and when viewed in terms of lane miles, the plan includes only a 4 percent expansion of lane-miles over the next 30 years.

Map 11 displays, by County, the arterial street and highway system preservation, improvement, and expansion measures recommended under the plan. Each proposed arterial street and highway improvement, and expansion 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 the responsible government entity will make the final decision on whether and how a planned project will proceed to implementation.

#### *Evaluation of the Recommended Transportation Plan*

The adopted year 2035 regional transportation plan contains an evaluation of the recommended plan, including its estimated capital and operating costs, effect on the convenience and efficiency of travel, impact on the environment, and safety. Three alternative transportation system plans were evaluated and compared as part of the evaluation process: a No-build plan alternative, which would maintain the existing transportation system as it existed in the year 2005 with the resurfacing and reconstruction without additional lanes of the existing arterial street and highway system; a Transportation System Management (TSM) plan alternative, which would include all proposed improvements to the transportation system with the exception of the arterial street and highway capacity expansion; and a Transportation Systems Management plus arterial street and highway capacity expansion (TSM Plus Highway) plan, which has been adopted as the recommended year 2035 regional transportation plan. Some of the key benefits and costs of the recommended plan are listed below.

- Map 12 compares existing traffic congestion with forecast future traffic congestion under the No Build and recommended plans. If improvements were limited to the measures under the TSM plan, traffic congestion on an

average weekday would be expected to double over the next 30 years—only slightly less than under a No-Build plan. The arterial street and highway system improvements proposed in the recommended plan may be expected to result in a significant reduction in traffic congestion when compared to the TSM plan, resulting in levels of congestion similar to, and somewhat less than, existing conditions.

- The annual cost of the recommended plan is about 30 percent greater than the cost of simply maintaining existing facilities and services, and about 10 percent greater than current expenditures.
- The plan's impact on air pollutant emissions is relatively modest. Air pollutant emissions from the transportation system have been significantly declining even with increasing traffic due to the normal replacement of aging vehicles with new ones using existing emission control technology. Furthermore, these emissions are projected to continue to substantially decline even with increasing traffic. Measures intended to encourage alternatives to personal and vehicular travel and increase public transit service are expected, in comparison, to have a small impact on projected air pollutant emissions from the transportation system.

#### **Preparation of New County Jurisdictional Highway System Plans Initiated**

This work effort continued following the preparation of the new year 2035 regional transportation system plan. The new jurisdictional highway system plans will respond to planned changes in land use within each county to the year 2035 along with the traffic patterns attendant to the new 2035 regional land use plan.

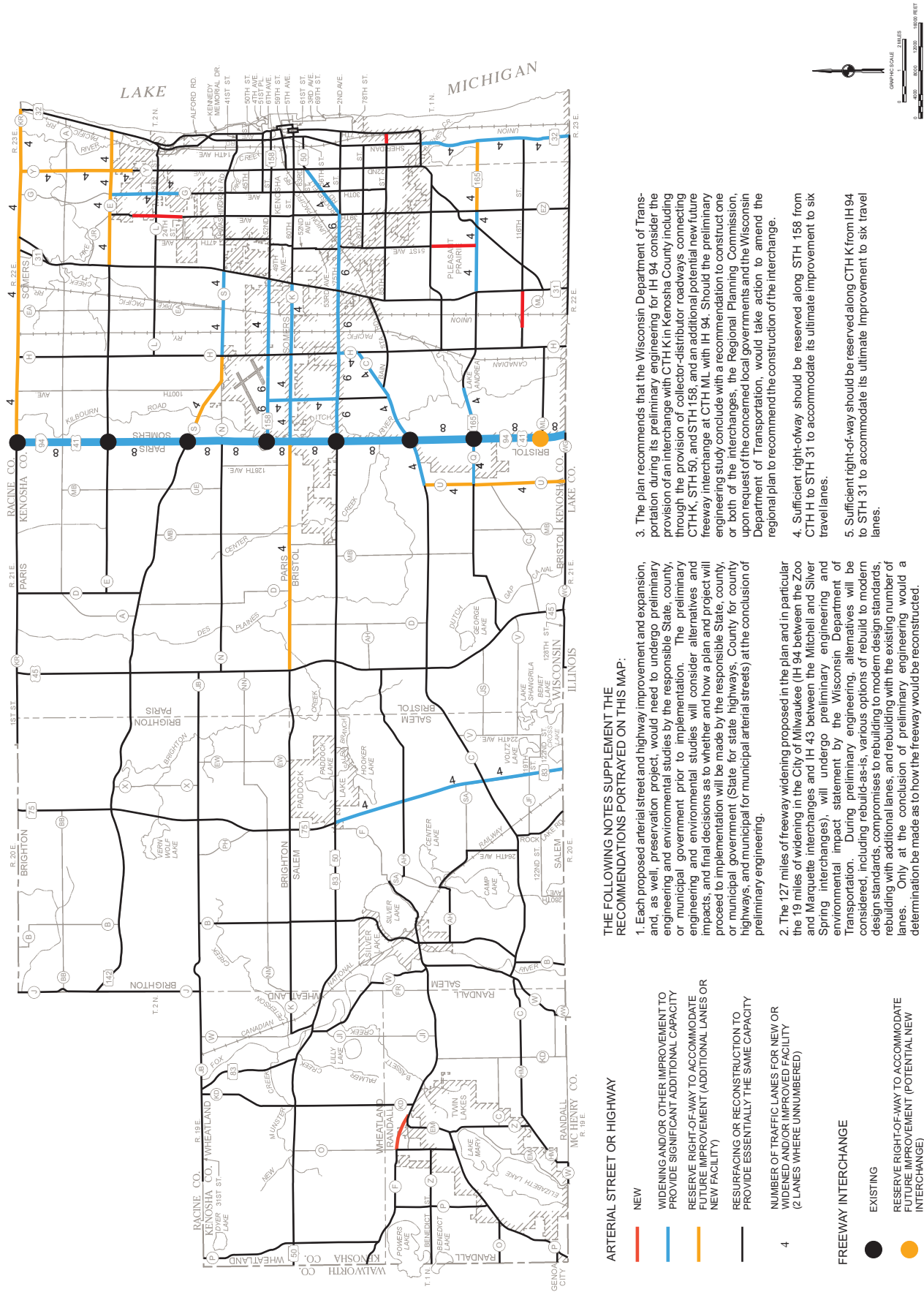
#### **Air Transportation Planning**

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.



Map 11

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN KENOSHA COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN



THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. 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.
2. The 127 miles of freeway widening proposed in the plan and in particular the 19 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild-as-is, various options of rebuild to modern design standards, compromises to rebuilding to modern design standards, rebuilding with additional lanes, and rebuilding with the existing number of lanes. Only at the conclusion of preliminary engineering would a determination be made as to how the freeway would be reconstructed.
3. The plan recommends that the Wisconsin Department of Transportation during its preliminary engineering for IH 94 consider the provision of an interchange with CTH K in Kenosha County including through the provision of collector-distributor roadways connecting CTH K, STH 50, and STH 158, and an additional potential new future freeway interchange at CTH ML with IH 94. Should the preliminary engineering study conclude with a recommendation to construct one or both of the interchanges, the Regional Planning Commission, upon request of the concerned local governments and the Wisconsin Department of Transportation, would take action to amend the regional plan to recommend the construction of the interchange.
4. Sufficient right-of-way should be reserved along STH 158 from CTH H to STH 31 to accommodate its ultimate improvement to six travel lanes.
5. 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.

Source: SEWRPC.



Map 11 (continued)

# **FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN MILWAUKEE COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN**

## ARTERIAL STREET OR HIGHWAY

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

## FREEWAY INTERCHANGE

- NEW
- ◐ HALF NEW
- EXISTING

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

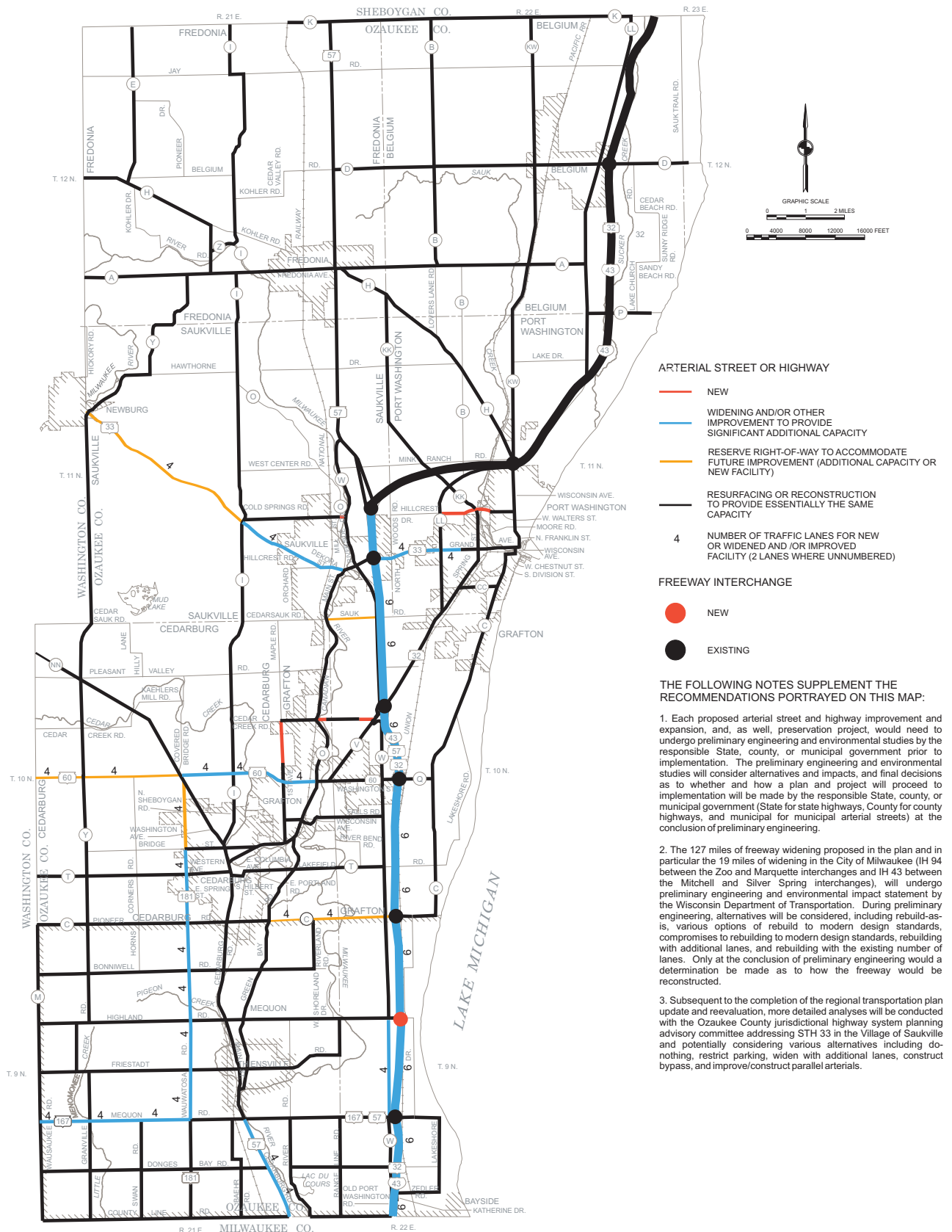
1. Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental 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.
2. The 127 miles of freeway widening proposed in the plan and in particular the 19 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild-as-is, various options of rebuild to modern design standards, compromises to rebuilding to modern design standards, rebuilding with additional lanes, and rebuilding with the existing number of lanes. Only at the conclusion of preliminary engineering would a determination be made as to how the freeway would be reconstructed.
3. The plan also provides further recommendations with respect to half freeway interchanges. The plan recommends that the Wisconsin Department of Transportation during the reconstruction of the freeway system:
  - Convert the S. 27th Street with IH 94 interchange to a full interchange;
  - Consider as an alternative where conditions permit the combination of selected half interchanges into one full interchange - for example, STH 100 and S. 124th Street with IH 43; and
  - Retain all other existing half interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.
4. The plan also recommends that during preliminary engineering for the reconstruction of STH 100 from W. Forest Home Avenue to IH 43, consideration be given to alternatives without additional traffic lanes, alternatives with additional traffic lanes or auxiliary lanes, and alternatives with frontage roads.





Map 11 (continued)

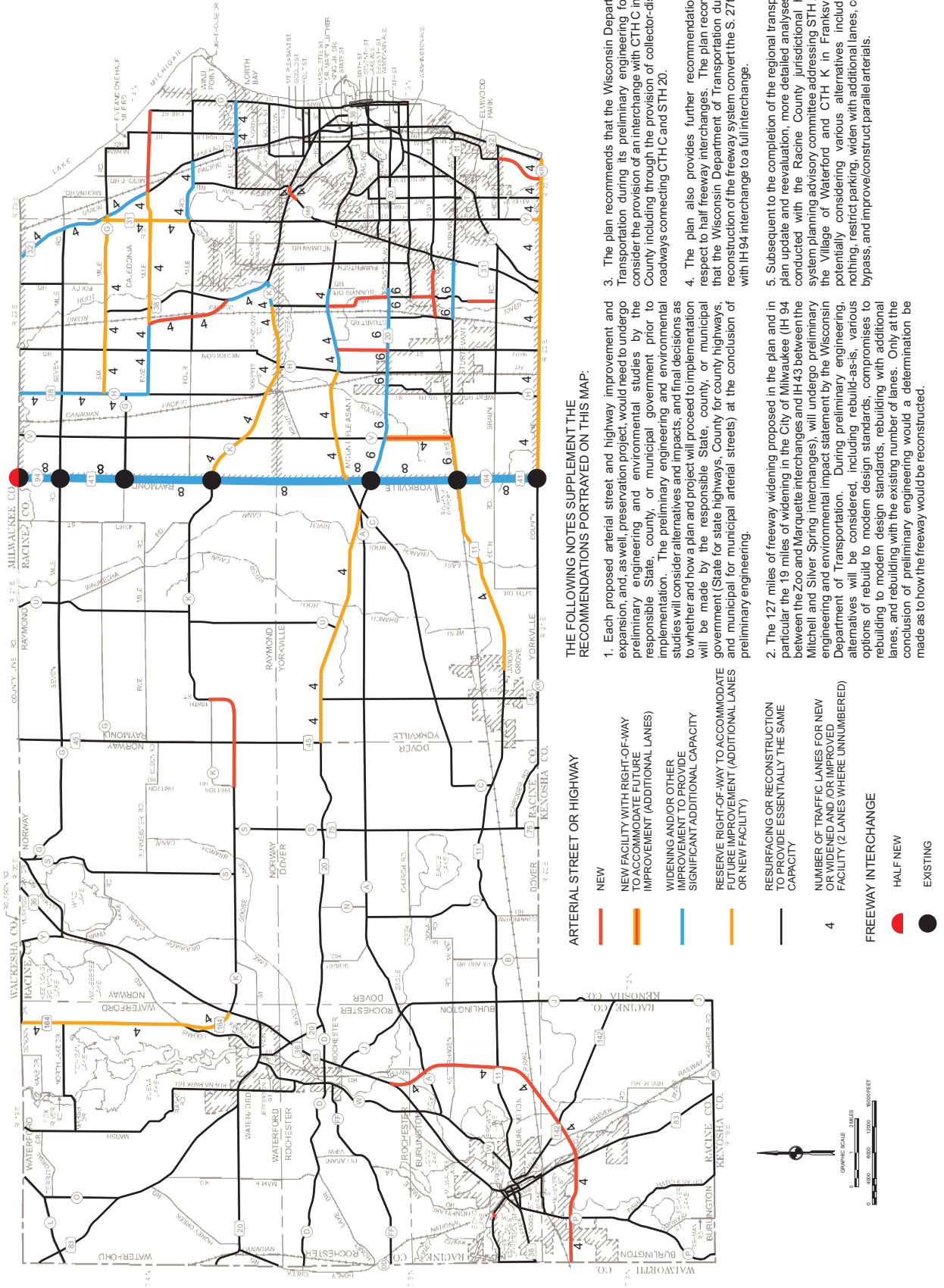
**FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN  
OZAUKEE COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN**





Map 11 (continued)

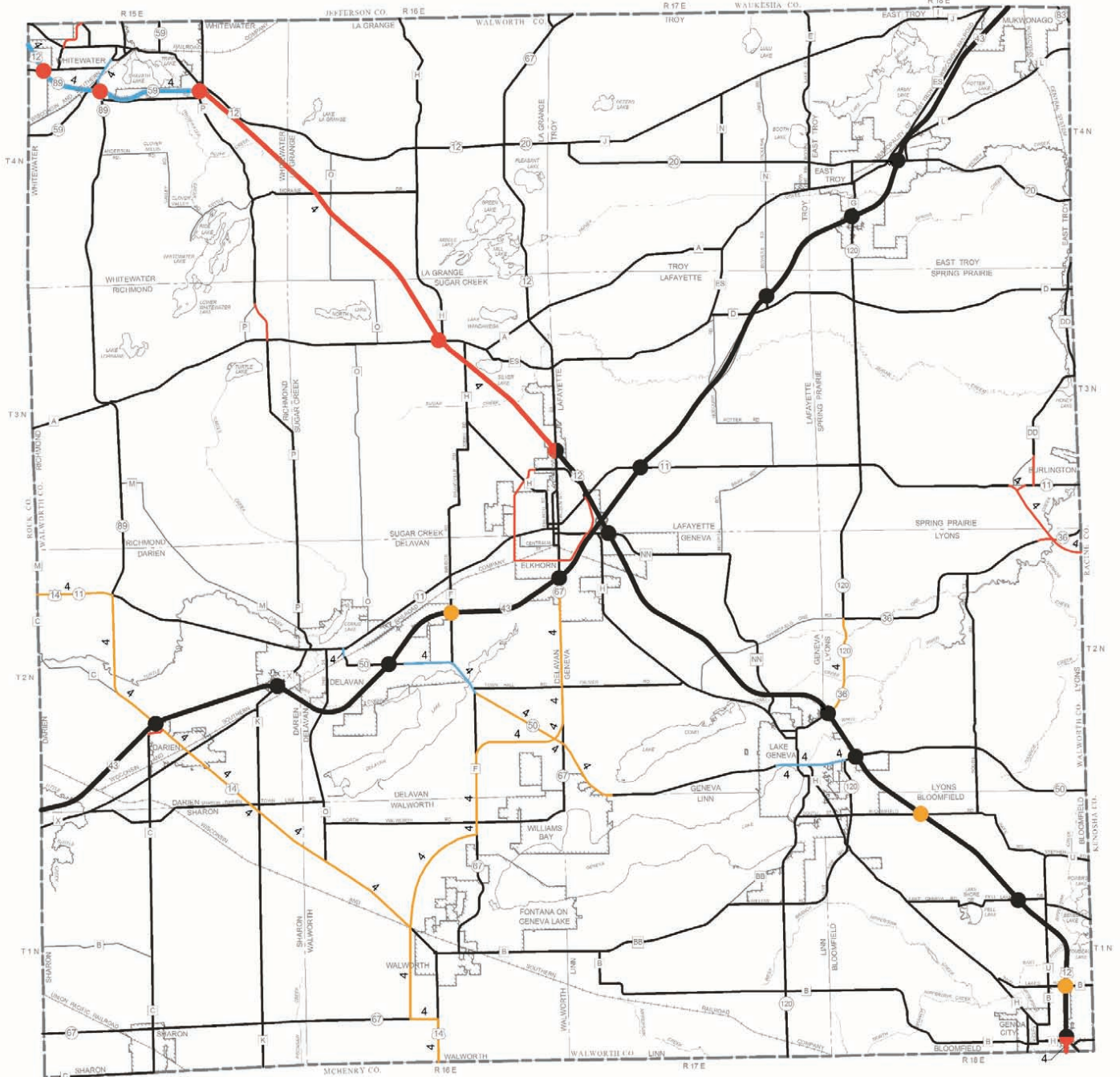
FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN  
RACINE COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN





# Map 11 (continued)

## FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WALWORTH COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN



### ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL CAPACITY OR NEW FACILITY)
- 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
- ◐ HALF NEW
- EXISTING

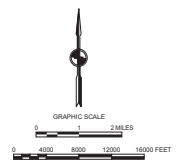
RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL NEW INTERCHANGE)

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

1. 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.

2. The plan identifies additional potential new future freeway interchanges, and recommends that action be taken by the local governments to preserve the potential necessary right-of-way to assure that the future development of these interchanges is not precluded. Should the concerned local governments take the next step of participating with the Wisconsin Department of Transportation in the conduct of a preliminary engineering study of the interchange, and the preliminary engineering conclude with a recommendation to construct the interchange, the Regional Planning Commission, upon the request of the concerned local governments and the Wisconsin Department of Transportation, would take action to amend the regional plan to recommend the construction of the interchange. These potential future new interchanges are CTH B and Bloomfield Road with USH 12 and CTH F with IH 43.

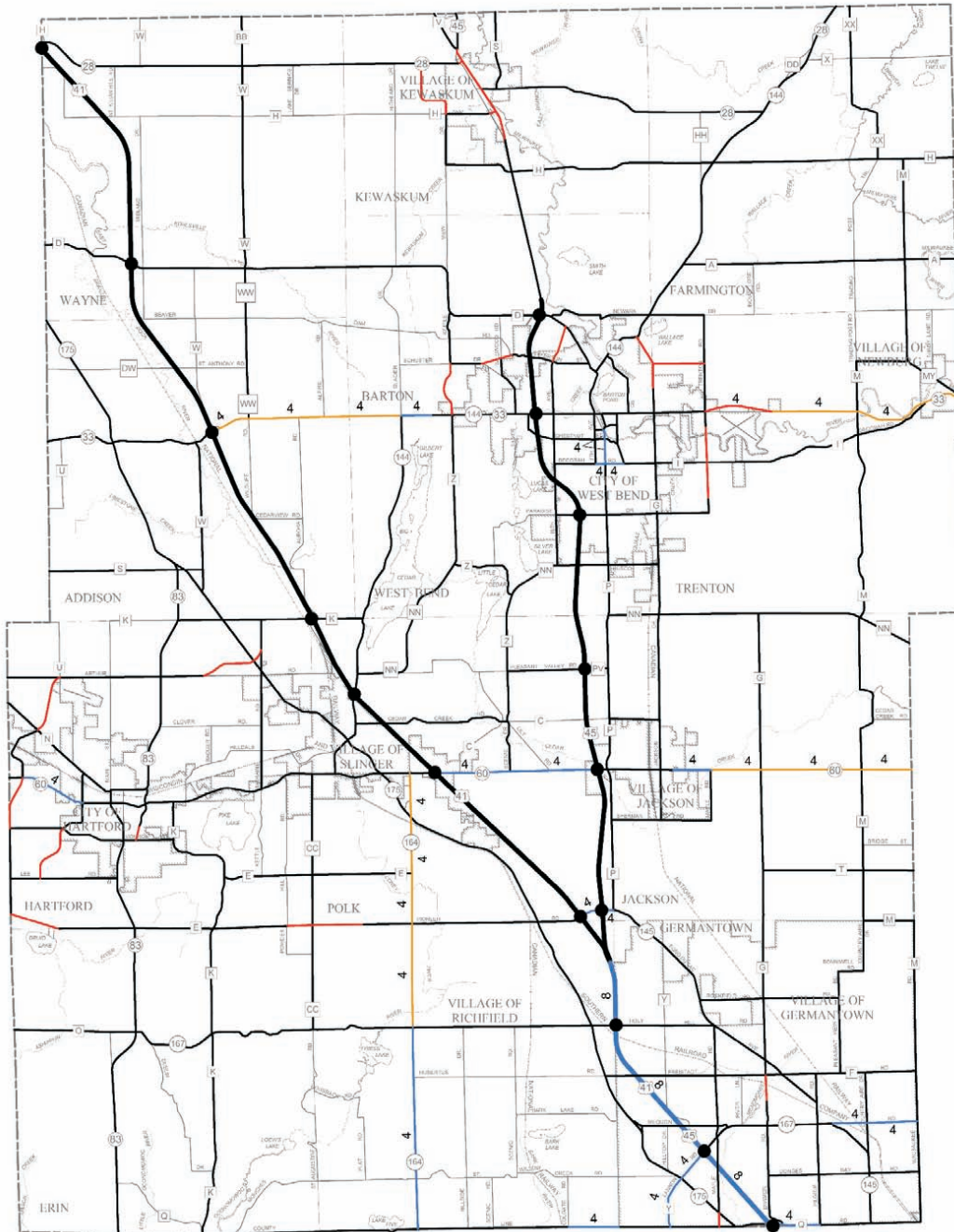
3. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Walworth County jurisdictional highway system planning advisory committee addressing STH 50 in the City of Lake Geneva and potentially considering various alternatives including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.





# Map 11 (continued)

## FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WASHINGTON COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN



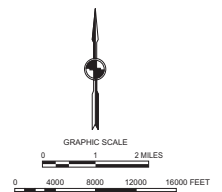
- ARTERIAL STREET OR HIGHWAY**
- NEW
  - WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
  - RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
  - RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
  - 4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)
- FREEWAY INTERCHANGE**
- EXISTING

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

1. 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.

2. The 127 miles of freeway widening proposed in the plan and in particular the 19 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild-as-is, various options of rebuild to modern design standards, compromises to rebuilding to modern design standards, rebuilding with additional lanes, and rebuilding with the existing number of lanes. Only at the conclusion of preliminary engineering would a determination be made as to how the freeway would be reconstructed.

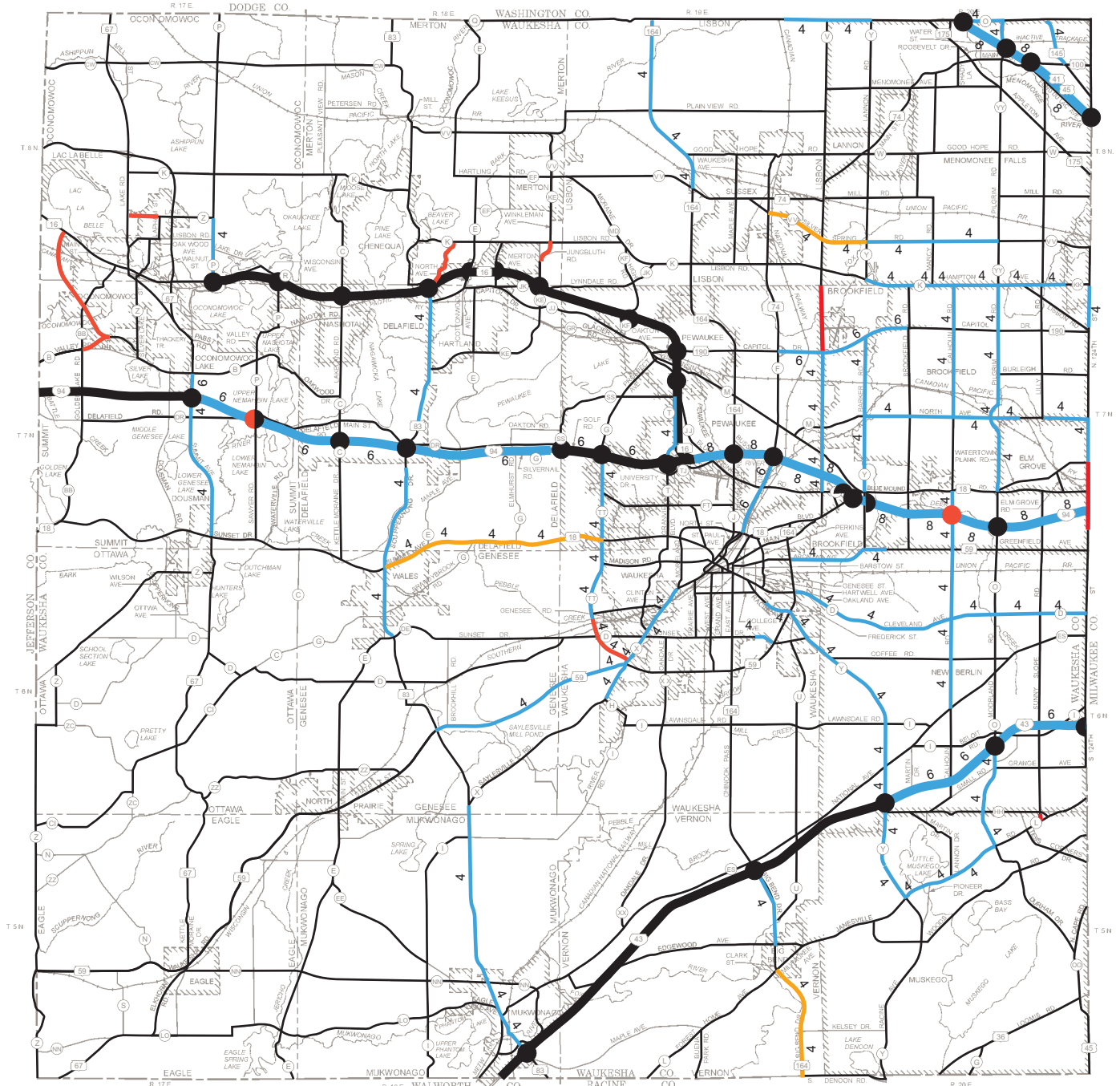
3. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Washington County jurisdictional highway system planning advisory committee addressing STH 60 in the Village of Jackson and potentially considering various alternatives including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.





# Map 11 (continued)

## FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WAUKESHA COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN

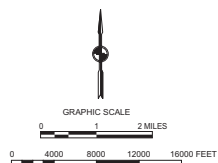


### ARTERIAL STREET OR HIGHWAY

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

### FREEWAY INTERCHANGE

- NEW
- NEW HALF
- EXISTING



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

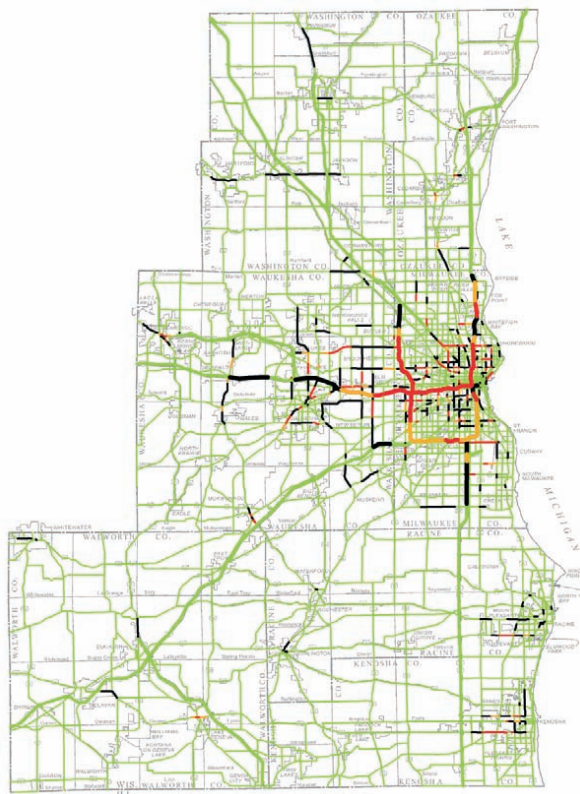
1. Each proposed arterial street and highway improvement and expansion, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental 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.
2. The 127 miles of freeway widening proposed in the plan and in particular the 19 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild-as-is, various options of rebuild to modern design standards, compromises to rebuild to modern design standards, rebuilding with additional lanes, and rebuilding with the existing number of lanes. Only at the conclusion of preliminary engineering would a determination be made as to how the freeway would be reconstructed.
3. The plan also provides further recommendations with respect to half freeway interchanges. The plan recommends that the Wisconsin Department of Transportation during the reconstruction of the freeway system:
  - Convert the CTH P with IH 94 interchange to a full interchange.
  - Consider as an alternative where conditions permit the combination of selected half interchanges into one full interchange - for example, STH 100 and S. 124th Street with IH 43; and
  - Retain all other existing half interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.
4. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Waukesha County jurisdictional highway system planning advisory committee addressing STH 164 in the Village of Big Bend and potentially considering various alternatives including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.



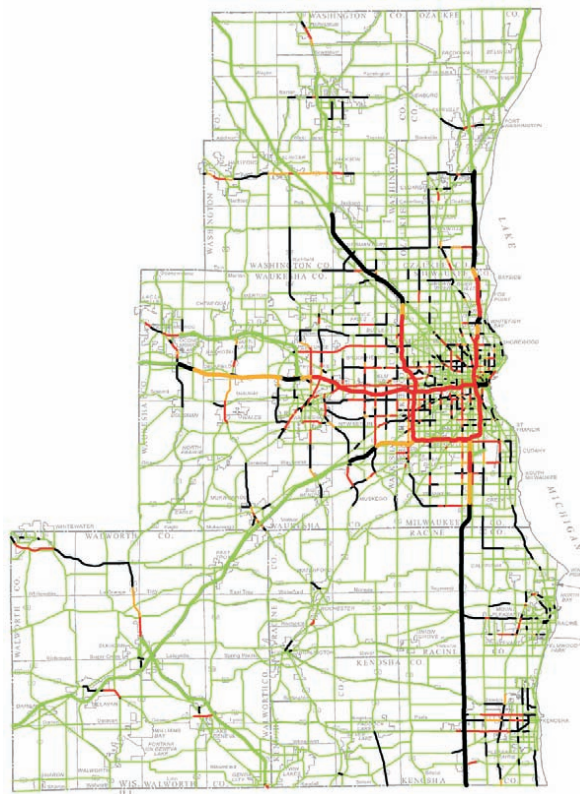
Map 12

**COMPARISON OF EXISTING YEAR 2001 AND FORECAST FUTURE YEAR 2035 AVERAGE WEEKDAY TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION UNDER THE TSM AND TSM PLUS HIGHWAY ALTERNATIVE PLANS**

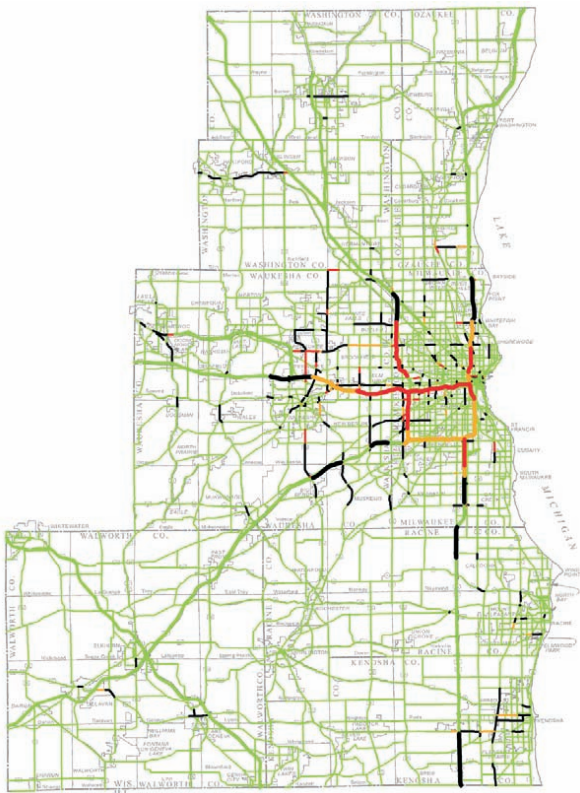
2001



TSM PLAN

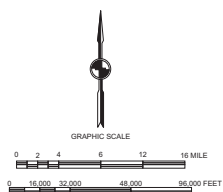


TSM PLUS HIGHWAY PLAN



**FACILITY CONGESTION STATUS**

- AT OR UNDER DESIGN CAPACITY
- MODERATELY CONGESTED
- SEVERELY CONGESTED
- EXTREMELY CONGESTED





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 2007, total aircraft operations at Mitchell International totaled about 200,200, representing about a 1 percent decrease from 2006. The 2007 total is about 13 percent below the 230,700 operations forecast to occur at Mitchell International during that year under the adopted regional airport system plan.

From 2006 to 2007, the number of air carrier enplaning and deplaning passengers at Mitchell International increased by about 414,000, to about 7,713,100 passengers, or about 6 percent above the 2006 level of about 7,299,300 passengers. The 2007 level was within 3 percent of the 7,490,000 passengers forecast for that year under the adopted regional airport system plan.

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 58,700 total operations during 2007, representing about a 2 percent decrease from the 59,700 total operations in 2006. At Kenosha Regional Airport, there were about 61,000 total operations during 2007, representing about a 7 percent decline from the 65,700 total operations in 2006. At Lawrence J. Timmerman Airport, there were about 44,600 total operations during 2007, representing about a 16 percent decrease from the 53,000 total operations in 2006. At General Mitchell International Airport, where general aviation accounts for only a small portion of all activity, there were about 20,400 general aviation operations reported for 2007, representing about a 3 percent decrease from the 20,900 general aviation operations reported for 2006.

### **Rail Transportation Planning**

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, General Mitchell International Airport,

and Sturtevant. Commuter rail service is provided between Kenosha and Chicago, with intermediate stops throughout the north shore suburbs of northeastern Illinois, by the Union Pacific Railroad under an agreement with Metra, the commuter rail division of the Regional Transportation Authority (RTA) in northeastern Illinois.

#### *Kenosha-Racine-Milwaukee (KRM) Commuter Link Project*

During 2007, the Kenosha-Racine-Milwaukee corridor study neared completion. Based upon an evaluation of commuter rail and bus alternatives, the Southeastern Wisconsin Regional Transit Authority (RTA) and the Steering Committee of the Intergovernmental Partnership of the Cities and Counties of Kenosha, Milwaukee and Racine, and the Wisconsin Department of Transportation concluded that a commuter rail line should be implemented between Milwaukee and Kenosha, connecting to Metra Kenosha to Chicago commuter rail. The Commission staff acted as project manager and staff in the conduct of this corridor study.

The conclusions of the evaluation and comparison of the costs and benefits of the commuter rail and bus alternatives were as follows:

***Travel Time and Speed*** – Commuter rail will be much faster than bus in connecting the Kenosha, Milwaukee, and Racine areas to each other and with northeastern Illinois. An example of the average speed and travel time is shown below:

- Commuter Rail: 38 mph average speed; 52 minutes average travel time
- Bus: 20 to 29 mph average speed; 83 to 108 minutes average travel time

In comparison, an automobile may be expected to make the same trip during peak traffic hours in about 54 minutes.

***Travel Reliability*** – Commuter rail would provide the highest level of reliability:

- Operating over a separate non-highway right-of-way, it would not be affected by the unpredictable nature of rush-hour automobile and truck traffic
- It would have priority over street and highway traffic at crossings and over freight traffic on railroads



- Inclement weather would have little impact, this being especially important during the winter season

***Comfort and Convenience*** – Commuter rail would provide the highest level of comfort, convenience, and overall attractiveness:

- It can provide a smoother and more consistent ride due to the vehicles operating on a dedicated route alignment that doesn't have interference from other traffic
- Its route simplicity, dedicated route, and larger stations and equipment make it more visible and therefore easier to use

***Ridership*** – Commuter rail may be expected to attract more than twice the ridership than bus:

- On an average weekday, commuter rail will attract 6,700 trips vs. 2,600 for bus
- Annually, commuter rail will attract 1.72 million trips vs. 0.66 million for bus

***Passenger-Miles*** – Passenger-miles from commuter rail ridership represent four times the passenger-miles from bus (as a result of attracting longer trips):

- On an average weekday, commuter rail will attract 98,700 passenger-miles vs. 24,200 for bus
- Annually, commuter rail will generate 25.2 million passenger-miles vs. 6.2 million for bus

***Impact on Highway System*** – Commuter rail will have a substantially greater impact on highway system traffic and traffic congestion:

- Commuter rail ridership will be 2.6 times that of bus, and passenger-miles will be 4.1 times that of bus

***Alternative During IH 94 Reconstruction*** – Commuter rail will provide a far superior alternative mode of travel during IH 94 reconstruction over the next 20 years compared to a bus alternative:

- Commuter rail will be able to attract significantly more traffic from IH 94 which will be limited in capacity during reconstruction.

- Commuter rail will offer an alternative which will be competitive with automobile travel time and will be unaffected by increased IH 94 freeway and corridor traffic congestion.

***Air Pollutant Emissions and Energy Consumption*** – Commuter rail would contribute to a greater reduction in vehicle generated air pollutant emissions and vehicle energy consumption in proportion to its potential to attract greater transit ridership, longer trips by transit, and new transit trips:

- Additional reductions in air pollutant emissions and energy consumption may be expected due to commuter rail's potential to encourage more efficient higher density infill development and redevelopment

***More Efficient Development and Redevelopment*** – Commuter rail will have the potential to result in more efficient higher density land development and redevelopment around its stations in the corridor and reduce urban sprawl:

- Encourage desirable needed and planned development in central cities of Milwaukee, Racine, and Kenosha and inner, older suburbs of Cudahy, St. Francis, and South Milwaukee
- Encourage higher density, more efficient development in the developing communities of Oak Creek, Caledonia, and Somers
- Commuter rail may be expected to support, and assist in bringing about, planned development around its nine stations of up to:
  - 23,000 residential units
  - 71,000 jobs
  - 7.6 million square feet of retail space
  - 4.7 million square feet of office space
- Some of the above development and redevelopment may be specifically attributed to the implementation of commuter rail:
  - 12,800 residential units
  - 17,100 jobs



***Economic Impact of Development and Redevelopment*** – Economic impact of potential development around the nine commuter rail stations totals:

- Increase in assessed valuation of \$7.9 billion
- Increase in annual retail sales of \$750 million
- This does not include the spillover of development and redevelopment, and increased land and property values which will occur in neighborhoods adjacent to the immediate station areas

***Accessibility to Jobs*** – Due to its higher average speeds and resulting lower travel times, commuter rail will provide greater accessibility to the significant number of jobs in the KRM/northeastern Illinois corridor:

- Corridor jobs within a one mile station radius in the year 2000:
  - Downtown Milwaukee – 110,300
  - Milwaukee County – 21,600
  - Kenosha and Racine Counties – 28,200
  - Chicago North Shore Suburbs – 95,100
  - Chicago North Side – 58,500
  - Downtown Chicago – 599,400

This corridor provides access to far more jobs than any other potential southeastern Wisconsin transit corridor, for example, compared to a Milwaukee – Oconomowoc commuter rail or Milwaukee – Waukesha express bus corridor:

- More than 4 times more jobs
- More than 50 percent more jobs (if Downtown Chicago jobs not included)

The KRM commuter rail provides this job access to central city residents, and in particular minority populations, low income populations, and those without an automobile and dependent upon public transit:

- For example, an estimated 245,900 or 41 percent of City of Milwaukee residents reside within 3 miles of the two proposed KRM train stations in the City of Milwaukee, some within walking distance and others within a short connecting bus or shuttle ride or drive or drop off by automobile. Of these city residents, about 30 percent, or 71,500 do not own an automobile; and 58 percent or 143,000 are minorities (slightly higher than the city as a whole) including 72,000 African Americans and 57,900 Hispanics.
- The number of jobs accessible to these City of Milwaukee residents (not including downtown Milwaukee) by the KRM commuter rail totals over 800,000 jobs in total, 200,000 jobs not including downtown Chicago and 140,000 jobs not including the Downtown and North Side of Chicago. This can be compared to Milwaukee – Oconomowoc commuter rail and Milwaukee – Waukesha express bus at 80,000 and 100,000 jobs, respectively (also not including downtown Milwaukee)

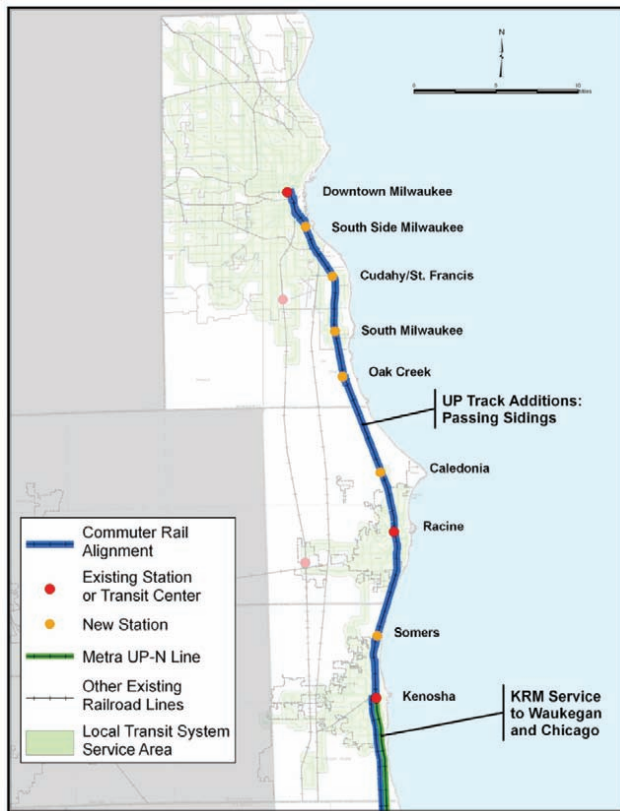
***Encouraging Corridor Economic Development and Growth in the Corridor*** – Due to its much higher average speeds and shorter travel times, commuter rail will do a significantly better job of more closely connecting Kenosha, Racine, and Milwaukee to each other and to northeastern Illinois and Chicago:

- This improved linkage between southeastern Wisconsin and the mega-metropolitan area of northeastern Illinois may be expected to result in more economic and population growth in the KRM corridor and in southeastern Wisconsin.
- The potential for future economic growth of southeastern Wisconsin through more closely linking to northeastern Illinois is one of a few major economic development themes being advanced for southeastern Wisconsin by the Milwaukee 7.
- Companies such as S.C. Johnson, one of the largest employers in southeastern Wisconsin and in the State of Wisconsin, have cited the importance of this link to northeastern Illinois to



Map 13

**PROPOSED KENOSHA-RACINE-  
MILWAUKEE COMMUTER RAIL**



retaining and attracting qualified employees, and maintaining and expanding their presence in southeastern Wisconsin.

**Capital and Operating Costs** – Commuter rail would have higher capital costs and annual operating and maintenance (O&M) costs (in 2006 dollars) than bus

- Capital cost—\$198 million for commuter rail compared to \$27 million for bus
- Annual O&M cost—\$10.9 million total and \$6.3 million net (less passenger fares) for commuter rail compared to \$3.2 million total and \$1.9 net for bus

The Southeastern Wisconsin RTA, after carefully considering the costs and benefits of the commuter rail and bus alternatives, concluded that the benefits of commuter rail outweighed its operator costs, and sought the authority to sponsor, implement, and

provide the local funding for the KRM commuter rail in the 2007-2009 biennial State of Wisconsin budget, but was unsuccessful. The Southeastern Wisconsin RTA and Intergovernmental Partnership determined to continue to pursue implementation of the KRM commuter rail by working towards completion of the Draft Environmental Impact Statement for the project, preparing the necessary application to the U.S. Department of Transportation, Federal Transit Administration for a Federal discretionary capital grant to be submitted in the summer of 2009, and continuing work on the RTA's primary function of recommending to the State Legislature and Governor a permanent, dedicated funding source for the local share of capital and operating costs of public transit, including commuter rail. The Commission staff continued to assist the RTA and Intergovernmental Partnership in these efforts in 2007.

The following provides a description of the proposed KRM commuter rail:

- Would use commuter rail service to connect Milwaukee and Racine to the existing Chicago-Kenosha commuter rail service
  - 33-mile route using existing Union Pacific Railroad (UP) and Canadian Pacific Railway (CP) freight lines (See Map 13)
- Nine stations
  - Existing stations at Kenosha and Milwaukee and new transit center at Racine
  - New stations at Somers, Caledonia, Oak Creek, South Milwaukee, Cudahy-St. Francis, and Milwaukee South Side
- Level of service
  - Service provided in both directions during all time periods
  - 14 weekday trains in each direction
  - Operating speed – up to 59 mph
  - Average speed – 38 mph
- Shuttle bus service



- Dedicated service between Amtrak station and Milwaukee central business district
- Dedicated service between General Mitchell International Airport and Cudahy-St. Francis station
- Train operation
  - Service provided by meeting existing Metra trains at either Kenosha or Waukegan
- One new train between Milwaukee and Chicago (to Milwaukee in A.M. and Chicago in P.M.)
- Contract with UP Railroad and provide time-transfer (6 minutes) at Kenosha and Waukegan to Metra
- Diesel-Multiple-unit cars (“DMUs” or self-propelled coaches)



# 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 management, as opposed to flooding, problems and to provide adequate facilities for existing and probable future rural and urban development? How can improved stormwater management systems best integrate stormwater drainage and 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 2007 in four program areas: water quality management planning; water supply planning; watershed, floodland, and stormwater management planning; and coastal management planning.

## WATER QUALITY MANAGEMENT PLANNING

During 2007, 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 activities related to the abatement of nonpoint source pollution and in completing 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 wastewater 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 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 2007, the Commission completed work on an update of the regional water quality management plan for the Greater Milwaukee Watersheds (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 14, 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 was coordinated with a parallel sewerage facilities planning program carried out by the Milwaukee Metropolitan Sewerage District (MMSD) which was designed to utilize the watershed approach consistent with evolving U.S. Environmental Protection Agency (USEPA) policies. The study area is shown on Map 14. 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 coordinated approach to carrying out the regional water quality management plan update and the MMSD facilities planning program was developed cooperatively by the WDNR, the MMSD, and SEWRPC. The regional water quality management plan update resulted 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 was added based largely upon companion work programs.

The regional water quality management plan update was documented in two reports;

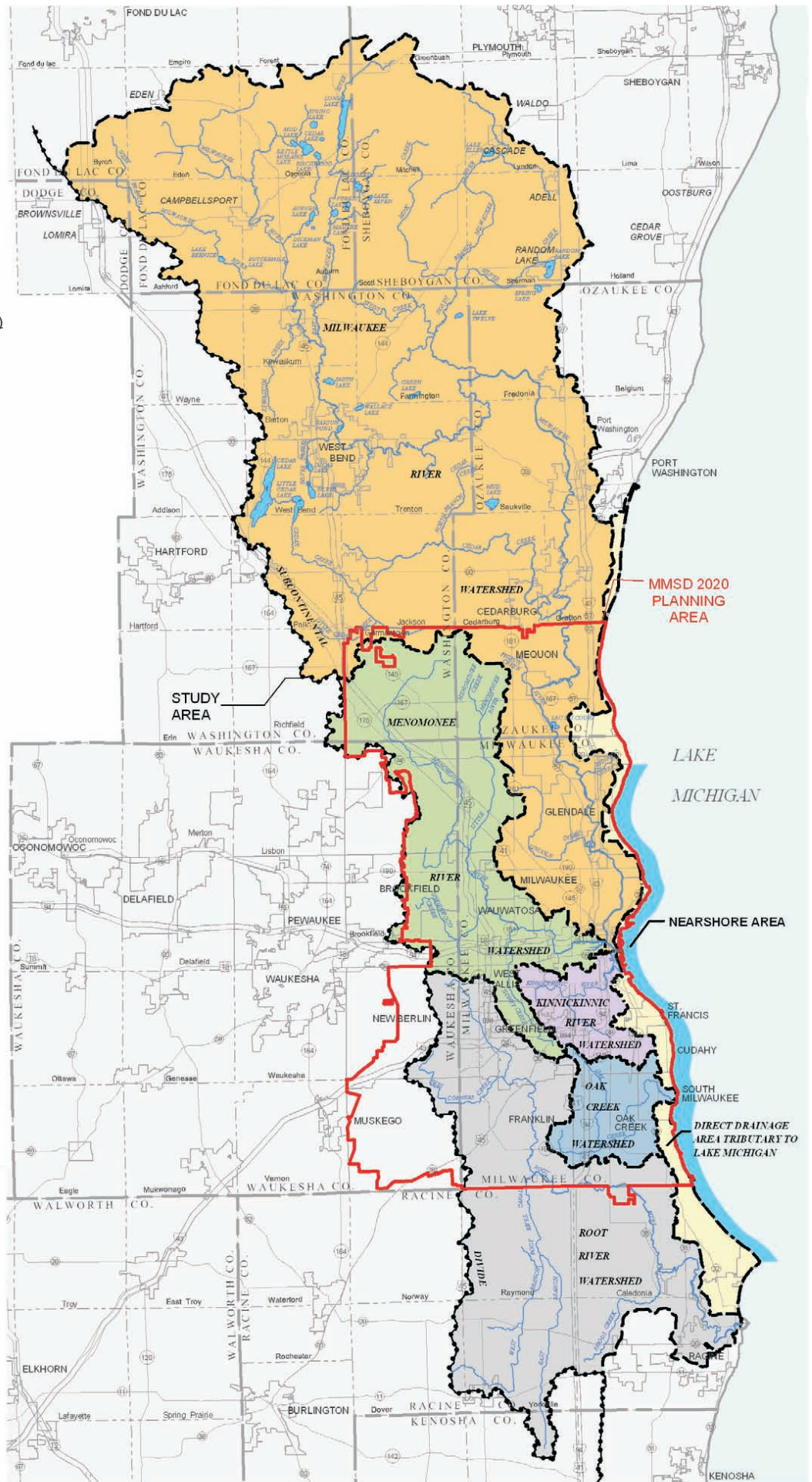
- SEWRPC Planning Report No. 50 (PR No. 50), *A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds*, December 2007, and
- SEWRPC Technical Report No. 39 (TR No. 39), *Water Quality Conditions and Sources of Pollution in the Greater Milwaukee Watersheds*, November 2007.

Planning Report No. 50 documents the development of the regional water quality management plan update including inventories, analyses of alternative plans and the recommended plan, and a plan implementation strategy. Detailed systems-level costs are set forth for the alternative plans and the recommended plan. The plan is developed for year 2020 land use and population conditions. In 2007, the following chapters from PR No. 50 were prepared by the Commission staff and reviewed and approved by the Technical Advisory Committee that guided the preparation of the plan:



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

MMSD PLANNING AREA	
NUMBER OF COUNTIES	5
NUMBER OF LOCAL MUNICIPALITIES	29
TOTAL AREA (SQUARE MILES)	416





- Chapter III - Existing and Historical Surface Water and Groundwater Conditions,
- Chapter IV - Sources of Water Pollution,
- Chapter VIII - Future Situation: Anticipated Growth and Change,
- Chapter X - Recommended Water Quality Management Plan,
- Chapter XI - Plan Implementation, and
- Chapter XII - Summary.

Technical Report No. 39 presents detailed information on water and sediment quality conditions; includes detailed analyses of measured water quality data, including toxicity conditions in water, sediment, and the tissue of aquatic organisms; presents water quality modeling data regarding pollutant loads from point and nonpoint sources; describes stream channel and habitat and riparian corridor conditions; presents inventories and evaluations of fishery and macroinvertebrate conditions; evaluates water quality trends over the past 30 years; and assesses levels of compliance with regulatory water use objectives and associated water quality standards and criteria. The following chapter from TR No. 39 was completed and reviewed and approved by the Advisory Committee:

- Chapter XII - Summary and Conclusions.

Report chapters can be accessed at [www.sewrpc.org](http://www.sewrpc.org).

The recommended regional water quality management plan update for the greater Milwaukee watersheds:

- Incorporates almost all of the MMSD 2020 facilities plan recommendations;
- Includes recommendations regarding construction of trunk sewers and future facilities planning for public sewerage systems outside the MMSD planning area (Map 15 displays recommended point source control measures within the study area);
- Calls for the preservation of environmentally significant lands;
- Includes specific recommendations to establish or expand riparian buffers along streams adjacent to

agricultural lands and to convert some marginally productive farmland to wetland and prairie conditions;

- Calls for voluntary county programs to oversee older private onsite wastewater treatment systems;
- Recommends enhanced programs to detect and eliminate illicit discharges to storm sewer systems and to control urban-sourced pathogens;
- Promotes programs to reduce both the use of fertilizers containing phosphorus and the discharge of chlorides to waterways from water softeners and through runoff from roads, highways, and parking lots;
- Recommends instream and inland lake measures to improve water quality; and
- Includes recommendations related to groundwater recharge and sustainability, expanded mapping of groundwater contamination areas, stormwater management measures affecting water quality, and water conservation.

The plan also includes detailed assessments of the degree to which the water quality standards and criteria that support the designated uses of the streams in the study area would be expected to be met under recommended plan conditions. Map 16 graphically indicates anticipated compliance with selected water quality standards under recommended plan conditions in the Menomonee River watershed.

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

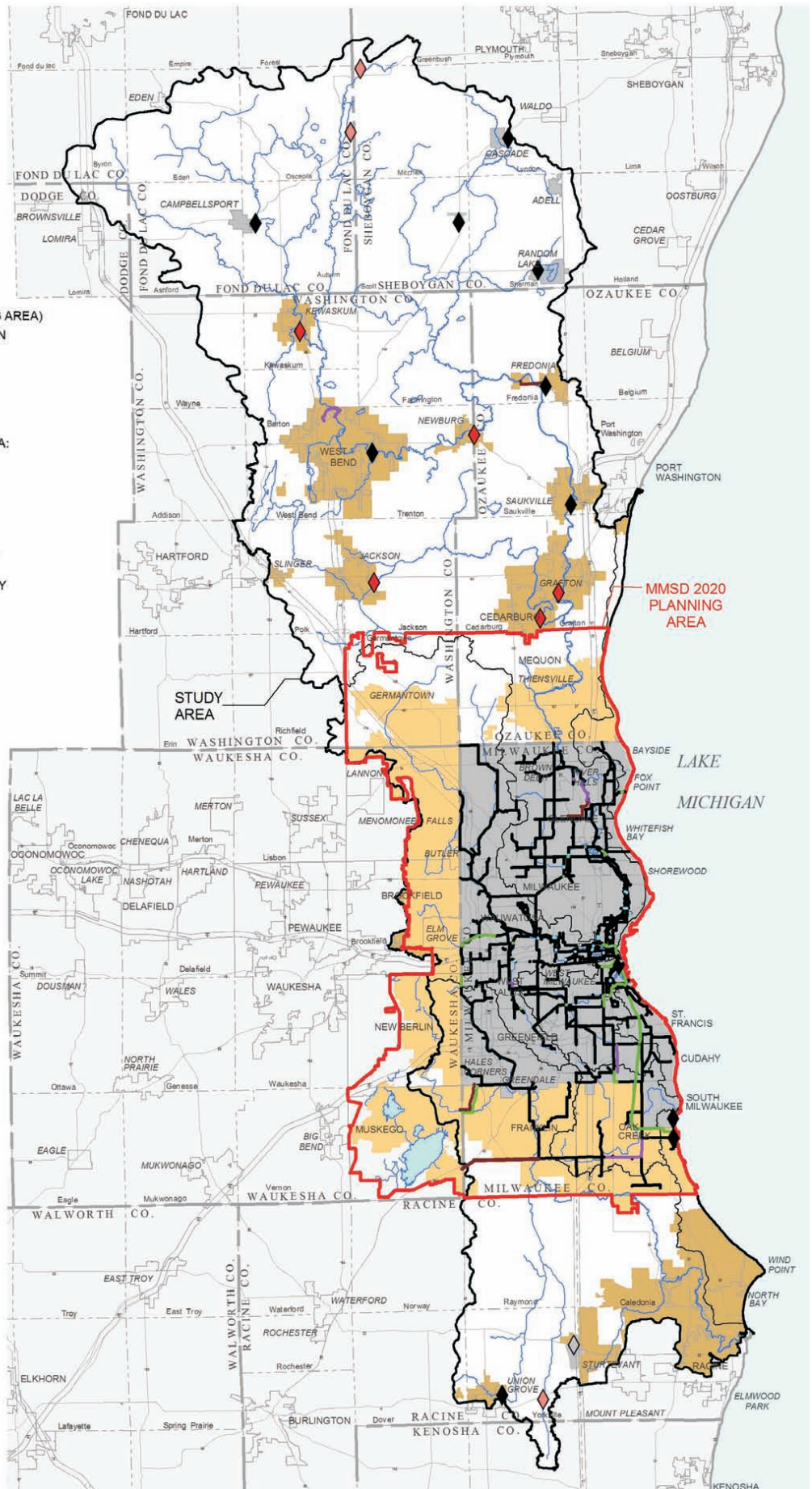
The adopted regional water quality management plan recommends that local agencies charged with responsibility for nonpoint source pollution control prepare refined and detailed local-level nonpoint source pollution control plans and programs. Such plans and programs are to identify and implement the nonpoint source pollution control practices that should be applied to specific lands. This more refined and detailed level of planning was recommended because the design of nonpoint source pollution abatement practices should be a localized, highly detailed, and individualized effort, an effort that is based on site-specific knowledge of the physical, managerial, social, and fiscal considerations that affect the landowners concerned.



Map 15

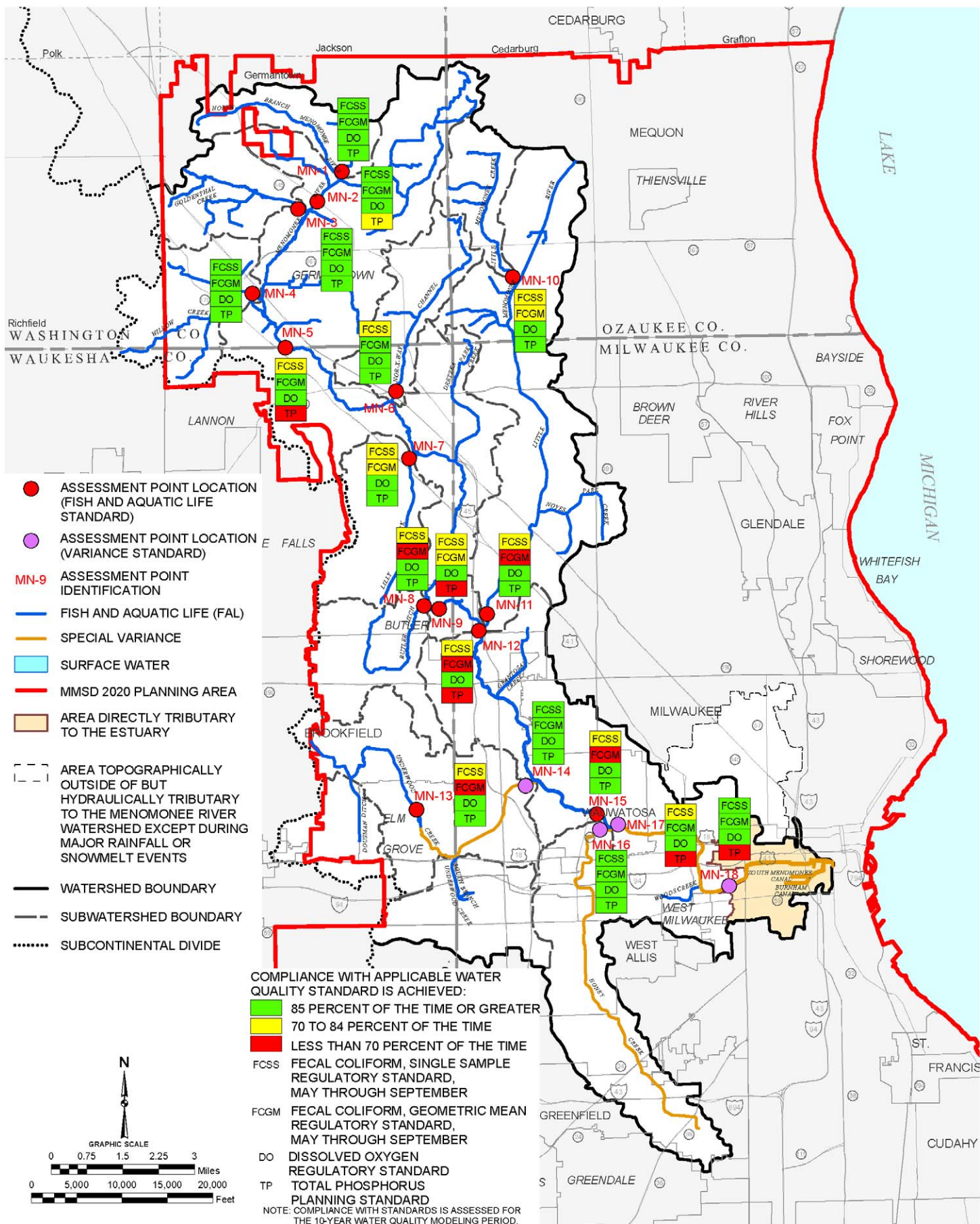
**RECOMMENDED POINT SOURCE  
CONTROL MEASURES WITHIN  
THE REGIONAL WATER QUALITY  
MANAGEMENT PLAN UPDATE  
STUDY AREA**

- MMSD 2020 PLANNING AREA
- EXISTING GRAVITY SEWER (MMSD PLANNING AREA)
- EXISTING PRESSURE SEWER OR FORCE MAIN (MMSD PLANNING AREA)
- EXISTING SIPHON (MMSD PLANNING AREA)
- PROPOSED NEW OR REPLACEMENT TRUNK OR RELIEF SEWER
- PROPOSED FORCE MAIN
- UNREFINED SANITARY SEWER SERVICE AREA: DECEMBER 31, 2006
- REFINED SANITARY SEWER SERVICE AREA: DECEMBER 31, 2006
- REFINED SANITARY SEWER SERVICE AREA OUTSIDE MMSD PLANNING AREA: DECEMBER 31, 2006
- ◆ PUBLIC WASTEWATER TREATMENT FACILITY
- ◆ PRIVATE WASTEWATER TREATMENT FACILITY
- ◆ PUBLIC WASTEWATER TREATMENT PLANT FOR WHICH FACILITIES PLANNING SHOULD BE DONE BY 2020
- ◆ PUBLIC WASTEWATER TREATMENT PLANT FOR WHICH FACILITIES PLANNING SHOULD BE CONDUCTED WHEN THE PLANT NEARS THE END OF ITS USEFUL LIFE. FACILITIES PLANNING SHOULD CONSIDER ABANDONMENT AND CONNECTION TO THE RACINE WASTEWATER TREATMENT PLANT.
- SURFACE WATER
- STUDY AREA BOUNDARY





# ASSESSMENT POINTS WITHIN THE MENOMONEE RIVER WATERSHED FOR THE RECOMMENDED WATER QUALITY MANAGEMENT PLAN





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 2007, 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 and Racine Counties, the Commission staff prepared second editions of the County land and water resources management plans. Those plans are documented in the following reports:
- SEWRPC Community Assistance Planning Report No. 255 (2<sup>nd</sup> Edition), *A Land and Water Resource Management Plan for Kenosha County: 2008-2012*, October 2007, and
- SEWRPC Community Assistance Planning Report No. 259 (2<sup>nd</sup> Edition), *A Land and Water Resource Management Plan for Racine County: 2008-2012*, October 2007.

The State-mandated plans guide the activities of the County Land and Water Conservation departments in their efforts to protect and improve land and water resources.

- The Commission staff continued to serve on the Root-Pike Watershed Initiative Network Agricultural and Urban Pollution Prevention Task Group, which reviews applications for grants to implement specific water quality-based projects, and on the Resource Group which approves funding of projects.

### **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 2007, 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 and Pike in Washington County; and Ashippun, Eagle Spring, Fowler, Keesus, Lac La Belle, Little Muskego, Nagawicka, North, Oconomowoc, Okauchee, Pewaukee, and Upper and Lower Phantom, 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 were updated and refined, and published as second editions of these comprehensive plans, prior to 2007.

In addition, prior to 2007, 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 and Pell Lakes in Walworth County; aquatic plant management plans for Crooked Lake, Fowler Lake, Nagawicka Lake, Pretty 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. Of these, the lake protection plans for Silver Lake in Washington County, and for Pretty Lake in Waukesha County were updated and refined, and published as second editions of these plans, prior to 2007. While such plans or reports form elements of comprehensive lake water quality management plans, they do not, in and of themselves, constitute comprehensive lake management plans. The Commission staff also 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 2007, 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. The Commission assisted in the development and conduct of the 2007 Lakes Convention, an annual informational and educational program of the Wisconsin Lakes Partnership; and, the 2007 Southern Wisconsin Lakes Workshop, focusing on the specific concerns of lake-oriented communities within and adjacent to the Commission's planning region.

Also during 2007, 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 Shangrila Lakes in Kenosha County; the

Waterford Impoundment and Eagle, Waubeesee, and Wind Lakes and Wildlife Acres Pond in Racine County; Beulah, Cravath, Delavan, East Troy, Geneva, Pleasant, Trippe, Wandawega, and Whitewater Lakes, and East Troy Pond, all in Walworth County; Pike, Silver, and Wallace Lakes in Washington County; and Ashippun, Beaver, Cornell, Eagle Spring, Fowler, Golden, Upper Kelly, Lower and Upper Nemahbin, Little Muskego, Middle and Lower Genesee, Nagawicka, North, Oconomowoc, Pewaukee, Upper and Lower Phantom, Pine, Pretty, and Silver Lakes, and Lac La Belle, all in Waukesha County. The Commission staff continued to serve on the Southeastern Wisconsin Fox River Commission as a nonvoting member pursuant to the provisions of Subchapter VI of Chapter 33 of the *Wisconsin Statutes*.

Assistance in preparing applications for State grants in partial support of lake protection and management planning was also provided during 2007 for several lakes. Over the years 1992 through 2007, the Commission assisted communities in preparing grant applications to support more than 75 lake-management-related projects on nearly 60 of the Region's lakes.

#### *A Lake Protection Plan for the Kelly Lakes*

During 2007, the Commission completed a lake protection plan for Upper and Lower Kelly Lakes. This plan, documented in SEWRPC Memorandum Report No. 135, 2<sup>nd</sup> Edition, *A Lake Protection Plan for the Kelly Lakes, Milwaukee and Waukesha Counties, Wisconsin*, April 2007, was prepared by the Commission for the Kelly Lakes Association, Inc., at the request of the City of New Berlin. The plan examines existing and anticipated conditions and potential management problems in the Upper and Lower Kelly Lakes and refines a recommended plan for the resolution of these problems set forth in the first edition of the plan, published by the Commission during November 2000.

One of the key plan recommendations relates to ongoing activities to maintain the natural structure and function of the wetland system immediately upstream of Upper Kelly Lake to more effectively control nutrient and sediment loading rates into the Lake from the tributary drainage area. The restoration of this wetland and reconnection of the stream flowing into Upper Kelly Lake and its associated floodlands were innovative aspects of the initial plan. These plan elements, and the planning program leading up to the implementation of



these plan elements, were featured in a 2007 article, entitled “The World Lake Vision and ecohydrology: case study from Wisconsin, USA,” which appeared in the international journal of *Ecohydrology and Hydrobiology*, volume 7, number 2, pages 79 to 88.

#### *Lake Management Plans*

Lake management plans were completed in 2007 for Lac La Belle and Ashippun Lake in Waukesha County, George Lake in Kenosha County, and the Waterford Impoundment in Racine County. Each of those plans included recommendations in the following general categories:

- Protection of the natural resource base,
- Protection and maintenance of water quality and aesthetic conditions,
- Protection and enhancement of fish and natural resources,
- Enhancement of recreational opportunities, and
- Public information and education.

Additional background on those plans is provided below.

#### **A Water Quality Management Plan for Lac La Belle**

During 2007, the Commission completed a comprehensive lake management plan for Lac La Belle. This plan, published in SEWRPC Community Assistance Planning Report No. 47, 2<sup>nd</sup> Edition, *A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin*, May 2007, was prepared by the Commission at the request of the Lac La Belle Management District, in cooperation with the Wisconsin Department of Natural Resources (WDNR). This plan extends and refines the lake management measures initially set forth in SEWRPC Community Assistance Planning Report No. 47, *A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin*, published in December 1980. The plan is intended to serve as a guide to the making of decisions concerning the use and management of Lac La Belle. The study area, which is coterminous with the total area tributary to the Lake, encompasses about 100 square miles in southwestern Washington County and northwestern Waukesha County. Approximately 6.75 square miles of

this drainage area are directly tributary to the Lake. Recommended plan elements are shown on Map 17.

#### **Lake Management Plan for Ashippun Lake**

During 2007, the Commission completed a comprehensive lake management plan for Ashippun Lake. This plan, published in SEWRPC Community Assistance Planning Report No. 48, 2<sup>nd</sup> Edition, *A Lake Management Plan for Ashippun Lake, Waukesha County, Wisconsin*, May 2007, was prepared by the Commission at the request of the Ashippun Lake Protection and Rehabilitation District, in cooperation with the WDNR. This plan extends and refines the lake management measures initially set forth in SEWRPC Community Assistance Planning Report No. 48, *A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin*, published in January 1982. The plan is intended to serve as a guide to the making of decisions concerning the use and management of Ashippun Lake. The study area, which is coterminous with the total area tributary to the Lake, encompasses about one square mile in northwestern Waukesha County. Recommended plan elements are shown on Map 18.

#### **A Lake Management Plan for George Lake**

During 2007, the Commission completed a comprehensive lake management plan for George Lake. This plan, published in SEWRPC Community Assistance Planning Report No. 300, *A Lake Management Plan for George Lake, Kenosha County, Wisconsin*, August 2007, was prepared by the Commission at the request of the George Lake Rehabilitation District, in cooperation with the WDNR. This plan is intended to serve as a guide to decision-making with respect to the use and management of George Lake. The study area, which is coterminous with the total area tributary to the Lake, encompasses about 3.5 square miles in south central Kenosha County. Recommended plan elements are shown on Map 19.

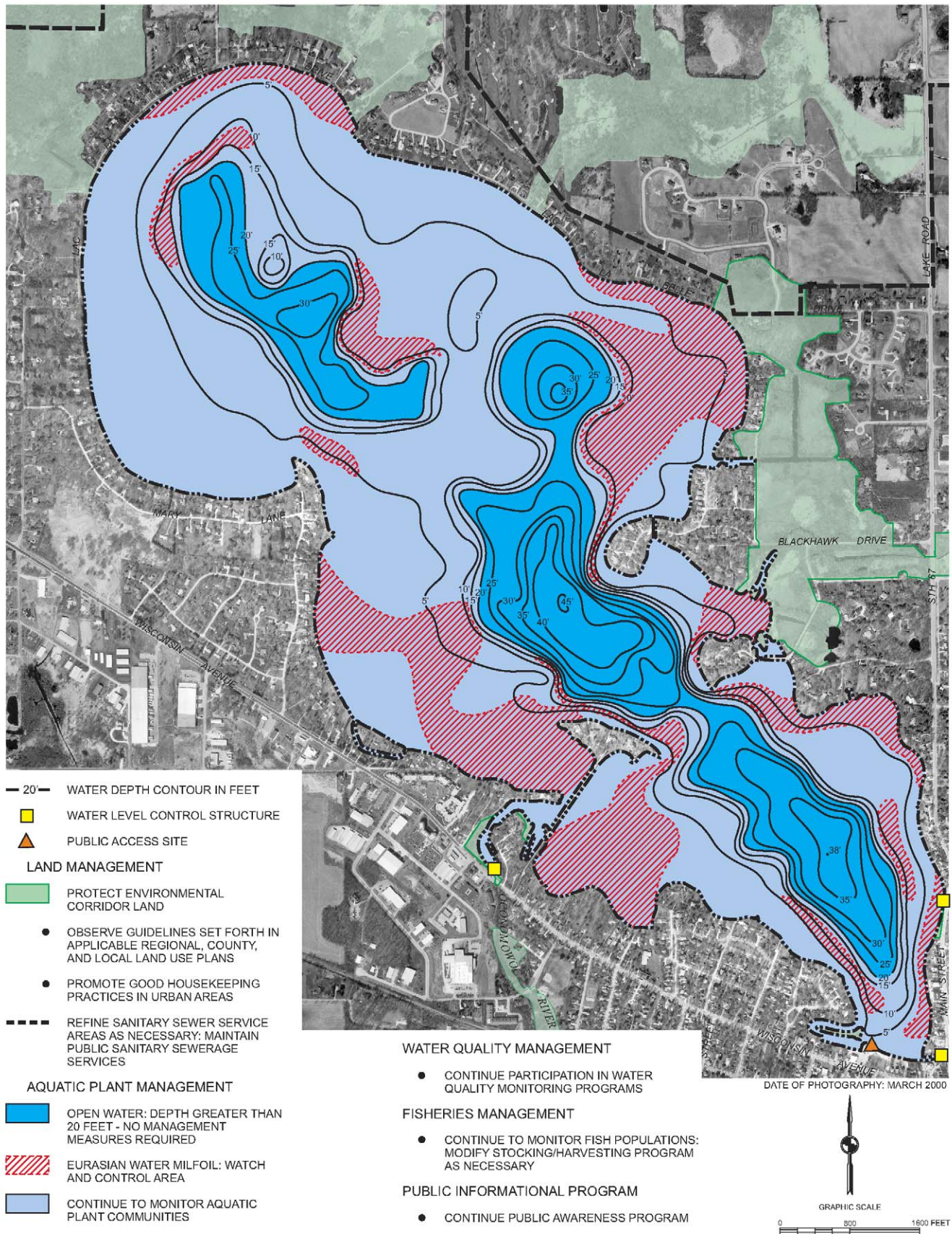
#### **A Lake Management Plan for the Waterford Impoundment**

During 2007, the Commission completed a comprehensive lake management plan for the Waterford Impoundment. This plan, published in SEWRPC Community Assistance Planning Report No. 283, *A Lake Management Plan for the Waterford Impoundment, Racine County, Wisconsin*, Volume One, *Inventory Findings*, and Volume Two, *Alternatives and Recommended Plan*, October 2007, was prepared by the Commission at the request of the Waterford Waterway



# Map 17

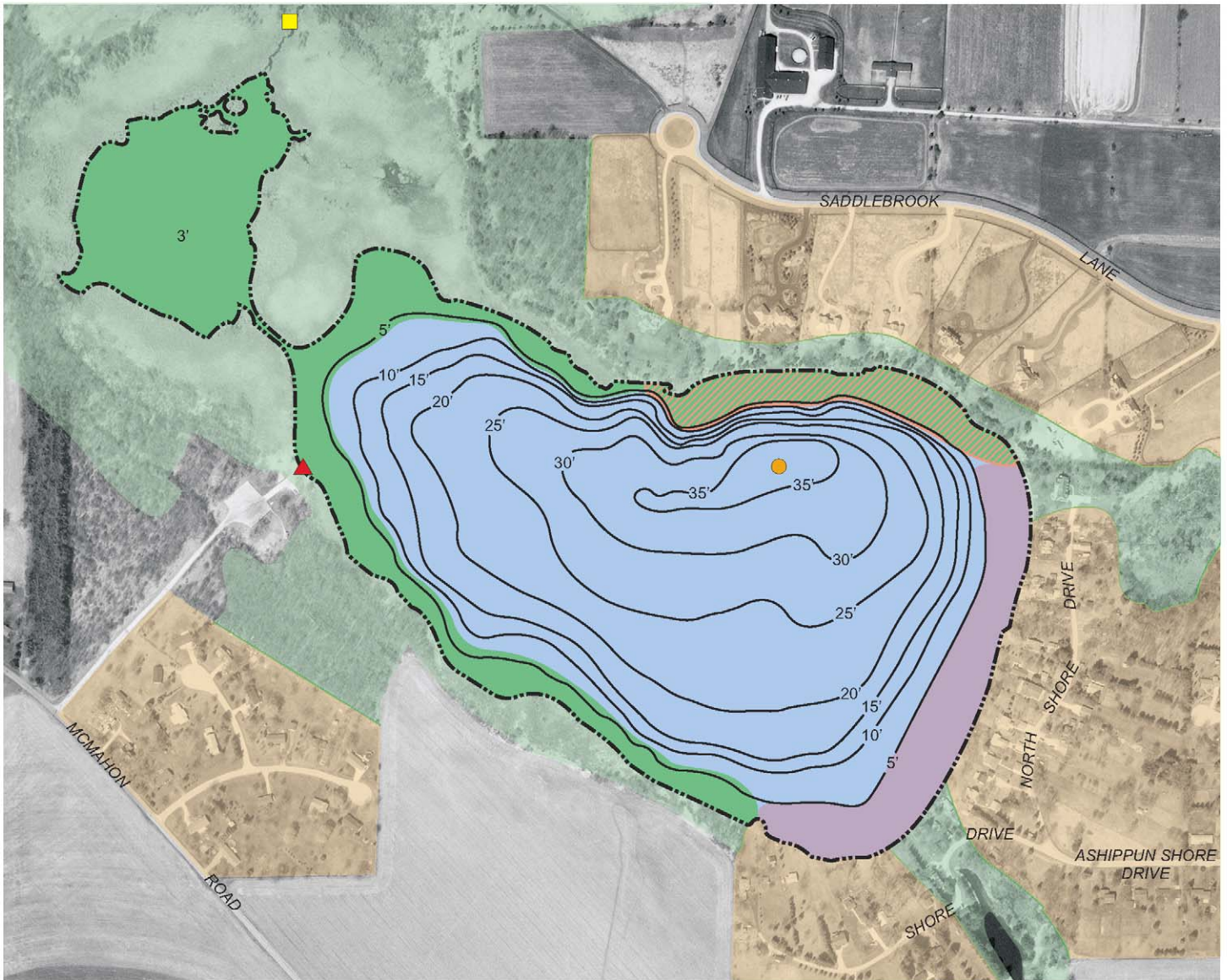
## RECOMMENDED MANAGEMENT PLAN ELEMENTS FOR LAC LA BELLE





# Map 18

## RECOMMENDED MANAGEMENT PLAN ELEMENTS FOR ASHIPGUN LAKE



DATE OF PHOTOGRAPHY: MARCH 2000

- 20' — WATER DEPTH CONTOUR IN FEET
- ▲ MAINTAIN PUBLIC RECREATIONAL BOATING ACCESS
- CONTINUE PERIODIC WATER QUALITY MONITORING
- CONDUCT HYDRAULIC STUDY - CONSIDER PLACEMENT OF FLOW MANAGEMENT STRUCTURE
- PROTECT ENVIRONMENTALLY SENSITIVE LANDS
- OPEN WATER: NO MANAGEMENT REQUIRED
- WISCONSIN DEPARTMENT OF NATURAL RESOURCES-DELINEATED CHAPTER NR 107 ENVIRONMENTALLY SENSITIVE AREA
  - CHEMICAL TREATMENT: LIMITED TO NONNATIVE SPECIES
  - HARVESTING: LIMITED TO NONNATIVE SPECIES
  - MANUAL CONTROL: AROUND PIERS AND DOCKS ONLY
- RIPARIAN ZONE
  - CHEMICAL TREATMENT: LIMITED TO NONNATIVE SPECIES AND AROUND PIERS AND DOCKS
  - HARVESTING: LIMITED TO NONNATIVE SPECIES
  - MANUAL CONTROL: AROUND PIERS AND DOCKS ONLY

- PROPOSED RIPARIAN ZONE EXPANSION
- MAINTAIN HISTORIC LAKEFRONT RESIDENTIAL - DWELLING DENSITIES: OBSERVE GUIDELINES IN WAUKESHA COUNTY DEVELOPMENT PLAN

### WATERSHED MANAGEMENT

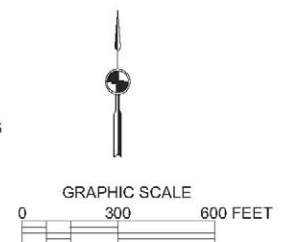
- PROMOTE GOOD HOUSEKEEPING PRACTICES PREPARE FARM PLANS FOR AGRICULTURAL LANDS
- CONDUCT ONSITE SEWAGE DISPOSAL SYSTEMS INSPECTION PROGRAM

### FISHERIES MANAGEMENT

- PERIODICALLY CONDUCT FISHERIES SURVEYS: MODIFY STOCKING AS NECESSARY; PROTECT FISH AND SHORELINE HABITAT
- CONTROL NONNATIVE SPECIES AS NECESSARY

### PUBLIC INFORMATION AND EDUCATION

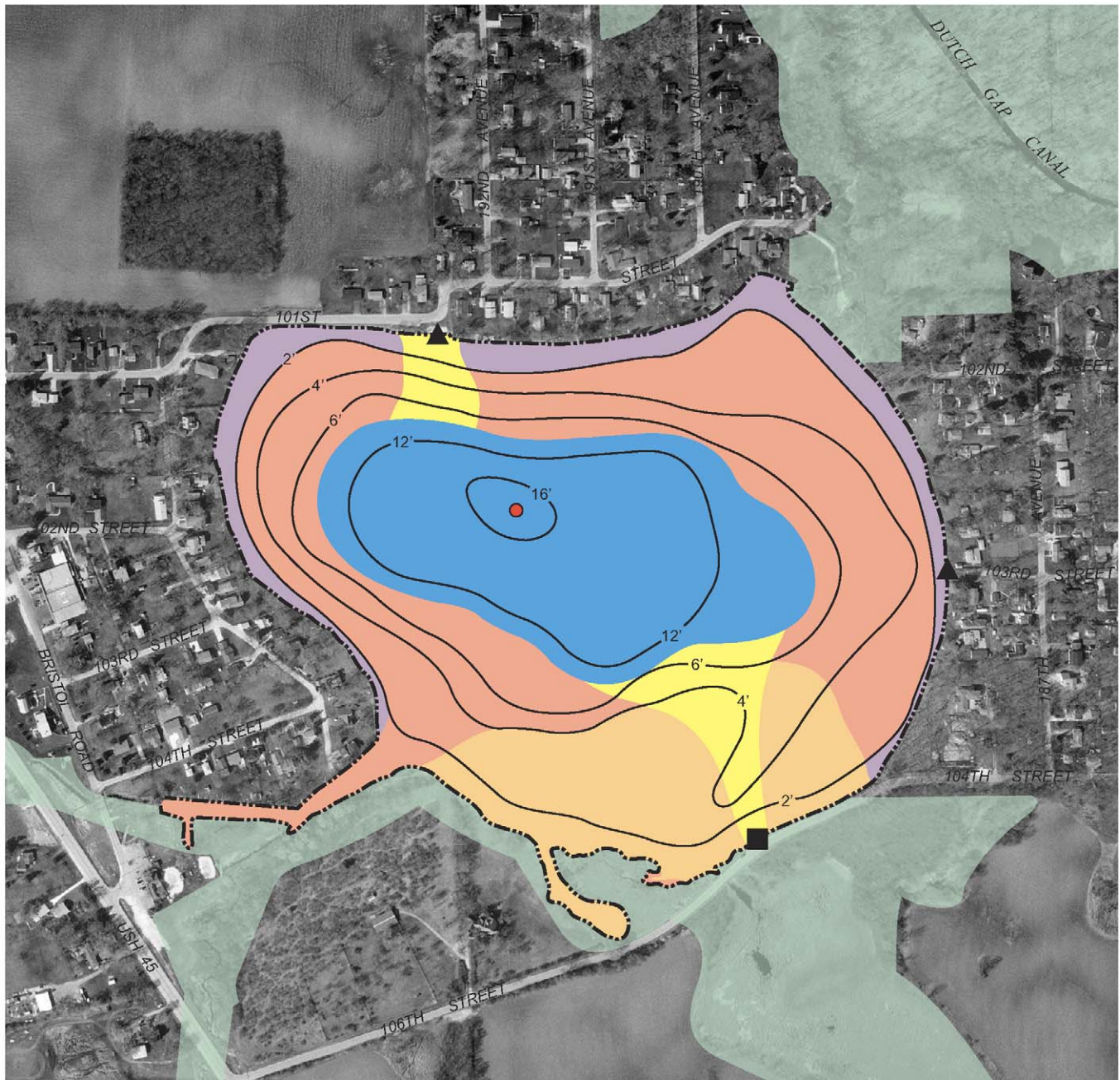
- CONTINUE PUBLIC AWARENESS PROGRAMS
- SUPPORT ENVIRONMENTAL EDUCATION IN LOCAL SCHOOLS





Map 19

RECOMMENDED LAKE MANAGEMENT PLAN FOR GEORGE LAKE



— 12' — WATER DEPTH CONTOUR IN FEET

**WATER QUALITY MONITORING**

● MONITORING SITE

**RECREATIONAL USE MANAGEMENT**

■ MAINTAIN PUBLIC RECREATIONAL BOATING ACCESS

▲ PERIODICALLY MONITOR FECAL COLIFORM CONCENTRATIONS AT BEACH

**LAND USE MANAGEMENT**

■ PROTECT ENVIRONMENTALLY SENSITIVE LANDS

- PROMOTE GOOD HOUSEKEEPING PRACTICES IN DRAINAGE AREA
- MAINTAIN HISTORIC LAKEFRONT DENSITIES; OBSERVE GUIDELINES IN REGIONAL LAND USE PLAN
- PERIODICALLY REVIEW SEWER SERVICE AREA FACILITIES PLAN

DATE OF PHOTOGRAPHY: MARCH 2000

**AQUATIC PLANT MANAGEMENT**

■ CONTROL NONNATIVE SPECIES, ESPECIALLY EURASIAN WATER MILFOIL AND PURPLE LOOSESTRIFE  
CHEMICAL CONTROL: HIGH PRIORITY (SPRING TREATMENT)  
HARVESTING: HIGH PRIORITY

■ RECREATIONAL ACCESS  
CHEMICAL CONTROL: HIGH PRIORITY (SPRING TREATMENT, TREAT FOR SWIMMER'S ITCH AS REQUIRED)  
HARVESTING: HIGH PRIORITY

■ RIPARIAN ZONE  
CHEMICAL CONTROL: MODERATE PRIORITY  
HARVESTING: MANUAL CONTROL, HIGH PRIORITY

■ FISH AND HABITAT AREA  
CHEMICAL CONTROL: LIMITED (NONNATIVE SPECIES)  
HARVESTING: LIMITED (CRUISING LANES ONLY)

■ OPEN WATER  
CHEMICAL CONTROL: NONE  
HARVESTING: NONE

NOTE: PERIODIC NONNATIVE SPECIES CONTROL MAY BE REQUIRED

GRAPHIC SCALE

0 250 500 FEET



Management District, in cooperation with the WDNR. This plan is intended to serve as a guide to the making of decisions concerning the use and management of the Waterford Impoundment. The study area, which is coterminous with the total area tributary to the Impoundment, encompasses about 360 square miles in south central Waukesha County and north central Racine County. Approximately 23 square miles of this drainage area are directly tributary to the Lake. Recommended plan elements are shown on Maps 20 through 22.

In addition to specific recommendations in the general categories listed previously, this plan includes the following recommendations for governance and institutional development within the area directly tributary to the Impoundment:

- Continue cooperation with the Southeastern Wisconsin Fox River Commission (SEWFRC) and Fox River Committee Against Underwater Sedimentation and Erosion (Fox River CAUSE), among others.
- Consider including riparian lands directly north of the “Iron Bridge” and second tier development with lake access within the Waterford Waterway Management District.

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

Prior to 2007, 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. Past stream restoration assessment and design recommendations for WisDOT roadway

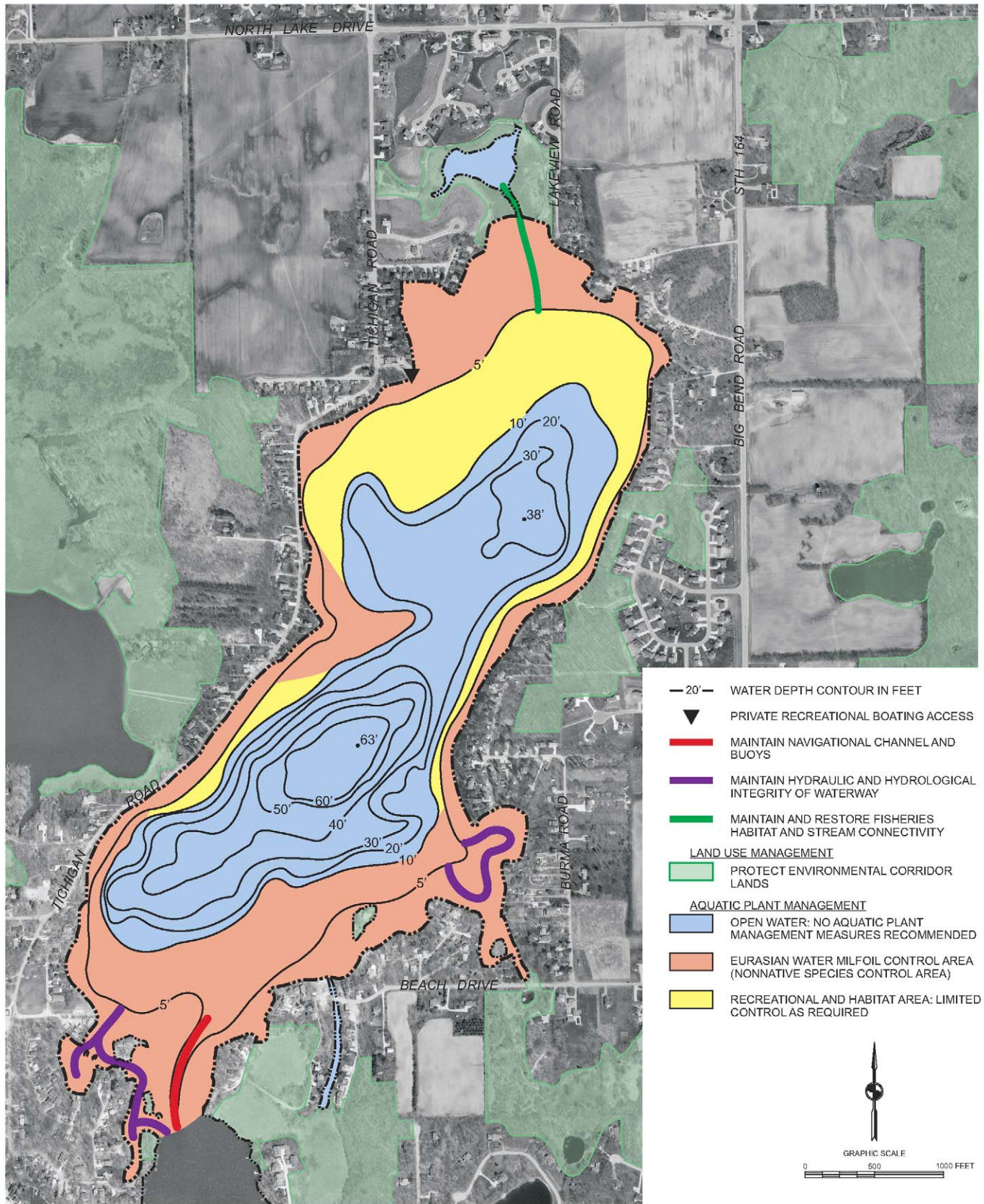
improvement projects involving stream relocation include the following: USH 45, Tributary to the Milwaukee River, Washington County; 144th and Brown Deer Road, Dretzka Park Tributary, Waukesha County; 35th Street and Rawson Avenue, East Branch of the Root River, Milwaukee County; STH 120 Lake Geneva Bypass, West Branch Nippersink Creek, Walworth County; STH 83 Bypass, Karcher Creek, Kenosha County; STH 12/67 Bypass, Tributary to Sugar Creek, Walworth County; Tri-County Road, Tributary to Galloway Creek, Walworth, Kenosha, and Jefferson Counties; and STH 16/67 Oconomowoc Bypass, Rosenow Creek, Waukesha County; The results of these investigations were reported to the communities in the form of Commission staff memoranda and letter reports. Also, prior to 2007, the Commission provided technical assistance to the City of New Berlin, Village of Hales Corners, and the Kelly Lakes Association, Inc., during 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 the recreation of stream and floodplain ecosystems tributary to Upper Kelly Lake, and is documented in a 2nd Edition of SEWRPC Memorandum Report No. 135. In addition, Commission staff provided technical assistance to Washington County for the development of the Quass Creek watershed Protection Plan completed in 2004. The assistance provided an assessment of channel stability and biological assessment of Quass Creek and were summarized in SEWRPC Memorandum Report No. 151.

During 2007, the Commission continued to provide technical assistance relating to stream system management to the Wisconsin Department of Natural Resources and Wisconsin Department of Transportation (WisDOT), and certain municipalities and other organizations. The Commission staff conducted the physical, chemical, and biological assessment and preliminary stream design for two WisDOT roadway improvement projects associated with the Southeast Corridor Interchange. One project involves relocation of a Tributary to the Kilbourn Road Ditch in Kenosha County at CTH KR and the second project involves relocation of a Tributary to the Root River in Racine County at CTH G. In addition, the Commission staff completed inventory and analysis for the Pebble Creek Watershed Protection Plan as described further in the Stormwater and Floodland Management Planning section of this report. The Commission staff also



Map 20

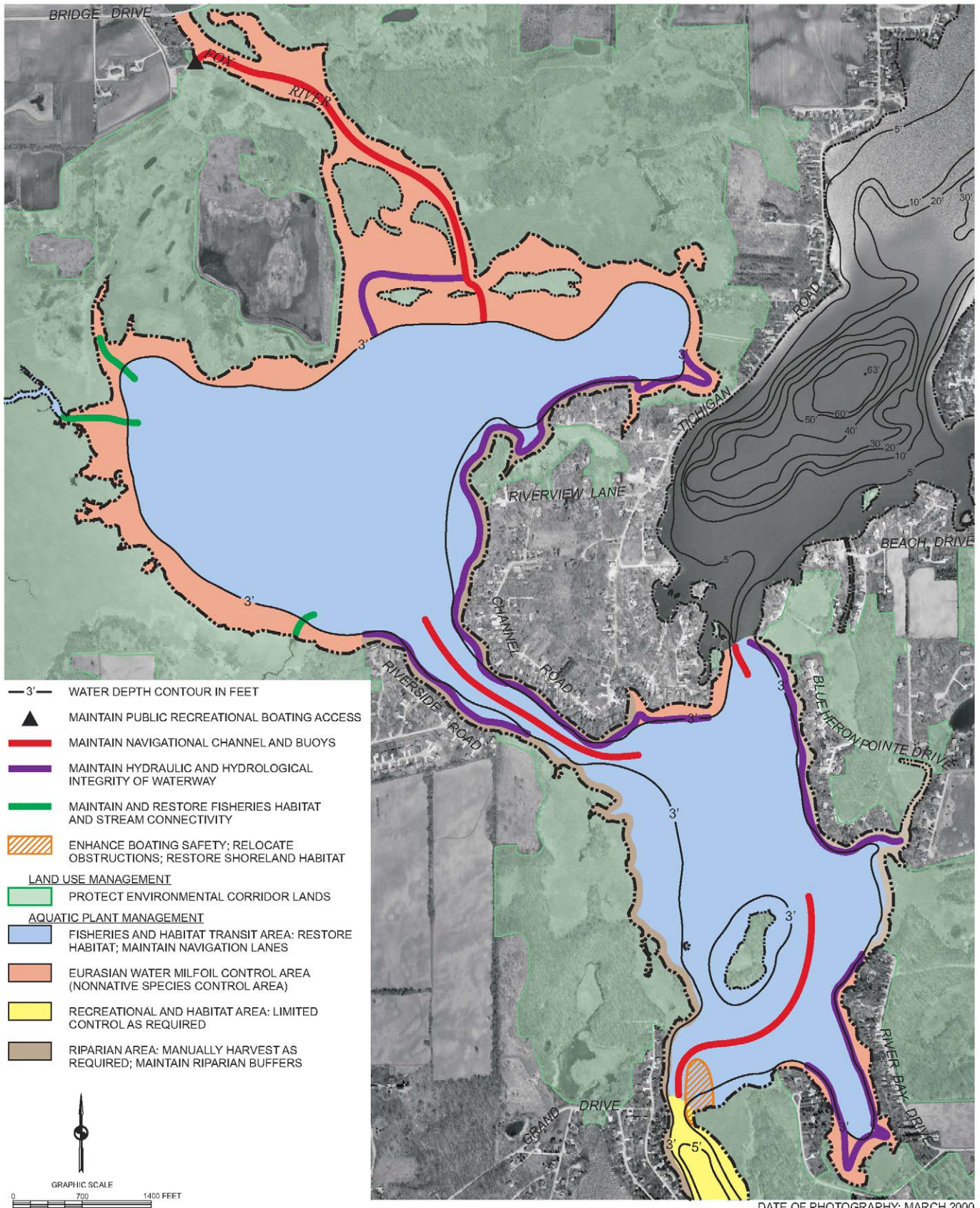
RECOMMENDED MANAGEMENT PLAN FOR TICHIGAN LAKE





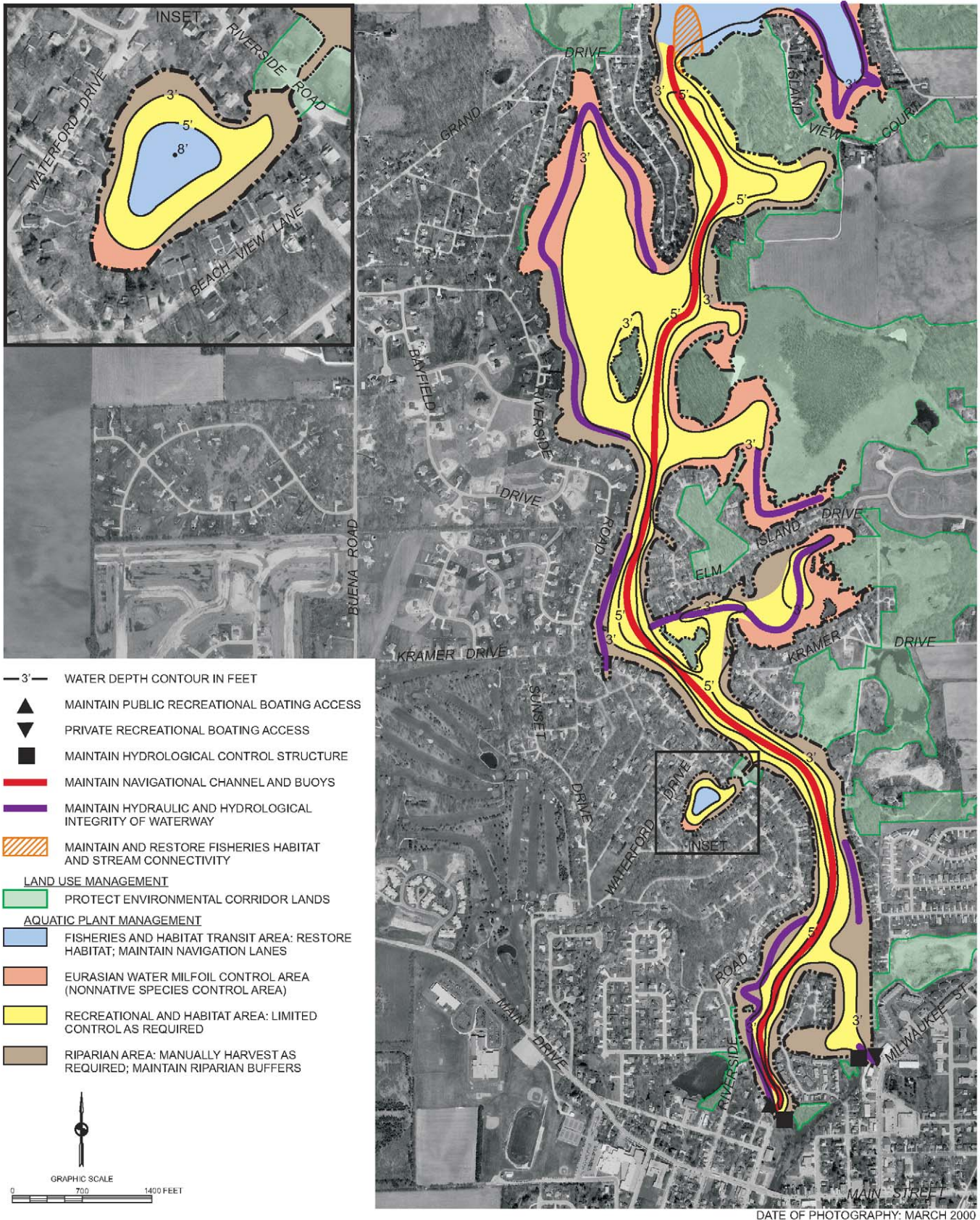
Map 21

RECOMMENDED MANAGEMENT PLAN FOR THE WATERFORD IMPOUNDMENT





RECOMMENDED MANAGEMENT PLAN FOR THE WATERFORD IMPOUNDMENT AND BUENA LAKE





served as a member of, and technical advisor to, the WDNR Milwaukee Harbor Estuary Area of Concern (AOC) Steering Committee. That (AOC) Committee is tasked with establishing the technical criteria to be employed in evaluating the effectiveness of the Remedial Action Plan (RAP) being executed in the Milwaukee Harbor.

In 2007, the Commission continued to provide technical support to the Southeastern Wisconsin Fox River Commission, as set forth under Subchapter VI of Chapter 33 of the *Wisconsin Statutes*. Specifically, staff developed a bus tour in the Lower Fox River watershed promoting information and education of streambank and habitat protection projects.

During 2007, the Commission continued to provide technical assistance to the U.S. Army Corps of Engineers with respect to the Upper Des Plaines River Phase II Feasibility Study. This collaborative planning effort with the U.S. Army Corps of Engineers and the Illinois Department of Natural Resources lead to an innovative assessment and understanding of land use, fisheries community quality, and effects of low head dams that was summarized and accepted for publication by the North American Journal of Fisheries Management entitled “Effects of Tributary Spatial Position, Urbanization, and Multiple Low-head Dams on Warmwater Fish Community Structure in a Midwestern Stream,” which is to be published in 2008.

During 2007, a collaborative effort with the North American Lake Management Society (NALMS) Special Conference Sessions on the Great Lakes lead to SEWRPC staff serving as guest editors of the NALMS publication *LakeLine* Volume 26, No. 3. In this issue Commission stream management planning efforts were featured in an article entitled “Lake Michigan Tributary Fisheries: Interdependence and Potential”, which summarized pertinent aspects of the regional water quality management plan for the greater Milwaukee watersheds as set forth in SEWRPC Planning Report No. 50 and the companion SEWRPC Technical Report No. 39.

During 2007, 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 and lake districts, notably for the Roller Mill Dam on the Bark River system in Waukesha County. Specifically, field inventories were

conducted for the Upper Nemadji Lake Management District to assess the physical and biological aspects of this impoundment in order to develop stream design alternatives, if the dam were to be removed. These data and recommendations will be summarized in a SEWRPC memorandum report that is expected to be completed in 2008. Commission staff also partnered with WDNR and Ozaukee County staff in gathering information on stream impediments in an effort to increase awareness and develop corrective strategies to improve fish and other aquatic organism passage at road crossings.

During 2007, the Commission participated in the development of a planning program for the Mukwonago River Basin, responding to requests from The Nature Conservancy, Eagle Spring Lake Management District, Phantom Lakes Management District, and Wisconsin Department of Natural Resources. Data acquisition and field inventory were conducted as part of the Upper and Lower Mukwonago River Watershed Protection Planning programs. The inventory, analysis, and recommendations to protect this watershed will be summarized in a SEWRPC community assistance planning report that is expected to be published in 2009.

### **Sewerage Facilities Planning**

During 2007, 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 2007 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 2007:

- Continued assistance to local units of government within the Region in developing facility plans for modifications to existing public sewerage



systems. During 2007, local sewerage facilities plan amendments were reviewed for the Milwaukee Metropolitan Sewerage District, Walworth County Metropolitan Sewerage District; and the Villages of Big Bend, Dousman, Fredonia, and Kewaskum.

- Provided the Village of Caledonia with background information on options for sanitary sewer service.
- Served on the Technical Advisory Committee for preparation of the Village of Caledonia IH 94 Sewer Service Area Trunk Sewer analysis. That study investigated the cost-effectiveness of various options for providing sewerage systems to serve areas of existing and future development in the City of Racine; the Villages of Caledonia, Mt. Pleasant, and Sturtevant; and the Towns of Raymond and Yorkville.
- Completed a cost-effectiveness analysis for the provision of sanitary sewer service to lands located between the adopted sewer service areas for the Village of Genoa City and the Pell Lake Sanitary District No.1.
- Reviewed the preliminary design for a headworks upgrade for the City of South Milwaukee wastewater treatment plant, and reviewed and commented on a project to replace sand filters at the City of Oconomowoc wastewater treatment plant.
- The Commission continued to work cooperatively with the MMSD and the WDNR to complete the 2020 MMSD facility plan in a coordinated manner with the updating of the regional water quality management plan for the greater 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 South-eastern 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. Those 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 2007, this work effort included the following:

- Adoption by the Commission of amendments to the sanitary sewer service areas for the greater Kenosha area, the Village of Twin Lakes, and the Towns of Bristol and Salem in Kenosha County; the City of Oak Creek in Milwaukee County; the City of Burlington and environs and the City of Racine and environs in Racine County; the City of Elkhorn (two amendments) in Walworth County; and the Cities of Brookfield, Muskego, and Waukesha and the Village of Sussex, in Waukesha County.

By the end of 2007, 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 2007, 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 18 and on Map 23. 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 2007; 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 2007, review comments were provided on 148 proposed public sanitary sewer extensions and 105 proposed private main sewer or building sewer extensions, distributed by county as shown in Table 19.



Table 18

## PLANNED SANITARY SEWER SERVICE AREAS IN THE REGION: 2007

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 Wilmot 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, 2 <sup>nd</sup> Edition, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, March 2004
	Lake Church	--	--	--



Table 18 (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)	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
	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



Table 18 (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)	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
	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



Table 18 (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	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 7, 2007	SEWRPC Community Assistance Planning Report No. 192, 3rd Edition, Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin, March 2007
	--	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
	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



**Table 18 (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)	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.

## WATER SUPPLY PLANNING

During 2007, Commission water supply planning was focused primarily on the preparation of a regional water supply plan for the seven-county Southeastern Wisconsin Region. The plan will identify the best means of providing a sustainable water supply for the Region.

The planning effort is being overseen by the SEWRPC Regional Water Supply Planning Advisory Committee. Membership on this Committee includes knowledgeable and concerned representatives of the constituent counties and municipalities; of concerned State and Federal agencies; of the academic community; and of businesses and industries. The water supply plan is scheduled to be completed over a four-year period ending at the end of 2008.

The preparation of the regional water supply plan represents the third, and final, element of the Commission's water supply planning program. The first element—completed in 2002—consisted of basic groundwater resource inventories. The second element—completed in 2004—consisted of the development of a groundwater simulation model for the Region. The completion of these elements involved interagency partnership programs with the U.S. Geological Survey (USGS), the Wisconsin Geological

and Natural History Survey (WGNHS), the University of Wisconsin-Milwaukee (UWM), the Wisconsin Department of Natural Resources (WDNR), and a number of the public water supply utilities serving the Region.

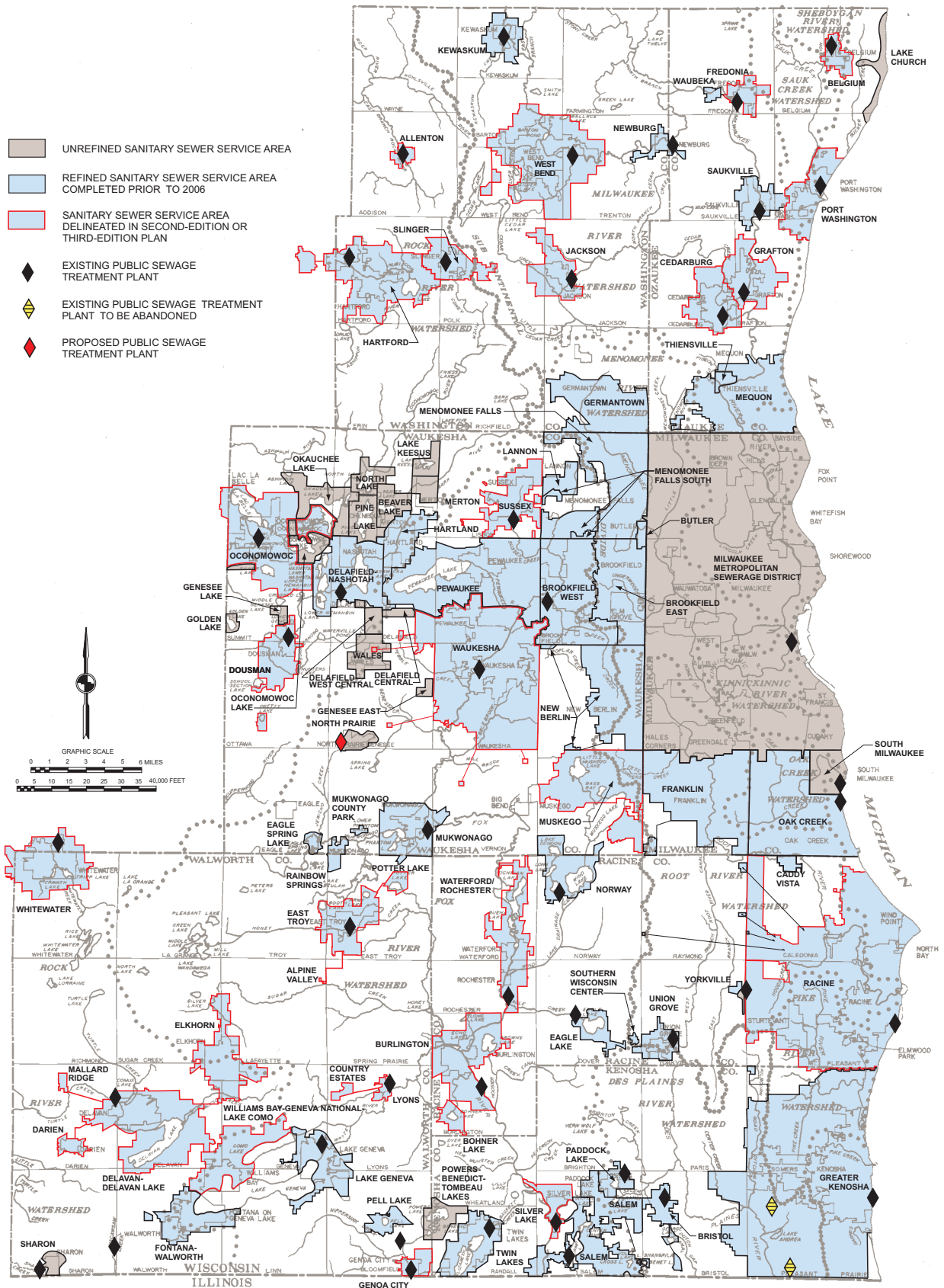
The regional water supply planning program includes the following major components:

- A comprehensive inventory and analysis of the location, condition, and service areas of the existing public and private water supply facilities within the Region, and of the capacity of those facilities to treat and deliver water supply;
- An inventory and analysis of existing water use within the Region, with particular attention to the geographic distribution of the water uses;
- Determination of urban water supply service areas and of existing and forecast demand water use by these urban service areas; by exurban residential, commercial, and industrial uses; and by rural agricultural and recreational uses;
- Identification of existing and potential water supply problems as revealed by inventories, analyses, and forecasts;



Map 23

RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 2007





**Table 19****SANITARY SEWER EXTENSION REVIEWS: 2007**

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Dodge <sup>a</sup> .....	1	--	1
Jefferson <sup>b</sup> .....	1	--	1
Kenosha.....	31	11	42
Milwaukee.....	30	20 <sup>c</sup>	50
Ozaukee.....	8	3	11
Racine.....	10	7	17
Walworth.....	13	8	21
Washington.....	11	14	25
Waukesha.....	43	42	85
Total	148	105	253

<sup>a</sup> Hartford sewer service area.

<sup>b</sup> City of Whitewater.

<sup>c</sup> The Commission has delegated the responsibility for the review of building sewer extensions within the City of Milwaukee to the City. During 2007, 420 reviews of building sewer extensions were conducted by the City.

- Development of recommendations for water conservation efforts to reduce water demand;
- Development and evaluation—including environmental assessment—of alternative means of addressing the identified water supply problems, culminating in the identification of an initially recommended plan for the sources of supply and for development of the basic infrastructure required to deliver that supply.
- Identification of groundwater recharge areas to be considered for protection from incompatible development;
- Identification of any constraints to development levels in subareas of the Region that may emanate from water supply sustainability concerns; and
- Identification of any new institutional structures found necessary to carry out the plan recommendations.

Two very important components—the evaluation of water supply sources and the specification of water conservation measures—will be done considering a full range of viable options. This evaluation will be developed in a manner fully consistent with the regulations and policies regarding the ability to obtain

water from the Great Lakes basin, including the Great Lakes-St. Lawrence River Basin Resources Compact now under consideration by the Great Lakes states. In addition, the planning is intended to be coordinated with, and consistent with, the State of Wisconsin groundwater legislation and the related activities of the Groundwater Advisory Committee.

During 2007, work was completed on a state-of-the-art report for water supply management which identifies the viable water supply management measures and design standards for use in the planning program. In addition, the alternative water supply plans were developed on a conceptual basis and work was initiated on developing the details of those plans.

The state-of-the-art of water supply practices report is documented in SEWRPC Technical Report No. 43, *State-of-the-Art of Water Supply Practices*, July 2007. This report presents the results of a review of the current practices related to water supply source development; water treatment, transmission, and storage; and water conservation and reuse. Information presented includes descriptions and applicability of the water supply practices, together with information on attendant capital, operation, and maintenance costs. The state-of-the-art of water supply practices report is intended to serve as a technical foundation for the development of alternative and recommended water supply plans under the regional water supply planning program. The report is also intended to be a useful resource for public officials, water utility engineers and managers, and others involved in, or having interest in, water supply within the Region.

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

During 2007, 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; coordination with FEMA, WDNR, and the FEMA study contractor for the floodplain Map Modernization



program in Kenosha, Racine, Walworth, and Washington Counties; 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 2007, hydrologic modeling was performed for the Menomonee and Root River watersheds and the Fish Creek subwatershed. Hydraulic modeling was conducted for Beaver Creek, Brown Deer Park Creek, Fish Creek and Woods Creek. In 2007, the MCAMLIS Steering Committee was provided with electronic floodplain and floodway delineations for the following streams:

- Legend Creek in the Root River watershed in the City of Franklin;
- The Milwaukee River main stem in the Cities of Milwaukee and Glendale and the Villages of Brown Deer, River Hills, and Shorewood;
- Lincoln Creek in the Milwaukee River watershed in the Cities of Milwaukee and Glendale;
- Streams in the Oak Creek watershed in the Cities of Franklin, Milwaukee, Oak Creek, and South Milwaukee;
- Underwood Creek and the South Branch of Underwood Creek in the Menomonee River watershed in the Cities of Wauwatosa and West Allis;

- Southbranch Creek and the North Tributary to Southbranch Creek in the Milwaukee River watershed in the Village of Brown Deer; and
- The North Branch of Whitnall Park Creek in the Root River watershed in the Village of Hales Corners.

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 2004, and in 2007 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) conducting a pilot project to implement watershed study recommendations related to the Kilbourn Road Ditch subwatershed. The Commission staff also served on the Project Delivery Team that is involved in oversight 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.

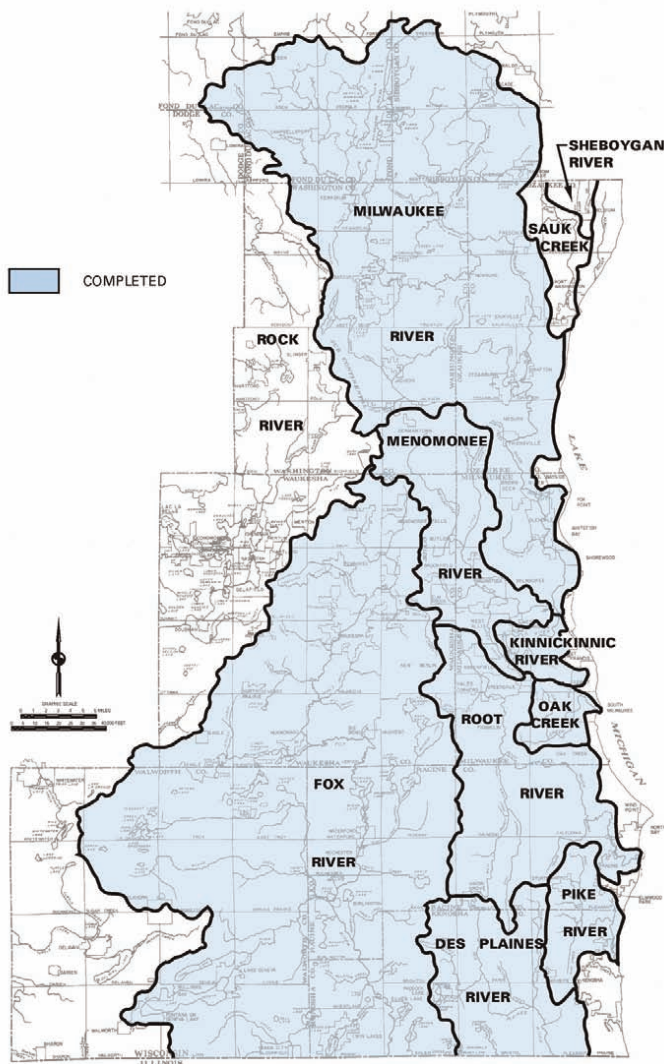
Prior to 2007, the Commission staff provided hydrologic and hydraulic information and digital floodplain maps developed under various Commission studies for use in preparation of County-wide FEMA Digital Flood Insurance Rate Maps (DFIRMs) for Kenosha, Racine, and Washington Counties. In 2007, the Commission staff attended the FEMA/WDNR open houses at which the preliminary DFIRMs for those counties were presented to local officials. Following those open houses, the Commission staff provided specific, written comments on the preliminary maps and flood insurance study reports. The Commission staff also attended a FEMA Map Modernization kickoff meeting for Walworth County.

Map 24 indicates the coverage of the watershed studies conducted by the Commission through 2007.



Map 24

**SEWRPC WATERSHED  
STUDIES COMPLETED: 2007**



**Stormwater and Floodland  
Management Planning**

During 2007, the Commission staff provided technical assistance to State and local governmental agencies in resolving stormwater and floodland management problems.

In 2007, 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 1) the floodplain impacts on an unnamed tributary to Camp Lake of a proposed development in the Town of Salem, 2) a floodplain analysis for an unnamed tributary to Trevor Creek in the Town of Salem, and 3) a floodplain analysis of a proposed development along Pike Creek in the Town of Somers.
- At the request of the Village of Pleasant Prairie, the Commission staff reviewed a floodplain boundary adjustment proposal along Unnamed Tributaries No. 2 and 2A to the Des Plaines River.
- At the request of Milwaukee County, the Commission staff reviewed the floodplain management aspects of 1) the proposed redevelopment of the Oak Leaf Bicycle Trail along the Menomonee and Little Menomonee Rivers in the City of Milwaukee and 2) proposed modifications to the existing Beerline Bicycle Trail along the Milwaukee River in the City of Milwaukee.
- At the request of the City of Franklin, the Commission staff reviewed 36 specific locations for which the City identified problems with the flood hazard boundaries shown on the preliminary Milwaukee County FEMA DFIRM, redelineated the one-percent-probability floodplain boundary at 20 of those locations using elevation contour data developed from the 2005 MCAMLIS digital terrain model, performed automated tributary area delineations for 14 of the remaining problem areas located in approximate flood zones, and provided recommendations to revise or delete flood zones from the DFIRM as appropriate.
- At the request of the City of Glendale, the Commission staff attended a meeting of City residents at which floodplain questions were answered. Following the meeting, staff provided the City with information related to FEMA procedures for documenting elevation characteristics of houses in or near the one-percent-annual-probability (100-year recurrence interval).



- At the request of the City of Milwaukee, the Commission staff performed hydraulic analyses for proposed modifications to the W. Becher Street bridge over the Kinnickinnic River and alternative replacement structures for the W. Forest Home Avenue (STH 24) bridge over the Kinnickinnic River.
- At the request of the Village of Hales Corners, the Commission staff provided WDNR with documentation regarding the calibration and verification of the Root River watershed hydrologic model for use in the Department's review of the North Branch of Whitnall Park Creek floodplain boundary resulting from construction of an MMSD flood control project.
- At the request of Racine County, the Commission staff reviewed the floodplain aspects of a proposed project to elevate an existing house within the one-percent-probability floodplain of Eagle Lake and to construct first and second-floor additions and a detached garage. Staff also reviewed the as-built survey related to a limited floodplain boundary adjustment for a property located along the Fox River in the Town of Waterford.
- At the request of the Village of Mt. Pleasant, the Commission staff hosted an interagency meeting regarding implementation of the Village's Pike River restoration and floodland management project. The meeting focused on issues related to review and approval of hydrologic and hydraulic models, WDNR and FEMA approval of floodplain changes, and local zoning issues.
- The Commission staff completed a major floodplain mapping project for the Oconomowoc River watershed and tributary streams in Washington County. That project included automated hydrologic and hydraulic modeling of about 30 miles of stream using information from the digital elevation and terrain models recently acquired by the County. The streams studied included the main stem of the Oconomowoc River, Flynn Creek, Putter Creek, the Coney River, and several unnamed tributaries.
- At the request of Waukesha County, the Commission staff reviewed compensatory floodwater storage analyses related to a development along Lac La Belle in the Town of Oconomowoc, a proposed subdivision along the Fox River in the City of Waukesha, a proposed subdivision along Sussex Creek in the City of Pewaukee, and a proposed development along the Pewaukee River in the Village of Sussex. The Commission staff also reviewed a floodplain delineation for a portion of an unnamed tributary to Artesian Brook in the Village of Big Bend.
- At the request of the Village of Elm Grove, the Commission staff prepared the hydrologic study submittal form required by WDNR for review and approval of the flood mitigation and stream restoration project for Underwood Creek within the Village. That project, which has now been constructed, was originally recommended under the plan documented in SEWRPC Community Assistance Planning Report 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*, February 2000.
- At the request of the Village of Menomonee Falls, the Commission staff reviewed a proposed floodplain boundary adjustment along a reach of Phillips Tributary in the Lilly Creek sub-watershed.
- The Commission staff assisted the Waukesha County communities that are members of the Upper Fox River Watershed Stormwater Discharge Permit Application Group in establishing and administering group participation in a WDNR/USGS stormwater monitoring project that meets the group's discharge permit requirement.
- The Commission staff continued preparation of a watershed protection plan for the Pebble Creek watershed in Waukesha County. The Pebble Creek watershed protection plan is a collaborative effort with the Land Resources Division of the Waukesha County Department of Parks and Land Use. The plan addresses management of the surface water resources of the watershed which includes Pebble Creek and Brandy Brook. A recommended plan was developed and the 100-year recurrence interval floodplain boundaries will be delineated along Pebble Creek and Brandy Brook.



- 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 2007, data were provided for the following: 1) Lake Michigan; 2) the Des Plaines River, Unnamed Tributaries No. 1 C, E, and F to the Des Plaines River, Unnamed Tributary No. 1 C to Center Creek, Jerome Creek, Pike Creek, and the Airport Branch tributary to Pike Creek in the Town of Bristol, the City of Kenosha, and/or the Village of Pleasant Prairie; 3) Unnamed Tributary No. 8 to Kilbourn Road Ditch in the Town of Paris; 4) Camp and Center Lakes in the Town of Salem; 5) Sorenson Creek in the Town of Somers; 6) the Milwaukee River in the City of Glendale and the Villages of Brown Deer and River Hills; 7) the Kinnickinnic River, Menomonee River, Lincoln Creek, Wilson Park Creek, and the North Branch of Oak Creek in the City of Milwaukee; 8) Underwood Creek in the City of Wauwatosa; 9) Southbranch Creek in the Villages of Brown Deer and River Hills; 10) Beaver Creek in the Village of Brown Deer; 11) the Pike River, the Bartlett Branch tributary to the Pike River, and Kilbourn Road Ditch in the Village of Mt. Pleasant; 12) the Root River in the Town of Raymond; 13) Friess Lake in the Village of Richfield; 14) the Fox River in the City of Brookfield; 15) Pewaukee Lake in the City of Pewaukee; 16) Phillips Tributary in the Village of Menomonee Falls; 17) the Pewaukee River and the East Branch of Sussex Creek in the Village of Sussex; and 18) Scuppernong Creek in the Town of Delafield.

### **Floodplain Data Availability**

The availability of flood hazard data within the Region is shown on Map 25. 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. In addition, special Commission floodland management studies have resulted in the development of definitive flood hazard data for a total of about 116 additional miles of stream channel, an increase of 36 percent relative to 2006. 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 704 miles of stream, an increase of 4 percent relative to 2006.

### **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 and counties in obtaining updated FEMA Digital 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



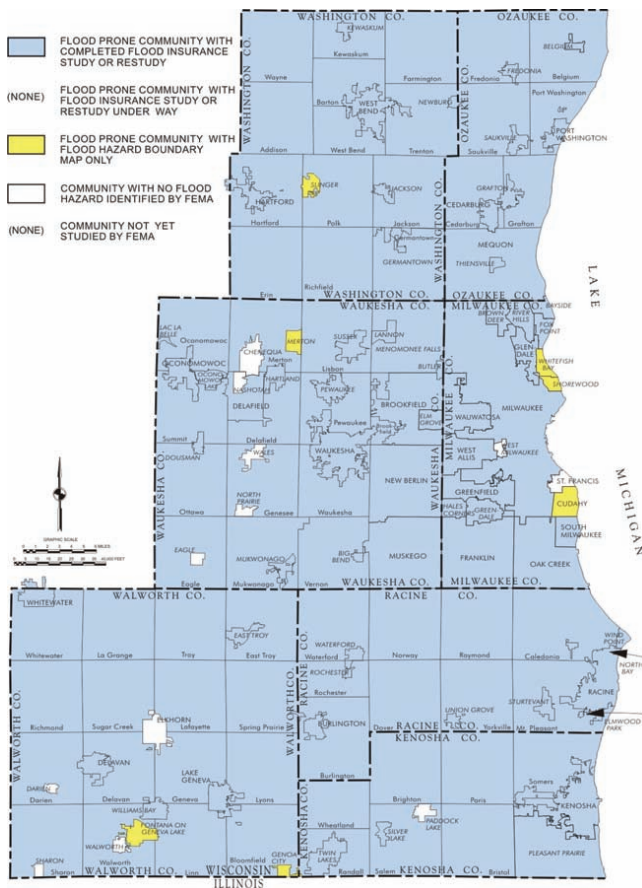
DELINEATION OF FLOODLANDS: 2007





Map 26

# STATUS OF FLOOD INSURANCE STUDIES: 2007



and villages and for the unincorporated areas of counties; however, recent FEMA policies call for development of such studies on a countywide basis. The status of flood insurance rate studies in the Region at the end of 2007 is shown on Map 26.

As shown on Map 26, as of 2007, there were 19 cities or villages in the Region for which FEMA 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. As of 2007, no final determination regarding the extent of the flood hazard had been made for the remaining 12 cities or villages in the Region. In 2007, a flood hazard area as identified by the Commission in

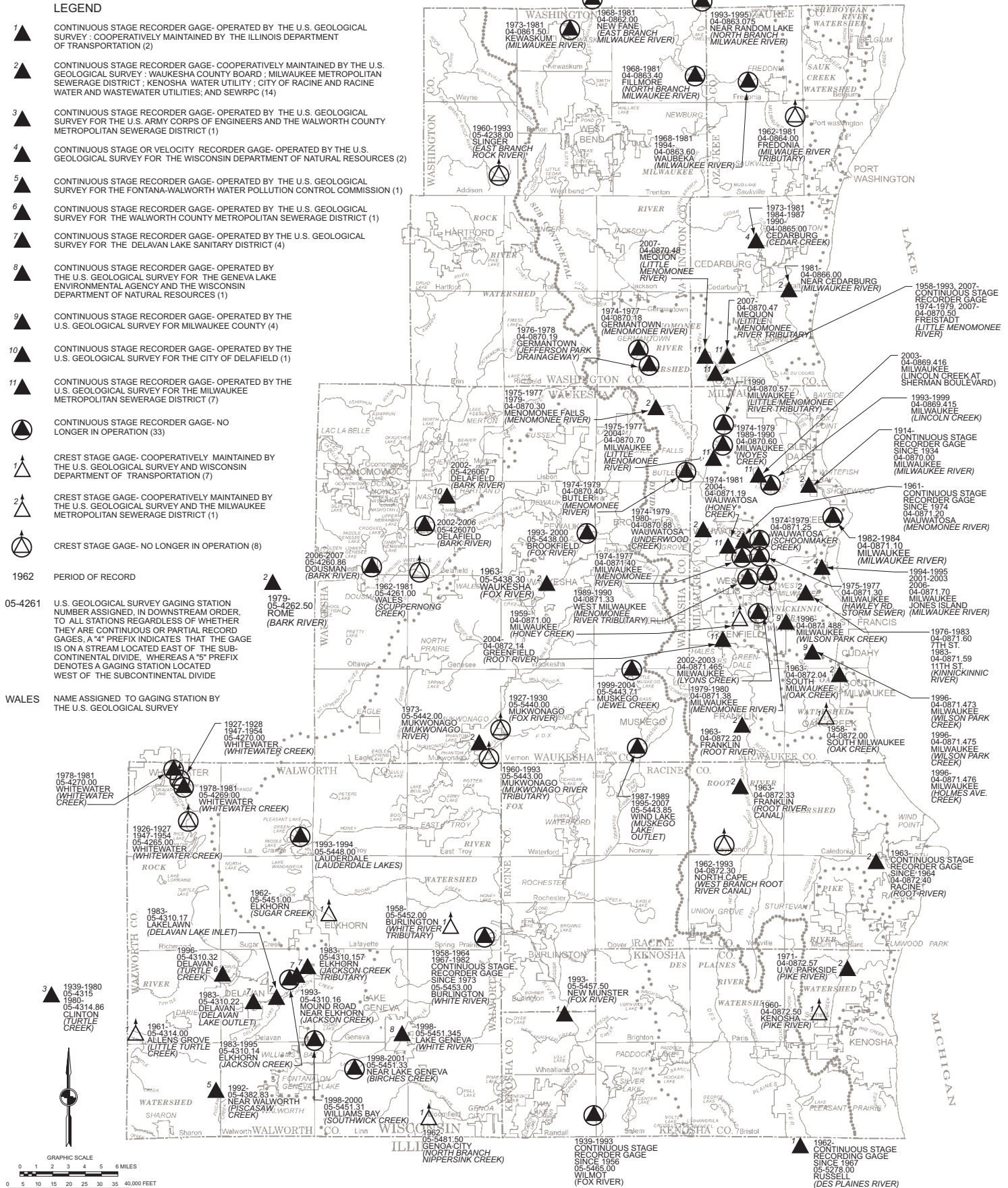
the Milwaukee River watershed study was mapped by FEMA in the portion of the Village of Newburg in Ozaukee County. Also in 2007, FEMA made its first delineation of a flood hazard in the Village of Belgium in Ozaukee County. Besides providing available data from the Commission files to the contractors conducting such studies for FEMA, the Commission staff helps to delineate floodplains and attends meetings with local officials and other citizens to discuss the results of flood insurance 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 2007, the Commission staff assisted the WDNR, FEMA, communities, and counties in coordinating the FEMA Map Modernization Program in Kenosha, Racine, Walworth, and Washington Counties.

## Stream-Gaging Program

Streamflow data are essential to the sound management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous-recording streamflow gages were in operation within the Region. Since that time, the Commission has been instrumental in establishing, through cooperative, voluntary, intergovernmental action, a more adequate streamflow-gaging program (see Map 27). 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 2007, there were 38 continuous-recording streamflow gages in operation on stream reaches entering, lying within, or originating within the Region. That represents an increase of three gages relative to 2006. Of the 37 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, seven gages were supported by the MMSD outside the Commission’s cooperative program, 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,



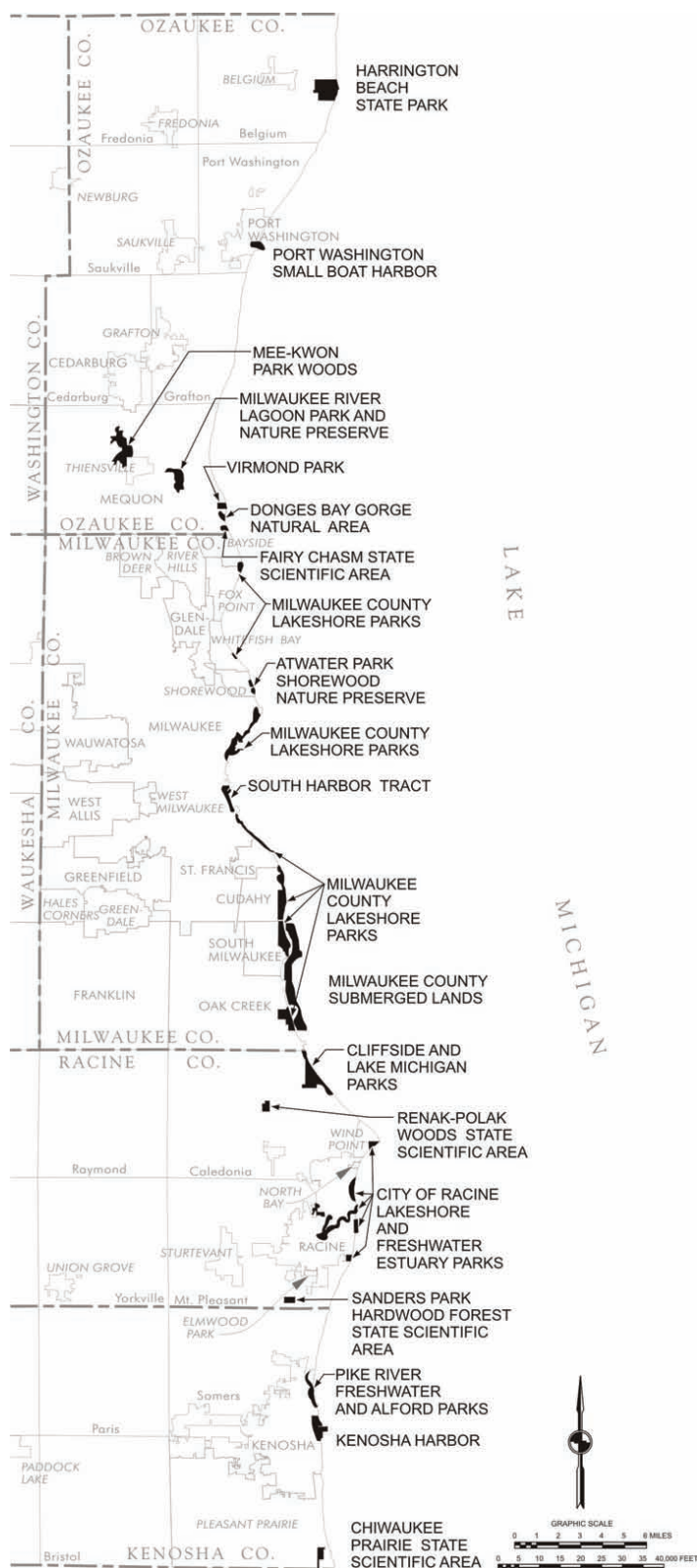
## LOCATION OF U.S. GEOLOGICAL SURVEY STREAM-GAGING STATIONS: 2007





Map 28

**DESIGNATED COASTAL AREAS IN  
SOUTHEASTERN WISCONSIN: 2007**



four gages were supported by the Delavan Lake Sanitary District, one gage was supported by the Geneva Lake Environmental Agency and the WDNR, one gage was supported by the City of Delafield, and two gages were supported by the Illinois Department of Transportation.

In addition, in 2007 there were three gages at which water levels, but not streamflow, were continuously recorded. These included, one at Delavan Lake near the City of Delavan, one at Geneva Lake in the City of Lake Geneva; and one at Wind Lake in the Town of Norway.

## COASTAL MANAGEMENT PLANNING

During 2007, 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 2007, 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 28. 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.



# 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.

Beyond traditional telecommunications planning functions, the Division has also developed capabilities in the areas of wireless network monitoring systems and experimental field testing of proposed wireless network configurations. Both of these capabilities are very important in the plan implementation phase of the telecommunications planning process and allow for Commission support in the final design and deployment of actual wireless networks.

## 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 has been 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 10 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 set of proposals to identify potential public enterprise networks
- A Comprehensive Regional Wireline-Wireless Telecommunications Network or Universal Broadband Access Plan.

## **ANTENNA SITING AND RELATED INFRASTRUCTURE PLAN**

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 local units of government concerned. Site installation delays of several years are not uncommon.

The primary objective of the original antenna site location plan was 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 has made 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. This antenna site structure plan was to be prepared in cooperation with the wireless service providers serving the Region.

During 2005, it became apparent that a change was required in the basic direction of the regional wireless communications planning program. This need for change resulted from a number of factors that included:

- Poor Cooperation From Wireless Service Providers.

None of the six service providers was willing to provide the base station technical data needed to develop geographic radio coverage maps of the Region. Two service providers provided partial data, but in the end, all failed to provide the comprehensive databases needed for evaluation of second (2G) and third (3G) generation cellular/PCS wireless networks. Lacking such a database, there was no way to cooperatively upgrade existing 2G and emerging 3G wireless networks in the Region.

- Results of Cellular/PCS Wireless Network Monitoring System.

The Division staff developed and deployed a wireless network monitoring system to evaluate the performance of the six regional cellular/PCS wireless service providers. Testing was conducted in all seven counties over a period of 15 weeks. Results from the beginning indicated that the performance of regional wireless networks, even the latest 3G networks, was far below the performance levels specified in the objectives and standards of the regional wireless plan. Given these substandard performance results, the project focus moved to the forthcoming fourth generation (4G) technologies to achieve these objectives and standards.



The end result was a redirection of the wireless telecommunications planning program to fourth generation wireless networks planning. Such planning took the form of exploring new topologies and advanced technologies that have the potential for 4G level performance. The 4G wireless plan was completed in September 2006. This plan, documented in SEWRPC Planning Report No. 51, *A Wireless Antenna Siting and Related Infrastructure Plan for Southeastern Wisconsin*, September 2006, extended in scope far beyond the original objective of recommended antenna site locations to a recommended regional broadband communication wireless plan that integrated a set of community based wireless networks into a region-wide wireless backhaul network. The final recommended wireless plan document also detailed comprehensive wireless infrastructure and system performance inventories that provided the foundation for the final wireless plan. The final plan was also designed to comply with the objectives, principles and standards documented in the report that served as the criteria for plan selection.

The regional 4G wireless plan was formally adopted by the Commission on September 13, 2006, and was certified to the county and local governments in the Region shortly thereafter. Even before completion of this plan, Commission staff initiated a community assistance program to support, upon request, constituent local units of government that are interested in planning, designing, and implementing broadband wireless networks. The process being followed involves refining and detailing the regional wireless system plan recommendations attendant to the community concerned, followed up by field testing to verify the efficacy of each detailed plan. Assistance is also provided in preparing and evaluating requests-for-proposals, whereby private service providers would be solicited to install and operate potential municipal networks.

Broadband wireless plan preparation was carried out for a number of cities, villages and towns in the Region. Such plan development took the form of an initial community network plan that designated the required access points, geographic coverage and performance levels of the community network. Comprehensive field testing was undertaken to verify the plan in terms of field-measured coverage and performance. After approval of the field tested plan by the local government, the network is ready for deployment.

As of the end of 2007, the following 15 communities had requested and were provided broadband wireless plans:

1. Town of Wayne, Washington County
2. Town of Addison, Washington County
3. City of Waukesha, Waukesha County
4. North Shore Communities (7) – Milwaukee County (Villages of Bayside, Brown Deer, Fox Point, River Hills, Shorewood and Whitefish Bay, and the City of Glendale)
5. Village of Thiensville, Ozaukee County
6. Town of Ottawa, Waukesha County
7. Town of Merton, Waukesha County
8. City of Lake Geneva, Walworth County
9. Village of Hartland, Waukesha County

## **PUBLIC ENTERPRISE TELECOMMUNICATION NETWORKS PLANNING**

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.

Public networks planning took 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 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 was 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. In September 2005, the Commission documented potential public enterprise networks in SEWRPC Memorandum Report No. 164, *Potential Public Enterprise Telecommunications Networks for Southeastern Wisconsin*.

Primary emphasis in public enterprise networks planning relates to wireless public safety communications networks. These networks are currently in a state of transition from traditional public safety communications networks that feature primarily voice traffic to high speed multi-media communications systems that feature voice, data, and video traffic. Current public safety communications trends revolve around the new 4.9 GHz band allocated by the FCC in 2002 exclusively for public safety functions. This frequency band provides sufficient bandwidth for data communications at rates exceeding 20 megabits per second; such throughput performance is in sharp contrast to present data rates of 19.2 kilobits per second characteristic of most regional public safety transceiver equipment. Unfortunately, the 4.9 GHz is also characterized by high attenuation losses in typical metro areas. To overcome these obstacles, innovations in both network structure and equipment technology are required for the design of cost effective broadband wireless communications systems. A plan for a new high speed county-wide wireless data communications network in the 4.9 GHz band was prepared on a preliminary basis for field test in Ozaukee County in 2006.

Although Ozaukee County did not follow through on plan implementation, Kenosha County took the initiative in 2007 and contracted with the Commission to demonstrate the new 4.9 GHz wireless technology on two existing county-controlled antenna towers. That demonstration project is scheduled for completion in the Fall of 2008.

## 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 has been selected from a set of alternative regional network plans prepared for objective evaluation by the Advisory Committee. Each alternative plan was 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.

Initial network design planning efforts was 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 WiFi, WiMAX and other advanced technologies were prepared as the first element of a comprehensive regional wireless-wireline network plan.

In its final form, the comprehensive regional wireline-wireless plan was selected from the following alternative and adjunct plans.

- Community-Based Wireless Alternative Plan—in which each of the Region's 147 communities has its own wireless network-integrated into a region-wide wireless back-haul network.
- Regional Wireless Alternative Plan—in which a joint public safety/commercial wireless network would be deployed on a county-by-county basis.
- Regional Fiber-to-the-Node (FTTN) Wireline Alternative Plan—in which fiber links from telephone central offices are deployed to remote nodes which then serve users through the legacy copper wire infrastructure in a one square mile area.
- Regional Fiber-to-the-Premises (FTTP) Wireline Alternative Plan—in which fiber optic cable is deployed from telephone central offices to individual users in a passive optical configuration in which the primary fiber is split into smaller fibers targeted to home and business users.
- Mobile Wireless Adjunct Plan A (WiMAX)—in which a high speed cellular wireless



system based on WiMAX (IEEE 802.16e) technology is deployed throughout the Region.

- Mobile Wireless Adjunct Plan B (WiFi and WiFiA) (802.11g and 802.11a) - in which the fixed community-based WiFi wireless network or the regionally-based WiFiA wireless network is used to serve mobile wireless users.

The Regional Wireless Alternative Plan was selected as the primary broadband telecommunications plan for the Region. This plan called for a combined public safety wireless network in the 4.9 GHz frequency band and a commercial wireless network in the 5.8 GHz frequency band that shared the same antenna towers and fiber optic backhaul network. Such a public-private partnership provides for a sharing of costs that makes both networks more economically viable. The demonstration project in Kenosha County noted above

is intended to serve as the pilot effort for the implementation of the regional plan.

While selecting the Regional Wireless Plan as the primary plan for the Region, the commission also recognized that other alternative plans had sufficient private or public support to insure their partial deployment in the seven-county area. Foremost was the Regional Fiber-to-the-Node (FTTN) pursued by AT&T as embodied in their U-Serve System.

Mobile Wireless Adjunct Plan B based on WiFi and WiFiA wireless technology was selected over the WiMAX alternative as offering the same performance at a much lower cost as an adjunct to either the Regional or community-based wireless networks.

The regional broadband plan is set forth in SEWRPC Planning Report No. 53, *A Regional Broadband Telecommunications Plan for Southeastern Wisconsin*, November 2007. The plan was adopted by the Commission on December 5, 2007.



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# 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 2007, Commission local economic development program planning efforts were focused on 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 2007 included the following: 1) maintaining a link on [www.choosemilwaukee.com](http://www.choosemilwaukee.com) website that provides information on applying for tax credits through the Metropolitan Milwaukee Technology Zone and the Southeast Tri-County Technology Zone; 2) contracting with the Wisconsin Procurement Institute to work with companies on gaining access to the Small Business Innovation Research (SBIR) Program and other technology-based Federal grant programs; 3) 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; 4) obtaining approval for two technology zone applications totaling \$775,000 that were prepared with the assistance of Commission staff; 5) supporting periodic educational forums that provided economic development professionals, local officials, and businesses in the Region with information on important economic development issues; and 6) providing staff assistance to the Milwaukee 7 in the implementation of its regional economic development initiative. 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 2007, 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 examples of Division activity in performing this function during 2007:



- 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 socio-economic 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 2007, the following representative project planning services were provided:

- Economic profiles were maintained for 64 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 Commission website ([www.sewrpc.org](http://www.sewrpc.org)) and can be printed by individual users. The communities for which profiles were maintained in 2007 are shown on Map 29.
- Provision of assistance to the Racine County Economic Development Corporation and University of Wisconsin-Parkside in updating the data set that was originally compiled by

Commission staff to evaluate the success of the County's strategic economic development planning process.

- Provision of assistance to the Village of Shorewood in developing policies and procedures for a new revolving loan fund program.
- Provision of assistance to Kenosha County in researching funding opportunities for a countywide wireless public safety network.

## **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.


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-in-Aid Procurement**

In 2007, the Commission assisted local units of government in obtaining the following grant-in-aid awards:

- Kenosha County received approval for a \$300,000 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 1 percent annual probability (100-year) floodplain of the Fox River.
- Kenosha County received approval for a \$135,330 Federal Emergency Management Agency-Flood Mitigation Assistance (FMA)



 PROFILE COMPLETED

NOTE: PROFILES HAVE ALSO BEEN COMPLETED FOR EACH OF THE SEVEN COUNTIES IN THE REGION.





grant application that was prepared with the assistance of Commission staff. The resulting grant award will be used to finance the acquisition and removal of a residential structure located in the 1 percent annual probability (100-year) floodplain of the Fox River.

- Ozaukee County received approval for a \$200,000 Wisconsin Community Development Block Grant-Economic Development (CDBG-ED) application that was prepared with the assistance of Commission staff. The resulting grant award will be used to finance the purchase of dairy cows for Trinity Holsteins, LLC.

### **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 managing these grant awards, including ensuring that the terms of each grant award or funding program are met. During 2007, the Commission provided contract services to administer the following grant awards:

- A Wisconsin Community Development Block Grant (CDBG) for Economic Development grant award totaling \$206,000 obtained by Ozaukee County with the assistance of Commission staff. This grant award was used 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 (CDBG) for Economic Development grant award totaling \$81,000 that was prepared with the assistance of Commission staff. This grant award was used by Noble Dairy, LLC, to purchase dairy cows for its new operation in Ozaukee County.
- A Wisconsin Community Development Block Grant (CDBG) award totaling \$22,500 that was prepared with the assistance of Commission staff. This grant award is being used by BIO-CATT, Inc., to develop a plan to provide high-speed broadband service to western Kenosha County and eastern Walworth County.

- A Wisconsin Department of Transportation (WisDOT) Transportation Economic Assistance (TEA) grant award totaling \$325,500 obtained by the Village of Mt. Pleasant with the assistance of Commission staff. This grant award is being used to construct a rail spur for the expansion of Big Buck Building Centers, Inc., in the Village.
- A Federal Emergency Management Agency-Hazard Mitigation Grant Program (HMGP) award totaling \$371,978 obtained by Kenosha County in 2002 with the assistance of Commission staff, along with a \$303,038 supplement obtained in 2005. This grant award and supplement are being used to finance the acquisition and removal of residential structures that are located in the 1 percent annual probability (100-year) floodplain of the Fox River.
- A Federal Emergency Management Agency-Hazard Mitigation Grant Program (HMGP) award and supplement totaling \$677,337 obtained by Kenosha County in 2005 with the assistance of Commission staff. This grant award and supplement are being used to finance the acquisition and removal of residential structures that are located in the 1 percent annual probability (100-year) floodplain of the Fox River.
- A Wisconsin Community Development Block Grant (CDBG) Emergency Assistance program grant award totaling \$300,000 obtained by Kenosha County in 2007 with the assistance of Commission staff. This grant award is being used to finance the acquisition and removal of residential structures located in the 1 percent annual probability (100-year) floodplain of the Fox River.
- A Federal Emergency Management Agency-Flood Mitigation Assistance (FMA) grant award totaling \$135,330 obtained by Kenosha County in 2007 with the assistance of Commission staff. This grant award is being used to finance the acquisition and removal of a residential structure that is located in the 1 percent annual probability (100-year) 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 (CDBG) awards and through the appropriation of local funds. A number of activities are involved in the management of 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 2007 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 (CDBG) revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of one loan totaling \$61,000 that was provided with the assistance of the Commission and 2) provision of assistance in the preparation of two semi-annual progress reports that were submitted 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 (CDBG) 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 21 loans totaling \$2.5 million that were provided with the assistance of the Commission and 2) provision of assistance in the preparation of two semi-annual progress reports that were submitted 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 (CDBG) revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of two loans totaling \$200,000 that were provided with the assistance of the Commission and 2) provision of assistance in the preparation of two semi-annual progress reports that were submitted to the Wisconsin Department of Commerce.
- 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 (CDBG) revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of two loans totaling \$214,000 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of one new loan totaling \$40,000; and 3) provision of assistance in the preparation of two semi-annual progress reports that were submitted 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 (CDBG) revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of seven loans totaling \$888,500 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of one new loan totaling \$303,400; and 3) provision of assistance in the preparation of two semi-annual progress reports that were submitted 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 (CDBG) revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of two loans totaling \$152,000 that were provided with the assistance of the Commission; 2) provision of assistance in the packaging, closing, and servicing of two new loans totaling \$588,400; and 3) provision of assistance in the preparation of two semi-annual progress reports that were submitted 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 (CDBG) revolving loan fund program and in completing the following activities: 1) provision of assistance in the servicing of two loans totaling \$139,300 that were provided with the assistance of the Commission and 2) provision of assistance in the preparation of two semi-annual

progress reports that were submitted 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 (CDBG) revolving loan fund program for housing rehabilitation, and providing information to local residents on available public housing programs. A Commission staff member serves as Executive Director of the Housing Authority and staffs the Housing Authority office in western Kenosha County. CDBG administration included the following activities: 1) provision of assistance in the packaging and closing of seven new loans totaling \$70,834 and 2) the servicing of 168 loans totaling \$1.36 million.



# 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 2007, 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 County and 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. Examples of educational efforts carried out in 2007 include the following:

- The following presentations were made regarding the 2035 regional land use and transportation system plans and other regional planning efforts:
  - Presentations and individual opportunities to comment on the KRM Commuter Link study were provided in discrete meetings with Hispanic Roundtable representatives in the City of Racine, Repairers of the Breach homeless shelter staff and clients in the City of Milwaukee, and staff of Esperanza Unida and the Lao Family Community neighborhood-based organizations also in Milwaukee. Background on the Commission and its role were also addressed in these efforts to reach the leadership and/or affiliates of organizations that represent minority, low-income, and special needs populations in Kenosha, Milwaukee, and Racine Counties.
  - Commission staff worked with Repairers of the Breach homeless center staff and clients in the City of Milwaukee to conduct a Saturday morning "living room" session which allowed some 50 attendees to obtain information, ask individual questions, and make comments early in the process of developing a new Milwaukee County Transit Development Plan. The session supplemented and was equivalent to public informational meetings which had been conducted at other City of Milwaukee locations.
  - Two coordinating meetings in an ongoing series were conducted with a group consisting of the following organizations, for the purposes of obtaining additional input related to minority and low-income populations and Year 2035 regional land use and transportation system planning, KRM Commuter Link planning, and a prospective Environmental Justice Task Force: American Civil Liberties Union of Wisconsin, Black Health Coalition of Wisconsin, Metropolitan Milwaukee Fair Housing Council, Milwaukee Branch NAACP, and University of Wisconsin-Milwaukee.
  - Two presentations on the Regional Wireless Telecommunications Plan being developed by the Commission were provided, working in coordination with the CNI/Fondy North Business Association. These occurred during a Media, Wireless, and You conference conducted at the Milwaukee School of Engineering, and during a Digital Divide Summit meeting conducted at Phyllis Wheatley Elementary School in the City of Milwaukee.
  - A presentation on regional water and transportation issues to the Waukesha County Action Network.



- Helped plan and conduct the 2007 Community Development Symposium in cooperation with the Milwaukee Metropolitan Builders Association and several other organizations. SEWRPC's Executive Director facilitated the symposium.
- A presentation on conservation subdivision and development design considerations at a Wisconsin Land and Water Conservation Association meeting.
- A presentation to the McHenry County (Illinois) Planning Commission describing the regional planning framework, including the regional land use plan and environmental corridor concept, and Commission efforts to assist Kenosha and Walworth Counties in developing multi-jurisdictional comprehensive plans for each County and a number of partnering local governments.
- Two presentations to a real estate records class at Waukesha County Technical College; the first on the regional plans prepared by the Commission and the second on automated land information systems.
- Presentations describing the purpose and findings to date of the regional water supply plan were made to a number of agencies, organizations, and conferences, including the Kenosha County Multi-Jurisdictional Comprehensive Plan Advisory Committee; the Agricultural and Natural Resources Work Group of the Ozaukee County Comprehensive Planning Citizen Advisory Committee; the Washington County Comprehensive Plan Advisory Committee; the SEWRPC Environmental Justice Task Force; an intergovernmental informational meeting for southern Waukesha and northeastern Walworth Counties; the Phantom Lakes Management District; the Southeast Area Land and Water Conservation Association; the Water-Wise in Waukesha County Conference; the Waukesha County Land Use, Parks, and Environment Committee; the Wisconsin Water Association Groundwater Management Conference; the Upper Mississippi River Basin State Cooperators' Roundtable for the U.S. Geological Survey Cooperative Water Program; the United Methodist Church in the Village of Whitefish Bay; and the Wisconsin Department of Natural Resources staff.
- Presentation to the Milwaukee County Committee on Parks, Energy, and Environment entitled, "Great Lakes – St. Lawrence River Basin Water Resources Compact - Background, Overview, and Implications."
- Presentation at the Wisconsin Association of Floodplain, Stormwater and Coastal Managers Fifth Annual Conference entitled, "A Design Rain Storm Time Distribution for the Southeastern Wisconsin Region."
- Presentation to a delegation traveling under the auspices of the International Visitors Leadership Program on Urban Environmental Issues entitled, "Watershed Planning and Regional Initiatives."
- Guest lectures at Carroll College and the University of Wisconsin – Milwaukee and a presentation at Woodside Elementary School in Sussex about the regional planning program and its relationship to natural resource protection, with a focus on lake and stream protection projects.
- Participation occurred in strategic planning for, "Common Ground, Continuing the Conversation," an inter-denominational and interfaith effort in the greater Milwaukee area designed to avoid and eliminate social disparity linked to race and income, among other issues.
- Continued Commission participation occurred in the interagency consortium known as "Testing the Waters," which has trained scores of teachers and thousands of high school students over the years, most from within the watersheds tributary to the Milwaukee Harbor Estuary. In 2007, staff again worked with the Washington County Land Conservation Department to plan and conduct two watershed bus tours for students and their teachers to view land use changes, water quality problems, and solutions particularly in the rural landscape. In addition, a presentation on the Regional Water Quality Management Plan Update was provided in a related teacher training session.
- Land Use Education Program resources in the form of aerial photographs and a meeting



with faculty occurred at Rufus King High School, for the purpose of continuing instruction in planning issues at this Milwaukee central city school.

- Educational sessions were conducted for ten groups of Pewaukee Middle School students attending camp on Lake Keesus in Waukesha County, to sample lake-bottom organisms and instruct about the impact of land use and roadways on the aquatic environment. This annual event has taught over 2,000 youth and their leaders over the years.
- Commission co-sponsorship and a staffed exhibit featuring major planning programs were provided during the two-day Milwaukee Regional Science and Engineering Fair conducted at the Wisconsin Career Academy, a Milwaukee Public Schools charter school.
- Assistance was provided in designing and interpreting the results of a community newsletter survey for the Village of Hartland.
- Presentation of a paper entitled, "Identifying Needs and Strategically Planning With Local Government Leaders: A Case Study of Hartland, Wisconsin," was given at the International Community Development Society conference held in Appleton, Wisconsin.
- Local coordination and plenary session moderation were provided during a major Growing Wisconsin: Working Lands Conference conducted in the City of Oconomowoc as part of a statewide series sponsored by the Wisconsin Department of Agriculture, Trade and Consumer Protection.
- The SEWRPC Regional Water Quality Management Plan Update (RWQMUP) for the Greater Milwaukee Watersheds and the MMSD 2020 Facilities Plan were developed separately, but in close coordination under an effort called the Water Quality Initiative (WQI). The following presentations were made related to the RWQMUP and the WQI:
  - Presentations to the Milwaukee Metropolitan Sewerage District (MMSD)

Commissioners, MMSD service area public officials, the MMSD Technical Advisory Team, the Executive Council of the MMSD Intergovernmental Cooperation Council of Milwaukee County, the MMSD/SEWRPC Citizens Advisory Council for the WQI, and the MMSD Virtual Team.

- Presentation to the MMSD Water Quality Initiative Integrated Watershed Implementation Plan Analysis Workshop.
- Presentation at the Clean Rivers - Clean Lakes IV Conference in Milwaukee, entitled "The Unveiling – Water Quality Plans for Action – Recommended Plan."
- Presentations to the Agricultural and Natural Resources Work Group of the Ozaukee County Comprehensive Planning Citizen Advisory Committee and to the Washington County Comprehensive Plan Advisory Committee.
- Public information meetings/public hearings on the plan were held in the Cities of Milwaukee and Racine and the Village of Newburg. Each meeting included a SEWRPC staff presentation on the recommended plan.
- The following activities were undertaken with regard to lake and stream management, including fisheries management:
  - Keynote address on trends in lake and stream management in Southeastern Wisconsin and a workshop on implementing lake management plans at the Southern Wisconsin Regional Lakes Workshop.
  - Co-presented a workshop for Lake District Commissioners at the Wisconsin Lakes Convention and served on the planning committee for the Convention.
  - Presentation on "Examples of Successful Lake and Stream Restoration in Southeastern Wisconsin" at the Clean Rivers - Clean Lakes IV Conference in Milwaukee.



- Participated in the “Pontoon Classroom” held on Tichigan Lake, sponsored by the Waterford Waterway Management District, and attended by students from area high schools.
- Presentation on keys to successful lake management plan implementation at the Southeastern Wisconsin Lakes Workshop held in Pewaukee.
- The following activities were undertaken with regard to wetland identification, vegetation management, and plant and wildlife habitat:
  - A presentation on calcareous fens and a field trip to study the water chemistry of a calcareous fen for a Carroll College Environmental Chemistry class.
  - A presentation to a Carroll College Environmental Studies class on Wetland Functions, Values, Types, and Protections in Wisconsin.
  - Helped facilitate a workshop on basic plant identification and descriptions of natural habitats for a Stewardship Corps Volunteer Program at Mequon Nature Preserve.
  - A presentation at a meeting of the Walworth County Land Trust on “Special Places in Walworth County,” describing natural areas and critical species habitats in the County.
- SEWRPC staff participated in, and provided assistance to, the following professional organizations:
  - Dr. Thomas M. Slawski of the Commission staff served as President of the Wisconsin Chapter of the American Fisheries Society.
  - Dr. Jeffrey A. Thornton chaired the North American Lakes Management Society publication committee, overseeing the magazine *LakeLine*, and journal, *Lake and Reservoir Management*, as well as special projects for the Society.
  - Served as the local organizing committee for the Wisconsin Chapter, American Fisheries Society, Annual Conference held in Milwaukee.
  - Commission staff continued to serve as Coordinator for the Southeast Area Land and Water Conservation Association, which is comprised of county land conservation committee and department staff representatives. In that capacity, relevant Commission activities were presented and discussed as appropriate.
  - Presentation and coordination leadership were provided for local officials and conservation agency staff attending a day-long bus tour hosted by the Soil and Water Conservation Society-Wisconsin Chapter and Southeast Area Land and Water Conservation Association. The tour featured environmental problems and solutions in Milwaukee and Ozaukee Counties, for which Commission staff served as primary tour guide.
  - A presentation on urban issues in conservation was given, and organizational and moderating assistance provided, to the Wisconsin Land and Water Conservation Association during that organization's annual conference. Attendees were principally county land conservation committee members and corresponding land conservation department staff.
  - Program area leadership via service as a District Liaison position and updates on Commission planning programs were provided to UW-Extension community resource development educators working in the Quad Counties of southeastern Wisconsin and Eastern Districts.
  - Facilitation assistance was provided to the Wisconsin Geographic Information Systems Coordination Council for a strategic planning session conducted in the City of Pewaukee.



## 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 of technical planning and engineering assistance to communities and government agencies on request. Representative advisory services performed during 2007 included the following:

- Provided information on comprehensive plan status and land use regulations in effect in each county and local unit of government in the Southeastern Wisconsin Region to the Wisconsin Department of Administration.
- Provided digital copies of conservation subdivision design figures prepared by the Commission staff to the 1000 Friends of Florida for their use in a best management practice manual for planning wildlife friendly communities in Florida.
- Provided sample Planned Unit Development (PUD) regulations and a sample ordinance to amend a Town zoning map to the Town of Polk.
- Provided information to the City of Waukesha regarding a desirable mix of housing types.
- Provided information to Ozaukee County on typical zoning ordinance provisions for regulating billboards.
- Provided an example of extraterritorial zoning regulations to a consultant working in Walworth County.
- Provided staff comments to the Waukesha County planning staff relating to the treatment of senior housing development proposals in relation to specific land use categories identified in land use plans.
- Met with the Town of Cedarburg to discuss regional plan recommendations related to providing sanitary sewer and water services to areas of new urban development.
- Met with the City and Town of Whitewater and the City and Town of Cedarburg to describe the

framework for intergovernmental agreements, including boundary agreements, shared services, and revenue sharing.

- Provided historic and existing land use data relating to orchards in the Southeastern Wisconsin Region to the Wisconsin Department of Agriculture, Trade, and Consumer Protection for use in identifying potential locations of pesticide contamination.

## 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. Two basic types of review services are performed by Commission staff: review of local plans, plan implementation devices, and development proposals; and review of environmental impact statements, reports, and assessments. SEWRPC historically reviewed applications for Federal and State grant assistance to determine if the proposed project was consistent with regional plan recommendations; however, the Wisconsin Department of Administration terminated the intergovernmental grant review program in July 2007. Accordingly, this function is no longer performed by the Commission.

At the request of local units of government, the Commission reviews and comments on locally prepared community comprehensive and neighborhood unit development plans and cooperative and boundary agreements for conformity with the regional plan. During 2007, the work program, outline, and a chapter of the Town of Salem Coordinated Land Use Plan, which will synthesize the 11 neighborhood plans prepared by the Town into one plan report, were reviewed.

The Commission staff routinely reviews proposed subdivision plats and certified survey maps for Kenosha, Racine, and Walworth Counties, as well as a number of cities and villages in the Region. In 2007, 50 preliminary subdivision plats were reviewed and comments were provided to the County or local government concerned. Plats submitted to the Commission are reviewed against all regional plan elements.



During 2007, Commission staff assisted The Nature Conservancy (TNC) and the USDA- Natural Resources Conservation Service in reviewing an Environmental Assessment for the Crooked Creek dam removal project. The assessment included two earth impounded dams on TNC land.

## **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 or plan implementation ordinances. During 2007, the Commission's project planning efforts included the following:

### **Comprehensive and Master Plans**

Commission staff work on comprehensive and master plans is focused on assisting six counties and 93 partnering cities, towns, and villages to prepare multi-jurisdictional county-local comprehensive plans to meet the requirements of the Wisconsin comprehensive planning law. Comprehensive planning activity in 2007 included the following:

- Commission staff continued work on a Kenosha County multi-jurisdictional comprehensive plan. The participating local governments are the City of Kenosha, the Villages of Pleasant Prairie and Silver Lake, and the Towns of Brighton, Bristol, Paris, Salem, Somers, and Wheatland. The Multi-Jurisdictional Advisory Committee (MJAC), consisting of representatives from the County and participating local governments and stakeholder group representatives, was established to oversee the planning process. Work on the plan during 2007 included the following:
  - A draft public participation plan (PPP) for the Kenosha County Multi-Jurisdictional Comprehensive Plan was prepared by UW-Extension with assistance from Commission staff, and approved by the MJAC in 2006. The PPP was adopted by the City of Kenosha, Villages of Pleasant Prairie and Silver Lake, and the Towns of Brighton, Paris, and Salem in 2006. The Kenosha County Board and the Bristol, Somers, and Wheatland Town Boards adopted the PPP in early 2007.
  - SEWRPC, in conjunction with Kenosha County and UW-Extension, co-hosted two public participation meetings. A “Kickoff” meeting was held in March to introduce the concept of comprehensive planning to the public, and to provide a forum for public input through a SWOT analysis workshop. A second public meeting, a “Kenosha County Café,” was held in May to help develop a vision for Kenosha County as part of the “Issues and Opportunities” element of the comprehensive plan.
  - SEWRPC, in conjunction with Kenosha County and UW-Extension, co-hosted a public informational meeting in each of the nine participating communities from September to November to introduce the concept of comprehensive planning to the public, and to provide a forum for public participation and input. The public comments were gathered and summarized by UW-Extension and incorporated into Chapter VII, “Issues and Opportunities Element.”
  - The following inventory chapters were prepared by SEWRPC staff and reviewed and conceptually approved by the MJAC: Chapter III, “Inventory of Agricultural, Natural, and Cultural Resources,” Chapter IV, “Inventory of Existing Land Uses and Transportation Facilities and Services,” Chapter V, “Existing Utilities and Community Facilities,” Chapter VI, “Existing Plans and Ordinances.”
  - Chapter VII, “Issues and Opportunities Element” was prepared by SEWRPC staff and distributed to participating local governments, the MJAC, and County staff and officials. The MJAC participated in an activity to develop a vision statement for Kenosha County as part of the “Issues and Opportunities” element. The preliminary draft of Chapter XIII, “Economic Development Element” was completed and tentatively approved by the MJAC. Preparation of Chapter X, “Housing Element,” was initiated.



- Work continued on updating the existing land use inventory for the County from 2000 to 2007, which will be incorporated into Chapter IV, “Inventory of Existing Land Uses and Transportation Facilities and Services,” and used to help design the land use element of the Kenosha County comprehensive plan.

- Commission staff continued to work with Ozaukee County staff to prepare an Ozaukee County multi-jurisdictional comprehensive plan and comprehensive plans for the 14 cities, villages, and towns partnering with the County. The partnering local governments are the Cities of Mequon and Port Washington; Villages of Belgium, Fredonia, Grafton, Newburg, Saukville, and Thiensville; and Towns of Belgium, Fredonia, Cedarburg, Grafton, Port Washington, and Saukville. SEWRPC work during 2007 included the following:

- The following element chapters of the multi-jurisdictional comprehensive plan report were prepared by SEWRPC staff and reviewed and approved by the appropriate comprehensive plan workgroup; the Citizen Advisory Committee (CAC); and the Comprehensive Planning Board (CPB), a subcommittee of the Ozaukee County Board of Supervisors:
  - Chapter VII, the “Agricultural, Natural, and Cultural Resources Element.”
  - Chapter VIII, the “Land Use Element.”
  - Chapter IX, the “Housing Element.”
  - Chapter X, the “Transportation Element.”
  - Chapter XI, the “Utilities and Community Facilities Element.”
  - Chapter XIII, the “Economic Development Element.”

SEWRPC staff completed a 2007 generalized land use map for each community, which was used to help design a land use plan map and a land use element for each partnering community. SEWRPC and Ozaukee County staff met with each participating local government as needed during the year to develop a preliminary

land use plan map for 2035 and to review data layers to help identify environmentally sensitive lands and natural limitations for building site development for inclusion in the land use element of each local plan. The local land use plan maps were used to prepare the County land use plan map.

- SEWRPC staff prepared “templates” to be used to prepare the agricultural, natural, and cultural resources; housing; and economic development elements of city, village, and town comprehensive plans and distributed the templates to participating local governments for their use. SEWRPC and Ozaukee County staff attended local plan commission meetings as requested to assist in developing the local plan element chapters.

- Commission staff continued to work with Washington County staff to prepare a Washington County multi-jurisdictional comprehensive plan and comprehensive plans for the 10 towns and one village partnering with the County. The participating local governments are the Towns of Addison, Barton, Erin, Farmington, Germantown, Hartford, Kewaskum, Polk, Trenton, and Wayne, and the Village of Kewaskum. SEWRPC work during 2007 included the following:

- The following element chapters of the multi-jurisdictional comprehensive plan report were prepared by SEWRPC staff and reviewed and approved by the appropriate comprehensive plan workgroup, the Multi-Jurisdictional Advisory Committee (MJAC), the Technical Advisory Committee (TAC), and the Planning, Conservation, and Parks Committee (PCPC) of the Washington County Board of Supervisors:

- Chapter VII, the “Issues and Opportunities Element.”
- Chapter VIII, the “Agricultural, Natural, and Cultural Resources Element.”
- Chapter IX, the “Land Use Element.”
- Chapter X, the “Housing Element.”



- Chapter XI, the “Transportation Element.”
- Chapter XII, the “Utilities and Community Facilities Element.”
- Chapter XIII, the “Economic Development Element.”
- SEWRPC and County staff worked with each partnering community to prepare and fine-tune a preliminary land use plan map for 2035. Once approved by the local government, SEWRPC staff standardized local land use categories in order to compile a County land use plan map. SEWRPC and County staff also worked with communities that are not part of the multi-jurisdictional process to obtain adopted or preliminary land use plan maps for incorporation into the County plan map.
- SEWRPC reviewed each town land use plan map to determine if the plan was in substantial agreement with the regional land use plan. SEWRPC staff established the criteria used to determine substantial agreement and documented its findings in a memorandum for review by the PCPC. A County Board resolution adopted in 2004 requires that Town land use plans be in substantial agreement with the regional land use plan in order to be incorporated into the County land use plan map. SEWRPC’s determination was reviewed by the PCPC on November 14, 2007, and the PCPC concurred with SEWRPC’s determination that each of the town plans was in substantial agreement with the regional plan, provided that the plans include policies calling for protection of primary environmental corridors. As required by Section 59.69 of the *Statutes*, city and village land use plan maps for areas within existing municipal boundaries were automatically included in the County plan.
- UW-Extension, County, and SEWRPC staff met with participating local governments to complete work on each local government’s vision, goals, and objectives. SEWRPC staff also continued work on drafting chapters for comprehensive plans for each of the participating local governments.
- Commission staff continued work on the preparation of a multi-jurisdictional comprehensive plan for Walworth County. The participating local units of government are the Towns of Darien, Delavan, East Troy, Geneva, LaFayette, LaGrange, Richmond, Sharon, Spring Prairie, Sugar Creek, Troy, Walworth, and Whitewater. The work is being carried out under the guidance of the Walworth County Smart Growth Technical Advisory Committee, consisting of representatives of each participating town and representatives of the County Zoning Committee and County Land Conservation Committee. Progress on the comprehensive planning program during 2007 included the following:
  - The Commission staff prepared preliminary drafts of Chapter IV (Inventory of Land Use and Transportation Facilities and Services), Chapter V (Inventory of Utilities and Community Facilities), Chapter VI (Inventory of Existing Plans and Ordinances), Chapter VII (Population, Household, and Employment Projections), and Chapter VIII (Issues and Opportunities and Goals and Objectives) of the comprehensive plan report.
  - The Commission staff administered a countywide public opinion survey on a range of topics of concern in the comprehensive planning process. The sample survey was conducted on a mail-out/mail back basis; the random sample included resident households and non-resident property owners. The staff prepared a memorandum report summarizing the survey results.
  - The Commission staff coordinated a series of public informational meetings at four locations throughout the County, providing the public with background information on the comprehensive planning program along with a summary of inventory data collected to date. These meetings included a group exercise in which the public was invited to identify strengths, weaknesses, opportunities, and threats facing the County, for consideration in developing the comprehensive plan. The staff prepared a memorandum report summarizing the results of these exercises.



- Commission staff continued work on the preparation of a multi-jurisdictional comprehensive plan for Racine County. All 18 local units of government in Racine County are participating in the planning process. The work is being carried out under the guidance of the Racine County Multi-jurisdictional Advisory Committee (MJAC), consisting of one representative of each participating local government and a representative of the Racine County Board Land Use and Economic Development Committee. Progress on the comprehensive planning program during 2007 included the following:
  - The Commission staff prepared preliminary drafts of Chapter III (Inventory of Agricultural, Natural, and Cultural Resources), Chapter IV (Inventory of Existing Land Uses and Transportation Facilities and Services), Chapter V (Inventory of Utilities and Community Facilities), Chapter VI (Inventory of Existing Plans and Ordinances), Chapter VII (Population, Household, and Employment Projections), and Chapter VIII (Issues and Opportunities and Goals and Objectives) of the comprehensive plan report. Chapters III thru VI were approved by the MJAC in 2007. Chapters VII and VIII will be considered at MJAC meetings in 2008.
  - In a cooperative effort between the Commission staff, UW-Extension, Racine County, and the MJAC, a countywide public opinion survey was conducted on a range of topics of concern in the comprehensive planning process. The sample survey was conducted on a mail-out/mail back basis; the random sample included County residents using voter registration lists. The UW-Extension staff prepared a memorandum report summarizing the survey results and the Commission printed the report.
  - The Commission, Racine County, and UW-Extension staffs coordinated a series of public informational meetings at four locations throughout the County, providing the public with background information on the comprehensive planning program along with a summary of inventory data collected to date. These meetings included a group exercise in which the public was invited to identify strengths, weaknesses, opportunities, and threats facing the County, for consideration in developing the comprehensive plan. The staff prepared a summary of the results of these exercises.
  - The Commission staff began the process of meeting with each of the participating communities for the purpose of creating or refining local land use plan maps, identifying local planning goals and objectives, and to select 2035 population, household, and employment projections. In 2007, meetings were held with eight of the 18 participating communities.
- The Commission staff continued to serve on the Waukesha County Comprehensive Development Plan Advisory Committee. Commission staff also serves on the Agricultural, Natural, and Cultural Resources and the Land Use and Transportation subcommittees and serves as staff for all subcommittees. Twenty-eight of the 37 cities, towns, and villages in the County are participating in a multi-jurisdictional planning process. The process is being led by County staff. The role of the Commission is to provide data from the Commission's data base as needed, to review draft plan materials, and to provide other assistance as needed. During 2007, Commission staff reviewed and continued to provide extensive comments on revised drafts of Chapter 5, "Housing Element," and Chapter 8, "Transportation Facilities Element"; and drafts of preliminary recommended planning objectives, principles, and standards pertaining to housing and transportation facilities. Commission staff provided drafts of Chapter VII, "Agricultural, Natural, and Cultural Resources Element," Chapter VIII, "Land Use Element," Chapter X, "Transportation Element," and Chapter XI, "Utilities and Community Facilities Element," of the Ozaukee County comprehensive plan report to assist Waukesha County staff in drafting similar plan element chapters for the Waukesha County comprehensive plan.



### **City, Town, and Village Park and Open Space Plans**

- A draft park and open space plan was completed and provided to the City of West Bend for review in late 2005. SEWRPC staff worked with City staff during 2007 to incorporate City comments into the plan and to prepare the plan for committee and public review in early 2008.

### **Zoning and Land Division Ordinances and Maps**

- Work continued on updating zoning maps for the Town of Barton and the Town of Erin, and work was initiated on an updated zoning map for the Town of Hartford. The Town of Barton zoning map was adopted by the Town Board. Draft maps were completed and sent to the Towns of Erin and Hartford for review.
- Continued to assist the Village of Hartland and Village of Wales in making comprehensive updates to the Village zoning ordinances, and to the Village of Hartland zoning map.
- Updated the Town of Polk zoning and land division ordinances and the Town zoning map to include recent amendments.

### **Other Project Planning Efforts**

- The Commission staff worked with the Wisconsin Department of Natural Resources

and other agencies on an initiative called “Sustain, Reconnect, and Grow Environmental Corridors” (SRGE). This multi-agency initiative seeks to increase the awareness of the importance of preserving environmental corridors and to enhance and expand environmental corridors, thereby benefiting water quality, expanding wildlife habitat, providing recreational opportunities, and retaining rural character. During the first six months of 2007, the Commission staff collated information on primary and secondary environmental corridors, isolated natural resource areas, candidate corridor expansion areas, and corridor buffer lands, specifically identifying those lands that are protected through public ownership, private ownership, or conservation easements. This information was presented by the Commission staff at a “kick-off” meeting held in May 2007. Ongoing efforts for the SRGE initiative will include annually acquiring information on open space acquisition activity by public and private agencies and periodic updates of the SRGE analysis to highlight the previous year’s activity.

- Assisted the Village of Hartland and the Zimmerman Architectural Studios, Inc., in preparing a Revitalization Plan for the Hartland Village Center. The plan was adopted by the Village in May as a component of the adopted Village of Hartland Master plan prepared by SEWRPC staff.



# **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 2007, 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 2007, 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 30 and in Table 20, a total of 11,753 U.S. Public Land Survey corners in the Region as of the end of 2007 had been relocated, monumented, and coordinated, representing 100 percent of all such corners in the Region. Map 31 shows those areas of the Region for which, as of the end of 2007, large-scale topographic maps had been or were being prepared to Commission-recommended standards. As shown in Table 20, the area thus completed totals about 2,385 square miles, or about 89 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 30 and 31 and on Map 33. Map 32 shows those areas of the Region for which, as of the end of 2007, large-scale cadastral (parcel) maps had been 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 portion of a completed cadastral map is shown on Map 34.



# RELOCATION, MONUMENTATION, AND COORDINATION OF U.S. PUBLIC LAND SURVEY CORNERS: 2007

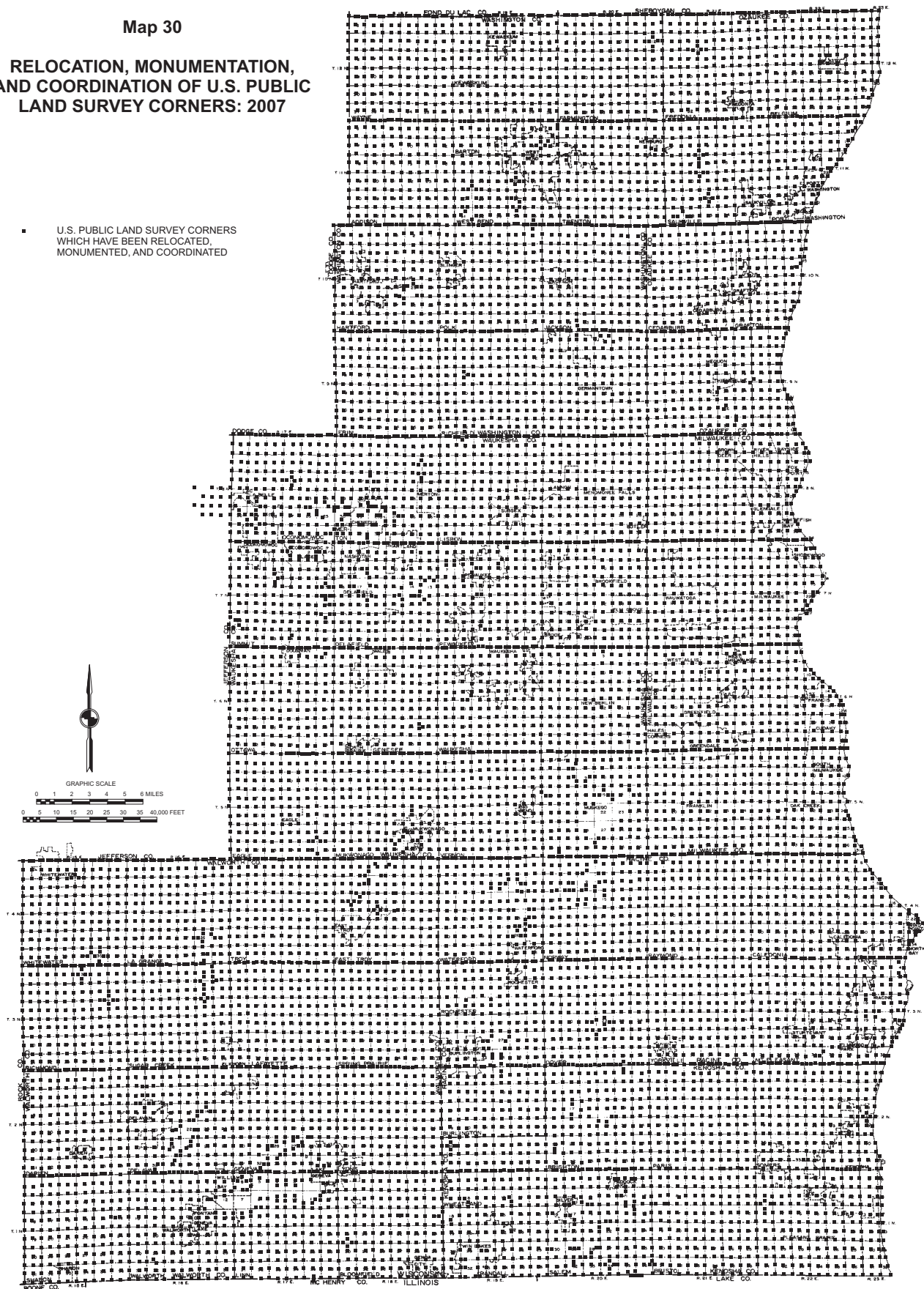




Table 20

**RELOCATION, MONUMENTATION, AND COORDINATION OF U.S. PUBLIC LAND  
SURVEY CORNERS AND COMPLETION OF LARGE-SCALE TOPOGRAPHIC MAPPING: 2007**

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						
		SEWRPC	County	Milwaukee Metropolitan Sewerage District	Local <sup>a</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	--	550.50	--	27.50	--	578.00	100.00
Washington .....	436	22.75	60.75	--	89.75	9.00	182.25	41.80
Waukesha .....	581	78.75	307.00	--	145.25	--	531.00	91.39
Region	2,689	190.00	1,763.25	49.50	371.00	11.50	2,385.25	88.70

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>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-

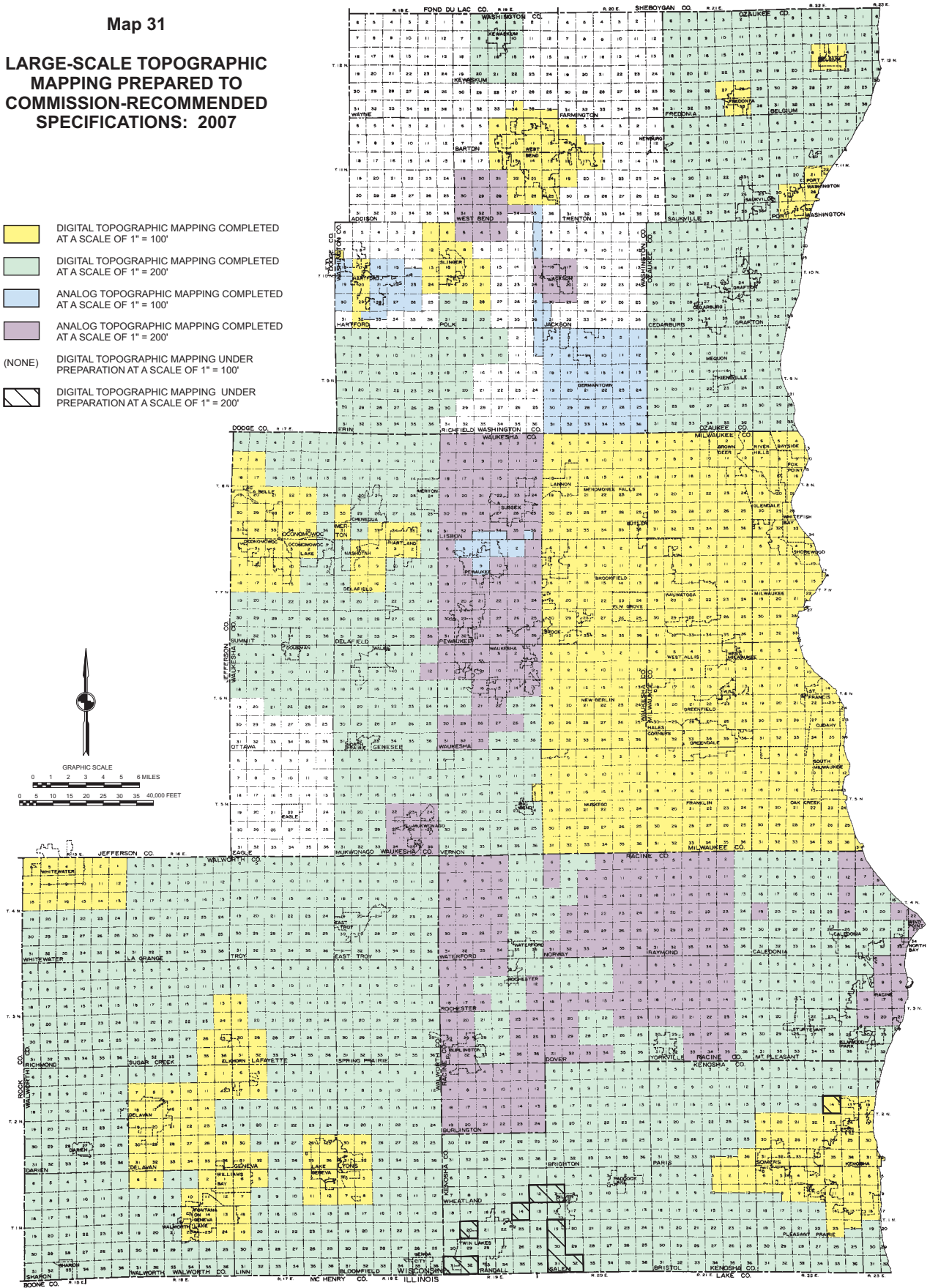
tor of which is to act in the capacity of county surveyor for the county. Under this act, the Commission is also made responsible for perpetuating corners of the U.S. Public Land Survey which maybe subject to destruction, removal, or burial through construction or other activities and for maintaining a record of the surveys required for such perpetuation. This act became effective on May 28, 1984.



# Map 31

## LARGE-SCALE TOPOGRAPHIC MAPPING PREPARED TO COMMISSION-RECOMMENDED SPECIFICATIONS: 2007



-  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'
- (NONE) DIGITAL TOPOGRAPHIC MAPPING UNDER PREPARATION AT A SCALE OF 1" = 100'
-  DIGITAL TOPOGRAPHIC MAPPING UNDER PREPARATION AT A SCALE OF 1" = 200'

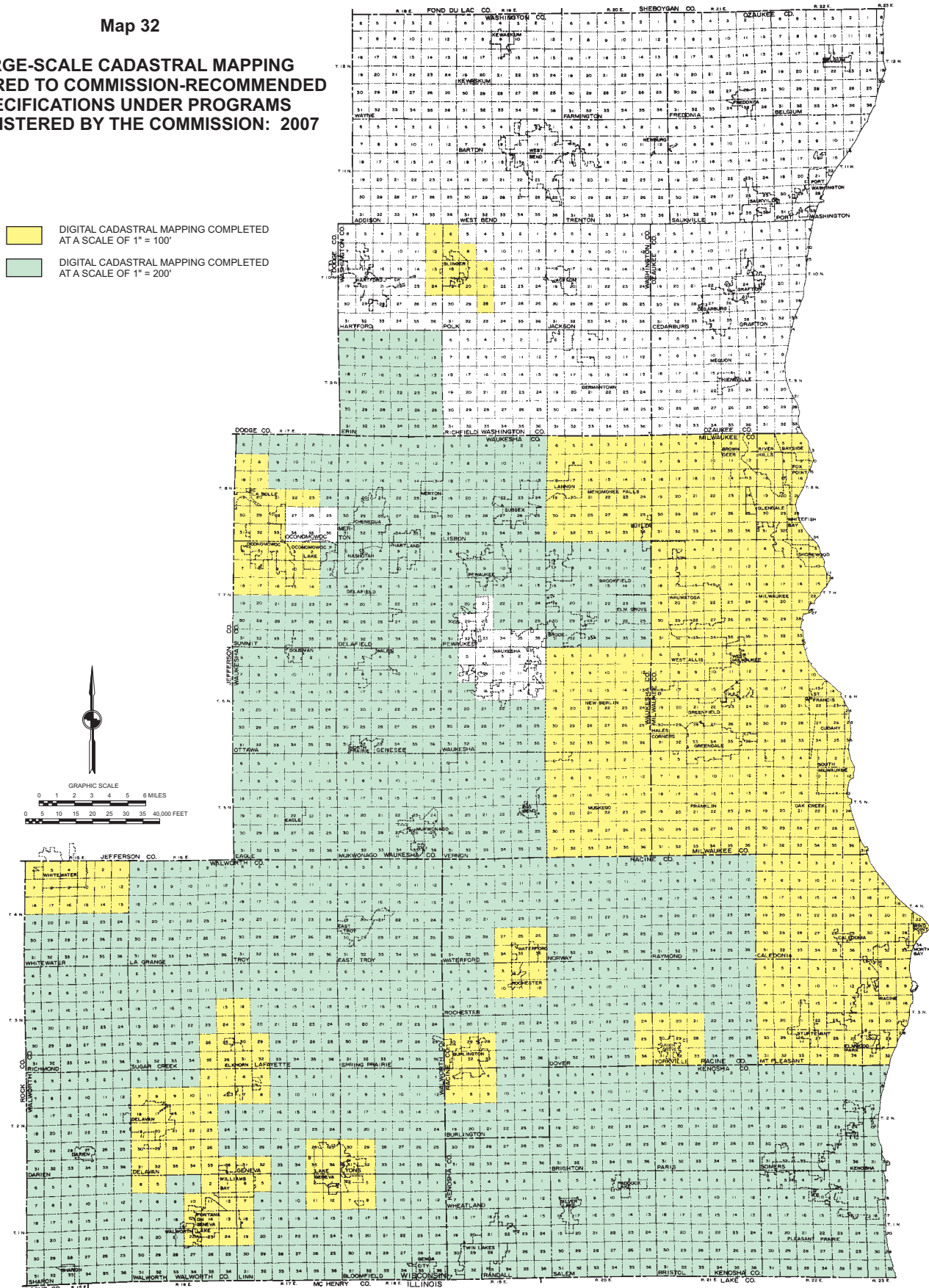
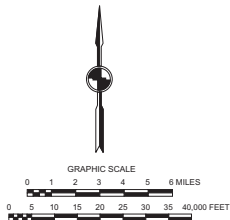




# Map 32

## LARGE-SCALE CADASTRAL MAPPING PREPARED TO COMMISSION-RECOMMENDED SPECIFICATIONS UNDER PROGRAMS ADMINISTERED BY THE COMMISSION: 2007

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





# RECORD OF U.S. PUBLIC LAND SURVEY CONTROL STATION

In 2007, under the requirements of this legislation, the Division received, indexed, and filed 1,675 records of land surveys completed within Milwaukee County, the only county within the Region which meets the statutory criteria concerned. In addition, the Commission began a project in 2006 to incorporate historic records of land surveys acquired from a now defunct land surveying firm. During 2007 a significant portion of these records were indexed and filed, bringing the total number of records of land surveys completed within Milwaukee County which have been filed by the Division to 65,063.

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. Since 2006, the Commission has been responsible for the perpetuation of the U.S. Public Land Survey System in Kenosha County. In Kenosha, 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 30 and 31—are updated on the internet site as new or revised data becomes available. In 2007, the Commission completed work on updating the website to include access to the record of land surveys index data base. At present, the user is able to locate

a particular record, or plat of survey, which has been filed in the Commission offices. The internet site can be accessed at [www.sewrpc.org/regionallandinfo/](http://www.sewrpc.org/regionallandinfo/).

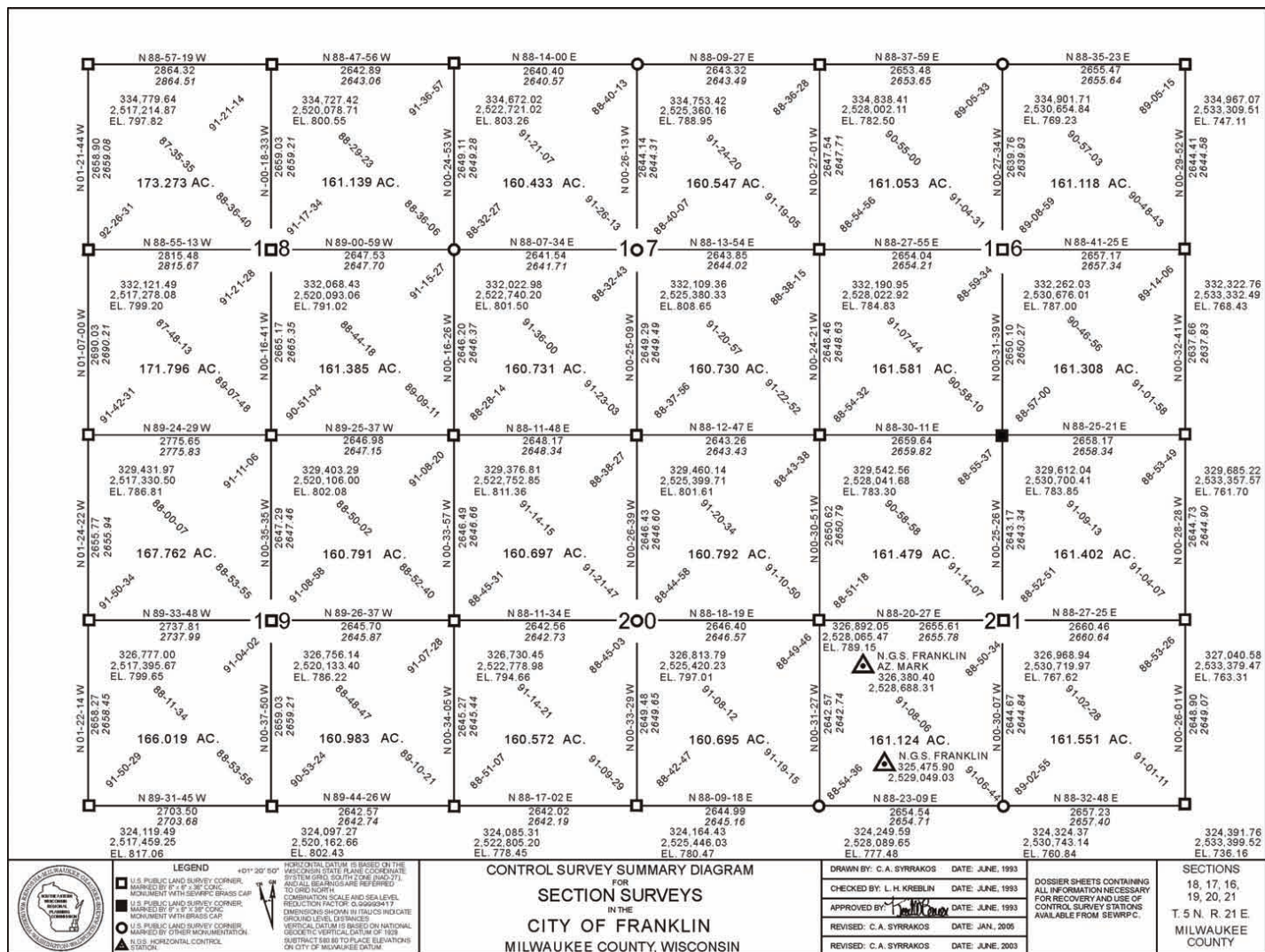
## REPRODUCTION SERVICES

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 2007, a total of 874 prints of aerial photographs and 25 large-scale topographic maps of portions of the Region were reproduced, along with one soil map print.



Figure 31

TYPICAL CONTROL SURVEY SUMMARY DIAGRAM



## FINAL REPORT PRODUCTION

The Commission produces most of its documents using in-house staff and equipment. During 2007, the Cartographic and Graphic Arts Division was responsible for the production of the following Commission publications:

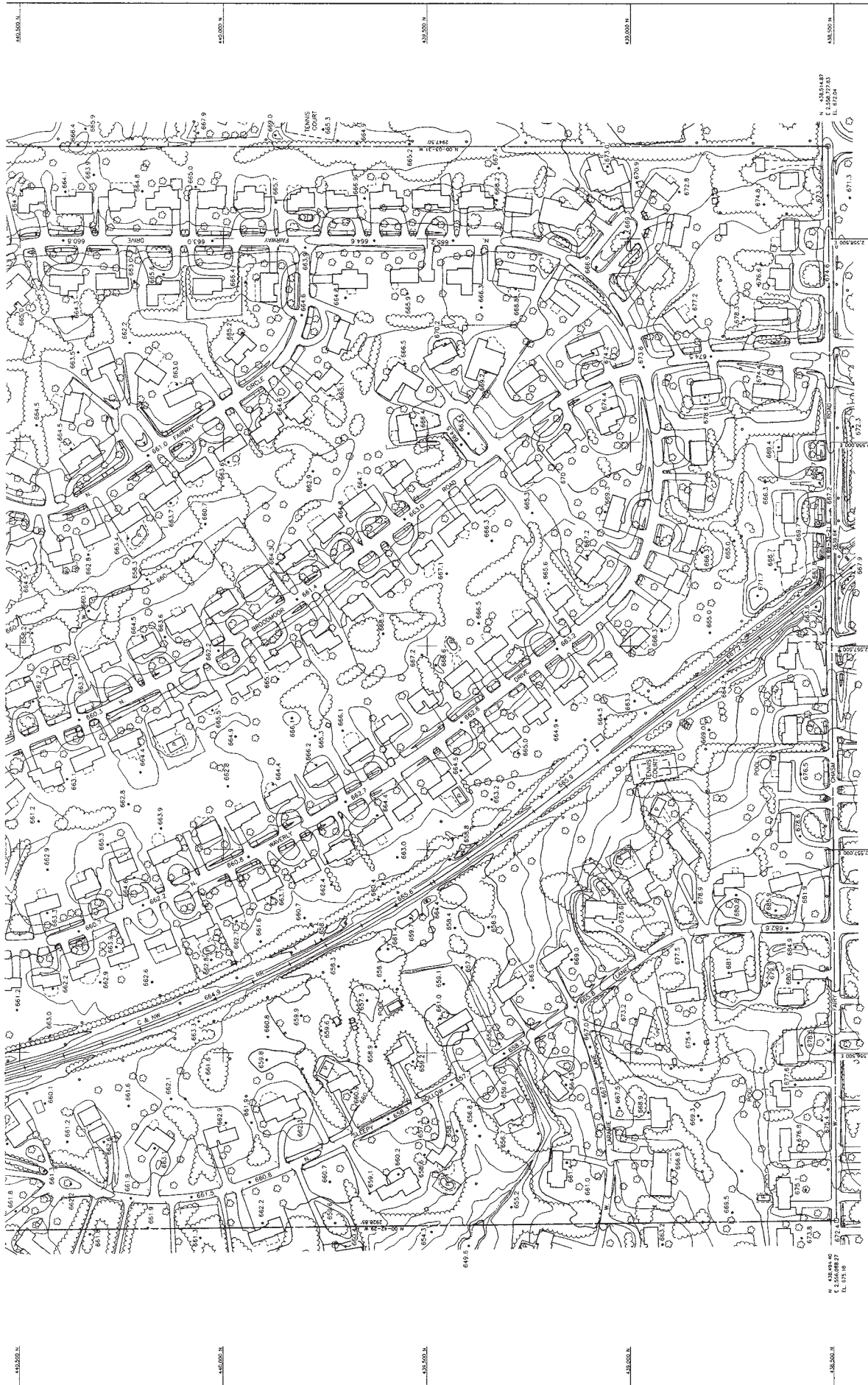
## PLANNING REPORTS

- No. 50, *A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds*, December 2007, 1,468 pages
- No. 53, *A Regional Broadband Telecommunications Plan for Southeastern Wisconsin*, October 2007, 193 pages



Map 33

TYPICAL TOPOGRAPHIC MAP



	<p>PREPARED FOR MILWAUKEE COUNTY, WISCONSIN</p> <p>BY KETO-METRIC ENGINEERING, INC. A DIVISION OF KETO-METRIC GROUP, INC. 10000 WISCONSIN AVENUE SOUTH EASTERN WISCONSIN REGIONAL OFFICE P.O. BOX 1111, SECAUCUS, NJ 07094</p>		<p>TOPOGRAPHIC MAP OF NE 1 / 4 SECTION 5 TOWNSHIP 8 NORTH, RANGE 22 EAST MILWAUKEE COUNTY, WISCONSIN</p>	<p>SCALE: 1" = 100' CONTOUR INTERVAL: 2' TO PLACE CLIPPING ON CITY OF MILWAUKEE DATUM SUBTRACT 506.803</p> <p>GRAPHIC SCALE IN FEET</p> <p>GRAPHIC SCALE IN METERS</p>	<p>COORDINATE SCALE AND SEA LEVEL HORIZONTAL DATUM IS THE WISCONSIN STATE PLANE COORDINATE SYSTEM VERTICAL DATUM IS MEAN SEA LEVEL COMPARISON TO NATIONAL MAP ACCURACY METHODS: THE MAP WAS COMPILED BY METRIC METHODS, INC. IN 1992 MET. PROJECT NO. 038712</p>	<p>LEGEND</p> <ul style="list-style-type: none"> <li>▲ NO. TRANSFER STATION</li> <li>○ ADJUSTED LANE CORNER</li> <li>△ SCANTY TRANSFER STATION</li> <li>✕ BM OR BM (LABELLED)</li> </ul> <p>1" = 100' SCALE</p>
--	--	--	--	--	--	---



TYPICAL CADASTRAL MAP



**LEGEND**

- UNIMPROVED 1/4 S. CORNER
- 1/4 S. CORNER LINE
- 1/4 S. CORNER SECTION LINE
- 1/4 S. CORNER QUARTER SECTION LINE
- 1/4 S. CORNER QUARTER SECTION QUARTER SECTION LINE
- 1/4 S. CORNER QUARTER SECTION QUARTER SECTION QUARTER SECTION LINE

**SECTION 1/4**

**SECTION 5**

**TOWNSHIP 8 NORTH, RANGE 22 EAST**

**MILWAUKEE COUNTY, WISCONSIN**

**PREPARED FOR**

**MILWAUKEE COUNTY, WISCONSIN**

**SOUTHERN WISCONSIN REGIONAL**

**PLANNING COMMISSION**

**K.W. BAUER, P.L., EXECUTIVE DIRECTOR**

**DATE OF SURVEY**

**DECEMBER 31, 1991**



## TECHNICAL REPORTS

- No. 39, *Water Quality Conditions and Sources of Pollution in the Greater Milwaukee Watersheds*, November 2007
- No. 43, *State-of-the-Art of Water Supply Practices*, July 2007, 246 pages
- No. 44, *Water Supply Law*, April 2007, 246 pages

## COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 47-2nd Edition, *A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin*, May 2007, 225 pages
- No. 48-2nd Edition, *A Lake Management Plan for Ashippun Lake, Waukesha County, Wisconsin*, May 2007, 192 pages
- No. 192-3rd Edition, *Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin*, March 2007, 48 pages
- No. 255-2nd Edition, *A Land and Water Resource Management Plan for Kenosha County: 2008-2012*, October 2007, 127 pages
- No. 259-2nd Edition, *A Land and Water Resource Management Plan for Racine County: 2008-2012*, October 2007, 131 pages
- No. 283, *A Lake Management Plan for the Waterford Impoundment, Racine County, Wisconsin*, October 2007, Volume 1, *Inventory Findings*, 127 pages
- No. 283, *A Lake Management Plan for the Waterford Impoundment, Racine County, Wisconsin*, October 2007, Volume 2, *Alternatives and Recommended Plan*, 83 pages
- No. 300, *A Lake Management Plan for George Lake, Kenosha County, Wisconsin*, August 2007, 166 pages
- No. 303, *Proposed Redistricting Plan for Walworth County: 2007*, July 2007, 32 pages

## ANNUAL REPORTS

- *2006 Annual Report*, October 2007, 208 pages

## MEMORANDUM REPORT

- No. 135-2nd Edition, *A Lake Protection Plan for the Kelly Lakes, Milwaukee and Waukesha Counties, Wisconsin*, April 2007, 243 pages

## NEWSLETTERS

- *Milwaukee County Transit System Development Plan: 2007-2011*, February 2007, 12 pages
- *Year 2035 Regional Land Use and Transportation System Plans for Southeastern Wisconsin*, April 2007, 24 pages
- *Summary of Proposed Comprehensive Broadband Telecommunications Plan for Southeastern Wisconsin*, October 2007, 8 pages
- *Regional Water Supply Plan for Southeastern Wisconsin*, December 2007, 16 pages

## OTHER

- *Record of Public Comments, Milwaukee County Transit System Development Plan, Volume 1, Comments Received Through March 31, 2007*, May 2007, 136 pages
- *Amendment to the Regional Water Quality Management Plan, Town of Bristol Utility District No. 1*, March 2007, 4 pages
- *Amendment to the Regional Water Quality Management Plan, City of Brookfield*, March 2007, 3 pages
- *Amendment to the Regional Water Quality Management Plan, Town of Salem*, March 2007, 5 pages
- *Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area*, March 2007, 4 pages
- *Amendment to the Regional Water Quality Management Plan, Villages of Caledonia and Mount Pleasant*, June 2007, 26 pages



- *Amendment to the Regional Water Quality Management Plan, Greater Kenosha Area, June 2007, 7 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Twin Lakes, June 2007, 5 pages*
- *Amendment to the Regional Water Quality Management Plan, Walworth County Metropolitan Sewerage District/Elkhorn Sanitary Sewer Service Area, June 2007, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, City of Burlington, September 2007, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, City of Oak Creek, September 2007, 5 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Sussex and Environs, September 2007, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, City of Muskego, December 2007, 4 pages*
- *Amendment to the Regional Water Quality Management Plan, Village of Wales/City of Waukesha, December 2007, 4 pages*



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# **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 an assemblage 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 have 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, 2005
- 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, 2005
- Natural Areas and Critical Species Habitats
- Civil Division Boundaries: 1985, 1990, 1995, 2000
- Regional Land Use Plans: 2010, 2020, 2035

- 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.

## **REGIONAL ORTHOPHOTOGRAPHY PROGRAM**

The Commission has a long-standing program of obtaining aerial photography of the Southeastern Wisconsin Region at regular intervals. Conventional aerial photography was first acquired in 1963 and thereafter collected in 1967, 1970, and at five-year intervals since. The early aerial photography was prepared as a black-and-white hardcopy product.

Beginning in 1995, the Commission upgraded the aerial photography to collect black-and-white orthophotography in both hardcopy and digital form. Orthophotography is aerial photography that is enhanced by the removal of horizontal displacement caused by ground relief, thereby creating image products that can be used as true maps. In 2005, the regional product was further enhanced with the collection of 12-inch pixel resolution color orthophotography in digital format only. Milwaukee and Waukesha Counties conducted separate projects that acquired more detailed 6-inch pixel resolution orthophotography to contribute to the regional product.



Hardcopy orthophoto products were not included in the 2005 orthophotography project, but can be prepared on demand from the digital orthophoto files.

In 2006, the Commission obtained a grant award from the U.S. Geological Survey (USGS) that was used to acquire color 12-inch pixel resolution orthophotography for a large portion of the Region. This project obtained 2007 orthophotography for all of Milwaukee, Ozaukee, and Waukesha Counties and portions of Washington and Dodge Counties. The USGS provided the grant as part of the Federal Homeland Security Program initiative to maintain current large-scale color orthophotography for the largest urban areas in the United States.

The 2007 orthophotography project acquired color digital orthophoto files in both GeoTIFF format and MrSID compressed file format for an area of about 1,187 square miles. In addition, the digital terrain model files used to prepare previous orthophotography were updated where necessary. The digital files were reviewed by Commission staff and preliminary files were delivered to the counties in 2007. The final orthophotography files for this project are expected to be delivered in early 2008.

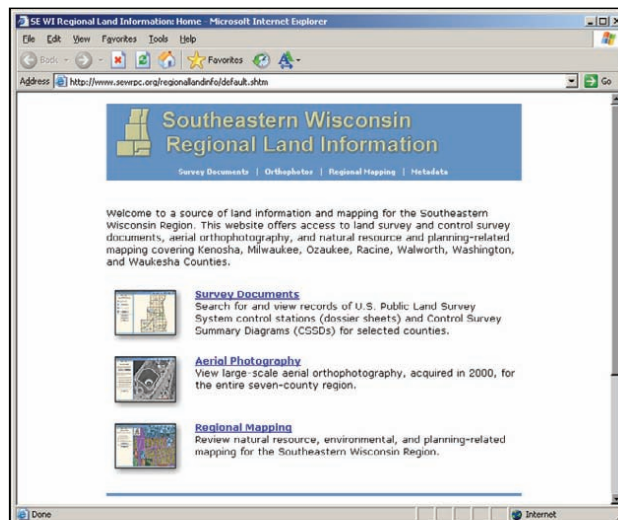
## DEVELOPMENT OF A REGIONAL LAND INFORMATION WEBSITE

In 2003, the Commission continued the development of a regional geographic information system with the creation of a land information website (see Figure 32). 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

Figure 32

### REGIONAL LAND INFORMATION WEBSITE



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.

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. The site displays year 2000 ortho-



photography and 2005 orthophotography. 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-feet or one-inch-equals-200-feet 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 provides a focal point for land records modernization issues and efforts within Wisconsin. Under the program, counties throughout the State prepared and implemented 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. 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 2007, the Commission carried out the following major activities in support of development of the county-based land information systems:

#### **Kenosha County**

- A large-scale topographic mapping project begun in 2006 was completed in Kenosha County. The Commission assisted the County in acquiring digital and hardcopy topographic mapping and digital terrain model files for an area of approximately eight square miles.
- The Commission initiated and completed a new mapping project that obtained digital and hardcopy topographic mapping and digital terrain model files for an additional eight square miles in the County.

#### **Milwaukee County**

- The Commission continued work on a floodland mapping 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 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 the land information data sets—including county-wide digital cadastral and topographic mapping—which have been prepared under the MCAMLIS program.

- The Commission, on behalf of the MCAMLIS Steering Committee, continued a project that will acquire color orthophotography, new digital terrain model files, and new and updated digital topographic mapping for all of Milwaukee County. Commission staff worked with the photogrammetric engineering firm selected for the project in reviewing and approving high-resolution orthophotography files covering the County. The orthophotography files were accepted and delivered to Milwaukee County in 2006. The majority of the digital terrain model files and digital topographic map files were delivered to the County by early 2007. The exception is the area covered by the Marquette Interchange Reconstruction Project, where final orthophotography, digital terrain model files, and topographic map files will be completed for this 2.5-square-mile area when the highway project is finished.

#### **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 completed a portion of the work required on a large-scale topographic mapping project covering an approximately 12-square-mile area. The hardcopy maps for this project were finalized and delivered to the County. Work began on the review of the digital terrain model and digital topographic map files prepared for the area, with final delivery of the files expected in early 2008.
- Commission staff continued to provide technical assistance to Racine County in 2007 by attending the County's regularly scheduled GIS Advisory Committee meetings.

### **Walworth County**

- The Commission continued to assist Walworth County with map maintenance services in 2007. Under an agreement with the County, the Commission staff performed regular updates to the County's digital zoning map. Under a separate agreement, the Commission staff reviewed and performed quality control procedures on the County-maintained digital cadastral mapping.

### **Washington County**

- The Commission assisted Washington County in a project which acquired new elevation data for a large portion of the County. Utilizing a new technology called LiDAR (light detection and ranging), the subcontractor for this project collected raw elevation data for the entire County. The raw data were then processed to create digital terrain model and digital elevation files (contour, depression, and spot elevation features) for an approximately 214-square-mile area, the last portion of the County for which elevation mapping had not been prepared. The Commission staff reviewed these files and delivered them to the County in 2007. The raw LiDAR data for the remainder of the County is available for processing when needed by Washington County.

### **Waukesha County**

- During 2007, 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 2007 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 2007, 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 2007, the Division distributed a total of 1,840 copies of Commission publications. These included the following: one prospectus, 330 planning reports,

294 amendments to planning reports, 151 technical reports, 471 community assistance planning reports, 45 memorandum reports, three technical records, 493 annual reports, 26 newsletters, four transportation improvement programs, one planning guide, 18 zoning ordinances, three records of public comment, and one lake use report. In addition, the Division distributed 911 aerial photographs, one soils map, and 28 topographic maps.



## **APPENDICES**



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## Appendix A

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: DECEMBER 2007

#### COMMISSIONERS

	Term Expires
<b>KENOSHA COUNTY</b>	
*** Robert W. Pitts .....	2012
** Adelene Greene .....	2010
* Anita M. Faraone .....	2010
<b>MILWAUKEE COUNTY</b>	
*** William R. Drew, Treasurer .....	2008
** Lee Holloway .....	2010
* vacancy .....	2008
<b>OZAUKEE COUNTY</b>	
** Thomas H. Buestrin, Chairman .....	2008
*** William E. Johnson .....	2012
* Gustav W. Wirth, Jr., Secretary .....	2008
<b>RACINE COUNTY</b>	
*** Susan S. Greenfield .....	2010
* Michael J. Miklasevich .....	2008
** Mary A. Kacmarcik .....	2012
<b>WALWORTH COUNTY</b>	
*** Richard A. Hansen, Vice-Chairman .....	2012
** Gregory L. Holden .....	2008
* Allen L. Morrison .....	2012
<b>WASHINGTON COUNTY</b>	
* Charlene S. Brady .....	2008
** Daniel S. Schmidt .....	2010
*** David L. Stroik .....	2012
<b>WAUKESHA COUNTY</b>	
* James T. Dwyer .....	2012
*** 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  
Richard A. Hansen, Vice-Chairman  
William R. Drew  
James T. Dwyer  
Adelene Greene  
Michael J. Miklasevich  
Daniel S. Schmidt  
David L. Stroik  
Gustav W. Wirth, Jr.

##### ADMINISTRATIVE COMMITTEE

David L. Stroik, Chairman  
Adelene Greene, Vice-Chairman  
Thomas H. Buestrin  
William R. Drew  
James T. Dwyer  
Richard A. Hansen  
Michael J. Miklasevich  
Allen L. Morrison  
Daniel S. Schmidt  
Gustav W. Wirth, Jr.

##### INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE

Michael J. Miklasevich, Chairman  
Allen L. Morrison, Vice-Chairman  
Charlene S. Brady  
Thomas H. Buestrin  
William R. Drew  
James T. Dwyer  
Anita M. Faraone  
Lee Holloway  
Gustav W. Wirth, Jr.

##### PLANNING AND RESEARCH COMMITTEE

Daniel S. Schmidt, Chairman  
Charlene S. Brady, Vice-Chairman  
Thomas H. Buestrin  
Anita M. Faraone  
Susan S. Greenfield  
Gregory L. Holden  
Lee Holloway  
William E. Johnson  
Mary A. Kacmarcik  
Michael J. Miklasevich  
Robert W. Pitts  
David L. Stroik  
Anselmo Villarreal  
Paul G. Vrakas



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## Appendix B

### COMMISSION ADVISORY COMMITTEES: 2007

#### 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  
Justin Drew ..... City Planner, City of Hartford  
Thomas J. Gorlinski ..... Former 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  
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  
George A. Torres ..... Director of Transportation and Public Works, Department  
of Public Works, Milwaukee County  
Earl E. Vorpagel, 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  
Kenneth R. Yunker ..... Deputy Director,  
Secretary Southeastern Wisconsin  
Regional Planning Commission  
David C. Buehn ..... President, Village of Paddock Lake  
Wisconsin Department of Transportation  
Jeffrey T. Butler ..... Chairman, Town of Wheatland  
David E. Cox ..... Administrator, Village of Twin Lakes  
Virgil Gentz ..... Chairman, Town of Paris  
Barry S. Goad ..... President, Village of Genoa City  
Richard Gossling ..... Chairman, Town of Bristol  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Roger Johnson ..... President, Village of Silver Lake  
Thomas W. Kerkman ..... Chairman, Town of Brighton  
Michael M. Lemens ..... Director of Engineering, City of Kenosha  
Dwight E. McComb ..... Planning and Program  
Development Engineer,  
U.S. Department of Transportation,  
Federal Highway Administration  
George E. Melcher ..... Director, Department of Planning and  
Development, Kenosha County  
Matthew Ostrander ..... Chairman, Town of Randall  
James M. Smith ..... Chairman, Town of Somers  
Michael Spence ..... Village Engineer, Village of Pleasant Prairie  
Diann D. Tesar ..... Chairman, Town of Salem

#### MILWAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

George A. Torres ..... Director of Transportation and Public Works,  
Chairman Department of Parks and Public Infrastructure  
Milwaukee County  
Kenneth R. Yunker ..... Deputy Director,  
Secretary Southeastern Wisconsin  
Regional Planning Commission  
John M. Bennett ..... City Engineer, City of Franklin  
Curt Bolton ..... City Engineer,  
City of Greenfield  
Patrick Casey ..... Village Administrator, Village of West Milwaukee  
Melinda K. Dejewski ..... City Engineer, City of St. Francis  
David Eastman ..... Director of Public Works, City of Gendale

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

E. Graig Faucett ..... Engineering Director,  
Department of Public Works,  
City of Cudahy  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
William A. Kappel ..... Director of Public Works,  
City of Wauwatosa  
Mary Jo Lange ..... Village Engineer, Village of Whitefish Bay  
Michael G. Lewis ..... City Engineer, City of West Allis  
Jeffery J. Mantes ..... Commissioner of Public Works,  
City of Milwaukee  
Michael J. Martin ..... Director of Public Works, Village of Hales Corners  
Andrew Pederson ..... Village Manager, Village of Bayside  
Allen Radliff ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
Susan E. Robertson ..... Village Manager, Village of Fox Point  
Wayne St. John ..... Director of Public Works, City of Oak Creek  
Chris Swartz ..... Village Manager, Village of Shorewood  
Carl J. Tisonik ..... Director of Public Works, Village of Greendale  
Thomas W. Tollaksen ..... Village Manager, Village of River Hills  
Russell Van Gompel ..... Village Manager, Village of Brown Deer  
Kyle E. Vanderkar ..... City Engineer, City of South Milwaukee

#### OZAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Robert R. Dreblow ..... Highway Commissioner,  
Chairman Ozaukee County  
Kenneth R. Yunker ..... Deputy Director,  
Secretary Southeastern Wisconsin  
Regional Planning Commission  
Lester A. Bartel, Jr. .... Chairman, Town of Grafton  
Bill Cording ..... Clerk, Village of Newburg  
Karl V. Hertz ..... President, Village of Thiensville  
William Hoppe ..... City Engineer, City of Mequon  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
James Kadow ..... Chairman, Town of Saukville  
Frederick Kaul ..... Chairman, Ozaukee County  
Public Works Committee  
Francis J. Kleckner ..... Chairman, Town of Belgium  
Richard Mueller ..... Chairman, Town of Fredonia  
Dave Murphy ..... Director of Public Works/  
Village Engineer, Village of Grafton  
Gregory P. Myers ..... Mayor, City of Cedarburg  
Allen Radliff ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
Lee E. Schlenvogt ..... Chairman, Town of Port Washington  
Donald J. Schommer ..... President, Village of Belgium  
Joseph Short ..... President, Village of Fredonia  
David Valentine ..... Chairman, Town of Cedarburg  
Robert Vanden Noven ..... City Engineer/Public Works Director,  
City of Port Washington  
Roy Wilhelm ..... Director of Public Works,  
Village of Saukville

#### RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

David Proft ..... Director of Public Works,  
Chairman Racine County  
Kenneth R. Yunker ..... Deputy Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Michael Aimone ..... President, Village of Union Grove  
Julie A. Anderson ..... Director, Planning  
and Development,  
Racine County  
Michael H. Andreason ..... President, Village of Mount Pleasant  
Donna Block ..... Supervisor, Town of Waterford  
Christopher Denman ..... President, Village of Rochester  
Rebecca Ewald ..... Administrator, Village of Waterford  
Raymond A. Gromacki ..... Chairman, Town of Dover  
Michael A. Hayek ..... Village Engineer, Village of Caledonia  
Steven Jansen ..... President, Village of Sturtevant  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation



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

Richard M. Jones ..... Commissioner of Public Works,  
City of Racine  
Gary Kastenson ..... Chairman, Town of Raymond  
Thomas R. Kramer ..... Treasurer, Town of Norway  
Claude Lois ..... Mayor, City of Burlington  
Dennis C. Mahoney ..... President, Village of North Bay  
Terrence J. McMahon ..... Supervisor, Town of Yorkville  
Cecil F. Mehrling ..... Manager of Planning and Engineering Services,  
Public Works Department, Racine County  
Brian F. O'Connell ..... Director of City Development, City of Racine  
Kurt Petrie ..... Chairman, Town of Burlington  
Andrew Radliff ..... Wisconsin Division of Administrator  
Federal Highway Administration,  
U.S. Department of Transportation  
William F. Schalk ..... President, Village of Wind Point  
Audrey Viau ..... President, Village of Elmwood Park  
Michael Weinkauff ..... Supervisor, Town of Rochester

**WALWORTH COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Shane Crawford ..... Director of Public Works, Walworth County  
Chairman  
Kenneth R. Yunker ..... Deputy Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Joseph Abell ..... Chairman, Town of Walworth  
David Bollweg ..... Chairman, Town of Linn  
Tom Brandemuehl ..... Superintendent of Public Works,  
Village of Mukwonago  
Kevin M. Brunner ..... City Manager, City of Whitewater  
Allen Curler ..... Chairman, Town of Troy  
Charles Dorn ..... President, Village of Sharon  
Ron Fero ..... Chairman, Town of Whitewater  
Barry S. Goad ..... President, Village of Genoa City  
Dewayne J. Johnson ..... Director, Southeast Region  
Wisconsin Department of Transportation  
Dennis Jordan ..... Administrator, City of Lake Geneva  
Daniel L. Lauderdale ..... Chairman, Town of Geneva  
William R. Loesch ..... President, Village of East Troy  
Cecil R. Logterman ..... Chairman, Town of Darien  
William R. Mangold ..... Chairman, Town of Lyons  
Dwight E. McComb ..... Planning and Program Development Engineer,  
U.S. Department of Transportation,  
Federal Highway Administration  
Jerry Mehrling ..... Superintendent of Public Works,  
Village of Williams Bay  
Robert Metzner ..... President, Village of Darien  
Kenneth Monroe ..... Chairman, Town of Bloomfield  
Robert R. Mueller ..... Chairman, Town of East Troy  
Charles Papcke ..... Chairman, Town of Sugar Creek  
Ron Politt ..... President, Village of  
Fontana-on-Geneva Lake  
Allan Polyock ..... Chairman, Walworth County  
Public Works Committee  
Wayne Polzin ..... Chairman, Town of Delavan  
Wayne Redenius ..... Chairman, Town of Richmond  
Bruce Schiffleger ..... Chairman, Town of Lafayette  
James C. Simons ..... Chairman, Town of Spring Prairie  
Samuel E. Tapson ..... Administrator, City of Elkhorn  
Frank Taylor ..... Chairman, Town of LaGrange  
Edward Vander Veen ..... Chairman, Town of Sharon  
James O. Wagner ..... President, Village of Mukwonago  
Todd V. Waters ..... President, Village of Walworth  
Mark E. Wendorf ..... Director of Public Works, City of Delavan

**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  
James Bennett ..... Chairman, Town of Hartford  
Richard L. Bertram ..... Chairman, Town of Barton  
Robert A. Bingen ..... Chairman, Town of Addison  
Russell Brandt ..... President, Village of Slinger  
Kristine Deiss ..... Mayor, City of West Bend  
Justin Drew ..... City Planner, City of Hartford  
Jerry Gilles ..... Director of Public Works, Village of Kewaskum  
Joseph C. Gonnering ..... Chairman, Town of Trenton

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

Dan Goetz ..... Supervisor, Washington County Board  
Scott M. Henke ..... Mayor, City of Hartford  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Ellis R. Kahn ..... Chairman, Town of Kewaskum  
Thomas Kempinski ..... President, Village of Germantown  
Dennis E. Kenealy ..... Chairman, Town of Erin  
Carl Klemme ..... Chairman, Town of Wayne  
Dwight E. McComb ..... Planning and Program Development Engineer,  
U.S. Department of Transportation,  
Federal Highway Administration  
Paul J. Metz ..... Chairman, Town of Germantown  
Scott A. Mittelsteadt ..... President, Village of Jackson  
Paul E. Mueller ..... Administrator,  
Planning and Parks Department,  
Washington County  
Diane Pedersen ..... Chairman, Town of Richfield  
Gene L. Reiter ..... Citizen, Town of Polk

**WAUKESHA COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Kenneth C. Herro ..... Supervisor, Waukesha County Board  
Chairman Waukesha County Public Works Committee  
Kenneth R. Yunker ..... Deputy Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Richard Arrowood ..... Chairman, Town of Ottawa  
Tim Barbeau ..... Town Engineer, Town of Delafield  
Richard A. Bolte ..... Director of Public Works,  
Waukesha County  
Kenneth C. Herro ..... Supervisor, Waukesha County Board  
Chairman Waukesha County Public Works Committee  
Kenneth R. Yunker ..... Deputy Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Richard Arrowood ..... Chairman, Town of Ottawa  
Tim Barbeau ..... Town Engineer, Town of Delafield  
Richard A. Bolte ..... Director of Public Works,  
Waukesha County  
Gordon Carlson ..... Supervisor, Town of Genesee  
Harlan E. Clinkenbeard ..... Planner, City of Pewaukee  
Paul G. Day ..... Interim Director of Public Works,  
City of Waukesha  
David Dubey ..... Chairman, Town of Mukwonago  
Richard Eberhardt ..... Town Engineer, Town of Waukesha  
Richard A. Ensslin ..... President, Village of Butler  
Jeffery A. Flaws ..... President, Village of Wales  
Scott Gosse ..... Administrator, Village of Pewaukee  
Keith Henderson ..... Chairman, Town of Brookfield  
Brian Hense ..... President, Village of Big Bend  
Robert Hultquist ..... Chairman, Town of Oconomowoc  
Arlyn Johnson ..... Director of Engineering Services,  
Village of Menomonee Falls  
Gregory W. Kessler ..... Director, Department of City Development,  
City of New Berlin  
Richard J. Kneiser ..... President, Village of Oconomowoc Lake  
Robert Kwaitkowski ..... Chairman, Town of Eagle  
Tony Lapcinski ..... President, Village of Sussex  
Richard Lartz ..... President, Village of Nashotah  
Dan Martin ..... President, Village of Lannon  
Dwight E. McComb ..... Planning and Program  
Development Engineer,  
U.S. Department of Transportation,  
Federal Highway Administration  
Richard Nawrocki ..... Supervisor, Town of Merton  
Jack Nissen ..... President, Village of Dousman  
Brian Paff ..... Chairman, Town of Vernon  
Neil Palmer ..... President, Village of Elm Grove  
Michael Reed ..... Chairman, Town of Lisbon  
Sheri Schmidt ..... Systems Planning Group Manager, Southeast Region  
Wisconsin Department of Transportation  
Philip Schuman ..... Mayor, City of Delafield  
Jennifer Sheffer ..... Administrator, City of Muskego  
Jeff R. Speaker ..... Mayor, City of Brookfield  
Richard A. Spurrell ..... President, Village of Eagle  
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  
Wallace C. Thiel ..... Village Administrator, Village of Hartland  
James O. Wagner ..... President, Village of Mukwonago  
Robert W. Weber ..... President, Village of Merton  
Joseph L. Whitmore ..... President, Village of North Prairie



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

David Prott..... Director of Public Works,  
Chairman Racine County  
Philip C. Evenson..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Michael H. Andreasen..... Administrator, Village of Mt. Pleasant  
Sandra K. Beaupre..... Director, Bureau of Planning, Division of  
Transportation Investment Management,  
Wisconsin Department of Transportation  
Michael J. Glasheen..... Transit Planner, City of Racine  
Michael A. Hayek..... Village Engineer, Village of Caledonia  
Mark C. Janiuk..... Administrator, Village of Sturtevant  
Dewayne J. Johnson..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Richard M. Jones..... Director of Public Works, City of Racine  
Dennis C. Mahoney..... President, Village of North Bay  
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.  
Allen Radliff..... Wisconsin Division Administrator  
Federal Highway Administration  
U.S. Department of Transportation  
William H. Shalk..... President, Village of Wind Point  
Marisol Simón..... Regional Administrator, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation  
Audrey Viau..... President, Village of Elmwood Park

**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  
Leonard Brandrup..... Director, Department of Transportation  
City of Kenosha  
Ronald L. Bursek..... Director, Public Works Department,  
City of Kenosha  
Dewayne J. Johnson..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Jeffrey B. Labahn..... Director, Department of City Development,  
City of Kenosha  
Michael M. Lemens..... Director, Engineering Division,  
Public Works Department,  
City of Kenosha  
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 J. Pjevach..... President, Wisconsin Coach Lines, Inc.  
Michael R. Pollocoff..... Administrator, Village of Pleasant Prairie  
Allen Radliff..... Wisconsin Division Administrator  
Federal Highway Administration  
U.S. Department of Transportation  
Marisol Simón..... Regional Administrator, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation

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

Richard A. Bolte..... Director of Public Works, Waukesha County  
Robert R. Dreblow..... Highway Commissioner, Ozaukee County  
Thomas M. Grisa..... Director of Public Works, City of Brookfield  
Robert C. Johnson..... Transit Director, City of Waukesha  
Transit System Utility  
William A. Kappel..... Director of Public Works,  
City of Wauwatosa  
Michael G. Lewis..... City Engineer, City of West Allis  
Michael J. Maierle..... Manager of Long-Range Planning,  
Department of City Development,  
City of Milwaukee

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

Jeffrey J. Mantes..... Commissioner,  
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  
George A. Torres..... Director of Transportation and Public Works,  
Department of Parks and Public Infrastructure,  
Milwaukee County  
Paul Vornholt..... Mayor's Office, City of Milwaukee  
Scott K. Walker..... Milwaukee County Executive  
Philip Walzak..... Staff Advisor to the Mayor,  
Office of Mayor Tom Barrett,  
City of Milwaukee  
Dr. James G. White..... Supervisor, Milwaukee County Board of Supervisors

**Nonvoting Technical Staff Members**

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  
Anita Gullota-Connelly..... Managing Director,  
Milwaukee County Transit System  
Dewayne J. Johnson..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Peter T. McMullen..... Program and Planning Analyst,  
Transportation Section of Air Management,  
Wisconsin Department of Natural Resources  
Michael J. Pjevach..... President, Wisconsin Coach Lines, Inc.  
Allen Radliff..... Wisconsin Division Administrator  
Federal Highway Administration  
U.S. Department of Transportation  
Marisol Simón..... Regional Administrator, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation

**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  
Allison Bussler..... Chief of Staff,  
Waukesha County Executive's Office  
Shane Crawford..... Public Works Director, Walworth County  
Anita Gullota-Connelly..... Managing Director,  
Milwaukee County Transit System  
Paul G. Day..... Interim Director of Public Works,  
City of Waukesha  
Robert R. Dennik..... Deputy Chief of Staff, Milwaukee County  
Executive's Office  
Robert R. Dreblow..... Highway Commissioner, Ozaukee County  
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  
Kevin K. Kessler..... Acting Director, Bureau of Air Management,  
Wisconsin Department of Natural Resources  
Michael M. Lemens..... Director of Engineering, City of Kenosha  
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, U.S. Department of Transportation,  
Federal Highway Administration  
Gloria L. McCutcheon..... Southeast Region Director, Wisconsin  
Department of Natural Resources  
Larry Moore..... Community Partnership Coordinator  
City of Milwaukee Housing Coordinator  
Kenneth M. Pesch..... Highway Commissioner, Washington County  
Jeffrey S. Polenske..... City Engineer, City of Milwaukee  
David Proff..... Director of Public Works,  
Racine County



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

Sheri Schmit ..... Systems Planning Group Manager  
Southeast Region, Wisconsin Department of Transportation  
Marisol Simón ..... Regional Administrator, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation  
Wallace Thiel ..... Village Administrator, Village of Hartland  
George A. Torres ..... Director of Transportation  
and Public Works,  
Department of Parks and  
Public Infrastructure,  
Milwaukee County  
Sandra Rusch Walton ..... Director, Injury and Violence Prevention Program,  
City of Milwaukee Health Department

**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, Department of Public Works  
City of Milwaukee  
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, Southeast Region,  
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 Roessl ..... President, Bay View Bicycle Club  
Ronald J. Rutkowski ..... Director, Transportation Planning  
and Development, Milwaukee County  
Department of Parks and Public Infrastructure  
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

**DES PLAINES RIVER  
WATERSHED COMMITTEE**

George E. Melcher ..... Director, Department of Planning and  
Chairman Development, Kenosha County  
Philip C. Evenson ..... Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Julie A. Anderson ..... Director, Planning and  
Development, Racine County  
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  
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  
Jeffrey B. Labahn ..... Director of City Development,  
City of Kenosha  
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

**DES PLAINES RIVER  
WATERSHED COMMITTEE  
(continued)**

Steve Richter ..... Director of Conservation and Land Management,  
The Nature Conservancy  
James M. Smith ..... Chairman, Town of Somers  
Ronald L. Thomas ..... Deputy Director of Planning,  
Chicago Metropolitan Agency for Planning  
Michael D. Warner ..... Executive Director, Lake County Stormwater  
Management Commission

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

Dr. Norman P. Lasca ..... Professor, Department of Geological Sciences,  
Chairman University of Wisconsin-Milwaukee  
Susan Black ..... Superintendent, Parks System Administration  
Vice-Chairman Milwaukee County Department of  
Parks and Public Infrastructure  
Dr. Donald M. Reed ..... Chief Biologist, Southeastern Wisconsin  
Secretary Regional Planning Commission  
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  
Steve Keith ..... Acting Director of Environmental Service,  
Milwaukee County  
Jeffrey J. Mantes ..... Commissioner of Public Works,  
Department of Public Works,  
City of Milwaukee  
Tamara Mayzik ..... Administrative Coordinator, City of South Milwaukee  
Gloria L. McCutcheon ..... District Director, Southeast Region,  
Wisconsin Department of Natural Resources  
C. William Nelson ..... Member, Great Lakes  
Sports Fisherman's Club  
Eric Reinelt ..... Municipal Port Director, Port of Milwaukee  
Susan E. Robertson ..... Manager, Village of Fox Point  
Chad Sampson ..... County Conservationist,  
Racine County  
Kevin L. Shafer, P.E. ..... Executive Director, Milwaukee  
Metropolitan Sewerage District

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

Daniel S. Schmidt ..... SEWRPC Commissioner  
Chairman  
Michael G. Hahn ..... Chief Environmental Engineer, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Julie A. Anderson ..... Director, Planning and Development,  
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  
Lisa Conley ..... Representative, Town and Country Resource  
Conservation and Development, Inc.  
Joyce Fiocco ..... Director, Land Resources and  
Parks Department, Dodge County  
Shawn Graff ..... Executive Director, The Ozaukee  
Washington Land Trust, Inc.  
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  
Steve Keith ..... Acting Director of Environmental Services,  
Milwaukee County  
Kristine M. Krause ..... Vice-President, Environmental  
Department, We Energies  
James F. Lubner ..... Sea Grant Advisory Services Specialist,  
University of Wisconsin Sea Grant Institute  
Jeffrey J. Mantes ..... Commissioner, Department of Public Works,  
City of Milwaukee  
Lynn Mathias ..... County Land Conservationist  
Fond du Lac County  
James L. McNelly ..... Regional Water Leader, Wisconsin  
Department of Natural Resources  
Charles S. Melching ..... Associate Professor,  
Civil and Environmental  
Engineering, Marquette University



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

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.....Director of Utilities,  
Village of Menomonee Falls  
Judith A. Neu.....City Engineer, City of West Bend  
Charles A. Peters.....Director, Wisconsin Water Science Center,  
U.S. Geological Survey  
Kevin L. Shafer.....Executive Director, Milwaukee  
Metropolitan Sewerage District  
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  
Shawn L. Wesener.....Assistant Planning Director,  
Planning and Resources Department,  
Sheboygan 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,  
Racine County  
Susan Black.....Superintendent, Parks System Administration,  
Milwaukee County Department of  
Parks and Public Infrastructure  
Martha L. Brown.....Deputy Commissioner, Department of  
City Development, City of Milwaukee  
John B. Capelle.....Director of Community Development,  
City of West Bend  
Krista Chapdelaine.....Water Resources Planner  
Milwaukee Metropolitan Sewerage District  
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  
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  
Jeffrey B. Labahn.....Director of City Development,  
City of Kenosha  
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  
Sheri Schmit.....Systems Planning Group Manager,  
Southeast Region, Wisconsin Department of Transportation  
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  
Donald Harrier, Jr.....Chief,  
Demographic Services Center,  
Wisconsin Department of Administration  
Dale A. Landgren.....Vice President and  
Chief Strategic Officer,  
American Transmission Company  
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  
Dennis K. Winters.....Chief of the Office of Economic  
Advisors, Wisconsin Department of  
Workforce Development

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

Dr. 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.....Former 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



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

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**

Dr. Kurt W. Bauer .....Executive Director Emeritus, Southeastern Wisconsin  
Chairman .....Regional Planning Commission  
Robert P. Biebel .....Special Projects Environmental Engineer,  
Secretary .....Southeastern Wisconsin  
Regional Planning Commission  
Julie A. Anderson .....Director, Planning and  
Development, Racine County  
Kenneth R. Bradbury.....Hydrogeologist/Professor  
Wisconsin Geological  
and Natural History Survey  
Thomas J. Bunker .....Former General Manager, Water and  
Wastewater Utility, City of Racine  
Douglas S. Cherkauer .....Professor of Hydrogeology,  
University of Wisconsin-Milwaukee  
Lisa Conley.....Representative, Town and  
Country Resource Conservation  
and Development, Inc.  
Michael P. Cotter.....Director, Walworth County  
Land Use and Resource  
Management Department  
Charles A. Czarkowski .....Regional Water Program Expert,  
Wisconsin Department of  
Natural Resources, Southeast Region  
Daniel S. Duchniak.....General Manager,  
Waukesha Water Utility,  
City of Waukesha  
Charles P. Dunning .....Hydrologist, U.S. Geological Survey  
Franklyn A. Ericson .....Manager,  
Environmental Operations &  
Central Services,  
S. C. Johnson & Son, Inc.  
David Ewig .....Water Superintendent,  
City of Port Washington  
Thomas M. Grisa .....Director of Public Works,  
City of Brookfield  
Jeffrey A. Helmuth.....Hydrogeologist Program Coordinator,  
Wisconsin Department of  
Natural Resources, Madison  
Andrew A. Holschbach.....Director, Ozaukee County Planning,  
Resources, and Land  
Management Department  
Eric J. Kiefer .....Manager,  
North Shore  
Water Commission  
Terrence H. Kiekhaefer .....Director of Public Works,  
City of West Bend  
Thomas J. Krueger.....Water and Wastewater Utility Director,  
Village of Grafton  
Carrie M. Lewis .....Superintendent, Milwaukee Water Works,  
City of Milwaukee  
Mark Lurvey.....Agricultural Business Operator  
George E. Melcher .....Director, Department of Planning and  
Development, Kenosha County  
Matthew Moroney.....Executive Director, Metropolitan Builders  
Association of Greater Milwaukee  
Paul E. Mueller .....Administrator, Washington County  
Planning and Parks Department  
Jeffrey Musche .....Administrator/Clerk, Town of Lisbon  
Michael P. Rau .....General Manager,  
We Energies-Water Services  
Edward St. Peter .....General Manager,  
Water Utility, City of Kenosha  
Dale R. Shaver .....Director, Waukesha County  
Department of Parks and Land Use  
James Surfus .....Senior Environmental Engineer,  
Miller Brewing Company  
George A. Torres.....Director, Transportation and Public Works  
Department, Milwaukee County  
Daniel S. Winkler.....Director of Public Works and Utilities,  
City of Lake Geneva  
Steven N. Yttri .....General Manager, Water and Sewer Utility,  
City of Oak Creek

**ADVISORY COMMITTEE ON REGIONAL  
TELECOMMUNICATIONS PLANNING**

Dr. Kurt W. Bauer .....Executive Director Emeritus, Southeastern Wisconsin  
Chairman .....Regional Planning Commission  
William R. Drew .....Southeastern Wisconsin Regional  
Vice-Chairman .....Planning Commissioner, and  
Executive Director,  
Milwaukee County Research Park  
Roger Caron.....President, Racine Area  
Manufacturers and Commerce  
Bob Chernow.....Chairman,  
Regional Telecommunications Commission  
David L. DeAngelis.....Village Manager,  
Village of Elm Grove  
Michael Falaschi.....President, Wisconsin Internet  
Barry Gatz .....Network Supervisor, CenturyTel  
Michael E. Klasen.....Director of Regulatory Affairs, SBC  
J. Michael Long .....Attorney at Law, Murn and Martin, SC  
Jeff Lowney .....Vice President/General Manager,  
Time Warner Telecom  
Jeff Mantes.....Commissioner, Department of Public Works,  
City of Milwaukee  
George E. Melcher .....Director, Department of Planning and  
Development, Kenosha County  
Paul E. Mueller .....Administrator, Washington County  
Planning and Parks Department  
Rob N. Richardson.....Director, Racine County Information Systems  
Steven L. Ritt .....Attorney at Law,  
Michael Best & Friedrich  
James W. Romlein .....Managing Director, MV Labs, LLC  
Bennett Schliesman .....Director, Kenosha County Emergency  
Management/Homeland Security  
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. ....Southeastern Wisconsin Regional  
Planning Commission Commissioner

**ENVIRONMENTAL JUSTICE TASK FORCE**

Adelene Greene .....Director of Workforce Development,  
Chairman .....Kenosha County; Commissioner, Southeastern  
Wisconsin Regional Planning Commission  
Ness Flores .....Attorney, Flores & Reyes Law Offices  
Joette Heckenbach.....COPE Services  
Nancy Holmlund .....President, Racine Interfaith Coalition,  
Darryl Johnson.....Executive Director,  
Riverworks Development Corporation  
Lo Neng Kiatoukaysy .....Executive Director,  
Hmong-American Friendship Association  
Gary Koppelberger .....Administrator, City of Hartford  
N. Lynnette McNeely.....Attorney, Law Offices of Thomas J. Awen; NAACP  
Larry Moore .....Community Partnership Coordinator,  
City of Milwaukee Housing Authority  
Brian Peters.....Housing Program Coordinator,  
Independence First  
Guadalupe "Wally" Rendon.....Member Education/Outreach Representative,  
Racine Educator's Credit Union;  
Former Racine Police Officer  
Yolanda Santos Adams.....Director, League of  
United Latin America Citizens  
Jackie Schellinger .....Indian Community School  
Theresa Schuerman .....Walworth County Bilingual  
Migrant Worker Outreach  
Willie Wade .....Alderman, City of Milwaukee

**TECHNICAL ADVISORY COMMITTEE ON  
THE REVIEW AND REEVALUATION OF  
REGIONAL CONTROL SURVEY PROGRAM**

Dr. Kurt Bauer .....Executive Director Emeritus, Southeastern  
Chairman .....Wisconsin Regional Planning Commission;  
County Surveyor for Kenosha, Milwaukee,  
Walworth, and Waukesha Counties  
John M. Bennett .....City Engineer-Director of Public Works,  
City of Franklin  
John P. Casucci .....Survey Land Development Manager,  
R.A. Smith National, Inc.



**TECHNICAL ADVISORY COMMITTEE ON  
THE REVIEW AND REEVALUATION OF  
REGIONAL CONTROL SURVEY PROGRAM  
(continued)**

Harold S. Charlier .....	Executive Director, Wisconsin Society of Land Surveyors
Michael R. Duckett .....	President, Duckett Group; Executive Director, Southeast Wisconsin Professional Baseball Park District
John T. Ellingson .....	Wisconsin State Geodetic Advisor, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Geodetic Survey
Thomas M. Grisa .....	Director of Public Works, City of Brookfield
Gregory G. High .....	Director, Architectural, Engineering and Environmental Services, Public Works Department, Racine County
Marcia G. Lindholm .....	Civil Engineer Senior, City of Milwaukee Department of Public Works
Cecil F. Mehring .....	Former Manager of Planning and Engineering Services, Public Works Department, Racine County
George E. Melcher .....	Director, Department of Planning and Development, Kenosha County
Robert W. Merry .....	Chief Technical Officer, Aero-Metric, Inc.
Kent B. Pena .....	State GIS Coordinator, USDA Natural Resources Conservation Service
Glen R. Schaefer .....	Geodetic Engineer, Wisconsin Department of Transportation
Daniel R. Talarczyk .....	Survey Services Supervisor, Milwaukee Metropolitan Sewerage District
Thomas J. Tym .....	Head, Technology Services Department, Ruekert & Mielke, Inc.
William T. Wambach .....	Former District Director, District 1, Wisconsin Department of Transportation



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## Appendix C

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 2007

#### EXECUTIVE DIVISION

Philip C. Evenson, AICP  
Executive Director

Kenneth R. Yunker, PE  
Deputy Director

Loretta Watson  
Executive Secretary

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

#### COMMUNITY ASSISTANCE PLANNING DIVISION

Nancy M. Anderson, AICP  
Chief Community  
Assistance Planner

Richard R. Kania, AICP, RLA  
Principal Planner

Catherine D. Madison, AICP  
Benjamin R. McKay  
Christopher D. Parisey  
Robbie L. Robinson  
Planners

Joyce A. Gramz  
Senior GIS Planning Specialist

#### GEOGRAPHIC INFORMATION SYSTEMS DIVISION

John G. McDougall  
Geographic Information  
Systems Manager

Paul J. Clavette  
Principal Systems Analyst

Michael G. Gosetti  
Geographic Information  
Systems Supervisor

Bradley T. Subotnik  
Senior GIS Applications  
Specialist

Patricia L. Bouchard  
Michael B. Scott  
GIS Application Specialists

Timothy R. Gorsegner  
Jean M. Roman  
Geographic Information  
Systems Technicians

James M. Kocher  
Web Technician

#### 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

Laura R. Burgbacher  
Thomas J. Moes  
James P. Siegler  
Planners

Frank G. Fierek, Jr.  
Land Use Mapping  
Specialist

#### ECONOMIC DEVELOPMENT PLANNING DIVISION

John R. Meland  
Chief Economic  
Development Planner

#### CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Donald P. Simon, RLS  
Chief Planning Illustrator

Jean C. Johnson  
Nancee A. Nejedlo  
Principal Planning  
Draftsmen

LuAnn Sakale  
Senior 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

#### TRANSPORTATION PLANNING DIVISION

Christopher T. Hiebert  
Chief Transportation  
Engineer

Albert A. Beck  
Otto P. Dobnick  
Principal Planners

Ryan W. Hoel, PE  
David M. Jolicoeur, PE  
Senior Engineers

Sonia Dubielzig  
Planner

Reginald L. Mason  
Research Analyst

#### TELECOMMUNICATIONS PLANNING DIVISION

Dr. 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

#### ENVIRONMENTAL PLANNING DIVISION

Michael G. Hahn, PE, PH  
Chief Environmental  
Engineer

Dr. Donald M. Reed  
Chief Specialist-Biologist

Robert P. Biebel, PE, PH  
Special Projects Engineer

Ronald J. Printz, PE  
Principal Engineer

Joshua A. Murray, PE  
Senior Engineer

Dr. Thomas M. Slawski  
Dr. Jeffrey A. Thornton, CLM, PH  
Principal Planners

Dr. Joseph E. Boxhorn  
Senior Planner

Dr. Lawrence A. Leitner  
Principal Biologist

Daniel R. Treloar  
Land and Water  
Conservation Specialist

Dr. Dhruva N. Vangipuram  
Engineer

Christopher J. Jors  
Kristin A. Sherfinski  
Specialists

Jennifer L. Dietl  
Aaron W. Owens  
Sara W. Teske  
Nicole T. Wurdeman  
Research Analysts

Edward J. Schmidt  
GIS Planning Specialist

Patricia M. Kokan  
Secretary



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## Appendix D

### PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-2007

(Titles of reports in red are those that can be accessed on the website at [www.sewrpc.org](http://www.sewrpc.org).)

#### 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  
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- No. 91 - A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Waukesha Transit System Utility, January 1994\*
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- No. 93 - A Regional Water Quality Management Plan for Southeastern Wisconsin: An Update and Status Report, March 1995\*
- No. 94 - A Recommended Public Boating Access and Waterway Protection Plan for Big Muskego Lake, Waukesha County, Wisconsin, July 1994
- No. 95 - Traffic Engineering Study of W. Bender Road between Milwaukee River Parkway and Jean-Nicolet Road in the City of Glendale, Milwaukee County, Wisconsin, August 1994
- No. 96 - A Paratransit Service Plan for Disabled Persons: 1995 Update/Milwaukee County Transit System, January 1995\*
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- No. 98 - A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Racine Transit System, January 1995\*
- No. 99 - A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Waukesha Transit System Utility, January 1995\*
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- 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
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- 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
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- No. 122 - A Lake Protection Plan for Pretty Lake, Waukesha County, Wisconsin, April 1998\*



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- No. 123 - A Lake Protection and Recreational Use Plan for Silver Lake, Washington County, Wisconsin, September 1997
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- 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. 133 - Review and Update of Regional Airport System Plan Forecasts, October 2004
- 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
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- No. 136 - Racine County Industrial Park Land Absorption Study, July 1999
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- 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



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- No. 145 - Lake and Stream Resources Classification Project for Waukesha County Wisconsin: 2000
- No. 146 - An Aquatic Plant Management Plan for Little Cedar Lake, Washington County, Wisconsin, May 2004
- 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. 158 - A Lake Protection and Recreational Use Plan for Pell Lake, Walworth County, Wisconsin, May 2006
- No. 159 - An Aquatic Plant Management Plan for Voltz Lake, Kenosha County, Wisconsin, January 2005
- 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
- No. 161 - An Aquatic Plant Management Plan for Nagawicka Lake, Waukesha County, Wisconsin, March 2006
- No. 162 - Assessment of Conformity of the Year 2005-2007 Transportation Improvement Program and the Regional Transportation System Plan—Six County Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, January 2005
- No. 163 - A Hartland/Merton Cluster Development Plan, Waukesha County, December 2004
- No. 164 - Potential Public Enterprise Telecommunications Networks for Southeastern Wisconsin, September 2005
- No. 165 - Assessment of Conformity of the 2035 Regional Transportation System Plan and the Year 2005-2007 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Southeastern Wisconsin Ozone Nonattainment Area, June 2006
- No. 167 - Simulation of Shallow Groundwater Flow in the Vicinity of the Village of Eagle, Waukesha County, Wisconsin, June 2006



## 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



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### 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



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### 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

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## 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 42, Number 4  
SEWRPC Freeway System Study Newsletter, Nos. 1 through 5  
**SEWRPC Review and Update of Regional Land Use and  
Transportation System plans for Southeastern Wisconsin Nos. 1 through 4**  
Milwaukee County Transit System Development Plan: 2007-2011  
**Year 2035 Regional Land Use and Transportation System Plans for Southeastern  
Wisconsin, Number 5**  
**Summary of Proposed Comprehensive Broadband Telecommunications Plan for  
Southeastern Wisconsin**  
**Regional Water Supply Plan for Southeastern Wisconsin—Issues 1 and 2**

## 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  
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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\*



## TRANSPORTATION IMPROVEMENT PROGRAMS—continued

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984\*

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1986-1990, December 1985\*

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1987-1991, December 1986\*

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1988-1992, December 1987\*

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1989-1993, December 1988

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994, December 1989

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1991-1995, December 1990

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

A Transportation Improvement Program for Southeastern Wisconsin: 2005-2007, January 2005

A Transportation Improvement Program for Southeastern Wisconsin: 2007-2010, December 2006

## 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.



## Appendix E

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### INDEPENDENT AUDITOR'S REPORT

To the Commissioners of  
Southeastern Wisconsin  
Regional Planning Commission  
Waukesha, Wisconsin

We have audited the accompanying general purpose financial statements of Southeastern Wisconsin Regional Planning Commission, as of and for the year ended December 31, 2007, 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 auditing standards generally accepted in the United States 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, 2007, 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 14, 2008, 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.  
Waukesha, Wisconsin  
March 14, 2008



Southeastern Wisconsin Regional Planning Commission  
Combined Balance Sheet - All Fund Types and Account Groups  
December 31, 2007

	Governmental Fund Types			Account Groups		(Memorandum Only)	
	General	Special Revenue	Debt Service	General Fixed Assets	General Long-Term Debt	2007 Total	2006 Total
<u>Assets</u>							
Pooled cash and cash equivalents	\$ 2,346,994	\$	\$	\$	\$	\$ 2,346,994	\$ 2,396,496
Grants receivable		828,875				828,875	733,915
Contracts and service agreements receivable	456,413					456,413	768,991
Interest receivable	12,787					12,787	6,570
Prepaid expense	107,521					107,521	117,906
Property and equipment				4,988,665		4,988,665	4,975,268
Deferred bond expenses			81,130			81,130	87,874
Due from other funds	1,061,260					1,061,260	1,015,614
Amount to be provided for retirement of bonds					2,485,000	2,485,000	2,600,000
Restricted assets:							
Cash with bond trustee			2,076,470			2,076,470	1,536,008
Total Assets	<u>\$ 3,984,975</u>	<u>\$ 828,875</u>	<u>\$ 2,157,600</u>	<u>\$ 4,988,665</u>	<u>\$ 2,485,000</u>	<u>\$ 14,445,115</u>	<u>\$ 14,238,642</u>
<u>Liabilities</u>							
State sales tax	\$ 11	\$	\$	\$	\$	\$ 11	\$ 49
Accounts payable	296,178	43,960				340,138	390,944
Vacation accrual	173,982					173,982	175,381
Deferred revenue	472,800					472,800	862,876
Sick pay accrual	263,880					263,880	209,283
Due to other funds		784,915	276,345			1,061,260	1,015,614
Accrued payroll and taxes	116,913					116,913	105,780
Deposits and advance rents	3,333		1,840,643			1,843,976	1,303,333
General long-term debt					2,485,000	2,485,000	2,600,000
Accrued interest payable			40,612			40,612	42,183
Total Liabilities	<u>1,327,097</u>	<u>828,875</u>	<u>2,157,600</u>		<u>2,485,000</u>	<u>6,798,572</u>	<u>6,705,443</u>
<u>Fund Equity</u>							
Investments in fixed assets				4,988,665		4,988,665	4,975,268
Fund Balances - designated	1,247,931					1,247,931	1,229,741
- undesignated	1,409,947					1,409,947	1,328,190
Total Fund Equity	<u>2,657,878</u>			<u>4,988,665</u>		<u>7,646,543</u>	<u>7,533,199</u>
Total Liabilities and Fund Equity	<u>\$ 3,984,975</u>	<u>\$ 828,875</u>	<u>\$ 2,157,600</u>	<u>\$ 4,988,665</u>	<u>\$ 2,485,000</u>	<u>\$ 14,445,115</u>	<u>\$ 14,238,642</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 Statement of Revenues, Expenditures and Changes  
in Fund Balance - All Governmental Fund Types  
For the Year Ended December 31, 2007

	Governmental Fund Types			Total
	General	Special Revenue	(Memorandum Only)	2007 2006
<u>Revenues</u>				
Contributions from counties	\$ 2,370,245	\$	\$ 2,370,245	\$ 2,380,290
Grant revenues		3,014,802	3,014,802	2,914,628
Contract and service grants	1,049,111	448,175	1,497,286	3,901,770
Pass-through grants	1,027,496	1,338,036	2,365,532	2,904,234
Interest on invested funds	163,865		163,865	157,769
Other income	34,722		34,722	56,397
Rental income	67,393		67,393	62,845
Total Revenues	<u>4,712,832</u>	<u>4,801,013</u>	<u>9,513,845</u>	<u>12,377,933</u>
<u>Expenditures</u>				
Salaries and fringe benefits	3,139,320	1,948,369	5,087,689	5,016,430
Office and other expenses:				
Technical consultants	269,011	230,368	499,379	333,801
Technical consultants - pass-through	954,013	1,338,036	2,292,049	5,442,487
Office supplies	29,833	38,964	68,797	66,364
Insurance, audit, legal fees	59,178		59,178	57,172
Library acquisition and dues	30,754	546	31,300	42,071
Printing and graphics supplies	127,011	6,867	133,878	151,006
Public information				5,685
Postage expense	34,343		34,343	25,362
Travel expense	35,482	16,641	52,123	67,743
Telephone expense	39,563		39,563	43,417
Building usage	176,311		176,311	192,585
Building maintenance	153,275		153,275	119,868
Other operating expenses	34,810	12,680	47,490	24,533
Software and equipment maintenance	122,305	9,444	131,749	214,474
Capital outlay	123,850		123,850	313,339
Interest expense	122,924		122,924	121,292
Total Expenditures	<u>5,451,983</u>	<u>3,601,915</u>	<u>9,053,898</u>	<u>12,237,629</u>
Excess (Deficit) Revenues Over Expenditures	(739,151)	1,199,098	459,947	140,304
Indirect Expense Allocation	1,199,098	(1,199,098)		
Fund Balance - beginning of year	2,557,931	-0-	2,557,931	2,717,627
Transfer - amount transferred to trustee	(360,000)		(360,000)	(300,000)
Fund Balance - end of year	<u>\$ 2,657,878</u>	<u>\$ -0-</u>	<u>\$ 2,657,878</u>	<u>\$ 2,557,931</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 Statement of Revenues, Expenditures and Changes  
in Fund Balance - Budget and Actual - All Governmental Fund Types  
For the Year Ended December 31, 2007

Revenues	Budget	Actual	Variance Favorable (Unfavorable)
Contributions from counties	\$ 2,370,245	\$ 2,370,245	\$ -
Grant revenues	2,987,500	3,014,802	27,302
Contract and service grants	1,856,700	1,497,286	(359,414)
Pass-through grants		2,365,532	2,365,532
Interest on invested funds		163,865	163,865
Other income		34,722	34,722
Rental income	67,393	67,393	-
Total Revenues	7,281,838	9,513,845	2,232,007
Expenditures			
Salaries and fringe benefits	5,659,545	5,087,689	571,856
Office and other expenses:			
Technical consultants	505,600	499,379	6,221
Technical consultants - pass-through		2,292,049	(2,292,049)
Office supplies	70,000	68,797	1,203
Insurance, audit, legal fees	76,000	59,178	16,822
Library acquisition and dues	30,000	31,300	(1,300)
Printing and graphics supplies	120,000	133,878	(13,878)
Public information	10,000		10,000
Postage expense	30,000	34,343	(4,343)
Travel expense	55,000	52,123	2,877
Telephone expense	45,000	39,563	5,437
Building usage	115,000	176,311	(61,311)
Building maintenance	130,000	153,275	(23,275)
Annual report	6,500		6,500
Other operating expenses	25,000	47,490	(22,490)
Unemployment compensation expense	5,000		5,000
Software and equipment maintenance	107,000	131,749	(24,749)
Capital outlay	168,000	123,850	44,150
Interest expense	124,193	122,924	1,269
Total Expenditures	7,281,838	9,053,898	(1,772,060)
Excess Revenues Over Expenditures	\$ -0-	459,947	\$ 459,947
Fund Balance - beginning of year		2,557,931	
Transfer: amount transferred to trustee		(360,000)	
Fund Balance - end of year		\$ 2,657,878	

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, 2007

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, 2007

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 Commissions 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, 2007 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, 2007

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.

	2007	2006
Land	\$ 335,300	\$ 335,300
Land improvements	213,655	213,655
Building and improvements	3,287,879	3,287,879
Office furniture	249,842	248,683
Computers and related equipment	321,984	276,603
Office equipment	347,300	393,561
Automobiles	189,412	189,412
Field equipment	43,293	30,175
	\$ 4,988,665	\$ 4,975,268



Note 3 – Employee Retirement Plan

All eligible Southeastern Wisconsin Regional Planning Commission employees participate in the Wisconsin Retirement System, a cost-sharing multiple-employer public employee retirement system (PERS). The payroll for employees covered by the system for the year ended December 31, 2007 was \$3,466,027, the employer's total payroll was \$3,613,540.

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 5.9% of their salary (2.9% for Executives and Elected Officials, 5.0% for Protective Occupations with Social Security, and 3.3% 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, 2007 and 2006 were \$367,399 and \$355,444, 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	\$ 486,540
Temporary cash investments	<u>1,860,454</u>
	<u>\$ 2,346,994</u>

The temporary cash investments are invested in the Wisconsin Investment Pool. The pool was paying 4.28% as of December 31, 2007.

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	142,931
Program Development Fund	<u>630,000</u>
	<u>\$ 1,247,931</u>

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:

	<u>Principal</u>	<u>Interest</u>
2008	\$ 120,000	\$ 119,315
2009	130,000	113,968
2010	135,000	108,136
2011	140,000	101,948
2012 and thereafter	<u>1,960,000</u>	<u>545,938</u>
Total	<u>\$ 2,485,000</u>	<u>\$ 989,305</u>

The commission has an option to prepay the balance of the bonds, at par, commencing March 1, 2011. With this option the Commission has deposited irrevocably with the bond trustee \$1,660,000 to be invested in U.S. Treasury notes. On March 1, 2011 this deposit and accrued interest will be used to pay the remaining bonds outstanding.

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 \$163,452. 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.





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