Twenty-ninth annual report. July 1990

Waukesha, Wisconsin: Southeastern Wisconsin Regional Planning Commission, July 1990

1989 ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

KENOSHA · MILWAUKEE · OZAUKEE · RACINE · WALWORTH · WASHINGTON · WAUKESHA

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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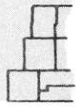

September 26, 1990

To: News Media in Southeastern Wisconsin

Subject: SEWRPC 1989 Annual Report

Gentlemen:

We are pleased to provide to you herewith a copy of the Southeastern Wisconsin Regional Planning Commission's 1989 Annual Report. This report provides an overview of the work of the Regional Planning Commission in calendar year 1989.

The Commission believes that comprehensive, areawide planning holds the key to the resolution of many of the pressing environmental and developmental problems facing the seven-county Southeastern Wisconsin Region. We would, therefore, urge you to review the enclosed report which we believe you will find to be informative.

If you have any questions or comments concerning the report after you have reviewed it, please do not hesitate to write or call.

Sincerely,

Kurt W. Bauer
Executive Director

KWB/ea
Enclosure
e.5/ar.5

TWENTY-NINTH ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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

July 1990

Inside Region $2.00
Outside Region $4.00

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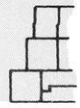

July 14, 1990

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

In accordance with the requirements of Section 66.945(8)(b) of the Wisconsin Statutes, this Commission each calendar year prepares and certifies an annual report to the State Legislature of Wisconsin and to the legislative bodies of the constituent county and local units of government within the Region. This, the 29th annual report of the Commission, summarizes the work of the Commission in calendar year 1989, and contains a statement of the financial position of the Commission as of the end of that calendar year as certified by an independent auditor.

While the Commission annual report is prepared to meet the legislative requirement noted above, the document also serves as an annual report to the state and federal agencies which fund several aspects of the Commission's work program. Importantly, the annual report is intended to provide county and local public officials and interested citizens with a comprehensive overview of current and proposed Commission activities, and thereby provide 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. In addition, this report summarizes the progress made during 1989 by the Commission in carrying out its three basic functions—data collection and dissemination, regional plan preparation, and promotion of plan implementation. During 1989, the Commission, working with Racine County, completed and adopted a new park and open space plan for that County as an amendment to the regional park and open space plan. The Commission also adopted a number of important amendments to the regional water quality management plan, including sanitary sewer service area plans for the Villages of Genoa City and Lac La Belle and the City of Oconomowoc; the creation of new sanitary sewer service areas in the Towns of Geneva and LaFayette in Walworth County; and the designation of the Sussex sewage treatment facility as a permanent areawide treatment plant in the Upper Fox River watershed. Work was also completed during 1989 in the transportation planning area on a new jurisdictional highway system plan for Washington County, and a new transit development program for the City of Waukesha. At year's end, those two plans were awaiting local adoption prior to Commission action. Other major work efforts completed during the year included the Lake Michigan shoreline erosion management plan prepared at the request of Milwaukee County, and a solid waste management plan prepared at the request of Kenosha County. Progress in these and other plan development efforts, as well as plan implementation efforts, is summarized in this annual report.

The Commission hopes that the constituent units and agencies of government concerned are pleased with the work of the Commission in 1989. The Commission looks forward to continuing to serve its constituent local units of government and the state and federal agencies concerned by providing the planning services required to address the areawide environmental and developmental problems of southeastern Wisconsin, and by promoting the intergovernmental cooperation needed to resolve these problems.

Very truly yours,

Frank F. Uttech

Frank F. Uttech
Chairman

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ABOUT THE COMMISSION

AUTHORITY

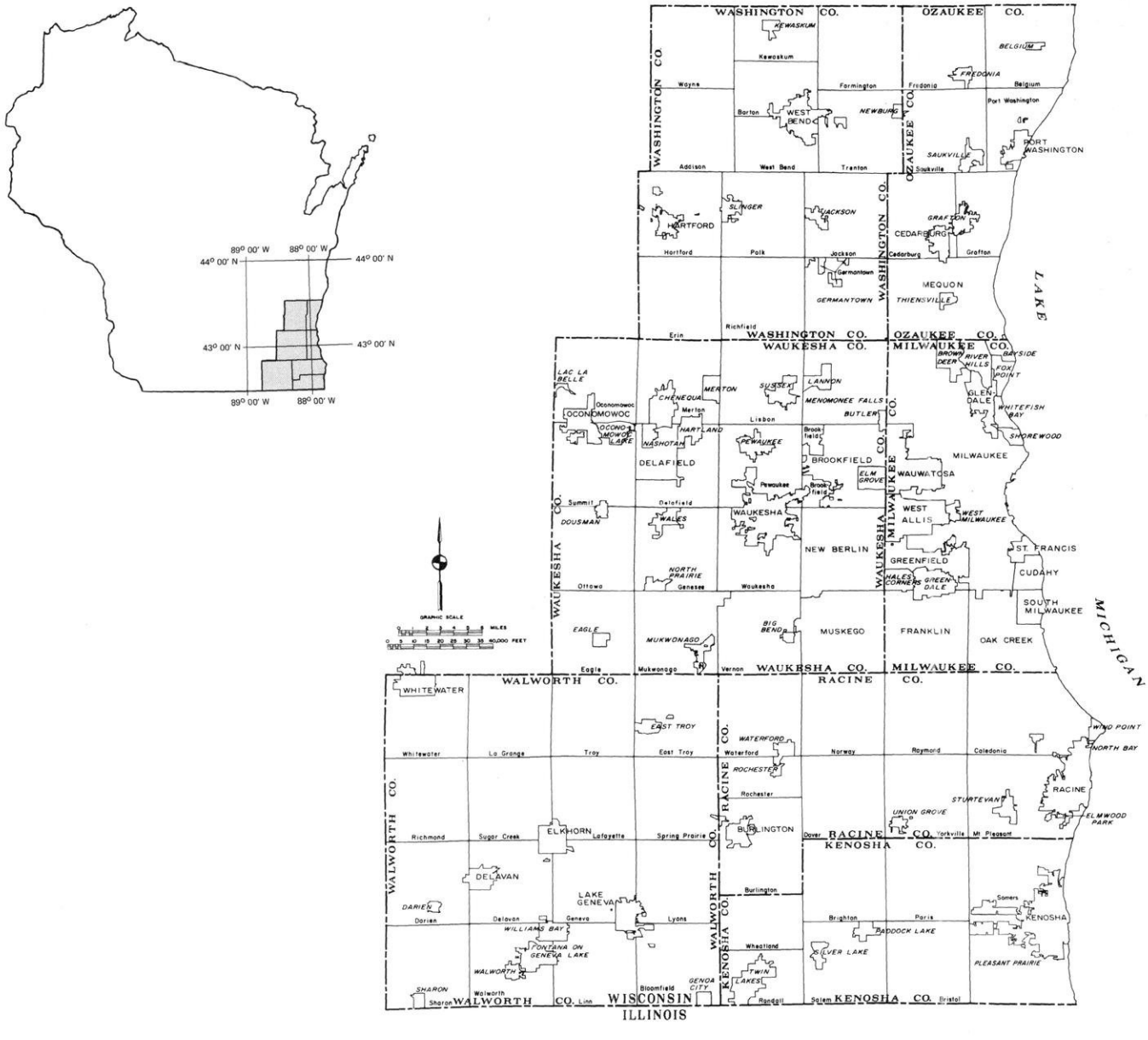
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.945 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning services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

AREA SERVED

The Commission serves a Region consisting of the seven counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha. 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 1.77 million persons, or about 36 percent of the total population of the State. The seven counties provide about 974,600 jobs, or about 38 percent of the total employment of the State,

Map 1

THE SOUTHEASTERN WISCONSIN REGION



and contain real property worth about $50.3 billion as measured in equalized valuation, or about 40 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 between urban and rural, local, state, and federal, and public and private interests. In this light, regional planning is not a substitute for federal, state, or local public planning or for private planning. Rather, regional planning is a vital supplement to such planning.

COMMISSION OFFICES
OLD COURTHOUSE
WAUKESHA COUNTY

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

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, who serve without pay. One Commissioner from each county is appointed by the county board and is an elected county board supervisor. The remaining two from each county are appointed by the Governor, one from a list prepared by the county board.

The full Commission meets at least four times a year and 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 meets monthly to oversee 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 the regional plan elements. The Administrative Committee meets monthly to oversee the routine but essential housekeeping activities of the Commission. The Planning and Research Committee meets as necessary to review 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 the communication process with the constituent county boards. The Committee meets as necessary to consider intergovernmental problems. The Commission and committee rosters are set forth in Appendix A. The Commission is assisted in its work by 29 technical, citizen, and intergovernmental coordinating and advisory committees. These committees include both elected and appointed public officials and interested citizens with knowledge in the Commission work areas. The committees perform a significant function in both the formulation and the execution of the Commission work programs. Membership on the advisory committees, which totals 555 persons, is set forth in Appendix B.

STAFFING

The Commission prepares an annual work program which is reviewed and approved by federal and state funding agencies. This work program is then carried out by a core staff of full-time professional, technical, administrative, and clerical personnel, supplemented by additional temporary staff and consultants as required by the various work programs underway. At the end of 1989, the staff totaled 84, including 67 full-time and 17 part-time employees.

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

FUNDING

Basic financial support for the Commission's work program is provided by county tax levies apportioned on the basis of equalized valuation. These basic funds are supplemented by state and federal aids. Revenues received by the Commission during 1989 totaled about $4.9 million, of which about 42 percent, or $2.1 million, represents contract revenues for local government data processing services. County tax levies in 1989 totaled $911,210, or about $0.51 per capita. The sources of this revenue for 1989 and the trend in funding since the inception of the Commission in 1960 are shown in Figures 2 through 5. It may be seen in Figure 2 that there has been little change in the tax levy for regional planning since 1963 when that levy is expressed in constant 1960 dollars.

Figure 1

SEWRPC ORGANIZATIONAL STRUCTURE

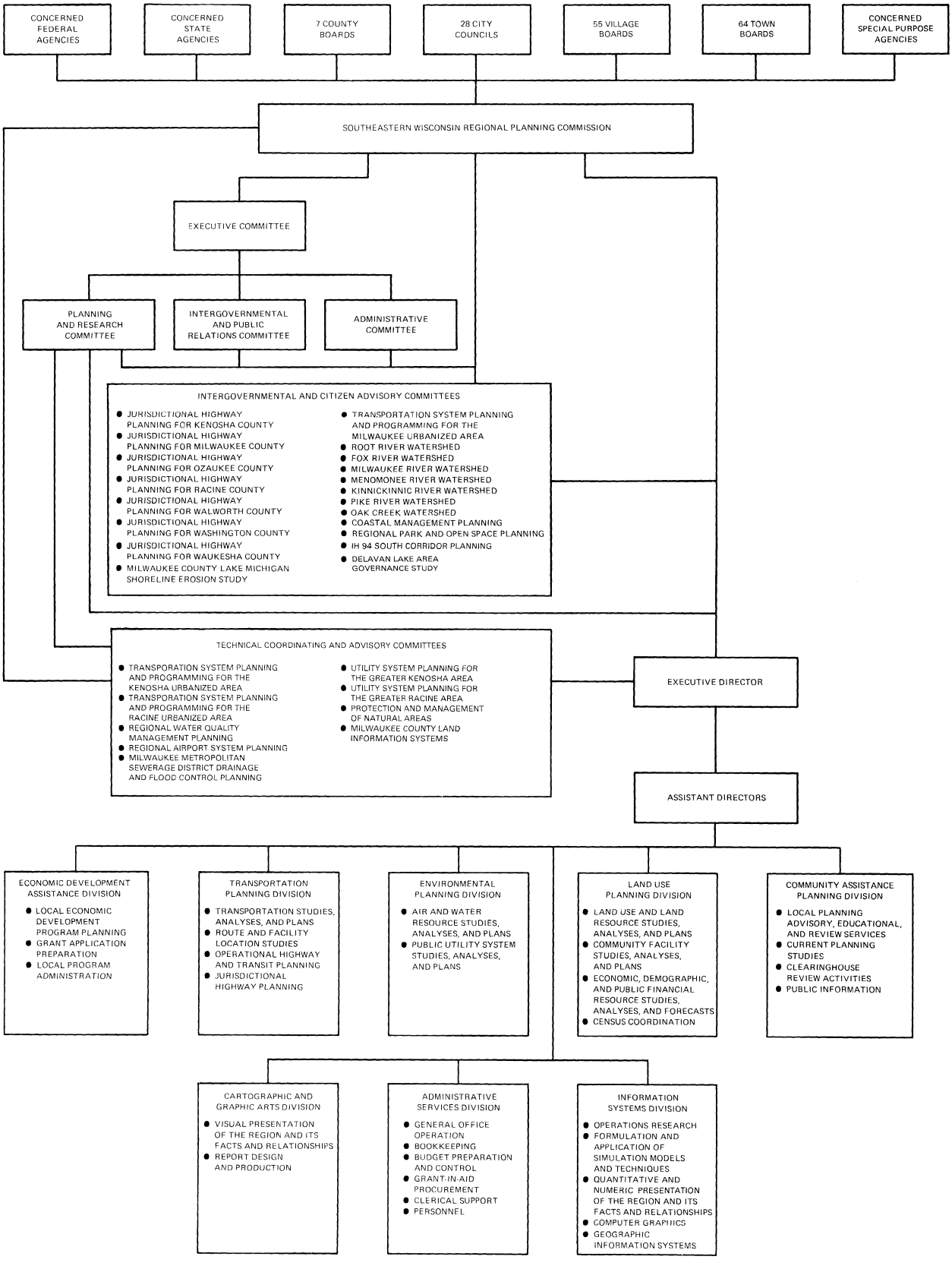


Figure 2

FUNDING TREND: 1961-1989

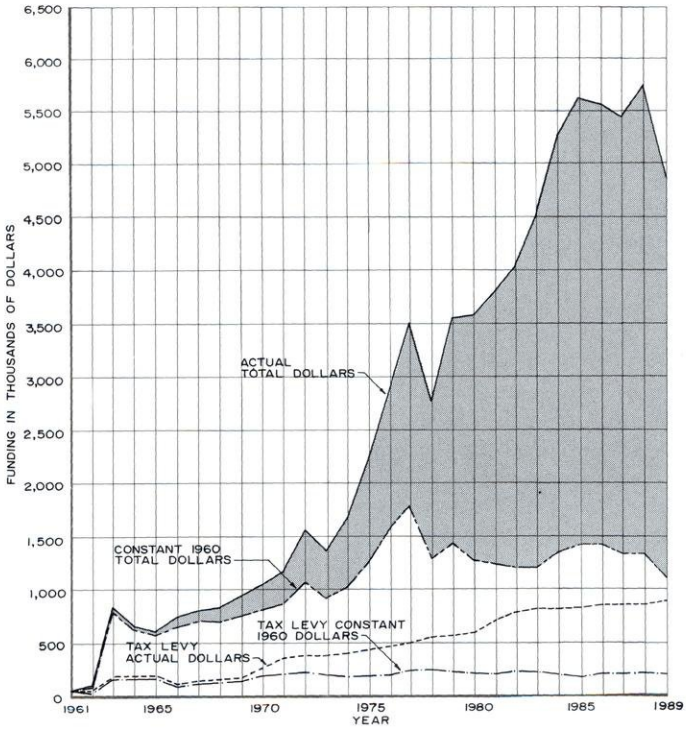


Figure 3

SOURCES OF REVENUES TREND: 1961-1989

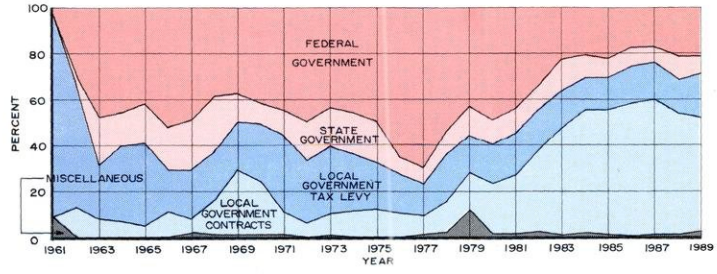


Figure 4

EXPENDITURES TREND: 1961-1989

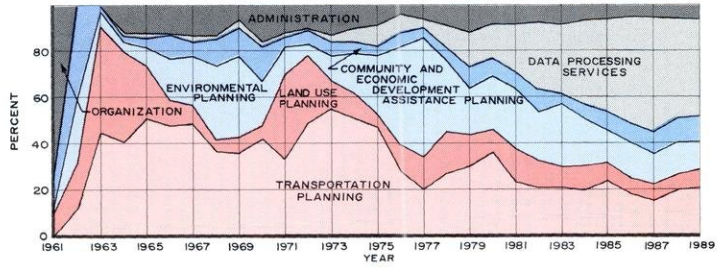
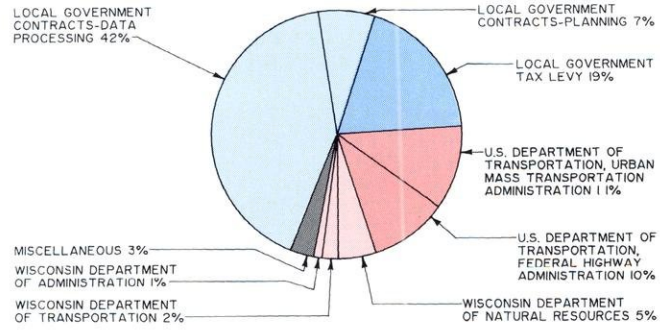


Figure 5

REVENUES AND EXPENDITURES: 1989

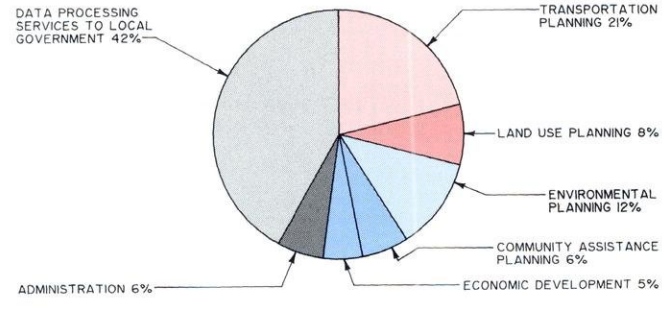
REVENUES

Federal Government	$1,048,593	21%
State Government	383,148	8%
Local Government Tax Levy	911,210	19%
Local Government Contracts	2,391,514	49%
Miscellaneous	129,000	3%
Total	$4,863,465	100%



EXPENDITURES

Transportation Planning	$1,003,045	21%
Land Use Planning	388,469	8%
Environmental Planning	575,080	12%
Community Assistance Planning	300,724	6%
Economic Development Assistance	247,567	5%
Data Processing Services to Local Governments	2,069,149	42%
Administration	279,431	6%
Total	$4,863,465	100%



1989 MEETINGS

COMMISSION AND ADVISORY COMMITTEE MEETINGS

Full Commission	6
Executive Committee	10
Administrative Committee	9
Planning and Research Committee	6
Intergovernmental and Public Relations Committee	0
Technical Coordinating and Advisory Committee on Regional Airport System Planning	0
Technical Coordinating and Advisory Committees on Jurisdictional Highway Planning	
Kenosha County	0
Milwaukee County	0
Ozaukee County	0
Racine County	2
Walworth County	0
Washington County	3
Waukesha County	0
Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming	
Kenosha Urbanized Area	1
Milwaukee Urbanized Area	1
Racine Urbanized Area	1
Watershed Committees	
Root River	0
Fox River	0
Milwaukee River	0
Menomonee River	0
Kinnickinnic River	0
Pike River	1
Oak Creek	0
Intergovernmental Coordinating and Technical Advisory Committee for the IH 94 South Freeway Corridor Development Plan	3
Technical Advisory Committee on Regional Water Quality Management Planning	0
Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin	0
Technical Advisory Committee for the Protection and Management of Natural Areas in Southeastern Wisconsin	1
Technical Advisory Committee for the Milwaukee County Automated Mapping and Land Information System Feasibility Study	4
Advisory Committee on Stormwater Drainage and Flood Control Planning for the Milwaukee Metropolitan Sewerage District and District Service Areas	0
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	0
Intergovernmental Coordinating and Technical Advisory Committee for the Milwaukee County Lake Michigan Shoreline Erosion Management Plan	3
The Greater Kenosha Area Utility Planning Committee	1
Advisory Committee on the Governance of the Delavan Lake Area	3
The Greater Racine Area Utility Planning Committee	3

STAFF TECHNICAL MEETINGS

Executive Director	265
Assistant Directors	215
Cartographic and Graphic Arts Division	15
Community Assistance Planning Division	186
Environmental Planning Division	116
Land Use Planning Division	153
Transportation Planning Division	150
Economic Development Assistance Division	211
Information Systems Division	47

STAFF SPEAKING ENGAGEMENTS

Executive Director	36
Assistant Directors	25
Community Assistance Planning Division	2
Environmental Planning Division	22
Land Use Planning Division	27
Transportation Planning Division	2
Economic Development Assistance Division	13
Information Systems Division	4

The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1989 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 historic value and for promulgating plan recommendations and alternatives to such recommendations. Published reports are intended to serve as important references for public officials at the federal and state levels, as well as at the local level, when considering important development decisions. Perhaps most importantly, however, published reports are intended to provide a focus for generating enlightened citizen interest in, and action on, plan recommendations. Accordingly, the Commission has established a series of published reports.

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

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

The third type of report in the series is the technical report. Technical reports are intended to make available to various public and private agencies within the Region valuable information assembled by the Commission staff during the course of its planning work on a work progress basis. Technical reports document the findings of such important basic inventories as detailed soil surveys, stream water quality surveys, potential park and open space site inventories, and horizontal and vertical control surveys.

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

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

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

The seventh type of report in the series is the annual report. The annual report has served an

increasing number of functions over the period of the Commission's existence. Originally, and most 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 State Legislature of Wisconsin and to the legislative bodies of the local units of government within the Region an annual report summarizing the activities of the Commission. In addition, the annual report documents activities under the continuing regional land use-transportation study and as such serves as an annual report to the federal and state Departments of Transportation. The Commission's annual report is also intended to provide local public officials and interested citizens with a comprehensive overview of the Commission's activities and thereby to provide a focal point for the promotion of regional plan implementation.

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

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

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.

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 Region." The permissible scope and content of this plan, as outlined in the enabling legislation, extend to all phases of regional development, implicitly emphasizing, however, the preparation of alternative spatial designs for the use of land and for supporting transportation and utility facilities.

The scope and complexity of areawide development problems prohibit the making and adopting of an entire comprehensive development plan at one point in time. The Commission has, therefore, determined to proceed with the preparation of individual plan elements which together can comprise the required comprehensive plan. Each element is intended to deal with an identified areawide developmental or environmental problem. The individual elements are coordinated by being related to an areawide land use plan. Thus, the land use plan comprises the most basic regional plan element, an element on which all other elements are based. The Commission believes 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; and all planning and plan implementation techniques are based upon, or related to, the comprehensive plan.

The validity of the concept of the comprehensive plan has been questioned in recent years and its application, in fact, opposed by some segments of the planning profession. The Commission believes, however, that the comprehensive plan remains a viable and valid concept, a concept essential to coping with the developmental and environmental problems generated by areawide urbanization. The comprehensive plan not only provides the necessary framework for coordinating and guiding growth and development within a multi-jurisdictional urbanizing region having essentially a single community of interest, but provides the best conceptual basis available for the application of systems engineering skills to the growing problems of such a region. This is because systems engineering basically must focus upon 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—1989

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 1970's, this plan design function has included major plan reappraisal as well as the preparation of new plan elements.

By the end of 1989, the adopted regional plan consisted of 22 individual plan elements. These plan elements are identified in Table 1. Four of these elements are land use related: the regional land use plan, the regional housing plan, the regional library facilities and services plan, and the regional park and open space plan.

Table 1

THE ADOPTED REGIONAL PLAN—1989

Functional Area	Plan Element	Plan Document	Date of Adoption
Land Use, Housing, and Community Facility Planning	Regional Land Use Plan[a]	Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	December 19, 1977
	Amendment—Kenosha County	Community Assistance Planning Report No. 45, A Farmland Preservation Plan for Kenosha County, Wisconsin	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, A Farmland Preservation Plan for Racine County, Wisconsin	June 17, 1982
	Amendment—Ozaukee County	Community Assistance Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin	June 16, 1983
	Amendment—Pewaukee Area	Community Assistance Planning Report No. 76, A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin	December 1, 1983
	Amendment—Town of Pleasant Prairie	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	March 11, 1985
	Regional Library Facilities and Services Plan	Planning Report No. 19, A Library Facilities and Services Plan for Southeastern Wisconsin	September 12, 1974
	Regional Housing Plan	Planning Report No. 20, A Regional Housing Plan for Southeastern Wisconsin	June 5, 1975
	Regional Park and Open Space Plan	Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000	December 1, 1977
	Amendment—Ozaukee County Park and Open Space Plan	Community Assistance Planning Report No. 133, A Park and Open Space Plan for Ozaukee County	September 14, 1987
	Amendment—Kenosha County Park and Open Space Plan	Community Assistance Planning Report No. 131, A Park and Open Space Plan for Kenosha County	December 5, 1988
	Amendment—Racine County Park and Open Space Plan	Community Assistance Planning Report No. 134, A Park and Open Space Plan for Racine County	March 6, 1989
Transportation Planning	Regional Transportation Plan[b]	Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	June 1, 1978
	Amendment— Lake Freeway South Corridor	Amendment to the Regional Transportation Plan—2000, Lake Freeway South Corridor	June 18, 1981
	Amendment—Milwaukee Area Primary Transit System	Planning Report No. 33, A Primary Transit System Plan for the Milwaukee Area	June 17, 1982
	Amendment—Racine County	Amendment to the Regional Transportation Plan—2000, Racine County	December 2, 1982
	Amendment—Waukesha County	Amendment to the Regional Transportation Plan—2000, Waukesha County	December 2, 1982
	Amendment—Milwaukee Northwest Side/ Ozaukee County	Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area	September 8, 1983
	Amendment—Lake Freeway North/Park Freeway East	Amendment to the Regional Transportation Plan—2000, Lake Freeway North/Park Freeway East	December 1, 1983
	Amendment—Stadium Freeway South Corridor	Amendment to the Regional Transportation Plan—2000, Stadium Freeway South Corridor	March 11, 1985
	Amendment—Waukesha County	Amendment to the Regional Transportation Plan—2000, Waukesha County	June 20, 1988
	Racine Area Transit Development Plan	Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979	September 12, 1974

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	Regional Airport System Plan[c]	Planning Report No. 38, A Regional Airport System Plan for Southeastern Wisconsin: 2010	June 15, 1987
	Kenosha Area Transit[d] Development Plan	Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1988	March 11, 1985
	Transportation Systems Management Plan	Community Assistance Planning Report No. 50, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981	December 4, 1980
	Amendment—Milwaukee Northwest Side/ Ozaukee County	Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area	September 8, 1983
	Amendment—Milwaukee Area	Planning Report No. 39, A Freeway Traffic Management System Plan for the Milwaukee Area	December 5, 1988
	Elderly-Handicapped Transportation Plan	Planning Report No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982	April 13, 1978
	Amendment—Racine Area	SEWRPC Resolution No. 78-17	December 7, 1978
	Amendment—Racine Area	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Three, Racine Urbanized Area	September 11, 1980
	Amendment—Racine Area	Memorandum Report No. 24, A Public Transit Program for Handicapped Persons—City of Racine Transit System	December 7, 1987
	Amendment—Milwaukee County	Community Assistance Planning Report No 39, A Public Transit System Accessibility Plan, Volume Two, Milwaukee Urbanized Area/Milwaukee County	June 20, 1980
	Amendment—Milwaukee County	Memorandum Report No. 21, A Public Transit Program for Handicapped Persons—Milwaukee County Transit System	December 7, 1987
	Amendment—Kenosha Area	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume One, Kenosha Urbanized Area	September 11, 1980
	Amendment—Kenosha Area	Memorandum Report No. 23, A Public Transit Program for Handicapped Persons—City of Kenosha Transit System	December 7, 1987
	Amendment—Waukesha County	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Four, Milwaukee Urbanized Area/Waukesha County	September 11, 1980
	Amendment—Waukesha County	Memorandum Report No. 22, A Public Transit Program for Handicapped Persons—Waukesha County Transit System	December 7, 1987
	Amendment—City of Waukesha	Amendment to the Public Transit Accessibility Plan for the Milwaukee Urbanized Area/ Waukesha County, City of Waukesha Transit System Utility	June 18, 1981
	Amendment—City of Waukesha	Memorandum Report No. 17, A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility	December 7, 1987
Environmental Planning	Root River Watershed Plan	Planning Report No. 9, A Comprehensive Plan for the Root River Watershed	September 22, 1966
	Fox River Watershed Plan	Planning Report No. 12, A Comprehensive Plan for the Fox River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan	June 4, 1970
	Amendment—Water Pollution Control Time Schedule	Amendment to the Comprehensive Plan for the Fox River Watershed	September 13, 1973
	Amendment—Lower Watershed Drainage Plan	Community Assistance Planning Report No. 5, Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed	June 5, 1975

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Pewaukee Flood Control Plan	Community Assistance Planning Report No. 14, Floodland Management Plan for the Village of Pewaukee	June 1, 1978
	Milwaukee River Watershed Plan	Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan	March 2, 1972
	Amendment—Lincoln Creek Flood Control Plan	Community Assistance Planning Report No. 13 (2nd Edition), Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin	December 1, 1983
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	December 7, 1987
	Menomonee River Watershed Plan	Planning Report No. 26, A Comprehensive Plan for the Menomonee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan	January 20, 1977
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	December 7, 1987
	Wastewater Sludge Management Plan	Planning Report No. 29, A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin	September 14, 1978
	Kinnickinnic River Watershed Plan	Planning Report No. 32, A Comprehensive Plan for the Kinnickinnic River Watershed	March 1, 1979
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	December 7, 1987
	Regional Water Quality Management Plan[e]	Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin, Volume One, Inventory Findings; Volume Two, Alternative Plans; Volume Three, Recommended Plan	July 12, 1979
	Amendment—Root River Watershed	Community Assistance Planning Report No. 37, A Nonpoint Source Water Pollution Control Plan for the Root River Watershed	March 6, 1980
	Amendment—Walworth County Metropolitan Sewerage District	Community Assistance Planning Report No. 56, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District	December 3, 1981
	Amendment—Cities of Brookfield and Waukesha	Amendment to the Regional Water Quality Management Plan—2000, Cities of Brookfield and Waukesha	December 3, 1981
	Amendment—Kenosha County	Community Assistance Planning Report No. 45, A Farmland Preservation Plan for Kenosha County, Wisconsin	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, A Farmland Preservation Plan for Racine County, Wisconsin	June 17, 1982
	Amendment—City of Muskego	Community Assistance Planning Report No. 64 (2nd Edition), Sanitary Sewer Service Area for the City of Muskego	March 3, 1986
	Amendment—Ashippun Lake, Waukesha County	Community Assistance Planning Report No. 48, A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin	September 9, 1982
	Amendment—Okauchee Lake, Waukesha County	Community Assistance Planning Report No. 53, A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin	September 9, 1982
	Amendment—Lac La Belle, Waukesha County	Community Assistance Planning Report No. 47, A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin	September 9, 1982
	Amendment—North Lake, Waukesha County	Community Assistance Planning Report No. 54, A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin	December 2, 1982
	Amendment—City of West Bend	Community Assistance Planning Report No. 35, Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin	December 2, 1982

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Grafton	Amendment to the Regional Water Quality Management Plan—2000, Village of Grafton	December 2, 1982
	Amendment—City of Brookfield	Amendment to the Regional Water Quality Management Plan—2000, City of Brookfield	December 2, 1982
	Amendment—Village of Sussex	Community Assistance Planning Report No. 84, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin	June 16, 1983
	Amendment—Ozaukee County	Community Assistance Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin	June 16, 1983
	Amendment—Village of Germantown	Community Assistance Planning Report No. 70, Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin	September 8, 1983
	Amendment—Village of Saukville	Community Assistance Planning Report No. 90, Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin	December 1, 1983
	Amendment—City of Port Washington	Community Assistance Planning Report No. 95, Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin	December 1, 1983
	Amendment—Pewaukee	Community Assistance Planning Report No. 76, A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin	December 1, 1983
	Amendment—Belgium Area	Amendment to the Regional Water Quality Management Plan—2000, Onion River Priority Watershed Plan	December 1, 1983
	Amendment—Geneva Lake Area	Amendment to the Regional Water Quality Management Plan—2000, Geneva Lake Area Communities	December 1, 1983
	Amendment—Village of Butler	Community Assistance Planning Report No. 99, Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin	March 1, 1984
	Amendment—City of Hartford	Community Assistance Planning Report No. 92 Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin	June 21, 1984
	Amendment—Mukwonago Area	Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago	June 21, 1984
	Amendment—Village of Fredonia	Community Assistance Planning Report No. 96, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin	September 13, 1984
	Amendment—Village of East Troy	Community Assistance Planning Report No. 112, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin	September 13, 1984
	Amendment—City of Milwaukee	Amendment to the Regional Water Quality Management Plan—2000, City of Milwaukee	September 13, 1984
	Amendment—Town of Pleasant Prairie	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	March 11, 1985
	Amendment—Village of Belgium	Community Assistance Planning Report No. 97 (2nd Edition), Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin	June 15, 1987
	Amendment—Town of Addison	Community Assistance Planning Report No. 103, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin	March 11, 1985
	Amendment—Town of Yorkville	Amendment to the Regional Water Quality Management Plan—2000, Town of Yorkville	March 11, 1985
	Amendment—Village of Williams Bay	Amendment to the Regional Water Quality Management Plan—2000, Village of Williams Bay/Walworth County Metropolitan Sewerage District	March 11, 1985
	Amendment—Town of Trenton City of West Bend	Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/ Town of Trenton	March 11, 1985
	Amendment—Village of Hartland	Community Assistance Planning Report No. 93, Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin	June 17, 1985

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Jackson	Community Assistance Planning Report No. 124, Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin	June 17, 1985
	Amendment—Pewaukee Area	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 17, 1985
	Amendment—City of Waukesha	Community Assistance Planning Report No. 100, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin	December 2, 1985
	Amendment—Village of Slinger	Community Assistance Planning Report No. 128, Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin	December 2, 1985
	Amendment—Delafield/ Nashotah Area	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	December 2, 1985
	Amendment—Kenosha Area	Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin	December 2, 1985
	Amendment—Town of Eagle	Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District	December 2, 1985
	Amendment—Town of Salem	Community Assistance Planning Report No. 143, Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin	March 3, 1986
	Amendment—Friess Lake, Washington County	Community Assistance Planning Report No. 98, A Water Quality Management Plan for Freiss Lake, Washington County, Wisconsin	March 3, 1986
	Amendment—Geneva Lake Walworth County	Community Assistance Planning Report No. 60, A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin	March 3, 1986
	Amendment—Pewaukee Lake Waukesha County	Community Assistance Planning Report No. 58, A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin	March 3, 1986
	Amendment—Waterford/ Rochester Area	Community Assistance Planning Report No. 141, Sanitary Sewer Service Area for the Waterford/ Rochester Area, Racine County, Wisconsin	June 16, 1986
	Amendment—City of Burlington	Community Assistance Planning Report No. 78, Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin	June 16, 1986
	Amendment—City of Waukesha/ Town of Pewaukee	Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha/ Town of Pewaukee	December 1, 1986
	Amendment—Salem/Paddock Lake/Bristol Area	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	December 1, 1986
	Amendment—Racine Area	Community Assistance Planning Report No. 147, Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin	December 1, 1986
	Amendment—Town of Lyons	Amendment to the Regional Water Quality Management Plan—2000, Country Estates Sanitary District/Town of Lyons	March 2, 1987
	Amendment—Village of Silver Lake	Community Assistance Planning Report No. 119, Sanitary Sewer Service Area, Village of Silver Lake, Kenosha County, Wisconsin	June 15, 1987
	Amendment—Village of Twin Lakes	Community Assistance Planning Report No. 149, Sanitary Sewer Service Area, Village of Twin Lakes, Kenosha County, Wisconsin	June 15, 1987
	Amendment—Cedarburg/ Grafton Area	Community Assistance Planning Report No. 91, Sanitary Sewer Service Area, City of Cedarburg, Village of Grafton, Ozaukee County, Wisconsin	June 15, 1987
	Amendment—Town of Walworth	Amendment to the Regional Water Quality Management Plan—2000, Town of Walworth Utility District No. 1/Walworth County Metropolitan Sewerage District	June 15, 1987

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—City of West Bend	Amendment to the Regional Water Quality Management Plan—2000, City of West Bend	June 15, 1987
	Amendment—City of Whitewater	Community Assistance Planning Report No. 94, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin	September 14, 1987
	Amendment—Town of Lyons	Community Assistance Planning Report No. 158, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin,	September 14, 1987
	Amendment—City of Hartford	Amendment to the Regional Water Quality Management Plan—2000, City of Hartford	September 14, 1987
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	December 7, 1987
	Amendment—City of New Berlin	Community Assistance Planning Report No. 157, Sanitary Sewer Service Area for the City of New Berlin, Waukesha County, Wisconsin	December 7, 1987
	Amendment—Village of Sussex	Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex	December 7, 1987
	Amendment—Kenosha Area	Amendment to the Regional Water Quality Management Plan—2000, City of Kenosha and Environs	December 7, 1987
	Amendment—Village of Kewaskum	Community Assistance Planning Report No. 161, Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin	March 7, 1988
	Amendment—Town of Darien	Amendment to the Regional Water Quality Management Plan—2000, Town of Darien/ Walworth County Metropolitan Sewerage District	June 20, 1988
	Amendment—Village of Sussex	Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex	June 20, 1988
	Amendment—Village of Darien	Community Assistance Planning Report No. 123, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin	June 20, 1988
	Amendment—West Bend Area	Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Town of West Bend	September 12, 1988
	Amendment—Hartford Area	Amendment to the Regional Water Quality Management Plan—2000, City of Hartford	September 12, 1988
	Amendment—Town of Waterford	Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District	September 12, 1988
	Amendment—Hartford Area	Amendment to the Regional Water Quality Management Plan—2000, City of Hartford	December 5, 1988
	Amendment—City of Waukesha	Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha	December 5, 1988
	Amendment—Oconomowoc Area	Community Assistance Planning Report No. 172, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin	March 6, 1989
	Amendment—Village of Genoa City	Community Assistance Planning Report No. 175, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin	March 6, 1989
	Amendment—Village of Germantown	Amendment to the Regional Water Quality Management Plan—2000, Village of Germantown	March 6, 1989
	Amendment—Racine Area	Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs	March 6, 1989
	Amendment—Upper Fox River Watershed	Amendment to the Regional Water Quality Management Plan—2000, Upper Fox River Watershed—Brookfield and Sussex Sewage Treatment Plants	May 15, 1989
	Amendment—Racine Area	Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs	June 19, 1989
	Amendment—Lake Geneva Area	Amendment to the Regional Water Quality Management Plan—2000, City of Lake Geneva and Environs	June 19, 1989

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Town of Geneva	Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District	November 6, 1989
	Amendment—Town of Waterford	Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District	December 4, 1989
	Amendment—Delavan Lake Area	Amendment to the Regional Water Quality Management Plan—2000, Delavan Lake Sanitary District/Walworth County Metropolitan Sewerage District	December 4, 1989
	Amendment—East Troy Area	Amendment to the Regional Water Quality Management Plan—2000, Towns of East Troy, Lafayette, and Spring Prairie, and Village of East Troy	December 4, 1989
	Regional Air Quality Plan	Planning Report No. 28, A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000	June 20, 1980
	Amendment—Emission Reduction Credit Banking and Trading System	Amendment to the Regional Air Quality Attainment and Maintenance Plan: 2000, Emission Reduction Credit Banking and Trading System	December 1, 1983
	Pike River Watershed Plan	Planning Report No. 35, A Comprehensive Plan for the Pike River Watershed	June 16, 1983
	Amendment—Town of Mt. Pleasant	Amendment to the Pike River Watershed Plan, Town of Mt. Pleasant	June 15, 1987
	Amendment—City of Kenosha/ Town of Somers	Amendment to the Pike River Watershed Plan, City of Kenosha/Town of Somers	June 15, 1987
	Oak Creek Watershed Plan	Planning Report No. 36, A Comprehensive Plan for the Oak Creek Watershed	September 8, 1986
Community Assistance Planning	Kenosha Planning District Comprehensive Plan	Planning Report No. 10, A Comprehensive Plan for the Kenosha Planning District, Volumes One and Two	June 1, 1972
	Racine Urban Planning District Comprehensive Plan	Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume One, Inventory Findings and Forecasts; Volume Two, The Recommended Comprehensive Plan; Volume Three, Model Plan Implementation Ordinances	June 5, 1975

[a]*The regional land use plan is a second 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.*

[b]*The regional transportation plan is a second 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.*

[c]*The regional airport system plan is a second generation plan. The initial plan was adopted by the Commission on March 4, 1976, and is documented in SEWRPC Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin.*

[d]*The Kenosha area transit development plan is a second 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.*

[e]*The regional water quality management plan is a second generation plan. The initial plan was 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.*

Six 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, and detailed transit development plans for the Kenosha and Racine urbanized areas.

Ten 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, 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 1989, the Commission adopted 12 amendments to the regional plan. These consisted of 10 amendments to the regional water quality management plan dealing with changes to sanitary sewer service areas at various locations throughout the Region; one amendment to the regional water quality management plan designating a third regional sewage treatment plant for the Upper Fox River watershed; and an amendment to the regional park and open space plan in the form of a new park and open space plan for Racine County. As appropriate, each of these plan amendments is discussed in a subsequent section of this annual report.

THE CYCLICAL NATURE OF THE PLANNING PROCESS

The Commission views the planning process as cyclical in nature, alternating between system—or areawide—planning, and project—or local—planning. For example, with respect to transportation planning, under this concept 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 resultant plans represent "second generation" plans for the Region, incorporating the "feedback" from the intensive project and facilities planning efforts completed by local agencies after, and in implementation of, the first generation areawide system plans.

The second generation regional land use plan is based upon the same three basic concepts that formed the basis of the initial regional land use plan; 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. While the second generation regional land use plan is thus conceptually identical to the original regional land use plan, it does differ in the detailed application of these concepts throughout the seven-county Southeastern Wisconsin Region, taking into account land use decisions that were made following adoption of the initial plan—sometimes at variance with that plan—as well as forecasts of reduced regional population and household growth. This second generation regional land use plan for the design year 2000 was adopted in December 1977.

The second generation regional transportation plan differs in some important respects from the first generation regional transportation plan, reflecting decisions made during the project planning phase of the first cycle of planning. For example, planned freeway segments—the Park Freeway-West in its entirety and the Stadium Freeway-North in its entirety, the Bay Freeway from Pewaukee to Whitefish Bay, the Metropolitan Belt Freeway in its entirety, and the Racine Loop Freeway—as well as one major transit proposal—the exclusive freeway in the east-west travel corridor of Milwaukee

County—were deleted from the second regional transportation plan. This second generation transportation plan for the design year 2000 was adopted in June 1978.

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 second generation regional water quality management plan, taking into account the results of the project and facility level planning efforts of the first cycle. This second generation plan differed from the first generation plan primarily in scope and complexity, the second generation 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.

PLAN ELEMENTS UNDER PREPARATION

At the end of 1989, the Commission had underway a number of programs designed to refine, detail, amend, or extend the existing plan elements. These work efforts included the following:

- The preparation of a third generation regional land use plan. This plan will be based upon new forecasts of regional population and economic activity to the design year 2010.

- The preparation of a third generation regional transportation system plan. Like the land use plan, this work effort would extend the transportation plan to the design year 2010. Work is being done first on a subregional basis, with particular concentration on county level and corridor studies, all intended to be integrated into a new regional plan. Nearing completion at the end of the year were updated jurisdictional highway system plans for Racine and Washington Counties, as well as a corridor plan for the IH 94 South Freeway in Kenosha, Milwaukee, and Racine Counties.

- An update of the regional park and open space plan being carried out by preparing seven individual but coordinated county park and open space plans. By the end of 1989, such new plans had been completed and adopted for Kenosha, Ozaukee, and Racine Counties, and were in various stages of preparation and review for the remaining four counties in the Region.

- Additional sanitary sewer service area plans being prepared to refine, detail, and amend the regional water quality management plan. At the end of 1989, such locally focused planning efforts were underway for the communities of Mequon and Thiensville in Ozaukee County; Union Grove in Racine County; and Brookfield, Elm Grove, and Menomonee Falls in Waukesha County.

- A composite stormwater drainage and flood control system plan for the Milwaukee Metropolitan Sewerage District and its contract service areas in Ozaukee, Racine, Washington, and Waukesha Counties. This work effort is reevaluating and updating prior Commission recommendations attendant to drainage and flood control in the Milwaukee, Menomonee, Kinnickinnic, and Root River watersheds and Oak Creek watershed, and extending those plans as necessary to develop definitive drainage and flood control recommendations for all streams and watercourses for which the MMSD has taken jurisdiction.

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 kept up-to-date and extended in terms of design year. Thus, the Commission carries on annually 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, and airport 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 and/or study design prior to undertaking any major new planning efforts.

As reported in the 1988 Annual Report, during that year the Commission completed, at the request of the Kenosha Water Utility, a prospectus for the preparation of coordinated sanitary sewer and water supply system plans for the greater Kenosha area. During 1989, that program was funded by the local governments concerned and work begun. Also during 1989, the Commission completed at the request of the Racine County Executive a prospectus for the preparation of coordinated sanitary sewer and water supply system plans for the greater Racine area. Finally, during 1989 the Commission completed, at the request of Milwaukee County and the Wisconsin Department of Natural Resources, a prospectus for a program that would help ensure the identification and protection of the remaining unique and outstanding natural resources and critical species habitat in the Region. Progress on the Kenosha area utility study and the specific recommendations set forth in the Racine area prospectus and in the natural areas planning program prospectus are reported in later sections of this annual report.

LAND USE PLANNING DIVISION

DIVISION FUNCTIONS

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

- How many people live and work in the Region? How are these levels of population and employment changing over time?
- Where in the Region do people live and work? How are these distribution patterns changing over time?
- What is the most probable future level of population 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, wildlife habitat areas, and prime agricultural lands? What is happening to these resources over time?
- 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 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 facilities?

In an attempt to provide answers to these and similar questions, the Land Use Planning Division, during 1989, conducted a number of activities in three identifiable areas: economic and demographic base data collation and analysis, land use planning, and park and open space planning.

ECONOMIC AND DEMOGRAPHIC BASE ANALYSIS

During 1989, the Division continued to monitor secondary data sources on changes in population, employment, and school enrollment levels and to provide pertinent socioeconomic data in support of the work of the Land Use, Transportation, and Environmental Planning Divisions.

Number of Available Jobs

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

Figure 6

LAND USE PLANNING DIVISION

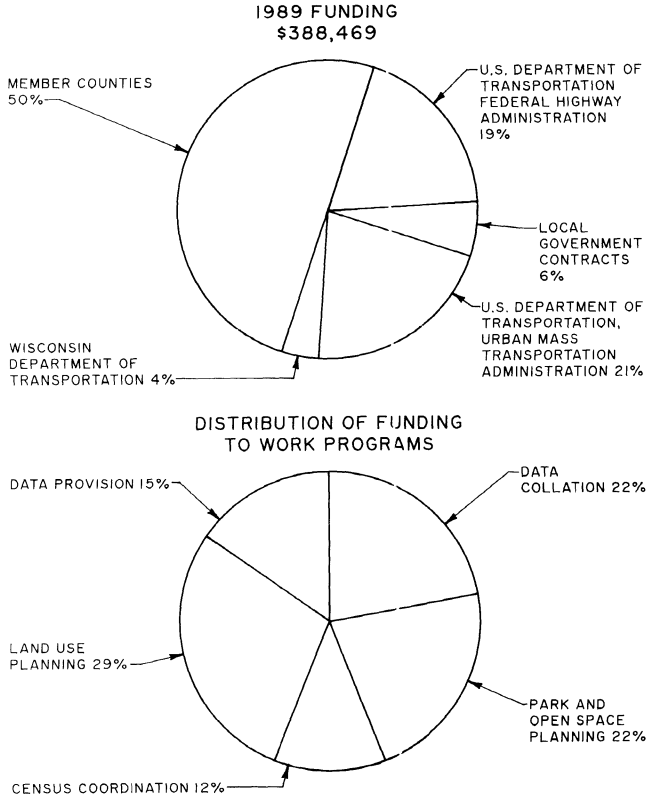


Table 2

REGIONAL EMPLOYMENT BY CATEGORY: 1970, 1980, AND 1989

Employment Category	Jobs			Difference			
				1970-1980		1980-1989	
	1970	1980	1989[a]	Number	Percent	Number	Percent
Agriculture	11,900	12,800	10,300	900	7.6	-2,500	-19.5
Construction	27,200	25,800	32,900	-1,400	-5.1	7,100	27.5
Manufacturing							
Food and Kindred Products	18,900	20,900	16,400	2,000	10.6	-4,500	-21.5
Printing and Publishing	14,900	16,300	23,300	1,400	9.4	7,000	42.9
Primary Metals	22,500	16,600	12,300	-5,900	-26.2	-4,300	-25.9
Fabricated Metals	24,600	31,800	27,200	7,200	29.3	-4,600	-14.5
Nonelectrical Machinery	68,100	73,100	56,000	5,000	7.3	-17,100	-23.4
Electrical Machinery	36,500	40,100	24,000	3,600	9.9	-16,100	-40.1
Transportation Equipment	22,000	21,500	13,100	-500	-2.3	-8,400	-39.1
Other Manufacturing	44,800	41,500	55,900	-3,300	-7.4	14,400	34.7
Manufacturing Subtotal	252,300	261,800	228,200	9,500	3.8	-33,600	-12.8
Transportation, Communication, and Utilities	36,700	39,600	39,800	2,900	7.9	200	0.5
Wholesale Trade	35,300	43,500	49,900	8,200	23.2	6,400	14.7
Retail Trade	115,700	131,900	153,000	16,200	14.0	21,100	16.0
Finance,Insurance, and Real Estate	32,800	41,200	49,500	8,400	25.6	8,300	20.1
Services	119,600	158,200	210,900	38,600	32.3	52,700	33.3
Government and Education	83,300	120,700	136,700	37,400	44.9	16,000	13.3
Self Employed, Except Farm	37,200	46,200	61,100	9,000	24.2	14,900	32.3
Miscellaneous[b]	1,700	2,500	2,300	800	47.1	-200	-8.0
Total Jobs	753,700	884,200	974,600	130,500	17.3	90,400	10.2

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

[b]Includes agricultural services, forestry, commercial fishing, mining, and unclassified jobs.

whether or not the job is held by a resident of the jurisdiction in which the job is enumerated or by a commuter. The number of jobs available in the Region in the years 1970, 1980, and 1989 is set forth in Table 2 by employment category.

The number of jobs in the Region in 1989 was estimated at 974,600, an increase of 36,400 jobs, or 4 percent, over the 1988 level of 938,200 jobs. As shown in Table 2, a majority of the employment sectors continued to provide more jobs in 1989 than in 1980. There still were, however, about 33,600 fewer manufacturing jobs within the Region in 1989 than in 1980. While about 50 percent of this decline occurred in the nonelectrical machinery manufacturing sector, which accounted for about 17,100 fewer jobs in 1989 than in 1980, employment within this manufacturing sector has stabilized within recent years. Within the manufacturing category, only the printing and publishing and "other" manufacturing sectors provided more jobs in 1989 than in 1980.

Employment distribution by county is shown in Table 3. In six counties—Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha—there were more jobs in 1989 than in 1980—about

Table 3

REGIONAL EMPLOYMENT BY COUNTY: 1970, 1980, AND 1989

County	1970	1980	1989	1970-1980		1980-1989	
				Number	Percent	Number	Percent
Kenosha	40,000	50,100	48,100	10,100	25.3	-2,000	-4.0
Milwaukee	507,100	542,300	570,400	35,200	6.9	28,100	5.2
Ozaukee	19,800	25,600	31,500	5,800	29.3	5,900	23.0
Racine	62,700	76,100	82,000	13,400	21.4	5,900	7.8
Walworth	24,500	31,100	36,200	6,600	26.9	5,100	16.4
Washington	23,100	31,400	40,300	8,300	35.9	8,900	28.3
Waukesha	76,500	127,600	166,100	51,100	66.8	38,500	30.2
Region	753,700	884,200	974,600	130,500	17.3	90,400	10.2

28,100, 5,900, 5,900, 5,100, 8,900, and 38,500, respectively. In Kenosha County there were about 2,000 fewer jobs in 1989 than in 1980, a loss of about 4 percent.

Comparison of Estimated and Projected Employment Levels

As reported in the Commission's 1984 Annual Report, the Commission in 1984 developed a new set of projections of regional employment change. These projections are for the design year 2010 and will provide one of the bases upon which adopted regional plan elements, particularly the adopted regional land use, regional transportation system, and regional water quality management plans, will be reappraised and extended to the design year 2010. These projections are documented in SEWRPC Technical Report No. 10 (2nd Edition), The Economy of Southeastern Wisconsin.

Because of the increasing uncertainty surrounding future population levels, the Commission adopted an "alternative futures" approach in preparing a set of projections of regional employment levels for the year 2010. Three alternative regional economic scenarios were developed. Two of these were intended to represent "pessimistic" and "optimistic" extremes of future regional employment levels; the third was intended to identify an intermediate future—that is, a future that lies between the two extremes. While carried out under an alternative futures approach, the regional employment projections presented in Technical Report No. 10 were developed using an approach similar to that used successfully by the Commission in its previous employment projection efforts—that is, by preparing a range of projections for each of the dominant and subdominant industry groups within the Region in order to arrive at projections of total regional employment levels to the year 2010 under the most optimistic and most pessimistic futures that could be reasonably envisioned for the economy of southeastern Wisconsin. This range of employment projections allows for the development of system plans at the regional level, as well as facility plans at the local level, that may be expected to remain viable under greatly varying future conditions.

Employment in the Region in 1989 was anticipated to total 977,200 jobs under the optimistic scenario; 875,100 jobs under the intermediate scenario; and 810,900 jobs under the pessimistic scenario. The estimated 1989 level of 974,600 jobs is less than 1 percent below the level anticipated under the optimistic scenario and about 11 percent and 20 percent, respectively, above the levels anticipated under the intermediate and pessimistic scenarios. The 1989 employment levels projected for each of the Region's seven counties under each of the three alternative futures and the 1989 estimated county employment levels are set forth in Table 4 and Figures 7 through 14.

Civilian Labor Force Levels

Another important measure of economic activity within the Region is the composition of the Region's civilian labor force. By definition, the civilian labor force of an area consists of all of

Table 4

EXISTING AND PROJECTED NUMBER OF AVAILABLE JOBS BY COUNTY: 1989

County	Estimated 1989 Jobs	Projected 1989 Jobs		
		Pessimistic Scenario	Intermediate Scenario	Optimistic Scenario
Kenosha	48,100	45,400	49,700	55,500
Milwaukee	570,400	486,000	517,300	570,600
Ozaukee	31,500	23,400	26,000	30,900
Racine	82,000	72,200	81,000	93,200
Walworth	36,200	29,800	34,000	39,500
Washington	40,300	31,400	35,400	40,500
Waukesha	166,100	122,700	131,700	147,000
Region	974,600	810,900	875,100	977,200

Figure 7

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR THE REGION: 1960-2010

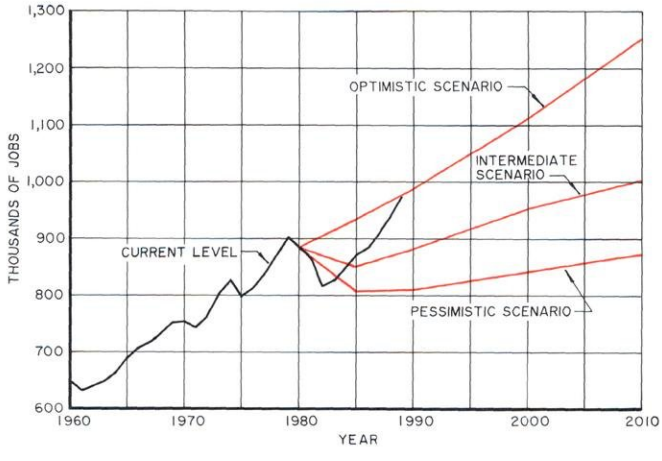


Figure 8

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR KENOSHA COUNTY: 1960-2010

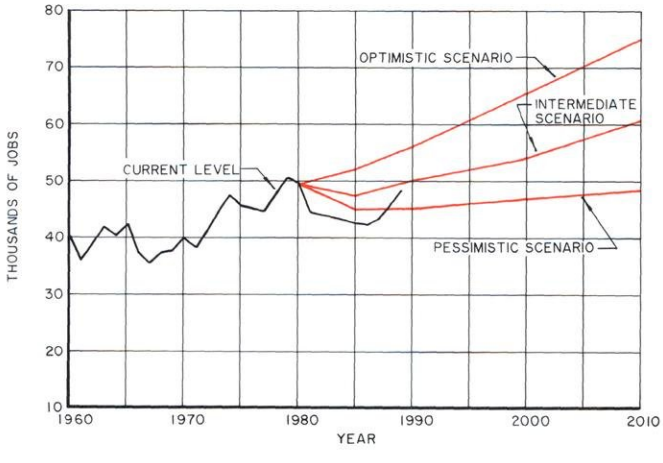


Figure 9

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR MILWAUKEE COUNTY: 1960-2010

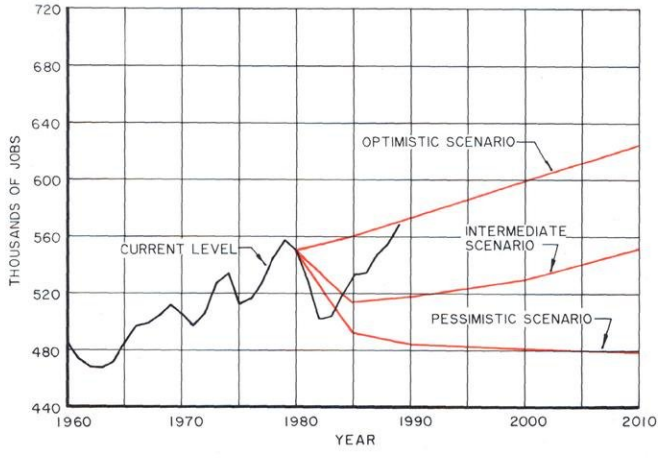
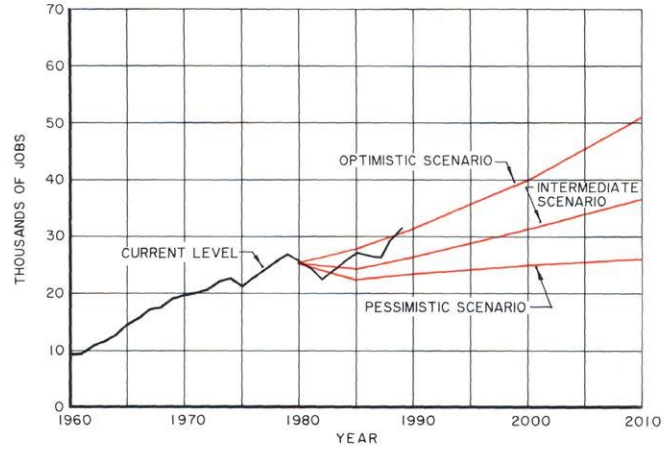


Figure 10

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR OZAUKEE COUNTY: 1960-2010



its residents 16 years of age and older who are either employed at one or more jobs or temporarily unemployed. Civilian labor force data are often referred to as "place-of-residence" employment data. Because of the different definitions and estimation procedures utilized in their preparation, place-of-work and place-of-residence employment data for a particular geographic area will often differ in absolute values, but generally exhibit similar trends, as shown in Figures 15 through 22. In addition to providing information about regional economic activity, comparisons between place-of-work and place-of-residence employment data can provide important insights into such characteristics of the resident population of the Region as labor force participation and work trip commutation, and, when compared with changes in population levels, can provide indirect evidence of population migration.

The regional civilian labor force was estimated at 960,400 persons in 1989. Between 1988 and 1989, the civilian labor force increased by about 23,100 persons, or about 2 percent. During the same time period, the number of employed members of the civilian labor force increased from about 898,300 in 1988 to about 920,900 in 1989, an increase of 22,600 persons, or about 3 percent. The number of unemployed members of the civilian labor force increased slightly from about 39,000 in 1988 to about 39,500 in 1989—an increase of about 500, or about 1 percent. The unemployment rate in 1989 was 4.1 percent, in comparison to 4.2 percent in 1988.

Figure 11

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR RACINE COUNTY: 1960-2010

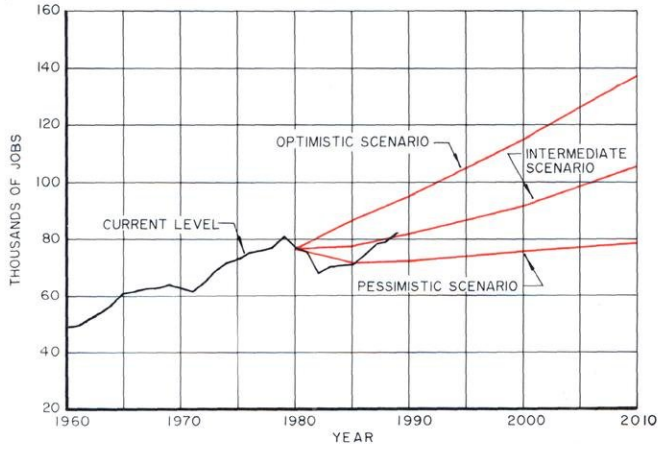


Figure 12

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR WALWORTH COUNTY: 1960-2010

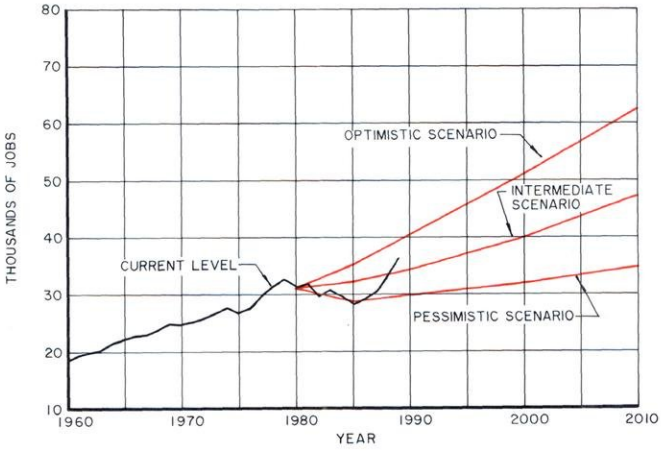


Figure 13

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR WASHINGTON COUNTY: 1960-2010

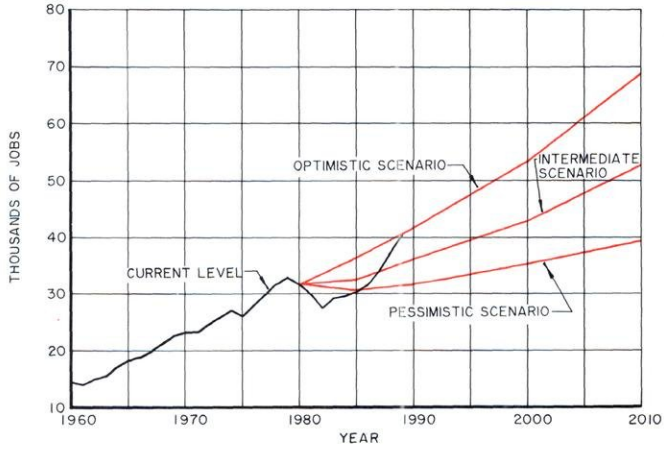


Figure 14

CURRENT AND ALTERNATIVE FUTURE NUMBER OF AVAILABLE JOBS FOR WAUKESHA COUNTY: 1960-2010

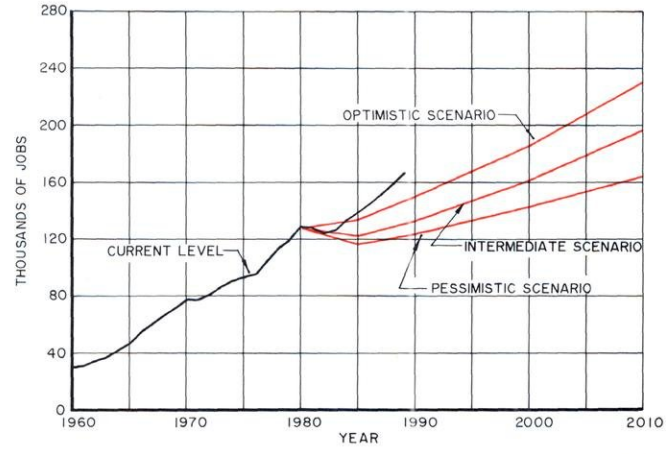


Figure 15

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR THE REGION: 1975-1989

Figure 16

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR KENOSHA COUNTY: 1975-1989

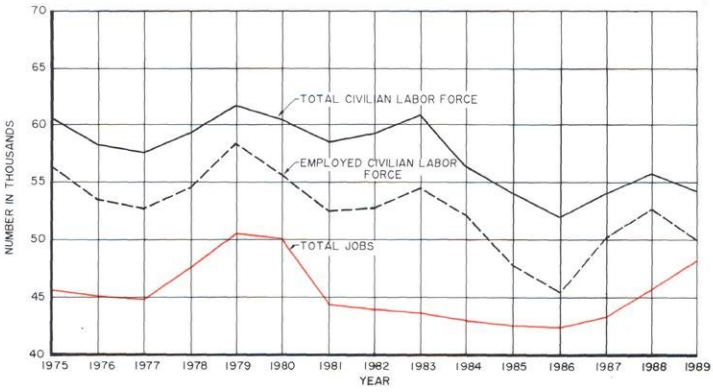


Figure 17

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR MILWAUKEE COUNTY: 1975-1989

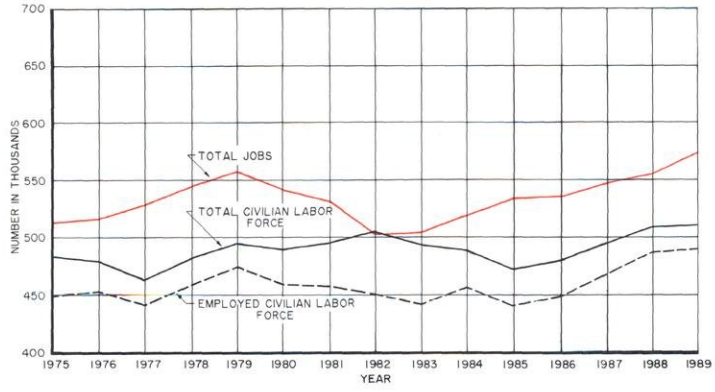


Figure 18

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR OZAUKEE COUNTY: 1975-1989

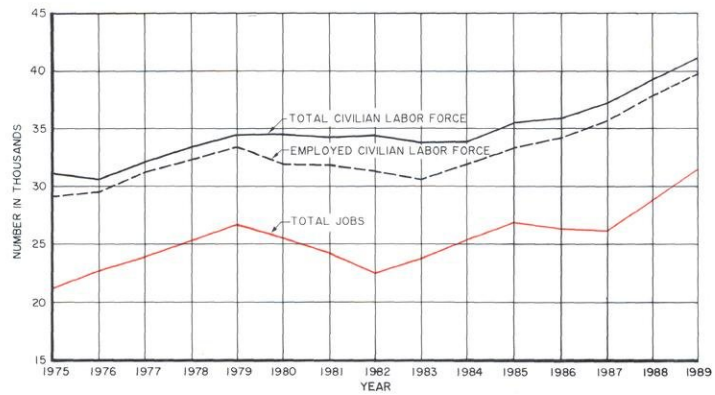


Figure 19

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR RACINE COUNTY: 1975-1989

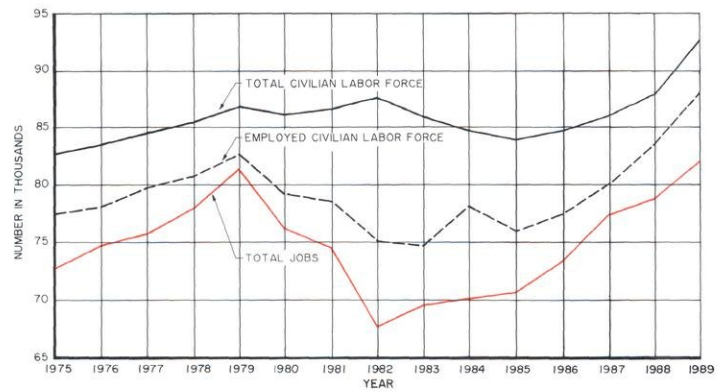


Figure 20

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR WALWORTH COUNTY: 1975-1989

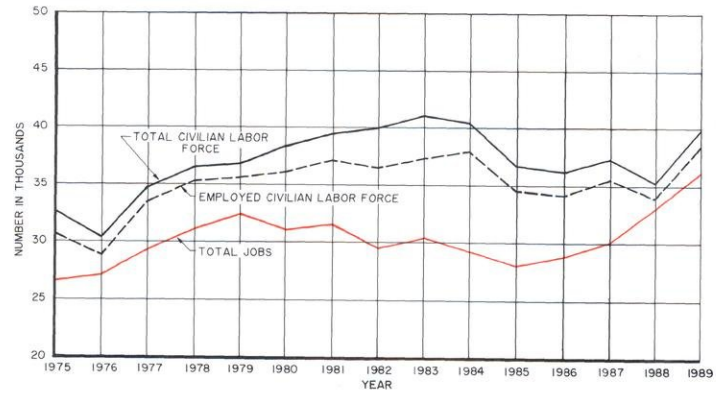


Figure 21

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR WASHINGTON COUNTY: 1975-1989

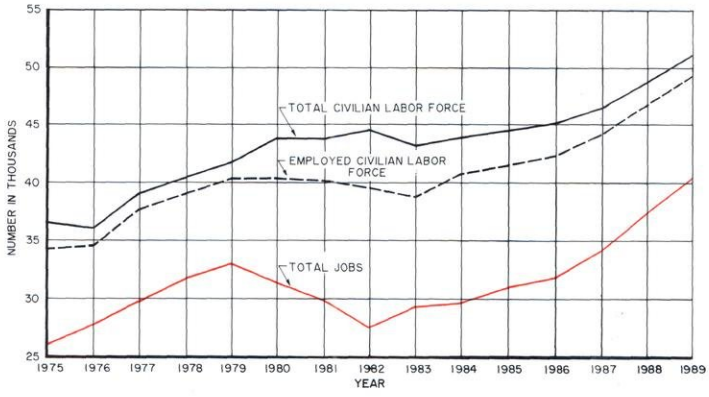
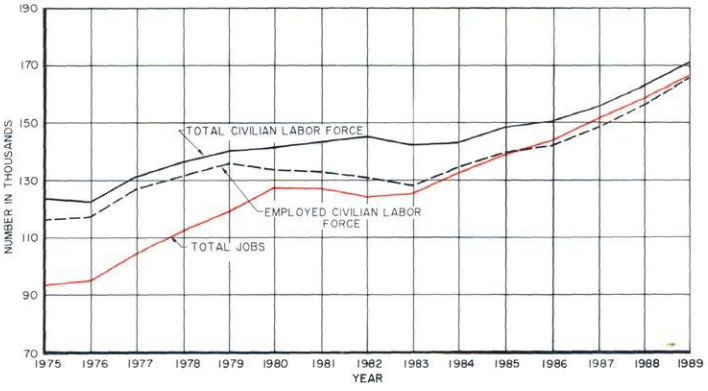


Figure 22

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR WAUKESHA COUNTY: 1975-1989



Current Population Levels

The size of the resident population of the Region remained virtually unchanged between 1970 and 1980, increasing from about 1,756,100 residents in 1970 to about 1,764,800 residents in 1980—an increase of only about 8,700 residents, or less than 1 percent. This stands in marked contrast to the large population increases of the immediately preceding decades—333,000 residents, or about 27 percent, from 1950 to 1960, and 182,500 residents, or about 12 percent, from 1960 to 1970. In 1989, the resident population of the Region was estimated by the Wisconsin Department of Administration to be 1,767,800 persons—an increase of about 16,900 persons, or 1 percent, over the 1988 estimated population of 1,750,900 persons. The 1989 population was 3,000 persons, or about 0.2 percent, greater than the population enumerated in the 1980 federal census, and about 11,700, or about 0.7 percent, greater than the population enumerated in the 1970 federal census.

The Wisconsin Department of Administration (DOA) estimates of 1989 resident population levels are set forth in Table 5. The DOA has statutory responsibility for preparing intercensal population estimates as a basis for distributing state shared taxes to local units of government. These estimates are based upon symptomatic indicators of population change, including automobile registrations, the number of persons filing income tax returns, and the dollar value of exemptions for dependents claimed on income tax returns. According to these estimates, Milwaukee and Racine Counties experienced population declines—about 3 percent and 1 percent, respectively—since the 1980 federal census was taken. The aggregate loss of population in these two counties was about 33,300 persons. The remaining five counties experienced population increases ranging from a low of about 1,800 persons, or about 2 percent, in Kenosha County to a high of about 20,200 persons, or about 7 percent, in Waukesha County.

An examination of recent resident population levels in the Region indicates that the character of the population of the Region may be undergoing some fundamental changes. This is particularly true in the outlying counties of the Region. The population of an area such as southeastern Wisconsin is constantly changing with the occurrence of vital events such as births and deaths, and through the inflow and outflow of persons migrating from one area to another.

Population increases result from births and in-migration of persons; population decreases result from deaths and out-migration of persons. Thus, population change is not a simple phenomenon but comprises four major components: births, deaths, in-migration, and out-migration. The balance between births and deaths is termed "natural increase" and the balance between in-migration and out-migration is termed "net migration." Trends in natural increase and net migration over time thus provide one important basis for the evaluation of changes in resident population levels.

Table 5

POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1970, 1980, AND 1989

County	Population			1970-1980 Change		1980-1989 Change	
	1970 Census	1980 Census	1989 Estimate	Number	Percent	Number	Percent
Kenosha	117,900	123,100	124,900	5,200	4.4	1,800	1.5
Milwaukee	1,054,300	965,000	932,900	-89,300	-8.5	-32,100	-3.3
Ozaukee	54,500	67,000	70,400	12,500	22.9	3,400	5.1
Racine	170,800	173,100	171,900	2,300	1.3	-1,200	-0.7
Walworth	63,500	71,500	74,300	8,000	12.6	2,800	3.9
Washington	63,800	84,900	93,000	21,100	33.1	8,100	9.5
Waukesha	231,300	280,200	300,400	48,900	21.1	20,200	7.2
Region	1,756,100	1,764,800	1,767,800	8,700	0.5	3,000	0.2

Changes in natural increase and net migration over the past 13 years in the Region and each of the Region's seven counties are illustrated in Figures 23 through 30. The measurement of natural increase is straightforward and subject to relatively little error since the registration of births and deaths is virtually complete in Wisconsin. The measurement of migration, however, is indirect, since there are no records kept on the movement of persons between places. For small areas such as counties, migration generally must be measured as the net balance between total population change from a given date to a subsequent date and the computed natural increase between the two dates. When estimates, rather than counts, of resident population levels are used to compute total population change, any error between "true" population change and the estimated population change becomes incorporated into the estimates of net migration. Net migration levels computed in this manner must, therefore, be viewed as approximate rather than absolute.

Natural increase in the Region has been relatively stable over the past 13 years, ranging from about 10,000 to 13,000 persons yearly. Since 1979, there has been a trend toward slightly higher levels of natural increase due to a modest increase of about 2,000 yearly in the number of births in the Region.

In contrast to natural increase, yearly net migration levels for the Region have fluctuated greatly over the past 13 years, although they have consistently indicated that larger numbers of people are moving out of the Region than into the Region. Net out-migration was recorded in Milwaukee County during the 1960's and in Kenosha, Milwaukee, and Racine Counties during the 1970's. These trends for the most part have continued into the 1980's. Of particular note, however, was a general change from net in-migration to net out-migration in some of the outlying counties of the Region between 1980 and 1986. Ozaukee and Washington Counties are estimated to have experienced net out-migration for five out of the six years between 1980 and 1986, while Walworth and Waukesha Counties fluctuated between overall in-migration and out-migration during this time period. For the years 1987 and 1988, however, the predominate trend has been in-migration, with only Milwaukee and Racine Counties experiencing out-migration during these two years. In fact, in-migration was estimated to be larger than out-migration for the Region overall during 1988, marking the first year since 1964 in which the Region experienced a net population in-migration.

Comparison of Actual and Projected Population Levels

As reported in the Commission's 1984 Annual Report, the Commission in 1984 developed a new set of projections of regional population change. Like the previously described employment projections, these projections are for the design year 2010, and will provide one of the bases upon which all adopted regional plan elements, particularly the adopted regional land use and regional transportation system plans, will be

Figure 23

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR THE REGION: 1975-1989

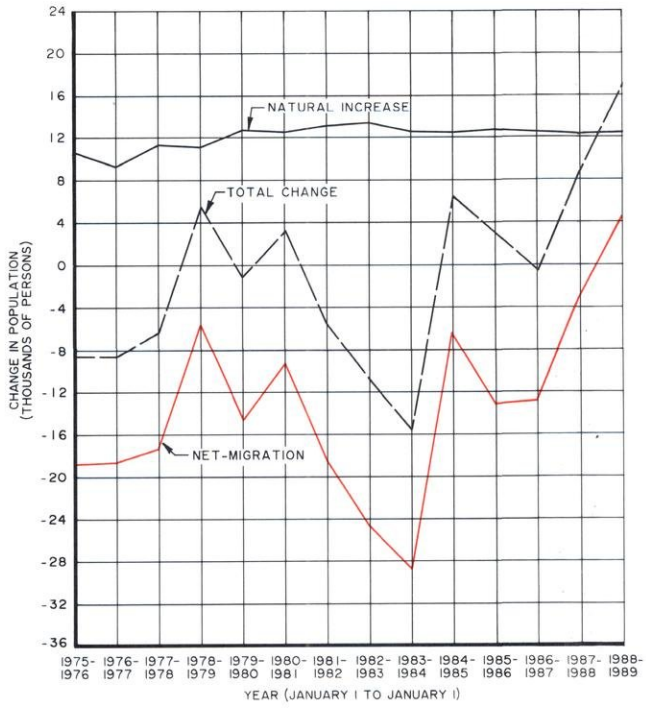


Figure 24

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR KENOSHA COUNTY: 1975-1989

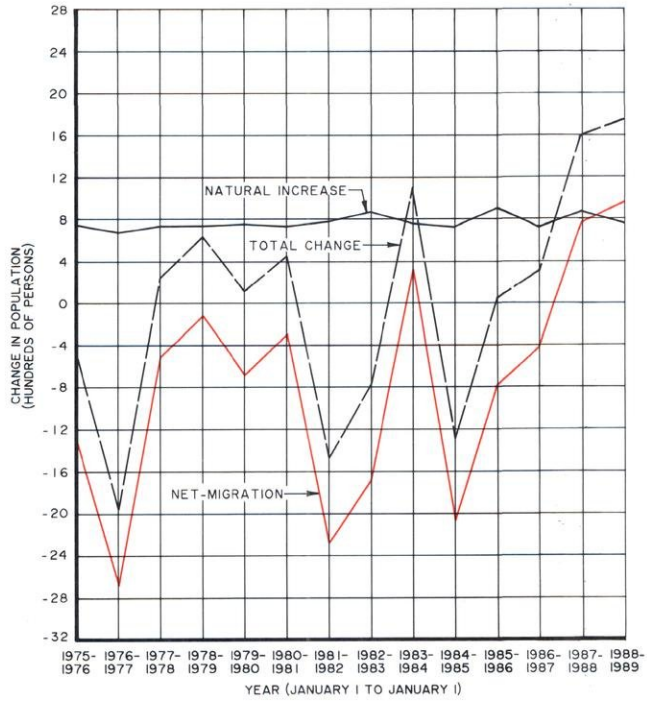


Figure 25

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR MILWAUKEE COUNTY: 1975-1989

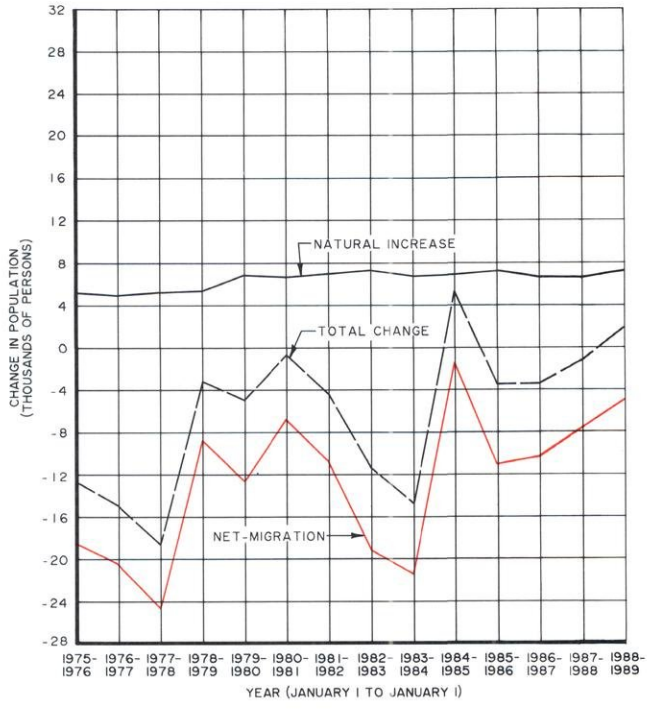


Figure 26

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR OZAUKEE COUNTY: 1975-1989

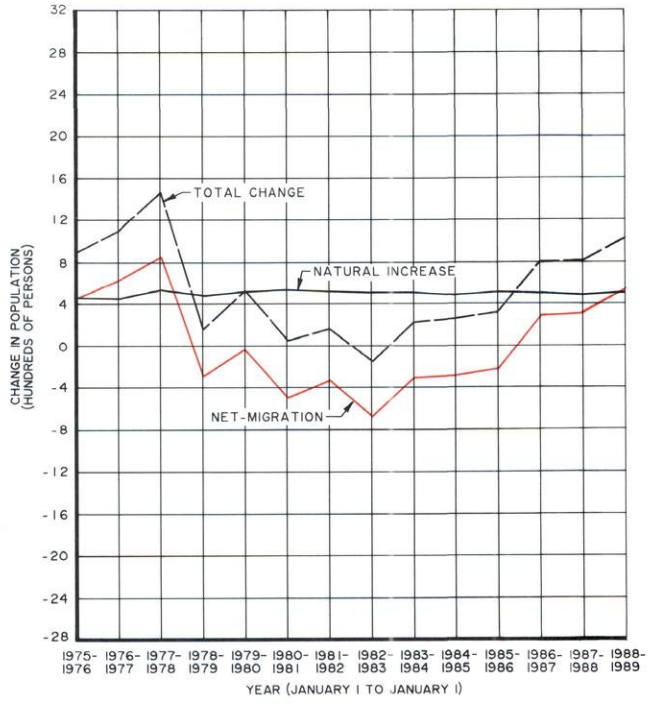


Figure 27

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR RACINE COUNTY: 1975-1989

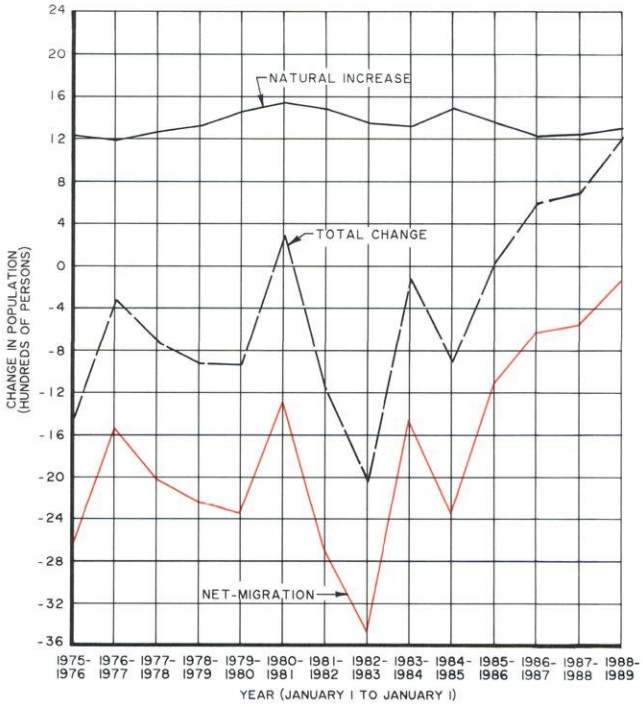


Figure 28

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR WALWORTH COUNTY: 1975-1989

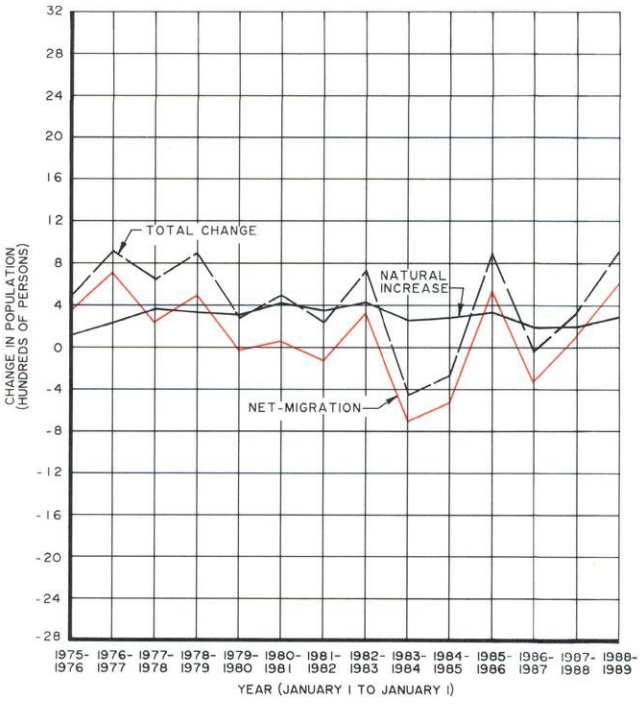


Figure 29

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR WASHINGTON COUNTY: 1975-1989

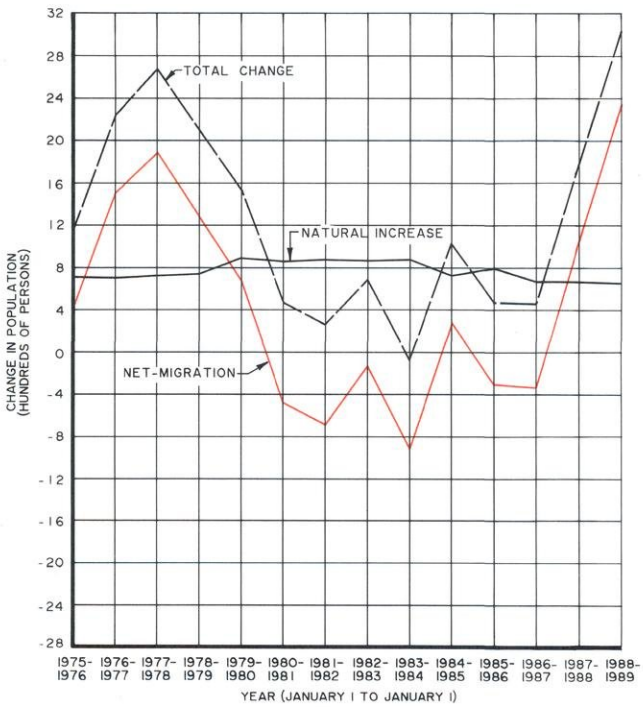


Figure 30

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR WAUKESHA COUNTY: 1975-1989

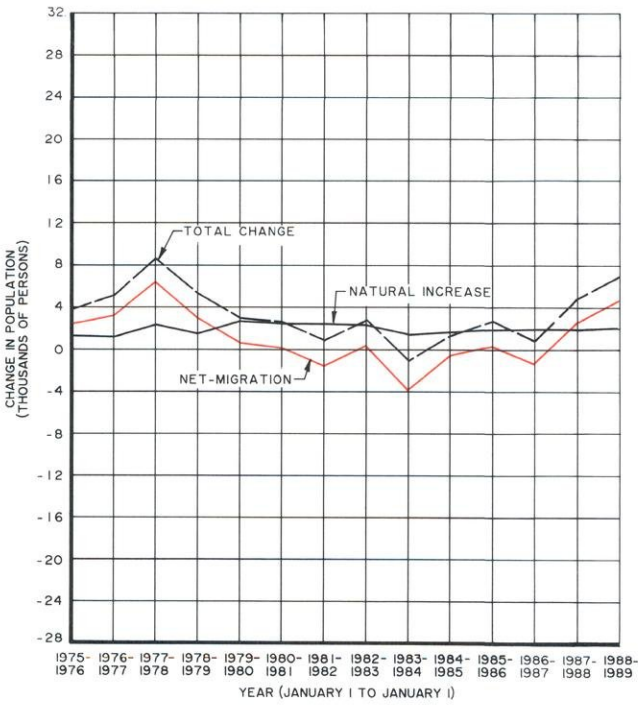


Table 6

EXISTING AND PROJECTED RESIDENT POPULATION LEVELS BY COUNTY: 1989

County	Estimated 1989 Population	Projected 1989 Population		
		Pessimistic Scenario	Intermediate Scenario	Optimistic Scenario
Kenosha	124,900	111,100	117,500	134,200
Milwaukee	932,900	871,200	924,900	964,000
Ozaukee	70,400	61,200	69,300	82,200
Racine	171,900	154,900	165,600	186,600
Walworth	74,300	67,600	77,200	84,000
Washington	93,000	78,900	95,500	111,200
Waukesha	300,400	269,300	299,600	346,000
Region	1,767,800	1,614,200	1,749,600	1,908,200

reappraised and extended to the year 2010. These projections are documented in SEWRPC Technical Report No. 11 (2nd Edition), The Population of Southeastern Wisconsin.

As in the preparation of employment projections, the conceptual framework used by the Commission to develop the population projections was the "alternative futures" method. Three alternative regional population scenarios were developed, each of which is closely linked to a corresponding economic scenario for the Region. Two of these were intended to represent "pessimistic" and "optimistic" extremes of future regional population levels; the third was intended to identify an intermediate future—that is, a future that lies between the two extremes. While carried out under an alternative futures approach, the regional population projections were developed using a cohort-component procedure similar to that used by the Commission in its previous population projection efforts.

Under the optimistic scenario, the population level of the Region was anticipated to be 1.91 million persons in 1989. The estimated 1989 regional population level of 1.77 million persons noted above is about 7 percent below this anticipated level. Under the pessimistic scenario, the population level of the Region was anticipated to be 1.61 million persons in 1989. The estimated 1989 population level is about 10 percent above this level. The regional population level of about 1.75 million persons anticipated in 1989 under the intermediate scenario differs from the 1989 estimated regional population level by about 1 percent. The 1989 population levels projected for each of the Region's seven counties under each of the three alternative futures and the 1989 estimated county population levels are set forth in Table 6 and Figures 31 through 38.

School Enrollment

Enrollment in public and nonpublic schools within the Region totaled 343,000 students in 1989, representing an increase of about 2,700 students, or about 0.8 percent, over the 1988 level of 340,300 students. As indicated in Table 7, the 1989 regional school enrollment was about 26,300 students, or about 7 percent, below the 1980 level of 369,300. Enrollment in public schools was about 278,200 students in 1989, about 16,800 students, or 6 percent, below the 1980 level of 295,000. Enrollment in nonpublic schools was about 64,800 students in 1989, about 9,500 students, or 13 percent, below the 1980 level of 74,300.

Map 2 shows public school enrollment changes between 1980 and 1989 for public high school districts operating wholly or partially within the Region. Union high school districts and their constituent feeder K-8 school districts have been combined into a single district for the purpose of preparing this map. About 73 percent of the public K-12 and the combined union high school and K-8 districts have experienced enrollment declines of 5 percent or more since 1980. Four districts—Franklin Public Schools, Kettle Moraine Schools, Milwaukee Public Schools, and Mukwonago Area Schools—experienced an enrollment gain during this period.

Figure 31

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR THE REGION: 1950-2010

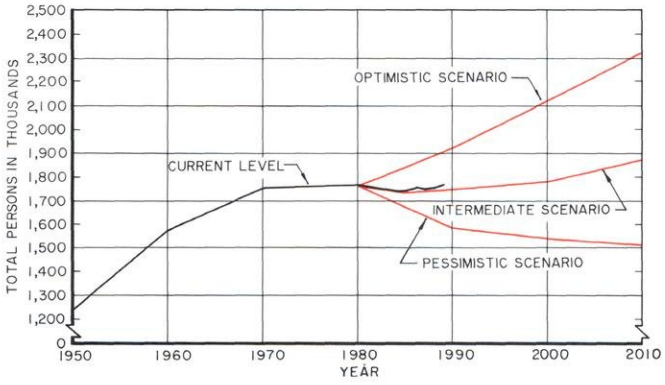


Figure 32

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR KENOSHA COUNTY: 1950-2010

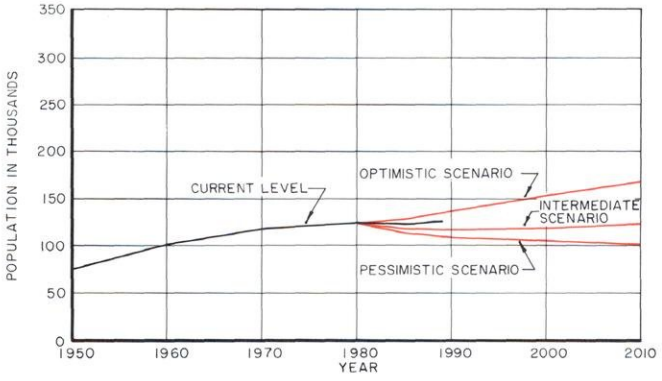


Figure 33

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR MILWAUKEE COUNTY: 1950-2010

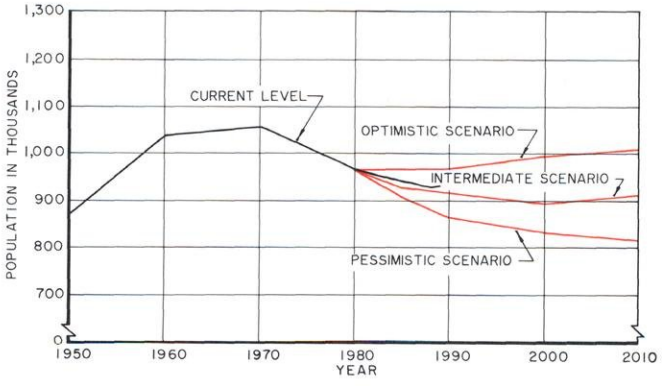


Figure 34

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR OZAUKEE COUNTY: 1950-2010

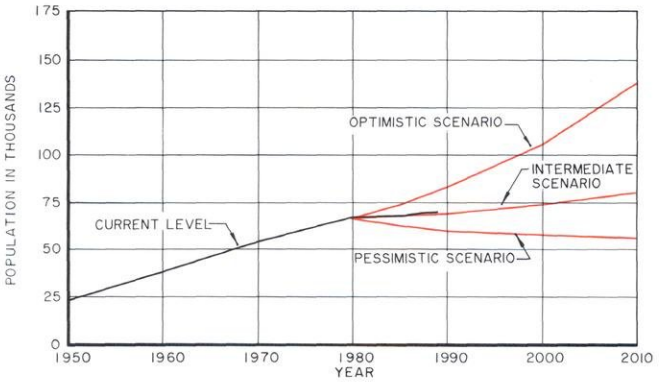


Figure 35

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR RACINE COUNTY: 1950-2010

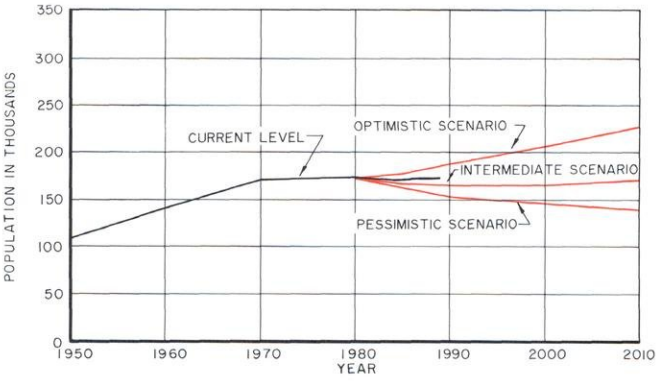


Figure 36

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR WALWORTH COUNTY: 1950-2010

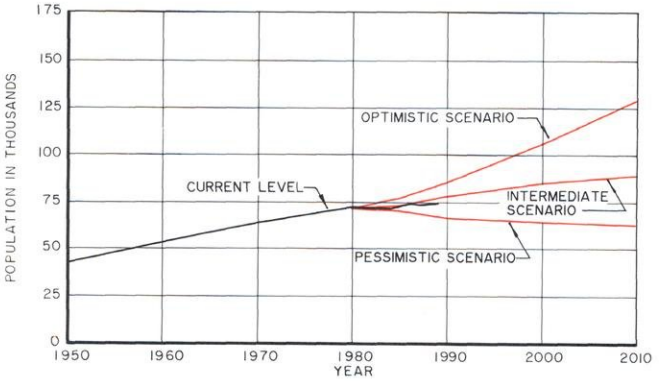


Figure 37

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR WASHINGTON COUNTY: 1950-2010

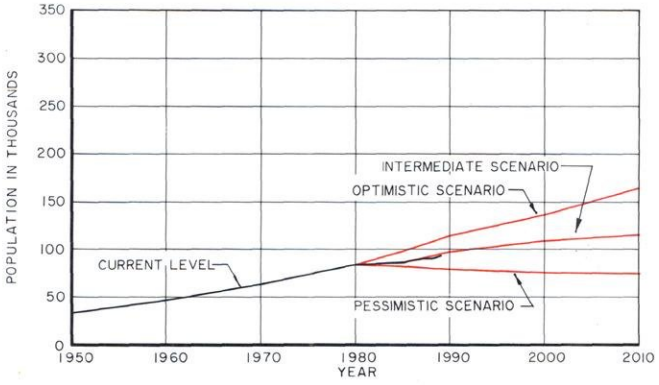
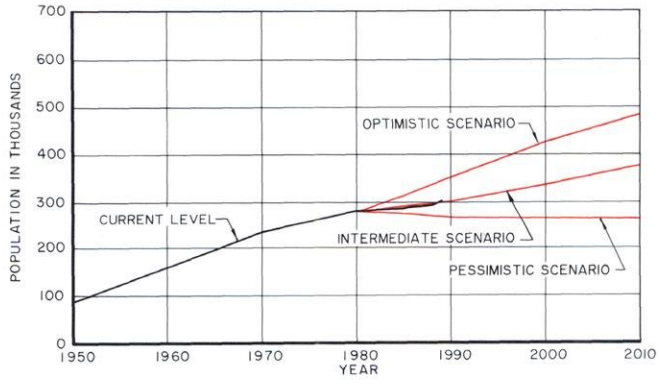


Figure 38

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR WAUKESHA COUNTY: 1950-2010



Census Coordination

The Commission serves a coordinating function for the U. S. Bureau of the Census in the seven-county Southeastern Wisconsin Region. Under agreements between the Commission and the Census Bureau, the Commission provides staff services to Census Statistical Areas Committees in each county. In this regard, the Commission serves as the census "Key Person" for Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties; provides direct staff support services to the census Key Person for Racine County; and serves as a member of the Census Statistical Areas Committee for Milwaukee County.

The Commission also participates in the U. S. Census Bureau State Data Center Program, a nationwide program under which the governor of each state designates an agency or group of agencies within the state government to serve as the lead agency within that state—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 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 in the seven-county Southeastern Wisconsin Region.

In 1989, the Commission, together with the U. S. Bureau of the Census and the Wisconsin State Data Center, co-sponsored two workshops to instruct local units of government on how to perform a review of pre-census housing unit estimates and post-census preliminary housing unit counts to be provided by the U. S. Bureau of the Census as part of the conduct of the 1990 Census of Population and Housing. During 1989, the Commission staff also assisted the U. S. Bureau of the Census in identifying the major employment centers within the Region. These centers were coded for the U. S. Census Bureau's "Workplace" file by Commission staff. This file will be used by the U. S. Bureau of the Census to provide accurate journey-to-work data from the 1990 Census of Population and Housing.

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

Map 2

RELATIVE PUBLIC SCHOOL ENROLLMENT CHANGES IN THE REGION: 1980-1989

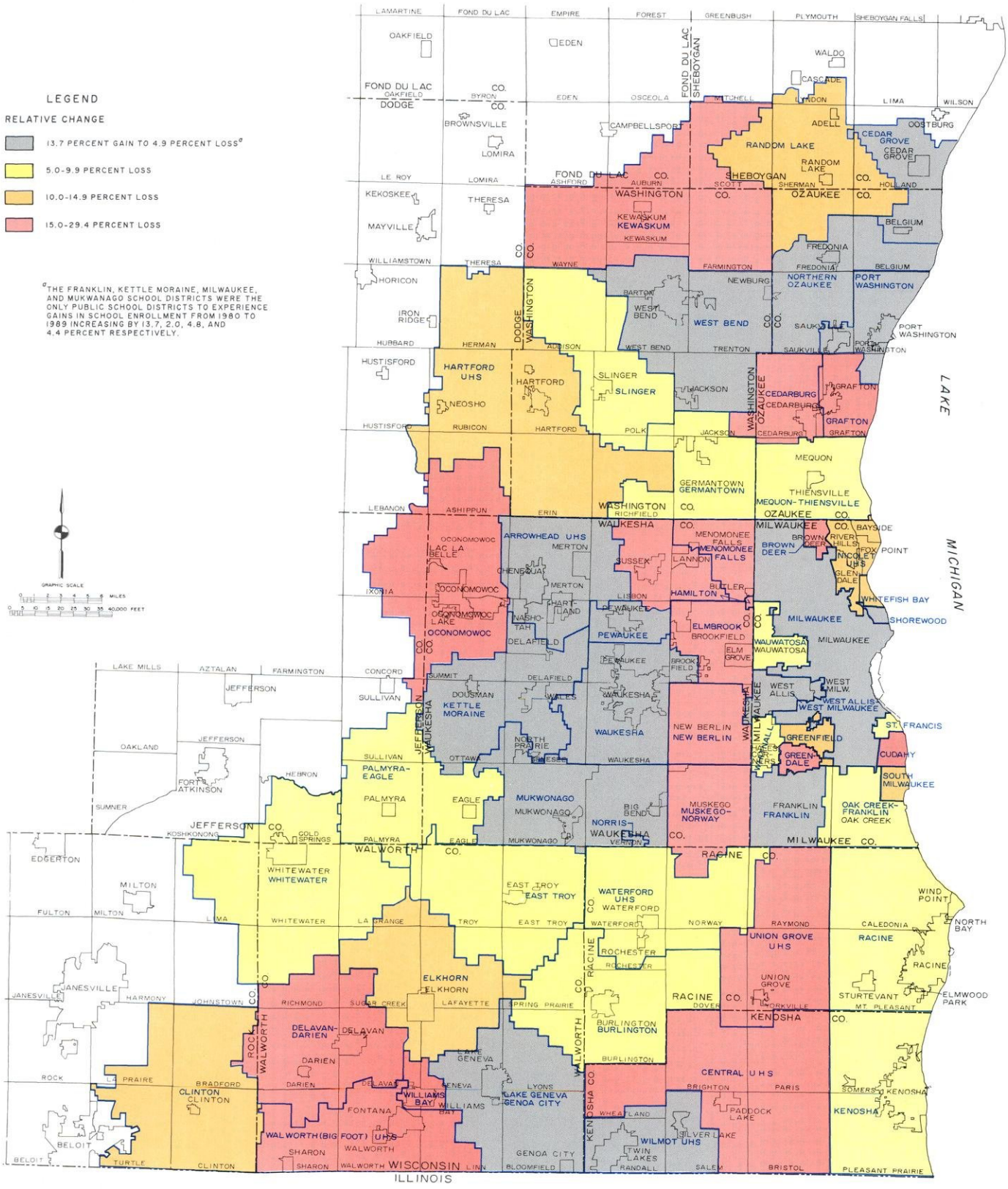


Table 7

REGIONAL SCHOOL ENROLLMENT BY COUNTY: 1970, 1980, AND 1989

County	School Enrollment			Difference			
				1970-1980		1980-1989	
	1970	1980	1989	Number	Percent	Number	Percent
Kenosha	32,300	26,700	24,400	-5,600	-17.3	-2,300	-8.6
Milwaukee	267,900	184,900	177,200	-83,000	-31.0	-7,700	-4.2
Ozaukee	15,900	15,000	13,300	-900	-5.7	-1,700	-11.3
Racine	48,600	38,800	34,300	-9,800	-20.2	-4,500	-11.6
Walworth	15,600	13,700	12,700	-1,900	-12.2	-1,000	-7.3
Washington	19,200	21,500	19,800	2,300	12.0	-1,700	-7.9
Waukesha	73,100	68,700	61,300	-4,400	-6.0	-7,400	-10.8
Region	472,600	369,300	343,000	-103,300	-21.9	-26,300	-7.1

LAND USE PLANNING

During 1989, the Division efforts in land use planning were directed primarily toward implementation of the regional land use plan. Major efforts in this regard involved the completion of agricultural soil erosion control plans for Kenosha, Ozaukee, and Washington Counties. The Division also continued to monitor residential subdivision platting and farmland preservation activity within the seven-county Region during 1989.

Regional Land Use Plan—An Overview

The second generation regional land use plan, documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume Two, Alternative and Recommended Plans, was formally adopted by the Commission in December 1977, published in the spring of 1978, and subsequently certified to various units and agencies of government for adoption and implementation.

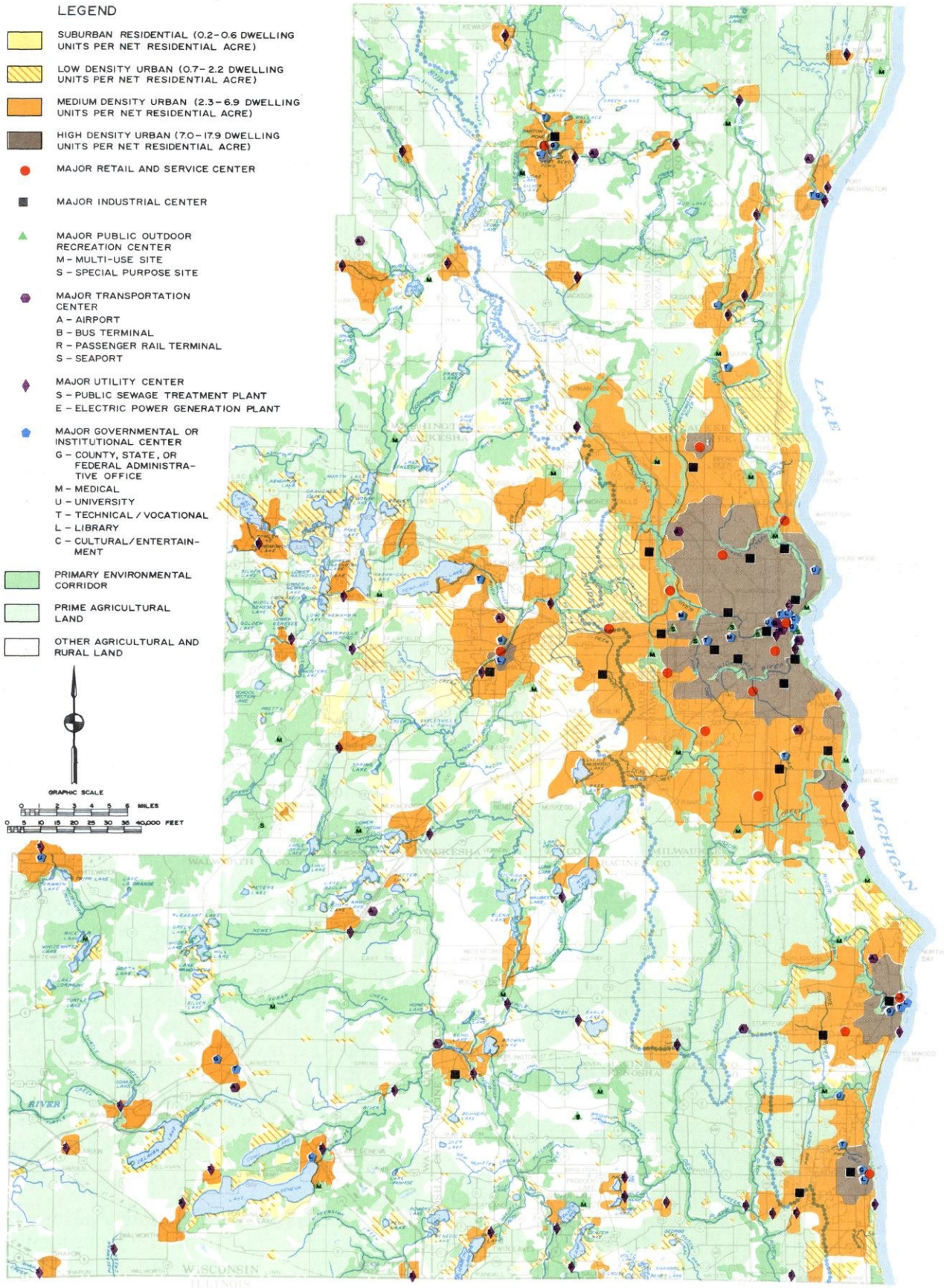
The recommended regional land use plan for the year 2000 is shown in graphic summary form on Map 3. The basic concepts underlying the land use plan are essentially the same as those underlying the first generation regional land use plan for the year 1990. That plan had been adopted by the Commission in 1966. Like the year 1990 plan, the year 2000 land use plan advocates a return to the historic development trends that were evident within the Region prior to 1950, with new urban development proposed to occur largely in concentric rings along and outward from the full periphery of the established urban centers of the Region.

The recommended land use plan seeks 1) to centralize land use development to the greatest degree practicable; 2) to encourage new urban development to occur at densities consistent with the provision of public centralized sanitary sewer, water supply, and mass transit facilities and services; 3) to encourage new urban development to occur only in areas covered by soils well suited to urban use and not subject to special hazards such as flooding and erosion; and 4) to encourage new urban development and redevelopment to occur in areas in which essential urban facilities and services are available—particularly the existing urban centers of the Region—or into which such facilities and services can be readily and economically extended. In short, the plan seeks to promote a more orderly and economic settlement pattern; to avoid the intensification of existing and the creation of new areawide developmental and environmental problems; and generally to guide the operation of market forces into conformance with sound areawide land use development activities.

The recommended regional land use plan envisions converting about 113 square miles of land from rural to urban use from 1970 through 2000,

Map 3

ADOPTED REGIONAL LAND USE PLAN FOR SOUTHEASTERN WISCONSIN: 2000



less than half of the approximately 235 square miles that would have to be converted if decentralization of urban development were allowed to continue unrestrained; and seeks to encourage new urban development to occur primarily in planned neighborhood development units at medium-density population levels—that is, about four dwelling units per net residential acre, or about 5,000 persons per gross square mile. The plan envisions that by the year 2000, about 92 percent of all urban land and 93 percent of all the people in the Region will be served with public sanitary sewer service.

The most important elements of the natural resource base of the Region, including the best remaining woodlands; wetlands; wildlife habitat areas; surface waters and associated shorelands and floodlands; areas covered by organic soils; areas containing rough topography and significant geological formations; scenic, historic, and scientific sites; groundwater recharge and discharge areas; existing park sites; and potential park and related open space sites, have been found to occur largely together in linear patterns termed primary environmental corridors by the Commission. Like the year 1990 regional land use plan, the design year 2000 regional land use plan proposes that these environmental corridors be protected and preserved in essentially natural, open uses. Such protection and preservation is considered essential to the protection and wise use of the natural resource base; to the preservation of the Region's cultural heritage and natural beauty; and to the enrichment of the physical, intellectual, and spiritual development of the resident population. In addition, protecting and preserving the natural resource base serves to prevent the creation of new problems such as flooding and water pollution. The topography, soils, and flood hazards existing in these corridors, moreover, make them poorly suited to intensive urban development of any kind, but well suited to recreational and conservancy uses. The intrusion of urban development into these corridors may be expected to result in costly environmental and developmental problems, including flooding; water pollution; failing foundations for buildings, pavements, and other structures; wet basements; excessive operation of sump pumps; and excessive infiltration of clear water into sanitary sewers. Together, the primary environmental corridors encompass about 500 square miles, or about one-fifth of the total area of the Region.

Also like the year 1990 regional land use plan, the design year 2000 regional land use plan proposes to preserve, to the greatest extent practicable, those areas identified as prime agricultural lands. In 1970 these lands totaled about 746 square miles, or 28 percent of the area of the Region. The year 2000 plan proposes that only those prime agricultural lands that have already been, in effect, committed to urban development because of their proximity to expanding concentrations of urban uses and the prior commitment of heavy capital investments in utility extensions be converted to urban uses. Only about 13 square miles, or 2 percent, of the prime agricultural lands would be converted to urban use under the plan.

By the end of 1989, the year 2000 regional land use plan had been adopted by the Kenosha, Racine, Walworth, and Waukesha County Boards of Supervisors; the Common Councils of the Cities of Burlington and Milwaukee; the Village Board of the Village of River Hills; the Town Board of the Town of Norway; and the Kenosha County Park Commission, the City of Oconomowoc Plan Commission, and the Town of Dover Plan Commission. In addition, the plan had been endorsed by the U. S. Department of Housing and Urban Development; the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; the U. S. Department of Agriculture, Soil Conservation Service; the Wisconsin Department of Transportation; and the Wisconsin State Board of Soil and Water Conservation Districts (now the Wisconsin Land Conservation Board).

Preservation of Farmland

As already noted, a major recommendation of the regional land use plan is the preservation of the remaining prime agricultural lands in the Southeastern Wisconsin Region. Planning for the preservation of agricultural lands and implementation of such planning efforts through zoning received major impetus in 1977 with the passage of the Wisconsin Farmland Preservation Program, a program that combines planning and zoning provisions with tax incentives for the purpose of ensuring the preservation of farmland. The program is intended to help county and local units of government preserve farmland through local plans and zoning and to provide tax relief, in the form of state income tax

credits, to farmland owners who participate in the program. The following is a description of the Wisconsin Farmland Preservation Program and the status of farmland preservation planning within the Region.

Wisconsin Farmland Preservation Program

The Wisconsin Farmland Preservation Program provides property tax relief in the form of state income tax credits to eligible owners of farmland who decide to participate. Owners of farmland in "urban" counties, including all counties in southeastern Wisconsin, are eligible to participate in the program if their land has been placed in a state-certified exclusive agricultural zoning district and if certain other program eligibility requirements are met. For example, the farm must be at least 35 acres in size and must have produced a value of farm product of at least $6,000 in the last year or $18,000 in the past three years. In addition, all participants in the farmland preservation program are required to adhere to sound soil conservation practices.

Program changes enacted in 1988 also allow farmers in urban counties to participate on the basis of long-term agreements with the State that limit the use of their land to agricultural use. Farmers in urban counties may apply for such agreements between July 1, 1988, and June 30, 1991. After that period, the requirement of exclusive agricultural zoning for tax credit eligibility in urban counties will be restored. Tax credits through long-term agreements in urban counties will first be available for tax year 1989.

Under the Farmland Preservation Program, the level of income tax credit for which a farmland owner is eligible is determined in part by a formula which takes into account the owner's household income and the property tax on his farm. In general, the higher the property tax and the lower the household income, the higher the income tax credit. The level of tax relief for which a farmland owner is eligible is also dependent upon planning and zoning actions taken by county and local units of government to preserve agricultural lands. The highest tax credits are available where a county has prepared and adopted a farmland preservation plan and implemented that plan through the application of exclusive agricultural zoning.

A farmland owner who claims a farmland preservation tax credit on the basis of exclusive agricultural zoning must include in his state income tax return a certificate from the local zoning administrator verifying that the land in question is located within an exclusive agricultural zoning district. A total of 1,333 zoning certificates for farm parcels encompassing 181,992 acres were issued in the Region for tax year 1988 (see Table 8, Figure 39, and Map 4). Among the seven counties in the Region, Walworth County had the highest level of participation in the Farmland Preservation Program. A total of 775 zoning certificates for farm parcels encompassing 108,628 acres were issued in Walworth County for tax year 1988.

In tax year 1988, the average tax credit for participating landowners in southeastern Wisconsin was $1,297, or 35 percent of the average property tax of $3,760. Among the seven counties in the Region, the average tax credit level ranged from $704 in Milwaukee County to $1,789 in Kenosha County (see Table 9).

Farmland Preservation Planning

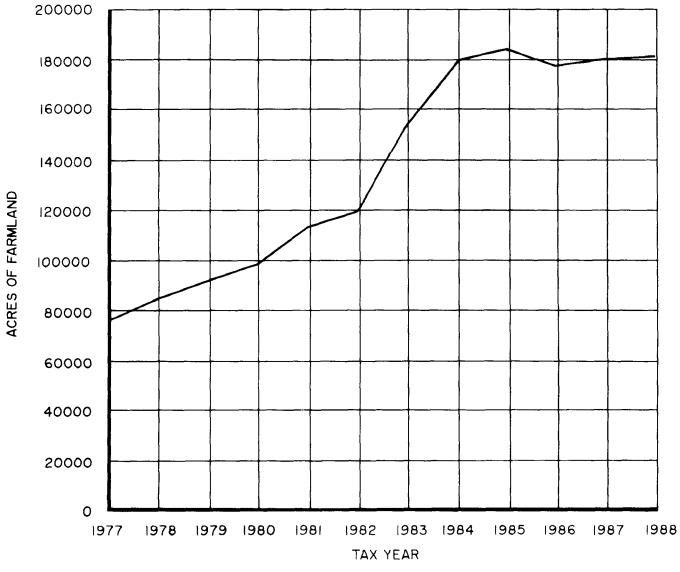
Considerable progress has been made in planning for the preservation of farmland within the Southeastern Wisconsin Region since the passage of the Wisconsin Farmland Preservation Act by the State Legislature in 1977. Six counties in the Region—Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha—have adopted farmland preservation plans which were subsequently certified by the Wisconsin Land Conservation Board (see Map 5).

Farmland Preservation Zoning

Under Chapter 91 of the Wisconsin Statutes, exclusive agricultural zoning is defined as zoning which limits the use of land to agricultural use; specifies a minimum parcel size of 35 acres for a residence or farm operation; and prohibits structures or improvements on the land unless consistent with agricultural uses. By the end of 1989, exclusive agricultural zoning ordinances certified by the Wisconsin Land Conservation Board were in effect in 41 local units of government in the Region. Twenty-four towns—3 in Kenosha County, 2 in Racine County, 16 in Walworth County, and 3 in Waukesha County—have adopted exclusive agricultural zoning under county-enacted zoning ordinances. Thirteen towns—6 in Ozaukee County, 5 in Washington County, and 2 in Waukesha County—have applied exclusive agricultural zoning under town-enacted zoning ordinances. The City of Franklin in Milwaukee County, the City of

Figure 39

PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM FOR THE REGION: TAX YEARS 1977-1988



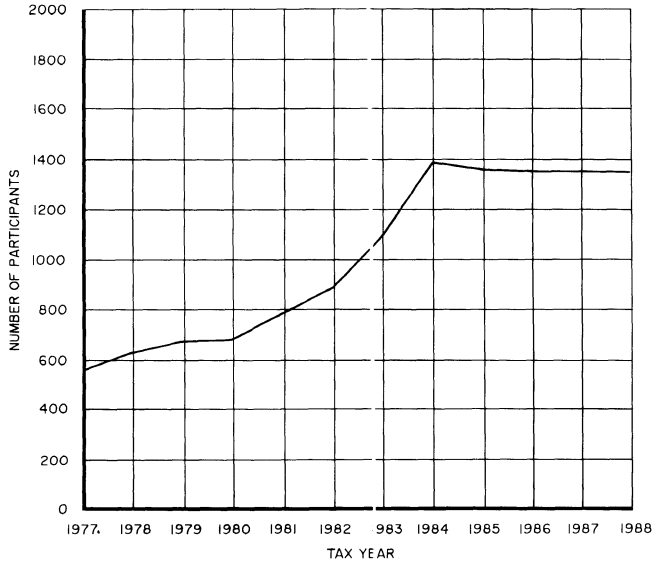


Table 8

PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM: TAX YEAR 1988

County	Certificates Issued		Acres Certified	
	Number	Percent of Region	Number	Percent of Region
Kenosha	38	2.8	5,699	3.1
Milwaukee . . .	4	0.3	263	0.1
Ozaukee	244	18.3	30,120	16.6
Racine	24	1.8	4,834	2.7
Walworth . . .	775	58.1	108,628	59.7
Washington . .	126	9.5	16,068	8.8
Waukesha . . .	122	9.2	16,380	9.0
Region	1,333	100.0	181,992	100.0

Table 9

AVERAGE TAX CREDIT LEVELS UNDER THE WISCONSIN FARMLAND PRESERVATION PROGRAM: TAX YEAR 1988

County	Average Property Tax	Average Tax Credit	
		Amount	Percent of Property Tax
Kenosha	$4,273	$1,789	41.9
Milwaukee	2,055	704	34.3
Ozaukee	3,854	1,161	30.1
Racine	3,909	1,184	30.3
Walworth	3,691	1,349	36.5
Washington . . .	3,892	1,244	32.0
Waukesha	3,957	1,373	34.7
Region	$3,760	$1,297	34.5

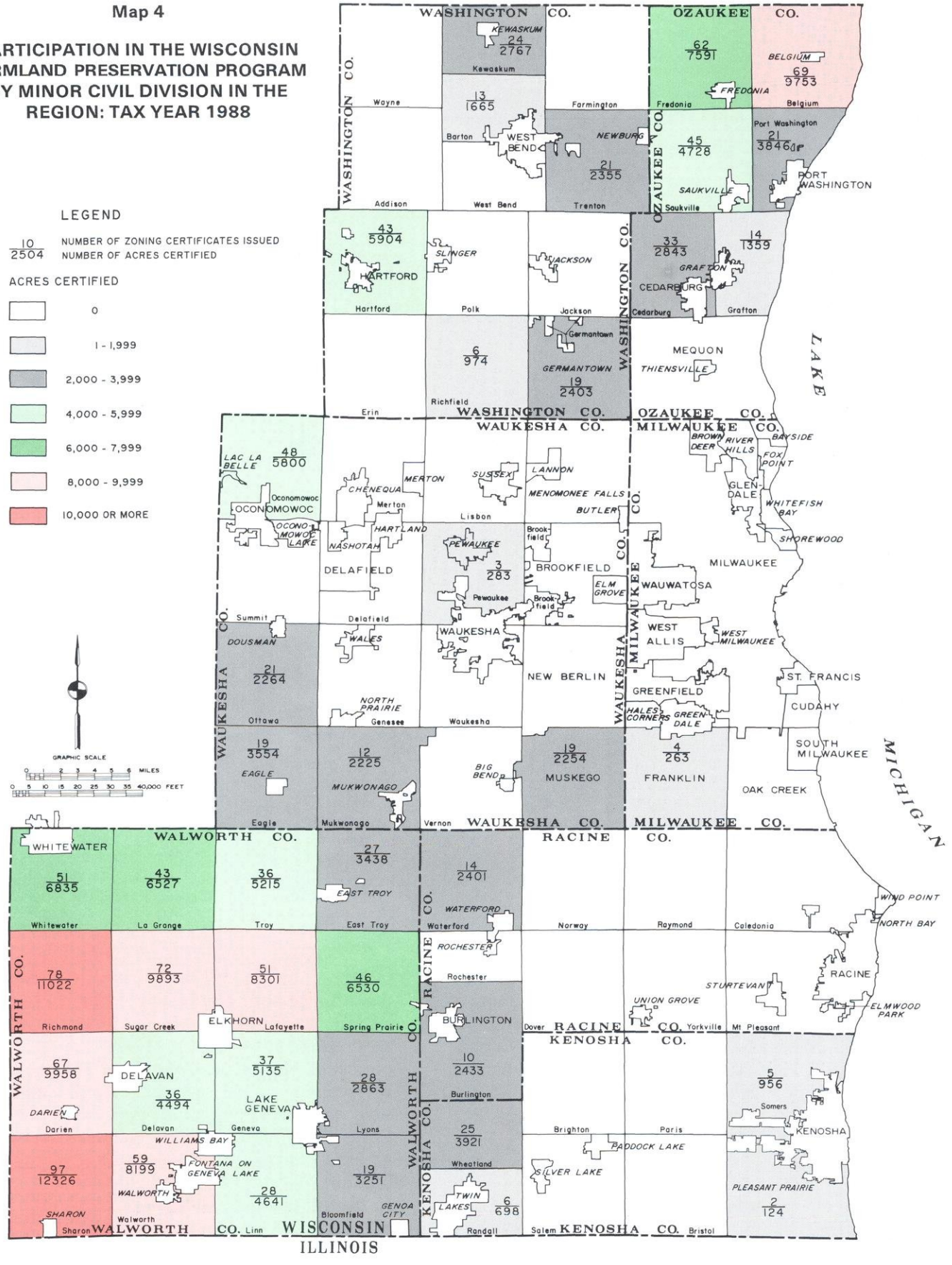
Muskego in Waukesha County, the Village of Germantown in Washington County, and the Village of Pleasant Prairie in Kenosha County have also adopted exclusive agricultural zoning in conformance with the standards of the Farmland Preservation Act (see Map 5).

Soil Erosion Control Planning

Cropland soil erosion is a matter of increasing concern, especially in light of shifts away from dairy farming and traditional crop rotation patterns to continuous row cropping operations, which result in increased soil erosion unless special precautions are taken. Recognizing this concern, the Wisconsin Legislature in 1982 revised the state soil and water conservation law, as set forth in Chapter 92 of the Wisconsin Statutes, to require the preparation of county soil erosion control plans focusing on cropland soil erosion. A total of 55 counties located generally in the southern two-thirds of the State, including all counties in southeastern Wisconsin, are required to prepare such a plan.

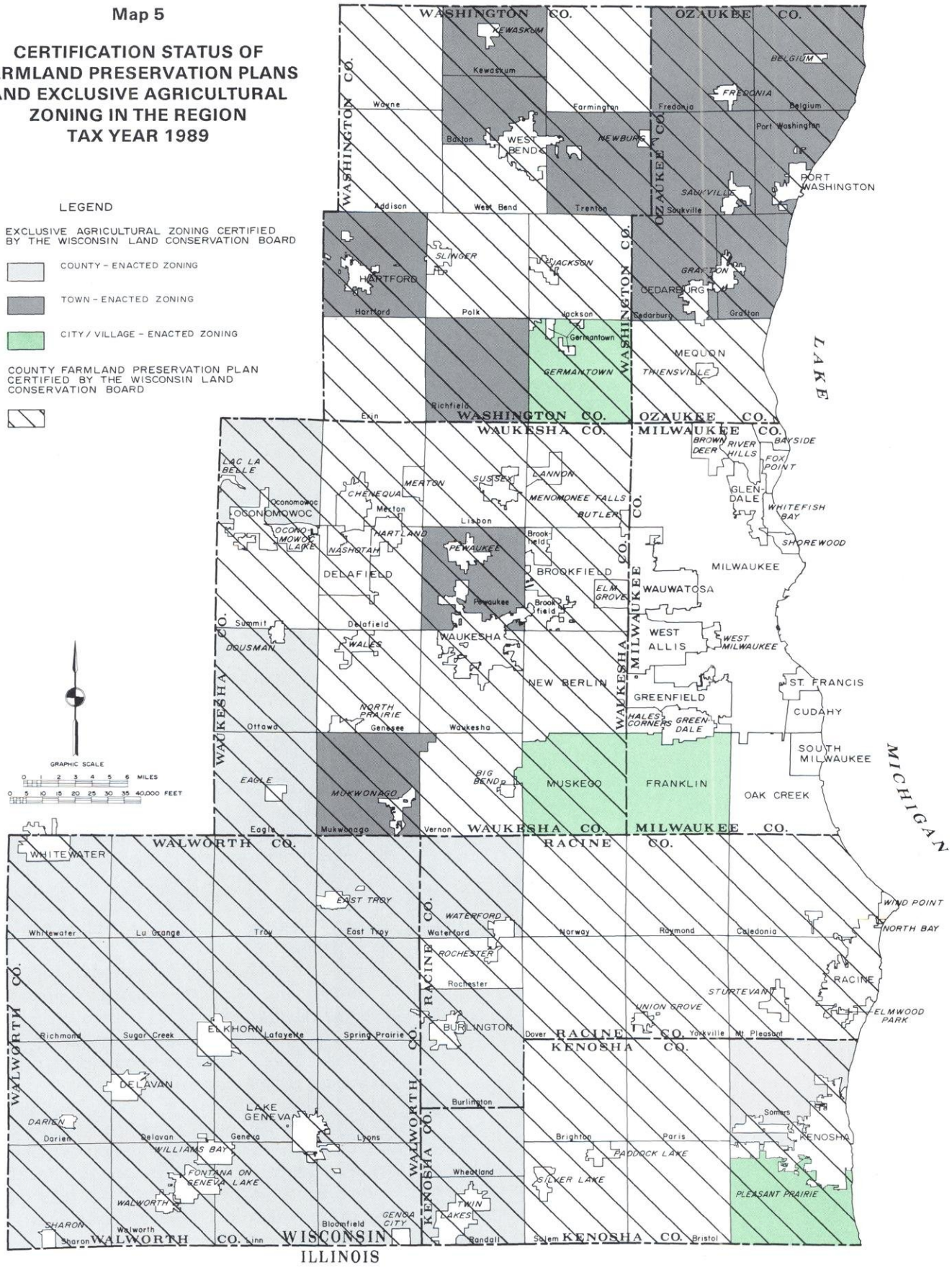
Map 4

PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM BY MINOR CIVIL DIVISION IN THE REGION: TAX YEAR 1988



Map 5

CERTIFICATION STATUS OF FARMLAND PRESERVATION PLANS AND EXCLUSIVE AGRICULTURAL ZONING IN THE REGION TAX YEAR 1989



During 1989, the Commission continued to assist counties in the Region in the preparation of the required agricultural soil erosion control plans. The Commission published SEWRPC Community Assistance Planning Report No. 164, Kenosha County Agricultural Soil Erosion Control Plan; SEWRPC Community Assistance Planning Report No. 170, Washington County Agricultural Soil Erosion Control Plan; and SEWRPC Community Assistance Planning Report No. 171, Ozaukee County Agricultural Soil Erosion Control Plan. Each of the county soil erosion control plan reports identifies the agricultural soil erosion control problems existing in the county; recommends a soil erosion control objective and related standards; identifies the types and amounts of soil erosion control practices needed to reduce agricultural soil erosion to tolerable levels within the county; and identifies the actions that should be taken by the various units and agencies of government concerned to carry out the plan. Similar soil erosion control plans were prepared by the Commission for Waukesha County in 1987 and for Racine County in 1988.

Residential Subdivision Platting Activity

The Commission annually monitors land subdivision activities in the Region. A total of 2,740 residential lots were created in the Region during 1989 through subdivision plats, compared with 2,794 lots platted in 1988. Of the total residential lots created in 1989, 2,487 lots, or about 91 percent, were served by public sanitary sewers, and the remaining 253 lots, or 9 percent, were designed to be served by onsite septic tank sewage disposal systems (see Table 10 and Map 6). With respect to the seven counties in southeastern Wisconsin, the number of residential lots created through subdivision plats in 1989 ranged from a low of 43 lots in Walworth County to a high of 1,141 lots in Waukesha County. The historic trend in residential platting activity since 1960 is shown for the Region and by county in Figures 40 through 47.

Chiwaukee Prairie-Carol Beach Land Use Plan Implementation

One of the most complex and difficult planning programs undertaken by the Regional Planning Commission in recent years involved the preparation of a land use plan for the Chiwaukee Prairie-Carol Beach area of the Town of Pleasant Prairie, Kenosha County. A description of the plan was set forth in the Commission 1985 Annual Report. This planning program, which was undertaken by the Commission at the request of Kenosha County and the Town of Pleasant Prairie, attempted to achieve a sound balance between competing resource protection and urban development objectives for the Chiwaukee Prairie-Carol Beach area. It sought to do so by identifying in detail those lands—both wetlands and uplands—that should be protected and preserved in the public interest for their resource value despite prior subdivision platting activity, and those lands upon which urban growth should continue to be accommodated as sanitary sewers are introduced into the area. Importantly, the planning process sought a way to fairly compensate owners, in particular those owners of platted lots, whose land would have to be zoned against development to protect the natural resource base. The development of the plan was particularly complex and difficult because most of the wetlands in the Chiwaukee Prairie-Carol Beach area had in prior years been publicly sanctioned for development through approvals of subdivision plats at the state and local levels of government.

The key element of the plan for the Chiwaukee Prairie-Carol Beach area is the acquisition by the Wisconsin Department of Natural Resources (DNR) of certain lands recommended for open space preservation. Under the plan, the DNR was to acquire about 347 acres of land for resource protection purposes. This acquisition is made up of 686 individual platted lots and seven larger tracts. In 1989, the Department continued to secure appraisals on the lands in question and to negotiate on a voluntary basis with individual landowners for the purchase of the many properties involved. By the end of 1989, the DNR either had fully acquired or had accepted offers to purchase a total of 155 acres, representing 45 percent of the total proposed in the plan to be acquired. The acquired land is made up of 413 individual platted lots and three larger tracts of land. The area proposed in the plan to be acquired and the lands acquired to date within that area are shown on Map 7.

In addition to open space acquisition by the Department of Natural Resources, The Nature Conservancy, a private nonprofit organization, continues to negotiate on a voluntary basis with the landowners in its project area south of 116th Street, in accordance with the recommendations of the Chiwaukee Prairie-Carol Beach plan. The

Table 10

RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1989

County	Sewered Lots		Unsewered Lots		Total Lots	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha	342	100.0	0	--	342	12.5
Milwaukee	244	100.0	0	--	244	8.9
Ozaukee	223	100.0	0	--	223	8.1
Racine	244	90.4	26	9.6	270	9.9
Walworth	41	95.3	2	4.7	43	1.6
Washington	466	97.7	11	2.3	477	17.4
Waukesha	927	81.2	214	18.8	1,141	41.6
Region	2,487	90.8	253	9.2	2,740	100.0

Map 6

RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1989

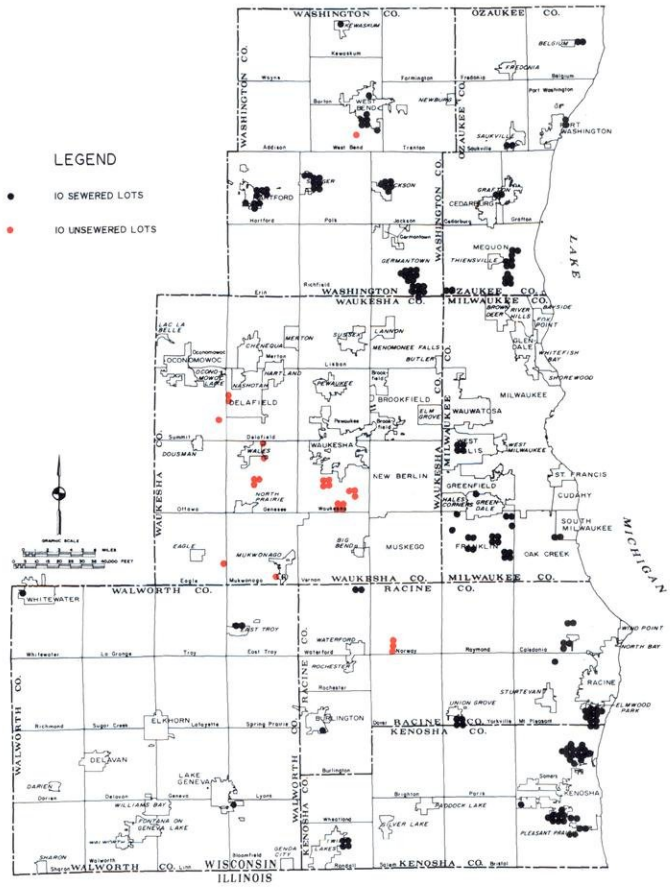


Figure 40

RESIDENTIAL LOTS PLATTED IN THE REGION: 1960-1989

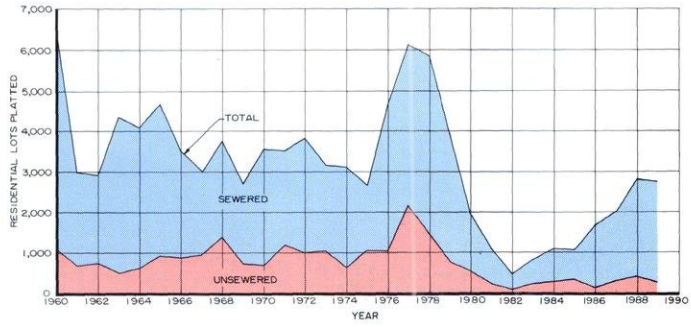


Figure 41

RESIDENTIAL LOTS PLATTED IN KENOSHA COUNTY: 1960-1989

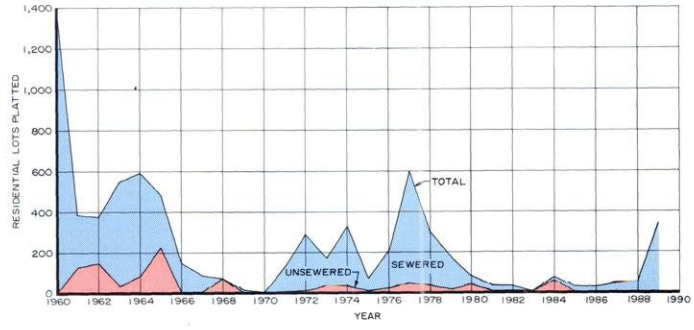


Figure 42

RESIDENTIAL LOTS PLATTED IN MILWAUKEE COUNTY: 1960-1989

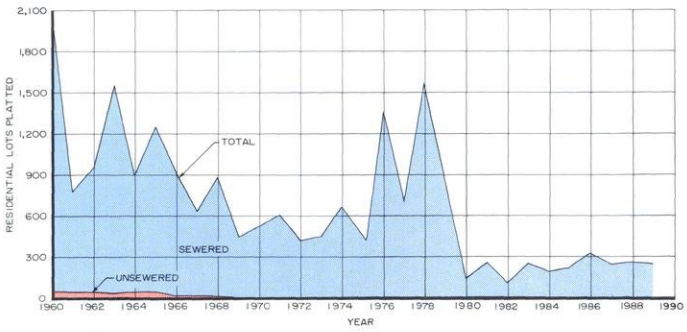


Figure 43

RESIDENTIAL LOTS PLATTED IN OZAUKEE COUNTY: 1960-1989

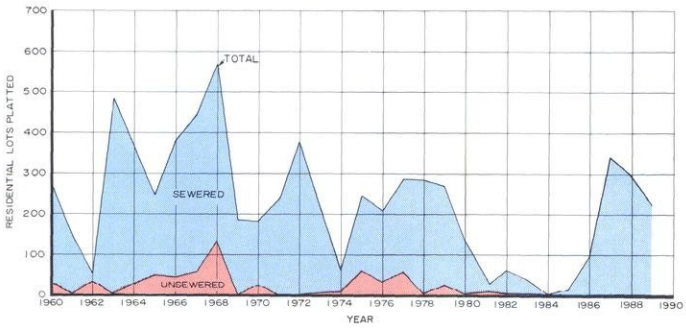


Figure 44

RESIDENTIAL LOTS PLATTED IN RACINE COUNTY: 1960-1989

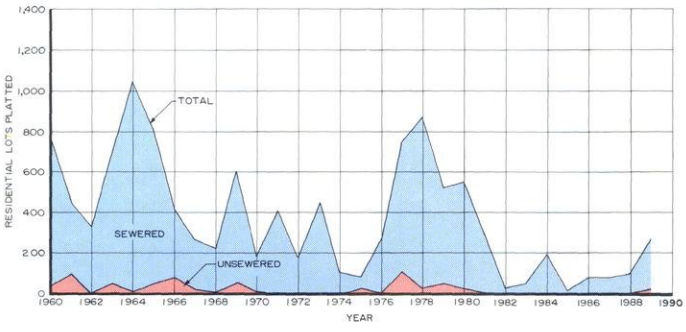


Figure 45

RESIDENTIAL LOTS PLATTED IN WALWORTH COUNTY: 1960-1989

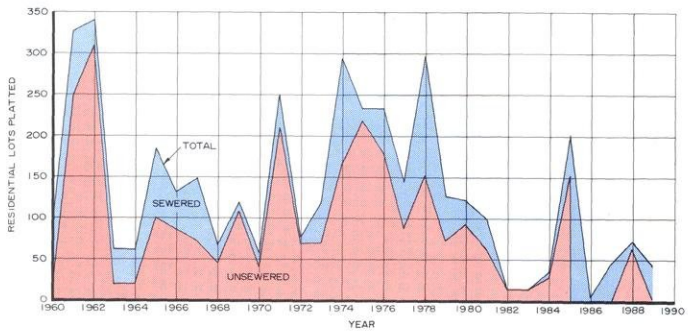


Figure 46

RESIDENTIAL LOTS PLATTED IN WASHINGTON COUNTY: 1960-1989

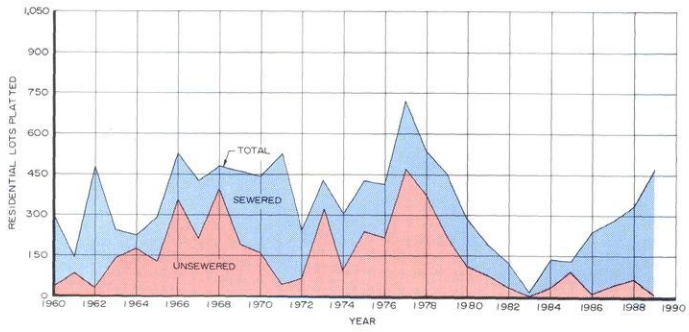
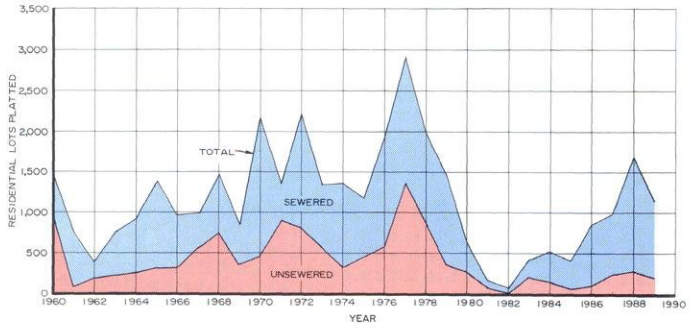


Figure 47

RESIDENTIAL LOTS PLATTED IN WAUKESHA COUNTY: 1960-1989



Nature Conservancy has enlarged its project area to include nearly the total preservation area recommended in the plan (see Map 7).

PARK AND OPEN SPACE PLANNING

The Commission adopted a regional park and open space plan for southeastern Wisconsin on December 1, 1977. The plan consists of two basic elements: an open space preservation element and an outdoor recreation element. The open space preservation element consists of recommendations for the preservation of primary environmental corridors and prime agricultural land. The outdoor recreation element consists of: 1) a resource-oriented outdoor recreation plan, which provides 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, which provides recommendations for the number and distribution of local parks and outdoor recreational facilities required in urban areas of the Region. The plan is documented in SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000, and is graphically summarized on Map 8.

The regional park and open space plan was certified to various governmental units and agencies for adoption and implementation early in 1978. Five of the seven constituent counties in southeastern Wisconsin—Kenosha, Milwaukee, Racine, Washington, and Waukesha Counties—adopted the regional plan as their county plan in 1978. In addition, the Commission prepared a refinement of the regional plan as it relates specifically to Ozaukee County. That plan was adopted by Ozaukee County in 1978. Thus, all the counties in southeastern Wisconsin except Walworth County have adopted the regional park and open space plan or a refinement of that plan. In addition, the plan was endorsed by the Wisconsin Natural Resources Board in January 1979.

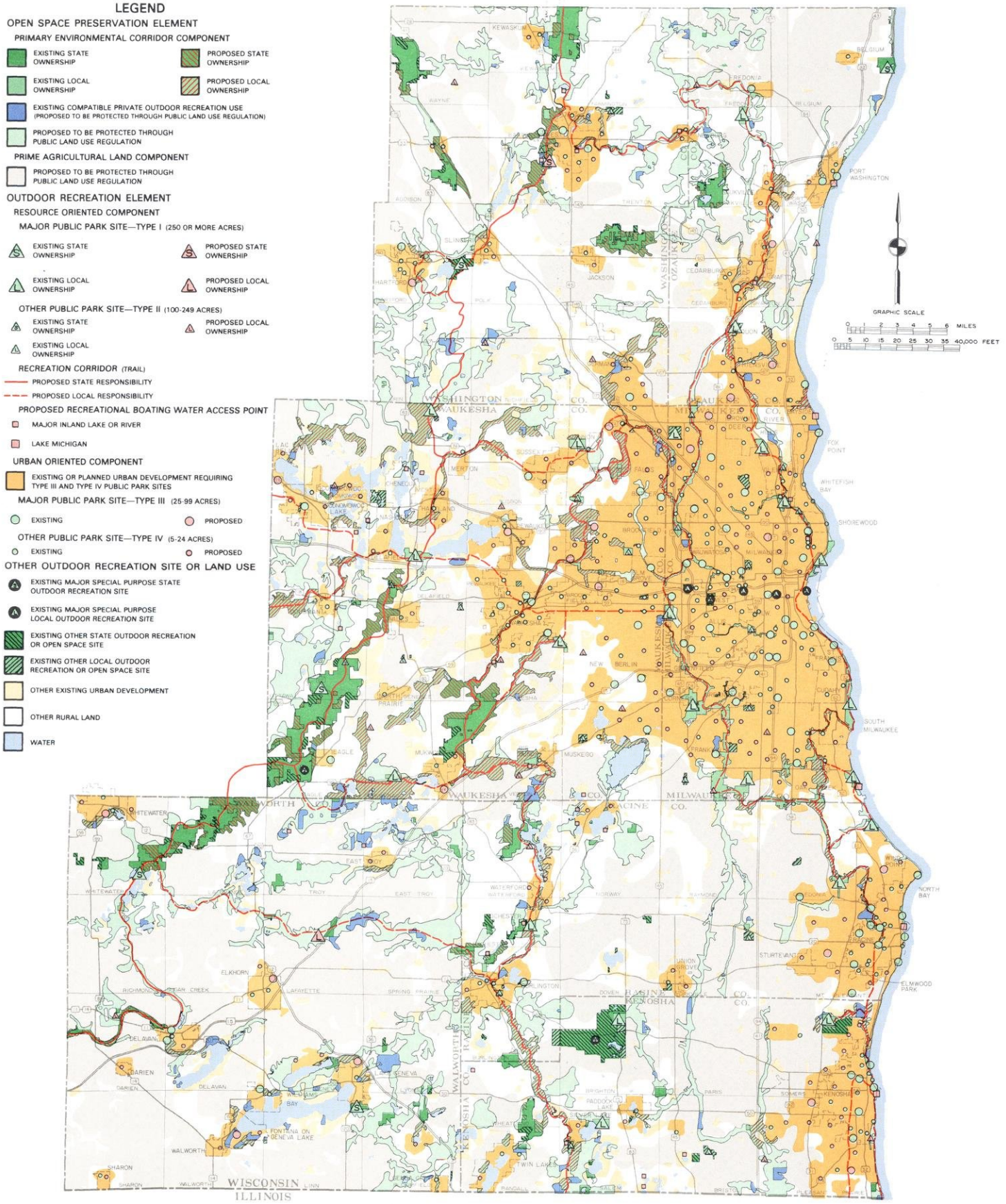
During 1989, Division efforts on park and open space planning were directed primarily toward the implementation of the regional park and open space plan. Implementation activities consisted of preparing detailed local park and open space plans consistent with the guidelines provided by the regional plan. These local plans are documented in SEWRPC community assistance planning reports and contain a set of park and open space preservation, acquisition, and development objectives and supporting standards relative to the needs of the citizens of the

Map 7

STATUS OF LAND ACQUISITION IN THE CHIWAUKEE PRAIRIE-CAROL BEACH AREA

Map 8

REGIONAL PARK AND OPEN SPACE PLAN: 2000



local community; present pertinent information on the supply of and need for park and open space sites in the community; and identify the actions required to meet park and open space needs. In addition, at the request of Milwaukee County the Commission undertook an inventory of vacant and underutilized lands and buildings in the riverine areas of the Milwaukee, Kinnickinnic, and Menomonee Rivers in central Milwaukee County and evaluated their suitability for park and open space use.

Specifically, during 1989 the Commission published SEWRPC Community Assistance Planning Report No. 178, A Park and Open Space Plan for the Village of Grafton, Ozaukee County, Wisconsin, and No. 179, A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin. Adoption of such plans by the local communities and approval of the plans by the Wisconsin Department of Natural Resources make the the local units of government eligible to apply for up to 50 percent state and federal assistance for the acquisition and development of the outdoor recreation and open space sites and related facilities proposed in the plans.

The Commission also continued work on the refinement of the regional park and open space plan as that plan relates to the county and state levels and agencies of government. A preliminary draft of each individual county park and open space plan was completed in 1986 and transmitted to the respective county park agencies and the Wisconsin Department of Natural Resources for review. The county plans are being documented in a series of seven community assistance planning reports. During 1989, the Commission published two of these county reports, SEWRPC Community Assistance Planning Report No. 136, A Park and Open Space Plan for Washington County, and No. 137, A Park and Open Space Plan for Waukesha County. In addition, the Racine County plan—documented in SEWRPC Community Assistance Planning Report No. 134, A Park and Open Space Plan for Racine County, and published in 1988—was adopted by the Racine County Board of Supervisors on February 14, 1989, and by the Regional Planning Commission on March 6, 1989. The Kenosha County plan was also published and adopted in 1988, and the Ozaukee County plan was published and adopted in 1987. The remaining two county reports are scheduled for completion in 1990. Adoption of each county plan by the county board of supervisors and approval by the Wisconsin Department of Natural Resources make each county eligible to apply for state and federal assistance for the acquisition of sites and development of facilities recommended in the plan.

Also in 1989, Milwaukee County—recognizing the changing land use pattern in riverine areas in the County and the potential benefits of acquiring and reusing vacant and underutilized lands and buildings in these areas—requested that the Commission undertake an inventory of the vacant and underutilized lands and buildings in the riverine areas of the Milwaukee, Kinnickinnic, and Menomonee Rivers in central Milwaukee County. The results of the requested inventory are documented in SEWRPC Memorandum Report No. 40, An Inventory of Vacant or Underutilized Lands in the Riverine Areas of Central Milwaukee County. The report identified such vacant or underutilized lands and buildings in the riverine areas; estimated the value of these lands and buildings; evaluated their suitability for park and open space use; and recommended priorities for public acquisition.

Natural Areas Planning Program Prospectus

In response to a request by Milwaukee County, the Commission in 1989 completed a prospectus for a planning program intended to identify all remaining high-quality natural areas and critical species habitats in the seven-county Region. The prospectus was prepared under the guidance of a 13-member Technical Advisory Committee created by the Commission for this purpose. The Committee included individuals knowledgeable about the subject matter from the public and private sectors and from the academic community. While the original request was directed toward identifying and protecting the remaining outstanding natural areas located in the Milwaukee County park system, the Technical Advisory Committee recommended that the geographic scope of the work be expanded to include the entire seven-county Southeastern Wisconsin Region.

In making its recommendations to the Commission and the seven constituent counties, the Committee recognized that the conduct of a natural areas protection and management program not only would provide the information needed to protect the best remaining natural

areas and critical species habitat in the Region, but would also provide information that would facilitate the sound economic development of the Region. With the information to be provided by the proposed program, economic development efforts could more readily take into account sensitive environmental concerns in a timely manner, and avoid costly delays and conflicts of opposing interests that could otherwise be encountered in the location and placement of new structures and supporting public and private streets and utilities. Such delays can occur, for example, when it is found that a site that is proposed for new urban development, or an alignment for a new road or utility line, contains a significant natural area or critical species habitat.

In making its recommendation, the Committee indicated that without the proposed program, significant native plant and animal communities, rare species and their habitats, and areas of archaeological and geological significance will continue to be adversely impacted—and possibly lost entirely—owing to unknowingly insensitive development. The Committee found that effective long-term management planning must be undertaken to ensure the maintenance of the integrity of natural areas and the survival of the species dependent on them. The Committee concluded that the long-term planning and management program would contribute significantly to the maintenance and restoration of the natural beauty of the Region, to the quality of life within the Region, and to the maintenance of biotic diversity within the Region.

Using techniques to be specified and agreed upon, the proposed study would identify, map, and evaluate the remaining natural areas and threatened and endangered species and their critical habitats throughout the entire seven-county Region. The proposed work would also include the preparation of a management plan to ensure the protection and maintenance of the remaining areas and habitats. The prospectus proposes that the study be undertaken over a three-year period under a cooperative effort involving the Commission, the Wisconsin Department of Natural Resources, and the seven constituent counties. The total cost of conducting the program for the entire Region is estimated at $172,300. The prospectus proposes that one-half of this amount be provided by the Wisconsin Department of Natural Resources, with the remaining one-half being provided by the seven counties in the Region based upon equalized valuation.

At year's end, the prospectus had been transmitted to the seven counties in the Region for consideration and funding approval.

DATA PROVISION AND TECHNICAL ASSISTANCE

Economic and Demographic Data

Considerable Division time is directed each year to answering requests for demographic, economic, and related data. This function 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 1989, the Division prepared letter responses to 133 requests for population, economic, and related information from the Commission data files. In addition, 95 requests were handled by telephone and 77 requests were accommodated through personal visits to the Commission offices. 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 1989 in performing this function:

- Provision of building permit data to the State Demographer for use in monitoring growth trends.
- Provision of demographic, employment, and building permit data for use by the consultant preparing a new airport master plan for Milwaukee County General Mitchell International Airport.
- Provision of election ward boundary data to Walworth County for submittal to the U. S. Bureau of the Census for use in the conduct of the 1990 Federal Census of Population and Housing.
- Provision of 1980 census block maps and data to nine communities in the Region for use in local review of the 1990 Federal Census of Population and Housing.
- Provision of a computer-generated listing of platted subdivisions in the Region to the

University of Wisconsin-Extension for use in a private well location study.

- Provision of 1985 population estimates for selected subareas of Milwaukee County to the Milwaukee County Department of Emergency Government for use in disaster preparedness studies.

- Provision of population, income, and housing data for the City of South Milwaukee to the City Attorney for use in establishing a local housing rehabilitation program.

- Provision of forecast population data to the consultant preparing a sewage treatment plant facility plan for the City of Waukesha.

Land Use and Park and Open Space Data

The land use and park and open space files are used extensively by state, county, and local governmental units and agencies and by private interests. Examples of the provision of land use and park and open space data during 1989 include the following:

- Provision of natural resource and land use data to the City of Kenosha for use in the preparation of a land use plan for the STH 50 corridor in the City.

- Provision of technical assistance to the City of Mequon in the evaluation of the suitability of a parcel of land for acquisition and use as a community park.

- Provision of forecast population, household, and land use data to the Delavan-Darien School District for use in the preparation of enrollment estimates and school facility planning.

- Provision of technical assistance to the Washington County Park and Planning Commission in the evaluation of the suitability of two parcels of land in the County for acquisition and use as a golf course.

- Provision of natural resource data to the Ashippun Lake Protection and Rehabilitation District for use in the evaluation of a residential subdivision development proposal within the Ashippun Lake drainage area.

Special Environmental Inventories, Assessments, and Evaluations

A growing demand is being placed upon the Commission to help federal, state, and local units and agencies of government by evaluating and assessing the environmental significance and quality of specific 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 1989, the Commission fulfilled a total of 133 requests for such information. This work effort may be divided into the following categories:

- Requests for the field identification and staking of wetland and/or primary environmental corridor boundaries in order to facilitate sound consideration by local governments of proposals for private development. A total of 111 such requests were fulfilled during the year at sites in the Villages of Pleasant Prairie and Twin Lakes and the Towns of Bristol, Paris, Randall, Salem, and Wheatland in Kenosha County; in the Cities of Franklin, Milwaukee, and Oak Creek and the Village of Greendale in Milwaukee County; in the Cities of Cedarburg and Mequon and the Village of Saukville in Ozaukee County; in the City of Racine, the Village of Wind Point, and the Towns of Burlington, Caledonia, Dover, Mt. Pleasant, Norway, Raymond, Waterford, and Yorkville in Racine County; in the Cities of Lake Geneva and Whitewater and the Towns of Geneva and La Grange in Walworth County; in the Cities of Hartford and West Bend, the Village of Germantown, and the Town of Richfield in Washington County; and in the Cities of Brookfield, Muskego, New Berlin, and Waukesha, the Villages of Butler, Hartland, Lac La Belle, and Menomonee Falls, and the Towns of Delafield, Merton, Ottawa, Vernon, and Waukesha in Waukesha County. Each of these 111 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 staked in the field by the Commission staff, the precise boundaries of

environmentally significant areas are surveyed by private land surveyors retained by the landowner and/or developer and the results of the survey placed on the face of subdivision plats, certified survey maps, and plats of survey.

- Requests for the field identification and evaluation of environmentally sensitive sites associated with transportation improvement projects. A total of nine such requests were fulfilled during the year, with the requests coming from the Wisconsin Department of Transportation, county highway departments, and local departments of public works. These nine requests were related to a proposed bridge replacement project over the Root River in the City of Oak Creek; a proposed frontage road with bridge over the Little Menomonee River in the City of Milwaukee; the reconstruction and widening of STH 67 in the City of Mequon and Village of Germantown; the reconstruction of STH 60 in the Village of Grafton and Town of Jackson; the location of a potential alignment for the ultimate relocation of STH 83 in the City of Hartford; the realignment and widening of STH 83 in the City of Delafield and Village of Hartland; the selection of an alignment for the STH 67 bypass in the Town of Oconomowoc; the selection of an alignment for the proposed extension of the Waukesha circumferential highway in the Town of Waukesha; and the reconstruction of STH 60 in the Town of Hartford.

- Requests for the field evaluation of sites to survey and identify the flora and fauna on the site, including a determination as to whether or not any rare or endangered species are on the site. A total of 10 such requests were fulfilled during the year at the request of state agencies and county and local units of government. These consisted of a biological survey on a woodlot in the Village of Pleasant Prairie in connection with a proposed rezoning of the site; a biological survey of an alignment for a proposed trunk sanitary sewer in the Village of Pleasant Prairie; a biological survey of a woodlot in the City of Mequon in connection with a proposed residential development project; biological surveys of areas in Harrington Beach State Park in connection with the preparation of an updated master plan for that park by the Wisconsin Department of Natural Resources; a biological survey of a proposed condominium development site in the Town of Caledonia in connection with a proposed sewer extension to that site; a biological survey of a site proposed for a new school in the Town of Waterford; a biological survey of a site in the Town of Richfield in connection with a potential preservation effort by the Kettle Moraine Audubon Society; a biological survey of a potential park site in the City of Brookfield; a biological survey of portions of the Mitchell Park site in the City of Brookfield to help identify appropriate alignments for access roads; and a biological survey of a proposed residential development site in the Town of Delafield adjacent to Nagawaukee County Park.

- Special projects that frequently involve the preparation of recommendations for land vegetation enhancement, as well as mitigation efforts associated with unavoidable destructive activities. A total of three such requests were fulfilled during the year. These consisted a field survey and historic study of wetland changes in a portion of the Village of Germantown; an evaluation of potential sites for sediment deposition pond construction on tributaries to Denoon Lake in the City of Muskego; and the provision of biological information to the U. S. General Services Administration in connection with an office site selection study in eastern Waukesha County.

In addition to the foregoing, the Commission works closely with Milwaukee County in carrying out an environmental assessment process attendant to proposals from the private sector for the acquisition of lands acquired in past years by Milwaukee County for park and parkway purposes. The environmental assessment procedure is intended to ensure that the County Board and County Executive have all available resource information before any parcels are declared excess and sold for private development. In carrying out this assessment, the Commission staff not only conducts biological field surveys of the land parcel concerned, but also compiles information attendant to the subject parcel from the Commission data bank.

In addition, the Commission is responsible under the process for soliciting the comments of other parties concerned, including the Milwaukee Public Museum, the State Historical Society of Wisconsin, and the Bureau of Endangered Resources in the Wisconsin Department of Natural Resources. During 1989, three such environmental assessments and reviews were conducted by the Commission at the request of Milwaukee County—one attendant to about 1.2 acres of land in the Dale Creek Parkway in the Village of Greendale, one attendant to an approximately 65-acre parcel in the City of Oak Creek, and a third attendant to an approximately five-acre parcel in the Menomonee River Parkway in the City of Milwaukee.

TRANSPORTATION PLANNING DIVISION

DIVISION FUNCTIONS

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

- 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 travel in the future will likely 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 1989 conducted a number of activities in eight identifiable areas: data collection, collation, and development; long-range planning; transportation systems management planning and traffic engineering; transportation improvement programming; elderly and handicapped transportation planning; rail transportation planning; air transportation planning; and data provision and technical assistance.

As the official metropolitan planning organization for transportation planning in the Southeastern Wisconsin Region, the Commission not only conducts transportation planning work programs with its own staff and with consultants, but also oversees related subregional transportation planning by other governmental agencies. In 1989 Milwaukee County undertook such planning work related to transit operations. The Commission is ultimately responsible for all transportation-related planning work funded by federal agencies. Accordingly, all transportation planning activities bearing upon the Commission's overall work program are reported herein irrespective of whether they are directly conducted by the Commission.

DATA COLLECTION, COLLATION, AND DEVELOPMENT

During 1989, the Division continued to monitor secondary data sources for changes in automobile and truck availability; mass transit ridership; carpool parking facility capacity and use; and traffic volumes.

Figure 48

TRANSPORTATION PLANNING DIVISION

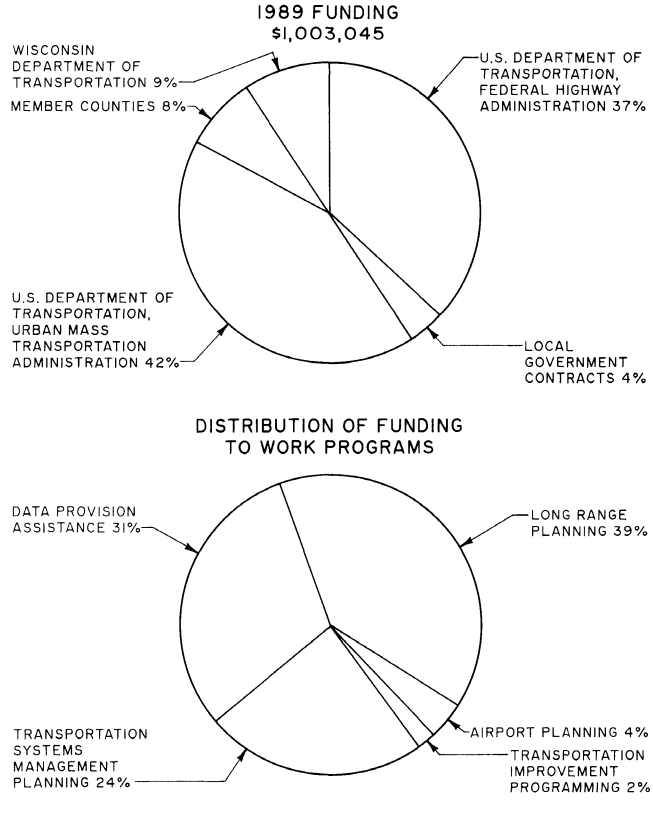


Table 11

AUTOMOBILE AVAILABILITY

County	1963	1972	1988	1989
Kenosha	35,160	48,010	63,270	65,180
Milwaukee	304,120	397,690	440,190	448,920
Ozaukee	14,320	24,430	39,480	40,840
Racine	47,580	68,270	87,590	89,710
Walworth	19,440	27,430	40,200	41,600
Washington	16,240	27,030	46,830	49,060
Waukesha	61,900	102,910	166,790	173,790
Total	498,760	695,770	884,350	909,100

Automobile and Truck Availability

The number of automobiles available to residents of the Region in 1989 totaled 909,100. This represents an increase of 24,750, or about 2.8 percent, over the 1988 level of 884,350 (see Table 11). Increases in automobile availability in 1989 were experienced within each County in the Region, continuing the generally steady, long-term trend of continued increases in the number of automobiles available to residents of the Region over the past 29 years. The average annual rate of growth in automobile availability within the Region from 1963 through 1989 was 2.1 percent.

The number of persons per automobile within the Region was estimated to be 1.94 in 1989, slightly lower than the estimated 1.98 in 1988, as shown in Figure 49. The estimated number of automobiles available within the Region in 1989 may be compared to the forecast range of automobile availability as developed under the long-range regional transportation system plan, as shown in Figure 50, which depicts the historical and forecast growth in automobile availability. The 1989 forecast automobile availability ranged from 886,000 under the adopted regional transportation system plan to 943,000 under the "no build" alternative. Thus, the 1989 regional automobile availability of 909,100 was about 3.6 percent lower than the "no build" forecast, and about 2.6 percent higher than the automobile availability envisioned under the adopted regional transportation system plan.

The number of motor trucks available in the Region during the year totaled about 170,130, an increase of about 5,520, or 3.3 percent, over the 1988 level of 164,610 trucks (see Table 12 and Figure 51). The increase in 1989 motor truck availability follows the trend of annually increasing vehicle availability in spite of declines observed in 1961, 1962, and 1985. Light trucks accounted for about 57 percent of all trucks in 1960, 60 percent of all trucks in 1970, 74 percent of all trucks in 1980, and 77 percent of all trucks in 1989. The number of light trucks available in 1989 totaled about 131,080, an increase of 7,450, or about 6.0 percent, over the number of light trucks available in 1988. The number of heavy trucks and municipal trucks totaled 39,050 in 1989, a decrease of about 1,930 trucks, or about 4.7 percent, from the 1988 level of 40,980. The average annual rate of growth in motor truck availability within the Region from 1963 to 1989 was 4.4 percent.

Figure 49

PERSONS PER AUTOMOBILE

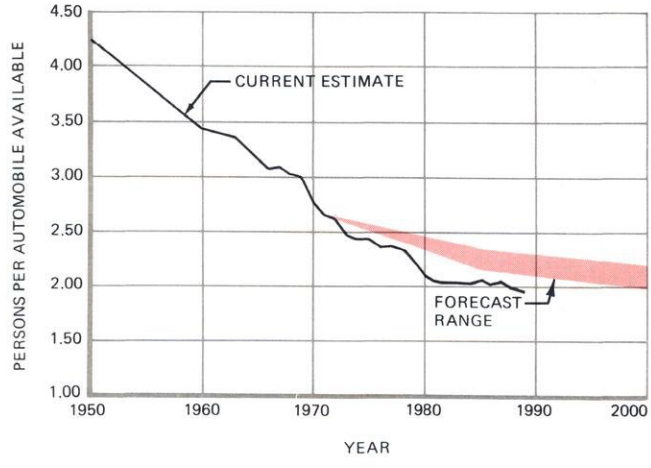


Table 12

TRUCK AVAILABILITY

County	1963	1972	1988	1989
Kenosha	4,860	7,040	15,600	15,980
Milwaukee	25,870	33,350	59,640	60,460
Ozaukee	2,290	3,290	7,500	7,660
Racine	6,200	9,140	19,510	20,250
Walworth	4,490	6,430	13,240	14,010
Washington	3,410	5,400	12,980	13,940
Waukesha	8,280	15,060	36,140	37,830
Total	55,400	79,710	164,610	170,130

Figure 50

FORECAST RANGE OF AUTOMOBILE AVAILABILITY

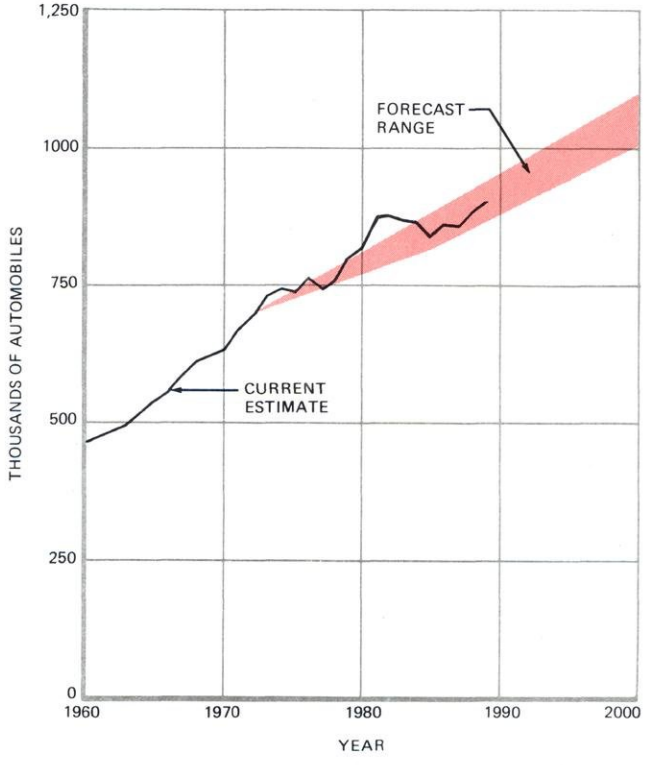
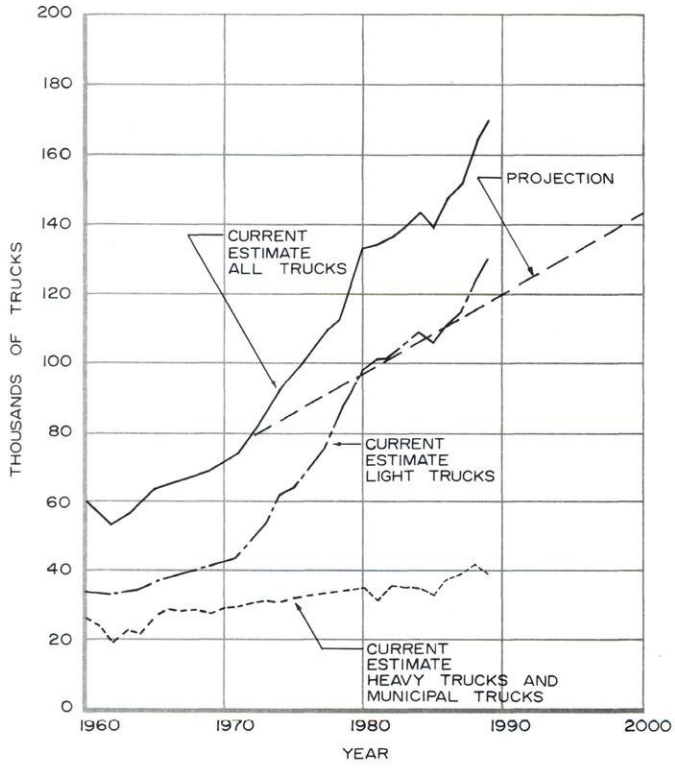


Figure 51

TRUCK AVAILABILITY



Public Transit Ridership

Publicly owned mass transit service is provided in the Region in the Kenosha, Racine, and Milwaukee urbanized areas, and in nonurbanized portions of the Region in the Cities of Hartford and Whitewater (see Table 13 and Figure 52). In the Kenosha urbanized area, ridership on the fixed-route public transit system serving the City of Kenosha increased during 1989 (see Figure 53). Ridership during the year approximated 1,205,800 revenue passengers, an increase of about 1 percent over the 1988 ridership level of about 1,194,100 revenue passengers. The number of bus miles operated in revenue service totaled about 683,300, an increase of about 3 percent over the 663,800 bus miles operated during 1988. The basic fare for the Kenosha system increased from $0.50 in 1988 to $0.55 in 1989.

Table 13

PUBLIC TRANSIT RIDERSHIP

Transit Operators By Area	1963	1972	1988	1989	Percent Change 1988-1989
Urbanized Areas					
Kenosha					
City of Kenosha	1,876,000	503,000	1,194,100	1,205,800	1.0
Milwaukee					
Milwaukee County	88,546,000	52,141,000	48,866,000	48,878,000	0.0
Waukesha County	--	--	271,500	288,400	6.2
City of Waukesha	451,000	227,000	374,000	383,100	2.4
Subtotal	88,997,000	52,368,000	49,511,500	49,549,500	0.1
Racine					
City of Racine—Local Bus	2,907,000	526,000	2,089,000	1,962,700	-6.0
City of Racine—Commuter Bus	165,000	153,000	71,100	68,300	-3.9
Subtotal	3,072,000	679,000	2,160,100	2,031,000	-6.0
Urbanized Area Total	93,945,000	53,600,000	52,865,700	52,786,300	-0.2
Nonurbanized Areas					
City of Hartford	--	--	12,300	12,900	4.9
City of Whitewater	--	--	42,700	41,600	-2.6
Nonurbanized Area Total	--	--	55,000	54,500	-0.9
Total Region	93,945,000	53,600,000	52,920,700	52,840,800	-0.2

To assist in the public operation of the transit system, the Commission prepared, at the request of the City, a five-year transit development plan in 1976 for the years 1976-1980.[1] Many of the plan's recommendations regarding transit route layout and scheduling were implemented in the mid-1970's as ridership increased on the system. In 1984, the Commission completed work on another transit development plan for the City of Kenosha transit system for the period 1984-1989.[2] Virtually all of the routing changes recommended under the new plan were implemented by the transit system in late December 1984.

Ridership on the fixed-route public transit system serving the City of Racine decreased during 1989 approximately 6 percent—from the 1988 level of approximately 2,089,000 revenue passengers to about 1,962,700 revenue passengers in 1989. The number of bus miles operated in revenue service decreased by less than 1 percent during 1989—from about 1,255,200 bus miles in 1988 to about 1,249,900 bus miles in 1989. The basic fare for the Racine transit system was $0.50 in 1989, unchanged from 1988.

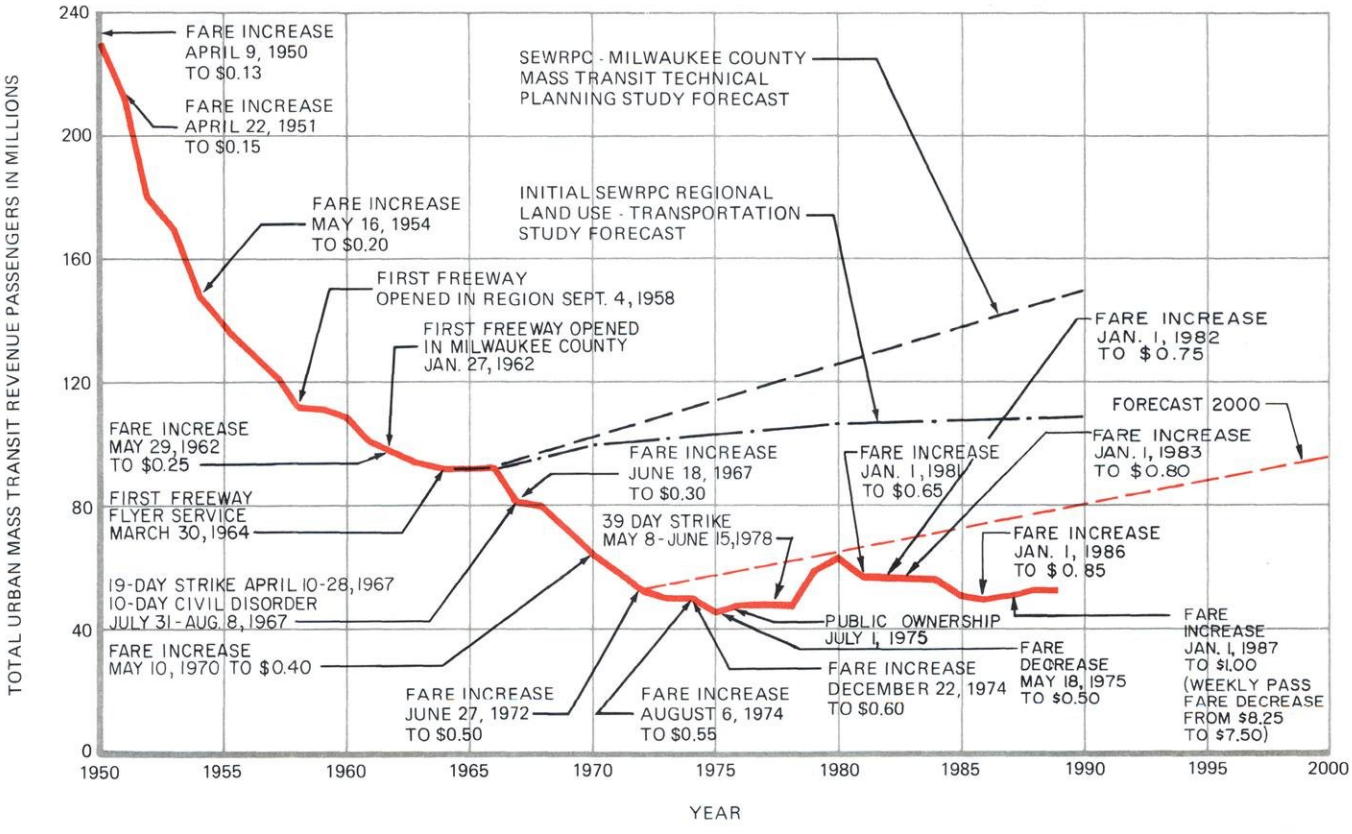
Transit ridership declines on the City of Racine transit system during 1982 and 1983 and again during the years 1985 through 1989 broke a trend of increasing ridership which began in July 1975 with the public acquisition and operation of the formerly privately operated system. To guide the public acquisition of the system and its initial years of operation, the Commission prepared, at the request of the City of Racine, a transit development plan covering

[1] *See SEWRPC Community Assistance Planning Report No. 7, Kenosha Area Transit Development Program: 1976-1980.*

[2] *See SEWRPC Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1989.*

Figure 52

HISTORICAL TREND IN MASS TRANSIT RIDERSHIP IN THE REGION



NOTE: FARE INCREASES AND DECREASES SHOWN IN THIS FIGURE REFER ONLY TO THE MILWAUKEE COUNTY TRANSIT SYSTEM AND TO THE SINGLE-RIDE ADULT CASH FARE FOR LOCAL SERVICE.

the years 1975 to 1979.[3] Nearly all of the plan recommendations for transit route layout, schedule, fare structure, and service levels were implemented in the first years of public operation. In 1984, the Commission completed work on another transit development program for the City of Racine transit system for the period 1984-1989.[4] Several of the routing changes recommended under the new plan were implemented by the transit system by December 1985.

During 1989, the City of Racine, in a joint effort with the City of Kenosha and Racine and Kenosha Counties, also provided commuter bus service between downtown Milwaukee and the Cities of Racine and Kenosha. The commuter bus service was provided by a private transit operator: Wisconsin Coach Lines, Inc. Until 1984, the route was operated without public subsidy, the passenger and freight revenues being sufficient to offset the operating costs. More recently, however, the operation of the route entailed a loss. During 1984, the Company approached the four governmental units and asked for financial assistance to subsidize the operation of the route. As a result, the four local units of government joined to help provide the Company with the financial assistance necessary to operate the bus service through the State of Wisconsin.

The City of Racine has assumed responsibility as the lead agency for the commuter bus project by acting as the applicant/grantee for the state urban transit assistance funds needed to subsidize the operation of the service. State transit assistance funds are the only public monies

[3] *See SEWRPC Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979.*

[4] *See SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1989.*

Figure 53

MASS TRANSIT RIDERSHIP
KENOSHA URBANIZED AREA

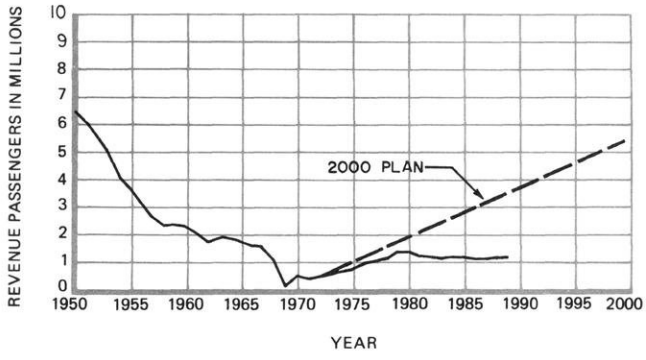
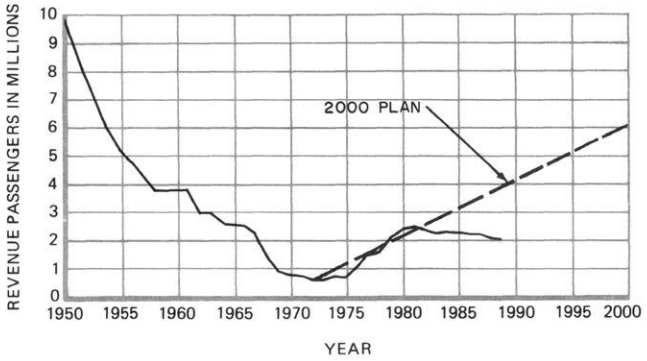


Figure 54

MASS TRANSIT RIDERSHIP
RACINE URBANIZED AREA



being used to subsidize the operating costs of the service. Ridership on the service approximated 68,300 revenue passengers during 1989, a decrease of about 4 percent from the 1988 ridership level of about 71,100 revenue passengers. The number of bus miles operated in revenue service increased by about 10 percent from 194,700 bus miles in 1988 to about 213,900 bus miles in 1989. Total transit ridership within the Racine urbanized area—including the City of Racine transit system and the special commuter bus service—decreased by about 6 percent—from the 1988 ridership level of 2,160,100 revenue passengers to about 2,031,000 revenue passengers in 1989 (see Figure 54).

In the Milwaukee urbanized area, publicly subsidized, fixed-route transit service was provided during 1989 by the Milwaukee County Transit System, Waukesha County, and the City of Waukesha. Ridership on the Milwaukee County Transit System was virtually unchanged from 1988 to 1989, increasing during 1989 by less than 1 percent over the 1988 level of about 48,866,000 revenue passengers to 48,878,000 revenue passengers. The basic cash fare for the Milwaukee County Transit System remained unchanged at $1.00 in 1989; however, the price of a weekly pass or a book of 10 fare tickets was increased from $7.50 to $8.50 at the end of 1989, which still allows regular users on the transit system to ride at a substantial discount from the full cash fare.

During 1989, Waukesha County continued to provide publicly supported, fixed-route bus service between Waukesha and Milwaukee Counties. Operated for Waukesha County on a contract basis by both the Milwaukee County Transit System and Wisconsin Coach Lines, Inc., bus service included the commuter-oriented service supported by the County since 1977 between the City of Milwaukee central business district and the Cities of Oconomowoc and Waukesha, and additional service provided over three bus routes initiated by the County during 1981. These three bus routes were originally part of a total of seven new routes implemented by Waukesha County on April 1, 1981. The Commission identified these seven routes in 1980 at the request of Waukesha County and proposed that any service implemented be on a trial basis.[5]

The three routes which continued to be operated during all or part of 1989 included two routes providing modified rapid, or "freeway flyer," transit service between the Milwaukee central business district and the Village of Menomonee Falls and the City of Oconomowoc, and one route providing local bus service from Milwaukee County to the Brookfield Square Shopping Center. Bus service was reduced during 1988 between the City of Oconomowoc and the Goerke's Corners public transit station over one of the original express bus routes subsidized by the County since 1977. This service change was based upon the analyses and recommendations

[5]*See SEWRPC Community Assistance Planning Report No. 44, Proposed Public Transit Service Improvements—1980, Waukesha County, Wisconsin.*

Figure 55

MASS TRANSIT RIDERSHIP
MILWAUKEE URBANIZED AREA

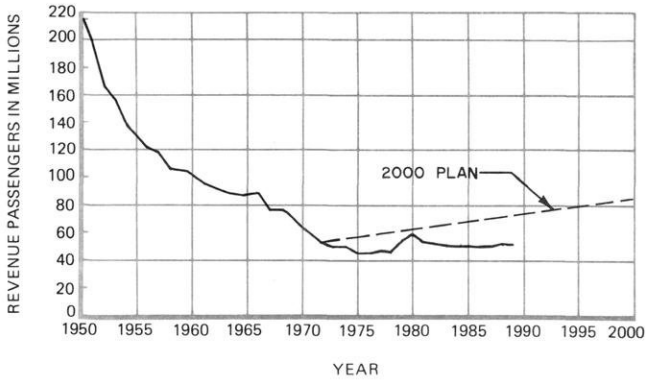
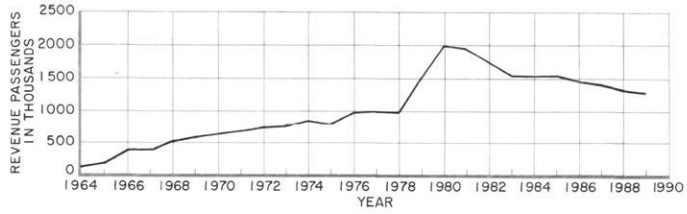


Figure 56

MILWAUKEE URBANIZED AREA
FREEWAY FLYER RIDERSHIP



presented in a new transit service plan for Waukesha County completed by the Commission during 1988.[6] Ridership on the Waukesha County transit system increased by about 6 percent in 1989, from 271,500 trips in 1988 to 288,400 trips in 1989. Transit fares on the Waukesha County Transit System—which are distance-related—were between $1.25 and $3.35 in 1989, unchanged from 1988.

Local bus service was reestablished in the City of Waukesha in August 1981, when the City placed into full-scale operation a new fixed-route transit system. The community had previously been without public transit service since June 1976, when local bus service provided by a private transit operator was discontinued. The reinstitution of transit service was guided by a transit development plan prepared by the Regional Planning Commission in 1980 at the request of the City of Waukesha.[7] The new Waukesha transit system—routes, schedule, service levels, and fare structure—was implemented essentially as recommended by that plan. In December 1989 the Commission completed work on another transit development plan for the period 1988-1992.[8] During calendar year 1989, the system carried approximately 383,100 revenue passengers, an increase of over 2 percent over the 374,000 revenue passengers carried on the system during 1988. The basic fare for the City of Waukesha transit system was $0.60, unchanged from 1988.

The number of bus miles operated in revenue service in the Milwaukee urbanized area during the year totaled about 17.74 million, an increase of less than 1 percent over the approximately 17.68 million bus miles operated during 1988. Total transit ridership within the Milwaukee urbanized area was virtually unchanged from the 1988 ridership level—about 49.5 million revenue passengers in 1989 (see Figure 55). This ridership consistency may be attributed primarily to the stable ridership on the Milwaukee County Transit System.

During 1989, rapid transit service in the Milwaukee urbanized area was provided by freeway flyer bus service operated by both Milwaukee and Waukesha Counties from 19 outlying parking terminals to the Milwaukee central business district. Ridership on the freeway flyer bus service totaled about 1,267,400 passengers in 1989, representing a decrease of about 1 percent from the 1,283,300 passengers carried in 1988 (see Figure 56). This decrease in freeway flyer ridership can be directly attributed to continued low fuel prices.

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[6]*See SEWRPC Community Assistance Planning Report No. 105, Waukesha County Transit Plan: 1989-1992.*

[7]*See SEWRPC Community Assistance Planning Report No. 31, Waukesha Area Transit Development Program: 1981-1985.*

[8]*See SEWRPC Community Assistance Planning Report No. 154, A Transit System Development Plan for the City of Waukesha: 1988-1992.*

Progress in providing the public transit stations recommended in the adopted year 2000 transportation plan is summarized on Map 9. During 1989, no new public transit stations were constructed to add to those which existed during 1988. Table 14 and Figure 57 provide data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 1989 at all transit stations by patrons of freeway flyer bus service and carpoolers. As shown in the table, transit service was provided at 12 of the 14 public transit/park-ride stations and at seven shopping center lots. The total of 21 freeway flyer terminal facilities represents no change from the number of facilities that existed in 1988. The number of spaces available at public transit/park-ride stations—3,265 spaces—and at shopping center lots—1,075 spaces—remained unchanged from 1988 to 1989.

Of the 3,265 spaces available at the 14 public transit/park-ride stations, 1,456 spaces were used on an average weekday during the fourth quarter of 1989, representing a utilization rate of about 45 percent. Of the 1,075 spaces available at the seven shopping center lots, 402 spaces were utilized during the last quarter of 1989, representing a utilization rate of about 37 percent. In total, about 43 percent of all available parking spaces were used on an average weekday during the last quarter of 1989.

Publicly operated transit service was also provided in the nonurbanized portion of the Region during 1989 by the City of Hartford in Washington County, which operated a shared-ride taxicab service and a special commuter shuttle bus service. Operated by the City of Hartford Municipal Recreation Department, the taxicab service was initiated in 1981 and is available to the public seven days a week for travel primarily within the City of Hartford and environs. The special commuter bus service was initiated in late 1982 and is operated to shuttle passengers from Hartford and West Bend to and from a transit stop used by an intercity bus operator serving the Milwaukee urbanized area. The services are provided using funds available for capital and operating assistance under the federal Section 18 rural transportation assistance program. During 1989, the Hartford taxicab and shuttle bus services carried approximately 12,900 revenue passengers and operated about 63,800 total vehicle miles. These figures represent an increase of about 5 percent over the 12,300 revenue passengers carried in 1988, and an increase of about 8 percent over 59,000 the total vehicle miles operated during 1988.

In January 1986, the City of Whitewater in Walworth County initiated operation of a shared-ride taxicab service. Operated by Brown's Cab Service based in Fort Atkinson, the taxicab service is available seven days a week for travel primarily within the Whitewater area. Adult fares for the service were established at $2.00 per one-way trip, with a half-fare program provided for students and elderly and handicapped users. The service was initiated using federal funds available for capital and operating assistance under the federal Section 18 rural transportation assistance program. During 1989, the Whitewater taxicab service carried approximately 41,600 revenue passengers—a decrease of about 3 percent from the 42,700 revenue passengers carried in 1988—and operated about 79,100 total vehicle miles—a decrease of about 3 percent from the 81,400 total vehicle miles operated in 1988.

Transit operating subsidies in the Region during 1989 totaled about $47.8 million, as compared with about $41.8 million during 1988, as shown in Table 15. The overall public operating subsidy per ride in the Kenosha urbanized area increased from about $1.23 in 1988 to about $1.38 in 1989 (see Figure 58). In the Racine urbanized area, the overall operating subsidy per ride increased from about $1.20 in 1988 to about $1.37 in 1989 (see Figure 59). In the Milwaukee urbanized area, the overall operating subsidy per ride increased from about $0.76 in 1988 to about $0.87 in 1989 (see Figure 60). By individual operator in the Milwaukee urbanized area, the per-ride subsidies in 1988 and 1989 were as follows: Milwaukee County Transit System, $0.74 and $0.85; Waukesha County, $2.94 and $3.14; and City of Waukesha, $2.18 and $2.23. The overall operating subsidy per ride for the taxicab and shuttle bus services operated by the City of Hartford increased markedly from about $6.91 per ride in 1988 to about $9.23 per ride in 1989 (see Figure 61). In Whitewater, the per-ride subsidy increased from $1.02 in 1988 to $1.62 in 1989 (see Figure 62).

Carpool Parking Facilities

During 1989, the Commission collected data on the use of available parking supply at carpool parking facilities within the Region. As shown in Table 16, 17 publicly owned carpool parking facilities were in operation at key freeway

Map 9

PRIMARY TRANSIT SYSTEM PLAN FOR THE REGION: 2000

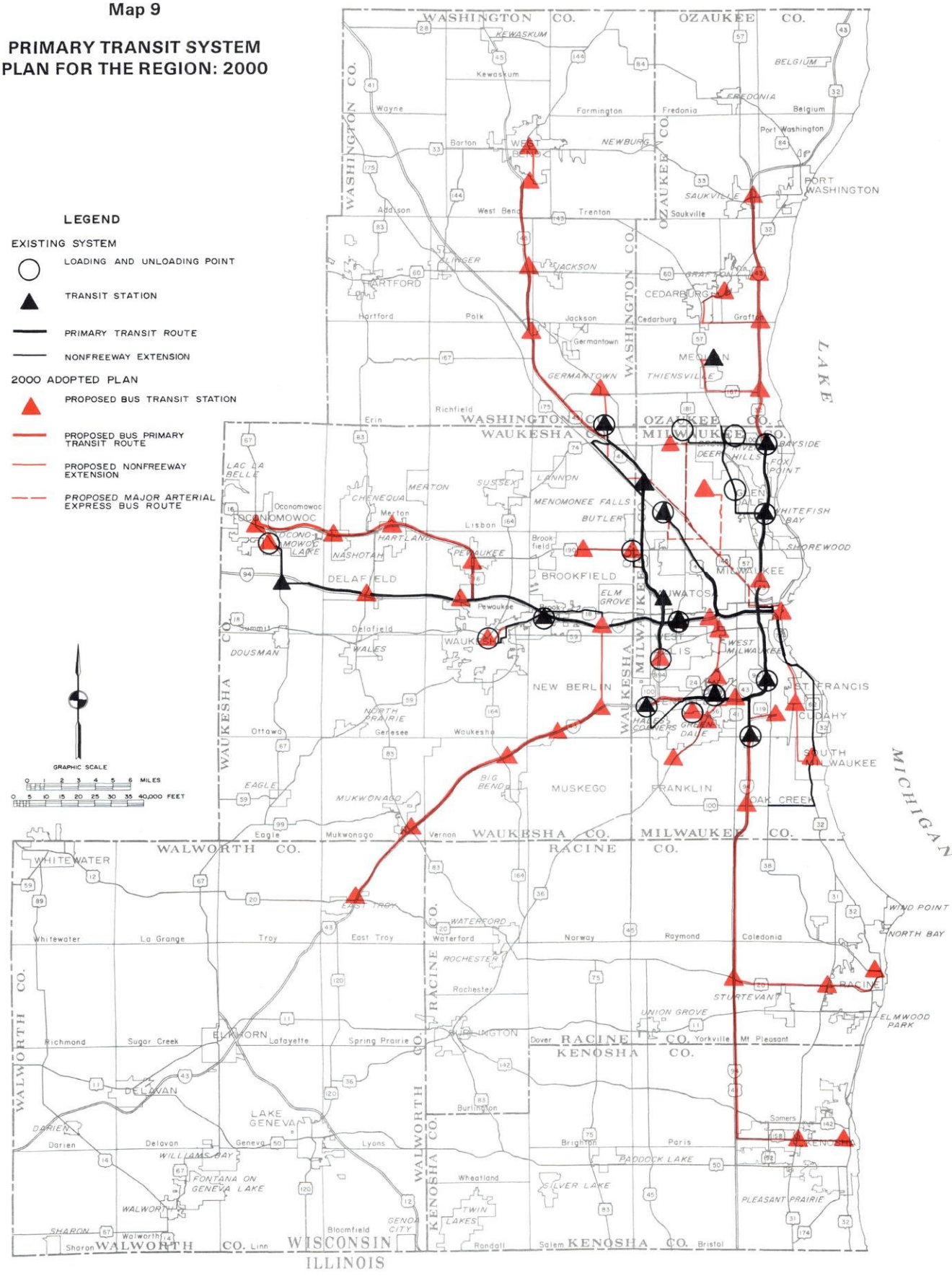


Table 14

USE OF PARKING AT FREEWAY FLYER TERMINALS: FOURTH QUARTER 1989

Location	Available Parking Spaces	Autos Parked on an Average Weekday—Fourth Quarter: 1989	Percent of Spaces Used
Public Transit Stations			
W. College Avenue (Milwaukee)	530	282	53
W. Watertown Plank Road (Wauwatosa)	200	87	44
North Shore (Glendale)	190	102	54
Brown Deer (River Hills)	250	119	48
Goerkes Corners (Brookfield)	250	132	53
Milwaukee Area Technical College (Mequon)	200	28[a]	14[a]
W. Holt Avenue (Milwaukee)	240	87	36
Whitnall (Hales Corners)	370	240	65
Pilgrim Road (Menomonee Falls)	65	65	100
STH 67 and IH 94 (Summit)	80	35	44
State Fair Park (West Allis)	200	114	57
Timmerman Field (Milwaukee)	140	47	34
W. Loomis Road (Greenfield)	415	106	26
W. Good Hope Road	135	12[a]	9[a]
Subtotal	3,265	1,456	45
Shopping Center Lots			
Northland (Milwaukee)	100	25	25
Zayre-Kohls (West Allis)	250	104	42
Zayre (Brookfield)	200	82	41
Southridge (Greendale)	250	97	39
Northridge (Milwaukee)	100	28	28
Zayre (Brown Deer)	125	66	53
Olympia (Oconomowoc)	50	--[b]	--[b]
Subtotal	1,075	402	37
Total	4,340	1,858	43

[a] *Public transit service to this station was not provided during 1989. The number of autos parked represents use by carpoolers.*

[b] *Data not available.*

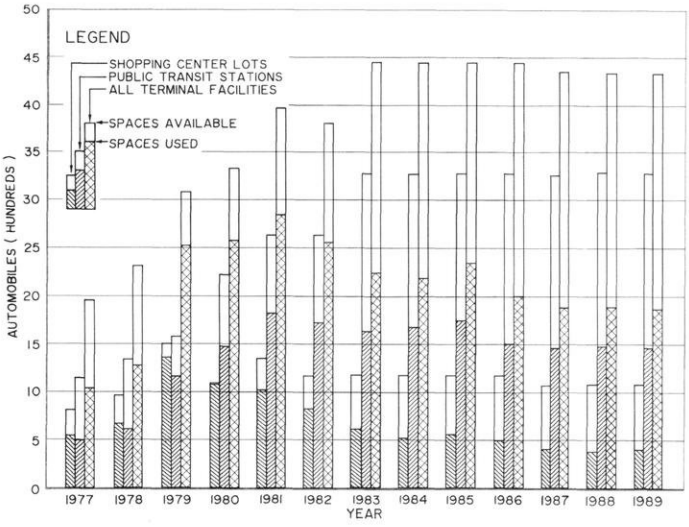
interchanges in the outlying areas of the Region in 1989. This number represents no change from the number of facilities available in 1988, as no new facilities were placed into service during 1989. During 1989 the carpool parking facility at IH 94 and CTH G was reconstructed, resulting in a reduction in the number of available parking spaces. During the fourth quarter of 1989, about 395 of the total 1,220 parking spaces available were used on an average weekday (see Figure 63). This represents a utilization rate of 32 percent in 1989, compared with a utilization rate of 28 percent in 1988. The progress in providing the carpool parking lots recommended in the adopted year 2000 regional transportation plan is summarized on Map 10.

Traffic Count Data

The Commission collates on a continuing basis traffic count data collected by other state, county, and local agencies during the year.

Figure 57

FREEWAY FLYER PARKING LOT USE
FOURTH QUARTER: 1977-1989



These data are essential to monitoring changes in travel occurring in the Region and to determining levels of, and trends in, vehicle miles of travel. During 1989 traffic volume data were collected from the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, and the City of Milwaukee, all of which operate regular traffic-counting programs. In addition, during the year the Commission conducted traffic counts for use in the analysis and planning activities of the community assistance and traffic engineering services provided to municipalities within the Region. At selected sites, data were collected on vehicle classification, turning movements, peak-hour factors, and other traffic engineering considerations.

LONG-RANGE PLANNING

Long-Range Transportation System Plan

On June 1, 1978, the Commission adopted a long-range regional transportation system plan for the design year 2000. This plan is documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume Two, Alternative and Recommended Plans. The plan extends and amends the regional transportation system plan for the design year 1990 adopted in 1966. The adopted plan is graphically summarized on Map 11. The long-range regional transportation system plan was prepared to accommodate the existing and probable future travel demand in the Region. Such demand is expected to increase by about 28 percent—from a total of about 4.5 million person trips per average weekday in 1972 to about 5.7 million such trips by the year 2000. Total vehicle miles of travel on an average weekday is anticipated to increase by more than 49 percent—from about 20.1 million to about 30.1 million. The design year 2000 regional transportation system plan seeks to provide the Region with a safe, efficient, and economical transportation system which can effectively serve the existing and probable future travel demand within the Region, which will meet the recommended regional transportation system development objectives, and which will serve and promote implementation of the adopted regional land use plan.

The plan did not include a number of previously planned freeways, including the Milwaukee Metropolitan Belt Freeway, the Bay Freeway from Pewaukee to Whitefish Bay, the Stadium Freeway-North, the Park Freeway-West, and the Racine Loop Freeway. The plan did, however, include the following freeways: the West Bend Freeway (USH 45), the USH 41 Freeway conversion in Washington County, the STH 16 Freeway in Waukesha County, the USH 12 Freeway in Walworth County, the Lake Freeway-South, the Milwaukee Downtown Loop Freeway, and the Stadium Freeway-South.

In 1981 the plan was amended to replace the Lake Freeway-South with a four-lane, limited access surface arterial. In 1983 the plan was further amended to remove the Milwaukee Downtown Loop Freeway and to add in its place a connection of the Park Freeway-East leg of that loop to N. Jefferson Street and a permanent connection of the East-West Freeway and Lake Freeway-North to N. Harbor Drive. Construction of the recommended permanent treatments at the end of the Park Freeway-East and the Lake Freeway-North and East-West Freeway to the surface arterial system began in 1984. The connections of the Lake Freeway-North and East-West Freeway were opened to traffic in December 1985.

In March 1985, the Commission further amended the plan to incorporate recommended changes in the Stadium Freeway-South corridor.

Table 15

PUBLIC TRANSIT OPERATING SUBSIDIES WITHIN THE REGION: 1987-1989

Area	Public Transit Operating Assistance (dollars)							
	1988 Actual				1989 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Urbanized Areas								
Kenosha								
City of Kenosha	618,200	722,400	132,300	1,472,900	579,400	815,100	271,300	1,665,800
Milwaukee								
Milwaukee County	5,273,800	24,980,800[a]	5,800,400[a]	36,055,000[a]	5,243,800	25,590,100	10,576,900	41,410,800
Waukesha County	264,500[a]	436,100[a]	98,800[a]	799,400[a]	286,400	493,900	127,100	907,400
City of Waukesha	183,300	371,000	260,000	814,300	181,400	395,400	280,800	857,600
Subtotal	5,721,600	25,787,900	6,159,200	37,668,700	5,711,600	26,479,400	10,984,800	43,175,800
Racine								
City of Racine—								
Local Bus	1,149,600	1,168,600	0	2,318,200	967,700	1,254,700	230,900	2,453,300
City of Racine—								
Commuter Bus	0	177,400[a]	109,700[a]	287,100[a]	0	203,800	117,100	320,900
Subtotal	1,149,600	1,346,000	109,700	2,605,300	967,700	1,458,500	348,000	2,774,200
Urbanized Area Subtotal	7,489,400	27,856,300	6,401,200	41,746,900	7,258,700	28,753,000	11,604,100	47,615,800
Nonurbanized Areas								
City of Hartford	37,400	38,100	9,500	85,000	46,600	51,600	20,900	119,100
City of Whitewater	9,200	34,300	0	43,500	24,700	42,700	0	67,400
Subtotal	46,600	72,400	9,500	128,500	71,300	94,300	20,900	186,500
Nonurbanized Area Total	7,536,000	27,928,700	6,410,700	41,875,400	7,330,000	28,847,300	11,625,000	47,802,300

Area	Operating Subsidy per Ride (cents)							
	1988 Actual				1989 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Urbanized Areas								
Kenosha								
City of Kenosha	52	60	11	123	48	68	22	138
Milwaukee								
Milwaukee County	11	51	12	74	11	52	22	85
Waukesha County	97	161	36	294	99	171	44	314
City of Waukesha	49	99	70	218	47	103	73	223
Average	12	52	12	76	12	53	22	87
Racine								
City of Racine—								
Local Bus	55	56	0	111	49	64	12	125
City of Racine—								
Commuter Bus	0	250	154	404	0	298	171	469
Average	53	62	5	120	48	72	17	137
Nonurbanized Areas								
City of Hartford	304	310	77	691	361	400	162	923
City of Whitewater	22	80	0	102	59	103	0	162
Nonurbanized Area Average	85	132	17	234	131	173	38	342

[a] *Estimated.*

Figure 58

MASS TRANSIT OPERATING SUBSIDIES IN THE KENOSHA URBANIZED AREA: 1975-1989

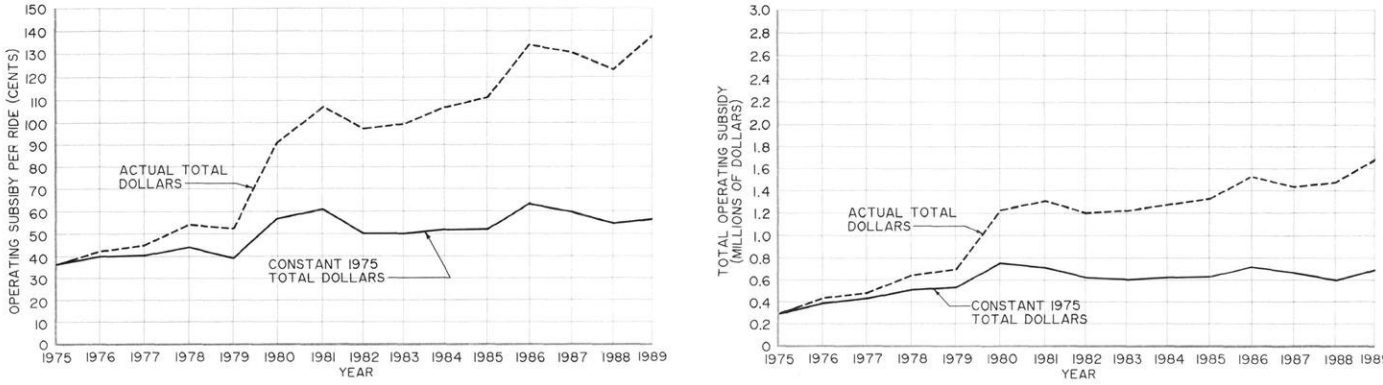
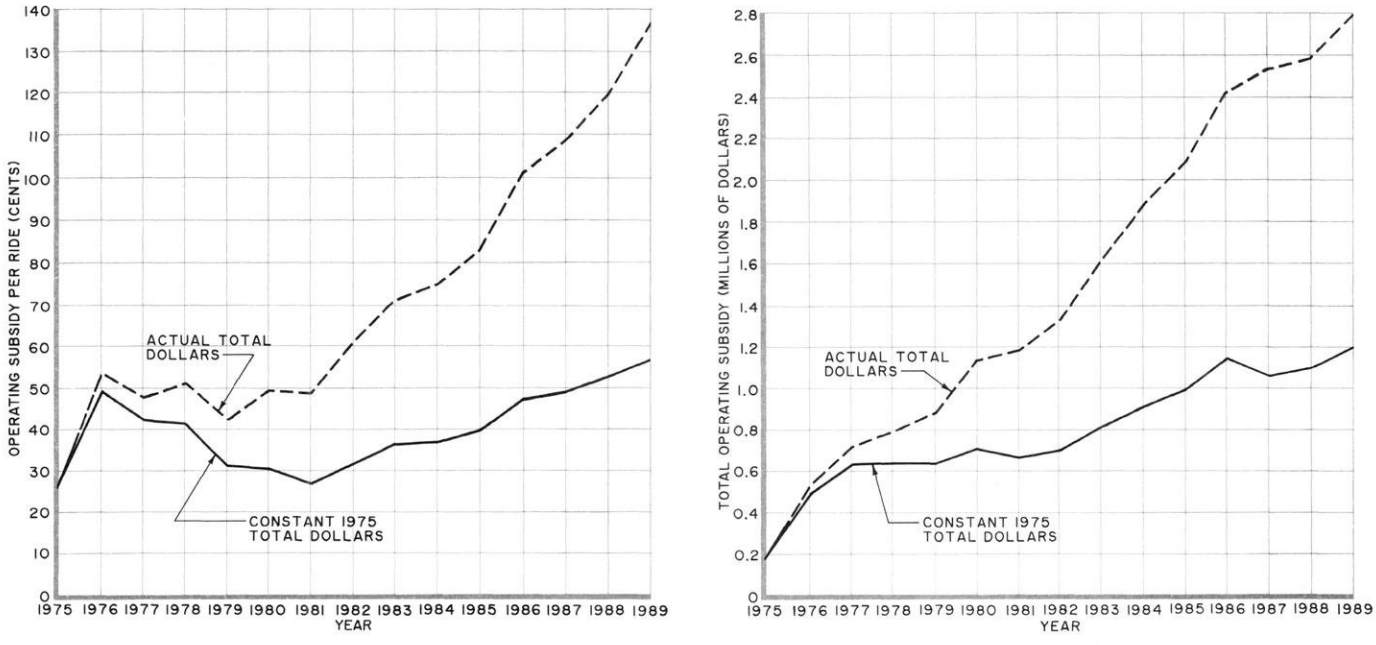


Figure 59

MASS TRANSIT OPERATING SUBSIDIES IN THE RACINE URBANIZED AREA: 1975-1989

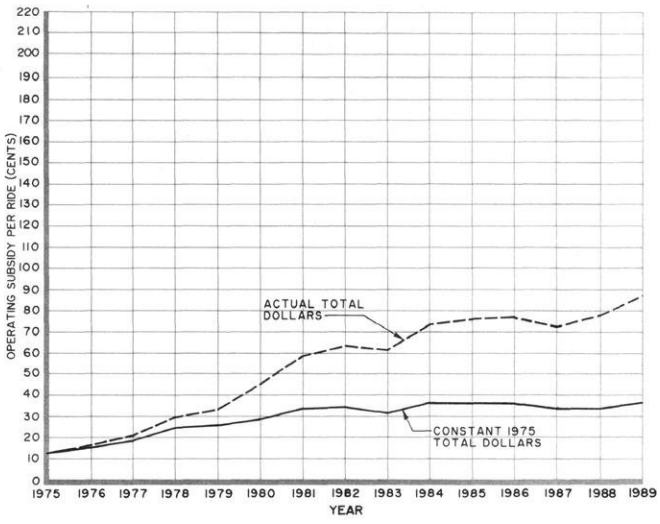


These changes consist of the deletion from the plan of the Stadium Freeway-South from W. National Avenue to the Airport Freeway and the addition of a freeway "stub end" improvement at W. National Avenue, consisting of a new at-grade intersection directly connecting to S. 43rd Street. From that intersection, S. 43rd Street would be improved to a divided boulevard section south to W. Lincoln Avenue. These Stadium Freeway-South improvements are more fully described in the 1984 Annual Report, and were opened to traffic late in 1988.

After review of alternatives and their estimated impacts, a 28-member Task Force created by the Commission acted to recommend construction of a four-lane arterial connection from the southern end of the Hoan Bridge to and along the Chicago & North Western Railway right-of-way to a connection with S. Pennsylvania Avenue at E. Layton Avenue. The new facility as proposed by the Task Force would be developed with special attention to aesthetics, including extensive plantings of trees and shrubs and the use of stone facings on structures and retaining walls.

Figure 60

MASS TRANSIT OPERATING SUBSIDIES IN THE MILWAUKEE URBANIZED AREA: 1975-1989



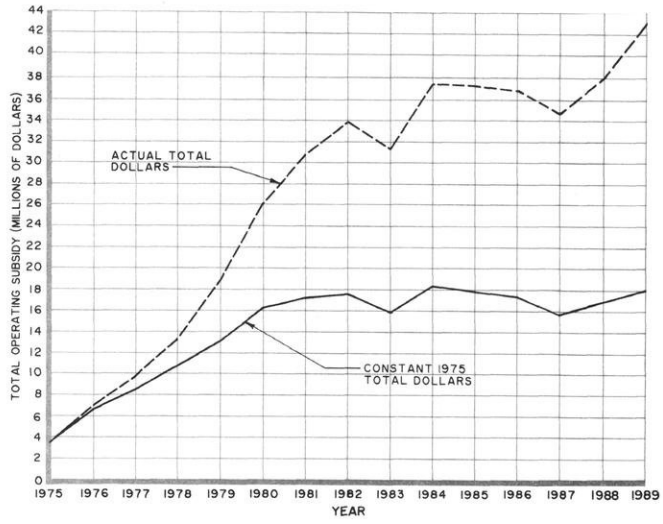
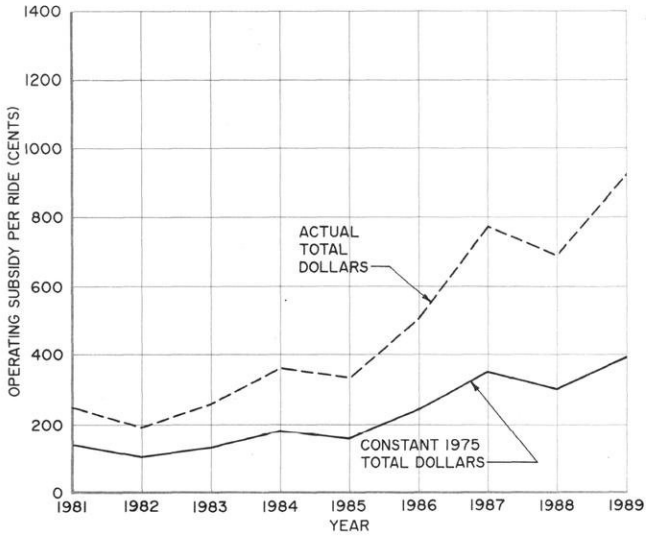


Figure 61

MASS TRANSIT OPERATING SUBSIDIES IN THE CITY OF HARTFORD: 1982-1989



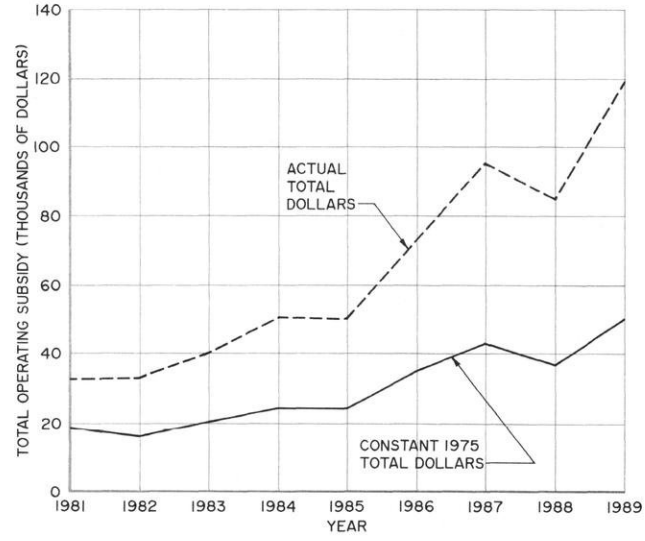
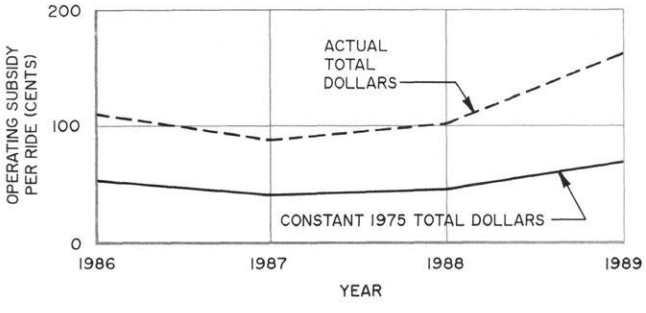


Figure 62

MASS TRANSIT OPERATING SUBSIDIES IN THE CITY OF WHITEWATER: 1986-1989



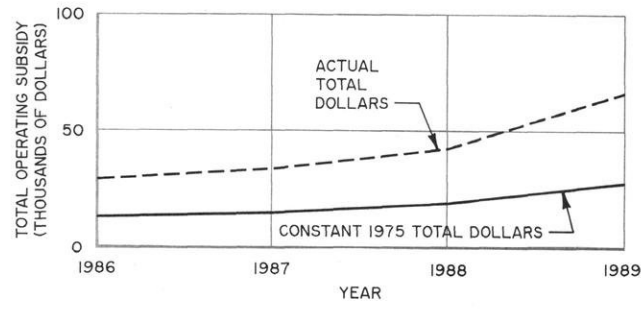


Table 16

USE OF PARKING SUPPLY AT CARPOOL PARKING LOTS: FOURTH QUARTER 1989

Location	Available Parking Spaces	Autos Parked on an Average Weekday Fourth Quarter 1989	Percent of Spaces Used
Ozaukee County			
IH 43 and STH 57 (Saukville)	100	11	11
IH 43 and CTH C (Grafton)	50	23	46
STH 57 and STH 84 (Fredonia)	20	5	25
Washington County			
USH 41 and CTH Y (Germantown)	100	23	23
STH 60 and CTH P (Jackson)	30	10	33
Waukesha County			
STH 16 and CTH C (Nashotah)	50	14	28
STH 16 and STH 83 (Chenequa)	65	9	14
IH 94 and STH 67 (Oconomowoc)	80	35	44
STH 16 and CTH P (Oconomowoc)	40	10	25
IH 94 and CTH CC (Delafield)	30	17	57
IH 94 and CTH G (Pewaukee)	50	14	28
IH 94 and STH 164 (Pewaukee)	80	42	53
IH 43 and STH 83 (Mukwonago)	95	42	44
IH 43 and STH 164 (Big Bend)	100	36	36
IH 43 and CTH Y (New Berlin)	60	16	27
IH 43 and CTH O (New Berlin)	200	24	12
USH 41 and Pilgrim Road (Menomonee Falls)	70	64	91
Total	1,220	395	32

The final environmental impact statement for the proposed facility was completed in the fall of 1987 by the Wisconsin Department of Transportation. Construction is set to begin in 1991, and the facility is anticipated to be completed and open to traffic in 1994. The work of the Task Force and its recommendations are presented in SEWRPC Memorandum Report No. 6, Report of the Hoan Bridge South Task Force.

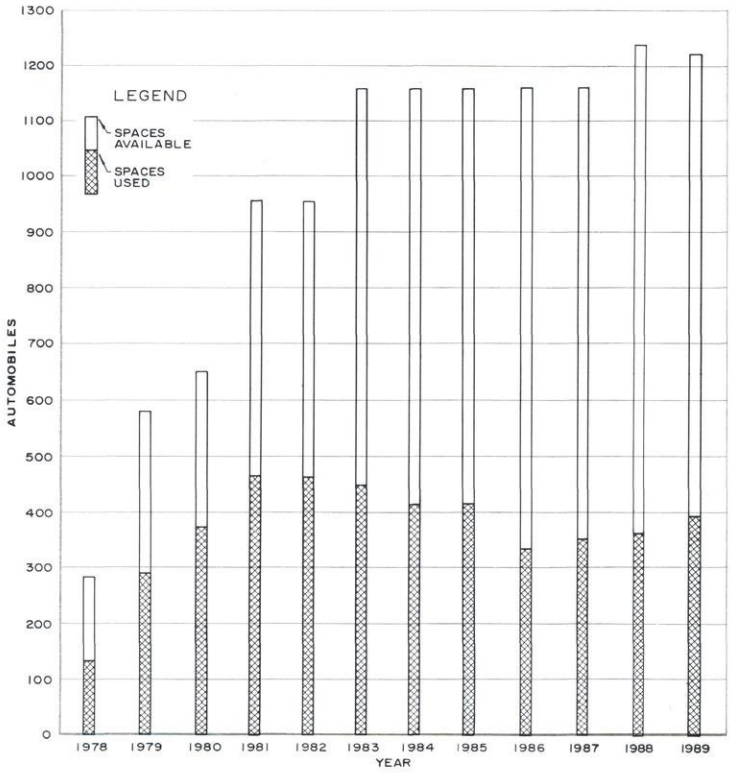
Washington County Jurisdictional Highway System Plan Update

In July 1987, the Mayor of the City of Hartford approached the Commission with a request that the Washington County Jurisdictional Planning Committee reexamine the arterial street and highway needs of the County, particularly with respect to the need for additional arterial capacity in the western portion of the County. In making the request, the Mayor pointed to recent events that have led to the creation of a new large industrial park on the west side of the City of Hartford, and noted that there was a perceived need in the Hartford community for better access from that park to the regional freeway system and, in particular, to the planned USH 41 freeway east of Hartford. In response, the Commission indicated that it would reconvene the Technical Coordinating and Advisory Committee on Jurisdictional Highway Planning for Washington County; conduct whatever study efforts may be necessary to address the Hartford area issue raised by the Mayor, as well as other needs that may be perceived throughout Washington County; and amend the county jurisdictional highway system plan as may be necessary.

The Advisory Committee met three times during 1989 to review the adopted Washington County jurisdictional highway system plan; review the actions which have been taken to date to implement that plan; identify and evaluate

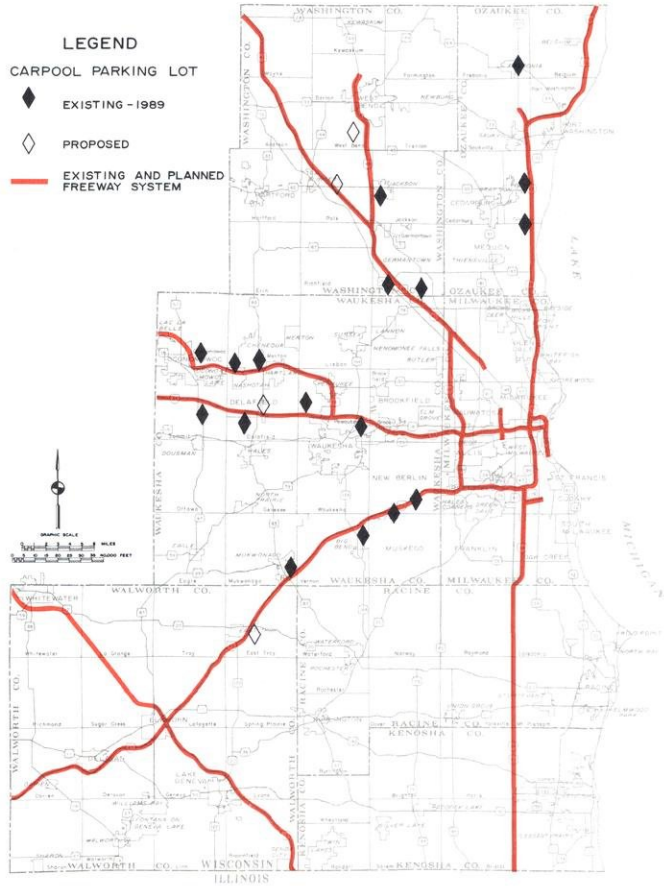
Figure 63

CARPOOL PARKING LOT USE: 1978-1989



Map 10

EXISTING 1989 AND PROPOSED CARPOOL PARKING LOTS



potential amendments to the plan; consider comments made by public officials and concerned citizens during a public hearing held to present preliminary recommendations for amendments to the plan; and make a final recommendation to the Washington County Board of Supervisors and the Commission.

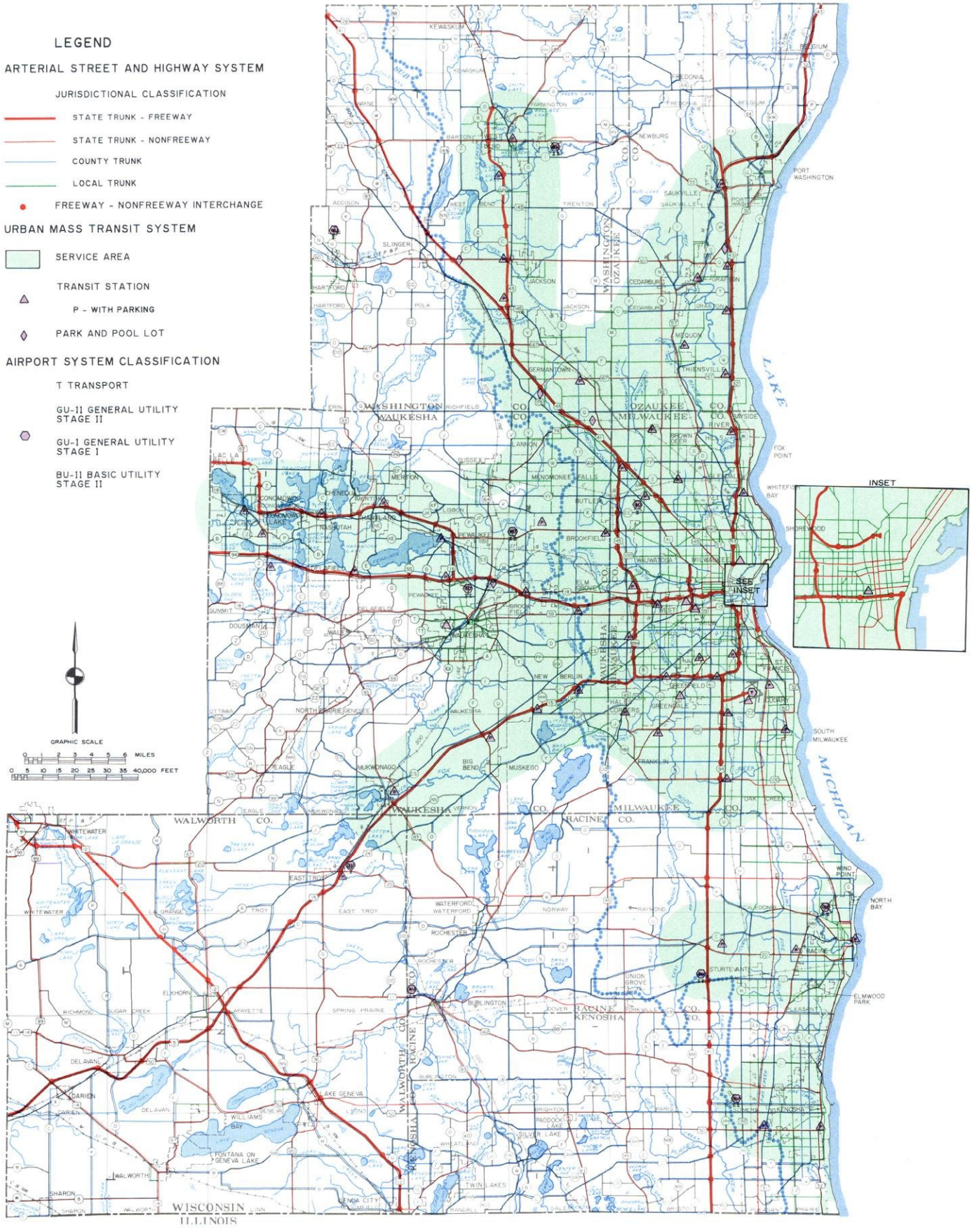
A public hearing was held on September 12, 1989, to present the findings and preliminary recommendations of the new Washington County jurisdictional highway system plan to public officials and concerned citizens for their consideration and comments. Based upon review of the public reaction to the preliminary plan, the Advisory Committee, at a meeting held on October 31, 1989, approved a recommended plan that included the following changes to the current plan:

- The provision of improved east-west arterial facility connections between the City of Hartford and Village of Slinger areas and USH 41. These included: an improved and extended Clover Road between CTH N and Arthur Road, and Arthur Road to STH 144; and the extension of the proposed Taylor Road from STH 60 to CTH N along with a transition road connecting CTH E with Pioneer Road and Pioneer Road to STH 175.

- The extension of CTH J from STH 60 to USH 41 including a half interchange with USH 41, providing access to and from the northwest on USH 41; and the conversion of CTH J and its extension from a county and local trunk highway to a state trunk highway from the Washington-Waukesha County line to USH 41.

Map 11

REGIONAL TRANSPORTATION SYSTEM PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2000



- The improvement of STH 33 to provide four traffic lanes between USH 41 and CTH Z, and between River Road and the Washington-Ozaukee County line.

- The extension of Trenton Road between STH 33 and Paradise Drive as a local arterial facility and the addition of Paradise Drive between CTH G and Trenton Road extended as a local arterial.

- The addition to the plan as arterials of Hillside Road between the Washington-Waukesha County line and STH 167; and of Friestadt Road between STH 175 and CTH J.

- The improvement of STH 175 to provide four traffic lanes between Maple Road and CTH Q.

- Changes in the recommended jurisdictional responsibility of arterial roads in the Village of Germantown, with the segment of Division Road between CTH Q and STH 167 changed to a county trunk highway from a local trunk highway; the segment of Pilgrim Road between CTH Q and STH 167 and between Fond du Lac Road and Friestadt Road changed to a local from a county trunk highway; and the segment of Friestadt Road from Pilgrim Road to Division Road changed to a county trunk highway from a local trunk highway.

- The deletion from the plan of the interchange of USH 41 with CTH K, retaining, however, a grade separation at USH 41 and CTH K, and the addition of an interchange on USH 41-45 at Freistadt Road.

The final second generation Washington County jurisdictional highway system plan as recommended by the Technical Coordinating and Advisory Committee on Jurisdictional Highway Planning for Washington County is shown on Map 12. The plan envisions a proposed system of arterial facilities in Washington County that can meet existing and probable future traffic demands at an adequate level of service. The plan identifies the location and configuration of the various facilities constituting the arterial system, and recommends the number of traffic lanes required on each segment of the system. The plan also recommends the level of government that should be responsible for the construction, operation, and maintenance of each facility making up the arterial system.

The major capacity improvements recommended under the new plan are shown on Map 13. These capacity improvements include widening of existing facilities to provide additional traffic lanes and the construction of new arterial facilities. The recommended changes in jurisdictional responsibility are shown on Map 14.

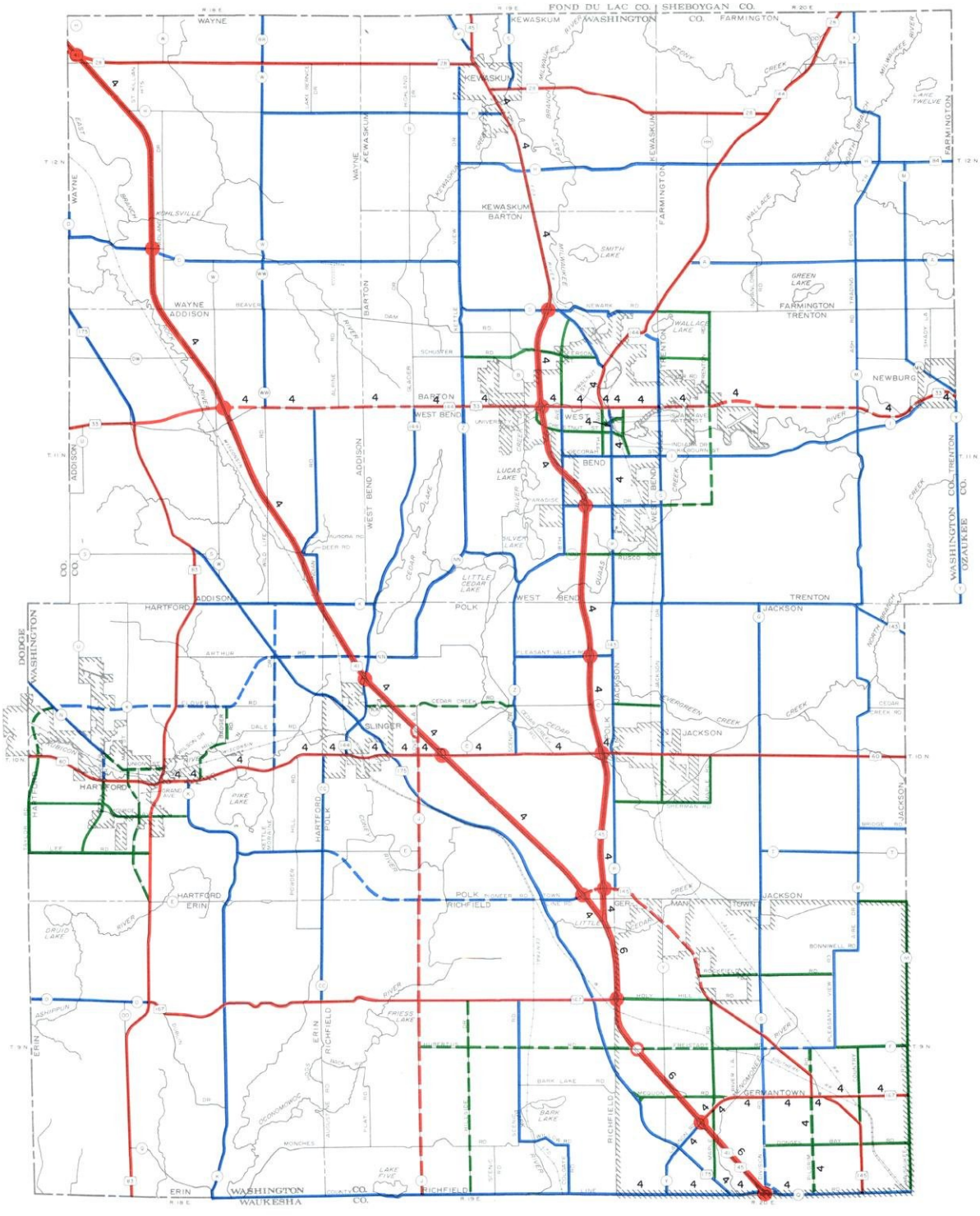
The recommended arterial system in the jurisdictional highway system plan as amended would include 474 miles of streets and highways, or about 33 percent of the expected 1,430-mile year 2000 total street and highway system in Washington County. The recommended state trunk highway element of the plan would include 158 miles of arterial facilities, or about 33 percent of the 474-mile planned arterial system. The recommended county trunk highway element of the plan would include 240 miles of arterial facilities, or about 51 percent of the 474-mile planned arterial system. The recommended local trunk highway element of the plan would include 76 miles of arterial facilities, or about 16 percent of the 474-mile planned arterial system. Under the plan, the total mileage of state trunk highways in the County would decrease from 186 miles to 158 miles, or by about 15 percent; and the total mileage of county trunk highways would increase from 197 to 240 miles, or by about 22 percent.

Of the total 474 miles of the planned arterial system in Washington County, a total of 395 miles would require only preservation, or resurfacing and reconstruction; 52 miles would require improvement, or widening to provide additional traffic lanes; and 27 miles would consist of new facilities. Of the 52 miles of proposed improvement projects, 48 miles, or 92 percent, would be on the planned state trunk highway system; and four miles, or the remaining 8 percent, would be on the planned county trunk highway system. Of the 27 miles of proposed new arterial facilities, seven miles, or 26 percent, would be on the state trunk element of the plan; 11 miles, or 41 percent, on the county trunk element of the plan; and nine miles, or 33 percent, on the local trunk element of the plan.

At year's end, the report documenting the foregoing recommendations of the Advisory Committee was completed, published, and transmitted to the Washington County Highway Committee. That report is entitled, Amendment to the Washington County Jurisdictional Highway System Plan—2000. Action on the new plan

Map 12

FINAL RECOMMENDED WASHINGTON COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



LEGEND

CURRENT PLAN

- FREEWAY
  - STATE TRUNK HIGHWAY
  - INTERCHANGE
- STANDARD ARTERIAL
  - STATE TRUNK HIGHWAY
  - COUNTY TRUNK HIGHWAY
  - LOCAL TRUNK HIGHWAY

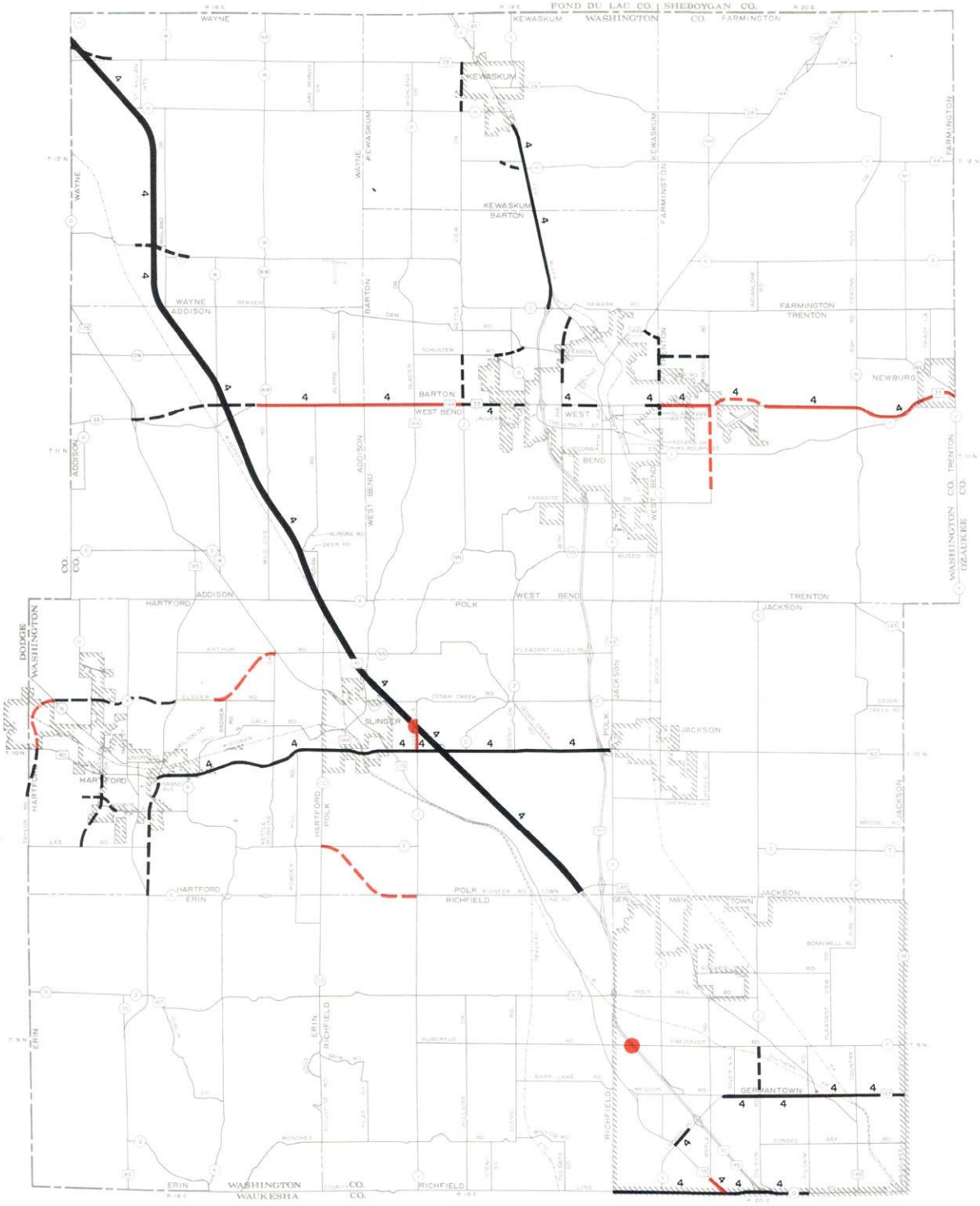
NEW PLAN AMENDMENTS

- STATE TRUNK HIGHWAY
- COUNTY TRUNK HIGHWAY
- LOCAL TRUNK HIGHWAY
- INTERCHANGE
- HALF INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES (2 WHERE UNNUMBERED)

GRAPHIC SCALE
0 1 2 MILES
0 4000 8000 12000 16000 FEET

Map 13

CAPACITY IMPROVEMENTS RECOMMENDED UNDER THE FINAL WASHINGTON COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



LEGEND

4 NUMBER OF LANES (2 WHERE UNNUMBERED)

CURRENT PLAN

- EXISTING LOCATION (WIDENING)
- NEW LOCATION

NEW PLAN AMENDMENTS

- EXISTING LOCATION (WIDENING)
- NEW LOCATION
- NEW FREEWAY HALF INTERCHANGE
- NEW FREEWAY INTERCHANGE

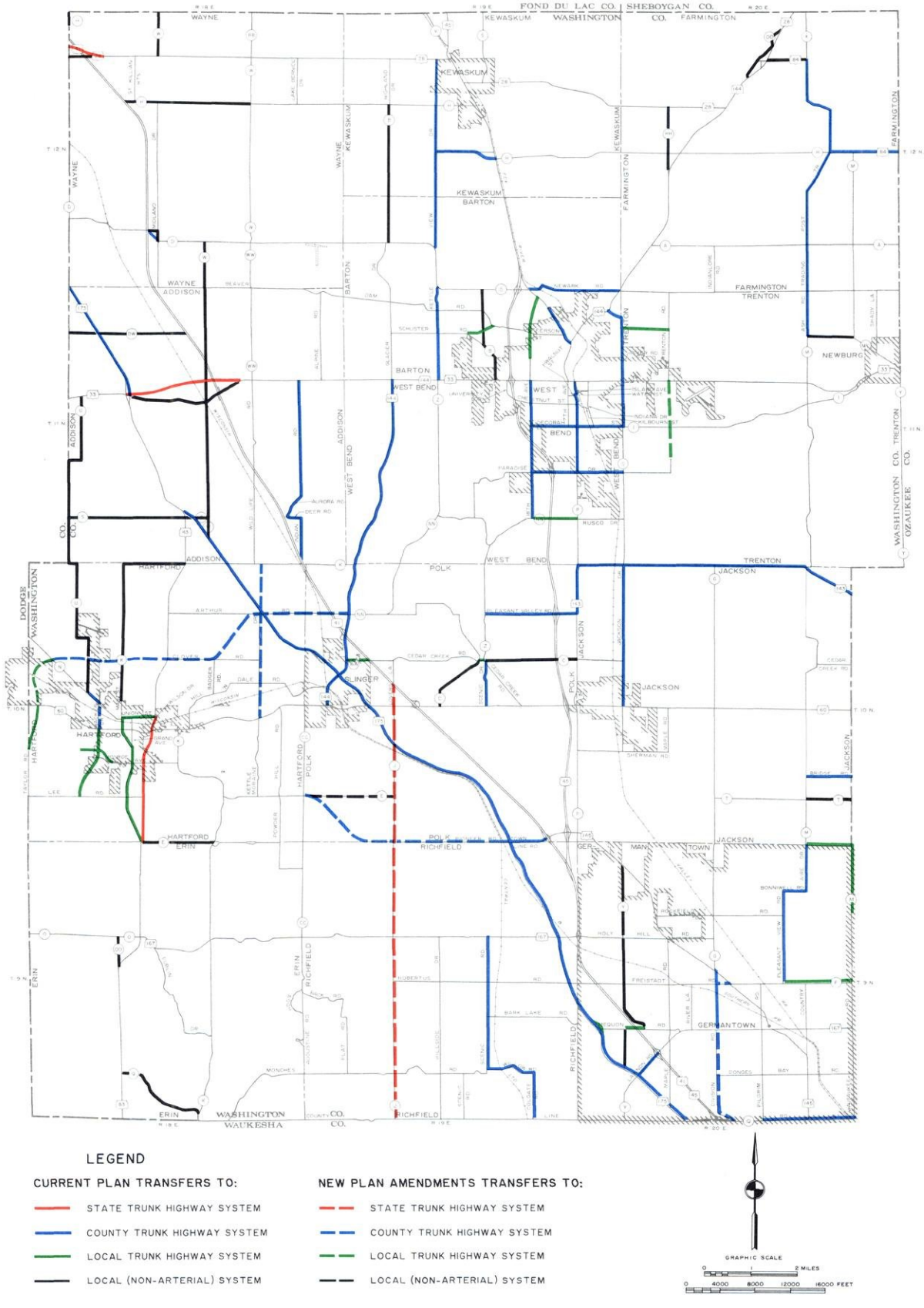
GRAPHIC SCALE

0 1 2 MILES

0 4000 8000 12000 16000 FEET

Map 14

CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITY IN WASHINGTON COUNTY RECOMMENDED UNDER THE FINAL PLAN



by the County Highway Committee, the Washington County Board of Supervisors, and the Commission is anticipated in 1990.

Racine County Jurisdictional Highway System Plan Update

Work continued during 1989 on the task of updating the Racine County jurisdictional highway system plan. As reported in the 1988 Annual Report, the updated Racine County plan is to take into account arterial street recommendations for eastern Racine County set forth in SEWRPC Memorandum Report No. 9, An Arterial Highway System Plan for Eastern Racine County, as well as proposals for changes to the current plan affecting the western portion of the County. During 1989, the Technical Coordinating and Advisory Committee on Jurisdictional Highway Planning for Racine County met twice to review Commission staff analyses of proposals to alter the current plan. These proposals included the addition to the plan of an outer bypass in the Burlington area and the removal from the plan of the long-proposed Three Mile Road extension between Green Bay Road and STH 31. At year's end, the Committee had formulated its preliminary recommendations and directed that the recommended plan amendments be taken to public hearing early in 1990.

Walworth County Jurisdictional Highway System Plan Update

In November 1989, the Commission initiated work on updating the Walworth County jurisdictional highway system plan. This work was requested by the Walworth County Highway Committee. By the end of the year, work had been completed on a review of the progress to date in implementing the original Walworth County jurisdictional highway system plan adopted in 1973. That information was to be considered by the Walworth County Jurisdictional Highway Planning Committee early in 1990.

Development Plan for the IH 94 South Corridor

Work continued during 1989 on the preparation of a land use and supporting transportation system plan for the IH 94 South Corridor. The corridor lies on either side of IH 94 extending from General Mitchell International Airport on the north to the Wisconsin-Illinois state line on the south. The corridor extends through three counties and encompasses portions of the Cities of Kenosha, Franklin, and Oak Creek; the Villages of Greendale, Pleasant Prairie, and Sturtevant; and the Towns of Bristol, Paris, Somers, Caledonia, Mt. Pleasant, Raymond, and Yorkville. Work on this subregional planning effort is being overseen by a 25-member Intergovernmental Coordinating and Technical Advisory Committee.

During 1989, the Commission completed all work on two alternative land use development plans for the corridor for the design year 2010. One plan is based upon an intermediate growth and centralized land use scenario for the Region, while the other plan is based upon an optimistic growth and decentralized land use scenario. From these two plans, the Advisory Committee formulated a recommended land use plan. That plan was reviewed by each of the local units of government concerned and adjusted to reflect the comments of local officials.

At year's end, work was underway to prepare forecasts of future travel demand on the arterial street and highway system serving the corridor, including both average weekday traffic volumes and afternoon peak-hour traffic volumes. During 1990, work is to be completed on the preparation of a transportation system plan to serve the land use pattern recommended for the corridor.

TRANSPORTATION SYSTEMS MANAGEMENT PLANNING

During 1989, the Commission completed a number of transportation systems management planning efforts for communities in southeastern Wisconsin. These included a traffic engineering study of a segment of Grandview Boulevard—CTH T—in the City of Waukesha; a traffic impact study of the interchange of STH 33 and CTH LL in Ozaukee County; and a traffic engineering study of Robinhood Drive in the Village of Menomonee Falls. In addition, the Commission conducted other work efforts attendant to ridesharing and transit system short-range planning.

Traffic Engineering Study of Grandview Boulevard—CTH T—from Northview Road to Fatima Drive

On July 1, 1988, the Highway and Transportation Committee of Waukesha County requested that the Commission conduct a traffic engineer-

ing study of Grandview Boulevard—CTH T—between Northview Road and Fatima Drive. This study was to identify existing traffic problems and to evaluate and recommend those short-range traffic engineering actions which may be expected to alleviate those traffic problems. The study also evaluated two intermediate traffic management actions which had been suggested by members of the Northwest Businessmen's Council of the Waukesha Chamber of Commerce. Finally, the year 2010 travel demand was forecast and a long-range improvement plan recommended to meet that demand. The study, including the analysis of alternative improvements and recommendations, is documented in SEWRPC Memorandum Report No. 42, Traffic Engineering Study of Grandview Boulevard—CTH T—from Northview Road to Fatima Drive. A mix of residential, commercial, service, office, and governmental land uses has resulted in a number of driveways providing access to Grandview Boulevard, particularly between Northview Road and Silvernail Road. In 1988, traffic volumes on the study segment of Grandview Boulevard exceeded the design capacity of the roadway. The pattern of hourly distribution of traffic exhibited on this study segment shows traffic increasing through the early morning to a peak of about 8 percent during the morning peak hour, remaining fairly constant through the midday before peaking at more than 8 percent during the evening peak hour, and then dropping later in the day. This pattern is typical of street segments with abutting commercial development.

The analyses of the signalized intersections indicate that during the evening peak hour, the traffic volume at the intersection of Grandview Boulevard with the westbound-to-southbound IH 94 off-ramp exceeds the design capacity and is equal to the actual capacity of the off-ramp approach to the intersection. Because this approach operates at its actual capacity, significant delay and vehicle queueing results. Capacity analysis of the other signalized intersections on Grandview Boulevard indicates that the approaches operate at or under design capacity during the evening peak hour.

The Commission found that vehicles entering and exiting the businesses located on the west side of Grandview Boulevard between Northview Road and Silvernail Road experience significant delay. Compounding the delay experienced by motorists entering and exiting the driveways as a result of the high traffic volumes is the speed along this portion of the study segment. The 85th percentile speed was measured to be approximately 43 miles per hour, compared to the posted speed limit of 35 miles per hour. The higher the travel speed, the longer the gap required for motorists to complete a left-turning movement.

A three-year motor vehicle accident history for the study segment of Grandview Boulevard indicates that although the number of accidents declined from 1986 to 1988, several intersections and segments of the study area were identified as accident problem locations.

A number of low-cost traffic engineering improvements to abate the existing traffic congestion, delay, and accident problems were identified, evaluated, and recommended for implementation. It is important to note that while these actions are designed to address a specific problem, they may be expected they have a beneficial impact on the other problems as well. Those low-cost traffic engineering improvements that were recommended for implementation include additional pavement marking and signing, the construction of consolidated driveways, and increased law enforcement activities.

The traffic engineering study also reviewed a number of intermediate-range improvement measures. These measures are designed to address the existing problems identified on the study segment, yet, because of their nature, may be expected to require significant amounts of time and capital to implement. One of these alternative actions is the extension of Woodburn Road from its current terminus easterly to Grandview Boulevard and abutting Merchants Grove on the south. At the request of the Northwest Businessmen's Council of the Waukesha Chamber of Commerce, the Commission reviewed two other alternative intermediate improvement measures—namely, the construction of a frontage road on the west side of Grandview Boulevard between Grandview Boulevard and the existing buildings, and a local service road west of Grandview Boulevard on the west side of the existing buildings. Neither of these alternative actions was recommended for implementation because of significant disruption to existing parking and internal circulation; the significant amount of right-of-way required; and cost. In addition, construction

of a frontage road may be expected to render implementation of improvements on Grandview Boulevard more difficult.

The study also contains a long-range highway improvement plan which is based on the forecast design year 2010 average weekday traffic volumes. The long-range plan stresses the importance of the implementation of the western Waukesha bypass to the study segment of Grandview Boulevard. Implementation of the bypass may be expected to remove between 5,000 and 7,000 vehicles per average weekday from the study segment of Grandview Boulevard. Therefore, completion of the bypass would postpone the need to improve Grandview Boulevard between Northview Road and Silvernail Road, and ultimately would permit the construction of a less intrusive roadway cross-section to meet the anticipated travel demand.

If the western Waukesha bypass is not constructed, a six-lane divided roadway would be required on Grandview Boulevard between Northview Road and Silvernail Road to meet the expected year 2010 travel demand. If this alternative were implemented, the curb-to-curb roadway width would increase from its current 48 feet to 104 feet. This would necessarily result in the loss of parking for some abutting property owners and may be expected to impair the internal parking lot circulation for other property owners. Finally, tapering this cross-section to match the two-lane roadway on Grandview Boulevard south of Northview Road would be extremely difficult.

The study report was transmitted to Waukesha County and the City of Waukesha for their consideration and implementation.

Traffic Impact Study of the Interchange of STH 33 and CTH LL

On June 8, 1989, officials of the City of Port Washington and Ozaukee County requested that the Commission staff conduct a study of the need to continue to maintain the existing grade-separated interchange at STH 33 and CTH LL. The study was to consider the advantages and disadvantages of maintaining or modifying the interchange, or of converting the interchange to an at-grade intersection. Study findings and recommendations are documented in SEWRPC Memorandum Report No. 46, Traffic Impact Study of the Interchange of STH 33 and CTH LL.

Upon its completion, the IH 43 freeway, which is located approximately one and one-half miles to the west of CTH LL, became the route for long-distance traffic in eastern Wisconsin; and USH 141 became CTH LL, reflecting its new role in carrying local traffic. The Wisconsin Department of Transportation owns and maintains the ramps and the lands on which they are located in the interchange of CTH LL and STH 33, as well as the overpass structure itself.

There is a need to determine whether the interchange should be maintained or converted to an at-grade intersection because urban development is approaching the interchange from both the City of Port Washington on the east and the Village of Saukville on the west along STH 33. Development of a portion of the parcel immediately east of the interchange ramps in the southeast quadrant is currently underway. By the year 2000, the interchange may be expected to be surrounded by urban development. Thus, a determination needs to be made whether the interchange should remain or be converted to an at-grade intersection so that the planned development expected to occur over the next decade, and the local street and utility system supporting such development, can be designed to accommodate either an interchange or an at-grade intersection.

One reason for providing and maintaining the interchange is to provide a high-speed, high-capacity controlled access route to serve large volumes of traffic for relatively long distances at a high level of safety. IH 43 currently provides such a route in the area. Moreover, the interchange at CTH LL and STH 33 is the only existing and planned interchange on CTH LL and cannot by itself provide such a high-speed, high-capacity route. Another reason for maintaining the grade separation would be to provide the safest and most efficient means to accommodate high volumes of intersecting traffic. However, both the existing and forecast year 2010 traffic volumes may be readily accommodated by an at-grade intersection, although exclusive turn lanes may be desirable and traffic signal installation may be warranted, particularly in the future. Therefore, the existing grade separation on CTH LL and STH 33 is no longer necessary.

An analysis was made of the costs of replacing the existing grade separation with an at-grade intersection and of maintaining the existing

grade separation. Based on that analysis, it was determined that in the near term, it would be less costly to maintain the existing grade separation and interchange ramps. However, in the long term, it would be more cost-effective to remove the grade separation and construct an at-grade intersection. It should be noted that failure to move in the short term toward replacing the grade separation with an at-grade intersection may result in land development and a local roadway system in the vicinity of the interchange being built to accommodate the interchange and not the potential at-grade intersection. It was, accordingly, recommended that the City of Port Washington, Ozaukee County, and the Wisconsin Department of Transportation acknowledge the long-term desirability of replacing the grade separation between CTH LL and STH 33 with an at-grade intersection and work toward replacement in the near-term future. If short-term replacement of the grade separation with an at-grade intersection is not feasible, then consideration should be given to reconstructing the interchange in the short term to accommodate potential development in the southeast quadrant of the interchange. This reconstruction would eliminate the on- and off-ramps in the southeast quadrant and reconstruct the on- and off-ramps in the northwest quadrant to permit all traffic movements to be made between CTH LL and STH 33.

The study report was transmitted to the Wisconsin Department of Transportation, Ozaukee County, and the City of Port Washington for their consideration and implementation.

Traffic Engineering Study of Robinhood Drive in the Village of Menomonee Falls

On March 31, 1989, the Village of Menomonee Falls requested that the Commission staff conduct a traffic engineering study of Robinhood Drive in the Village of Menomonee Falls because local residents had become concerned about the excessive speeds of vehicles utilizing Robinhood Drive. The study, including analysis of alternative improvements and recommendations, is documented in SEWRPC Memorandum Report No. 33, Traffic Engineering Study of Robinhood Drive in the Village of Menomonee Falls.

A spot speed study was conducted by the Commission on May 3 and 4, 1989, to establish the compliance with the 25-mile-per-hour posted speed limit. The average travel speeds were determined to be 31.6 miles per hour and 30.9 miles per hour for vehicles traveling eastbound and westbound, respectively. The 85th percentile speed, the speed at or below which 85 percent of the traffic is traveling, was determined to be 36.3 miles per hour for eastbound Robinhood Drive traffic and 34.7 miles per hour for westbound traffic. Based on this study, it can be concluded that about half of all motorists were traveling at least five miles per hour over the speed limit and 15 percent were traveling at least 10 miles per hour over the speed limit.

To control the speed of vehicles on Robinhood Drive, a number of alternative traffic control measures, categorized into physical and passive actions, were evaluated. Physical actions modify the street or physically affect the vehicle and motorist. Passive actions are those actions that influence the driver as a result of reaction to a traffic control device. Several physical actions were considered and one, the installation of speed-control bumps, was recommended to the Village for implementation to control vehicular speeds on the study segment of Robinhood Drive. The closing of Robinhood Drive between Lavergne Street and Hiawatha Court was recommended for future consideration only if the speed-control humps proved unsatisfactory. If neither the speed humps nor the street closing proved to be acceptable to the Village, an increase in law enforcement activity was recommended.

The study report was transmitted to the Village for its consideration and implementation.

Ridesharing Programs

One of the recommendations of the regional transportation systems management plan is the continued promotion of ridesharing. A formal Milwaukee area carpooling program was conducted by Milwaukee County from April 1975 to April 1976. The Commission assisted in that effort, conducting an evaluation of the effectiveness of the carpooling project and determining the extent of carpooling in the Milwaukee metropolitan area. The results of that initial effort are presented in SEWRPC Technical Report No. 20, Carpooling in the Metropolitan Milwaukee Area. That initial carpooling effort indicated a sufficient latent demand for carpooling programs and concluded that a continued

carpool promotional program would be effective in reducing motor fuel consumption and automobile traffic.

Late in 1979 Milwaukee County received approval of a funding request for federal urban aid funds to conduct a three-year continuing carpool promotional program. This program included media promotion of ridesharing activities, direct contact with major employers to encourage carpooling on an industry-by-industry basis, and a computerized matching program for potential carpoolers. The Commission assisted in that effort by providing the computer facilities necessary to conduct the matching program. In addition, near the end of the third year of the program, the Commission conducted an assessment of the program to determine the changes in the extent of ridesharing over the duration of the three-year program; the characteristics of rideshare participants; factors influencing the decision not to rideshare; the impact of ridesharing on traffic user costs and energy conservation; the latent demand for ridesharing; and the awareness of the Milwaukee Area Rideshare Program by commuters.

Based on the survey findings it was recommended that the program be continued, since the benefits derived by the program substantially outweighed its modest cost. It was further recommended that the program be extended to residents of Kenosha, Racine, and Walworth Counties; techniques be employed to improve the timeliness of response to rideshare requests; the use of public park-ride and park-and-pool lots be promoted for ridesharing purposes; the promotion of the use of vanpools, buspools, and taxipools be expanded; and a diversified marketing program be developed to reach a broader spectrum of employed persons. The findings and recommendations of the survey are documented in SEWRPC Technical Report No. 28, Evaluation of the Milwaukee Area Rideshare Program: 1979-1982.

Early in 1983, Milwaukee County received approval of a funding request for federal urban aid funds to conduct a two-year ridesharing promotional program. This program includes media promotion of ridesharing activities, continuation of a computerized matching program for potential carpoolers with the additional feature of staff contact to follow up persons who have requested services, development of a marketing program to focus on employers and employees in the Milwaukee central business district, promotion of park-ride lots for carpool use, and erection of 35 additional rideshare information signs. Late in 1984, federal funding was provided to extend the promotional program through 1989. In April 1987, administrative responsibilities for the conduct of the rideshare program were transferred from Milwaukee County to the Wisconsin Department of Transportation, District 2. The Commission has continued to assist in this effort by providing the computer facilities necessary to conduct the matching program.

During 1989, a total of 1,366 inquiries were made to the Wisconsin Department of Transportation concerning carpooling. Of this total, 670 inquiries resulted in attempts to match individuals with potential carpoolers. In all but 50 cases, matches were found in the computerized file maintained by the Commission and the individual was provided with a list of potential carpoolers.

Transit System Development Plans

During the year the Commission completed work on a new development plan for the public transit system serving the City of Waukesha. The new plan is intended to provide direction in the operation and development of the City of Waukesha transit system into the early 1990's, in much the same way the original plan provided direction to the City during the early 1980's, when the City of Waukesha was establishing a new fixed-route bus system. The majority of the recommendations in the original plan were successfully implemented.

The new transit system development plan for the City of Waukesha is set forth in SEWRPC Community Assistance Planning Report No. 154, A Transit System Development Plan for the City of Waukesha: 1988-1992. Work on the new plan was conducted under the guidance of the City of Waukesha Transit System Development Plan Advisory Committee. As the initial step in preparing the new transit system development plan, information on the basic characteristics of the City of Waukesha transit system and the City of Waukesha transit service area was assembled. This information included data on the current operation of the existing City of Waukesha transit system and the current population, land use, and employment characteristics of the City of Waukesha. After assembling this information, analyses were conducted to assess

the current performance of the City of Waukesha transit system and identify the current and potential short-range—five-year—transit travel markets within the City.

The performance of the City of Waukesha transit system was analyzed to determine the extent to which the existing system met the transit service objectives and standards adopted by the Advisory Committee. The performance evaluation was conducted at two levels. At the first level, an assessment of performance was made on a systemwide basis which examined the extent to which the transit system served the population and major land uses within the Waukesha area. The second part of this assessment evaluated the performance of each route in the transit system based upon its ridership, productivity, and financial performance. Further analyses of each route were then conducted to identify productive and nonproductive route segments. This performance evaluation of the existing transit system indicated that the system was providing excellent areal coverage of the residential areas of the City of Waukesha and good coverage of the major nonresidential land use centers in the study area. The transit system was also found to provide excellent coverage of residential concentrations of transit-dependent population groups; and good coverage of facilities used by elderly and handicapped persons. However, the analysis concluded that the existing route structure did not well serve much of the proposed new residential, industrial, commercial, and office development within the City of Waukesha. Some changes in the route configuration of the existing transit system would, therefore, be needed if the City were to maintain its policy of providing complete geographic coverage within the City, including areas of proposed new development. The analyses also indicated that certain changes in the transit system operation—including the elimination of underutilized bus trips and reductions in the days and hours of system operation—should be considered to improve the overall performance of the system and reduce public subsidy requirements.

The data gathered from the inventories and analyses were then used as the basis for the development and evaluation of alternative transit service changes. The alternative service changes considered by the Advisory Committee included a set of three basic alternative service plans, plus a set of three additional service changes that could be made under any of the three basic service plans. At the specific request of the Advisory Committee, the alternatives examined did not include any potential service reductions, but rather focused on increasing service to better serve existing ridership markets and extending service into areas of new or expanding development within the City. The three basic service alternatives for the City of Waukesha transit system were:

1. A "status quo" alternative, which proposed that the City of Waukesha continue to operate without changing the transit system operated by the City in 1988.

2. An alternative which proposed routing changes to four of the eight existing bus routes and the addition of one new bus route to provide transit service to new residential areas in the western portion of the City, and to unserved elderly housing complexes. In addition, this alternative proposed an expansion of transit service serving city elementary and secondary school students residing less than two miles from school who are not now provided with yellow school bus service.

3. An alternative which included the same changes proposed under Alternative 2, with further modifications to three existing bus routes and the addition of a second new bus route in order to serve new residential areas in the southeastern portion of the City.

The three additional service changes that could be made under any of the three basic service alternatives were:

1. Improved bus service between the City of Waukesha and the Blue Mound Road corridor. This service change proposed that the City of Waukesha and Waukesha County agree to combine the separate transit services that each agency currently operates within the corridor into one bus service between downtown Waukesha and the Brookfield Square Shopping Center. That service could be operated by either the City or the County. The successful implementation of this change would require agreement between the City and the County on issues related to the administration, operation, and funding of the service.

2. Reduction of off-peak headways on selected transit system routes. This service change proposed that headways on some transit system routes be reduced from 60 to 30 minutes during weekday midday periods and all day Saturday in order to improve transfer coordination among city bus routes at the downtown transfer terminal.

3. Provision of peak-hour express bus service to reduce travel times between downtown Waukesha and two neighboring major traffic generators—the General Electric Company, Medical Systems Division plant, and the Waukesha County Technical College—located in the far northwest portion of the study area.

A comparative evaluation of these alternatives was conducted to identify differences in terms of projected impacts on transit system ridership and service levels, the overall effectiveness and efficiencies of the transit system, and city funding requirements. Based upon the evaluation of the three basic service alternatives, the Advisory Committee ultimately recommended implementation of the transit service modifications proposed under Alternatives 2 and 3 as soon as practicable based on ridership trends and the pace with which new development occurs within the City. Both these alternatives would expand transit service to provide full coverage of the new and expanding residential areas within the City, as well as increase the regular school day-only transit service provided for students not served by the existing yellow school bus service. Both alternatives would also result in some improvement in the overall effectiveness and efficiency of the transit system from that projected for the system assuming no changes in service over the planning period.

With respect to the alternative additional service changes that could be made under any of the basic service alternatives, the Committee recommended that only the restructuring of bus service between downtown Waukesha and the Brookfield Square Shopping Center be implemented. Because it was recognized that implementation of this change would require agreement between the City and the County on issues relating to the administration, operation, and funding of the restructured bus service, the Committee also recommended that the City and the County initiate discussions needed to reach agreement on restructuring the existing bus service. The reduction of off-peak headways on selected bus routes and the provision of express bus service on Route No. 9 were not recommended for implementation at this time.

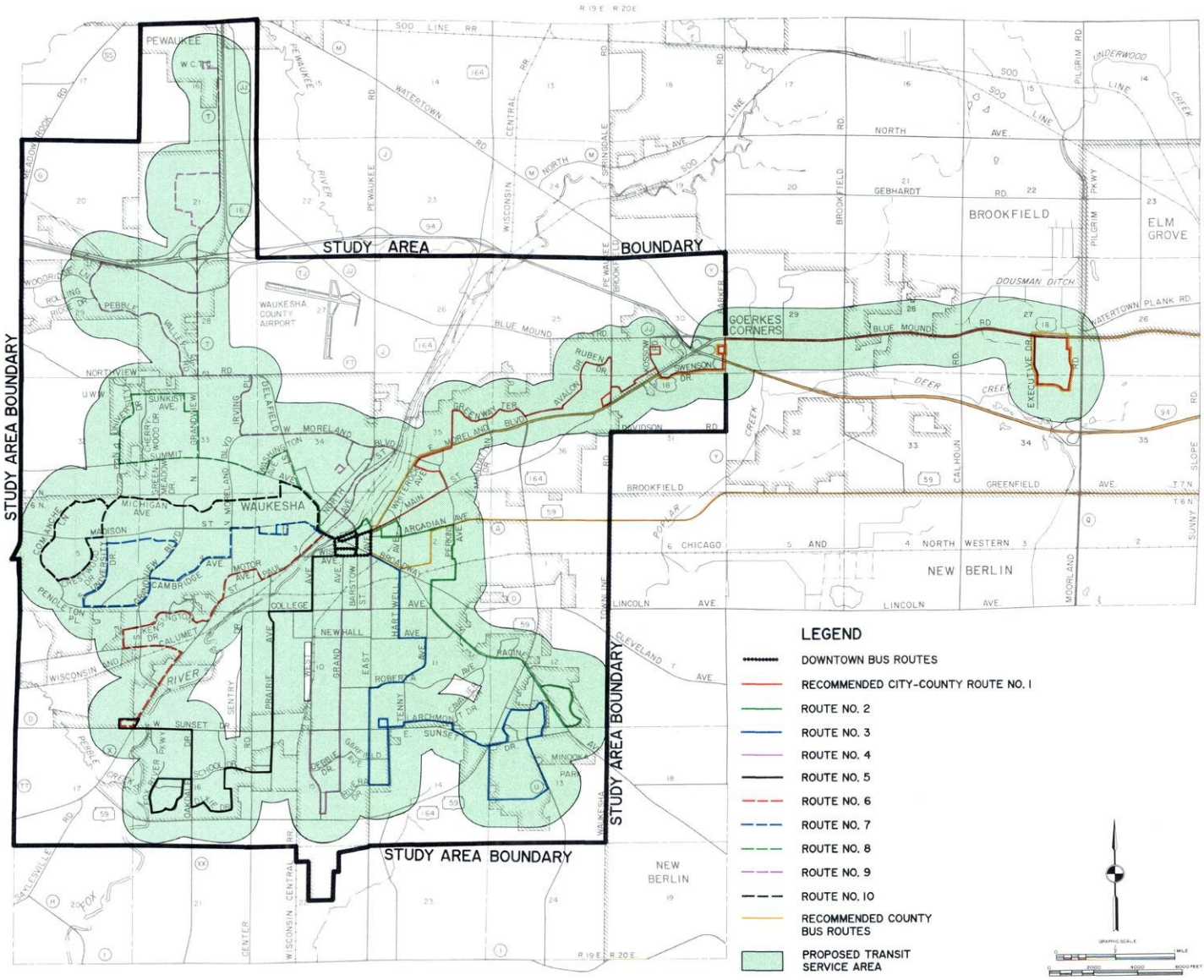
The recommended plan for the City's fixed-route transit system, shown on Map 15, calls for a number of specific changes in the existing service levels and route structure of the transit system in order to expand the basic geographic coverage of the system to include areas of proposed new residential development, as well as to increase the service provided for specific ridership markets. Foremost among these basic service changes would be the restructuring of Route No. 7 and the addition of one new regular bus route to improve transit service in the western portion of the City; the addition of special school day-only transit services to improve the transit service provided to city elementary and secondary school students who reside less than two miles from their school; the adjustment of the downtown routing of Routes No. 2, 6, and 9; and the reduction of off-peak headways on Route No. 8 during weekday midday periods and Route No. 4 all day Saturdays. These proposed service changes could be considered for immediate implementation by the City.

The recommended plan also calls for the ultimate implementation of additional service changes affecting the basic geographic coverage of the system, including the creation of a second new bus route to provide for more direct travel between the southwest portion of the City and downtown Waukesha by splitting existing Route No. 6 into two separate routes; and the restructuring of Routes No. 2 and 3 to provide transit service to three proposed areas of new residential development in the southeast portion of the City. While the modification of Route No. 6 could also be considered for immediate implementation based on existing conditions along the route, the modification of Routes No. 2 and 3 would be implemented if, and as, proposed additional residential development actually occurs within the southeast portion of the City.

Finally, the recommended plan includes the previously discussed restructuring of the existing city and county bus services in the corridor between downtown Waukesha and the Brook-

Map 15

RECOMMENDED FIXED-ROUTE TRANSIT SERVICES FOR THE CITY OF WAUKESHA



field Square Shopping Center, and improved coordination between the local bus services provided by the City of Waukesha and the commuter bus services provided by Waukesha County. The proposed restructuring of the existing bus services between downtown Waukesha and the Brookfield Square Shopping Center is a key element of the recommended major restructuring of the existing rapid transit services provided between downtown Waukesha and downtown Milwaukee. In this respect, the transit system development plan for Waukesha County, completed by the Commission in 1988 and discussed in the 1988 Annual Report, recommends that the existing rapid transit service be restructured to shift bus runs currently operating over Blue Mound Road between Waukesha and Milwaukee to operate instead over the freeway to reduce travel times. Bus service along Blue Mound Road would then be provided by a local bus route between downtown Waukesha and the Brookfield Sqaure Shopping Center which could be operated by either the County or the City, but funded by both govern-

mental units. The recommended restructuring of the Waukesha-to-Milwaukee rapid transit services is not likely to be implemented until an agreement is reached between the City and the County on the issues associated with the implementation of the restructured Waukesha-to-Brookfield Square bus service. Until such an agreement is reached, it was recommended that actions be taken by both the County and the City to encourage the use of the existing county bus services connecting the City of Waukesha with both downtown Milwaukee and the Brookfield Square Shopping Center. The plan also recommends that attempts be made to maximize the coordination of arrival and departure times of the county and city bus trips serving the downtown Waukesha bus terminal when the recommended restructuring of the existing Waukesha-to-Milwaukee rapid transit services is finally implemented. Such coordination may be expected to result in increased ridership on both transit systems.

By the year's end, the City of Waukesha transit system development plan had been reviewed and approved by the Advisory Committee. Publication of the final study report is expected to be completed early in 1990.

In November 1989, the Commission staff met with officials from the City of Kenosha Department of Transportation to discuss their request for the Commission to prepare a new development plan for the City of Kenosha transit system. The Commission subsequently agreed to initiate work immediately on a new transit system development plan for the City.

In December 1989, the Commission staff undertook the conduct of an on-board bus survey of Kenosha transit system users and counts of boarding and alighting passengers at bus stops along regular bus routes. The on-board bus survey was conducted on the regular routes and special school tripper routes of the transit system. The survey asked passengers for information on their trip origin and destination, trip purpose, mode of arrival at the bus stop, and method of payment. Information was also gathered on socioeconomic characteristics of the passengers, including home residence, age, income, and automobile availability. The survey was designed to assess transit service usage and needs. Counts of passengers boarding and alighting at bus stops along each regular route were also conducted concurrently with the survey. By the end of 1989 the survey forms and passenger count sheets were being encoded for computer tabulation.

Private Sector Involvement in Public Transit

In 1989 the Commission continued a study of private sector involvement in the provision of public transit services. One of the primary functions of this work effort was to provide assistance to transit operators in the Region, upon request, with competitively obtaining services from private transit operators, and with meeting guidelines concerning private sector involvement as set forth by the Urban Mass Transportation Administration (UMTA). Extensive assistance was provided to the Waukesha County staff in efforts to competitively procure transit services for the Waukesha County transit system. The Commission staff worked with, and assisted, the Waukesha County staff in understanding and complying with the federally mandated Section 13(c) labor and protection agreements as they apply to transit services provided by the County. During 1988, the Commission staff completed the Waukesha County transit plan, which recommended that the County continue to contract principally with private firms through a competitive bidding process for transit services. The assistance provided by the Commission to Waukesha County was a major factor leading to a decision by Waukesha County to competitively award service contracts for five of the six bus routes which the County operated during 1988.

During 1989, work was completed on much of the memorandum report describing the existing private sector involvement in southeastern Wisconsin transit systems, as well as the potential for increased private sector involvement. The report will describe the fully allocated cost modeling procedures which can be utilized by local transit operators, and potential private sector contracting opportunities and barriers to those opportunities.

Milwaukee County Short-Range Transit Planning

During 1989, short-range transit planning activities for the Milwaukee County transit system were conducted by the staff of that system and the Milwaukee County Department of Public Works. Through this planning effort, the follow-

ing major activities were carried out during the year: preparation and conditional approval of a transportation plan for the transportation handicapped, preparation of a transit maintenance plan, and development of the annual element of the regional transportation improvement program. In addition, this work effort included the preparation of such federally required reports as a Title VI assessment evaluating the provision of transit service to special population groups, and updated programs for the inclusion of business enterprises operated by the disadvantaged, minorities, and women in the provision of transit service.

ELDERLY AND HANDICAPPED TRANSPORTATION PLANNING

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

Section 504 Public Transit Programs for Handicapped Persons

The adopted transportation plan for the transportation handicapped was amended during 1987 following the completion of public transit plans for handicapped persons for each of the urban public transit operators within the Region. These planning efforts were designed to identify actions necessary to ensure that the planning and provision of public transit service in the Region is fully in accordance with Section 504 of the federal Rehabilitation Act of 1972. That act prohibits discrimination on the basis of handicap in all programs and activities receiving federal financial assistance. These planning efforts were conducted in accordance with new rules promulgated by the Secretary of the U. S. Department of Transportation and issued in 1986. The recommended public transit programs for each transit operator are documented in SEWRPC Memorandum Reports No. 17, A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility; No. 21, A Public Transit Program for Handicapped Persons—Milwaukee County Transit System; No. 22, A Public Transit Program for Handicapped Persons—Waukesha County Transit System; No. 23, A Public Transit Program for Handicapped Persons—City of Kenosha Transit System; and No. 24, A Public Transit Program for Handicapped Persons—City of Racine Transit System.

The new—or "final"—regulations are more explicit than previous regulations in that they mandate that each recipient's public transportation program must make services available to handicapped persons through one of three service options: 1) providing some form of demand-responsive and specialized transportation service which is accessible to wheelchair-bound and semiambulatory persons; 2) providing fixed-route bus service which is accessible to wheelchair-bound and semiambulatory persons over the regular routes operated by the recipient; or 3) providing a mix of accessible specialized transportation and accessible bus services.

For four of the five major transit operators—Milwaukee County and the Cities of Kenosha, Racine, and Waukesha—the plans recommend

essentially a continuation of the specialized transportation services currently being provided. The plan for the Waukesha County transit system recommends certain modifications to the current special efforts strategy in order for the system's program to meet the new regulations. A summary of the recommended programs for each of the five operators is provided below.

Milwaukee County

The handicapped transit program for Milwaukee County recommended that the County continue to subsidize the trips made by handicapped persons using the door-to-door specialized transportation services provided in the County by private taxicab companies and wheelchair van carriers. Two private taxicab companies and 14 private van carriers were under contract to participate in the program during 1989. The service area for the program is all of Milwaukee County and, under the program, eligible users request service from a participating provider in accordance with the methods being used by the provider. Generally, taxicab service is available seven days a week, 24 hours a day. Wheelchair van carrier service is generally available seven days a week between 7:00 a.m. and midnight. To become eligible for the program, handicapped persons must register for the program, pay an annual registration fee of $7.00, and obtain a certification form from the Milwaukee County Department of Public Works. The completed form is then submitted by the Department to the handicapped person's doctor or licensed health professional for certification, and, upon such certification, the person is registered in the program.

The handicapped transit program for Milwaukee County was approved by the federal Urban Mass Transportation Administration—UMTA—in June 1988. During 1989, about 367,600 one-way trips were made on the accessible transit services offered under the user-side subsidy program, up about 3.5 percent from 355,100 trips made in 1988.

Waukesha County

The handicapped transit program for Waukesha County recommended that the County continue its present strategy of providing door-to-door, lift-equipped bus service to handicapped persons through its "parallel commuter bus transportation project." Under this program, the County offers door-to-door, lift-equipped van service to handicapped individuals on an advance-reservation basis for trips with origins and destinations within one mile of both sides of any of the six bus routes subsidized by the County during 1989. Four of these routes were operated by a private transit operator, Wisconsin Coach Lines, Inc., and the remaining two routes were operated by the private management firm for the Milwaukee County Transit System.

Under the recommended program, the service characteristics of the existing program would be modified to allow all handicapped county residents to use the program. Only handicapped residents 18 years of age and older are eligible for the current program. Also, origin-to-destination van service for the handicapped would be offered an additional 46 hours a week along three of the six existing mass transit bus routes which operate in the corridor between the City of Waukesha in Waukesha County and downtown Milwaukee. These three bus routes provide regular local transit service and are operated throughout the entire day. With this expanded service, the hours and days of specialized service would be virtually the same as those of the regular bus services. In addition, the County would provide transportation to handicapped persons for trips made between the terminals, park-ride lots, and bus stops served by the remaining three bus routes subsidized by the County, which provide peak-hour, commuter-oriented service between outlying Waukesha County communities and downtown Milwaukee.

Currently, the parallel commuter bus transportation project is provided and administered by the Waukesha County Department of Aging in combination with two other projects—the Ride Line transportation project and the PM Ride Line transportation project. The Ride Line project offers an advance-reservation, door-to-door transportation service to all persons 60 years of age and older and to handicapped persons over the age of 18. The service is available weekdays between 8:00 a.m. and 4:30 p.m. The PM Ride Line project provides similar services on Wednesday and Friday evenings and Saturday afternoons and evenings. Under the recommended program, all requests for rides under the Ride Line and PM Ride Line projects would be reviewed to determine if they could be filled by the County's

parallel commuter bus transportation project. This action would enable the County to estimate the cost of providing specialized transportation service at the full performance level. It is further recommended that the fares charged for parallel commuter bus transportation be changed to be similar to those charged under the current Ride Line and PM projects for trips made within Waukesha County. Fares for trips made between Waukesha and Milwaukee Counties would be slightly higher.

Formal UMTA approval of the County's proposed program was received in August 1988. The County is currently considering how the proposed changes can best be implemented. During 1989, an estimated 1,300 trips were made on the Ride Line and PM Ride Line service offered under the parallel commuter bus transportation project, up about 18 percent from 1,100 trips made in 1988.

City of Kenosha

The handicapped transit program for the City of Kenosha recommended that the City continue to provide the dual special efforts strategy currently in effect. Under this program, the City provides on-call accessible bus service on the regular fixed routes, and participates in the provision of a specialized door-to-door transportation service that operates throughout the service area of the City's transit system. The service currently provided as part of the accessible fixed-route bus service is available to all residents in the City who require the use of a wheelchair. The door-to-door—Care-A-Van—service is available to persons 60 years of age and older and to all handicapped persons who do not have access to the City's regular public transportation system. Both services are available on an advance-reservation basis. The accessible fixed-route service would continue to be provided between 6:00 a.m. and 6:00 p.m. Monday through Saturday. The Care-A-Van program would continue to be provided generally from 7:30 a.m. to 7:00 p.m. weekdays, and from 9:00 a.m. to 7:00 p.m. Saturdays. The hours and days of operation for the specialized services are virtually the same as those of the fixed-route service operated by the City.

The handicapped transit program for the City of Kenosha was approved by UMTA in October 1987. During 1989, about 13,600 trips were made on the specialized transportation services supported by the City, representing essentially no change in comparison to the 1988 ridership level.

City of Racine

The handicapped transit program for the City of Racine recommended that the City continue to provide specialized transportation service through a project administered by the Racine County Human Services Department in eastern Racine County, which is partially funded by the City of Racine's public transportation program. Under this program, an accessible door-to-door transportation service is available to all handicapped persons in the service area of any of the regular bus routes operated by the City who are unable to use the City's regular public transportation system.

The service provided under the current program is available on an advance-reservation basis. Service is provided between 7:00 a.m. and 6:30 p.m. weekdays, and between 10:00 a.m. and 4:00 p.m. Saturdays. These hours are somewhat more restrictive than the regular hours of operation for the fixed-route service. The area served includes that portion of Racine County east of USH 45, which encompasses all of the Racine urbanized area as defined by the U. S. Bureau of the Census, and includes the entire area served by the City's regular fixed-route bus service.

UMTA approval of the City of Racine's handicapped transit program was received in October 1987. About 18,900 trips were made during 1989 on the Racine County specialized transportation service used by the City for its handicapped transit program, representing a decrease of about 10 percent from the 1988 ridership level of 21,000.

City of Waukesha

The handicapped transit program for the City of Waukesha recommended that the Waukesha Transit System Utility continue to provide the Metrolift program operated by the Utility. Under this program, which serves all areas within one-quarter mile of the City's regular bus routes, accessible, door-to-door transportation service is provided to handicapped persons on an advance-reservation basis. The service is available to all handicapped persons who are unable to use the regular bus service provided by the Utility.

Service under the Metrolift program is available between 6:15 a.m. and 6:00 p.m. weekdays, and between 9:00 a.m. and 6:00 p.m. Saturdays. These hours and days of operation are virtually the same as those of the regular fixed-route bus service.

The City was notified that its handicapped transit program had been approved by UMTA in May 1988. Ridership on the City's Metrolift program during 1989 was about 6,200 trips, up about 51 percent from 4,100 trips made in 1988.

TRANSPORTATION IMPROVEMENT PROGRAM

In December 1989, the Commission completed an updated five-year transportation improvement program (TIP) for the Kenosha, Milwaukee, and Racine urbanized areas of the Region, as required by the U. S. Department of Transportation. This program is set forth in a document entitled, A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994. The 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 three urbanized areas of the Region, and of the Cities of Kenosha, Milwaukee, and Racine and the Counties of Milwaukee and Waukesha as the operators of special mass transportation systems in these areas.

The 1990-1994 TIP document identifies all highway and mass transportation projects in the three urbanized areas programmed for implementation during this five-year period with the aid of U. S. Department of Transportation funds administered through the Federal Highway Administration (FHwA) and the Urban Mass Transportation Administration (UMTA). Following approval of the 1990-1994 TIP by the Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming for the Kenosha, Milwaukee, and Racine Urbanized Areas, the Regional Planning Commission formally adopted the program on December 4, 1989.

The 1990-1994 TIP authorizes funding for many important projects essential to maintaining the existing highway system, including the resurfacing of the East-West Freeway (IH 94) from the Waukesha County line to the Marquette Interchange (including the rehabilitation of the bridges); the resurfacing of Ryan Road from S. 27th Street to Loomis Road; and reconstruction of the Wisconsin Avenue viaduct over the Menomonee River and the 6th Street viaduct over the Menomonee River Valley. The TIP also authorizes funding for key transit maintenance projects, including the construction of a centralized transfer station for the City of Kenosha transit system and the purchase of new buses for the Milwaukee County Transit System. In addition, the TIP authorizes projects essential to the improvement of the Region's highway and transit systems. For example, included in the TIP are the reconstruction of the Silver Spring Interchange on IH 43; the reconstruction of W. Blue Mound Road (USH 18) in eastern Waukesha County; and the construction of the Hoan Bridge arterial connection.

Within the three urbanized areas of the Region, the program contains 487 projects for the five-year programming period, representing a total potential investment in transportation improvement and services of about $919 million. Of this total, $360 million, or about 39 percent, is proposed to be provided in federal funds; $323 million, or about 35 percent, in state funds; and $236 million, or about 26 percent, in local funds.

While the entire five-year program is an important planning tool, it is the annual element which is of primary interest, for it represents those projects that are intended to be implemented over the 12- to 24-month period beginning January 1, 1990. The annual element for the federal aid highway funding support is a 21-month element to match the federal fiscal year funding allocation, and is broken into the first nine months of calendar year 1990 and the federal 1990 fiscal year beginning October 1, 1990 and extending through September 30, 1991. For federally funded transit projects involving transit system operating assistance, the annual element consists of a 24-month period, calendar years 1990 and 1991. All other federally assisted transit projects within the transportation improvement program have an annual element consisting of a 12-month period of calendar year 1990.

A cost summary for these projects is shown in Table 17. The cost data in this table represent the proposed annual element expenditures for a total of 269 projects.

Table 17

COST SUMMARY OF PROJECTS WITHIN ANNUAL ELEMENT OF TRANSPORTATION IMPROVEMENT PROGRAM BY URBANIZED AREA

Funding	Kenosha	Milwaukee	Racine	Total
Federal	$5,027,400	$146,018,150	$6,582,300	$157,627,850
State	4,276,100	108,105,950	4,990,800	117,372,850
Local	4,637,500	88,454,900	3,640,600	96,733,000
Total	$13,941,000	$342,579,000	$15,213,700	$371,733,700

In order to provide a basis for a better under standing of the types of transportation improvements proposed to be undertaken in the three urbanized areas, projects have been grouped into nine categories: 1) highway preservation—that is, reconstruction of existing facilities to maintain present capacities; 2) highway improvement—that is, reconstruction of existing facilities to expand present capacities; 3) highway expansion—that is, the construction of new facilities; 4) highway safety; 5) highway-related environmental enhancement projects; 6) off-federal aid system highway improvement; 7) transit preservation; 8) transit improvement; and 9) transit expansion projects. Figure 64 graphically reflects the proposed expenditures in the annual element of these nine project categories for each of the three urbanized areas. At least three of the expenditure patterns apparent in the figures deserve some comment:

- A significant proportion of financial resources is to be devoted to the preservation of the existing transportation facilities and services in the 1990 annual element—about 59 percent in the Milwaukee urbanized area, about 70 percent in the Racine urbanized area, and about 45 percent in the Kenosha urbanized area. This allocation of resources is especially notable when it is realized that virtually none of the funding for routine highway maintenance activities—snow plowing, ice control, grass cutting, power for street lighting, and litter pickup—is included in the TIP.

- The expenditure of funds for highway expansion is a small portion of the total expenditures in the urbanized areas of the Region—no expenditures for this purpose are proposed in the Kenosha urbanized area, and about 4 percent of the total expenditures is proposed for this purpose in the Milwaukee urbanized area, and about 13 percent in the Racine urbanized area.

- A significant proportion of financial resources is devoted to public transit projects, which account for about 47 percent of the resources in the Milwaukee urbanized area annual element, about 49 percent of the resources in the Racine urbanized area annual element, and about 37 percent of the resources in the Kenosha urbanized area annual element.

A comparison of the 1990 annual element of the TIP with the 1989 annual element of the 1989-1993 TIP as reported in the Commission's 1988 Annual Report indicated the following:

- In the Kenosha urbanized area, total expenditures are proposed to increase by about 63 percent—from $8.5 million to about $13.9 million. Expenditures for highways, which constituted about 29 percent of total expenditures in 1989, are proposed to equal about 63 percent of total expenditures in 1990. Expenditures for transit were about 71 percent of total expenditures in 1989, and are proposed to account for about 37 percent of expenditures in 1990.

- In the Milwaukee urbanized area, total expenditures are proposed to decrease by about 6 percent—from about $363.8 million to about $342.6 million. Expenditures for highways, which made up about 48 percent of total expenditures in 1989, are proposed to constitute about 52 percent of expenditures in 1990.

- In the Racine urbanized area, total expenditures are proposed to increase by about 17 percent—from $13.0 million to $15.2

million. Expenditures for highways, which made up about 48 percent of total expenditures in 1989, are proposed to account for about 50 percent of total expenditures in 1990. Expenditures for transit were about 52 percent of total expenditures in 1989, and are proposed to account for about 50 percent of expenditures in 1990.

RAIL TRANSPORTATION PLANNING

The Regional Planning Commission participates in railway planning by monitoring the status of railway service within the Southeastern Wisconsin Region, proposals for service changes, and related issues that may affect the Region, and by providing technical assistance to local communities as requested.

Regional Railway System

As of December 31, 1989, railway freight service was being provided within southeastern Wisconsin over a total of 504 active miles of railway line by seven railroad companies. Three of the six carriers operated about 75 percent of the total railway miles in the Region: the Chicago & North Western Transportation Company, which operated 175 miles, or 35 percent of the railway mileage in the Region; Wisconsin Central Limited, which operated 109 miles, or 22 percent of the railway miles in the Region; and the Soo Line Railroad Company, which operated 96 miles, or 19 percent of the railway miles in the Region. Operation of the remaining 25 percent of the railway mileage in the Region was divided among four other carriers: the Wisconsin & Calumet Railroad Company, Inc.—57 miles; the Fox River Valley Railroad Company—27 miles; the Wisconsin & Southern Railroad Company—34 miles; and the Municipality of East Troy Wisconsin Railroad—6 miles.

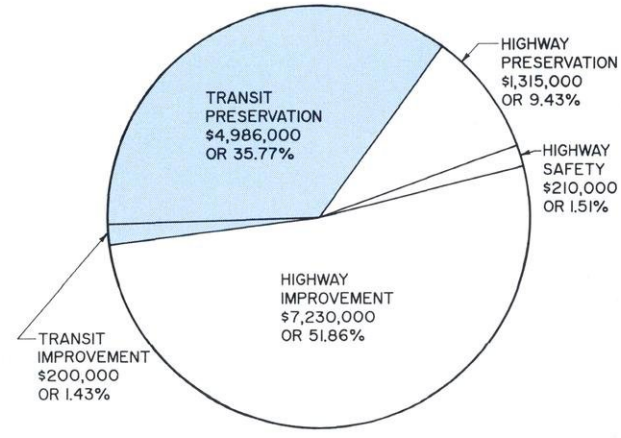
The locations of the common carrier railway lines in southeastern Wisconsin are shown on Map 16. The extent of railway mileage in each of the seven counties is set forth in Table 18. The 504 active miles of railway line in southeastern Wisconsin at the end of 1989 represent a net increase of about 31 miles over the 473 miles in southeastern Wisconsin at the end of 1988. This net increase is the result of the reactivation of service between Janesville and Chicago via Walworth, including the branch to Elkhorn, by the Wisconsin & Calumet Railroad Company, Inc.

At the end of 1989, only the 10-mile railway segment between the City of Burlington and the Village of Union Grove was identified as a

Figure 64

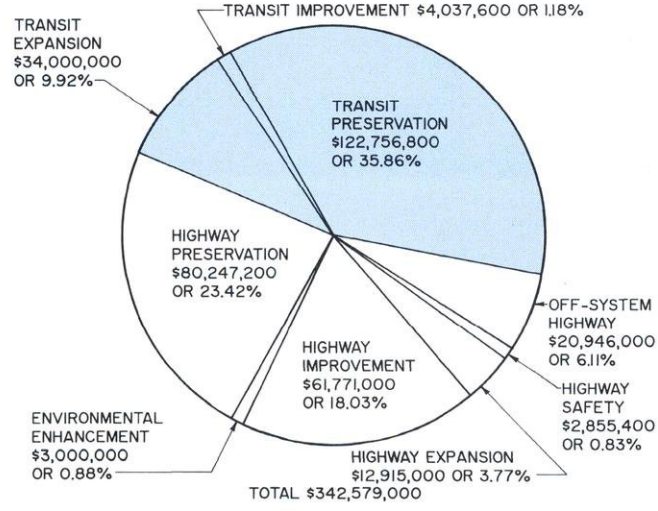
DISTRIBUTION OF EXPENDITURES IN THE ANNUAL ELEMENT OF THE 1989-1993 TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY

KENOSHA URBANIZED AREA



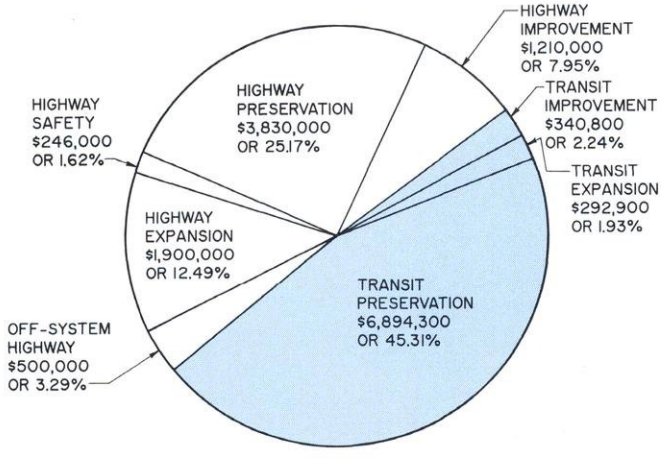
TOTAL $13,941,000

MILWAUKEE URBANIZED AREA



TOTAL $342,579,000

RACINE URBANIZED AREA



TOTAL $15,213,700

Map 16

COMMON-CARRIER RAILWAY FREIGHT LINES IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1989

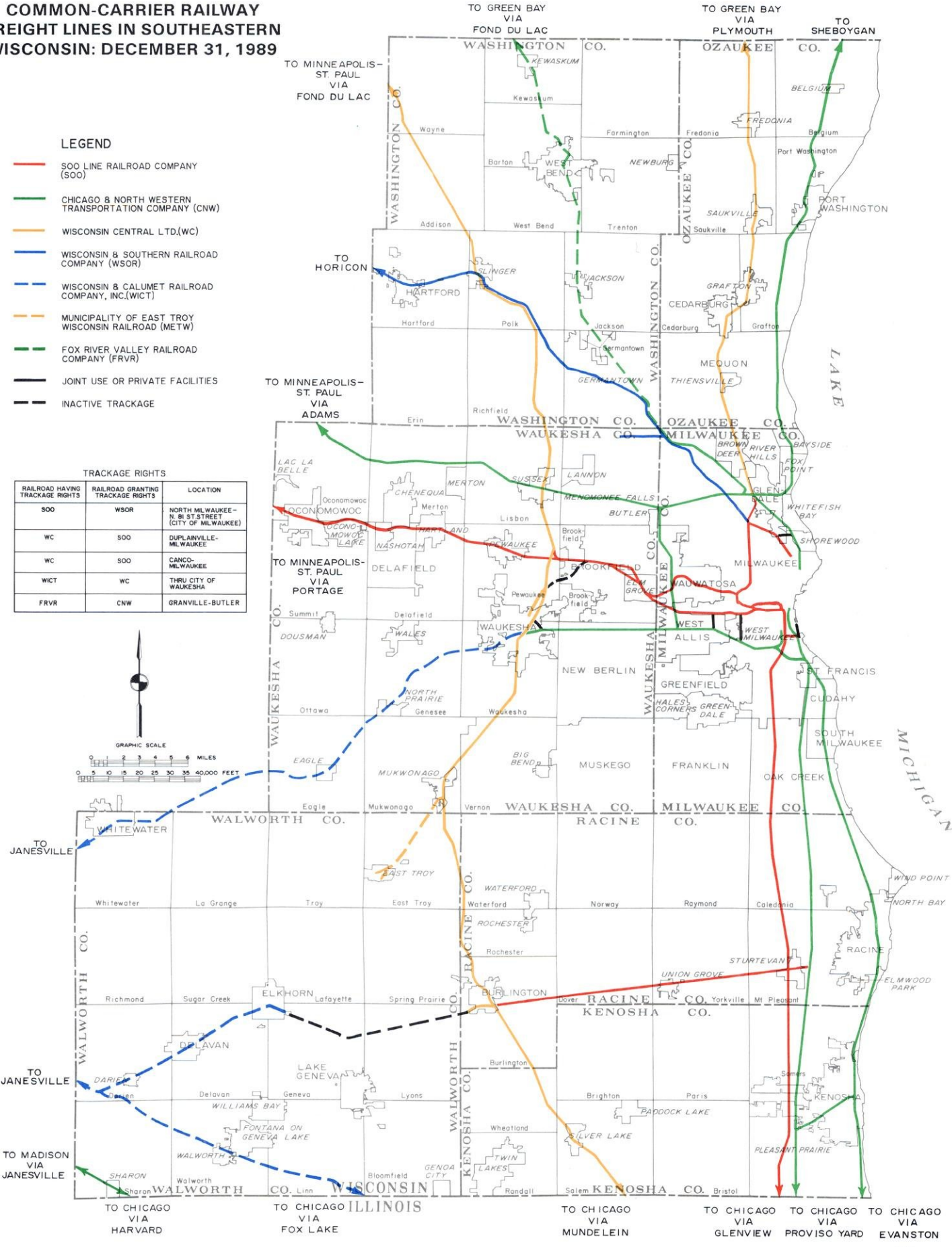


Table 18

ACTIVE COMMON-CARRIER RAILWAY MAINLINE MILEAGE IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1989

County	Chicago & North Western Transportation Company		Wisconsin Central Limited		Soo Line Railroad Company		Wisconsin & Calumet Railroad Company, Inc.		Fox River Valley Railroad Company		Wisconsin & Southern Railroad Company		Municipality of East Troy Wisconsin Railroad		Total	
	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region
Kenosha	28.5	5.6	10.2	2.0	12.2	2.4	--	--	--	--	--	--	--	--	50.9	10.1
Milwaukee	61.2	12.1	4.7	0.9	32.5	6.4	--	--	--	--	9.1	1.8	--	--	107.5	21.3
Ozaukee	25.8	5.1	25.1	5.0	--	--	--	--	--	--	--	--	--	--	50.9	10.1
Racine	24.5	4.9	13.5	2.7	25.2	5.0	--	--	--	--	--	--	--	--	63.2	12.5
Walworth	3.8	0.8	4.0	0.8	--	--	37.1	7.4	--	--	--	--	5.0	1.0	49.9	9.9
Washington	--	--	25.3	5.0	--	--	--	--	27.3	5.4	22.5	4.5	--	--	75.1	14.9
Waukesha	31.2	6.2	26.5	5.2	25.6	5.1	19.8	3.9	0.1	0.0	2.4	0.5	1.3	0.3	106.9	21.2
Total	175.0	34.7	109.3	21.7	95.5	18.9	56.9	11.3	27.4	5.4	34.0	6.7	6.3	1.3	504.4	100.0

NOTE: This table constitutes an inventory of only first track mainline mileage within the seven-county Southeastern Wisconsin Region. Other trackage such as exists in switching, terminal, industrial, and classification yard areas, as well as trackage considered by the railroad companies to be of a secondary nature, and thus not published in operating timetables, is not included. Trackage owned by private carriers is also not included. These mileages are based upon trackage which is owned or leased by the particular railroad and do not include trackage rights over trackage owned by another railroad company.

potential candidate for future abandonment. This railway line segment, owned and operated by the Soo Line Railroad Company, no longer serves any customers. Another abandonment action approved prior to 1989 and involving a 1.88-mile railway segment in the downtown area of the City of Waukesha was consummated during 1989. A track connection project was completed in July, allowing trains of the Wisconsin & Calumet Railroad to operate over an alternate route instead of over the downtown track. By the end of 1989 much of the downtown track segment had been dismantled.

Railway Passenger Service

Intercity passenger service in the Region is provided by the National Railroad Passenger Corporation—Amtrak—between Chicago and Minneapolis-St. Paul over Soo Line Railroad Company trackage, with trains stopping within southeastern Wisconsin at Milwaukee and Sturtevant. Commuter rail service is provided between Kenosha and Chicago, with intermediate stops throughout the north shore suburbs of northeastern Illinois. This service is operated by the Chicago & North Western Transportation Company under an agreement with the Northeast Illinois Railroad Corporation—Metra, the commuter rail division of the Regional Transportation Authority (RTA) in northeastern Illinois.

In April 1989 the City of Milwaukee asked the Regional Planning Commission to conduct a survey of Amtrak passengers traveling between Milwaukee and Chicago. The purpose of the survey was to collect basic travel and marketing data useful for future marketing strategies for this train service and to objectively identify the preferences of current passengers regarding train schedules, the number of trains per day, and other possible service improvements. The survey was part of a collaborative effort by the City of Milwaukee, the Wisconsin Department of Transportation, and Amtrak to add additional trains and improve the schedules of existing trains between Milwaukee and Chicago. The survey findings are presented in SEWRPC Memorandum Report No. 43, Amtrak Milwaukee-Chicago Passenger Survey Findings: May 1989.

The survey was conducted on Thursday, May 25, 1989, and consisted of a 100 percent sampling of passengers using Amtrak's Milwaukee-Chicago service and who boarded or deboarded the train at either Milwaukee or Sturtevant. A very high response rate of 93 percent was attained for the survey. The data collected during this survey were used to design and market additional Amtrak service between Milwaukee and Chicago. Since 1984, the service in the Milwaukee-Chicago corridor has consisted of six Milwaukee-Chicago trains and two Chicago-Seattle trains that also accommodated Milwaukee-Chicago passengers. In October 1989 the operation of four new Amtrak trains between Milwaukee and Chicago—partially subsidized by the States of Wisconsin and Illinois—was begun as part of a 26-month demonstration project to determine if

increased rail passenger service between the two cities can significantly contribute to economic development in southeastern Wisconsin. The Commission staff also prepared drafts of inspection forms to be used by the City of Milwaukee to monitor the Milwaukee-Chicago passenger train service. These forms were for train equipment inspection, station inspection, and train service inspection.

AIRPORT TRANSPORTATION PLANNING

During 1989 Commission activities in air transportation and airport planning included the continued monitoring of aviation activities within the Region through secondary data sources, the continued monitoring of and provision of technical assistance to airport master planning activities, the provision of technical assistance to the Illinois-Indiana regional airport site selection and master plan study, the conduct of an enplaning passenger survey at General Mitchell International Airport, and the conduct of an Elkhorn area airport study. The adopted airport system plan for southeastern Wisconsin is documented in SEWRPC Planning Report No. 38, A Regional Airport System Plan for Southeastern Wisconsin: 2010, and is shown on Map 17.

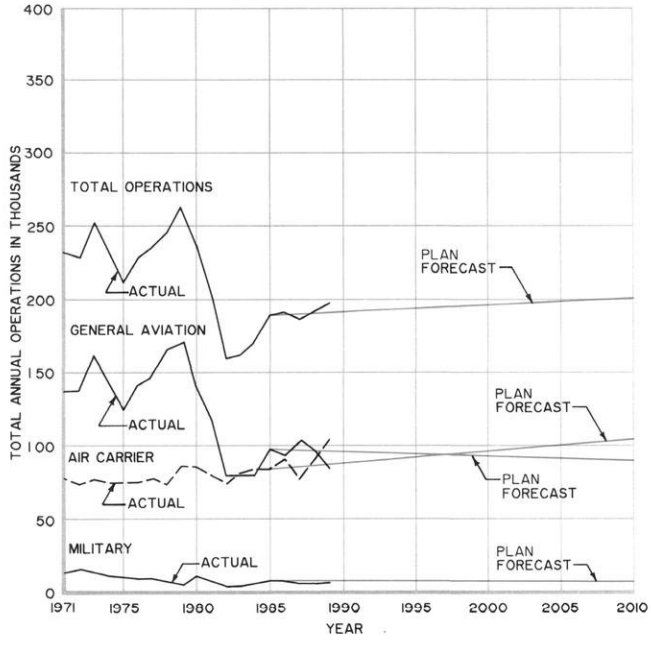
Aviation Activity

The Commission staff continued to monitor aviation activity within the Region during 1989. General trends in the level of aviation activity within southeastern Wisconsin are indicated by the number of aircraft operations at, and passengers using, General Mitchell International Airport. General Mitchell International Airport is the largest and busiest airport in the Region, and the only airport within the Region with scheduled air carrier service. As shown in Figure 65, in 1989 aircraft operations of all types at Mitchell International totaled about 198,400, an increase of about 5,800, or about 3 percent, over the 192,600 operations that occurred during 1988. This total is about 4 percent above the 190,300 operations forecast to occur at Mitchell International during 1989 in the second generation regional airport system plan.

Total aircraft operations at Mitchell International can be divided into three categories: air carrier, general aviation, and military. Air carrier operations during 1989 totaled about

Figure 65

ANNUAL AIRCRAFT OPERATIONS AT GENERAL MITCHELL INTERNATIONAL AIRPORT, MILWAUKEE



106,800, about a 16 percent increase over the 1988 level of 92,100 operations. General aviation operations at Mitchell International Airport totaled about 85,000 during 1989, a decrease of about 10 percent from the 1988 level of 94,200 operations. Military aircraft operations at Mitchell International Airport during 1989 totaled about 6,600, an increase of about 1 percent over the 1988 level of 6,500 operations.

From 1988 to 1989, air carrier enplaning and deplaning passengers at General Mitchell International Airport increased by about 278,000 to about 4,308,000 passengers per year, about 7 percent above the 1988 level. The 1989 level was about 903,000, or about 26 percent, greater than the 3,405,000 passengers forecast for 1989 under the second generation regional airport system plan, as shown in Figure 66. The increase in the actual 1989 passenger level is the result of very aggressive competition among air carriers for traffic originating in the Milwaukee area, including long-established carriers such as Northwest Airlines, newer carriers catering to the business market such as Midwest Express Airlines, and large carriers that are relatively new to the Milwaukee market such as Delta Air Lines.

Map 17

REGIONAL AIRPORT SYSTEM PLAN: 2010

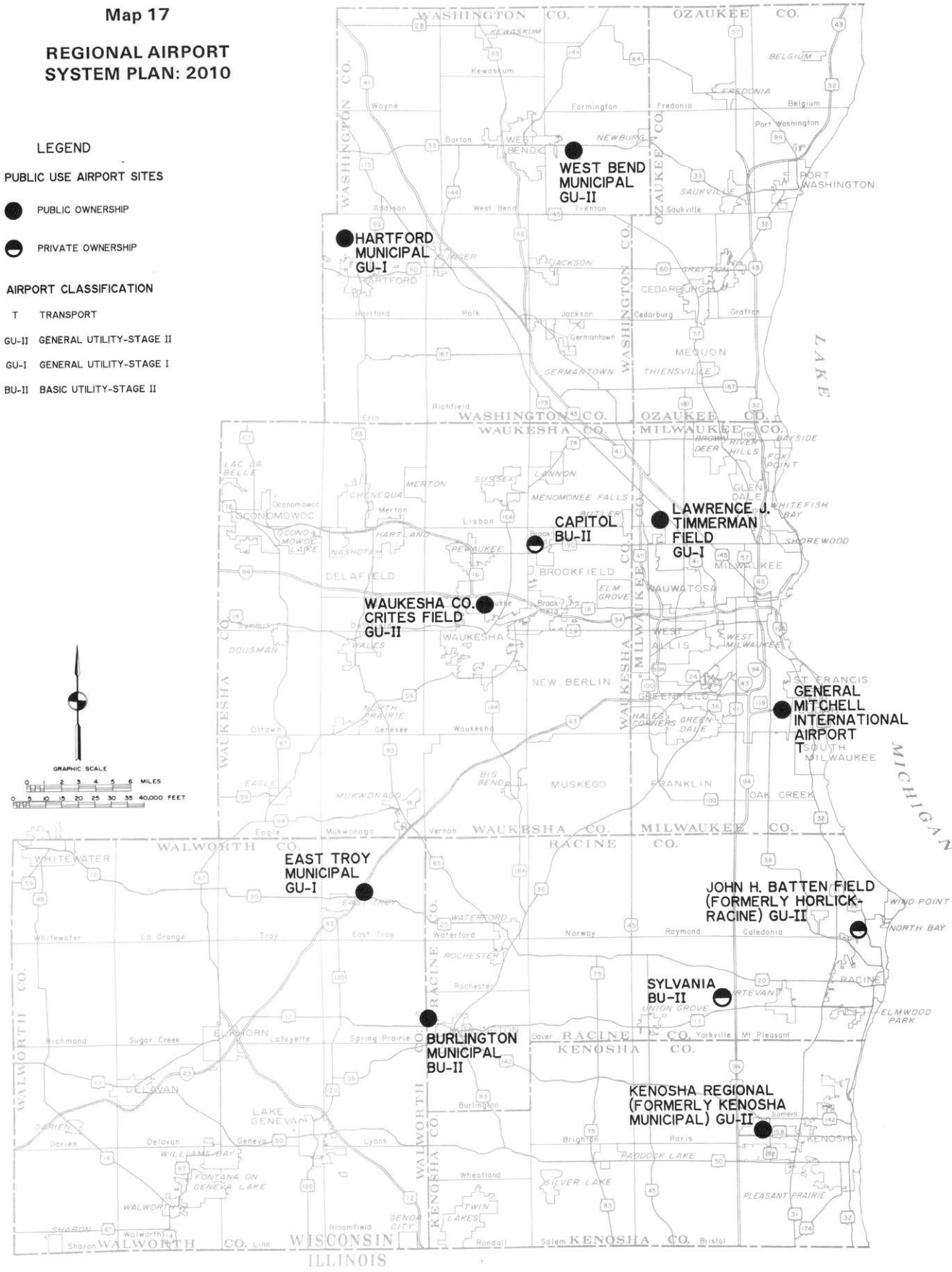


Table 19

GENERAL AVIATION AIRCRAFT BASED IN THE REGION

County	1960	1965	1970	1975	1980	1985	1989
Kenosha	28	60	76	148	123	112	121
Milwaukee	338	362	356	371	388	373	372
Ozaukee	19	13	32	28	29	27	29
Racine	65	89	108	151	179	207	230
Walworth	23	31	48	82	98	121	124
Washington	45	63	118	136	158	165	198
Waukesha	118	163	243	255	304	350	342
Total	636	781	981	1,171	1,279	1,355	1,416

Figure 66

ANNUAL AIR CARRIER ENPLANING AND DEPLANING PASSENGERS AT GENERAL MITCHELL INTERNATIONAL AIRPORT, MILWAUKEE

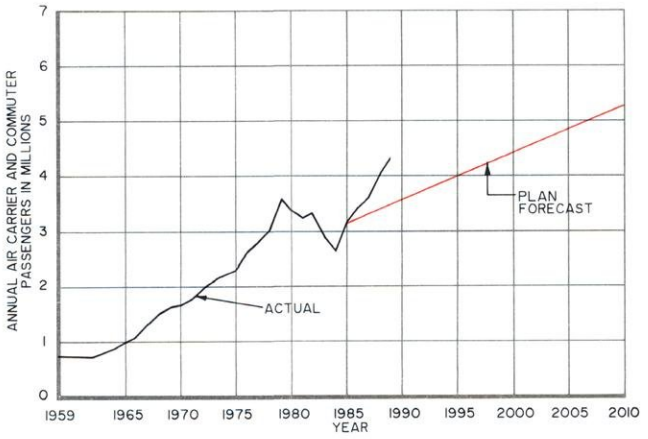
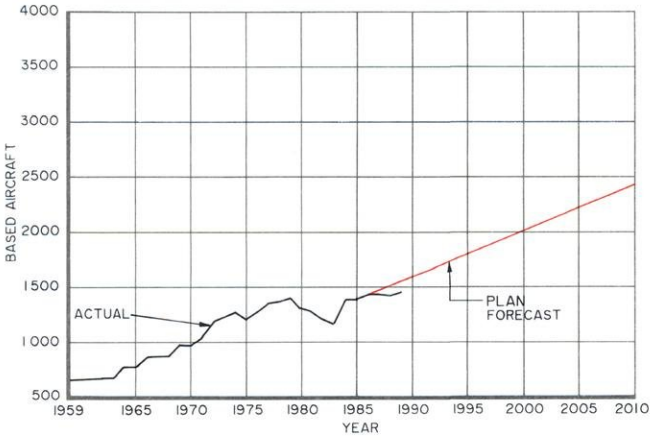


Figure 67

GENERAL AVIATION AIRCRAFT BASED IN THE REGION



General aviation activity can also be measured in terms of the number of aircraft based within southeastern Wisconsin. A total of 1,416 aircraft were based in the Region during 1989, representing an increase of 34 aircraft, or about 2 percent, over the number of aircraft based in the Region during 1988, as shown in Figure 67 and Table 19. The number of aircraft based in the Region during 1989 was about 19 percent lower than the total of 1,753 forecast for 1989 under the second generation regional airport system plan.

Airport Master Plans

Airport master plans are intended to refine the recommendations of the adopted regional airport system plan and, in fact, are prepared as the next step toward implementation of the regional airport system plan adopted by the Commission in 1987. Specifically, an airport master plan is intended to specify precise land-area requirements for acquisition and protection; provide a detailed airport layout plan; provide an analysis of financial feasibility and set forth a capital improvement budget; provide environmental impact information; and provide for local citizen participation in the work effort. The preparation of airport master plans is primarily the responsibility of the local implementing governmental agency, and such plans establish eligibility for federal financial aid under the Airport and Airway Improvement Act of 1982 as amended by the Airport and Airway Safety and Capacity Expansion Act of 1987.

As noted in previous annual reports, airport master plans have been completed for, and adopted by, the local governing bodies for the Kenosha, West Bend, and Hartford Municipal Airports and Waukesha County-Crites Field. In addition, airport layout plans—an important element of the airport master planning process—have been completed for John H. Batten Field (formerly Horlick-Racine Airport) in the City of Racine and East Troy Municipal Airport. All technical work was completed in 1977 on an airport master plan for General Mitchell International Airport in Milwaukee, but the plan has yet to be adopted by the Milwaukee County Board of Supervisors. During 1987, Milwaukee County began an update of the as yet unadopted master plan for Mitchell International, with specific consideration being given to the potential need for additional airfield capacity. The Commission staff has participated in the planning effort by providing technical data and information and by reviewing various elements of the study as requested by the Wisconsin Department of Transportation and Milwaukee County. This work continued during 1989.

Illinois-Indiana Airport Study

At the request of the Wisconsin Department of Transportation and Milwaukee County, the Commission staff began monitoring the progress of and providing technical assistance to a detailed study of potential new airport sites in the Chicago metropolitan area. This planning effort is known as the Illinois-Indiana regional airport site selection and master plan study, and was recommended under the Chicago airport capacity study as the next logical step toward investigating the need for additional airport capacity in the Chicago metropolitan area. The Chicago area airport capacity study was discussed in the SEWRPC 1988 Annual Report. The Commission staff served as a member of the support group to the Technical Advisory Committee for the Illinois-Indiana Airport Study.

During 1989 the Commission staff attended meetings of the study's technical advisory committee; reviewed the study's scope of work; and responded to requests for southeastern Wisconsin travel data, socioeconomic data, and other transportation system information.

General Mitchell International Airport Enplaning Passenger Survey

At the request of the Wisconsin Department of Transportation, the Commission conducted a survey over a seven-day period from October 26 to November 1, 1989, of all enplaning passengers using scheduled airline flights at Milwaukee County's General Mitchell International Airport. The purpose of the survey was to collect updated information concerning the number and types of trips made by passengers using Mitchell International, together with such related information as the socioeconomic characteristics of the tripmakers. At year's end, the survey results were being tabulated and readied for analysis and documentation in 1990.

Elkhorn Area Airport Study

In 1989 the Commission began a special study to assess the need for a general aviation airport in the immediate Elkhorn area and to determine whether or not such an airport should be included in the regional airport system plan for southeastern Wisconsin and the Wisconsin state airport system plan. During the year, work efforts were directed at estimating of the demand for general aviation airport facilities and services in the Elkhorn area, including preparation of a survey of local businesses to estimate their current and future airport needs. Local officials were contacted for assistance in determining which businesses should be surveyed, as well as to review the level of interest in general aviation airport development among Elkhorn area officials and businesses. At year's end, the draft survey instrument was under review by local officials.

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 1989:

- At the request of the Village of Brown Deer, the need for traffic signals and the reconfiguration of traffic lanes at the intersection of N. 60th Street and W. Dean Road was evaluated. The findings and recommendations were documented in a letter report to the Village.

- At the request of Waukesha County, traffic forecasts were prepared for five alternative alignments of the proposed western leg of the Waukesha circumferential highway.

- Traffic forecasts were provided to Racine County for that segment of CTH C between Neuman Road and Emmertson Road; to Waukesha County for CTH J between Northview Road and Moreland Boulevard and for CTH ES between S. 124th Street and S. Calhoun Road; to the Village of Menomonee Falls for Lilly Road between W. Hampton Avenue and W. Silver Spring Drive; and to the Wisconsin Department of Transportation for E. Howard Avenue between STH 32 and IH 94.

- At the request of the City of Hartford, a special parking survey was conducted in the central business district area, the results of which were set forth in a letter report to the City.

- At the request of the Arrowhead High School Board of Education, an analysis was made of the traffic circulation system at Arrowhead High School in the Town of Merton. Recommendations were set forth attendant to the system of access roadways, parking lots, and traffic signs to improve traffic patterns at the high school.

- At the request of the City of Milwaukee, the Commission prepared inspection forms to be used in monitoring the subsidized Amtrak passenger service between Milwaukee and Chicago, such forms relating to train equipment, station maintenance, and train service.

- At the request of the Village of Germantown, an analysis was made of a land development proposal near the intersection of CTH Q and STH 175, focusing on land access and traffic management considerations.

- At the request of Milwaukee County and in connection with the preparation of a land use plan for the Milwaukee County Institutions grounds, special traffic volume forecasts were prepared for all arterial streets and highways in the area bounded by STH 100 on the west, W. North Avenue on the north, Wauwatosa Avenue on the east, and IH 94 on the south.

- At the request of the City of Burlington, an analysis was conducted of the traffic impacts attendant to the proposed redevelopment of land near the intersection of STH 36 and Grove Street.

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:

- What is the existing quality of the lakes, streams, and groundwaters of the Region? Is 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 is the extent of the natural floodlands along lakes and streams?
- What are the best ways to resolve existing flooding problems and to ensure that new flooding problems are not created?
- What are the best ways to resolve existing stormwater drainage, as opposed to flooding, problems and to provide adequate drainage facilities for existing and probable future rural and urban development? How can improved stormwater drainage systems best be integrated with needed nonpoint source water pollution abatement measures?
- What areas of the Region should be provided with sanitary sewer service, and what are the most cost-effective ways of providing such service?
- 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?

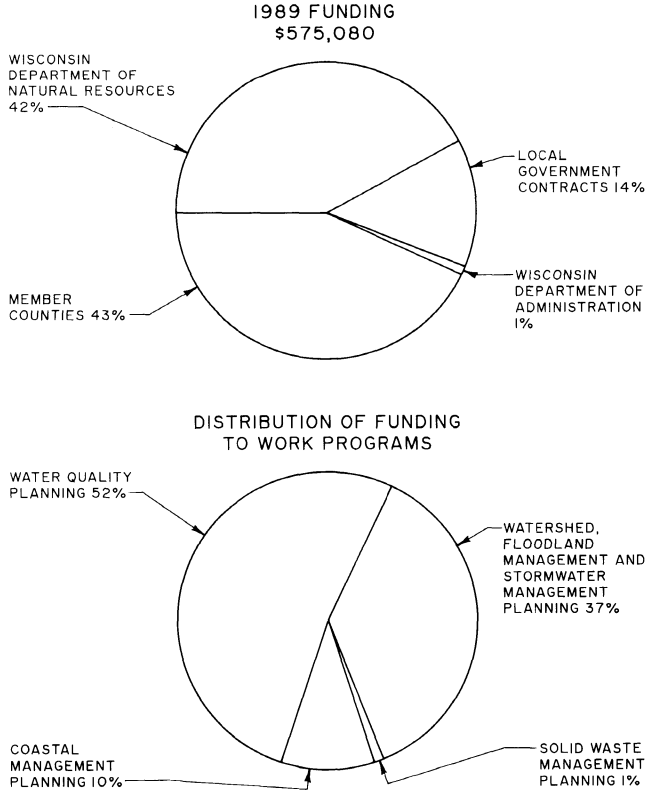
In attempting to find sound answers to these and related questions, develop recommendations concerning environmental protection and enhancement, monitor levels of environmental quality in the Region, and respond to requests for data and technical assistance, activities were conducted in 1989 in four identifiable program areas: water quality management planning; watershed, floodland, and stormwater management planning; coastal management planning; and solid waste management planning.

WATER QUALITY MANAGEMENT PLANNING

During 1989, Commission water quality planning efforts continued to be focused primarily on activities relating to implementation of the adopted regional water quality management plan. Such activities included providing assistance and coordination in the preparation of more detailed and refined nonpoint source pollution abatement plans, providing assistance in the preparation of inland lake water quality

Figure 68

ENVIRONMENTAL PLANNING DIVISION



management plans, and preparing local sanitary sewer service area plans. In addition, the Commission continued to assist local units of government in completing detailed sewerage facilities plans in preparation for the construction of point source pollution abatement facilities identified as needed in the adopted regional plan. The Commission also continued to assist the Wisconsin Departments of Natural Resources and of Industry, Labor and Human Relations 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.

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; Volume Two, Alternative Plans; and Volume Three, Recommended Plan. The plan provides recommendations for the control of water pollution from point sources—such as sewage treatment plants, points of separate and combined sewer overflow, and industrial waste outfalls—and from nonpoint sources—such as urban and rural stormwater runoff. This regional plan element is one of the more important plan elements adopted by the Commission for, 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 grants in partial support of sewerage system development and redevelopment; for the issuance of waste discharge permits by the Wisconsin Department of Natural Resources (DNR); for the review and approval of public sanitary sewer extensions by the DNR; for the review and approval of private sanitary sewer extensions and large onsite sewage disposal systems and holding tanks by the Wisconsin Department of Industry, Labor and Human Relations; and for federal and state financial assistance in support of local nonpoint source water pollution control projects.

The adopted regional water quality management plan for southeastern Wisconsin consists of five major elements: a land use plan 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 regional water quality management plan is provided in the Commission's 1979 Annual Report.

Nonpoint Source Pollution Abatement Planning

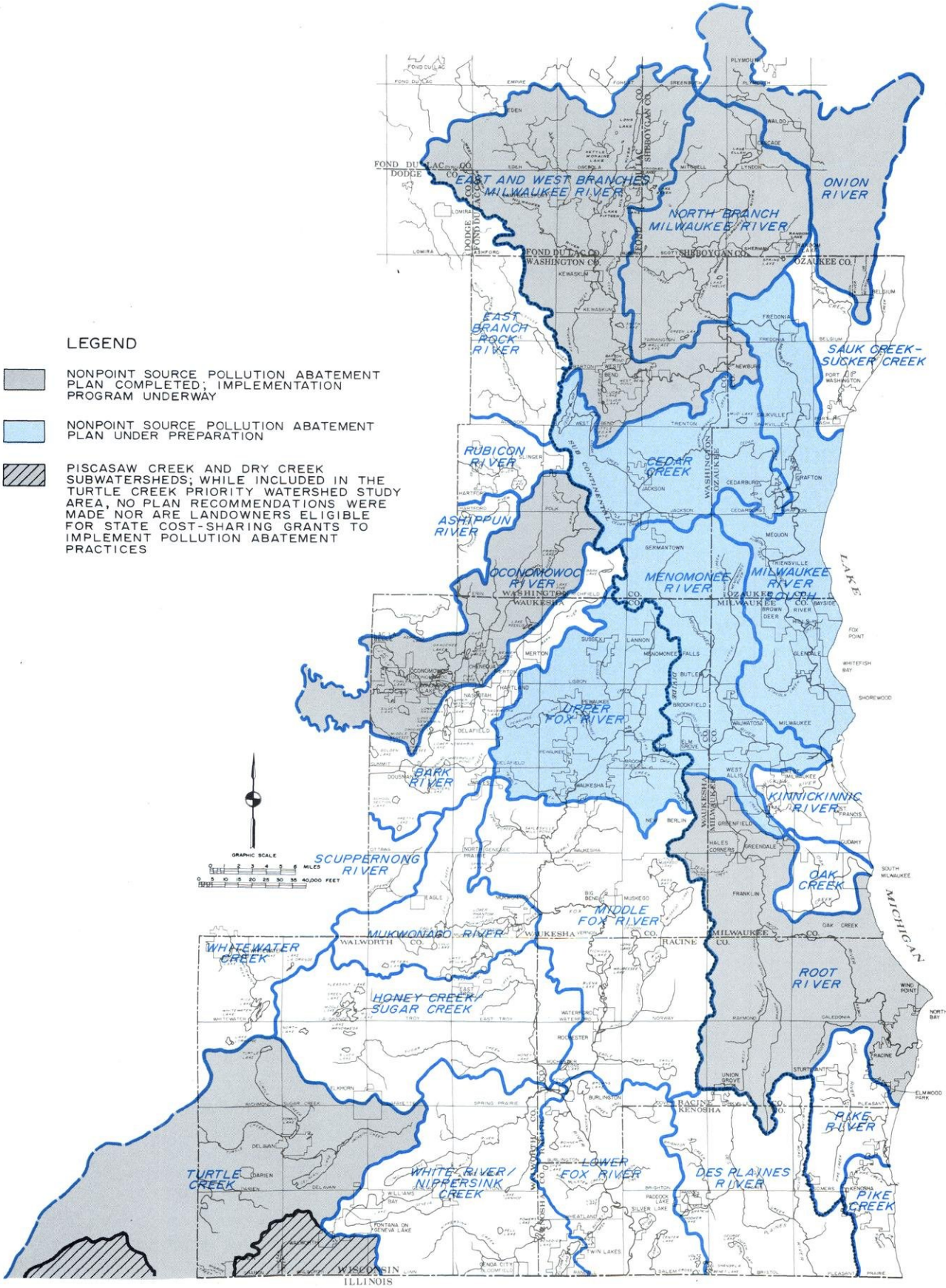
The adopted regional water quality management plan recommends that local agencies charged with responsibility for nonpoint source pollution control prepare refined and detailed, local level, nonpoint source pollution control plans. Such plans are to identify the nonpoint source pollution control practices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

Working with the individual county land conservation committees and the Commission, the Wisconsin Department of Natural Resources is carrying out the recommended detailed planning for nonpoint source water pollution abatement on a watershed-by-watershed basis. This detailed planning and subsequent plan implementation program, known as the Wisconsin Nonpoint Source Priority Watershed Pollution Abatement Program, provides matching funds of up to 80 percent of the cost of an individual project or land management practice to local governments and private landowners upon completion of the detailed plans.

For nonpoint source detailed planning and plan implementation purposes, the DNR has divided the Southeastern Wisconsin Region into 27 "priority" watersheds, as shown on Map 18. Prior to 1989, priority watershed nonpoint source pollution abatement plans had been completed for the Root River watershed, lying primarily in Racine and Milwaukee Counties; for the Onion River watershed, a small portion of which lies in Ozaukee County and which drains north out of the Region through Sheboygan County; for the Turtle Creek watershed, a major portion of which lies in Walworth County and which drains west out of the Region through Rock County; and for the Oconomowoc River water-

Map 18

STATUS OF PRIORITY WATERSHEDS IN SOUTHEASTERN WISCONSIN: 1989



shed, major portions of which lie within Washington and Waukesha Counties and which drains west out of the Region through Jefferson County. During 1989, such plans were completed for the East and West Branches of the Milwaukee River priority watershed and for the North Branch of the Milwaukee River priority watershed. Both of these priority watersheds are comprised of portions of Ozaukee and Washington Counties in the Region; the East and West Branches watershed also includes portions of Dodge, Fond du Lac, and Sheboygan Counties lying north of the Region, while the North Branch watershed includes portions of Fond du Lac and Sheboygan Counties.

Each of these detailed plans includes specific recommendations for nonpoint source water pollution abatement in urban areas, including construction site erosion control, improved street sweeping and vegetative debris collection and disposal, roadside and stream bank erosion control, landfill site runoff control, the installation of spent oil disposal stations, and stormwater runoff control; and in rural areas, including improved cropping practices, better livestock waste management, stream bank erosion control, and stormwater runoff control. Each of the priority watershed projects includes a detailed planning phase which lasts from 18 to 24 months; a project "sign-up" phase which begins at the completion of the plan and ends from three to five years later; and a project completion phase which ends from three to five years after the end of the project sign-up phase.

The Root River priority watershed plan was completed in 1980. The project sign-up phase ended on December 31, 1984. The projects and practices completed through the end of 1989 in the Root River watershed are summarized in Table 20. Local governments and landowners in the Root River watershed had through the end of December 1989 to complete all of the projects and practices which had been approved by the DNR at the end of the sign-up phase. Thus, except for projects where a time extension was granted, the projects and practices listed in Table 20 represent the final implementation status for the Root River priority watershed program.

The Onion River priority watershed plan was completed in 1981. The project sign-up phase concluded on June 30, 1984. The projects and practices completed within the portion of the watershed in the Region through the end of 1989 are summarized in Table 21. Local governments and landowners in the Onion River watershed had through the end of June 1989 to complete all projects and practices that had been approved by the DNR during the sign-up phase. Thus, the projects and practices listed in Table 21 represent the final implementation status for the Onion River priority watershed program.

The Turtle Creek priority watershed plan was completed in 1984. The project sign-up phase concluded on April 12, 1987. The projects and practices completed within the portion of the watershed in the Region through the end of 1989 are summarized in Table 22. Local governments and landowners in the Turtle Creek watershed have through the end of April 1992 to complete all projects and practices that were approved by the DNR during the sign-up phase.

The Oconomowoc River priority watershed plan was completed in 1986. The project sign-up phase concluded on April 15, 1989. The projects and practices completed within that portion of the Oconomowoc River watershed in the Region through the end of 1989 are summarized in Table 23. Local governments and landowners in the Oconomowoc River watershed have through the end of April 1994 to complete all projects and practices that were approved by the Department of Natural Resources during the sign-up phase.

In May 1984, the Wisconsin Legislature and Governor, through special legislation, designated five additional priority watersheds in the Region and directed the DNR to begin the priority watershed planning process for those watersheds. These five watersheds are all tributary to the Milwaukee Harbor estuary and include the Menomonee River, Cedar Creek, the North Branch of the Milwaukee River, the East and West Branches of the Milwaukee River, and the Milwaukee River-South main stem.

As noted above, plans for the East and West Branches and for the North Branch were completed during 1989. The project sign-up period for the East and West Branches and the North Branch watersheds began in June and July 1989, respectively, and will extend to June and July 1992, respectively. All projects and practices that are approved in that period will have to be completed by June and July 1997, respectively.

The Wisconsin Department of Natural Resources is continuing with the preparation of priority

Table 20

ROOT RIVER PRIORITY WATERSHED PROJECTS AND PRACTICES COMPLETED IN THE REGION AS OF DECEMBER 31, 1989

Projects and Practices	Extent Recommended	Extent Implemented[b]	Cost of Implemented Projects and Practices		
			Wisconsin Fund	Local Government or Landowner	Total
Contour Strip-cropping	490 acres	58 acres	$ 425	$ 425	$ 850
Diversions	50,000 feet	5,116 feet	20,840	8,931	29,771
Terraces	1,225,200 feet	16,400 feet	15,219	6,522	21,741
Waterways	182 acres	73 acres	383,358	194,568	577,926
Conservation Tillage	11,500 acres	199 acres	1,688	1,687	3,375
Barnyard Runoff Systems	23 systems	3 systems	24,262	10,398	34,660
Manure Storage Facilities	44 facilities	2 facilities	9,087	9,165	18,252
Stream Cattle Crossing	10 crossings	1 crossing	590	253	843
Stream Bank Fencing	3,350 feet	3,300 feet	538	231	769
Stream Bank Rip-rap	13,650 feet	6,142 feet	110,370	46,899	157,269
Stream Bank Shaping and Seeding	26,370 feet	21,458 feet	190,523	52,451	242,974
Critical Area Stabilization	18 acres	163 acres	99,845	40,931	140,776
Grade Stabilization Structures	111 structures	52 structures	204,184	82,104	286,288
Street Sweeping	4 new programs	1 new program	2,326	997	3,323
Infiltration Systems	--[a]	2 systems	314	134	448
Oil Disposal Storage Units	20 units	2 units	314	314	628
Concrete Lined Waterway	--[a]	1,264 feet	10,910	4,675	15,585
Total	--	--	$1,074,793	$460,685	$1,535,478

[a] *Not specified in priority watershed plan recommendations.*

[b] *The extent implemented is based upon the practices actually installed. In previous Annual Reports, the extent implemented was based upon those practices which had been approved for state funding, regardless of their installation status.*

Table 21

ONION RIVER PRIORITY WATERSHED PROJECTS AND PRACTICES COMPLETED IN THE REGION AS OF DECEMBER 31, 1989

Projects and Practices	Extent Recommended	Extent Implemented[a]	Cost of Implemented Projects and Practices		
			Wisconsin Fund	Local Government or Landowner	Total
Strip-cropping	585 acres	--	$ --	$ --	$ --
Diversions	22,500 feet	--	--	--	--
Waterways	41 acres	7 acres	9,972	4,273	14,245
Conservation Tillage	975 acres	169 acres	1,898	1,898	3,796
Barnyard Runoff Systems	12 systems	--	--	--	--
Manure Storage Facilities	5 facilities	1 facility	6,000	18,493	24,493
Stream Bank Fencing	450 feet	--	--	--	--
Stream Bank Shaping and Seeding	5,550 feet	--	--	--	--
Grade Stabilization Structures	1 structure	--	--	--	--
Total	--	--	$17,870	$24,664	$42,534

[a] *The extent implemented is based upon the practices actually installed. In previous Annual Reports, the extent implemented was based upon those practices which had been approved for state funding, regardless of their installation status.*

Table 22

TURTLE CREEK PRIORITY WATERSHED PROJECTS AND PRACTICES COMPLETED IN THE REGION AS OF DECEMBER 31, 1989

Projects and Practices	Extent Recommended	Extent Implemented[b]	Cost of Implemented Projects and Practices		
			Wisconsin Fund	Local Government or Landowner	Total
Contour Farming	499 acres	147 acres	$ 1,872	$ 1,872	$ 3,744
Contour Strip-cropping	560 acres	153 acres	2,143	2,143	4,286
Diversions	5,456 feet	2,615 feet	3,123	1,372	4,495
Terraces	96,873 feet	24,250 feet	23,422	10,038	33,460
Conservation Tillage	3,930 acres	162 acres	1,299	1,299	2,598
Grassed Waterways	182 acres	43 acres	50,537	21,759	72,296
Barnyard Runoff Systems	22 systems	6 systems	46,348	19,864	66,212
Manure Storage Facilities	15 facilities	1 facility	6,000	7,400	13,400
Stream Bank Fencing	15,000 feet	2,500 feet	4,620	1,580	6,200
Stream Bank Rip-rap	3,750 feet	7,102 feet	133,991	57,425	191,416
Stream Bank Shaping and Seeding	10,125 feet	780 feet	4,473	1,917	6,390
Critical Area Stabilization	7 acres	3 acres	4,900	2,100	7,000
Grade Stabilization Structures	8 structures	2 structures	5,315	1,329	6,644
Settling Basin	--[a]	1 acre	56,713	24,306	81,019
Total	--	--	$344,756	$154,404	$499,160

[a] *Not specified in priority watershed plan recommendations.*

[b] *The extent implemented is based upon the practices actually installed. In previous Annual Reports, the extent implemented was based upon those practices which had been approved for state funding, regardless of their installation status.*

Table 23

OCONOMOWOC RIVER PRIORITY WATERSHED PROJECTS AND PRACTICES COMPLETED IN THE REGION AS OF DECEMBER 31, 1989

Projects and Practices	Extent Recommended	Extent Implemented[b]	Cost of Implemented Projects and Practices		
			Wisconsin Fund	Local Government or Landowner	Total
Contour Strip-cropping	700 acres	--	$ --	$ --	$ --
Conservation Tillage	4,020 acres	--	--	--	--
Grassed Waterways	90 acres	--	--	--	--
Barnyard Runoff Systems	30 systems	1 system	10,967	4,700	15,667
Stream Bank Shaping and Seeding	19,000 feet	160 feet	5,730	2,456	8,186
Other Stream Bank Best Management Practices	--[a]	500 feet	77,197	19,299	96,496
Critical Area Stabilization	350 acres	1 acre	5,152	1,288	6,440
Grade Stabilization Structures	10 structures	2 structures	5,315	1,329	6,644
Total	--	--	$104,361	$29,072	$133,433

[a] *Not specified in priority watershed plan recommendations.*

[b] *The extent implemented is based upon the practices actually installed. In previous Annual Reports, the extent implemented was based upon those practices which had been approved for state funding, regardless of their installation status.*

watershed plans for the other three subwatersheds. It is anticipated that plans for the Milwaukee River-South main stem and the Menomonee River will be completed about mid-1990. The Cedar Creek watershed plan is expected to be completed early in 1991.

During 1989, the Wisconsin Department of Natural Resources designated the Upper Fox River in Waukesha County as the next priority watershed in southeastern Wisconsin. The Waukesha County Land Conservation Committee will work with the Department to complete the detailed plan. The 18-month planning period was scheduled to begin January 1, 1990.

During 1989, the Commission continued to assist the Department of Natural Resources in its data collection, analysis, and report production efforts for the Milwaukee River priority watersheds. The Commission staff attended 11 interagency coordinating meetings with the Department and completed portions of a report on the cost of construction site erosion control and urban stormwater management practices. Those portions completed included a description of the cost-estimating procedures and unit costs for each of eight urban nonpoint source pollution abatement measures and nine construction site erosion control measures. The Commission also completed a land use inventory of the urban portions of the Milwaukee River-South and Menomonee River watersheds. This work included the preparation and provision to the Department of base maps of the watersheds; the delineation of subbasins within the watersheds; the preparation of maps and tabular data on historical urban development patterns and on 1985 land use; and the preparation of maps and tabular data on lands planned for urban development. Work was initiated by the Commission staff on final report graphics for selected maps to be included in the reports for the Milwaukee River-South and Menomonee River watersheds.

Lake Water Quality Management Planning

The adopted regional water quality management plan recommended that detailed, comprehensive lake water quality management plans be prepared for the drainage areas directly tributary to each of the 101 major lakes in southeastern Wisconsin. The Commission and the DNR have been working with lake community organizations and agencies, including lake protection and rehabilitation districts, to complete the preparation of such comprehensive plans. Where budget and work program conditions permit, these lake studies are being documented in SEWRPC community assistance planning reports. These reports describe the existing chemical, biological, and physical water quality conditions of the lake; the existing and proposed uses of the lake and attendant water quality objectives and standards; the land management and land use measures required in each lake watershed; and required point and nonpoint source pollution abatement measures.

By the end of 1989, comprehensive lake water quality management plans had been completed for seven lakes—Ashippun, La Belle, Pewaukee, North, and Okauchee in Waukesha County; Geneva Lake in Walworth County; and Friess Lake in Washington County. These plans were adopted by the Commission as amendments to the regional water quality management plan.

At the end of 1989, the Commission had lake studies underway for Wind Lake in Racine County, Oconomowoc Lake and Fowler Lake in Waukesha County, and Pike Lake in Washington County. Special field surveys were conducted in Wind Lake in 1989 to examine the existing aquatic plant problems and control efforts, to delineate sensitive and valuable ecological resources within the lake. The Oconomowoc Lake study is expected to be completed in 1990, and the studies for Fowler Lake, Pike Lake, and Wind Lake are proposed to be completed over the next several years as funding permits.

In addition to these comprehensive lake water quality management plans, the Commission continued to provide assistance to certain lake districts and associations. During 1989, the Commission initiated work on a water use management plan for Waubeesee Lake and the Anderson Canal which connects Long Lake (Kee Nong Ga Mong Lake) to Waubeesee Lake. The plan is scheduled for completion in 1990. The plan will be based upon information contained in the Wisconsin Department of Natural Resources and Regional Planning Commission files, information obtained from personal interviews of lake residents, and data collected in field surveys conducted by the Commission during the summer of 1989. Finally, the Commission participated in lake association or district meetings for Pike, Powers, Waubeesee, and Wind Lakes.

Local Sewerage Facilities Planning

During 1989, 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 Fund established by the State Legislature in 1978 and administered by the Wisconsin Department of Natural Resources, and good engineering practice. Work activities during 1989 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, in particular 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.

During 1989, the Commission was directly involved in the following local sewerage facility planning efforts:

- The conduct of a study to reevaluate the recommendation of the regional water quality management plan for continued operation of two private sewage treatment plants serving the Alpine Valley Resort, Inc., facilities located in the Town of Lafayette, Walworth County. The study resulted in a recommendation that the Village of East Troy sewage treatment plant be designated as the receiving facility for sewage from the Alpine Valley Resort facilities, and that the two private sewage treatment plants serving the Alpine Valley Music Theatre and the Alpine Valley Lodge be abandoned. That recommendation was based upon findings related to cost-effectiveness and environmental impact. The findings and recommendations were documented in a staff memorandum. A public hearing on this matter was held on November 27, 1989. Following the hearing, the recommendations were endorsed by the Village of East Troy and adopted by the Commission as an amendment to the regional water quality management plan.

- The completion of a study to reevaluate the recommendation of the regional water quality management plan with respect to the provision of sewage treatment plants in the Upper Fox River watershed. As adopted in 1979, that plan called for the Village of Sussex treatment plant to be abandoned at the end of its useful life and for its tributary service area and certain other contiguous service areas in the Village of Lannon, the Town of Lisbon, and the Village of Menomonee Falls to be connected to the City of Brookfield sewage treatment plant. A staff memorandum was prepared to evaluate a request by the Villages of Sussex, Lannon, and Menomonee Falls and the Town of Lisbon to consider an amendment which would provide for the construction and operation by the four communities concerned collectively of a new areawide sewage treatment plant. That plant would discharge treated effluent to Sussex Creek, a tributary of the Fox River. The analysis indicated that over a 20-year period, the costs of the two alternatives considered—one areawide plant at Brookfield or two areawide plants, one at Brookfield and one at Sussex—would be about the same. Furthermore, the environmental analyses found no overriding considerations for selecting one alternative over the other. The great majority of the local units of government concerned favored the two-plant alternative. The study findings were presented at a public hearing. The testimony of the hearing substantially supported the request to change the plan by designating the Sussex plant as a permanent, areawide treatment plant. Accordingly, the amendment was adopted by the Commission and subsequently approved by the Wisconsin Department of Natural Resources.

- The extension of technical assistance to several local units of government that are considering the provision of centralized sanitary sewer service to existing urban development in areas surrounding inland lakes. By the end of 1989, the Commission had prepared grant application materials seeking planning grants that would enable the Towns of Randall and Wheatland in Kenosha County and the Town of Bloomfield in Walworth County for the Powers Lake area; the Town of Wheatland, Kenosha County, for the Lilly Lake area and other areas of existing development in the Town; the Town of Burlington, Racine

County, for the Bohner Lake area; and the Silver Lake Sanitary District in the Town of West Bend, Washington County, to conduct detailed planning studies to ascertain the need for sewerage facilities and the probable cost of installing such facilities. At year's end, the Wisconsin Department of Natural Resources had the grant applications under consideration, indicating to the communities that funding would become available during 1990.

- Work continued on the preparation of coordinated sanitary sewerage and water supply system plans for the greater Kenosha area. At year's end, the report chapters documenting the study objectives, standards, and design criteria and detailed inventories of the study area, including the existing sanitary sewer and water supply systems, had been completed and reviewed by the Greater Kenosha Area Utility Planning Committee guiding the study. Three advisory committee meetings were held during 1989 to review draft report materials.

- The conduct of a study to evaluate alternative means of providing for the treatment of sewage from the planned Geneva National Golf Club and adjacent Interlaken Resort sewer service area in the Town of Geneva, Walworth County. A cost-effectiveness evaluation and a sewage treatment plant impact analysis were completed by the Commission staff. These analyses resulted in a recommendation to attach this new sewer service area to the Walworth County Metropolitan Sewerage District. At year's end, the plan amendment providing for that attachment had been adopted by the Regional Planning Commission and transmitted to the Wisconsin Department of Natural Resources for approval.

- At the request of Racine County, the Commission prepared and published in 1989 a prospectus calling for the preparation of coordinated sanitary sewerage and water supply system plans for the greater Racine area. The proposed study would also address the intergovernmental, administrative, legal, and fiscal problems inherent in the development of the required utility systems. Particular emphasis would be placed upon identifying the most cost-effective and environmentally sound utility systems to serve the rapidly developing IH 94 freeway corridor and areas in northeastern Racine County. The prospectus was prepared under the guidance of an advisory committee. At year's end, the prospectus had been approved by all parties concerned, funding had been secured in accordance with the prospectus recommendation, and a consultant selected to carry out the preparation of the coordinated set of plans. The Regional Planning Commission agreed to administer the program for the local units of government in eastern Racine County.

Sanitary Sewer Extensions and Sewer Service Area Refinement Process

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

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 facility in the Region. A total of 85 such sanitary sewer service areas were delineated and named in the adopted plan. These

initially recommended sanitary sewer service areas were based upon the adopted regional land use plan for the year 2000. As such, the preliminary delineations were necessarily general in nature and did not reflect detailed local planning considerations. Accordingly, the Commission determined that upon adoption of the regional water quality management plan, steps would be taken 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 plan, consisting of intergovernmental meetings with the affected units of government and culminating in the holding of a public hearing on the refined and detailed sewer service area map. Such a map would 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, such corridors containing the best and most important elements of the natural resource base. Preserving the environmental corridor lands in essentially natural, open uses is important to the maintenance of the overall quality of the environment, and helps avoid the creation of serious and costly developmental problems. Accordingly, urban development should be discouraged from occurring within the corridors identified in the sewer service area plans, an important factor to be considered in the extension of sanitary sewer service.

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

By the end of 1989, the recommended plan refinement process had been completed for 53 of the 85 initially identified sanitary sewer service areas. Fifty of these refinements had been completed and adopted both by the local governments concerned and by the Commission prior to 1989. During 1989, such detailed planning efforts were completed for three additional areas: the Oconomowoc and Silver Lake areas in Waukesha County and the Genoa City area in Kenosha and Walworth Counties. The plans for these areas were adopted locally and by the Commission during 1989. The refinement process has resulted in a redefinition and combination of certain areas such that, upon completion of the refinement of the 53 areas, there remained only 45 such areas.

In addition to the refinement of previously delineated sanitary sewer service areas, the planning process followed since adoption of the regional water quality management plan in 1979 has resulted in the creation of eight new sanitary sewer service areas. The refined sewer service area plans for six of these service areas—Army Lake, the Country Estates Sanitary District in the Town of Lyons, and the Town of Walworth Utility District No. 1, all located in Walworth County; Eagle Spring Lake Sanitary District and Mukwonago County Park in Waukesha County; and Rainbow Springs lying in both Waukesha and Walworth Counties—were completed prior to 1989. During 1989 two new service areas were created—the Alpine Valley and Geneva National-Interlaken areas, both in Walworth County.

The existing status of all planned sanitary sewer service areas is summarized in Table 24 and on Map 19. This table identifies the originally defined 85 sewer service areas and the relation ship of those areas to the 53 refined and detailed sewer service areas and the eight new sewer service areas referenced above. The table also identifies the documents setting forth each refined and detailed sewer service area, and the date on which the Commission adopted that document as an amendment to the regional water quality management plan.

Additional sewer service area refinement plans were underway at the end of 1989. These included plans for the Mequon and Thiensville areas of Ozaukee County; the Union Grove area of Racine County; and the Brookfield, Elm Grove, and Menomonee Falls areas of Waukesha County.

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

Table 24

PLANNED SANITARY SEWER SERVICE AREAS IN THE REGION: 1989

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Kenosha	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
	Bristol IH 94 Pleasant Prairie North	Bristol/Pleasant Prairie	December 2, 1985	SEWRPC Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin
	Camp-Center Lakes Cross Lake Rock Lake Wilmot	Salem South	March 3, 1986	SEWRPC Community Assistance Planning Report No. 143, Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin
	Hooker-Montgomery Lakes	Salem North	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
	Kenosha Pleasant Park Somers	Kenosha	December 2, 1985	SEWRPC Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin
	Pleasant Prairie South	Pleasant Prairie South	December 2, 1985	SEWRPC Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin
	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

Table 24 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Kenosha (continued)	Silver Lake	Silver Lake	June 15, 1987	SEWRPC Community Assistance Planning Report No. 119, Sanitary Sewer Service Area for the Village of Silver Lake, Kenosha County, Wisconsin
	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
Milwaukee	Milwaukee Metropolitan Sewerage District	--	--	--
	South Milwaukee	--	--	--
Ozaukee	Belgium	Belgium	March 11, 1985	SEWRPC Community Assistance Planning Report No. 97, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin
	Cedarburg Grafton	Cedarburg Grafton	June 15, 1987	SEWRPC Community Assistance Planning Report No. 91, Sanitary Sewer Service Area for the City of Cedarburg, Village of Grafton, Ozaukee County, Wisconsin
	Fredonia Waubeka	Fredonia Waubeka	September 13, 1984	SEWRPC Community Assistance Planning Report No. 96, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin
	Lake Church	--	--	--
	Mequon	--	--	--
	Port Washington	Port Washington	December 1, 1983	SEWRPC Community Assistance Planning Report No. 95, Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin
	Saukville	Saukville	December 1, 1983	SEWRPC Community Assistance Planning Report No. 90, Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin
	Thiensville	--	--	--
Racine	Burlington	Burlington	June 16, 1986	SEWRPC Community Assistance Planning Report No. 78, Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin

Table 24 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Racine (continued)	Eagle Lake	- -	- -	- -
	Racine Caddy Vista	Racine Caddy Vista	December 1, 1986	SEWRPC Community Assistance Planning Report No. 147, Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin
	Southern Wisconsin Center	- -	- -	- -
	Union Grove	- -	- -	- -
	Waterford/Rochester Tichigan Lake	Waterford/Rochester	June 16, 1986	SEWRPC Community Assistance Planning Report No. 141, Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin
	Wind Lake	- -	- -	- -
	Yorkville	- -	- -	- -
Walworth	- -	Alpine Valley	December 4, 1989	Amendment to the Regional Water Quality Management Plan—2000, Towns of East Troy, Lafayette, and Spring Prairie, and Village of East Troy
	- -	Country Estates Sanitary District	March 3, 1987	Amendment to the Regional Water Quality Management Plan—2000, Country Estates Sanitary District, Town of Lyons
	Darien	Darien	June 20, 1988	SEWRPC Community Assistance Planning Report No. 123, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin
	Delavan Delavan Lake Elkhorn Walworth County Institutions	Delavan Delavan Lake Elkhorn Walworth County Institutions	December 3, 1981	SEWRPC Community Assistance Planning Report No. 56, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District
	East Troy Potter Lake - -	East Troy Potter Lake Army Lake	September 13, 1984	SEWRPC Community Assistance Planning Report No. 112, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin
	Fontana	- -	- -	- -
	- -	Geneva National-Interlaken	November 6, 1989	Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District
	Genoa City	Genoa City	March 6, 1989	SEWRPC Community Assistance Planning Report No. 175, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin

Table 24 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Walworth (continued)	Lake Como	- -	- -	- -
	Lake Geneva	- -	- -	- -
	Lyons	Lyons	September 14, 1987	SEWRPC Community Assistance Planning Report No. 158, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin
	Sharon	- -	- -	- -
	Walworth	- -	- -	- -
	- -	Town of Walworth Utility District No. 1	June 15, 1987	Amendment to the Regional Water Quality Management Plan—2000, Town of Walworth Utility District No. 1/Walworth County Metropolitan Sewerage District
	Whitewater	Whitewater	September 14, 1987	SEWRPC Community Assistance Planning Report No. 94, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin
	Williams Bay	- -	- -	- -
Washington	Allenton	Allenton	March 11, 1985	SEWRPC Community Assistance Planning Report No. 103, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin
	Germantown	Germantown	September 8, 1983	SEWRPC Community Assistance Planning Report No. 70, Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin
	Hartford	Hartford	June 21, 1984	SEWRPC Community Assistance Planning Report No. 92, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin
	Jackson	Jackson	June 17, 1984	SEWRPC Community Assistance Planning Report No. 124, Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin
	Kewaskum	Kewaskum	December, 1988	SEWRPC Community Assistance Planning Report No. 161, Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin
	Newburg	- -	- -	- -

Table 24 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Washington (continued)	Slinger	Slinger	December 2, 1985	SEWRPC Community Assistance Planning Report No. 128, Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin
	West Bend	West Bend	December 2, 1982	SEWRPC Community Assistance Planning Report No. 35, Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin
Waukesha	Beaver Lake	--	--	--
	Brookfield East	--	--	--
	Brookfield West	--	--	--
	Butler	Butler	March 1, 1984	SEWRPC Community Assistance Planning Report No. 99, Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin
	Delafield-Nashotah	--	--	--
	Dousman	--	--	--
	--	Eagle Spring Lake	December 2, 1985	Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District
	Elm Grove	--	--	--
	Hartland	Hartland	June 17, 1985	SEWRPC Community Assistance Planning Report No. 93, Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin
	Menomonee Falls	--	--	--
	Mukwonago	--	--	--
	--	Mukwonago County Park	June 21, 1984	Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago
	Muskego	Muskego	June 17, 1982	SEWRPC Community Assistance Planning Report No. 64, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin
	Nashotah-Nemahbin Lakes	--	--	--
	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

Table 24 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Waukesha (continued)	North Lake	--	--	--
	North Prairie	--	--	--
	Oconomowoc-Lac La Belle Silver Lake	Oconomowoc	March 6, 1989	SEWRPC Community Assistance Planning Report No. 172, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin
	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
	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
	Sussex-Lannon	Sussex	June 16, 1983	SEWRPC Community Assistance Planning Report No. 84, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin
	Wales	--	--	--
	Waukesha	Waukesha	December 2, 1985	SEWRPC Community Assistance Planning Report No. 100, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin

posed sanitary sewer extensions. During 1989, such review comments were provided on 280 public sanitary sewer extensions and 285 private main sewers or building sewers, distributed by county as shown in Table 25.

WATERSHED, FLOODLAND, AND STORMWATER MANAGEMENT PLANNING

During 1989, Commission efforts in watershed, floodland, and stormwater management consisted of the continuation of a stormwater drainage and flood control policy and system planning program for the Milwaukee Metropolitan Sewerage District; the provision of technical assistance to local governmental units in the development and implementation of floodland and stormwater management plans, policies, and practices; the provision of hydrologic and hydraulic data—including flood-flow and stage data—to consulting engineers and governmental agencies; and the conduct of a cooperative stream gaging program. Map 20 indicates the coverage of the watershed studies conducted by the Commission through 1989.

Map 19

RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 1989

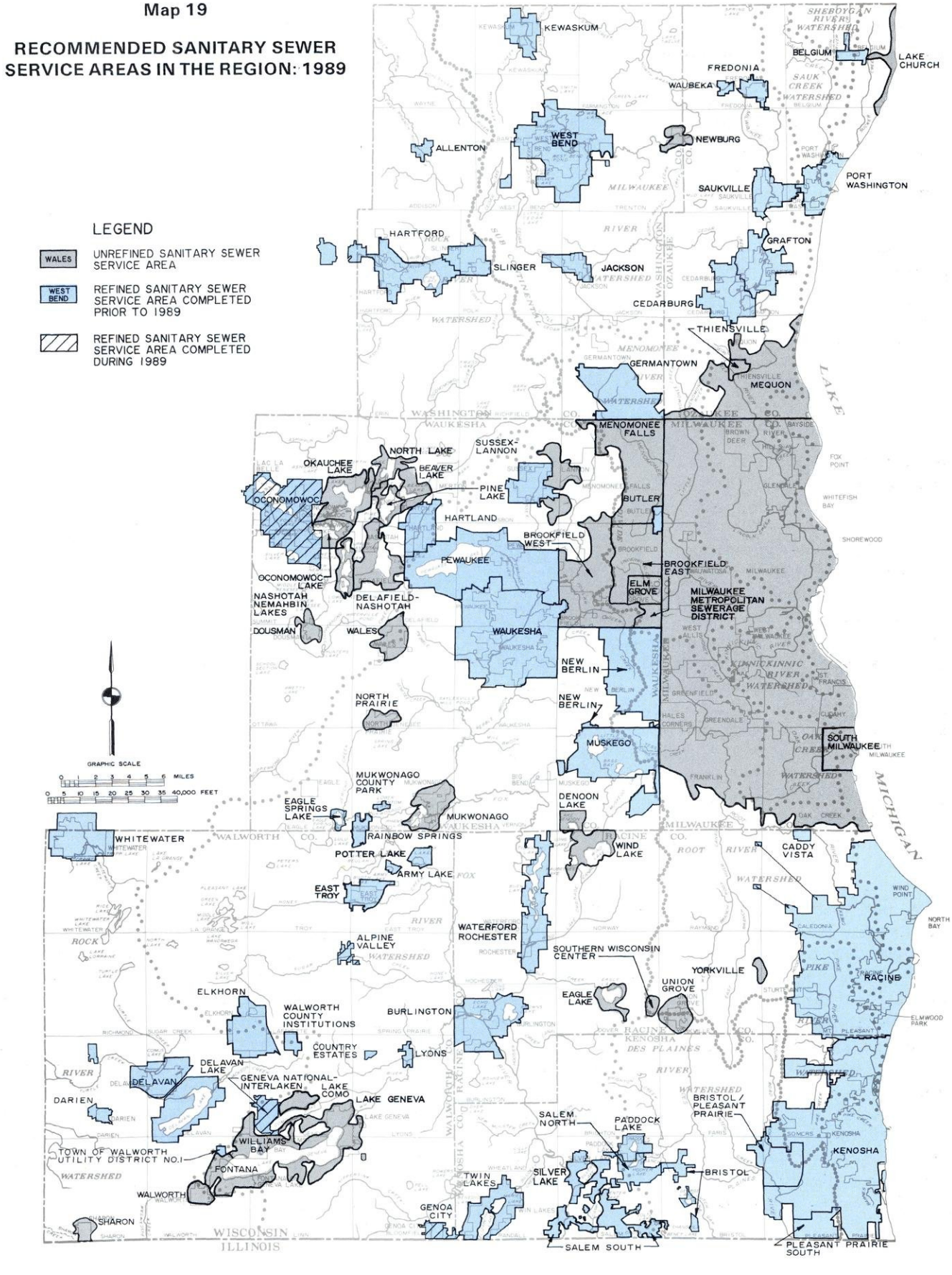


Table 25

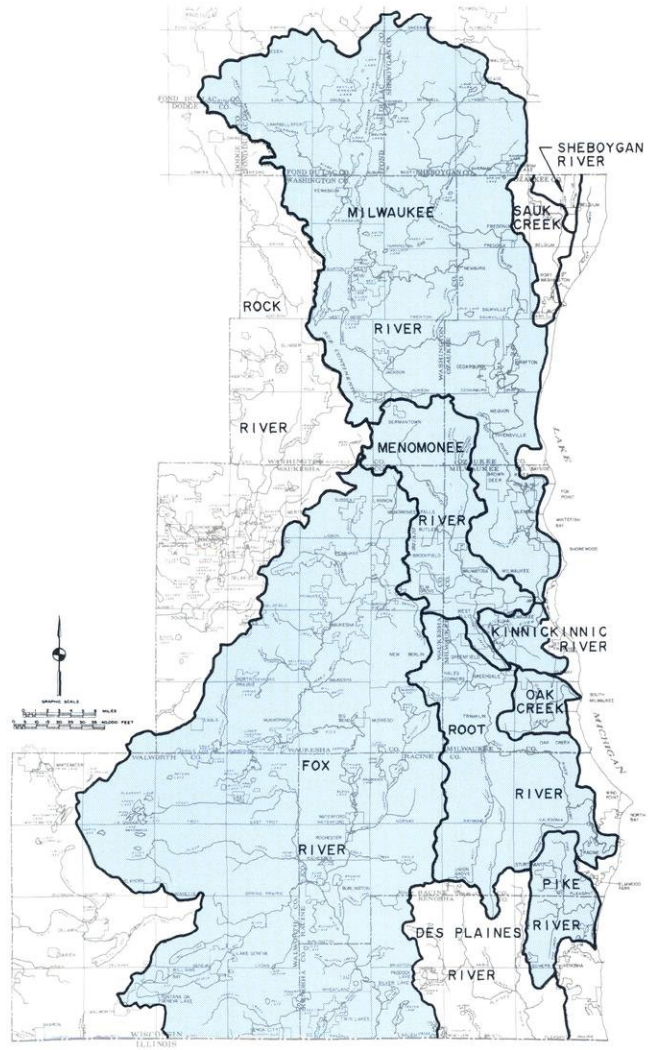
SANITARY SEWER EXTENSION REVIEWS: 1989

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Kenosha	27	15	42
Milwaukee . . .	53	47[a]	100
Ozaukee	26	17	43
Racine	26	29	55
Walworth . . .	13	18	31
Washington . .	33	43	76
Waukesha . . .	102	116	218
Total	280	285	565

[a]*The Commission has delegated the responsibility for the review of building sewer extensions within the City of Milwaukee to the City. During 1989, 419 reviews of building sewer extensions were conducted by the City.*

Map 20

SEWRPC WATERSHED STUDIES COMPLETED: 1989



Stormwater Drainage and Flood Control Planning Program for the Milwaukee Metropolitan Sewerage District

During 1989, the Commission continued work on the preparation of a stormwater drainage and flood control plan at the request of the Milwaukee Metropolitan Sewerage District. That District is charged by Section 66.89 of the Wisconsin Statutes with the function and duty of planning, designing, constructing, maintaining, and operating a system of facilities for the collection, transmission, and disposal of stormwater. In carrying out its responsibilities in this respect, the District recognized that a plan was needed that could be used to guide the development, over time, of drainage and flood control facilities within the greater Milwaukee area.

The program being carried out by the Commission for the District is being conducted in accordance with a prospectus published by the Commission in March 1985. In preparing the prospectus, it was recognized that sound public administration, as well as good planning and engineering practice, would dictate that the broad District responsibilities for stormwater management be carried out within explicit policy guidelines set forth by the governing body of the District, as well as within the context of a comprehensive stormwater drainage and flood control system plan consistent with the policy plan. Accordingly, the prospectus proposed that the District stormwater drainage and flood control plan consist of two elements—a policy plan and a system plan. The policy plan is intended to identify those streams and watercourses for which it is recommended that the MMSD assume jurisdictional responsibility for drainage and flood control purposes; to identify the type of watercourse improvements for which it is recommended that the MMSD assume responsibility; to set forth a recommended manner in which watercourse improvement costs should be shared between the MMSD and benefited municipalities; and to set forth a procedure for prioritizing MMSD drainage and flood control projects. The policy plan was completed in 1986, and was summarized in the Commission's 1986 Annual Report.

The MMSD system plan—to be prepared within the framework of the policy plan—will identify the type, capacity, location, and horizontal and vertical alignment of needed drainage and flood control facilities. To this end, the system plan will recommend the appropriate elevation, size, grade, and capacity of channels and appurtenant bridge waterway openings, major storm sewers, detention and retention basins, pumping stations, and other appurtenances of areawide significance. The system plan will also include such data on flood stages under existing and planned conditions as may be required for sound public decision-making concerning flood protection elevations. The system plan will be in sufficient depth and detail to provide a sound basis for local flood control planning and design, as well as for proceeding with final engineering of the recommended watercourse and other major drainage projects proposed to be constructed by the District. The system plan will identify the benefits and costs of the recommended improvements, and an order of priority and schedule for their construction over time. In effect, then, the system plan culminates in the preparation of a capital improvements program for areawide drainage and flood control works within the existing and planned District service area.

By the end of 1989 the Commission, working under the guidance of a technical advisory committee created for this purpose, completed preparation of flood control and related stormwater drainage system plans for streams in the Kinnickinnic River, Milwaukee River, Oak Creek, Root River, and Lake Michigan Direct Drainage Area watersheds. These streams included: the Kinnickinnic River, Lyons Park Creek, Whitnall Park Creek, the Edgerton Ditch, the S. 43rd Street Ditch, Villa Mann Creek, and an unnamed tributary to Villa Mann Creek, all in the Kinnickinnic River watershed; Indian Creek, Lincoln Creek, Beaver Creek, Brown Deer Park Creek, and South Branch Creek, all in the Milwaukee River watershed; Oak Creek, the North Branch of Oak Creek, and the Mitchell Field Drainage Ditch, all in the Oak Creek watershed; the North Branch of the Root River, the East Branch of the Root River, Hale Creek, Tess Corners Creek, Whitnall Park Creek, the North Branch of Whitnall Park Creek, the Northwest Branch of Whitnall Park Creek, Crayfish Creek, and the Caledonia Branch of Crayfish Creek, all in the Root River watershed; and Fish Creek in the Lake Michigan direct drainage area. At year's end, the Commission staff was nearing completion on flood control and related drainage system plans for streams in the Menomonee River watershed, the last watershed area to be studied.

Stormwater and Floodland Management Planning

During 1989, the Commission staff provided technical assistance to state and local governmental agencies in resolving stormwater and floodland management problems. Both stormwater drainage and flood control deal with problems of disposal of unwanted water, and the distinction between these two concepts is not always clear-cut. The Commission defines flood control as the prevention of damage from the overflow of natural streams and watercourses. In contrast, drainage is defined by the Commission as the disposal of excess stormwater on the land surface before such water has entered defined stream channels. While the Commission continues to be extensively involved in flood control planning, in recent years the Commission's work efforts have been increasingly directed toward stormwater management planning.

In 1989 the Commission undertook a number of stormwater and floodland management planning activities at the request of local units of government. The following are examples of such work:

- Work continued on the preparation of a stormwater management plan for the City of West Bend. During 1989, the Commission published SEWRPC Community Assistance Planning Report No. 173, A Stormwater Management Plan for the City of West Bend, Washington County, Wisconsin, Volume One, Inventory Findings, Forecasts, Objectives, and Design Criteria. Work continued during the year on the evaluation of stormwater management alternatives for the Silver Creek subwatershed. That work is being documented in a second volume of the report scheduled to be published in 1990.

- At the request of Racine County, hydrologic and hydraulic analyses were conducted to determine the downstream impacts of proposed filling and development of an industrial site along the Pike River. Alternative means of abating onsite and upstream drainage and flooding impacts of the pro-

posed fill and development were suggested in order to make the project consistent with county and state floodland regulations.

- At the request of Waukesha County, the Commission staff conducted hydrologic and hydraulic analyses for replacement structures for the CTH G bridge over a tributary to Pewaukee Lake in the Town of Pewaukee and the CTH K bridge over the Fox River in the Village of Menomonee Falls. These analyses were used by the County Highway Department in final replacement bridge designs.

- At the request of Kenosha County, the Commission staff conducted a review of a stormwater drainage plan for a commercial development in the Town of Wheatland. The analysis indicated that relatively minor impacts could be expected on adjacent agricultural lands if the drainage plan were to be implemented.

- At the request of the Village of Grafton, the Commission staff completed a hydraulic analysis of a proposed building modification and rehabilitation project, the building lying on the margin of the floodplain of the Milwaukee River. Specific recommendations were developed for refining the building grades and site plan to be consistent with local and state regulations.

- At the request of the City of Milwaukee, a flood control plan was developed for a portion of the Menomonee River estuary area where overland flooding problems exist during high Lake Michigan level periods. The Commission, working in cooperation with the City Engineering staff, completed the requested study, which included an evaluation of alternatives providing for dikes and floodwalls, stormwater pumping facilities, and filling. Consideration was given to the potential for flooding during both the 100-year and 500-year recurrence interval flood events. The recommended plan is consistent with regional as well as local land use development and flood control objectives, and provides primarily for floodproofing protection of 13 structures located wholly or partially within the 100-year recurrence interval floodplain; the placing of approximately 7,100 cubic yards of fill; the regrading and repaving of about 163,000 square feet of parking and material storage areas; raising about 1,200 lineal feet of street and associated storm sewer inlets and manholes; constructing about 550 lineal feet of floodwall; modifying the existing stormwater drainage system; and constructing one pumping station to serve an isolated property during periods of high lake and estuary water levels (see Map 21). The recommended plan is documented in SEWRPC Memorandum Report No. 39, A Flood Control Plan for a Portion of the Menomonee River Estuary Area, City of Milwaukee, Milwaukee County, Wisconsin.

- The Commission staff routinely provides hydrologic and hydraulic data to state and local units of government and consultants for use in the design of bridges and other structures over and adjacent to streams in the Region. During 1990 data was provided for: Cedar Creek near the Village of Jackson; the Bark River near the Village of Dousman; the Little Menomonee River in the City of Milwaukee; the Milwaukee River in the Village of Brown Deer; two tributaries of the Menomonee River in the Village of Germantown; the West Branch of the Root River in the City of West Allis; and an unnamed tributary to Pewaukee Lake in the Town of Pewaukee.

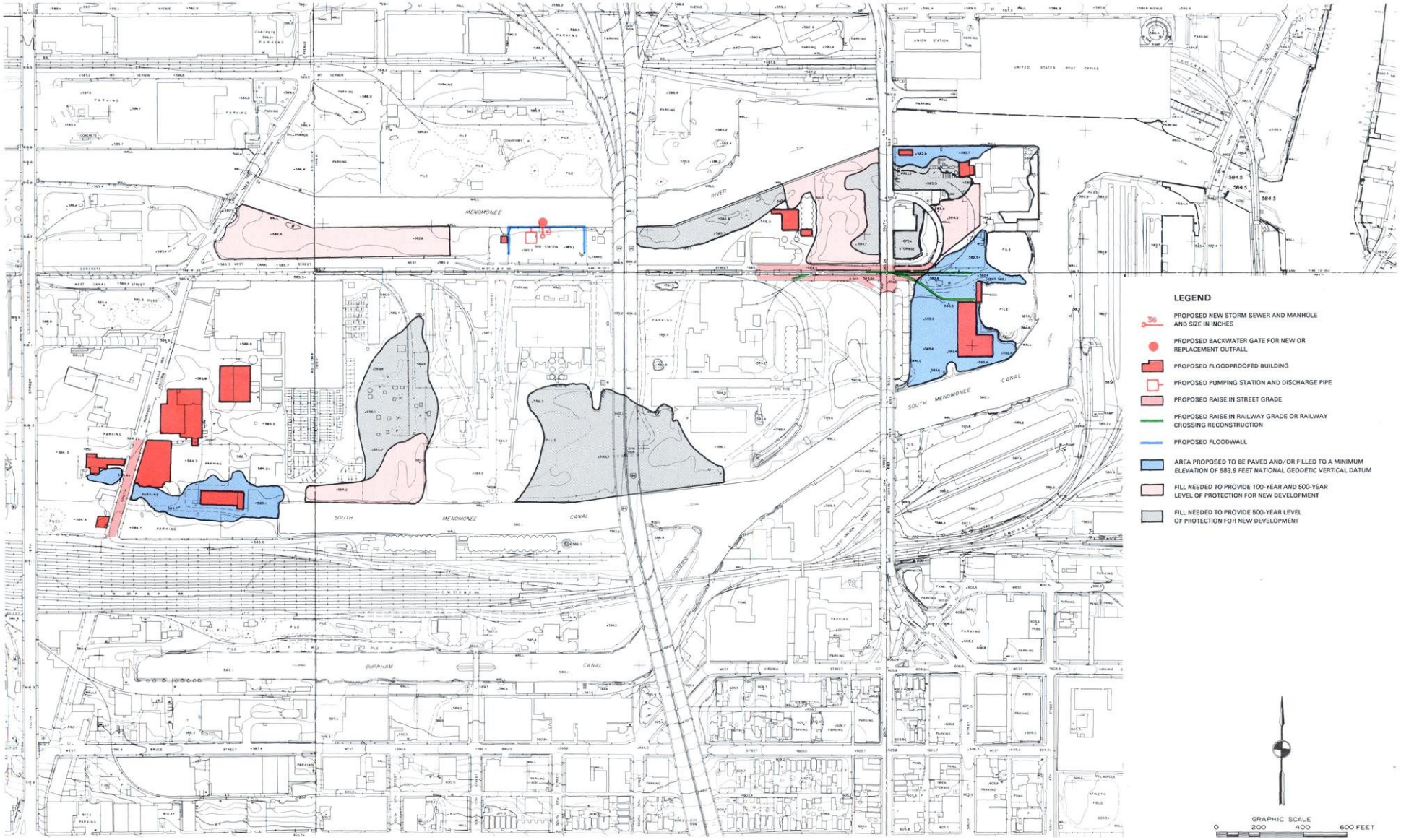
In 1990 the Commission will continue its involvement in stormwater management and floodland management activities, maintaining a staff capability to respond to requests for assistance from local governmental units and state agencies.

Floodplain Data Availability

The status of existing flood hazard data in the Region is shown on Map 22. The Commission has completed comprehensive watershed studies for the Fox, Kinnickinnic, Menomonee, Milwaukee, Root, and Pike River watersheds, and for the Oak Creek watershed, resulting in the development of flood hazard data for about 699 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 flood hazard data

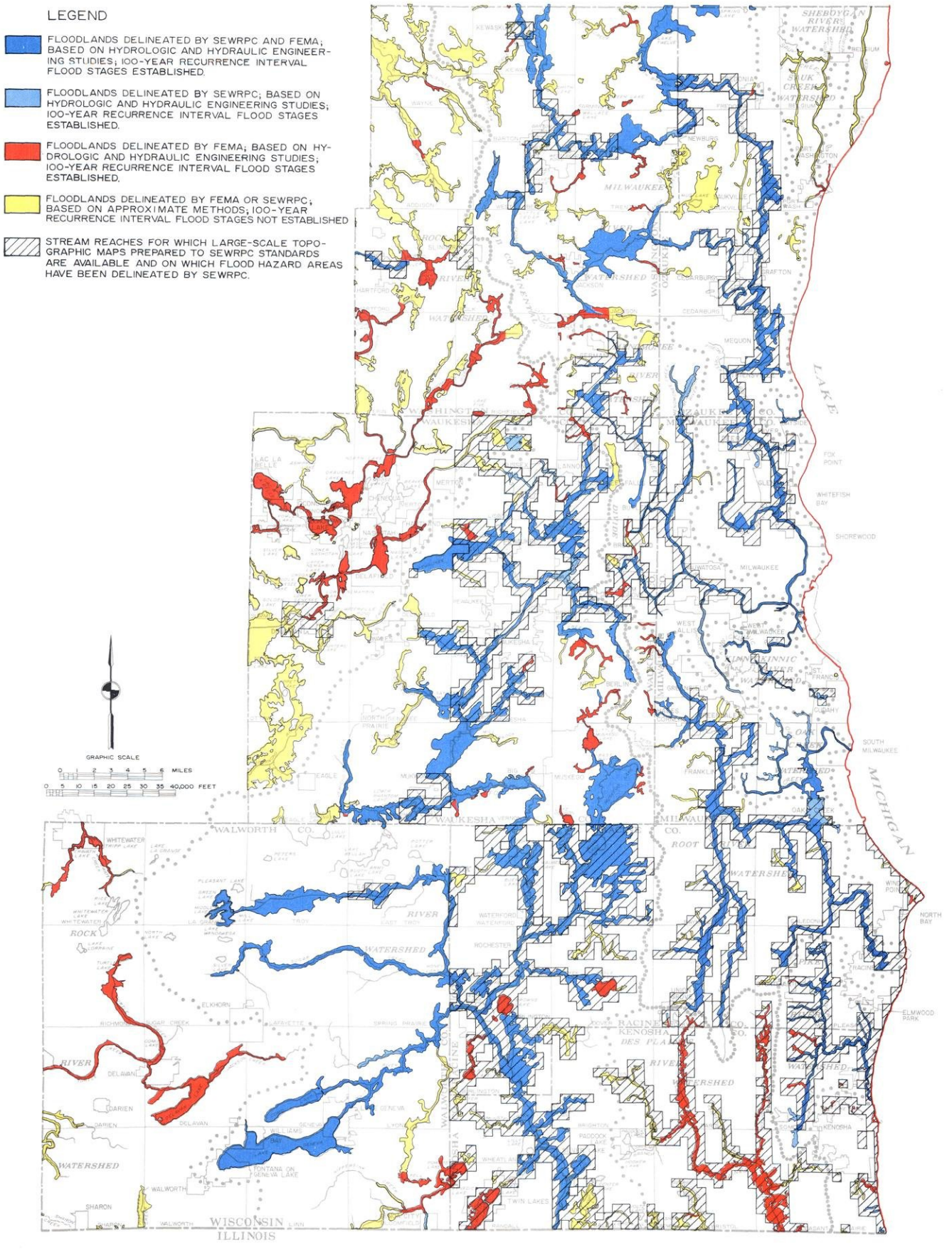
Map 21

RECOMMENDED FLOOD CONTROL PLAN FOR A PORTION OF THE MENOMONEE RIVER ESTUARY AREA



Map 22

DELINEATION OF FLOODLANDS: 1989



for about 46 additional miles of stream channel. Large-scale flood hazard maps prepared to Commission specifications are available for the riverine areas along about 444 miles of stream channel for which the Commission and the Federal Emergency Management Agency have developed flood hazard data.

Flood Insurance Rate Studies

Under the National Flood Insurance Act of 1968, the Federal Emergency Management Agency (FEMA) 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 of such studies on a community-by-community basis throughout the United States. While the Commission has not directly contracted with FEMA for the conduct of such studies, the Commission does cooperate with all of the engineering firms and agencies involved in the conduct of such studies, particularly in the provision of basic floodland data already developed by the Commission in a more comprehensive and cost-effective manner through its series of watershed studies. The Commission provides to the contractors all of the detailed hydrologic and hydraulic data developed under the 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.

Federal flood insurance studies are carried out individually for incorporated cities and villages and for the remaining unincorporated areas of counties. The status of flood insurance rate studies in the Region at the end of 1989 is shown on Map 23. During 1989, no new studies were underway for communities within the Region. However, the federal government had contracted for updated studies which were underway for the Cities of Cedarburg and Mequon, the Villages of Grafton and Saukville, and the unincorporated area of Ozaukee County to reflect new information and development since completion of the initial studies. It is the intent of FEMA to update older studies depending upon need and funding availability.

As shown on Map 23, as of 1989 there were a total of 24 cities or villages in the Region for which FEMA had not conducted a flood insurance rate study. In eight cases, FEMA has instead published a "flood hazard boundary map," which shows an approximate location of floodlands without the support of detailed engineering studies. The remaining 16 cities or villages in the Region are not considered by FEMA to contain flood hazard areas. In one of those 16—the Village of Newburg in Washington and Ozaukee Counties—a flood hazard area was identified and delineated by the Commission in the Milwaukee River watershed study. Although FEMA has not yet undertaken a flood insurance study for the Village of Newburg, the Village has enacted appropriate floodland zoning regulations.

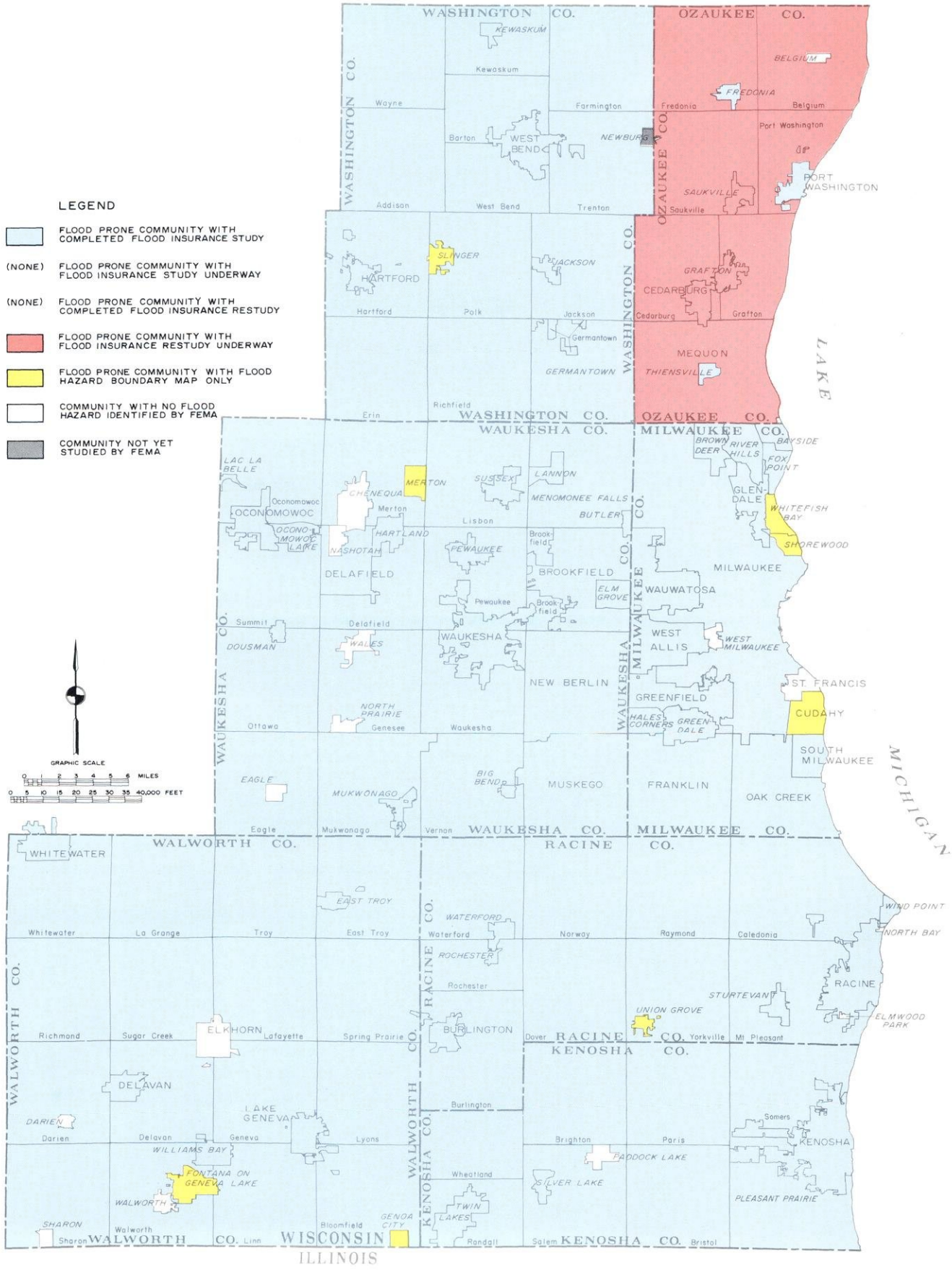
Besides providing available data from the Commission files to the contractors conducting such studies for FEMA, the Commission helps to delineate regulatory floodways and attends meetings with local officials and citizens to discuss the results of flood insurance rate studies. Under its community assistance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

Stream Gaging Program

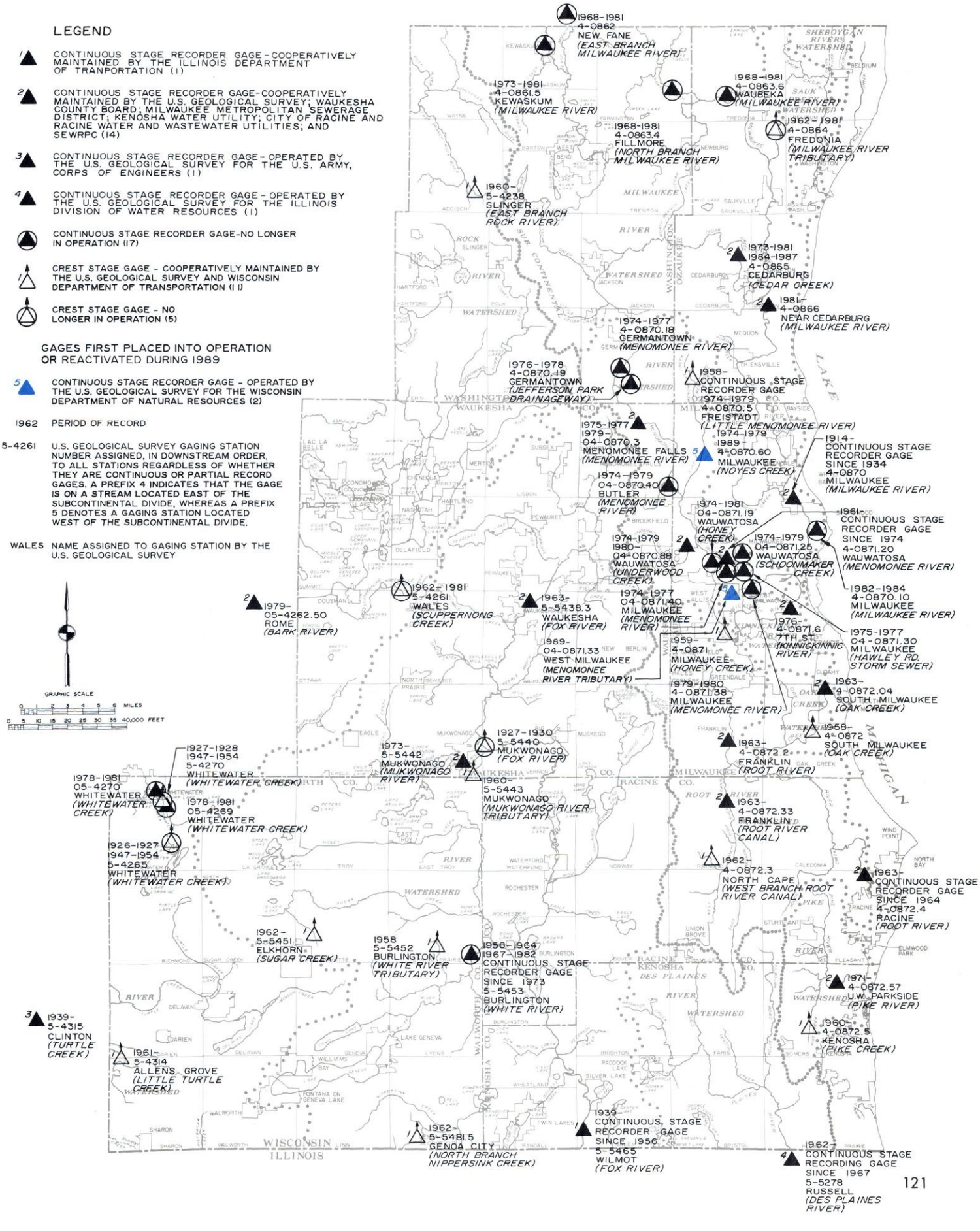
Streamflow data are essential to the sound management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous recording streamflow gages were in operation on the entire regional stream network. Since that time, the Commission has been instrumental in establishing, through cooperative, voluntary, intergovernmental action, a more comprehensive streamflow gaging program (see Map 24). In 1989, there were a total of 19 continuous recording streamflow gages in operation in the Region, two more than in 1988. Of that total, 14 were financially supported by the Waukesha County Board of Supervisors, the Milwaukee Metropolitan Sewerage District, the City of Racine and the Racine Water and Wastewater Utilities, and the Kenosha Water Utility under the Commission's cooperative

Map 23

STATUS OF FLOOD INSURANCE RATE STUDIES: 1989



LOCATION OF U. S. GEOLOGICAL SURVEY STREAM GAGING STATIONS



program. In addition, one gage was supported by the U. S. Army Corps of Engineers; one was supported by the Illinois Department of Transportation; and one was supported by the Illinois Environmental Protection Agency, Division of Water Resources. The two new gages were supported by the Wisconsin Department of Natural Resources. One of the two new gages was placed on a tributary to the Menomonee River in the Village of West Milwaukee. The second new gage is a reactivation of a gage operated over the period 1974-1979 on Noyes Creek, a tributary to the Little Menomonee River in the City of Milwaukee. The U. S. Geological Survey annually publishes the data collected under this streamflow monitoring program.

COASTAL MANAGEMENT PLANNING

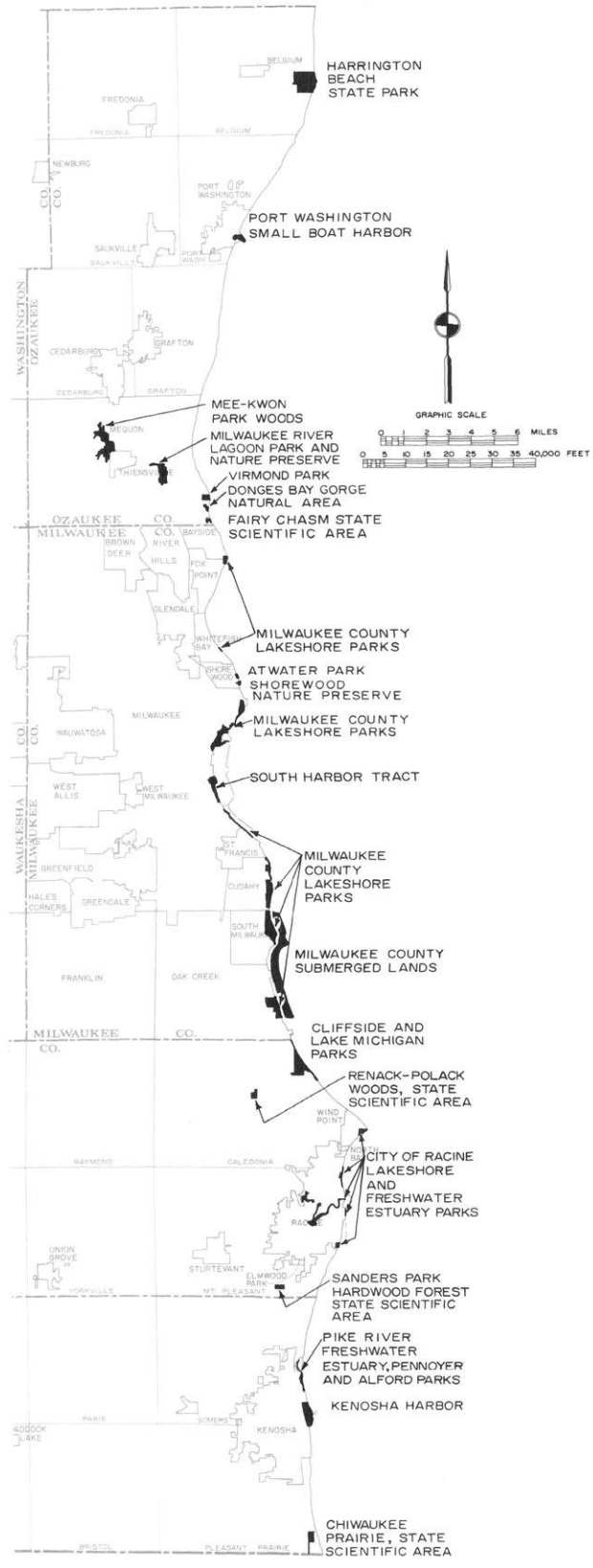
During 1989, the Commission continued to provide assistance to the Wisconsin Department of Administration's Bureau of Energy and Coastal Policy Analysis in the conduct of the Wisconsin coastal management program. This program is intended to coordinate governmental activities toward achieving the objective of better management of the resources of the Lake Michigan and Lake Superior coastal zones of the State. The program is being carried out by the State of Wisconsin pursuant to the federal Coastal Zone Management Act of 1972 through the Wisconsin Coastal Management Council.

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

One of the continuing functions of the Commission under the coastal management program is the designation of special coastal areas. In 1989, 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 25. These special areas have natural, scientific, economic, cultural, or historic importance. Designation by the Wisconsin Coastal Management Council as a special

Map 25

DESIGNATED COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 1989



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.

Lake Michigan Shoreline Erosion Management Plan for Milwaukee County

A shoreline erosion management plan for Milwaukee County was completed in 1989 and published in SEWRPC Community Assistance Planning Report No. 163, A Lake Michigan Shoreline Erosion Management Plan for Milwaukee County, Wisconsin. The study addresses bluff slope failure, shoreline erosion, and shore protection structure problems along the 30-mile reach of Lake Michigan shoreline of Milwaukee County. Special analyses were conducted to establish design water level and wave height design criteria to cover a range of conditions for both high- and low-water-level periods. The following briefly summarizes the findings and recommendations coming out of this study.

Inventory Findings

The bluffs along the Milwaukee County shoreline range up to nearly 130 feet in height above beach levels, with about one-half of the length of shoreline within the County having bluffs greater than 70 feet in height. The inventory findings indicated that the primary cause of bluff recession was bluff toe erosion by wave action, although groundwater seepage was also a major cause of slope failure in some portions of the shoreline.

Bluff characteristics and the stability of the bluff slopes were evaluated at 104 profile locations along the shoreline. The bluff materials and groundwater conditions were determined by field surveys, soil borings, and electrical resistivity analyses. The bluffs are largely composed of relatively impermeable glacial tills, and permeable lake sediments—mostly sand and silt.

About 32 percent of the county shoreline was found to have stable bluff slopes, while 25 percent of the shoreline was found to have unstable bluff slopes. Bluff slopes along 11 percent of the shoreline were classified as marginal—that is, unstable under certain conditions. Bluff slope stability was not evaluated for the remaining 32 percent of the shoreline, consisting of the shoreline protected by the Milwaukee Harbor breakwater; the terrace directly north of the harbor which extends to the City of Milwaukee Linnwood Avenue water treatment plant; and a terrace within the Village of Fox Point.

About 50 percent of the Milwaukee County shoreline was observed to be eroding in 1986 and 1987. At over one-half of the locations where erosion was observed, this shoreline erosion was threatening the stability of the bluff slopes.

Numerous types of shore protection structures exist along the Milwaukee County shoreline. The portion of the shoreline protected by structures has grown from about 15 percent in 1920, to about 35 percent in 1945, about 50 percent in 1975, and about 66 percent in 1987. The effectiveness of these structures—which include groins, bulkheads, revetments, and breakwaters—has varied. A field inspection of all 128 shore protection structures in the study area conducted in 1986 and 1987 found that 75 percent exhibited some type of damage and required repair. Of these 128 structures, 35 were considered major structures in that they protected either major public or quasi-public facilities, or more than 800 feet of public parkland or private property. The types of structure failure identified included overtopping, where the waves exceeded the top of, and often eroded material behind, the structure; flanking, or erosion at the sides of the structure; material failure; and undercutting.

The performance of the 35 major shore protection structures and beaches was evaluated under a range of six different Lake Michigan maximum water level and storm wave conditions. The evaluation indicated that, overall, depending upon the design storm wave selected, about 50 percent of the structures and beaches had a moderate or high potential for overtopping damage under a 10-year recurrence interval instantaneous maximum water level, compared to about 75 percent of the structures and beaches under a 100-year recurrence interval instantaneous maximum water level.

Lake Michigan Water Levels

Evaluation of the adequacy of existing shore protection structures and beaches, and the design of new structures, requires careful consideration of lake water levels. The annual mean lake level in 1986 of 582.5 feet above National Geodetic Vertical Datum (NGVD), and the

monthly mean level which occurred in October of that year of 583.2 feet above NGVD, set twentieth century record highs. A record high instantaneous maximum water level of 584.3 feet above NGVD occurred on March 9, 1987, during a severe storm that generated a 2.5-foot seiche and wind set-up.

The water level of Lake Michigan rises or falls according to the amount of water entering the lake and the amount leaving it. The amount entering the lake includes precipitation falling on the lake, stormwater runoff from the land surface draining to the lake, inflow from Lake Superior, and groundwater inflow. The water leaving the lake includes evaporation from the lake surface, groundwater outflow, and outflow through the St. Clair River and Chicago diversion. The outflow depends on the elevation of the lake: The higher the lake level, the higher its outflow. This self-regulating feature helps to keep lake levels within certain ranges. Man-made factors affecting the lake level include dredging of the outlet, diversions, consumptive uses, and regulation. The highest water levels generally occur in June, July, and August; the lowest water levels normally occur in January, February, and March. Because of the large volume of Lake Michigan, extremely high or low water levels may persist for extended periods of time, even after the factors causing those extremes have changed. However, the drought that occurred in late 1987 and in 1988 caused the lake levels to drop from record highs to about average levels in slightly more than one year.

Although there are other factors involved, lake levels generally follow trends in precipitation. Figure 69 compares precipitation over the lake basin, and Lake Michigan water level records for the period 1960 through 1989. Lake levels reached record lows in the early 1960's when precipitation over the basin was up to five inches per year below normal. High precipitation amounts in the 1980's resulted in the record high water levels in 1986. Water levels then returned to near normal levels in 1988 as the basin precipitation amounts fell to 36 percent below average. Throughout most of the 1970's and 1980's, precipitation amounts and Lake Michigan water levels have been above normal. Above-average amounts of precipitation have fallen over the Lake Michigan basin in 13 of the 17 years since 1972.

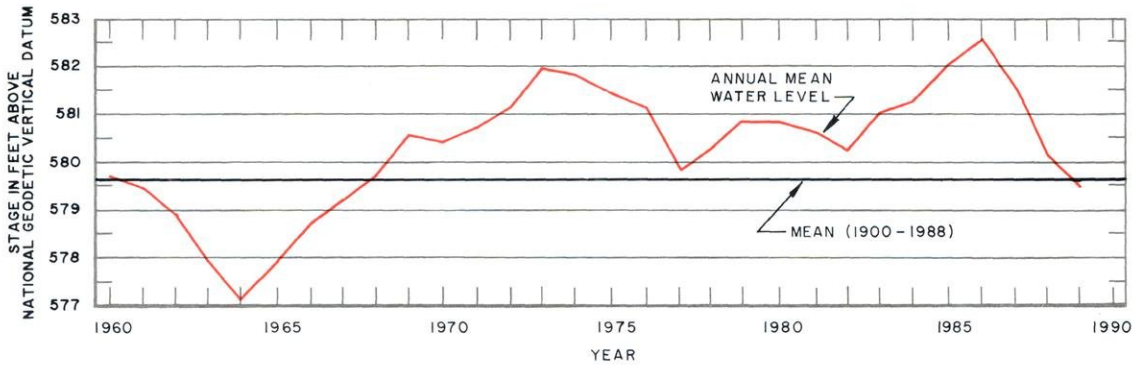
In order to provide an adequate level of protection against severe storms that occur during high water levels, the study recommends that major shore protection structures be designed to prevent severe damage under water levels at least up to and including the 100-year recurrence interval instantaneous maximum water level of 584.3 feet above NGVD. Since it may not be economically feasible for many private residential lakefront property owners to construct shore protection structures designed to prevent damage during a 100-year recurrence interval water level, the study recommends that shore protection structures protecting single-family residential dwellings be designed to prevent damage during a major storm with at least a 10-year recurrence interval instantaneous maximum water level of 582.8 feet above NGVD. The study recommends that all structures be designed to prevent severe damage during a 20-year recurrence interval wave height, a wave height which in deep water approximates 21.0 feet. Finally, the study recommends that all structures be designed to perform well under a range of water level and storm wave conditions. The recommended design water levels, water levels used to analyze existing shore protection structures, and recorded maximum and minimum instantaneous water levels are shown in Figure 70.

Plan Recommendations

Upon careful consideration of alternatives, the Intergovernmental Coordinating and Technical Advisory Committee guiding the study selected a recommended plan which, if implemented, would fully stabilize the bluff slopes and protect the shoreline from wave and ice erosion on a long-term basis. This plan, which consists of a bluff slope stabilization element, and a combination of the best components of the alternative shoreline protection plans considered, identifies those shore protection measures which, when applied on a reach-by-reach basis, would effectively abate the erosion problems, would recognize the preferences and priorities of the local units of government and lakefront property owners concerned, would be economically feasible and implementable, and would provide—to the extent practicable—a usable shoreline to be enjoyed by the general public, as well as by lakefront property owners. The recommended plan is graphically summarized on Map 26.

Figure 69

LAKE MICHIGAN WATER LEVELS AND PRECIPITATION AMOUNTS: 1960-1989



NOTE: ELEVATIONS ARE IN FEET ABOVE NATIONAL GEODETIC VERTICAL DATUM. TO CONVERT TO INTERNATIONAL GREAT LAKES DATUM, SUBTRACT 1.34 FEET.

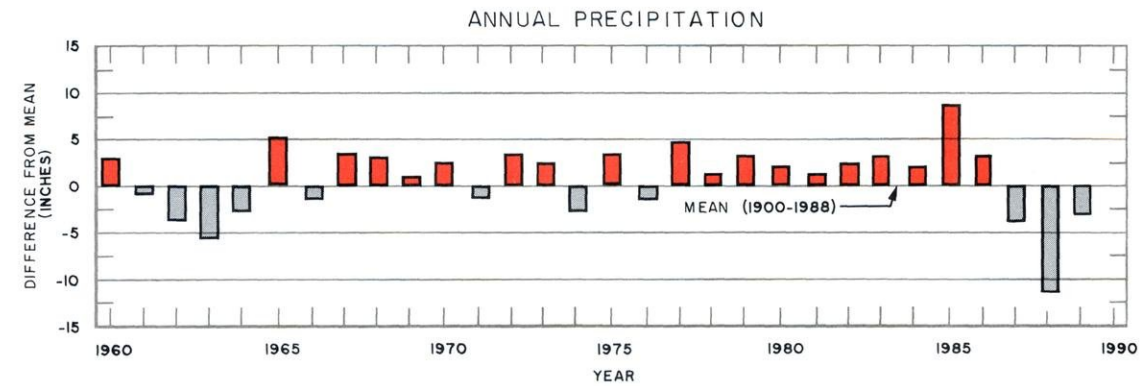
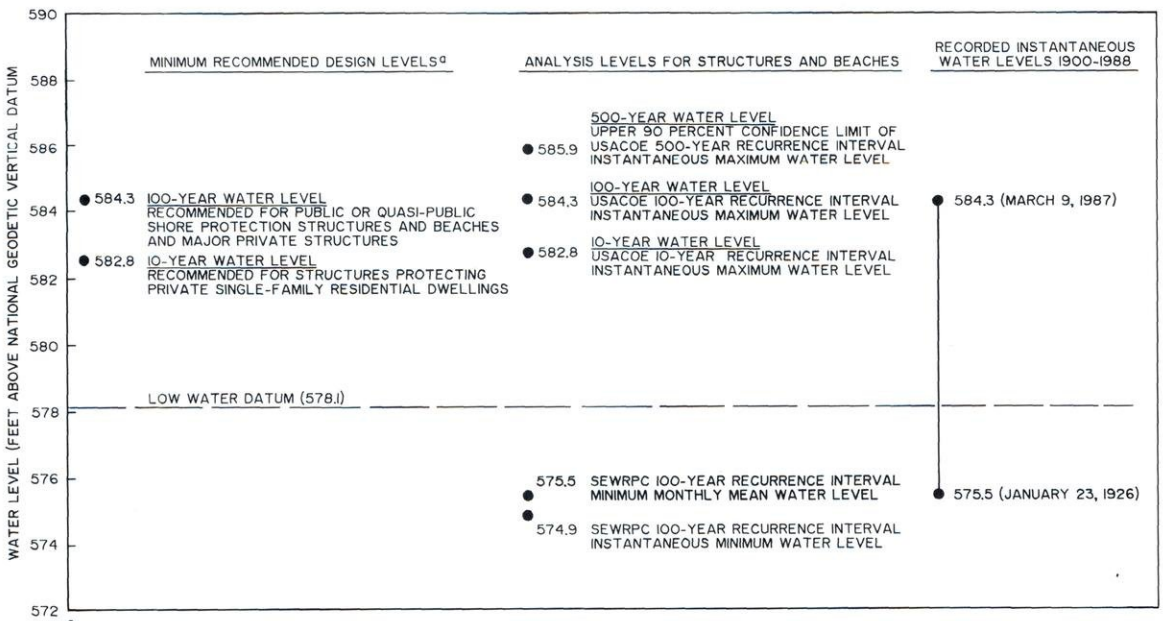


Figure 70

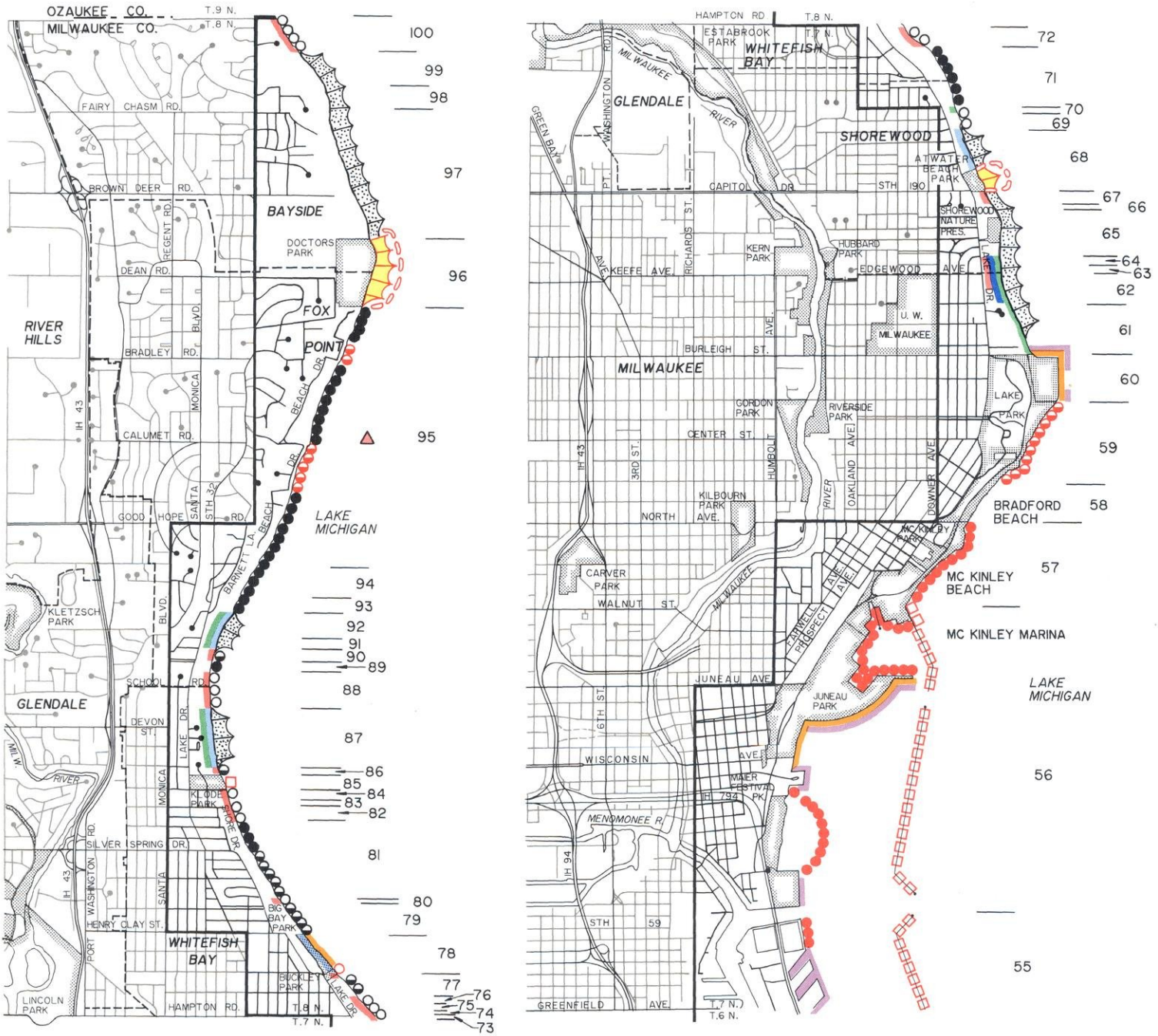
DESIGN, ANALYSIS, AND RECORDED LAKE MICHIGAN WATER LEVELS



[a] IT IS ALSO RECOMMENDED THAT ALL STRUCTURES BE DESIGNED TO PERFORM WELL UNDER A RANGE OF LAKE MICHIGAN WATER LEVELS, RATHER THAN UNDER ONLY A SINGLE DESIGN WATER LEVEL

Map 26

FINAL RECOMMENDED LAKE MICHIGAN SHORELINE EROSION MANAGEMENT PLAN FOR MILWAUKEE COUNTY



LEGEND

91 BLUFF ANALYSIS SECTION

BLUFF STABILIZATION PLAN ELEMENT

- BLUFF SLOPE REGRADING WITH REVEGETATION
- SURFACE WATER RUNOFF CONTROL
- GROUNDWATER DRAINAGE
- BLUFF SLOPE REVEGETATION

SHORELINE PROTECTION PLAN ELEMENT

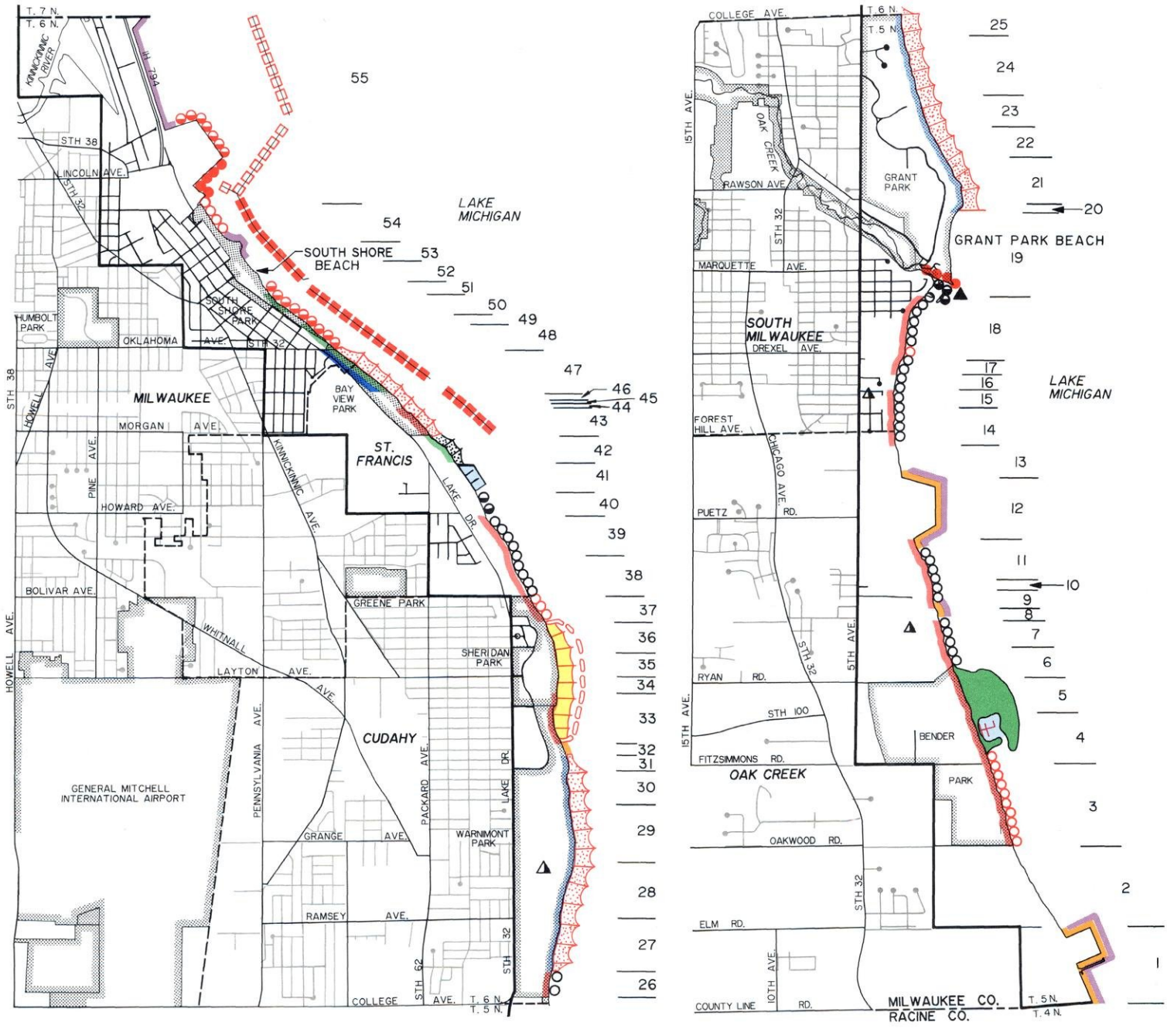
CONSTRUCT NEW STRUCTURES

- PRIVATE REVETMENT
- PUBLIC REVETMENT
- PRIVATE GROIN SYSTEM WITH COARSE SAND OR GRAVEL BEACH
- PUBLIC GROIN SYSTEM WITH COARSE SAND OR GRAVEL BEACH
- PUBLIC OFFSHORE BREAKWATERS WITH SAND BEACH
- PRIVATE MARINA
- PUBLIC MARINA

RECONSTRUCT EXISTING STRUCTURES

- PRIVATE REVETMENT
- PUBLIC REVETMENT

Map 26 (continued)



PUBLIC BULKHEAD

- RIP-RAP BERM
- HEIGHT EXTENSION
- BERM AND EXTENSION
- PUBLIC BREAKWATER TO 588.6 FEET ABOVE NATIONAL GEODETIC VERTICAL DATUM

MAINTAIN EXISTING STRUCTURES

- PRIVATE
- PUBLIC (ONSHORE)
- PUBLIC BREAKWATER AT EXISTING ELEVATION

AUXILIARY PLAN RECOMMENDATIONS

- ▲ ABATEMENT OF OAK CREEK SHOALING PROBLEM
- △ ASSESSMENT OF POTENTIAL TOXIC SUBSTANCES IN INDUSTRIAL WASTE SITES ON OR NEAR COASTAL BLUFFS
- △ MONITOR COASTAL ENVIRONMENT OFFSHORE OF FOX POINT TERRACE

GRAPHIC SCALE

0 1/4 1/2 MILE

0 2000 4000 FEET

Under the recommended shoreline erosion management plan, the bluff slopes along about 30,440 feet of shoreline, or 19 percent of the total county shoreline, would be stabilized by regrading and revegetating—where possible, using native plant species. In addition, about 12,060 feet of shoreline bluffs which do not require regrading would be revegetated, covering about 8 percent of the total county shoreline. It is recommended that site-specific studies be conducted to determine the feasibility of installing groundwater drainage systems along about 19,980 feet of shoreline, or 13 percent of the total county shoreline. Surface water drainage improvements are recommended to be installed along about 4,010 feet of shoreline, or 3 percent of the total county shoreline.

The recommended plan includes the construction of two new marinas: a public marina to be constructed in Milwaukee County Bender Park in the City of Oak Creek, and a private marina to be constructed in the City of St. Francis on the former Wisconsin Electric Power Company Lakeside power plant property. A total of 37 acres of nourished sand beaches contained by offshore breakwaters would be constructed at the Village of Shorewood Atwater Park and Milwaukee County Doctors Park and Sheridan Park. These breakwaters would contain a total of about 7,880 lineal feet, or 5 percent of the total county shoreline. Nourished gravel beaches contained by rock groins would be located along about 36,850 feet, or 23 percent of the total county shoreline. Quarry stone revetments would be constructed or reconstructed to protect about 44,840 feet, or 28 percent of the total county shoreline, including nearly all existing and proposed bluff fill projects.

Although no new bulkheads would be constructed, about 31,050 feet of existing concrete or steel sheet pile bulkheads, covering about 19 percent of the county shoreline, would be reconstructed by increasing the height of the structure or by placing a riprap berm in front of the bulkhead in order to reduce the potential for wave overtopping damage. Existing structures would be maintained along 27,300 feet of shoreline, or 17 percent of the total county shoreline.

Under the recommended plan, the Milwaukee Outer Harbor breakwater would be maintained at its existing elevation. It is much less expensive to modify or reconstruct threatened onshore structures than to substantially modify the Outer Harbor breakwater. It is recommended that the entire South Shore breakwater be reconstructed to an elevation of 588.6 feet above NGVD. For only 6,920 feet of shoreline, or 4 percent of the county total, shoreline erosion is not a significant threat, and no shore protection measures are recommended.

The total capital cost of the recommended shoreline erosion management plan is about $88.1 million, the annual maintenance cost is about $4.3 million, and the equivalent annual cost is about $9.5 million. Of the total plan cost, about 25 percent would be financed by the private sector and 75 percent would be financed by the public sector.

If the costs of the marina facilities are subtracted from the capital cost, the remaining total cost is $72 million, or just under $3.0 million per year over 25 years. It is expected that the plan would be phased in as the need for additional shore protection arises, thus making the plan more economically feasible. However, steps should be undertaken to ensure that plan implementation activities do not come to a standstill when water levels are lower and there is reduced public interest in shoreline erosion problems.

SOLID WASTE MANAGEMENT

During 1989, the Commission continued to assist counties in the Region in the preparation and implementation of locally developed, county-oriented, solid waste management plans. A comprehensive solid waste management plan for Kenosha County was completed during the year and is summarized below.

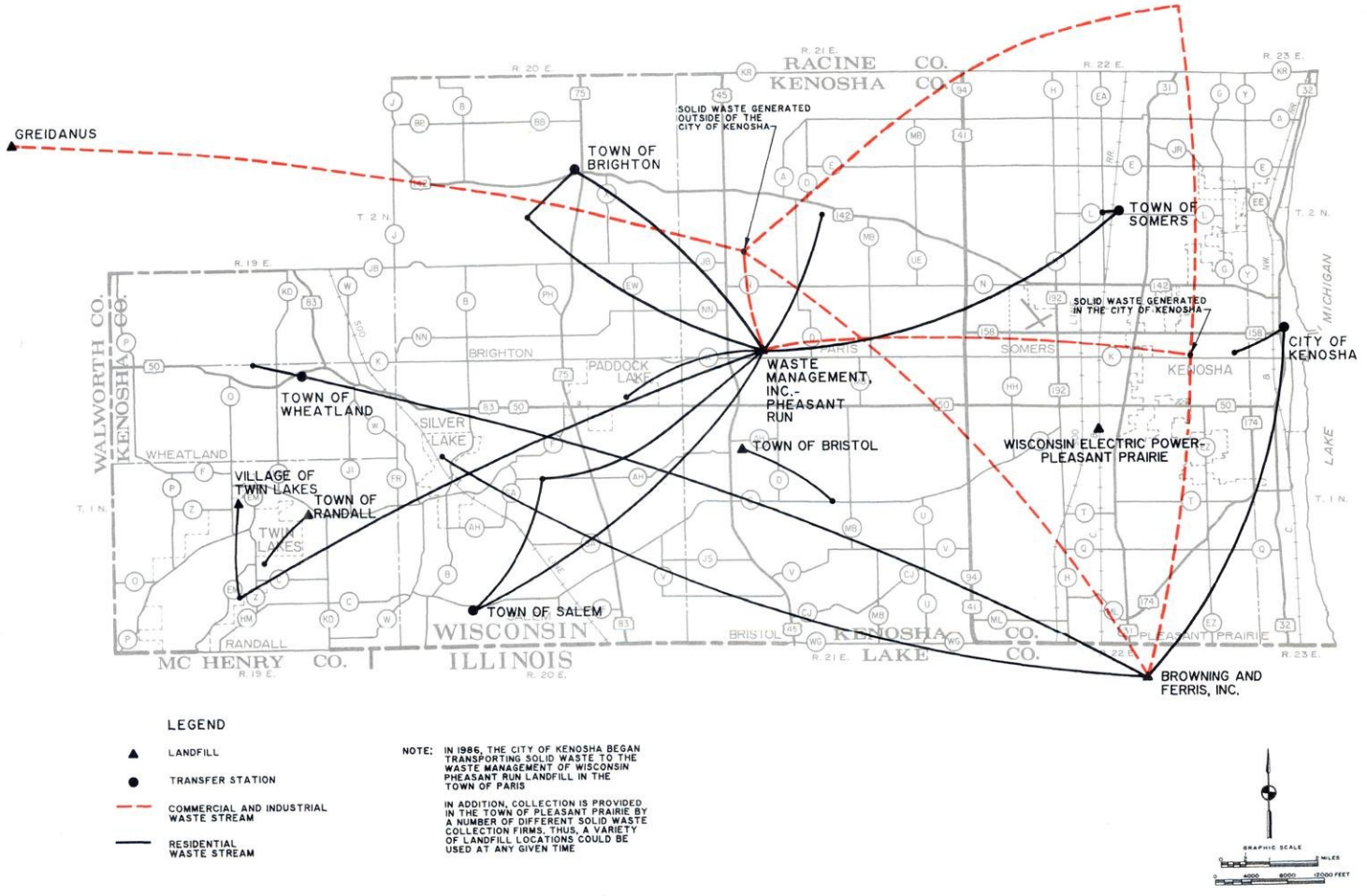
At year's end, the Commission staff was continuing to monitor proposed state legislative actions regarding solid waste management, including legislation promoting recycling programs, to ascertain the impacts on adopted countywide solid waste management plans in southeastern Wisconsin.

Kenosha County Solid Waste Management Plan

In cooperation with the Kenosha County Office of Planning and Development, the Commission staff worked with a 10-member Technical Advisory and Intergovernmental Coordinating Committee composed of local elected and appointed officials to complete the Kenosha County solid

Map 27

EXISTING SOLID WASTE TRANSPORTATION PATTERNS AND DISPOSAL SITES FOR KENOSHA COUNTY: 1984

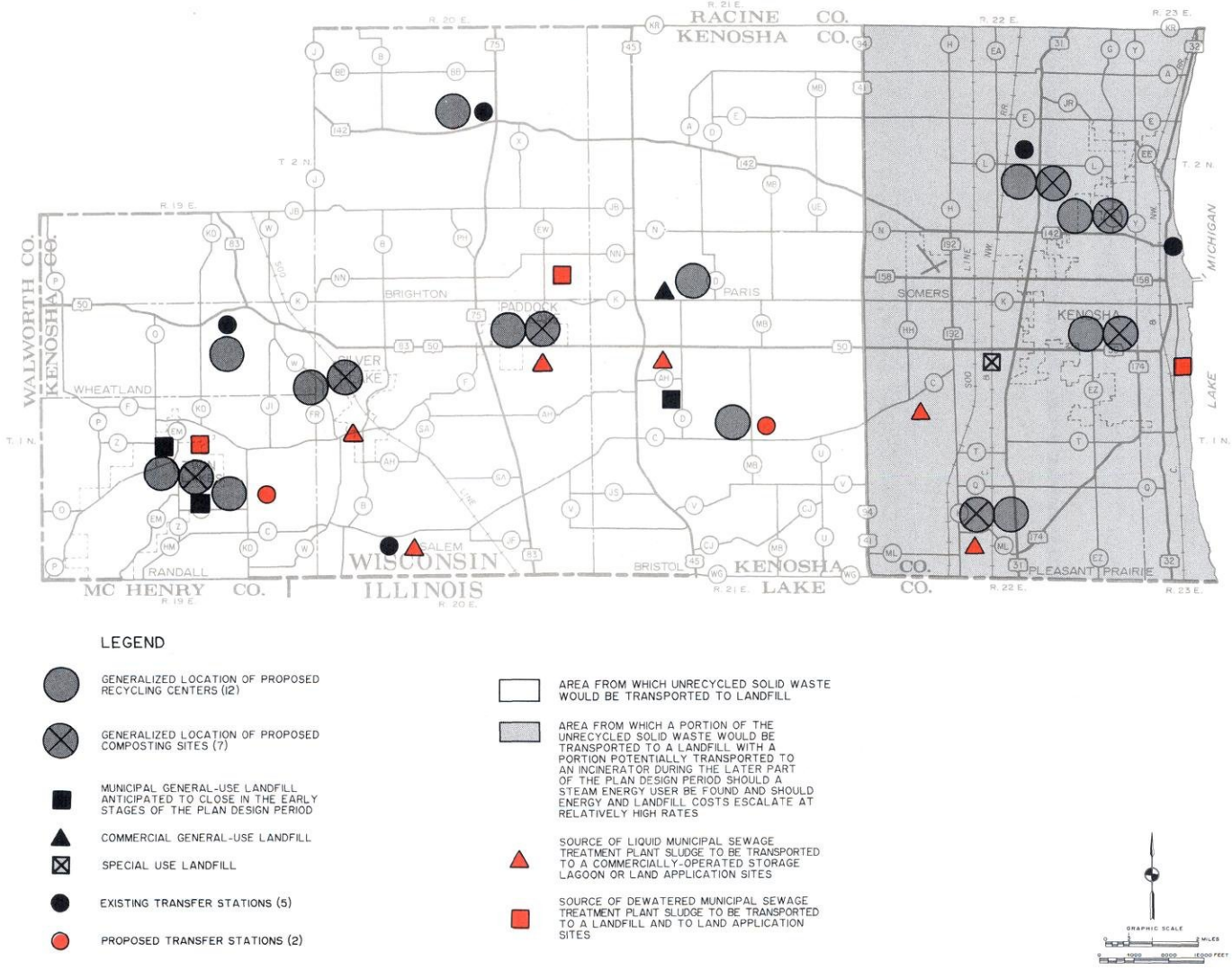


waste management plan. The study was funded jointly by the Wisconsin Department of Natural Resources, Kenosha County, and the City of Kenosha Water Utility, and is documented in SEWRPC Community Assistance Planning Report No. 129, A Solid Waste Management Plan for Kenosha County, Wisconsin, published in 1989.

The study evaluated the existing and anticipated future physical and demographic characteristics of the County, as well as the existing and anticipated solid waste types, quantities, and sources, and associated disposal methods. The study included consideration of public sewage treatment plant sludges, as well as conventional solid waste. The existing solid waste disposal facilities in the County and the transportation pattern for the residential and commercial solid wastes generated in and around the County are shown on Map 27. The study also evaluated the components and associated costs of eight alternative waste management plans for conventional solid waste and seven alternative plans for sewage sludge. In addition, four alternative levels of composting and recycling were evaluated. The alternative plans for conventional solid waste management contain options with respect to the number and location of solid waste landfill sites; the number and location of transfer stations; the use of incineration—and related production of steam and electricity; the conversion of solid waste to refuse-derived fuel; and the level of recycling and composting. The

Map 28

RECOMMENDED SOLID WASTE AND MUNICIPAL SEWAGE TREATMENT PLANT SLUDGE MANAGEMENT PLAN FOR KENOSHA COUNTY



LEGEND

- GENERALIZED LOCATION OF PROPOSED RECYCLING CENTERS (12)
- GENERALIZED LOCATION OF PROPOSED COMPOSTING SITES (7)
- MUNICIPAL GENERAL-USE LANDFILL ANTICIPATED TO CLOSE IN THE EARLY STAGES OF THE PLAN DESIGN PERIOD
- COMMERCIAL GENERAL-USE LANDFILL
- SPECIAL USE LANDFILL
- EXISTING TRANSFER STATIONS (5)
- PROPOSED TRANSFER STATIONS (2)
- AREA FROM WHICH UNRECYCLED SOLID WASTE WOULD BE TRANSPORTED TO LANDFILL
- AREA FROM WHICH A PORTION OF THE UNRECYCLED SOLID WASTE WOULD BE TRANSPORTED TO A LANDFILL WITH A PORTION POTENTIALLY TRANSPORTED TO AN INCINERATOR DURING THE LATER PART OF THE PLAN DESIGN PERIOD SHOULD A STEAM ENERGY USER BE FOUND AND SHOULD ENERGY AND LANDFILL COSTS ESCALATE AT RELATIVELY HIGH RATES
- SOURCE OF LIQUID MUNICIPAL SEWAGE TREATMENT PLANT SLUDGE TO BE TRANSPORTED TO A COMMERCIALLY-OPERATED STORAGE LAGOON OR LAND APPLICATION SITES
- SOURCE OF DEWATERED MUNICIPAL SEWAGE TREATMENT PLANT SLUDGE TO BE TRANSPORTED TO A LANDFILL AND TO LAND APPLICATION SITES

GRAPHIC SCALE
0 1 MILES
0 1000 2000 10000 FEET

alternative plans for sewage sludge management contain options providing for land application, landfilling, processing of sludge to produce a soil conditioner, composting, and incineration.

The recommended plan addresses six solid waste management functions—storage, source separation, collection, transportation, transfer, and disposal, as shown on Map 28.

The first component of the recommended plan is the storage system. Proper storage practices are an important element of an efficient collection system. Under the recommended plan, it is envisioned that residents would utilize either standard, leak-proof, galvanized metal or heavy-duty plastic trash cans with a 20- to 32-gallon capacity and equipped with tight-fitting lids; and/or heavy-duty plastic bags. The use of larger, bulk, portable containers designed for mechanized collection can reduce the time and cost of collection for certain commercial and industrial establishments, and in some multi-family residential areas. In addition, it is recommended that consideration be given to conversion to larger, individual residence, portable containers suitable for mechanized collec-

tion. Evaluations of this system should be made locally based upon cost, labor, and environmental considerations.

The second component of the recommended solid waste management plan addresses source separation. The program would consist of four integrated elements: 1) a residential solid waste recycling program for paper, glass, metal, waste oil, and plastic, whereby residents would transport these materials to a recycling center; 2) a curbside collection program for newsprint, whereby municipal and private solid waste collection vehicles would be equipped with special racks for temporary storage and transport of separated newsprint; 3) a composting program for the processing of yard wastes; and 4) a household toxic and hazardous waste management program.

The third and fourth components of the recommended solid waste management plan address the collection and transportation systems. The recommended plan envisions that the collection function will continue to be carried out in a manner similar to the existing system, which involves the use of municipally and privately owned and operated collection vehicles. Specific recommendations were made for the initiation of pilot programs for the collection of recyclables in the highly urbanized areas of the County.

The fifth component of the recommended solid waste management plan is the use of transfer stations for the consolidation of solid wastes. Five existing transfer stations would be continued, and two new stations would be added to the system.

The sixth component of the recommended solid waste management plan is the disposal system, which is applicable to both solid wastes and municipal sewage treatment plant sludge. This component is an integral part of the overall management system recommended for the study area in that it provides for the disposal of the unrecycled portion of the solid waste stream, and for a portion of the dewatered sludge generated by municipal sewage treatment plants.

It is recommended that the unrecycled solid wastes, as well as a portion of the municipal sewage treatment plant sludge, continue to be landfilled primarily at one existing commercial, general-use landfill—the Pheasant Run Landfill operated by Waste Management of Wisconsin, Inc., in the Town of Paris. It is recognized that the small, municipally owned landfills in the Village of Twin Lakes and the Towns of Bristol and Randall would continue to accept wastes until they are filled or abandoned. Also, existing commercial general-use landfills outside Kenosha County may be expected to continue to receive limited amounts of solid wastes generated within the County during the plan design period.

In addition, it is envisioned that the remaining sludge would be disposed of by land application in liquid form, with limited amounts to be transported to a commercially operated storage lagoon where it would be stored temporarily and eventually spread on agricultural lands in Kenosha and Walworth Counties. However, it is recommended that over the plan period, the sludge disposal system include provisions for increased use of land application, or for compost or soil conditioner production, to reduce the reliance on landfill disposal.

The capital investment cost of implementing the recommended Kenosha County solid waste management plan is estimated at $540,000 over the 20-year plan implementation period, not including the cost for landfill expansion which was assumed to take place incrementally over the plan period and is included in the annual operation cost. The total average annual cost of capital and operation and maintenance for carrying out the recommended plan, including the construction of new facilities and the operation and maintenance of those facilities, may be expected to approximate $3,130,000, or about $22.40 per ton of solid waste handled. Based upon the anticipated design year resident population of the County, the total average annual cost would be about $26 per capita. These costs do not include collection costs which, if added, would result in an average annual cost of $6,100,000, or about $43 per ton, or about $51 per capita.

The plan recommends that the overall management and administration of the plan implementation program be directed by a standing committee of the County Board, with assistance from a proposed countywide solid waste management task force. This task force could consist of one representative from each community in which a recycling and compost center is recommended to be operated, one representative of the county staff, representatives of the County Board, a possible representative from a landfill,

and representatives from the Wisconsin Department of Natural Resources and the University of Wisconsin-Extension program.

The solid waste management plan for Kenosha County sets forth the recommended means, costs, and implementation methods for meeting the existing and forecast year 2010 solid waste management needs in Kenosha County. Adoption and implementation of this plan will provide for the sound management of solid wastes in the County in an efficient, environmentally safe, and cost-effective manner, and will at the same time result in the recovery of valuable recyclable materials. Adoption and implementation of the plan would provide Kenosha County with a comprehensive, long-term solution to the resolution of the county solid waste management problems.

ECONOMIC DEVELOPMENT ASSISTANCE DIVISION

DIVISION FUNCTIONS

The Economic Development Assistance Division assists county and local units of government in the Region in pursuing economic development activities and promotes the coordination of county and local economic development plans and programs. The Division provides four basic types of services: economic development program planning; data and information provision; grant application preparation and grant award administration; and project planning.

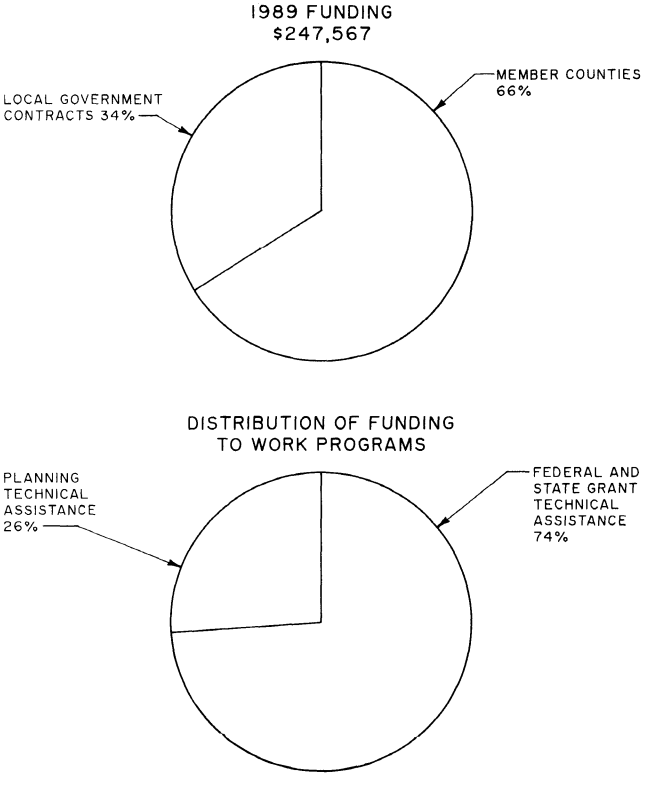
LOCAL ECONOMIC DEVELOPMENT PROGRAM PLANNING

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

There has been an increasing interest in carefully planning local economic development programs in order to contain the rising costs of promoting economic development. In order to attract new employers and retain existing employers, some communities have chosen to purchase land for industrial parks and to provide the necessary infrastructure for development—roadway, sanitary sewer, water supply, and stormwater drainage improvements. Other communities have improved central commercial business districts through street resurfacing; improvements to curbs and gutters, sidewalks, public parking lots, and utilities; and the provision of streetscape amenities such as trees and curbside benches. However, because the costs of these improvements have continued to escalate, and because business establishments have become less attached to existing geographic locations, many communities have begun to reevaluate previous decisions to promote economic development. While some have decided not to promote the growth of existing business and industry, or the location of new firms within their communities, others have decided to continue to pursue 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 compatible economic development activities. In response to the increased interest in furthering economic development at the county and local level, the Commission has developed a staff capability to assist public agencies and private organizations in such efforts.

Figure 71

ECONOMIC DEVELOPMENT ASSISTANCE DIVISION



During 1989, the Commission engaged in the following overall economic development program planning efforts:

- Completed the preparation of local economic development program plans for the City of Brookfield in Waukesha County and the Village of Slinger in Washington County.

- Provided demographic, socioeconomic, traffic, and land use data to enable updated countywide economic development program plans to be prepared for Kenosha and Racine Counties. These plans serve to maintain county eligibility for federal public works grants and business loan guarantees to further economic development.

PROVISION OF ECONOMIC DEVELOPMENT DATA AND INFORMATION

Considerable Commission staff effort is directed at answering requests for economic development-related data. This function also includes the provision of short-term technical assistance to local units of government, public agencies, and local development corporations in the analysis of economic development data. During 1989, the Division prepared letter responses to 60 requests for economic development data from the Commission files. In addition, approximately 250 requests were responded to 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, and private firms and individual citizens. The following are some examples of Division activity in performing this function during 1989:

- Provision of employer-related information to the Kenosha Area Development Corporation; Gateway Technical College in Kenosha County; Waukesha County Technical College; the Milwaukee Journal/Sentinel, Inc.; the University of Wisconsin-Whitewater, College of Business and Economics; the Wisconsin Electric Power Company; and the Waukesha County Department of Parks and Planning. The information was used in identifying the number of industries by industry type in the service areas of these organizations.

- Provision to the Wisconsin Business Development Finance Corporation of data on the potential economic impact of three proposed business loans. The corporation provides business loans that are guaranteed by the U. S. Department of the Treasury.

- Provision of assistance to the City of Franklin Director of Economic Development, and to the Franklin Economic Development Commission, in the development of information for the incorporation of a local private, not-for-profit economic development corporation. This type of organization can provide a range of local economic development services that government economic development commissions are not capable of providing.

- Provision of assistance to the Southeast Regional Marketing Group, Forward Wisconsin, Inc., in the coordination of the People and Jobs Forum held at the University of Wisconsin-Milwaukee. The Division also provided staff to serve as moderator for the Forum. The major initiative of the Forum was to provide information relative to the growth of employment opportunities in suburban locations and the availability of labor in central city locations. Such changes are expected to result in the need to develop new coalitions among economic development and community-based development professionals.

- Provision of assistance to the Wisconsin Department of Transportation in providing information to economic development professionals throughout the Region relative to the METRO 2020 planning initiative. METRO 2020 is intended, in part, to develop a regionwide consensus regarding transportation initiatives that are needed to attain specific economic development objectives.

- Provision of onsite assistance to local community staff and representatives of businesses interested in locating in, or expanding in, the community and utilizing state and federal business loan programs to do so. This assistance was provided on 42 separate occasions at locations in each of the Region's seven counties.

PREPARATION AND ADMINISTRATION OF ECONOMIC DEVELOPMENT GRANT APPLICATIONS

The Commission staff provides assistance to local units of government in the preparation of economic development grant applications to state and federal agencies and in the administration of programs following grant awards. In most cases, the grant applications seek to acquire state or federal funding to improve community facilities and services in order to meet the needs of business and industry, and to provide below-market interest rate loans to businesses in an effort to expand employment opportunities and to increase the community tax base.

The following applications for grants filed during 1989 either resulted in grant awards, were in the process of being prepared, or were being reviewed by the appropriate state or federal funding agency at the end of 1989:

- An application prepared at the request of the Village of Menomonee Falls for an economic development program grant from the Wisconsin Development Fund in the amount of $425,000. This grant was approved and used to provide a business loan to CAAP, Inc., a certified asbestos removal service company. The company was newly located in the Village. The loan is expected to result in 42 new jobs and $425,000 in private investment.

- An application prepared at the request of the Village of Mukwonago for an economic development program grant from the Wisconsin Development Fund in the amount of $120,000. This grant was approved and used to provide a business loan to Buell Motor Company, a manufacturer of high-performance motorcycles that expanded at a new location in the Village. The loan is expected to result in six new jobs and $120,000 in private investment.

- An application prepared at the request of the Village of Pleasant Prairie for an economic development program grant from the Wisconsin Development Fund in the amount of $747,500. This grant was approved and used to provide a business loan to Wrought Washer Manufacturing, Inc., a large manufacturer of washers, stamped and formed parts and assemblies, and heavyweight stampings. The company constructed a branch facility in the Village and relocated operations from Joliet, Illinois, that resulted from the asset purchase of a competitor. The loan is expected to result in 40 new jobs and $1.0 million in private investment.

- An application prepared at the request of the City of Whitewater for a transportation improvement grant from the State Transportation Economic Assistance Program in the amount of $65,810. This grant was approved and used to provide a portion of the funds required to construct a new industrial park road in the city industrial park to facilitate the location of a branch facility for Albert Trostel Package, Inc., a manufacturer of oil seals; molded rubber, polyurethane, and thermoplastic rubber products; assemblies; and custom-blended compounds. The grant is expected to result in 60 new jobs and $2.1 million in private investment.

- An application prepared at the request of the City of Hartford for a housing rehabilitation program grant from the Wisconsin Development Fund in the amount of $750,000. This grant was under preparation at the end of 1989, and, if approved, would be used to continue the owner- and renter-occupied housing rehabilitation program for low- and moderate-income persons in the City.

- An application prepared at the request of Kenosha County for a housing rehabilitation program grant from the Wisconsin Development Fund in the amount of $558,000. This grant was under preparation at the end of 1989, and, if approved, would be used to continue the owner- and renter-occupied housing rehabilitation program for low- and moderate-income persons in the County outside the City of Kenosha.

- An application prepared at the request of Kenosha County for an economic development program grant from the federal Economic Development Administration in the amount of $1.0 million. The grant application was in the process of being reviewed by the grantor agency at the end of 1989, and, if approved, would be used together with $335,000 in local funds from the County and the Kenosha Area Development Corpora-

tion to provide a business loan to a new company, Mann-Bilt Homes, Inc., a manufacturer of modular homes. The company would be located in a former Chrysler Corporation facility in the City of Kenosha. If approved, the grant would result in 40 new jobs and $2.4 million in private investment.

- An application prepared at the request of the City of Muskego for an economic development program grant from the Wisconsin Development Fund in the amount of $330,000. This grant was in the process of being reviewed by the grantor agency at the end of 1989, and, if approved, would be used to provide a business loan to the Delta Group, Inc., a new company to be located in the City that will manufacture secondary aluminum ingot for the aluminum casting industry. If approved, the grant would result in 17 new jobs and $330,000 in private investment.

- An application prepared at the request of Racine County for an economic development program grant from the federal Economic Development Administration in the amount of $400,000. This grant was in the process of being reviewed by the grantor agency at the end of 1989, and, if approved, would be used by the County to establish a revolving loan fund. That fund, together with private investment, would, in turn, be used to create new jobs in the County. The grant application was supported by an additional $200,000 provided by Racine County.

- An application prepared at the request of Racine County for an economic development program grant from the Wisconsin Development Fund in the amount of $750,000. This grant was in the process of being reviewed by the grantor agency at the end of 1989, and, if approved, would be used to provide a business loan to International Production Specialists, Inc., a company located in the City of South Milwaukee that will acquire the assets of and continue to operate Dan-Dee Equipment, Inc., which is located in the Town of Rochester. The new owner will continue to manufacture conveyors and conveying equipment. The loan is expected to result in 38 new jobs and $1.6 million in private investment.

- An application prepared at the request of Washington County for an economic development program grant from the Wisconsin Development Fund in the amount of $174,750. This grant was also in the process of being reviewed by the grantor agency at the end of 1989, and, if approved, would be used to provide a business loan to Craft-Cast, Inc., a precision investment casting foundry located in the Town of Jackson. The loan is expected to result in nine new jobs and $177,750 in private investment.

In addition to helping counties and communities apply for available federal and state funds, the Commission will, upon request, contract with successful applicants for the administration of the grant monies. A number of activities are involved in administering the grant monies, including, importantly, ensuring that the terms of the grant award are met. During 1989, the Commission provided contract services to administer the following projects that were supported by federal and state grant awards:

- A Wisconsin Development Fund grant in the amount of $750,000 obtained by the City of Oconomowoc in 1988. The grant monies were used to provide a business loan to Musebeck Shoe Company. The project is expected to create about 50 new jobs and result in $1.3 million in private capital investment.

- A Wisconsin Development Fund grant in the amount of $420,000 obtained by the Village of East Troy in 1988. The grant monies were used to provide a business loan to Plastronics Plus, Inc. The project is expected to create about 20 new jobs and result in $420,000 in private capital investment.

- A Wisconsin Development Fund grant in the amount of $300,000 obtained by Kenosha County with the assistance of the Commission in 1987. The grant monies were used to provide a business loan to Bristol Container Corporation, Town of Bristol. The loan is expected to create 15 new jobs and result in $300,000 in private capital investment.

- A federal Urban Development Action grant in the amount of $412,000 obtained by the City of Whitewater with the assistance of the Commission in 1985. The grant monies were used to make a business development

loan to the Hawthorn Mellody Company. The loan is expected to create about 15 new jobs in the City, and result in $960,000 in private capital investment.

- A Wisconsin Development Fund grant in the amount of $270,300 obtained by the City of West Bend with the assistance of the Commission in 1986. The grant monies were used to provide a business loan to Elite Plastic Services, Inc. The loan is expected to create about 40 new jobs, and result in $758,340 in private capital investment.

- A Wisconsin Development Fund grant in the amount of $177,880 obtained by the Village of Slinger in 1989. The grant monies were used to help pay the cost of extending centralized sanitary sewer service to the Wheel Estates Mobile Home Park in the Village.

- A Wisconsin Development Fund grant in the amount of $688,000 obtained by Kenosha County in 1988. The grant monies were used to help pay the cost of continuing the housing rehabilitation program in the County outside the City of Kenosha. The grant monies are being used to provide low- or no-interest loans to low- and moderate-income families to rehabilitate 63 owner-occupied units and seven vacant renter-occupied units; to provide handicapped accessibility improvements to six housing units; to defray the cost of installing sanitary sewer laterals to 12 housing units; and to defray the cost of removing two blighted properties owned by Kenosha County.

- A Wisconsin Development Fund grant in the amount of $344,500 obtained by Kenosha County with the assistance of the Commission in 1988. The grant monies were used to provide a business loan to Radigan's Taste of Wisconsin, Inc., a new restaurant in the Town of Bristol. The loan is expected to result in 38 new jobs and $1.2 million in private investment.

- A Wisconsin Development Fund grant in the amount of $344,500 obtained by the Village of Pleasant Prairie with the assistance of the Commission in 1988. The grant monies were used to provide a business loan to Manu-Tronics, Inc., an assembler of electronic components. The loan is expected to result in 55 new jobs and $1.7 million in private investment.

- A Wisconsin Development Fund grant in the amount of $395,000 obtained by the City of Mequon with the assistance of the Commission in 1988. The grant monies were used to provide a business loan to Sales Guides, Inc., a sales promotion company. The loan is expected to result in the retention of 40 jobs and the creation of 10 jobs and $600,000 in private investment.

- A Wisconsin Development Fund grant in the amount of $169,970 obtained by the Village of Twin Lakes with the assistance of the Commission in 1988. The grant monies were used to provide a business loan to Des Automotive, Inc., a remanufacturer of automotive brake shoes. The loan is expected to result in 10 new jobs and $325,000 in private investment.

- The previously mentioned Wisconsin Development Fund grant in the amount of $120,000 obtained by the Village of Mukwonago with the assistance of the Commission in 1989, and used to provide a business loan to Buell Motor Company, a manufacturer of high-performance motorcycles.

- The previously mentioned Wisconsin Development Fund grant in the amount of $425,000 obtained by the Village of Menomonee Falls with the assistance of the Commission in 1989, and used to provide a business loan to CAAP, Inc., a certified asbestos removal service company.

ECONOMIC DEVELOPMENT PROJECT PLANNING SERVICES

Economic development project planning services involve the conduct of detailed economic development planning studies for local units of government, development corporations, and other organizations concerned with economic development and seeking Commission assistance. During 1989, the following representative project planning services were conducted:

- At the request of the Sherman Park Community Association, the Commission assisted in the conduct of, and data processing attendant to, an exterior survey of

Figure 72

EXAMPLE OF COMMUNITY ECONOMIC DEVELOPMENT PROFILE

ECONOMIC PROFILE

City of Cedarburg, WI
DECEMBER 1989

Population

Year	Number	Percent Change
1960	5,191	—
1970	7,697	48.3
1980	9,005	17.0
1989	9,734	8.1

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

Housing

TOTAL UNITS

Year	Units	Percent Change	Persons per Unit
1960	1,541	—	3.5
1970	2,281	48.0	3.4
1980	3,332	46.1	2.7
1985	3,538	6.2	2.6

UNIT INFORMATION: 1980

Total Units	3,332
Owner Occupied	2,040
Median Value	$73,700
Vacancy Rate	0.7
Renter Occupied	1,191
Median Contract Rent	$257
Vacancy Rate	5.3

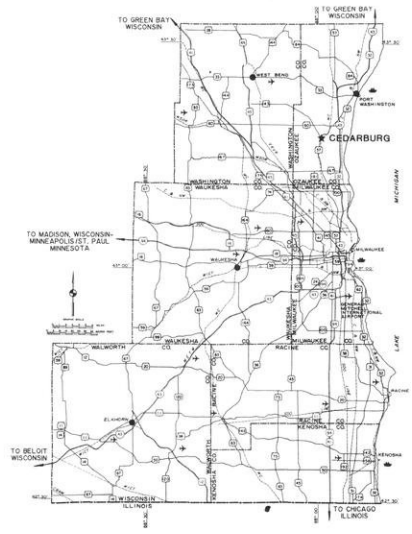
Source: U. S. Bureau of the Census, 1960, 1970, 1980; and SEWRPC.

Income

1985 Per Capita Income

City of Cedarburg	$12,734
Ozaukee County	13,887
Southeastern Wisconsin Region	11,504
Wisconsin	10,298

Source: U.S. Bureau of the Census.



Transportation

Highways
IH 43 is located about three miles to the east of the City of Cedarburg. STH's 57, 60, and 143, and CTH's C, I, N, and T also serve the City.

Trucking
There are 31 trucking and warehousing establishments located in Ozaukee County.

Water Transportation Facilities
The City is located eight miles from the Port of Port Washington, 23 miles from the Port of Milwaukee, and 64 miles from the port of Kenosha.

Air Service
The City of Cedarburg is served by two public-use general aviation airports: Lawrence J. Timmerman Field, located 19 miles southwest of the City, and West Bend Municipal Airport located 20 miles northwest of the City. Both of these airports are capable of handling a wide variety of business aircraft, up to and including some corporate jets, and have airfield lighting and navigation aids that permit all-weather operation. General Mitchell International Airport, the nearest scheduled air carrier airport to the City, is located in 32 miles to the south in the City of Milwaukee, and Chicago's O'Hare International Airport is located 100 miles to the south.

Public Transit
The City is served by the specialized transportation service provided by the City of Cedarburg Commission on Aging to elderly and handicapped city residents, and by the Ozaukee County Office of Aging services provided to elderly and handicapped county residents.

Railway Service
The City of Cedarburg is served by the Wisconsin Central Ltd.

Labor and Wages

OZAUKEE COUNTY EMPLOYMENT: 1988*

Employment by Industry	Number of Persons Employed	Percent of Persons Employed
Agriculture, Forestry, and Fishing	187	0.8
Construction	782	3.4
Manufacturing	8,599	37.1
Transportation, Communications	405	1.7
Wholesale Trade	1,072	4.6
Retail Trade	4,410	19.0
Finance, Insurance, Real Estate	757	3.3
Services	4,141	17.8
Government	2,834	12.2
Total	23,199	100.0

**Not included: Self-employed, unpaid family workers, and private household workers.*

Source: Wisconsin Department of Industry, Labor and Human Relations, March 1988; and SEWRPC.

MILWAUKEE AREA SMSA CIVILIAN LABOR FORCE

Total Labor Force	758,700
Employed Labor Force	728,200
Unemployed Labor Force	30,500

Source: Wisconsin Department of Industry, Labor and Human Relations—Average for 1988.

MEDIAN HOURLY WAGES FOR SELECTED OCCUPATIONS: 1988

Occupational Category	Service Delivery Area 12*
Executive, Administrative, and Managerial	$15.00
Professional	11.69
Technical	8.85
Sales	5.00
Administrative Support (including clerical)	7.05
Service Occupations	6.00
Mechanics and Repair Workers	10.30
Construction	14.34
Precision Production	10.96
Production Workers	8.62
Transportation and Material Workers	9.30
Handlers, Equipment Cleaners, and Laborers	7.50

**Wage rates are for Service Delivery Area 12 (which includes Waukesha, Ozaukee, and Washington Counties), and may vary in specific locations within the three-county area.*

Source: Wisconsin Department of Industry, Labor and Human Relations, 1988; and SEWRPC.

Manufacturing

MAJOR MANUFACTURING EMPLOYERS IN THE CEDARBURG AREA

Fabricated Metal Products
Aluminum Industries Corporation
Amcast Industrial Corporation, Meta-Mold Division
Ataco Steel Products Co.*
Federal Tool & Engineering Corporation
Kelch Corporation

Printing and Publishing
Graphic, Inc.
Landmark Publishing Inc.
News Graphic, Inc.
Schroeder Printing, Inc.
Tamms Lithography, Inc.

Machinery Except Electrical
Allen-Bradley Company, Drives Division
C & L Industries, Inc.
Carlsen Tool & Manufacturing Corporation
Cedar Tool Ltd.
Construction Forms, Inc.
Pioneer Tool & Die, Inc.
Primodan International Inc.*
Reflex, Inc.
Ram Tool, Inc.
Weld-Tech

Miscellaneous Manufacturing Industries
Hawk, Inc.*
Gem Shop, Inc.

Electric and Electronic Equipment
Belfour, Inc.
Doerr Electric
Electro-Pro, Inc.
Emission Control, Ltd.
Tescor Technology, Inc.

Food and Kindred Products
Cedarburg Dairy, Inc.
Cedar Crest Specialities, Inc.*
Nieman Orchards*
Stone Mill Winery, Inc.

Lumber and Wood Products
Schuette Woodcraft, Inc.

Paper and Allied Products
Badger Case, Inc.*
Formart Containers, Inc.
Pioneer Container Corporation
Quincy Container Corporation*

Stone, Clay, and Glass Products
Dimat, Inc.*

**Manufacturing employers located in the Town of Cedarburg.*

Source: 1989 Classified Directory of Wisconsin Manufacturers, the City of Cedarburg, and SEWRPC.

Financial

Banks
First Wisconsin-Cedarburg
N61 W6312 Turner Street
Cedarburg, Wisconsin 53012
Telephone: (414) 377-4540

Ozaukee Bank
N69 W5269 Columbia Road
Cedarburg, Wisconsin 53012
Telephone: (414) 377-9000

Savings and Loan Associations
Mutual Savings Bank
W62 N248 Washington Avenue
Cedarburg, Wisconsin 53012
Telephone: (414) 377-9222

First Ozaukee Savings Bank
W61 N526 Washington Avenue
Cedarburg, Wisconsin 53012
Telephone: (414) 377-0750

Taxes

Local Property Taxes, 1989*
--Assessment Ratio: 0.8523
--Net Rate/$1,000: $34.01
--Total Equalized Value: $357,216,000

**Note: Revaluation of all properties is currently in progress, to bring the 1990 assessment ratio to 100 percent.*

Source: The City of Cedarburg.

Education

Number of Schools in the District*

High Schools	1
Middle Schools	1
Elementary	3
Private Elementary and Secondary Schools	2

Source: Wisconsin Public and Nonpublic School Directories, 1986-1987; and SEWRPC.

Public and Private School Enrollment in the District

K-8	1,993
9-12	884
Total Enrollment 1988-1989 School Year	2,877

**The City of Cedarburg is served by the Cedarburg School District.*

Standardized Test Results
Based upon the mean scores reported in the nation, Wisconsin students ranked above the national average on the Scholastic Aptitude Test (SAT) and the American College Test (ACT) during the 1987-1988 testing period.

Source: Wisconsin Department of Public Instruction and SEWRPC.

The following post-secondary educational facilities are located within, or in proximity to, Ozaukee County:

Colleges and Universities
Alverno College, City of Milwaukee
Cardinal Stritch College, City of Glendale
Concordia University, City of Mequon
Marquette University, City of Milwaukee
Medical College of Wisconsin, City of Wauwatosa
Milwaukee School of Engineering, City of Milwaukee
Mount Mary College, City of Milwaukee
University of Wisconsin-Milwaukee, City of Milwaukee

Technical and Vocational Schools
Milwaukee Area Technical College, North Campus (Mequon)

Public Library
The Cedarburg Public Library is a member of the Eastern Shores Library System.

Utilities

Water
Cedarburg Light and Water Commission
Source: Groundwater
Pumping Capacity:
4.752 million gallons per day
Average Daily Consumption:
1.374 million gallons
Adequate Capacity for New Industry
Rate Information:
Utility Manager—(414) 377-1280

Solid Waste
Refuse collection services are provided by private contract.

Telephone
Wisconsin Bell
A Division of Ameritech, Inc.
Business Service Information:
In State—1-393-2000
Out-of-State—Call collect (414) 678-3368

Sanitary Sewerage
City of Cedarburg Treatment Plant
Average Hydraulic Design Capacity:
3.0 million gallons per day
Wet Weather Design Capacity:
8.0 million gallons per day
Ample Capacity for New Industry
Rate Information:
City Administrator—(414) 377-4500

Electric Power
Cedarburg Light and Water Commission
N30 W5926 Lincoln Boulevard
Cedarburg, Wisconsin 53012
Service Information: (414) 377-1280

Natural Gas
Wisconsin Gas Company
General Office
626 E. Wisconsin Avenue
Milwaukee, Wisconsin 53202
Service Information: 1-800-242-4035

Government Services

The City of Cedarburg has a mayor/common council/city administrator form of government.

Police and Fire
Police Department: 17 full-time officers
Fire Department: 80 active volunteer fire fighters; volunteer rescue company with emergency medical technicians and trained support staff.
Fire Underwriters' Rating: 3

Other
The City provides street maintenance, snow removal, street lighting, refuse removal, parks and recreation facilities, a community center, senior and youth centers, and two cemeteries. The City also has a plan commission, comprehensive plan, and a zoning ordinance.

Media

Newspapers
Milwaukee Journal-Sentinel, Daily
W63 N549 Hanover Avenue
Cedarburg, Wisconsin 53012

News Graphic Pilot, Bi-weekly
W63 N582 Hanover Avenue
Cedarburg, Wisconsin 53012

Ozaukee County Guide, Weekly
1930 Wisconsin Avenue
Grafton, Wisconsin 53024

Ozaukee Press, Weekly
125 E. Main Street
Port Washington, Wisconsin 53074

USA Today, Weekdays
730 Larry Court
Waukesha, Wisconsin 53186

Broadcasting Stations
Milwaukee

Television Stations	Channel
WCGV (Fox)	24
WISN (ABC)	12
WITI (CBS)	6
WTMJ (NBC)	4
WVTV (Independent)	18
WMVS (PBS)	10
WMVT (PBS)	36

Cable TV: Jones Intercable

Radio Stations—Ozaukee County
Two commercial radio stations are located in Ozaukee County. In addition, several radio stations are located in nearby communities, including 35 in the Milwaukee County area, that broadcast into Ozaukee County.

Recreation

Parks and Open Space
Fifteen parks encompassing 110 acres are located within the City of Cedarburg. They provide a wide range of recreational opportunities, including swimming, baseball and softball, tennis, soccer, fishing, hiking, picnicking, and other leisure activities. Ozaukee County has a state park and four county parks, as well as community and neighborhood sites.

Special Attractions
Ozaukee County special attractions include: The Washington Avenue Historic District, Cedarburg Cultural Center, Ozaukee Art Center, Cedar Creek Settlement and Stone Mill Winery, City of Cedarburg; 1876 covered Bridge, Hamilton Historic District, and Turnhalle, Town of Cedarburg; Stonecroft Village, Town of Grafton; Brooks Stevens Auto Museum, City of Mequon; Sunken Treasure Maritime Museum, City of Port Washington; and Ozaukee County Pioneer Village, Hawthorn Hills Park, and Stony Hill School House, Town of Fredonia.

Contacts

For industrial, commercial, or business information about the City of Cedarburg,

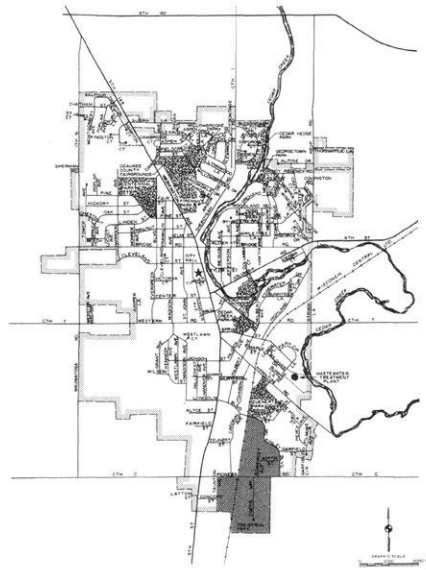
Local Contacts
- Administrator
  City of Cedarburg
  W63 N645 Washington Avenue
  P. O. Box 49
  Cedarburg, Wisconsin 53012
  Telephone: (414) 377-4500
- Manager
  Cedarburg Light and Water Utility
  N30 W5926 Lincoln Boulevard
  Cedarburg, Wisconsin 53012
  Telephone: (414) 377-1280
- Executive Director
  Cedarburg Chamber of Commerce
  W63 N645 Washington Avenue
  P. O. Box 204
  Cedarburg, Wisconsin 53012
  Telephone: (414) 377-9620

State Contacts
- Forward Wisconsin, Inc.
  11270 W. Park Place, Suite 550
  Milwaukee, Wisconsin 53224
  Telephone: (414) 359-2359
- Manager-Economic Development
  Wisconsin Electric Power Company
  231 W. Michigan Street
  Milwaukee, Wisconsin 53201
  Telephone: (414) 221-3842
- Wisconsin Department of Development
  Business Development Service
  P. O. Box 7970
  Madison, Wisconsin 53707
  Telephone: (608) 266-1018

P.O. Box 1607
Old Courthouse
Waukesha, Wisconsin 53187-1607
(414) 547-6721

This profile is one in a series of regional, county, and community profiles prepared by the Southeastern Wisconsin Regional Planning Commission in cooperation with the Wisconsin Electric Power Company as a community service.

City of Cedarburg

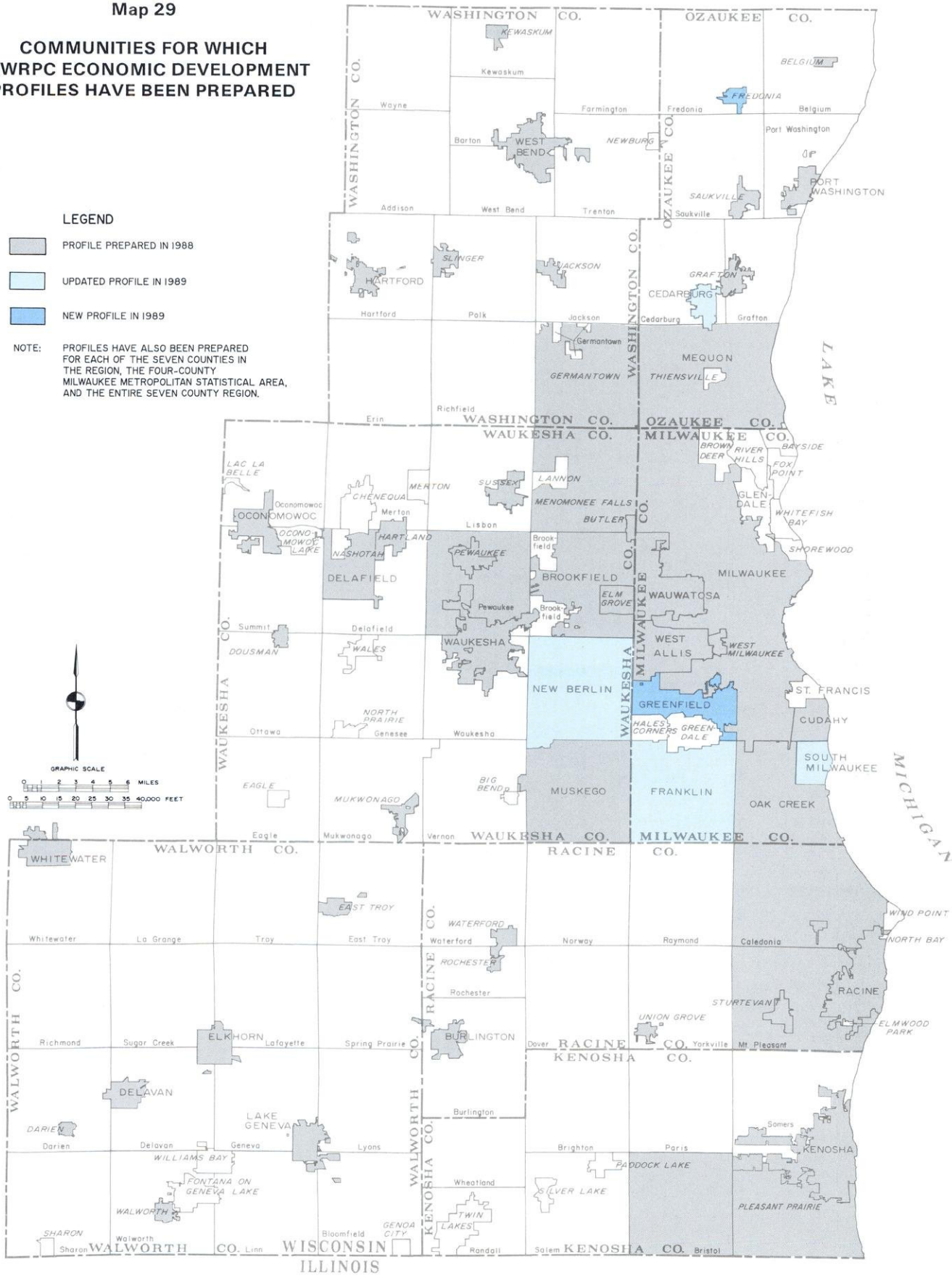


Health

The City of Cedarburg is served by the Cedarburg Clinic, the Homestead Family Health Center, the Cedar Creek Center of the Milwaukee Medical Clinic, and several independent physicians and specialists. In addition, St. Mary's Hospital in Port Washington; other clinics located in Ozaukee County, and the 25 area hospitals and 12 immediate care centers of Milwaukee County are all readily accessible to city residents. Also, St. Mary's Health Center was recently constructed in Cedarburg.

Map 29

COMMUNITIES FOR WHICH SEWRPC ECONOMIC DEVELOPMENT PROFILES HAVE BEEN PREPARED



housing conditions in the Sherman Park area of the City of Milwaukee. The results of the surveys provide important information for a number of the Association's neighborhood improvement projects.

- In 1989, the Commission staff, at the request of several local units of government, prepared original, or updated, community economic profiles. The first such profiles were prepared in 1984 and updated in 1988 in cooperation with the Wisconsin Electric Power Company. The profiles are intended to be used by county and local units of government, and by private development organizations, in efforts to attract and retain industrial and commercial development. The profiles, prepared in a succinct, easy-to-read format, provide information on resident population, personal income, employment and labor force, financial and educational institutions, public and private utilities and public services, transportation facilities, housing stock, and health facilities and services. In addition, each profile is illustrated with a map of the community, as well as of the Southeastern Wisconsin Region. In 1988, the Commission completed new economic profiles for the Region, the Milwaukee metropolitan area, each of the constituent seven counties, and 55 selected cities, villages, and towns within the Region. During 1989, new profiles were prepared for two additional communities—the Village of Fredonia and the City of Greenfield. In addition, updated profiles were published during the year for four communities—the Cities of Cedarburg, Franklin, New Berlin, and South Milwaukee. Figure 72 shows an example of an economic development profile, reduced for the purpose of reproduction herein. The communities for which profiles have been prepared are shown on Map 29, and are listed in Appendix D.

- In August 1989, the Commission staff conducted an inventory of industrial parks located in the Southeastern Wisconsin Region. In order to be included in the inventory, the industrial parks needed to comprise a minimum area of 10 acres; be provided with a suitable infrastructure, including, at a minimum, hard-surfaced roadways and sanitary sewer and public water supply facilities; and be controlled and administered by a single governmental unit, organization, or private company. The information was compiled through a mail survey of local units of government, local economic development authorities, and private development companies. The results of the survey are documented in a SEWRPC staff memorandum.

- At the request of the Milwaukee Area Technical College (MATC), the Commission staff reviewed, and commented on, a draft Economic Impact Statement. The Economic Impact Statement documented the impact of the location and operation of MATC on the areawide economy.

- At the request of the Village of Mukwonago, the Commission staff prepared a land development plan and attendant promotional materials for the existing industrial park in the Village. This work activity included: 1) analysis of the physical characteristics of the industrial park site; 2) the organizational development of aspects of industrial park development; 3) the preparation of alternative site development plans; 4) the identification of land use controls, restrictive covenants, and deed restrictions; and 5) the identification of alternatives for marketing and advertising the availability of the industrial parkland.

COMMUNITY ASSISTANCE PLANNING DIVISION

DIVISION FUNCTIONS

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

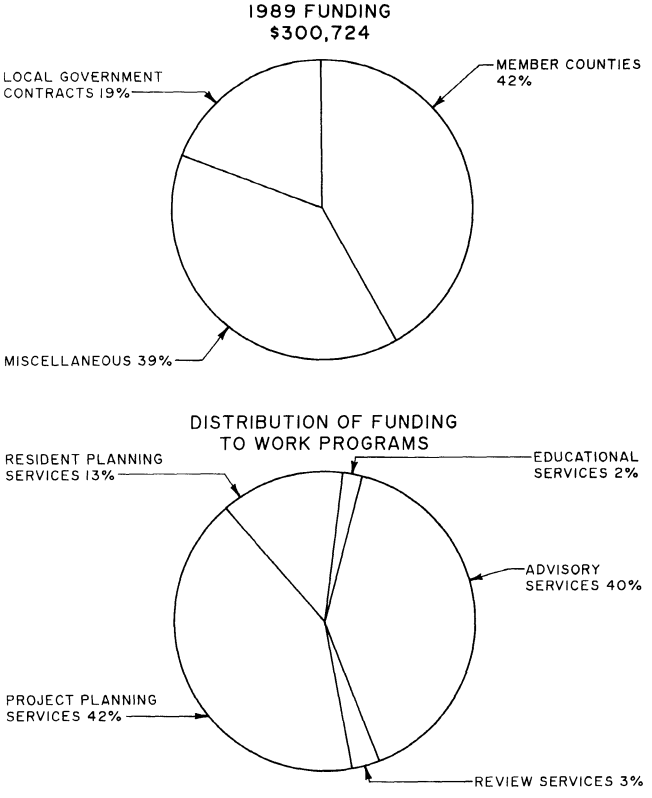
EDUCATIONAL SERVICES

Educational services are provided by the Division staff to local units of government and citizen groups on request, and are directed at explaining the need for, and purposes of, continuing local, regional, and state planning programs, and the relationships that should exist between these different levels of planning. In addition, these efforts are directed at encouraging the creation, organization, staffing, and financing of local planning programs. During 1989 educational efforts included the following:

- Presentations regarding the work of the Commission to local governmental, civic, and professional groups, including the Town Board of the Town of Richfield, the City of Lake Geneva and the Village of Thiensville Plan Commissions, the Village of Hartland and the Village of Pewaukee Chambers of Commerce, the Waukesha County Housing Forum, the Waukesha Cluster of the Evangelical Lutheran Church in America, the Elm Grove and Oconomowoc Kiwanis Clubs, and the Lake Geneva Rotary Club, and to classes at the University of Wisconsin-Milwaukee, University of Wisconsin-Parkside, University of Wisconsin-Whitewater, Waukesha County Technical College, Muskego High School, and Waukesha Central Middle School.
- A presentation regarding the relationship between land use plans and zoning ordinances for the University of Wisconsin-Extension over the Wisconsin Educational Telephone Network.
- A presentation regarding ethics for planners to a planning class at the University of Wisconsin-Milwaukee.
- Presentations on wetland preservation to classes at DePaul University and Waukesha North High School, to the Kettle Moraine Audubon Society, to citizens groups at the Lac Lawrann Sanctuary and the Retzer Nature Center, and to a public forum on wetland mitigation held by the Waukesha Environmental Action League.

Figure 73

COMMUNITY ASSISTANCE PLANNING DIVISION



- Conduct of wetland and wildlife habitat tours of the Beulah Bog State Natural Area, Chiwaukee Prairie, Horicon Marsh, Kettle Moraine State Forest, and Vernon Marsh Fen.

- Presentations concerning automated land records management systems to classes at Carroll College, the University of Wisconsin-Parkside, and the University of Wisconsin-Whitewater, and to the staffs of Wisconsin Bell, the Brown County Planning Department, the City of Eau Claire, the Bay-Lake Regional Planning Commission, and the Wisconsin Department of Natural Resources.

- Preparation and distribution of six Commission newsletters describing various Commission planning programs and related activities. The newsletters are distributed to about 1,500 public officials and interested citizens.

- Preparation and distribution to newspapers and to radio and television stations of three news releases concerning the conduct of a public hearing on the Washington County Jurisdictional Highway Plan; the conduct of an enplaning passenger survey at General Mitchell International Airport; and the conduct of a Kenosha bus rider survey.

- Preparation of the Commission's 1988 Annual Report.

ADVISORY SERVICES

Advisory services consist of the provision of basic planning and engineering data available in the Commission's files to local units of government and private interests, and the provision on an ad hoc basis of technical planning and engineering assistance to local communities. Representative advisory services performed during 1989 include:

- Interpretation of zoning regulations regarding floor area ratios and the construction of fences for the City of Cedarburg and the Village of Butler, respectively.

- Preparation of 1 inch equals 400 feet scale wetland jurisdictional maps for the Villages of Silver Lake and Thiensville. These maps delineate the areas affected by the shoreland-wetland zoning requirements of Chapter NR 117 of the Wisconsin Administrative Code.

- Preparation of proposed wetland zoning regulations for the Cities of Hartford and Oak Creek, and the Villages of Dousman, Hartland, and Pewaukee. The Commission staff also participated in public hearings conducted on wetland zoning ordinances in the Cities of Franklin and Oak Creek, and the Village of Dousman.

- Attendance at meetings in the Village of Whitefish Bay as an advisor to the Plan Commission regarding updating the Village Zoning Ordinance.

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. Four basic types of review services are performed: review of local plans, plan implementation devices, and development proposals; review of federal and state grant applications; review of environmental impact statements, reports, and assessments; and review of flood hazards affecting individual properties. The following is a representative sample of review services provided by the Division staff in 1989 in the first review category:

- Review of and comment on 43 preliminary land subdivision plats at the request of the Cities of Burlington, Franklin, Hartford, Muskego, and Waukesha; the Villages of Fredonia, Hartland, Lac La Belle, Pleasant Prairie, Saukville, Sussex, Walworth, and Williams Bay; and the Towns of Caledonia, LaGrange, Mt. Pleasant, Norway, Pewaukee, Randall, Somers, Walworth, and Waterford.

- Review of and comment on 13 certified survey maps at the request of the City of Burlington, the Village of Walworth, and the Town of Somers.

- Review of and comment on 29 petitions to rezone lands and eight proposed zoning text

Table 26

STATE AND FEDERAL GRANT REVIEWS: 1989

Review Category	Number of Reviews	Aggregate Amount of Federal and/or State Grant, Loan, or Mortgage Insurance Requests
Community Action	45	$115,086,847.00
Community Development	2	517,968.00
Community Facilities	13	6,322,537.00
Conservation	44	69,440,247.00
Historic Programs	1	98,248.00
Housing	13	56,260,385.00
Law Enforcement	1	250,000.00
Park and Open Space	2	241,100.00
Solid Waste	4	5,303,273.00
Transportation	32	44,713,946.00
Total	157	$298,234,551.00

amendments at the request of the Cities of Burlington, Cedarburg, Franklin, and New Berlin; the Villages of Menomonee Falls and Sussex; and the Town of Somers.

- Review of and comment on five development proposals affecting floodplains and/or wetlands at the request of the Villages of Dousman, Saukville, and Slinger, and the Town of Farmington.

- Review of and comment on plans to limit rural development to five-acre or larger lots in the Towns of Polk and Trenton.

Commission activities regarding the review of federal and state grant applications are summarized in Table 26. In total, review comments were provided for 157 applications for federal and/or state grants, loans, or mortgage insurance guarantees, requesting in the aggregate more than $298 million in federal and state financial assistance. Of the 157 requests, 16 were found to be in conformance with and serve to implement the adopted regional plan elements, and 141 were found to be not in conflict with the adopted regional plan elements. None were found to be in conflict with the adopted regional plan elements.

Division activities regarding the review of environmental impact statements, reports, and assessments are summarized in Table 27. Comments are provided, as required, relating the proposed projects and the data contained in the environmental impact statements to the adopted regional plans.

Table 27

ENVIRONMENTAL IMPACT STATEMENTS REVIEWED: 1989

Document Reviewed	Requesting Agency
Environmental Impact Statement for the construction of an 82,800-square-foot addition to the Gateway Technical College, Racine campus	Gateway Technical College
Environmental Impact Statement for the STH 100 and USH 45 Metro Center Study	Wisconsin Department of Transportation
Environmental Impact Statement for the Delavan Lake Rehabilitation Project	Wisconsin Department of Natural Resources
Environmental Impact Statement for the repair and maintenance of the detached breakwater at the Kenosha Harbor	U. S. Army Corps of Engineers

Flood hazard reviews relating to residential properties were provided until 1989 on request to realtors, lending institutions, and property

Table 28

FLOOD HAZARD REVIEWS: 1989

County	Number of Reviews
Kenosha	0
Milwaukee	136
Ozaukee	32
Racine	9
Walworth	2
Washington	13
Waukesha	125
Total	317

owners. During 1989 the Division conducted a total of 317 flood hazard reviews distributed by county, as shown in Table 28. The Regional Planning Commission determined to discontinue flood hazard review services on September 1, 1989. The Commission's determination was based upon an indication by the Federal Emergency Management Agency that it is the responsibility of federally supervised lending institutions, and not public agencies such as the Commission, to make flood hazard determinations with respect to specific properties. Floodplain information in the Commission files remains available for use by the public.

PROJECT PLANNING SERVICES

Project planning services involve the conduct for local member units of government, at cost, of detailed planning studies resulting in the preparation of local plans and plan implementation devices. During 1989, the following representative project planning efforts were conducted:

- Completion of zoning ordinances and attendant zoning maps for the Villages of Kewaskum and West Milwaukee. These ordinances are intended to address contemporary land development issues and serve to implement the land use objectives set forth in the adopted regional and local land use plans.

- Reprinting of the Zoning Ordinance and updating of the Zoning District Map for the City of Burlington. The reprinting incorporates text and map changes adopted by the City since the last reprinting of the Ordinance in 1986.

- Completion of zoning district maps for the City of West Bend and the Village of Dousman. The City of West Bend Zoning Maps consist of 22 maps at a scale of 1 inch equals 200 feet. Each map sheet consists of a zoning overlay covering one U. S. Public Land Survey section placed on the City's large-scale cadastral map for the same section. A representative sample of the completed zoning maps is illustrated on Map 30.

- Completion of a special governance study for the Delavan Lake area in Walworth County. This study was requested jointly by the City and Town of Delavan and the Delavan Lake Sanitary District in an attempt to evaluate the fiscal and other impacts of potential changes in the local governmental structure of the Delavan area. In particular, the study was structured to identify the probable impacts on the corporate bodies and residents of the Delavan area should the Delavan Lake Sanitary District either be merged with the City or be incorporated as an independent village. The results of this special impact study are documented in SEWRPC Community Assistance Planning Report No. 174, An Evaluation of Alternative Means for the Governance of the Delavan Lake Area, Walworth County, Wisconsin.

RESIDENT PLANNING SERVICES

The Commission provides part-time resident staff assistance, on request, to local units of government. This type of assistance involves a commitment by the Commission staff to attend local plan commission meetings and to provide recommendations on local planning issues as may be requested from time to time. The Commission views such assistance as an interim step to the eventual attainment of local full-time staffs.

During 1989, resident planning assistance was provided on a contractual basis to the Cities of Burlington, Cedarburg, Franklin, and New Berlin; to the Villages of Menomonee Falls and Sussex; and to the Town of Somers. Collectively these services required Division staff attendance and participation in 71 plan commission, town board, village board, and city council meetings.

CITY OF WEST BEND ZONING MAP FOR U. S. PUBLIC LAND SURVEY SECTION 13, TOWNSHIP 11 NORTH, RANGE 19 EAST

OFFICIAL ZONING MAP

SECTION 13, TOWNSHIP 11 NORTH, RANGE 19 EAST

CITY OF WEST BEND, WASHINGTON COUNTY, WISCONSIN

ZONING DISTRICTS
— ZONING DISTRICT BOUNDARY LINE

RESIDENTIAL DISTRICTS
- Re-1 SINGLE-FAMILY RESIDENTIAL
- Re-2 SINGLE-FAMILY RESIDENTIAL
- Re-3 SINGLE-FAMILY RESIDENTIAL
- Re-4 SINGLE-FAMILY RESIDENTIAL
- Rd-1 TWO-FAMILY RESIDENTIAL
- Rd-2 TWO-FAMILY RESIDENTIAL
- Rm-1 MULTI-FAMILY RESIDENTIAL
- Rm-2 MULTI-FAMILY RESIDENTIAL
- Rm-3 MULTI-FAMILY RESIDENTIAL
- Rm-4 MULTI-FAMILY RESIDENTIAL

BUSINESS DISTRICTS
- B-1 COMMUNITY BUSINESS
- B-2 CENTRAL BUSINESS
- B-3 NEIGHBORHOOD BUSINESS
- B-4 GENERAL BUSINESS
- B-5 NEIGHBORHOOD OFFICE
- B-6 OFFICE PARK

MANUFACTURING/INDUSTRIAL DISTRICTS
- M-1 LIMITED INDUSTRIAL
- M-2 GENERAL INDUSTRIAL
- M-3 PLANNED INDUSTRIAL PARK

PUBLIC/QUASI-PUBLIC DISTRICTS
- I-1 INSTITUTIONAL AND PUBLIC SERVICE
- P-1 PARK, RECREATION AND OPEN SPACE

FLOODLAND/CONSERVANCY DISTRICTS
- FW FLOODWAY
- FWW FLOODWAY-WETLAND
- FPW FLOODPLAIN-WETLAND
- FPS FLOODPLAIN-STORAGE
- SW SHORELAND WETLAND
- NSW NON-SHORELAND WETLAND

OVERLAY DISTRICTS
- PUD PLANNED UNIT DEVELOPMENT OVERLAY
- FFO FLOODPLAIN FRINGE OVERLAY

761.2 FLOODPLAIN ELEVATION IN FEET ABOVE NATIONAL GEODETIC VERTICAL DATUM (NGVD)

RM 3.60 RIVER MILE - DISTANCE IN MILES ABOVE RIVER MOUTH OR CONFLUENCE

MAP PREPARED BY SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION.

GRAPHIC SCALE
0 200 400 600 800
1 INCH EQUALS 200 FEET

NOTE: FLOOD HAZARD DATA CONTAINED IN THE FLOOD INSURANCE STUDY, CITY OF WEST BEND, WASHINGTON COUNTY, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AND DATED AUGUST 2, 1982, SUPPLEMENTED BY JULY 27, 1989 HYDRAULIC ANALYSIS REFLECTING THE REMOVAL OF THE WOOLEN MILLS DAM AND ASSOCIATED MODIFICATIONS TO TOPOGRAPHY BETWEEN SOUTH RIVER ROAD AND INDIANA AVENUE, WERE USED IN THE PREPARATION OF THIS MAP.

NOTE: WETLAND DATA SHOWN ON THE FINAL WISCONSIN WETLAND INVENTORY MAPS FOR THE CITY OF WEST BEND PREPARED BY THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES AND DATED SEPTEMBER 3, 1985, WERE USED IN THE PREPARATION OF THIS MAP. THE PRECISE LOCATIONS OF WETLAND LIMITS WHICH SERVE AS ZONING DISTRICT BOUNDARIES ARE SUBJECT TO FIELD VERIFICATION.

CERTIFICATION:

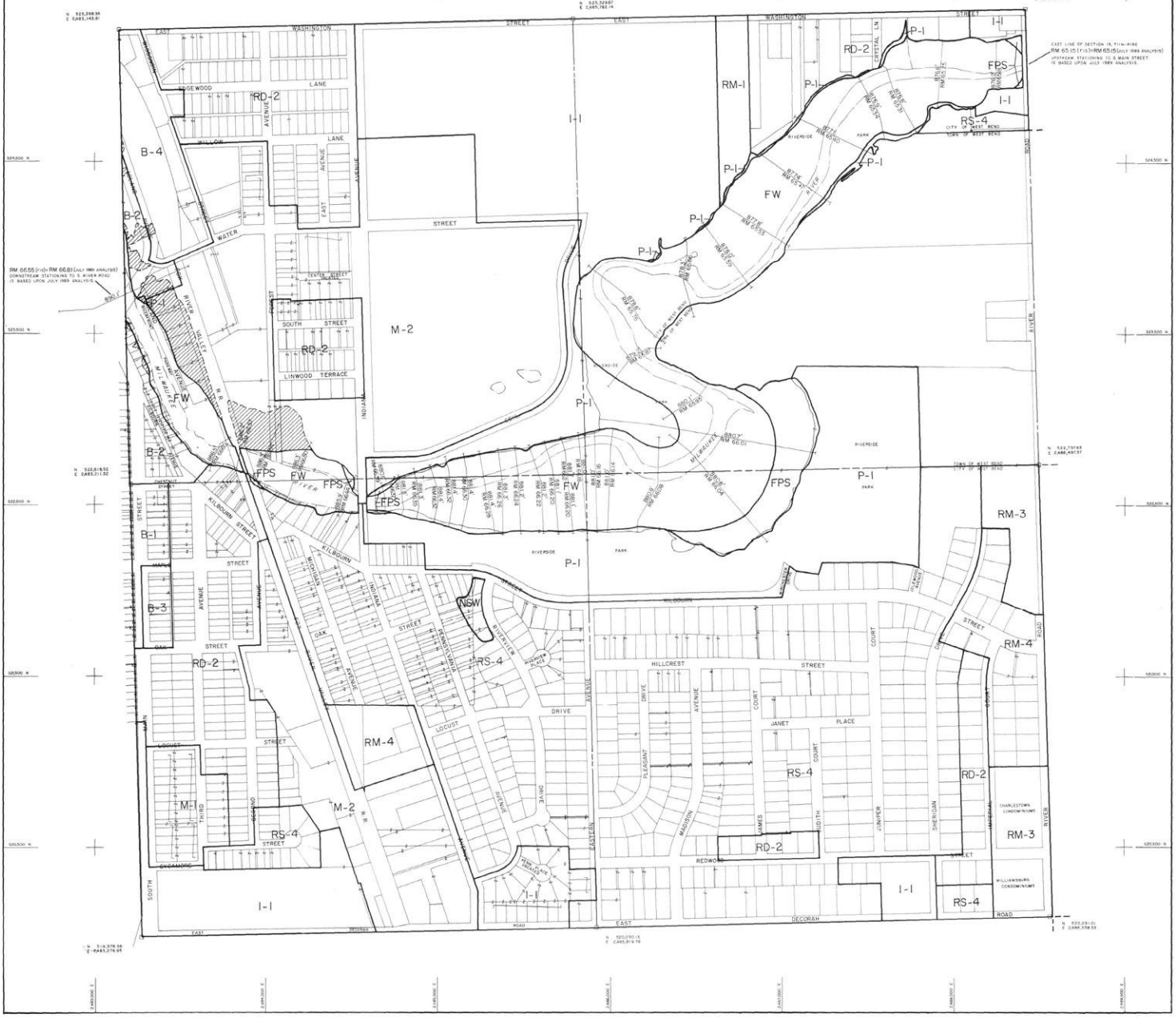
I, THE UNDERSIGNED, MAYOR OF THE CITY OF WEST BEND, WASHINGTON COUNTY, WISCONSIN, DO HEREBY CERTIFY THAT THIS "OFFICIAL ZONING MAP" WAS ADOPTED AND APPROVED AS PART OF THE "ZONING ORDINANCE, CITY OF WEST BEND, WISCONSIN," ON _____, 19__, AND IS AVAILABLE IN THE OFFICE OF THE CITY CLERK. CHANGES THEREAFTER SHALL NOT BECOME EFFECTIVE UNTIL ENTERED ON THIS CERTIFIED COPY.

ATTESTATION:

MAYOR _____ DATE _____

CITY CLERK _____ DATE _____

DATE OF LAST MAP REVISION: _____



CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

DIVISION FUNCTIONS

The Commission's Cartographic and Graphic Arts Division provides basic services to the other Commission divisions in a number of areas. The Division is responsible for creating and maintaining current a series of regional planning base maps that not only are used by the Commission, but are extensively used by other units of government and 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 decade census years and related mid-census periods. The Division also provides all necessary in-house 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 private interests.

The Division also serves as a regional coordinating center for the conduct of large-scale topographic and cadastral mapping efforts and the collation of horizontal and vertical survey control data. This function includes the preparation on request of contracts and specifications for large-scale mapping efforts by local units of government. Another Division function, begun in 1984, 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 1989, work continued on the updating of the Commission 1 inch equals 2,000 feet scale county planning base maps using ratioed and rectified aerial photography and Wisconsin Department of Transportation state aid mileage summary maps. In 1989, the updating effort included updating of planimetric features and changing civil division corporate limit lines to reflect recent annexations and incorporations. As of the end of 1989, about four-fifths of the Commission base maps had been updated to 1985.

TOPOGRAPHIC MAPPING AND SURVEY CONTROL

The Commission prepares and encourages local units of government in the Region to prepare 1 inch equals 100 feet scale and 1 inch equals 200 feet scale, two-foot contour interval topographic maps based on a Commission-recommended monumented control survey network, relating the U. S. Public Land Survey System to the State Plane Coordinate System. The Division assists local communities in the preparation of contracts and specifications for these programs. All of the horizontal and vertical control survey data obtained as a 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.

In 1976, Racine County completed a pioneering program which resulted in the completion of large-scale topographic maps and the attendant relocation, monumentation, and coordination of all of the U. S. Public Land Survey corners within the County. That work was done in accordance with specifications prepared by the Regional Planning Commission. In 1988 Kenosha County completed a similar program. The County Board assigned the responsibility for the preparation of the necessary contract documents and specifications and for the supervision of the work to the Executive Director of the Commission, a responsibility which includes the field inspection of the completed control survey monumentation and the quality control of the land survey, control survey, and topographic mapping work, as well as assistance in obtaining available state grants in partial support of the work. In 1981 Waukesha County undertook a similar countywide program and asked that the Commission staff provide the necessary supervision and assistance. These three county-level surveying and mapping programs represent model programs of national interest.

Map 31 shows those areas of the Region for which large-scale topographic maps have been or are being prepared to Commission-recommended standards. As shown in Figure 74 and

Table 29, this area totals 1,363 square miles, or about 51 percent of the total area of the Region. A total of 6,997 U. S. Public Land Survey corners in the Region have been or are being relocated, monumented, and coordinated, representing about 60 percent of all such corners in the Region. The utility of the control survey data developed and collated by the Commission is indicated by the fact that the Commission received over 500 inquiries for such data during 1989 alone.

PROVISION OF OTHER SURVEY-RELATED DATA

The Commission provides on request information on the latitude and longitude of specific sites. Such requests come primarily from industrial and institutional establishments. In 1989, requests for such information were fulfilled for 13 sites, bringing to 128 the total number of sites for which information has been provided since 1980. This kind of information has been required in the past primarily for the location of radio transmitters. The need for this kind of information may be expected to greatly increase in the future as the U. S. Environmental Protection Agency requires the submittal of industrial hazardous and toxic waste data for integration into a national data bank.

MILWAUKEE COUNTY LAND SURVEY RECORDS

In 1984, legislation was enacted which in part requires that in a county having a population of 500,000 or more where there is no county surveyor, a copy of each land survey plat prepared by a land surveyor be filed in the office of the regional planning commission, the Executive Director of which is to act in the capacity of county surveyor for the county. Under this act, the commission is also made responsible for perpetuating corners of the U. S. Public Land Survey which may be subject to destruction, removal, or cover-up due to construction or other activities, and for maintaining a record of the surveys required for such perpetuation. This act became effective on May 28, 1984. In 1989, under the requirements of the new legislation, the Division received, indexed, and filed 1,572 records of land surveys completed within Milwaukee County—the only county within the Region which meets the statutory criteria—bringing the total number of records of land surveys completed within Milwaukee County which have been filed by the Division to 12,168.

In order to facilitate convenient use of the survey records by land surveyors, abstractors, assessors, appraisers, attorneys, engineers, and other interested parties, the survey records are filed by the Commission under five headings, and computer-generated lists of the recorded surveys can be provided upon request. The five headings are:

1. Numerically by U. S. Public Land Survey township, range, section, quarter section, and record of survey.

2. Alphabetically by minor civil division (city or village).

3. Alphabetically by the property owner or client for whom the survey was completed.

4. Alphabetically by the name of the land surveyor employed by the property owner or client.

5. Chronologically by the date of the survey.

Updated copies of the five lists are prepared quarterly and transmitted to the Wisconsin Department of Transportation District Director, the Milwaukee County Transportation Director, all City and Village Engineers within the County, and all land surveyors who have submitted records of surveys to the Commission for indexing and filing.

Since 1961, the Commission has maintained records on U. S. Public Land Survey corners within the entire Region. However as already noted, since 1984 the Commission has been responsible for the perpetuation of the U. S. Public Land Survey System in Milwaukee County. In 1989, 27 corners of that system were perpetuated by remonumentation and referencing carried out by, or under the direction of, the Commission staff to replace damaged or substandard monumentation. This brings to 104 the total number of such corners so perpetuated in Milwaukee County since 1984. Also in 1989, dossier sheets were prepared for the 27 remonumented corners as well as for 48 corners which were referenced by the Commission staff subsequent to perpetuation by the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, and City Engineers. This brings to 280 the total number of such corners so referenced in Milwaukee County since 1984.

Map 31

LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1989

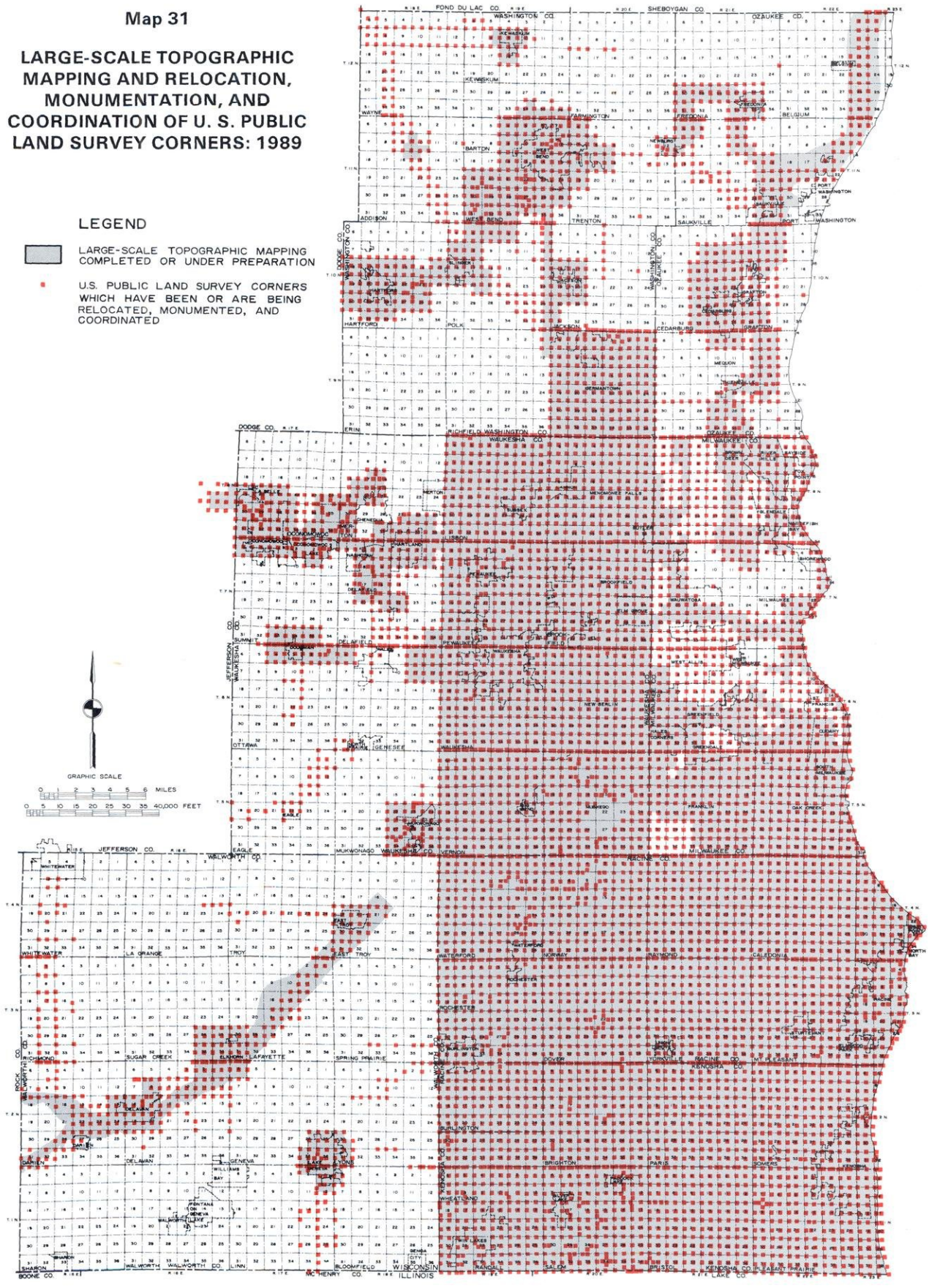
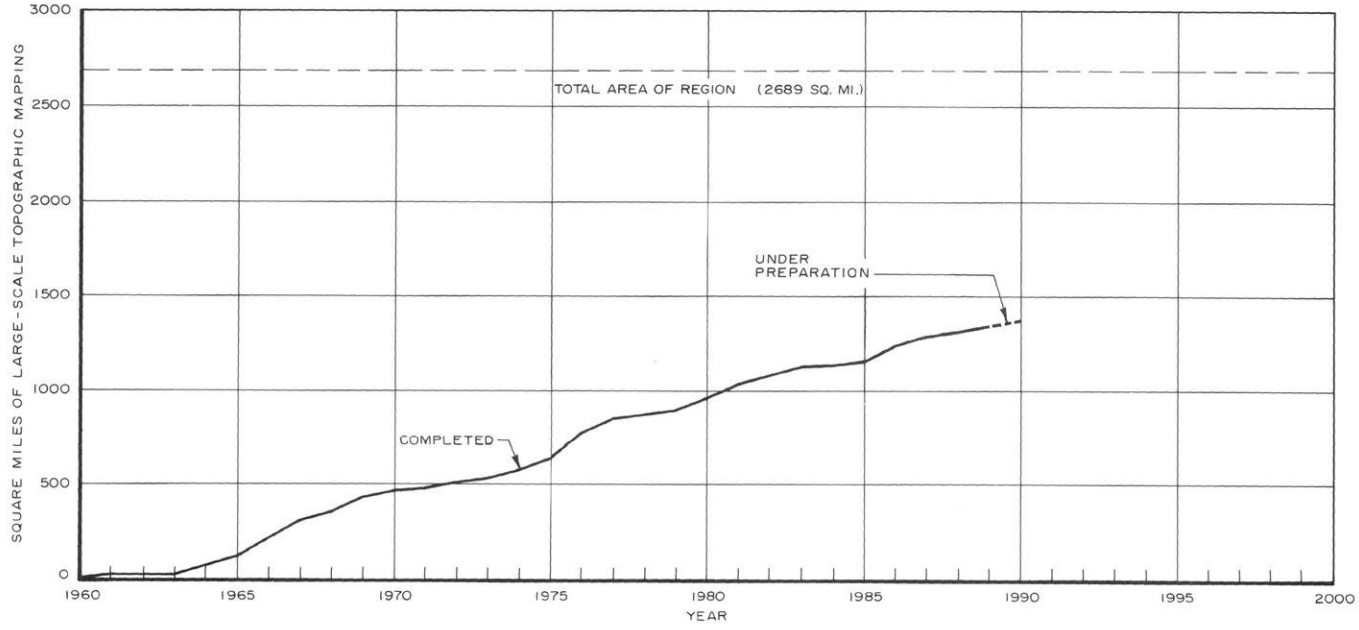
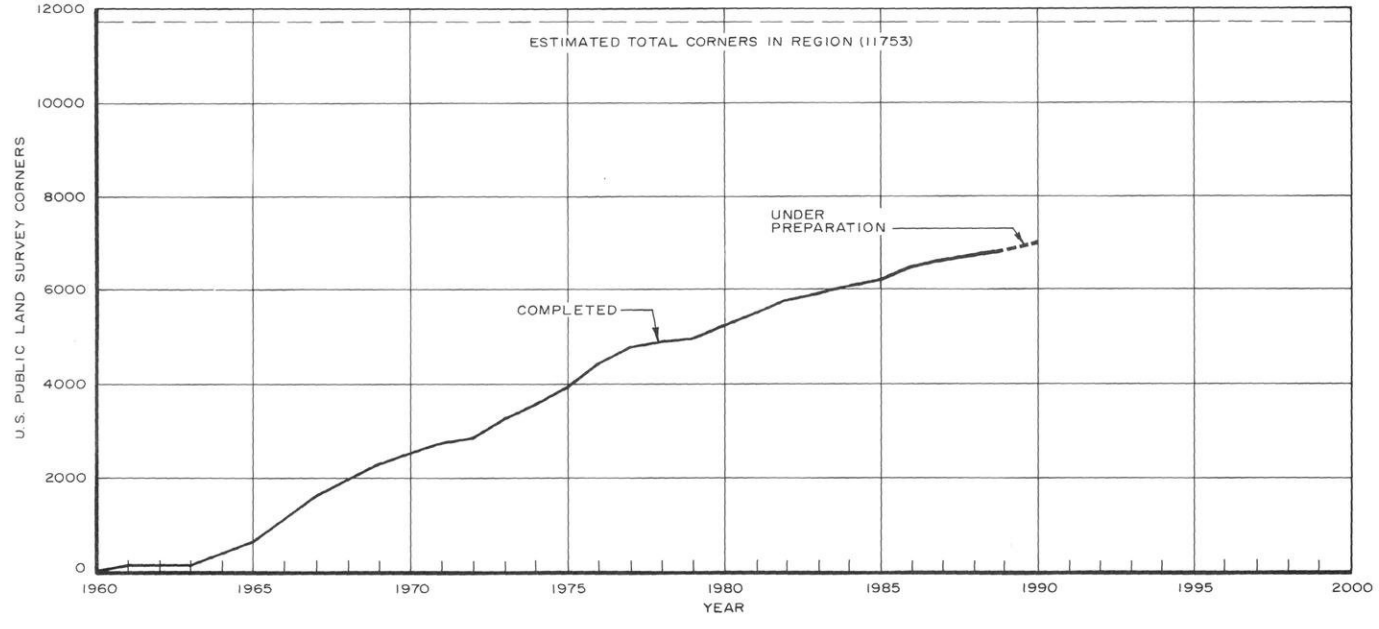


Figure 74

STATUS OF U. S. PUBLIC LAND SURVEY SECTION AND QUARTER SECTION CORNER RELOCATION, MONUMENTATION, AND COORDINATION AND LARGE-SCALE TOPOGRAPHIC MAPPING OF THE REGION: 1989





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. A total of 7,788 prints of aerial photographs of portions of the Region were reproduced, along with 99 soil map prints and 407 prints of maps in the Commission base map series. Aerial photographs were purchased

TYPICAL SEWRPC MONUMENT

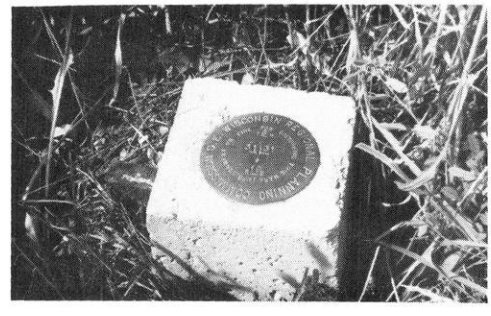


Table 29

LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1989

County	Total Area (square miles)	Area (square miles) of Large-Scale Topographic Mapping Completed or Under Preparation							
		Wisconsin Department of Transportation	SEWRPC	County	Milwaukee Metropolitan Sewerage District	Local[a]	Multi-Agency	Total	Percent
Kenosha	278	--	27.75	236.25	--	14.00	--	278.00	100.00
Milwaukee	242	--	11.00	7.75	49.50	77.00	2.50	147.75	61.05
Ozaukee	234	26.75	24.25	12.75	--	12.00	--	75.75	32.37
Racine	340	--	25.50	314.11	--	--	--	339.61	100.00
Walworth	578	30.25	--	--	--	24.00	--	54.25	9.39
Washington	436	1.50	22.75	--	--	89.25	--	113.50	26.03
Waukesha	581	1.25	78.75	128.50	--	145.25	--	353.75	60.89
Region	2,689	59.75	190.00	699.36	49.50	361.50	2.50	1,362.61	50.67

NOTE: Includes only those areas of the Region for which large-scale topographic maps have been or are being prepared and throughout which U. S. Public Land Survey corners have been or are being relocated, monumented, and coordinated utilizing SEWRPC-recommended procedures. Area shown indicates original large-scale topographic mapping programs. Of the 59.75 square miles originally mapped under WisDOT programs, 6.75 square miles have been updated by other agencies. Of the 190.00 square miles originally mapped under SEWRPC programs, 53.50 square miles have been updated by other agencies. Of the 699.36 square miles originally mapped under county programs, 2.00 square miles have been updated by other agencies. Of the 361.50 square miles originally mapped under local programs, 99.50 square miles have been updated by other agencies.

[a]*Includes 19 cities, 18 villages, and 3 towns.*

County	Estimated Total Corners	Number of U. S. Public Land Survey Corners Which Have Been or are Being Relocated, Monumented, and Coordinated							
		Wisconsin Department of Transportation	SEWRPC	County	Milwaukee Metropolitan Sewerage District	Local[a]	Multi-Agency	Total	Percent
Kenosha	1,203	58	168	914	--	63	--	1,203	100.00
Milwaukee	1,065	72	184	45	159	492	26	978	91.83
Ozaukee	1,064	133	179	69	3	63	--	447	42.01
Racine	1,478	--	172	1,306	--	--	--	1,478	100.00
Walworth	2,503	282	--	--	--	121	6	409	16.34
Washington	1,905	139	149	23	--	428	6	745	39.11
Waukesha	2,535	76	463	602	--	596	--	1,737	68.52
Region	11,753	760	1,315	2,959	162	1,763	38	6,997[b]	59.53

[a]*Includes 19 cities, 18 villages, and 3 towns.*

[b]*Because of the need to set witness corners these 6,997 U. S. Public Land Survey corners, including the centers of the sections, are marked by 7,093 monuments.*

primarily by local units of government, utilities, realtors, retail businesses, and service and manufacturing companies. Soil photo prints and base maps were purchased primarily by realtors, utilities, surveyors, engineers, and individual property owners.

FINAL REPORT PRODUCTION

During 1989 the Division was responsible for the production of the following Commission publications:

PROSPECTUSES

- Overall Work Program—1990 Southeastern Wisconsin Regional Planning Commission, November 1989, 221 pages

- Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Racine Area, May 1989, 35 pages

- Natural Area Protection and Management Planning Program Prospectus, August 1989, 34 pages

ANNUAL REPORTS

- 1988 Annual Report, July 1989, 212 pages

COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 129, A Solid Waste Management Plan for Kenosha County, Wisconsin, May 1989, 407 pages
- No. 136, A Park And Open Space Plan for Washington County, March 1989, 89 pages
- No. 137, A Park and Open Space Plan for Waukesha County, December 1989, 116 pages
- No. 154, A Transit System Development Plan for the City of Waukesha, 1988-1992, December 1989, 229 pages
- No. 163, A Lake Michigan Shoreline Erosion Management Plan for Milwaukee County, Wisconsin, October 1989, 549 pages
- No. 164, Kenosha County Agricultural Soil Erosion Control Plan, April 1989, 80 pages
- No. 170, Washington County Agricultural Soil Erosion Control Plan, March 1989, 93 pages
- No. 171, Ozaukee County Agricultural Soil Erosion Control Plan, February 1989, 79 pages
- No. 172, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, February 1989, 47 pages
- No. 173, A Stormwater Management Plan for the City of West Bend, Washington County, Wisconsin, Volume One, Inventory Findings, Forecasts, Objectives, and Design Criteria, October 1989, 95 pages
- No. 174, An Evaluation of Alternative Means for the Governance of the Delavan Lake Area, Walworth County, Wisconsin, March 1989, 170 pages
- No. 175, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, February 1989, 21 pages
- No. 177, Feasibility Study for a Milwaukee County Automated Mapping and Land Information System, October 1989, 66 pages
- No. 178, A Park and Open Space Plan for the Village of Grafton, Ozaukee County, Wisconsin, March 1989, 56 pages
- No. 179, A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin, November 1989, 71 pages

MEMORANDUM REPORTS

- No. 33, Traffic Engineering Study for Robinhood Drive in the Village of Menomonee Falls, Waukesha County, Wisconsin, December 1989, 10 pages
- No. 39, A Flood Control Plan for a Portion of the Menomonee River Estuary Area, June 1989, 48 pages
- No. 40, An Inventory of Vacant or Underutilized Lands in the Riverine Areas of Central Milwaukee County, May 1989, 31 pages
- No. 42, Traffic Engineering Study of Grandview Boulevard—CTH T—from Northview Road to Fatima Drive, Waukesha County, Wisconsin, July 1989, 44 pages
- No. 43, Amtrak Milwaukee-Chicago Passenger Survey Findings: May 1989, August 1989, 62 pages
- No. 45, Overall Economic Development Program Plan, Village of Slinger, Washington County, Wisconsin, October 1989, 70 pages
- No. 46, Traffic Impact Study of the Interchange of STH 33 and CTH LL, Ozaukee County, Wisconsin, September 1989, 13 pages
- No. 47, Economic Development Fact Book, City of West Allis, Milwaukee County, Wisconsin, October 1989, 143 pages

- No. 49, City of Brookfield Overall Economic Development Program Plan, December 1989, 66 pages

TECHNICAL RECORDS

- Volume 4, No. 5, December 1989, 65 pages, including the following articles:

  Review and Analysis of Lake Michigan Water Levels at Milwaukee, Wisconsin
  By David B. Kendziorski,
  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.

NEWSLETTERS

- Volume 29, Nos. 1-6, 166 pages

OTHER

- Amendment to the Regional Water Quality Management Plan—2000, Upper Fox River Watershed—Brookfield and Sussex Sewage Treatment Plants, May 1989, 69 pages
- Amendment to the Regional Water Quality Management Plan—2000, Village of Germantown, March 1989, 1 page
- Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs, March 1989, 1 page
- Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs, June 1989, 1 page
- Amendment to the Regional Water Quality Management Plan—2000, City of Lake Geneva and Environs, June 1989, 1 page
- Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District, November 1989, 30 pages
- Amendment to the Washington County Jurisdictional Highway System Plan—2000, November 1989, 67 pages
- Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District, December 1989, 3 pages
- Amendment to the Regional Water Quality Management Plan—2000, Delavan Lake Sanitary District/Walworth County Metropolitan Sewerage District, December 1989, 5 pages
- Amendment to the Regional Water Quality Management Plan—2000, Towns of East Troy, Lafayette, and Spring Prairie, and Village of East Troy, December 1989, 11 pages
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994, December 1989, 315 pages

INFORMATION SYSTEMS DIVISION

DIVISION FUNCTIONS

The Commission's Information Systems Division provides basic support to all other Commission divisions. The Division is responsible for maintaining a regional planning data bank that has been developed over a 28-year period. The Division is responsible for processing requests for retrieval of these data, with such requests coming not only internally from other divisions but externally from local units of government, state and federal agencies, and private interests. The Division also provides support to the Commission divisions in the development and application of simulation models. Finally, under a separate program the Division provides data processing services to local units of government.

REGIONAL PLANNING DATA BANK

The Division maintains a master file of regional planning information on more than 9,000 reels of magnetic tape, representing approximately 3,600 active data files. This permits the efficient filing, conversion, and retrieval of planning and engineering data essential to the execution of areawide comprehensive planning. The file's basic unit of geographic reference is the U. S. Public Land Survey quarter section. This file is, however, also organized to permit retrieval of data for various other geographic units, such as civil divisions, census tracts, traffic analysis zones, special planning analysis areas, and watersheds.

During 1989, the Commission maintained an IBM 4381-P13 main frame central processing unit. The unit has 16 million bytes of main memory storage and 32 billion characters of high-speed magnetic disk storage. Peripheral equipment includes three high-speed line printers, six high-speed magnetic tape units, and local and remote teleprocessing control units.

Attached to the main frame computer are 40 IBM CRT units and 10 IBM personal computers through which staff engineers, planners, and computer programmers can enter and receive data and use computer programs.

In addition to the "inhouse" terminal equipment, the main frame computer supports about 300 remote terminal devices located at three counties and 11 communities. Also attached to the main frame computer system are seven IBM System 36 computer systems, one IBM AS/400 computer system, and one IBM System 38 computer system. The remote computer systems are used for local data and text processing and as control units for access to the Commission's teleprocessing network. During 1989, the work load averaged about 75,000 teleprocessing tasks and 500 batch runs daily.

The Commission has maintained a computer-assisted mapping capability since 1976. Two general types of computer software are currently available for computer-assisted mapping applications. These are computer-assisted drafting (CAD) software and geographic information systems (GIS) software. To the casual observer, these software products appear to operate in a similar fashion and to produce similar map products, but they are, in fact, quite different in design, operation, and function. As a simplistic way of distinguishing between these two products, it can be stated that CAD software treats maps as "pictures," whereas GIS software treats maps as "information."

CAD software functions quite well in situations where the only need is for the creation, maintenance, and replication of maps, but in situations where there is the additional need to extract, analyze, and report the information content of maps, or to synthesize map and map-related information, GIS software is a more appropriate tool. In addition, GIS software possesses the capability to simultaneously extract information from more than one map, synthesize and analyze that information, and produce "new" information and "new" maps from the process. The ability to perform these types of operations is especially valuable within the context of areawide planning.

The computer software necessary to establish and operate geographic information systems is complex and evolving. True GIS software has been commercially available only within the past several years, and prior to 1987 the Commission utilized CAD-type software for its computer-assisted mapping applications. In 1986, the Commission staff evaluated a number of the GIS software products then commercially available to identify a software system for

purchase. Also evaluated were several products in advanced stages of development, but not yet ready for commercial release. This evaluation led in 1987 to the acquisition by the Commission of the DELTAMAP software system. DELTAMAP—since renamed GENAMAP as the result of the change in ownership of the software company that originally developed the product—is a true GIS software product capable of supporting a wide variety of map digitizing, map production, and map data element analysis functions, including network- and land parcel-based functions.

The computer graphics hardware configuration upon which GENAMAP operates is based around two networked Hewlett-Packard series 9000, Model 370, engineering work stations, each having a 19-inch, 16-color monitor and two 571 mb disks. These work stations share a Hewlett-Packard 1600/6250 dual-density tape drive and a Hewlett-Packard high-resolution, eight-color pen plotter capable of handling A-size through E-size cut sheet media or 36-inch roll feed media. The two work stations jointly serve as the support devices for seven Hewlett-Packard 12-inch, eight-color terminals, six of which are attached to Calcomp 44-inch by 60-inch, high-precision digitizing tables for interactive map data capture and editing. A Calcomp color electrostatic plotter is also available for off-line color map production. This device is capable of handling 44-inch roll feed media, and can produce monochrome and color line and solid color fill finished drawings at a resolution of 400 parts per inch.

SYSTEMS ENGINEERING

The Division provides support to other Commission divisions in systems analysis and engineering, particularly in the development and application of simulation models. Commission simulation modeling efforts at the present time are centered in the Transportation Planning and Environmental Planning Divisions, and personnel from these divisions work closely with personnel in the Information Systems Division.

Transportation-related simulation models currently being used by the Commission include the U. S. Department of Transportation, Federal Highway Administration, battery of highway system simulation models; the U. S. Department of Transportation, Urban Mass Transportation Administration, battery of transit system simulation models; and a series of models developed over the years by the Commission staff, including trip generation and modal split models and an air quality emissions model. In the water resources planning field, the Commission uses a water surface profile model developed by the U. S. Army Corps of Engineers; a hydrologic, hydraulic, and water simulation model developed by Hydrocomp, Inc.; and a flood economics model developed by the Commission staff. During 1989 the Commission began converting simulation modeling applications from the main frame computer to micro-computers.

DATA PROCESSING SERVICES TO LOCAL GOVERNMENTS

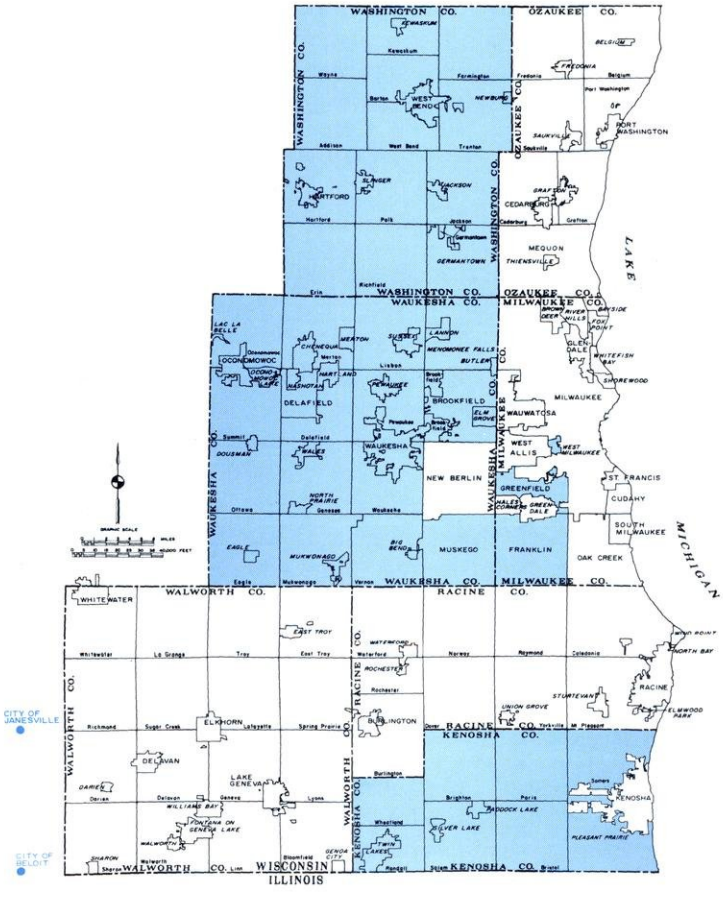
Since its inception, the Commission has offered to its member units of government special services, including professional advice on the selection of computer systems and the provision of special data processing services. Direct data processing services have been provided in the traditional "batch" mode of processing whereby the community delivers data to the Commission to process and the Commission returns appropriate reports and materials to the community. In 1989 the Commission continued to offer interested communities the opportunity to control and process their own data through the "on-line" use of small computer terminals attached to the Commission's Model 4381 computer via telephone lines. These terminals give the community the power of a large computer system at the price of a small computer.

During 1989, services were provided to communities utilizing both methods of processing. Some communities used both methods, doing some data processing in the "batch" mode and some data processing in the "on-line" mode.

One of the services provided in the "batch" mode is the tax bill processing system, which provides communities with property tax assessment rolls and tax bills. Throughout 1989 these property tax-related services were provided at cost to 73 communities, as shown on Map 32. Another service provided in the "batch" mode is the payroll processing system, which was provided to three school districts and one village in the Region, as shown on Map 33. In addition, payroll services were provided to one school district outside the Region. Map 34 shows those

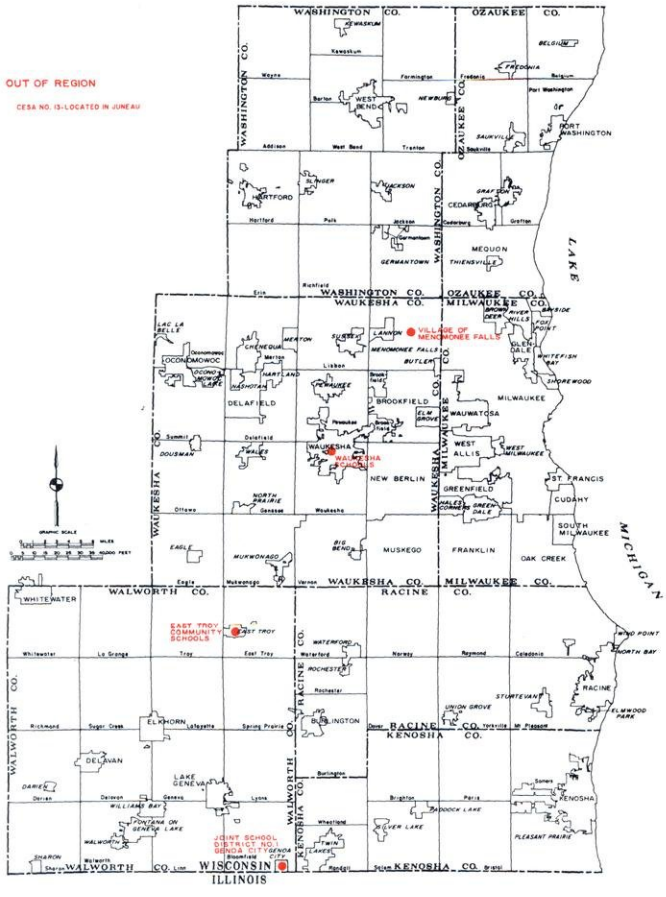
Map 32

LOCAL COMMUNITIES USING SEWRPC FOR PROPERTY TAX DATA PROCESSING: 1989



Map 33

SCHOOL DISTRICTS AND LOCAL COMMUNITIES USING SEWRPC FOR PAYROLL DATA PROCESSING: 1989



communities to which the Commission provided voter registration and poll list production services in the "batch" mode.

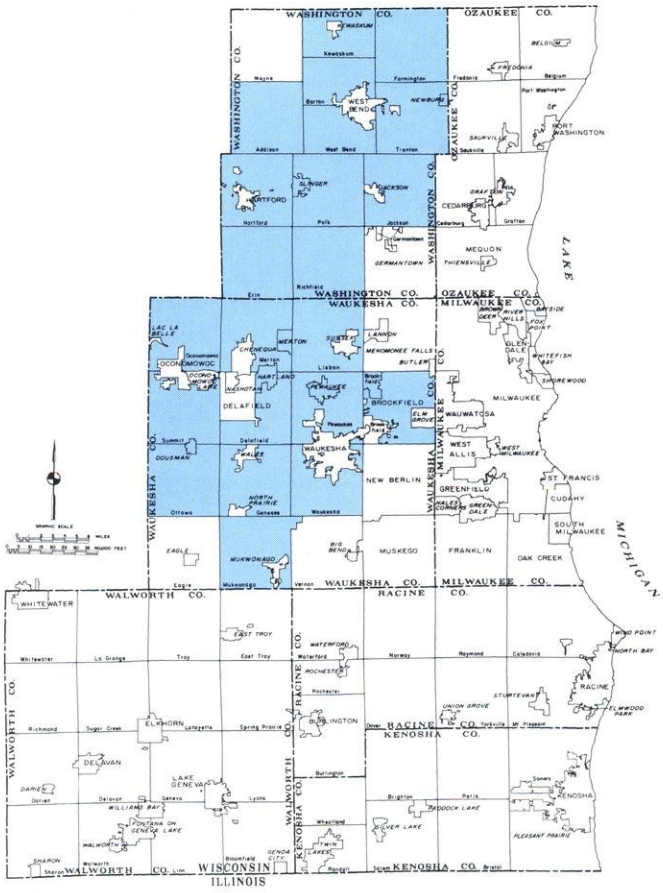
In addition to the above services, the Commission provided "batch" services to the Allenton Sanitary District, the Village of Dousman, the Town of Brookfield, and the Town of Pewaukee in the area of utility billing; to the Brown Deer School District in the area of school census; and to the U. S. District Court in the area of jury selection.

In the "on-line" processing mode, the Commission has installed computer terminals in three counties, 10 cities, and one village, and at the Wisconsin Correctional Service, a government-funded nonprofit service agency. Map 35 shows the locations of the terminals and the applications which were processed from those terminals during 1989.

In June 1988, the Commission strategically examined both the internal needs of the Commission to maintain a main frame computer and the actions of users of the Commission Data Center toward establishing local computer centers. With respect to its internal data processing needs, the results of that strategic analysis indicated that the Commission no longer needed a large main frame computer. Rather, it was determined that Commission planning and engineering work could be cost efficiently conducted using micro and mini computers with perhaps some reliance for periodic special needs on an outside service bureau for limited main frame applications.

Map 34

LOCAL COMMUNITIES USING SEWRPC FOR VOTER REGISTRATION AND POLL DATA PROCESSING: 1989



In reviewing the direction being taken by those county and local governments to which the Commission was providing data processing services, it was determined that the direction being taken was largely in favor of the establishment of individual computer centers to serve local individual needs. Indeed, the analysis indicated that several of the county and local governments that had heavily relied on the Commission's Data Center would no longer need Commission assistance within a relatively short period of time.

Based upon this analysis, the Commission determined to terminate its main frame computer operations and its traditional data processing services program as of December 31, 1990. All local government users of the Data Center were given formal notice of this decision on June 20, 1988, thus providing those governments with a 30-month period within which to make an orderly transition to some other way in which to obtain the data processing services now being provided by the Commission. In making this determination, the Commission directed that its Data Center be reconfigured as of January 1, 1991, to serve internal Commission needs.

GEOGRAPHIC INFORMATION SYSTEM

During 1989, the Commission also continued to help Kenosha County build a multi-purpose automated land information system. This system, which utilizes the state-of-the-art geographic information systems (GIS) computer hardware and software technology described earlier in this section, was described in the Commission's 1986 Annual Report. The system is built upon a demonstration project completed in 1986 for that portion of Kenosha County comprised of the Town of Randall and the Village of Twin Lakes. The findings of that demonstration project were reported in SEWRPC Technical Report No. 30, The Development of an Automated Mapping and Land Information System: A Demonstration Project for the Town of Randall, Kenosha County.

The automated land information system being developed for Kenosha County is intended to ultimately provide continuous, readily available, and comprehensive land-related information at the parcel level. The system utilizes the computer equipment and software for the conversion, storage, retrieval, and analysis of land-related information which has traditionally been represented on paper maps. A portion of a computer-generated real property boundary map—which represents one type of land-related information contained in the system—is shown as Figure 75. Under contract to Kenosha County, the Commission during 1989 completed preparing computer map files for the Towns of Salem and Wheatland. Thus, by the end of 1989, the basic land information system had been made computer-accessible for the Village of Twin Lakes and the Towns of Randall, Salem, and Wheatland. Together these areas—shown on Map 36—represent approximately 80 square miles, or about 29 percent of the area of Kenosha County.

The enhanced operational capability provided by the new geographic information systems computer hardware and software technology

Map 35

LOCAL GOVERNMENT—SEWRPC TELEPROCESSING CONFIGURATION AND APPLICATIONS

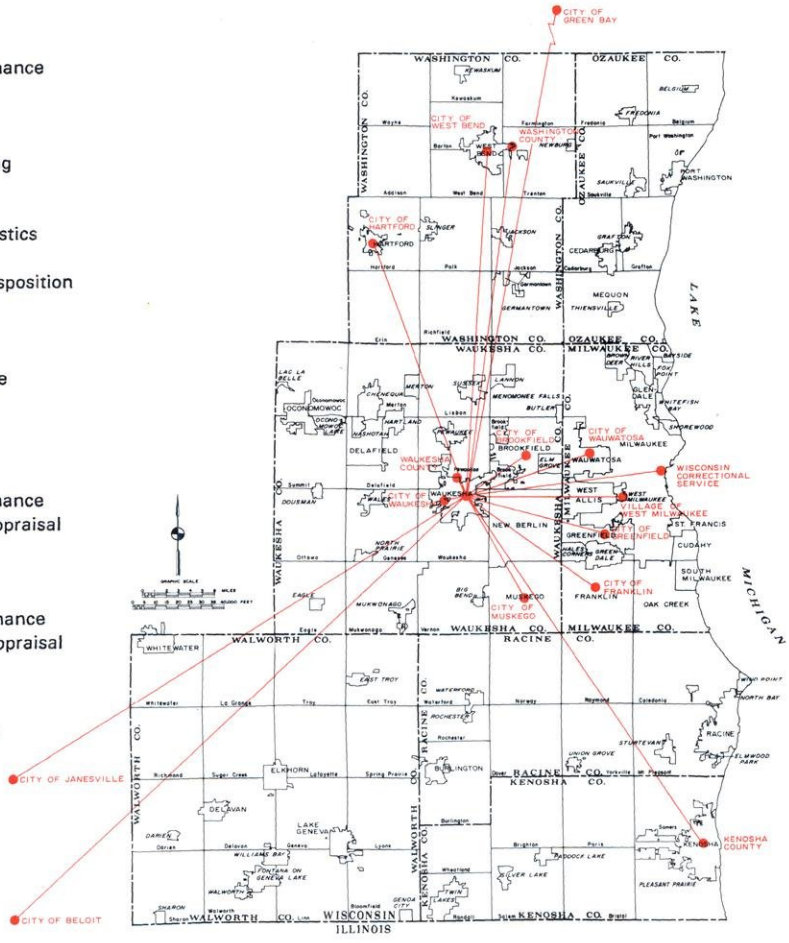
WASHINGTON COUNTY
- *TAX LISTER*
  Property Tax File Maintenance
- *TREASURER*
  Property Tax File Inquiry
  Receipts
  Delinquent Tax Processing
- *AUDITOR*
  Nursing Home Billing
  Nursing Home Staff Statistics
  Mental Health Billing
  District Attorney Case Disposition
- *CLERK OF COURTS*
  Alimony and Support
  Paternity
  Traffic Fine and Forfeiture
  Receipts

CITY OF HARTFORD
- *ASSESSOR*
  Property Tax File Maintenance
  Computer-Aided Mass Appraisal

CITY OF JANESVILLE
- *ASSESSOR*
  Property Tax File Maintenance
  Computer-Aided Mass Appraisal
- *TREASURER*
  Cash Receipts
- *FIRE DEPARTMENT*
  STATISTICAL ANALYSIS

CITY OF BELOIT
- *ASSESSOR*
  Property Tax File Maintenance
  Computer-Aided Mass Appraisal
  Mobile Home Billing
  Delinquent Personal Property
  Special Assessments
- *TREASURER*
  Utility Billing
  Tax Payment Inquiry
  Dog/Cat Licensing
  Cash Collection
- *BUILDING INSPECTOR*
  Dwelling Description Inquiry

WAUKESHA COUNTY
- *CLERK OF COURTS*
  Alimony and Support
  Paternity Payments
  Fine and Forfeiture Record Keeping
  Cash Collection
- *TAX LISTER*
  Property Tax File Maintenance
- *PERSONNEL DEPARTMENT*
  Employee File Maintenance
- *PAYROLL DEPARTMENT*
  Employee File Maintenance
- *DATA PROCESSING*
  Accounts Payable
  Receipts
  Payroll
  General Ledger
  Personnel Management Reports
- *TREASURER*
  Receipts
  Property Tax File Inquiry
  Cash Collections
  Delinquent Tax Processing



CITY OF WAUKESHA
- *COMPTROLLER*
  Accounts Payable
  Receipts
  General Ledger
  Special Assessments
  Municipal Invoices
- *MUNICIPAL COURT*
  Case Processing
- *ASSESSOR*
  Property Tax File Maintenance
  Computer-Aided Mass Appraisal
- *CLERK*
  Bartender License
  Voter Registration
- *POLICE DEPARTMENT*
  Parking Tickets
- *PARK/RECREATION DEPARTMENT*
  Reservation/Registration System

KENOSHA COUNTY
- *COUNTYWIDE TAX PROCESSING*
- *ASSESSOR*
  CAMA Tax System
  Mobile Home System
- *TREASURER*
  Delinquent System
  Cash Collection
- *HIGHWAY DEPARTMENT*
  Cost Accounting
- *FINANCE OFFICE*
  County Accounting

CITY OF GREEN BAY
- *ASSESSOR*
  Computer-Aided Mass Appraisal

CITY OF WEST BEND
- *CLERK*
  Cash Receipts
  Purchase Orders
  Special Tax Assessments
  General Ledger
  Accounts Payable
  Dog/Cat Licensing
- *ASSESSOR*
  Property Tax File Maintenance

WISCONSIN CORRECTIONAL SERVICE
  Accounting System

CITY OF WAUWATOSA
- *ASSESSOR*
  Computer-Aided Mass Appraisal

VILLAGE OF WEST MILWAUKEE
- *ASSESSOR*
  Property Tax File Maintenance

CITY OF GREENFIELD
- *ASSESSOR*
  Property Tax File Maintenance
- *TREASURER*
  Utility Billing
  Cash Receipts
  Special Assessments
- *BUILDING INSPECTION*

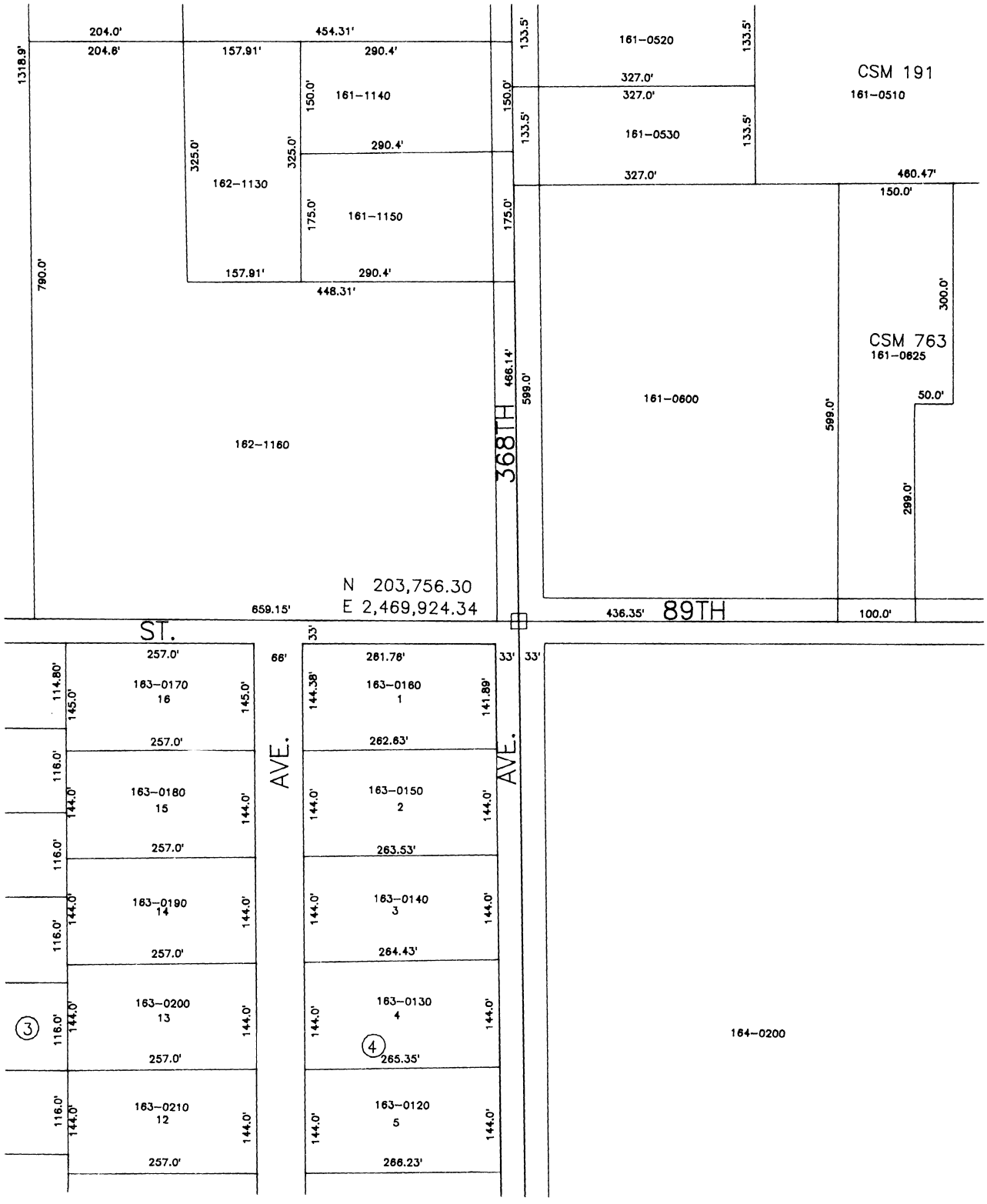
CITY OF BROOKFIELD
- *COMPTROLLER*
  Receipts
  Special Assessments
  Utility Billing/Accounting
- *POLICE DEPARTMENT*
  Uniform Crime Reporting
  Officer Activity
- *ASSESSOR*
  Property Tax File Maintenance
- *TREASURER*
  Receipts
- *LIBRARY*
  Circulation
  Fines
  Reference
  Inventory System

CITY OF FRANKLIN
- *CLERK*
  Budget Processing
  Accounts Payable
  Receipts
  Purchase Orders
  Special Assessments
  General Ledger
  Utility Billing
- *ASSESSOR*
  Property Tax File Maintenance
  Computer-Aided Mass Appraisal

CITY OF MUSKEGO
- *ASSESSOR*
  Property Tax File Maintenance
  Computer-Aided Mass Appraisal
  Special Assessments

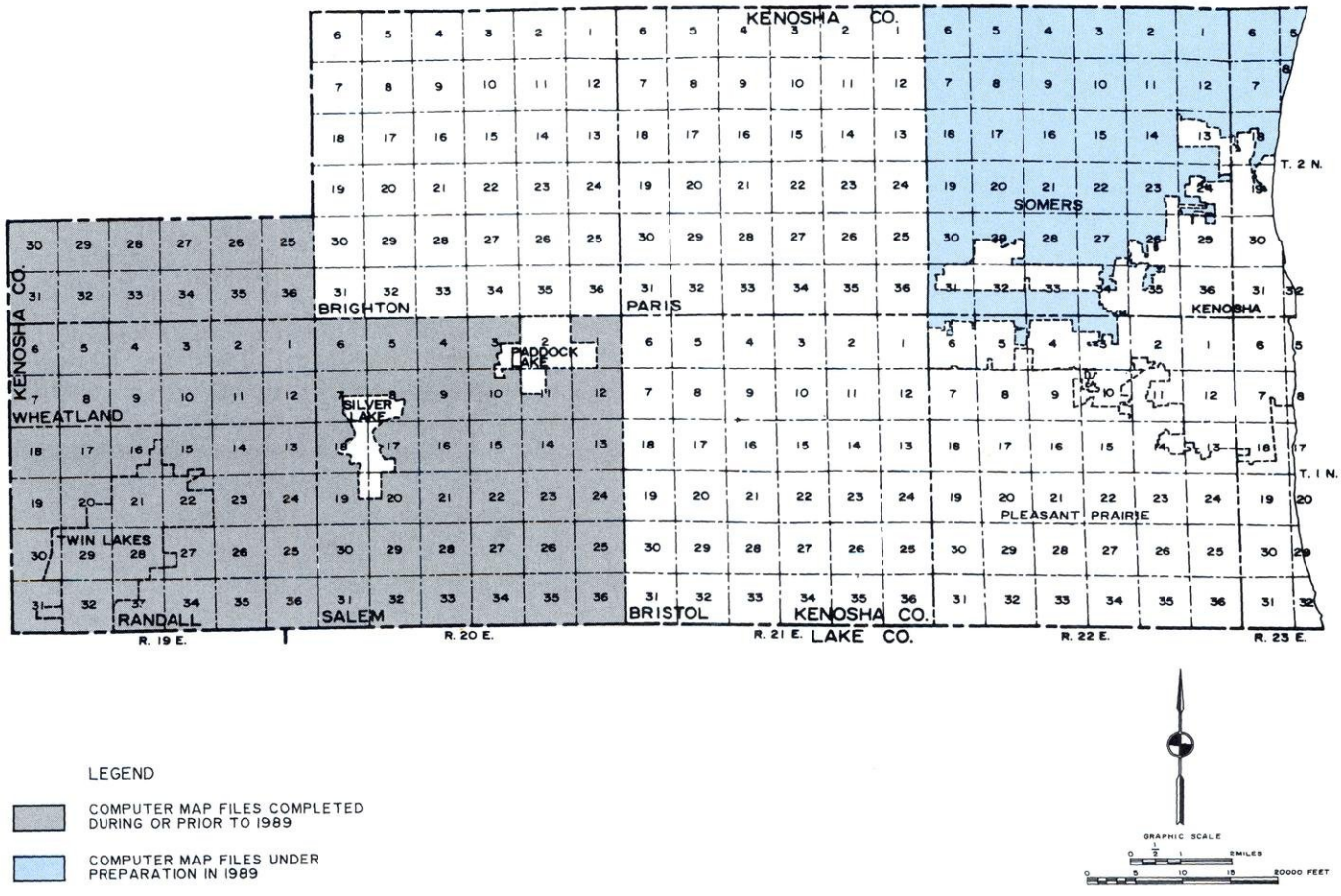
Figure 75

A PORTION OF A DIGITIZED CADASTRAL MAP FOR KENOSHA COUNTY



Map 36

STATUS OF COMPUTER MAP FILE COMPLETION IN KENOSHA COUNTY: 1989

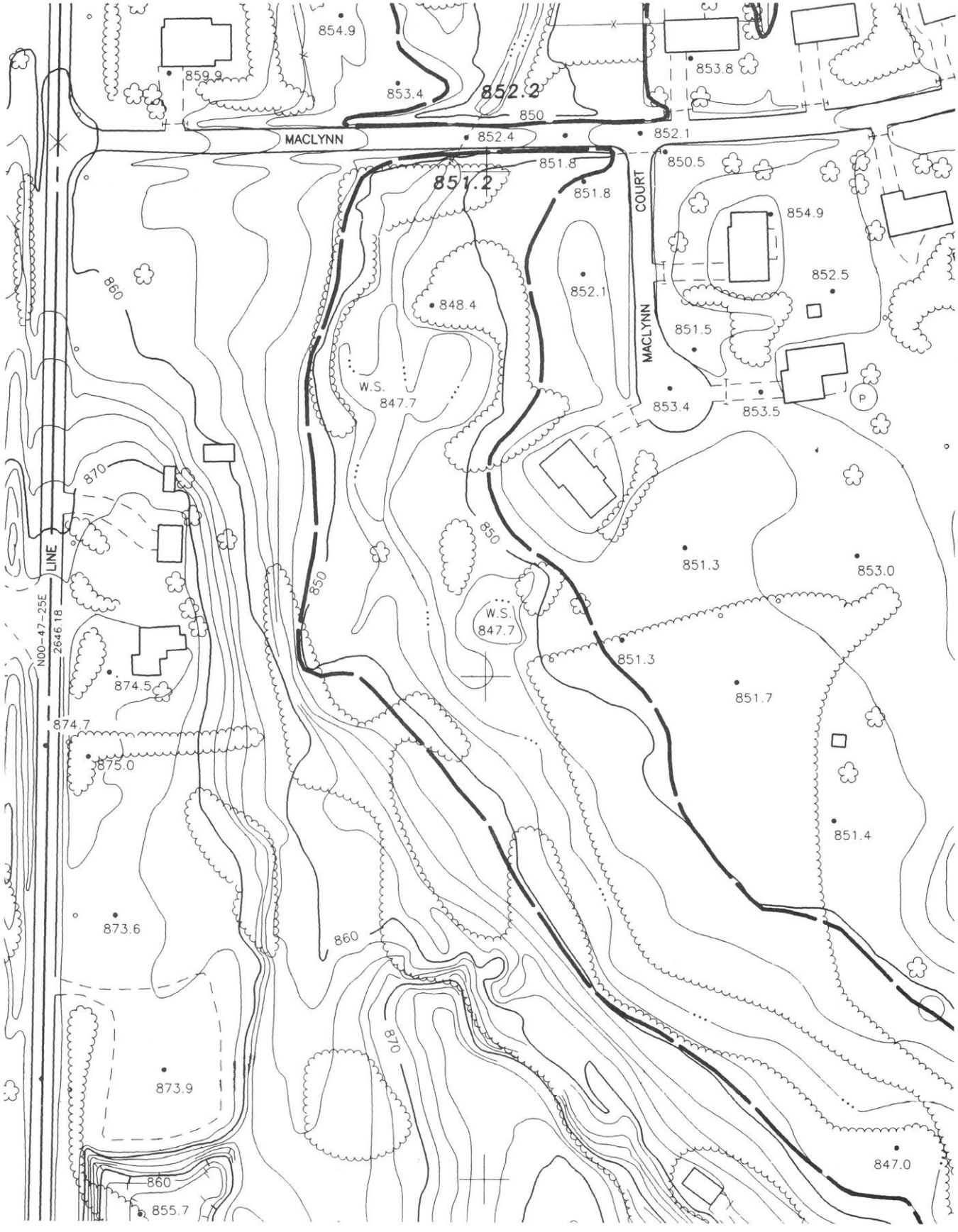


also allowed the Commission staff to begin taking steps in 1988 to provide large-scale topographic base maps in digital format prepared to Commission-recommended specifications for those counties and local units of government wishing to prepare these maps in digital rather than the traditional analog format. The first such project, involving the preparation of 144 topographic base maps at a scale of 1:1200 (one inch equals 100 feet) with contours at a vertical interval of two feet, was completed in the Menomonee Falls area of Waukesha County in 1988 and was cooperatively funded by Waukesha County, the Village of Menomonee Falls, and the Wisconsin Gas Company. At the request of the funding organizations, the Commission modified its large-scale topographic mapping specifications—in use for more than 25 years for the preparation of maps in traditional analog format—to provide for the alternative delivery of this type of mapping in digital format.

Digital map files were prepared by the photogrammetric engineer retained for the project by digitizing specified map features directly from stereoscopic models. The completed digital map files were provided to the Commission on magnetic computer tapes and were reformatted on the Commission's geographic information systems equipment, with final analog map copies being generated on the Commission's digital plotter for delivery to Waukesha County and the Village of Menomonee Falls. The Wisconsin Gas Company received its copies of the final maps as digital files on computer tape. A portion of a digitally prepared topographic map prepared as part of this project is shown as Figure 76.

Figure 76

A PORTION OF A DIGITAL LARGE-SCALE TOPOGRAPHIC BASE MAP FOR WAUKESHA COUNTY



As the project proceeded and interim products became available for review, Waukesha County—which is currently conducting a countywide mapping program under which new topographic mapping is prepared annually, a program administered for the County by the Commission—determined to have all future topographic mapping delivered in digital format. Subsequent to the action taken by Waukesha County, Milwaukee County and the City of West Bend also requested that the Commission assist them in acquiring topographic mapping in digital format. Map 37 shows those areas of the Region for which large-scale topographic maps have been or are being prepared in digital format to Commission-recommended standards. This area totals 130 square miles, or about 5 percent of the Region.

During 1989, the Regional Planning Commission completed and released SEWRPC Community Assistance Planning Report No. 177, Feasibility Study for a Milwaukee County Automated Mapping and Land Information System. This report sets forth the findings of an advisory committee assembled at the request of the County, and proposes the development of a countywide, multiple-user system of digital maps and related products as an initial step in the development of a modern land records system within Milwaukee County.

In the summer of 1988, the Milwaukee County Board of Supervisors adopted a resolution requesting the Southeastern Wisconsin Regional Planning Commission to convene an advisory committee to analyze the feasibility and cost-effectiveness of modernizing land records within the County by developing an automated mapping and land information system. This resolution was subsequently approved by the Milwaukee County Executive. Acting in response to this request, the Regional Planning Commission created an advisory committee composed of knowledgeable representatives of the City and County of Milwaukee, Milwaukee County suburban cities and villages, the Milwaukee Metropolitan Sewerage District, the Wisconsin Energy Corporation, the Wisconsin Gas Company, and Wisconsin Bell to guide the preparation of a report responsive to the County Board's charge.

The Advisory Committee reviewed the pertinent conclusions of recent research efforts in the area of land records modernization, including, most importantly, the reports of the National Research Council Panel on a Multipurpose Cadastre and the reports of the Wisconsin Land Records Committee. The Committee also reviewed the efforts and accomplishments of those existing automated mapping and land records systems whose operations cover all or portions of Milwaukee County. Finally, the Committee reviewed the results of previous deliberations among Milwaukee area units of government and utilities concerning the joint development of automated mapping capability.

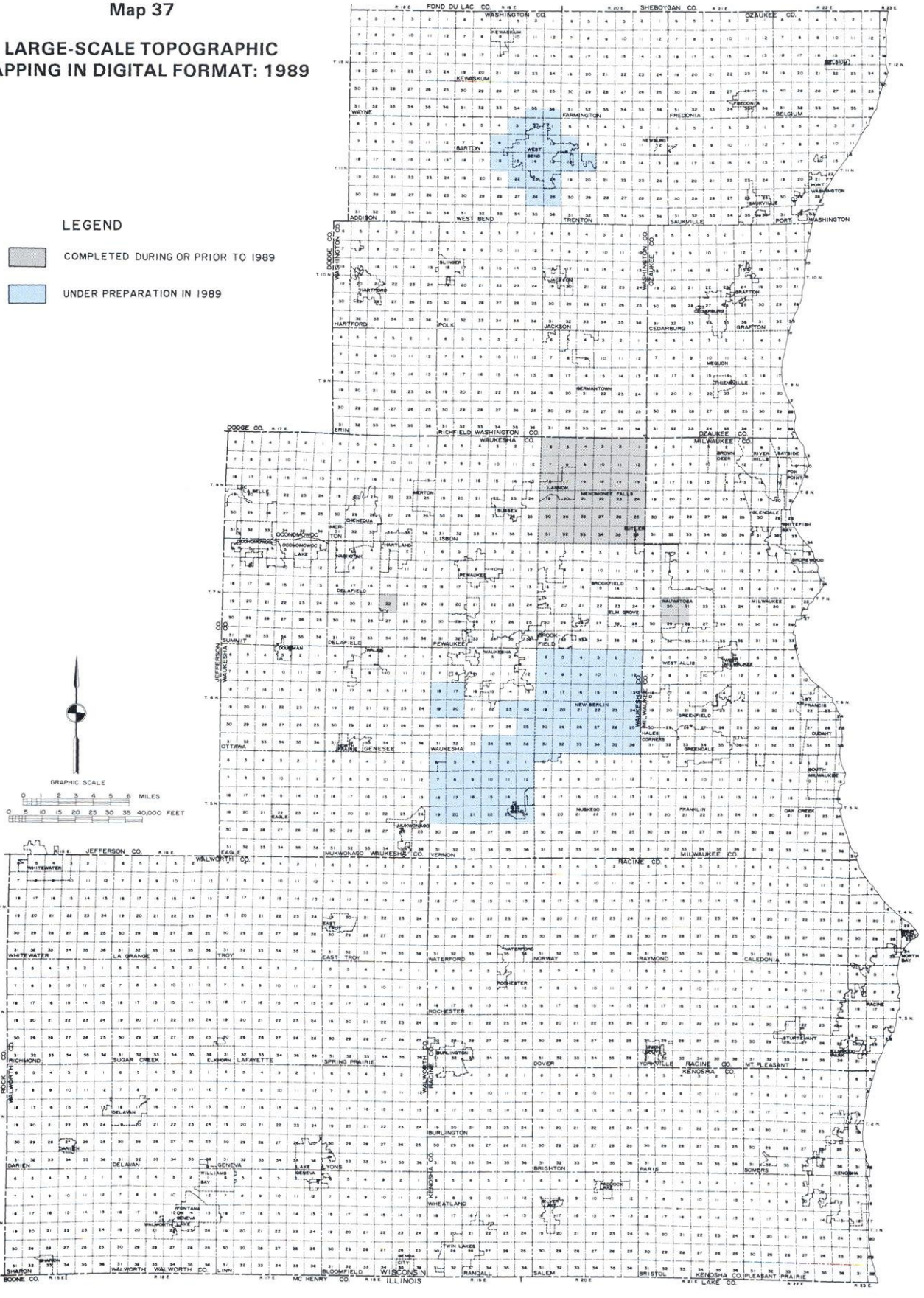
The Advisory Committee concluded that automated mapping as currently performed in Milwaukee County had led to duplication of effort between the various organizations involved and that this duplication would likely increase as additional units of government and public and private utilities undertook conversion of their analog mapping and land-related records to automated environments. The cost of this duplication is ultimately borne by the area residents, who pay for it in the form of tax payments, utility rate payments, and various user fees. Accordingly, better coordination of these conversion efforts would be in the best interests of the area residents.

The Advisory Committee further concluded that coordination of these efforts could be enhanced by the provision of a single automated mapping base for the entire County. This base would be prepared to a set of specifications able to meet the most stringent of the accuracy and map feature content requirements of all of the users concerned. Each organization using the automated base would provide its own operating environment—that is, computer hardware and software. Only the digital maps and parcel identification system would be shared. This basic system would provide an automated mapping capability suitable for the development by individual operators of a wide variety of applications, such as land ownership and title recordation systems, real property assessment and taxation systems, public and private utility inventory and management systems, environmental inventory and management systems, zoning and other code monitoring and enforcement systems, emergency vehicle response systems, and service delivery vehicle routing systems.

The Advisory Committee recommended that Milwaukee County undertake the responsibility for providing the basic system of U. S. Public

Map 37

LARGE-SCALE TOPOGRAPHIC MAPPING IN DIGITAL FORMAT: 1989



Land Survey corner monumentation, attendant horizontal and vertical control surveys, digital planimetric and topographic maps, digital cadastral map overlays, and parcel identifiers that constitute this basic automated mapping system; and that—once the system is completed—the County undertake the responsibility of maintaining the system in a current condition. It was the belief of the Advisory Committee that the County represents the most logical locus for this activity.

The Milwaukee County Automated Mapping and Land Information System would be centered in the Register of Deeds office, and the Register of Deeds would function as the executive officer of the system. The recommended organizational structure for this program is shown in Figure 77. The Register of Deeds would—over the expected five-year period that would be necessary to create the system—prepare a yearly budget for the creation of the system; secure the appropriate funding from the Milwaukee County Board and the other funding organizations; and administer the funds, once obtained. The County Surveyor would, at the request of the Register of Deeds and utilizing funds made available through the Register of Deeds, carry out the work necessary to extend the geographic reference framework into those portions of the County where this framework is incomplete, and would also carry out the work necessary to obtain the digital, large-scale planimetric and topographic base mapping, and the digital cadastral map overlays.

The creation of a set of digital planimetric and topographic base maps and cadastral map overlays for Milwaukee County is estimated to cost $4.16 million. These costs are set forth in detail in Table 30. About $204,000, or about 5 percent of the total amount, would be needed to complete the U. S. Public Land Survey corner monumentation and the attendant high-order horizontal and vertical control surveys in the County. About $960,000, or about 23 percent of the total amount, would be needed to acquire large-scale planimetric and topographic mapping in digital format for the 96 square miles of the County not previously mapped. About $1.183 million, or about 28 percent of the total amount, would be needed to prepare digital planimetric and topographic map files for the previously mapped 146 square miles of the County. About $763,000, or about 18 percent of the total amount, would be needed to complete cadastral map overlays and parcel identifiers for the approximately 105,000 real property parcels in the County outside the City of Milwaukee. Finally, about $1.05 million, or about 25 percent of the total amount, would be needed to prepare digital files of cadastral map overlays for the 105,000 real property parcels in Milwaukee County outside the City of Milwaukee. Digital map files of real property boundary lines have already been created for the City of Milwaukee and would be available for incorporation into the countywide automated mapping system.

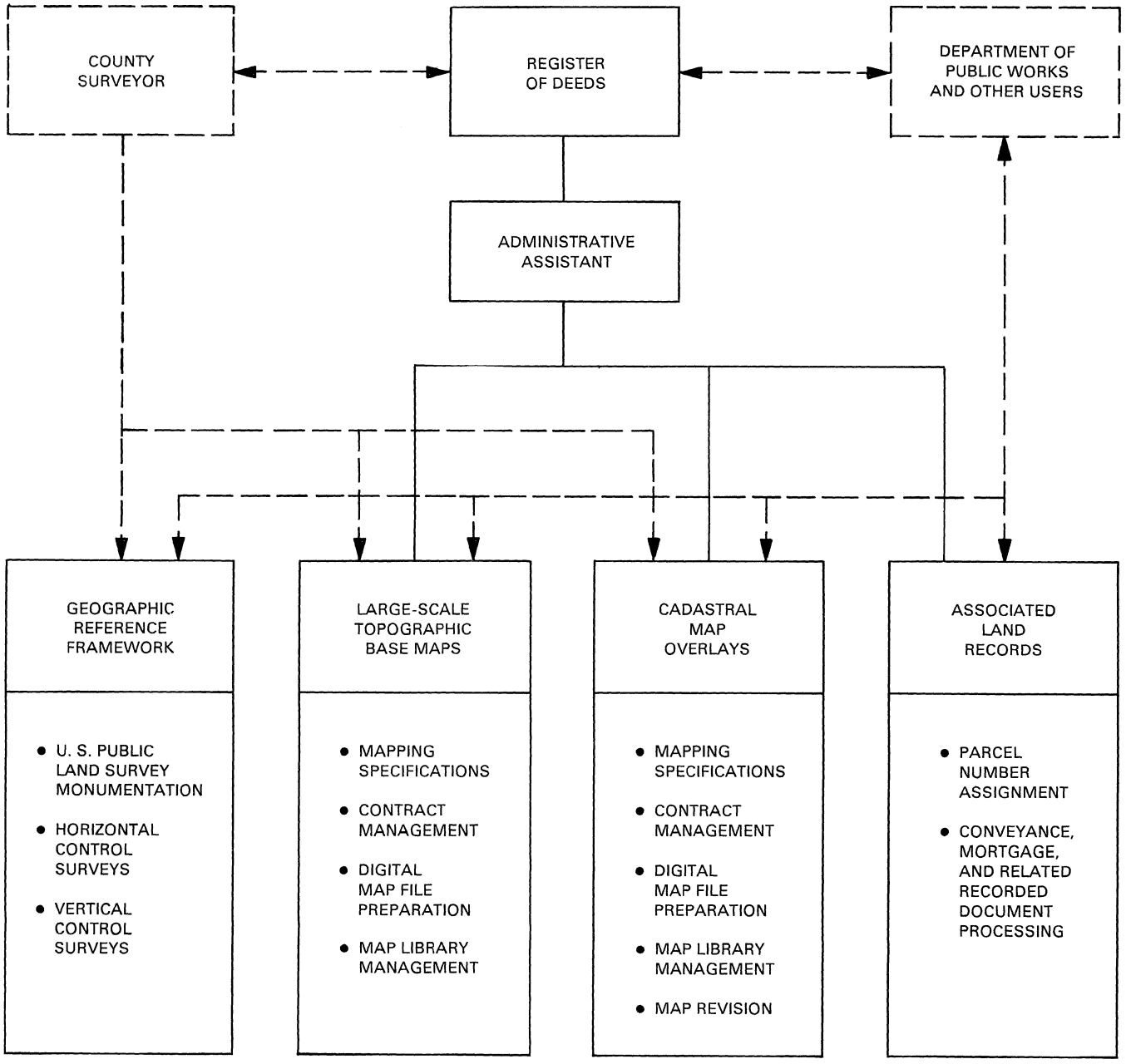
While the estimated cost of $4.16 million for completion of the system is a significant sum, it is important to note that substantial sums have already been invested within Milwaukee County in the provision of the needed horizontal and vertical control survey networks and in preparing large-scale topographic, planimetric, and cadastral maps to modern mapping specifications. The estimated current dollar replacement cost of these investments is in excess of $5 million. The proposed system would utilize these existing products, incorporating and building upon them, and thus take full advantage of the public investment that has already occurred in providing accurate mapping products in Milwaukee County.

Acquisition by Milwaukee County of computer hardware and software sufficient for its own use of the digital map files would cost about $500,000, depending upon the type and capacity of the chosen equipment. It should be noted that under the recommendations made by the Advisory Committee, the County would need to acquire only sufficient capacity to support its own day-to-day operations. Since the recommendations assume a distributed, rather than a centralized, operating scheme, the County would have no need to provide the additional computational and storage capacity that would otherwise be necessary in a centralized hardware system. Individual cities, villages, and public and private organizations within the County would, in like manner, provide their own hardware and software environments for use of the basic system of digital maps.

The development and common use of a countywide, parcel-based, multiple-user digital mapping base would be a major step toward the elimina-

Figure 77

TENTATIVE ORGANIZATIONAL STRUCTURE FOR A MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM IMPLEMENTATION PROGRAM



tion over time of redundancy in currently established county, city, and private utility operations, and would forestall the continued development of new, partially redundant operations. The specifications recommended for this proposed system are sufficiently precise to meet the most demanding requirement of a modern, parcel-based, land information system—that is, the precise correlation of real property boundary lines with earth science data such as floodplain boundary lines. The proposed system would provide the necessary framework for the accurate digital integration of a wide variety of land-based information such as real property boundary lines, municipal

Table 30

ESTIMATED COSTS FOR THE CREATION OF AN AUTOMATED MAPPING BASE FOR MILWAUKEE COUNTY

Work Component	Cost
Completion of the Survey Control Network	
Relocate and Monument Remaining 104 U. S. Public Land Survey Corners	$ 52,000
Establish State Plane Coordinates for Remaining 104 U. S. Public Land Survey Corners	68,000
Establish Vertical Elevations for Remaining 240 U. S. Public Land Survey Corners	84,000
Subtotal	$ 204,000
Creation of Planimetric and Topographic Base Map Files	
Acquire Photogrammetrically Compiled Digital Planimetric and Topographic Maps for Approximately 96 Previously Unmapped Square Miles	$ 960,000
Board Digitize Selected Planimetric Map Features for Approximately 146 Previously Mapped Square Miles	657,000
Board Digitize Contour Lines and Spot Elevations for Approximately 146 Previously Mapped Square Miles	526,000
Subtotal	$2,143,000
Creation of Cadastral Map Overlay Files	
Compilation of Real Property Boundary Line Maps for Approximately 105,000 Real Property Parcels	$ 763,000
Board Digitize Real Property Boundary Line and Ancillary Information for Approximately 105,000 Real Property Parcels	1,050,000
Subtotal	$1,813,000
Total of All Components	$4,160,000

engineering records and maps, public and private utility system records and maps, land title records, and tax assessment records. The development of a single digital mapping base prepared to a sufficiently precise set of specifications, as recommended by the Advisory Committee in the report, is of central importance to the coordination of future digital mapping efforts in Milwaukee County. Unless prudent action is taken in the initial implementation effort, the future ability of participants to exchange digital map data without extensive and expensive "refitting" will be jeopardized, and many of the perceived advantages inherent in moving to a digital mapping environment will be lost. The development of the automated mapping system as recommended by the Advisory Committee presents a unique opportunity for the private and public sectors to work together to create a modernized land information system with the potential for the more effective as well as efficient provision of needed facilities and services.

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, 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 managing the Commission financial affairs. This includes maintaining a fund accounting system, preparing an annual Commission budget, preparing Commission payrolls, and processing accounts receivable and payable. Through the computerized accounting system, monthly financial management reports are prepared, including budget control, cash flow, and quarterly Treasurer's reports. These reports are utilized by the Commission, its committees, and the 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 1989 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, commencing with the generation of a list of disadvantaged/women businesses which were contacted as potential Commission vendors.

The Division is also responsible for 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 1989 the Commission continued to make progress in carrying out a comprehensive equal employment opportunity program in the areas of recruitment, employment, promotion, transferring, and training. Action was taken to better monitor applicant flow in order to gage 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 already noted, 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 1989 the Division distributed a total of 28,229 copies of Commission publications. These included: 200 prospectuses, 284 planning reports, 229 amendments to planning reports, 72 technical reports, 2,169 community assistance planning reports, 1,397 memorandum reports, 35 technical records, 503 annual reports, 12,563 newsletters, 392 conference proceedings, 10,094 community economic development profiles, 8 lake use reports, 76 public hearing minutes, 77 transportation improvement programs, and 48 overall work programs. A total of 82 copies of the special publication entitled Twenty-five Years of Regional Planning were also distributed. In addition, the Division distributed 7,788 aerial photographs, 99 soils maps, 300 topographic maps, 1,035 control survey station dossiers, 398 control survey summary diagrams, and 407 maps from the Commission's base map series.

APPENDICES

Appendix A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
COMMISSIONERS AND COMMITTEES AS OF DECEMBER 31, 1989

COMMISSIONERS

	Term Expires
KENOSHA COUNTY	
***Leon T. Dreger	1994
*Francis J. Pitts	1992
**Sheila M. Siegler	1992
MILWAUKEE COUNTY	
*John R. Bolden	1990
***Jean B. Tyler	1990
OZAUKEE COUNTY	
*Allen F. Bruederle	1990
**Alfred G. Raetz	1990
***Elroy J. Schreiner	1994
RACINE COUNTY	
***David B. Falstad	1992
*Jean M. Jacobson, Secretary	1990
**Earl G. Skagen	1994
WALWORTH COUNTY	
**John D. Ames	1990
***Anthony F. Balestrieri	1994
*Allen L. Morrison, Vice-Chairman	1988
WASHINGTON COUNTY	
**Daniel S. Schmidt	1992
*Patricia A. Strachota	1990
***Frank F. Uttech, Chairman	1994
WAUKESHA COUNTY	
***Richard A. Congdon	1992
*Robert F. Hamilton	1994
**William D. Rogan, Treasurer	1992

*County Board-appointed Commissioners.

**Appointed by the Governor from a County Board-approved list of candidates.

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

COMMITTEES

EXECUTIVE COMMITTEE
- Frank F. Uttech, Chairman
- Allen L. Morrison, Vice-Chairman
- Anthony F. Balestrieri
- John R. Bolden
- Allen F. Bruederle
- David B. Falstad
- Robert F. Hamilton
- Jean M. Jacobson
- Francis J. Pitts
- Alfred G. Raetz
- William D. Rogan
- Sheila M. Siegler

ADMINISTRATIVE COMMITTEE
- Francis J. Pitts, Chairman
- Jean M. Jacobson, Vice-Chairman
- Anthony F. Balestrieri
- Allen F. Bruederle
- Richard A. Congdon
- David B. Falstad
- Allen L. Morrison
- Alfred G. Raetz
- William D. Rogan
- Frank F. Uttech

INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE
- Robert F. Hamilton, Chairman
- Allen L. Morrison, Vice-Chairman
- Allen F. Bruederle
- Jean M. Jacobson
- Francis J. Pitts
- William D. Rogan
- Patricia A. Strachota
- Frank F. Uttech

PLANNING AND RESEARCH COMMITTEE
- Sheila M. Siegler, Chairman
- Daniel S. Schmidt, Vice-Chairman
- John D. Ames
- Anthony F. Balestrieri
- Leon T. Dreger
- Robert F. Hamilton
- Jean M. Jacobson
- Allen L. Morrison
- William D. Rogan
- Elroy J. Schreiner
- Earl G. Skagen
- Patricia A. Strachota
- Jean B. Tyler
- Frank F. Uttech

Appendix B

COMMISSION ADVISORY COMMITTEES: 1989

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIRPORT SYSTEM PLANNING

William D. Rogan . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission
Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
C. Barry Bateman . . . . . Airport Director, General Mitchell International Airport
Richard A. Bolte . . . . . Highway Commissioner, Waukesha County
Edwin H. Daniels . . . . . Citizen Member, Darien
Dennis H. Eiler . . . . . Airport Director, Kenosha Regional Airport
George Gundersen . . . . . Director, Bureau of Systems Planning, Division of Planning and Budget, Wisconsin Department of Transportation
Major Reid M. Knutson . . . . . Base Civil Engineer, Wisconsin Air National Guard
Robert W. Kunkel . . . . . Director, Bureau of Aeronautics, Wisconsin Department of Transportation
Paul C. Leonard . . . . . Regional Vice-President, Central Region, Air Transport Association of America
Paul E. Milewski . . . . . Director of Community Development, City of Oak Creek
Glen A. Orcutt . . . . . Airport Planner, U. S. Department of Transportation, Federal Aviation Administration
Gerald Schwerm . . . . . Director of Transportation, Milwaukee County
Sylvester N. Weyker . . . . . Highway Commissioner, Ozaukee County

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR KENOSHA COUNTY

Gene A. Scharfenorth . . . . . Highway Commissioner, Kenosha County
Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
Gary Daniels . . . . . Chairman, Town of Brighton
Ralph L. Drinkwine, Jr. . . . . President, Village of Silver Lake
Noel Elfering . . . . . Chairman, Town of Bristol
Harvey Elmer . . . . . Director of Public Works, City of Kenosha
Thomas L. Frank . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Gerald K. Graff . . . . . Chairman, Town of Randall
Russell Hoel . . . . . Chairman, Town of Salem
Earl W. Hollister . . . . . Former Supervisor, Kenosha County
David D. Holtze . . . . . Chairman, Town of Somers
Merlin F. Jahns . . . . . Trustee, Village of Twin Lakes
Francis H. Kerkman . . . . . Chairman, Town of Wheatland
Norman H. Krueger . . . . . President, Village of Paddock Lake
Roger A. Prange . . . . . Trustee, Village of Pleasant Prairie
Harvey Shebesta . . . . . District Director, Wisconsin Department of Transportation
Thomas W. Terwall . . . . . President, Village of Pleasant Prairie
August Zirbel, Jr. . . . . Chairman, Town of Paris

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR MILWAUKEE COUNTY

Gerald Schwerm . . . . . Director of Transportation, Milwaukee County
Chairman and Secretary
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
John A. Erickson . . . . . City Engineer, City of Milwaukee
Thomas L. Frank . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR MILWAUKEE COUNTY (continued)

Frank M. Mayer . . . . . Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Nick T. Paulos . . . . . Village Engineer, Village of Greendale
Frank Reichert . . . . . City Engineer, City of Glendale
Gordon Rozmus . . . . . City Planner, City of Wauwatosa
John E. Schumacher . . . . . City Engineer, City of West Allis
Harvey Shebesta . . . . . District Director, Wisconsin Department of Transportation

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR RACINE COUNTY

James F. Rooney . . . . . Commissioner, Racine County Highway Commission
Chairman
Cecil F. Mehring . . . . . Highway Engineer, Racine County
Secretary
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Arnold L. Clement . . . . . Planning and Development Director, Racine County
Thomas M. Frank . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Richard J. Furst . . . . . Trustee, Village of Wind Point
Mark A. Gustafson . . . . . City Engineer, City of Burlington
Richard L. Hebron . . . . . Chairman, Town of Raymond
Edmund Karczewski . . . . . Chairman, Town of Dover
John Korzilius . . . . . Trustee, Village of Union Grove
Lawrence M. Krautkramer . . . . . Chairman, Town of Waterford
Fred H. Larson . . . . . Commissioner of Public Works, City of Racine
Brian J. Lawler . . . . . Trustee, Village of Elmwood Park
Myrtle A. Lovrine . . . . . Chairman, Town of Burlington
John L. Malchine . . . . . Chairman, Town of Norway
Clay E. Morgan . . . . . President, Village of Sturtevant
Alvin P. Nelson . . . . . Chairman, Town of Yorkville
Peter Nilles . . . . . President, Village of North Bay
Richard G. Rehberg . . . . . Chairman, Town of Rochester
John P. Robbins . . . . . President, Village of Waterford
Antony Rogers . . . . . Trustee, Village of Rochester
Michael Weber . . . . . Development Coordinator, Town of Mt. Pleasant
Robert Wilson . . . . . Chairman, Town of Caledonia
Thomas A. Winkel . . . . . District Chief Planning Engineer, Wisconsin Department of Transportation
Thomas N. Wright . . . . . Director of Community Development, City of Racine

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR OZAUKEE COUNTY

Sylvester N. Weyker . . . . . Highway Commissioner, Ozaukee County
Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
Leland J. Allen . . . . . Chairman, Town of Port Washington
Lester A. Bartel, Jr. . . . . Chairman, Town of Grafton
Paul H. Brunnquell . . . . . Supervisor, Town of Saukville
Alfred Bucholz . . . . . Chairman, Town of Belgium
Donald C. Bystricky . . . . . President, Village of Belgium
Anthony R. Depies . . . . . Assistant City Engineer, City of Port Washington

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR OZAUKEE COUNTY (continued)

David M. Drew . . . . . Director of Engineering and Development, City of Cedarburg
Thomas L. Frank . . . . . Planning Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Frederick Kaul . . . . . Chairman, Ozaukee County Highway Committee
John V. Kitzke . . . . . President, Village of Thiensville
Jeffrey P. Knight . . . . . President, Village of Saukville
Fred W. Koehler, Jr. . . . . Chairman, Town of Fredonia
D. Michael Mucha . . . . . Assistant City Engineer, City of Mequon
William Rathsack . . . . . President, Village of Fredonia
Kenneth A. Roell . . . . . Highway Commissioner, Town of Cedarburg
Robert R. Struck . . . . . Director of Public Works, Village of Grafton
Thomas A. Winkel . . . . . District Chief Planning Engineer, Wisconsin Department of Transportation

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR WALWORTH COUNTY

Benjamin Coopman, PE, Chairman . . . . . Highway Commissioner, Walworth County
Kurt W. Bauer, Secretary . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
James Bilskey . . . . . Chairman, Town of Darien
David Bollweg . . . . . Acting Chairman, Town of Linn
Gerald E. Byrnes . . . . . Chairman, Town of Troy
James W. Byrnes . . . . . Chairman, Town of East Troy
Spyro Condos . . . . . Mayor, City of Lake Geneva
John E. Davis . . . . . Supervisor, Town of Delavan
Don R. Fell, Sr. . . . . Chairman, Town of Sugar Creek
Thomas L. Frank . . . . . Planning Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Harold J. Friestad . . . . . President, Village of Williams Bay
Carl A. Gustafsen . . . . . Supervisor, Town of La Fayette
William S. Heimlich . . . . . Planning Supervisor, Wisconsin Department of Transportation
Albert J. Jones . . . . . Trustee, Village of Walworth
Neal Kedzie . . . . . Chairman, Town of La Grange
Paul Kitzman . . . . . Chairman, Town of Richmond
Kenneth Loehndorf . . . . . Chairman, Town of Whitewater
Dean Logertman . . . . . President, Village of Darien
Alfred Lynch . . . . . President, Village of Sharon
William R. Mangold . . . . . Chairman, Town of Lyons
Allen L. Morrison . . . . . Chairman, Town of Sharon
Paul Ormson . . . . . Mayor, City of Elkhorn
Richard Ploch . . . . . Chairman, Town of Geneva
Joseph H. Schaefer . . . . . Chairman, Walworth County Highway Committee
Charles Schuren . . . . . President, Village of Genoa City
Lyle A. Smith . . . . . Public Works Director, City of Delavan
Paul O. Sonderegger . . . . . President, Village of East Troy
James Stowell . . . . . Chairman, Town of Spring Prairie
Robert W. Tilton . . . . . Chairman, Town of Bloomfield
William S. Turner . . . . . President, Village of Fontana on the Lake
James Van Dresser . . . . . Chairman, Town of Walworth
Paul B. Webber . . . . . City Manager, City of Whitewater

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR WASHINGTON COUNTY

Kenneth M. Pesch, Chairman . . . . . City Engineer, City of West Bend
George B. Allman, Vice-Chairman . . . . . Chairman, Town of Kewaskum
Kurt W. Bauer, Secretary . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Gerald E. Boldt . . . . . President, Village of Jackson
Howard O. Buth . . . . . Supervisor, Washington County
John B. Cappelle . . . . . Director of Community Development, City of West Bend
Peter Gonnering . . . . . Supervisor, Washington County
James E. Heipp . . . . . Supervisor, Town of West Bend
Willard Heppe . . . . . Chairman, Town of Polk
Gordon C. Hoffman . . . . . Clerk, Town of Jackson
Carl Hohlweck . . . . . Chairman, Town of Wayne
Vernon Kauth . . . . . Trustee, Village of Germantown
John B. Kohl . . . . . Chairman, Town of Richfield
Frank M. Mayer . . . . . Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Paul J. Metz . . . . . Chairman, Town of Germantown
Michael R. Miller . . . . . Mayor, City of West Bend
Paul E. Mueller . . . . . Administrator, Land Use and Park Department, Washington County
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Reuben J. Schmahl . . . . . Chairman, Washington County Board
Daniel S. Schmidt . . . . . Administrator, Village of Kewaskum
Donald M. Shane . . . . . Citizen Member, Town of Trenton
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Gary Wendorf . . . . . Member, Planning Commission, City of Hartford
Milton Wilkens . . . . . President, Village of Newburg
Thomas A. Winkel . . . . . District Chief Transportation Assistance and Planning Engineer, Wisconsin Department of Transportation
Arthur H. Zabel . . . . . Trustee, Village of Germantown

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR WAUKESHA COUNTY

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

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Mary M. Carrington . . . . . .Chairman, Town of Mt. Pleasant
Jon J. Dederich . . . . . .Plan Commissioner, Village of Elmwood Park
Joel P. Ettinger . . . . . .Regional Manager, Region V,
U. S. Department of Transportation,
Urban Mass Transportation Administration
Richard J. Furst . . . . . .Trustee, Village of Wind Point
George Gundersen . . . . . .Director, Bureau of System Planning,
Division of Planning and Budget,
Wisconsin Department of Transportation
Michael L. Hansen . . . . . .Chairman, Wisconsin Coach Lines, Inc.
Wolfgang H. Klassen . . . . . .Director, Bureau of Air Management,
Wisconsin Department of Natural Resources
Frank M. Mayer . . . . . .Wisconsin Division Administrator,
U. S. Department of Transportation,
Federal Highway Administration
Douglas E. McIntosh . . . . . .Traffic Engineer, City of Racine
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Toya M. Nelson . . . . . .Acting Director, Bureau of Transit,
Wisconsin Department of Transportation
Cheryl L. Newton . . . . . .Environmental Protection Specialist, Region V,
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Department of Transportation

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

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Secretary Wisconsin Regional Planning Commission
Joel P. Ettinger . . . . . .Regional Manager, Region V,
U. S. Department of Transportation,
Urban Mass Transportation Administration
George Gundersen . . . . . .Director, Bureau of System Planning,
Division of Planning and Budget,
Wisconsin Department of Transportation
Michael L. Hansen . . . . . .Chairman, Wisconsin Coach Lines, Inc.
Donald K. Holland . . . . . .City Administrator, City of Kenosha
Edward A. Jenkins . . . . . .Director, Department of
Transportation, City of Kenosha
Wolfgang H. Klassen . . . . . .Director, Bureau of Air Management,
Wisconsin Department of Natural Resources
Frank M. Mayer . . . . . .Wisconsin Division Administrator,
U. S. Department of Transportation,
Federal Highway Administration
Toya M. Nelson . . . . . .Acting Director, Bureau of Transit,
Wisconsin Department of Transportation
Cheryl L. Newton . . . . . .Environmental Protection Specialist, Region V,
U. S. Environmental Protection Agency
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Department of Transportation

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

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City of Milwaukee
Richard A. Bolte . . . . . .Highway Commissioner, Waukesha County
Daniel Cupertino, Jr. . . . . .Supervisor, Milwaukee County Board
Ricardo Diaz . . . . . .Commissioner, Department of City
Development, City of Milwaukee

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

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Lawrence J. Kenny . . . . . .Supervisor, Milwaukee County Board
Nick T. Paulos . . . . . .Village Engineer, Village of Greendale
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Public Works, Milwaukee County
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City of Milwaukee
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City of Milwaukee
Udo L. Wilharm . . . . . .City Engineer, City of Oak Creek
Representative (vacant) . . . . . .Local Government,
Ozaukee/Washington Counties
Representative (vacant) . . . . . .North Shore Suburbs
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Michael L. Hansen . . . . . .Chairman, Wisconsin Coach Lines, Inc.
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Wisconsin Department of Natural Resources
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U. S. Department of Transportation,
Federal Highway Administration
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Wisconsin Department of Transportation
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Kurt W. Bauer . . . . . .Executive Director, Southeastern
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John M. Bennett . . . . . .City Engineer, City of Franklin
James J. Blazek . . . . . .City Engineer, City of Racine
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Raymond T. Dwyer . . . . . .City Engineer, City of Greenfield
Ruth Hilfiker . . . . . .Natural Resources Agent, Racine County
Orville L. Kurth . . . . . .District Conservationist,
U. S. Soil Conservation Service,
Milwaukee and Waukesha Counties
Neal T. O'Reilly . . . . . .Environmental Specialist,
Southeast District, Wisconsin
Department of Natural Resources
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James F. Rooney . . . . . .Director of Public Works, Racine County
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Nolan Anderson — Agricultural Agent, Walworth County
Jack A. Bierman — President, Village of Rochester
Kathryn C. Bloomberg — Mayor, City of Brookfield
William Burmeister — Chairman, Norway-Dover Drainage District
Arnold L. Clement — Planning and Development Director, Racine County
Steven J. David — Mayor, City of Burlington
Frank H. Dobbs — Director, Walworth County Planning, Zoning and Sanitation Department
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Robert E. Harvey — Citizen Member, Town of Mukwonago
Ruth Hilfiker — Resource Agent, UW-Extension, Kenosha County and Racine County
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Stan Wilson — Citizen Member, City of Burlington
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MILWAUKEE RIVER WATERSHED COMMITTEE

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Lawrence Brumm — President, Milwaukee River Restoration Council, Inc.
Kevin M. Brunner — Administrator, Village of Saukville
Delbert J. Cook — Chairman, Cedar Creek Restoration Council
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James B. Esselman — Chairman, Town of Trenton
Edward Frauenheim — County Board Chairman, Sheboygan County
Lawrence W. Hillman — Citizen Member
John Justen — Citizen Member
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Robert L. Konik — Planner, Fond du Lac County
Paul E. Mueller — Land Use and Park Administrator, Washington County
Steven Narveson — Director, Ozaukee County Department of Environmental Health
Donald A. Roensch — Administrator/Engineer, City of Mequon
M. Brigid Sullivan — Director of Parks, Recreation and Culture, Milwaukee County
Wallace White — Executive Director, Milwaukee Metropolitan Sewerage District
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Gordon Rozmus, Vice-Chairman — City Planner, City of Wauwatosa
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Glenn H. Evans — Citizens for Menomonee River Restoration
Richard Farrenkopf — Manager, Village of Menomonee Falls
Frank S. Hartay — Director of Manufacturing, Falk Corporation, Milwaukee
Edmund M. Henschel — Manager, Village of Elm Grove
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George C. Keller — President, Wauwatosa State Bank
Raymond J. Kipp — Former Dean, College of Engineering, Marquette University
Donald A. Roensch — Administrator/Engineer, City of Mequon
John E. Schumacher — City Engineer, City of West Allis
M. Brigid Sullivan — Director of Parks, Recreation and Culture, Milwaukee County
Walter J. Tarmann — Director, Waukesha County Park and Planning Commission
Lloyd L. Turner — Director of Public Works, Village of Germantown
Clark E. Wangerin — Special Projects Engineer, City of Brookfield
Wallace White — Executive Director, Milwaukee Metropolitan Sewerage District

KINNICKINNIC RIVER WATERSHED COMMITTEE

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John A. Erickson, Vice-Chairman — City Engineer, City of Milwaukee
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Raymond T. Dwyer — City Engineer, City of Greenfield
E. Craig Faucett — Director of Engineering, City of Cudahy
Stanley Polewski — Proprietor, Polewski Pharmacy, Milwaukee
Rudolfo N. Salcedo — Environmental Scientist, Department of City Development, City of Milwaukee
Frank Schultz — District Engineer, Southeast District, Wisconsin Department of Natural Resources
John E. Schumacher — City Engineer, City of West Allis
Gerald Schwerm — Director of Transportation and Public Works, Milwaukee County
Frank J. Wabiszewski — Vice-President, Maynard Steel Casting Company, Milwaukee
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PIKE RIVER WATERSHED COMMITTEE

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Richard Christensen, Vice-Chairman — Chairman, Mt. Pleasant Drainage District
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Les Aspin — Congressman, 1st District
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Ray A. Forgianni — Director of Development, City of Kenosha
Gerald L. Hebard — District Conservationist, U. S. Soil Conservation Service, Racine County
Ruth Hilfiker — Natural Resources Agent, Racine County
Donald K. Holland — Director of Public Works, City of Kenosha
David D. Holtze — Chairman, Town of Somers
Niels E. Ladine — Director, Parks Department, Kenosha County
Fred H. Larson — Director of Public Works, City of Racine
Leverett F. Leet — Retired Farmer, Town of Somers
Chelvadurai Manogaran — Associate Professor, Department of Geography, University of Wisconsin-Parkside
O. Fred Nelson — Manager, Kenosha Water Utility
Neal T. O'Reilly — Planning Analyst, Southeast District, Wisconsin Department of Natural Resources
Francis J. Pitts — Commissioner, Southeastern Wisconsin Regional Planning Commission
Lester Wald — President, Village of Sturtevant
Michael F. Weber — Development Coordinator, Town of Mt. Pleasant

OAK CREEK WATERSHED COMMITTEE

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Paul E. Milewski, Director of Planning, City of Oak Creek
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Secretary Wisconsin Regional Planning Commission
John M. Bennett, City Engineer, City of Franklin
Thomas D. Borgwardt, Airport Engineer, Milwaukee
County Department of Public Works
John A. Erickson, City Engineer, City of Milwaukee
Ronald W. Kazmierczak, Assistant District Director,
Southeast District, Wisconsin
Department of Natural Resources
Richard A. Keyes, Environmental Engineer, Department
of Public Works, Milwaukee County
Charles G. Lambert, Secretary, Milwaukee
County Conservation Alliance
John D. St. John, Supervisor, Milwaukee County
Douglas R. Sleight, Member, South Milwaukee Yacht Club
M. Brigid Sullivan, Director of Parks, Recreation and Culture,
Milwaukee County
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Metropolitan Sewerage District

TECHNICAL ADVISORY COMMITTEE ON REGIONAL WATER QUALITY MANAGEMENT PLANNING

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City of Milwaukee
Frank R. Boucher, Director, Environmental Department,
Wisconsin Electric Power Company
Arnold L. Clement, Planning and Development Director,
Racine County
Frank H. Dobbs, Administrator, Planning, Zoning
and Sanitation Department,
Walworth County
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Farmers Home Administration
Ruth Hilfiker, Natural Resources Agent,
Racine County
Helen M. Jacobs, Citizen Member
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Department of Natural Resources
Orville L. Kurth, District Conservationist,
U. S. Soil Conservation Service,
Milwaukee and Waukesha Counties
Paul E. Mueller, Land Use and Park Administrator,
Washington County
Dr. William G. Murphy, Former Professor, Soils Mechanics,
College of Engineering,
Marquette University; Engineers
and Scientists of Milwaukee
O. Fred Nelson, Manager, Kenosha Water Utility
Herbert E. Ripley, Health Officer, Waukesha
County Department of Health
Donald A. Roensch, Administrator, City of Mequon
Marvin E. Schroeter, Secretary-Treasurer and
General Manager, United Sewer
and Water, Inc., Menomonee Falls
Daniel W. Stoffel, Supervisor, Washington County
Walter J. Tarmann, Director, Waukesha County
Park and Planning Commission
Rodney W. Vanden Noven, Director of Public Works,
City of Waukesha
Udo L. Wilharm, City Engineer, City of Oak Creek
Thomas White, General Manager, Racine Water
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TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON COASTAL MANAGEMENT IN SOUTHEASTERN WISCONSIN

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University of Wisconsin-Milwaukee
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Vice-Chairman and Culture, Milwaukee County
Donald M. Reed, Principal Specialist-Biologist, Southeastern
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Hubert J. Albert, Port Washington Yacht Club
Carl W. Birks, Director, Engineering, Environment and
Energy, Milwaukee County
John R. Bolden, Commissioner of Public Works, City of Milwaukee
Josephine Boucher, Member, North Shore League of
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Benjamin C. Chapla, Coastal Coordinator, Town of Caledonia
Noreen R. Cook, Manager, Village of Fox Point
E. Craig Faucett, Director of Engineering, City of Cudahy
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Wisconsin Department of Natural Resources
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of Engineering, Marquette University;
Engineers and Scientists of Milwaukee
Mary C. Nelson, City of South Milwaukee
Shoreline Property Owner
C. William Nelson, Member, Great Lakes Sports Fisherman's Club
Dr. William T. Painter, President, Foundation
Engineering, Inc., Milwaukee
Neil H. Palmer, Senior Legislative Representative, Wisconsin
Electric Power Company
James M. Phinney, Resident, Village of Fox Point
Phil Sander, Executive Secretary, Southeastern
Wisconsin Sportsmen's Federation
Kenneth J. Szallai, Port Director, Board of Harbor
Commissioners, City of Milwaukee
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Metropolitan Sewerage District

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Charles O. Kamps, Attorney, Quarles and Brady, Milwaukee
Philip H. Lewis, Jr., Professor, Department of Landscape
Architecture, University of Wisconsin-Madison;
Director, Environmental Awareness Center, Madison
Paul E. Mueller, Land Use and Park Administrator, Washington County
Kathleen Pfister, Cultural Specialist, Department of
City Development, City of Milwaukee
Robert D. Ross, Vice-President, Lee Enterprises Newspapers, Racine
Phil Sander, Executive Secretary, Southeastern
Wisconsin Sportsmen's Federation
Frederick G. Schmidt, Izaak Walton League; Member, Sierra Club
Mrs. John D. Squier, Member, Riveredge Nature Center, Inc.
Walter J. Tarmann, Director, Waukesha County
Park and Planning Commission
Edgar W. Trecker, Supervisor of Forestry, Wildlife and
Recreation, Southeast District, Wisconsin
Department of Natural Resources
Elwood R. Voigt, Park Commissioner, Ozaukee County
Joseph C. Waters, President, Wisconsin Association of
Campground Owners; Proprietor, Lazy Day
Campground, Town of Farmington
Dr. Harry J. Wilkins, Citizen Member, City of Wauwatosa
Dr. George T. Wilson, Visiting Lecturer, Department of
Continuing and Vocational Education,
University of Wisconsin-Madison
Thomas N. Wright, Director of City Development, City of Racine

ADVISORY COMMITTEE ON STORMWATER DRAINAGE AND FLOOD CONTROL PLANNING FOR THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT AND DISTRICT SERVICE AREAS

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Ted B. Prawdzik . . . . . Citizen Member
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Dr. Clifford Crandall . . . . . Professor of Civil Engineering,
Marquette University
John A. Erickson . . . . . City Engineer, City of Milwaukee
John M. Fredrickson . . . . . Manager, Village of River Hills
Richard H. Halfman . . . . . Director of Public Works,
Village of Brown Deer
Gloria L. McCutcheon . . . . . District Director, Southeast District,
Wisconsin Department of Natural Resources
Dr. James Papandrea . . . . . Citizen Member
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Gerald Schwerm . . . . . Director of Transportation and
Public Works, Milwaukee County
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Metropolitan Sewerage District
S. Howard Young . . . . . Engineering and Operations
Administrator, City of Wauwatosa

INTERGOVERNMENTAL COORDINATING AND TECHNICAL ADVISORY COMMITTEE FOR THE MILWAUKEE COUNTY LAKE MICHIGAN SHORELINE EROSION MANAGEMENT PLAN

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Chairman Milwaukee County
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Vice-Chairman Audubon Society of America
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Penny E. Podell . . . . . Supervisor, 3rd District,
Milwaukee County
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Milwaukee County
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Department of City Development,
City of Milwaukee
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Ralph J. Voltner, Jr. . . . . Administrator,
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Milton Vretenar . . . . . Mayor, City of St. Francis
Wallace White . . . . . Executive Director, Milwaukee
Metropolitan Sewerage District
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Donald K. Holland . . . . . Administrator, City of Kenosha
Ronald W. Kazmierczak . . . . . Assistant District Director, Wisconsin
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Wayne E. Koessl . . . . . WEPCo/WISPARK Corporation
George E. Melcher . . . . . Director, Kenosha County Office of
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O. Fred Nelson . . . . . Manager, Kenosha Water Utility
Michael R. Pollocoff . . . . . Administrator, Town of Pleasant Prairie
Michael J. Serpe . . . . . Councilman, City of Kenosha
August Zirbel, Jr. . . . . Chairman, Town of Paris

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Vice-Chairman Director, Racine County
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Kurt W. Bauer . . . . . Executive Director, Southeastern
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Thomas J. Bunker . . . . . Chief of Operations, Water and
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David B. Falstad . . . . . Senior Vice-President, J. I. Case Company
Richard J. Furst . . . . . Trustee, Village of Wind Point
William Kiser . . . . . President, Raymond Heights Sanitary District
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Nico J. Meiland . . . . . Vice-President, U. S. Manufacturing,
S. C. Johnson & Son, Inc.
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John H. Veltus . . . . . President, Town of Mt. Pleasant
Sewer Commission
Thomas H. White . . . . . General Manager, Water and
Wastewater Utility, City of Racine

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Chairman Racine County
George E. Melcher . . . . . Director, Office of Planning and
Vice-Chairman Development, Kenosha County
Paul E. Milewski . . . . . Director, Department of Community
Secretary Development, City of Oak Creek
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin
Recording Secretary Regional Planning Commission
Richard A. Abdoo . . . . . Vice-President, Wisconsin Energy Corporation
John Bechler . . . . . Director, Kenosha Area Development Corporation
John M. Bennett . . . . . City Engineer, City of Franklin
Noel Elfering . . . . . Chairman, Town of Bristol
Thomas L. Frank . . . . . Planning and Research Engineer,
U. S. Department of Transportation,
Federal Highway Administration
George Gundersen . . . . . Director, Bureau of System Planning,
Wisconsin Department of Transportation
Richard L. Hebron . . . . . Chairman, Town of Raymond
Donald K. Holland . . . . . Administrator, City of Kenosha
David D. Holtze . . . . . Chairman, Town of Somers
Clay Morgan . . . . . President, Village of Sturtevant
Alvin P. Nelson . . . . . Chairman, Town of Yorkville
Allen C. Orth . . . . . President, IH 94 Racine
County Business Association
Michael R. Pollocoff . . . . . Administrator, Town of Pleasant Prairie
James F. Rooney . . . . . Director of Public Works, Racine County

INTERGOVERNMENTAL COORDINATING AND TECHNICAL ADVISORY COMMITTEE FOR THE IH 94 SOUTH FREEWAY CORRIDOR DEVELOPMENT PLAN (continued)

Gene A. Scharfenorth . . . . . .Highway Commissioner, Kenosha County
Michael F. Weber . . . . . .Development Coordinator, Town of Mt. Pleasant
Roderick Wilhelmi . . . . . .Executive Director, Racine County Economic Development Corporation
Robert L. Wilson . . . . . .Chairman, Town of Caledonia
Thomas A. Winkel . . . . . .District Chief Transportation Assistance and Planning Engineer, Wisconsin Department of Transportation
Thomas N. Wright . . . . . .Director of City Development, City of Racine
August Zirbel, Jr. . . . . .Chairman, Town of Paris

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

Dr. Forest Stearns . . . . . .Chairman, Wisconsin Scientific Areas Preservation Council; Professor Emeritus, Department of Biological Sciences, University of Wisconsin-Milwaukee
Chairman
Donald M. Reed . . . . . .Principal Biologist, Southeastern Wisconsin Regional Planning Commission
Secretary
John C. Bielefeldt . . . . . .Naturalist, Racine County Parks Department
Dr. Martyn Dibben . . . . . .Curator of Botany, Milwaukee Public Museum
Wesley Eisenhauer . . . . . .Director Horticulture-Nature Division, Milwaukee County Department of Parks, Recreation and Culture
Steven H. Grabow . . . . . .Parks Facilities Manager, Milwaukee County Department of Parks, Recreation and Culture
Marlin Johnson . . . . . .Associate Professor, Department of Biological Sciences, University of Wisconsin-Waukesha Center
G. Andrew Larsen . . . . . .Director, Riveredge Nature Center, Ozaukee County
Paul E. Matthiae . . . . . .Chief, Natural Areas Section, Wisconsin Department of Natural Resources-Madison
James P. Morrissey . . . . . .Environmental Impact Coordinator, Wisconsin Department of Natural Resources-Southeast District
Jerry A. Schwartzmeier . . . . . .Park Naturalist, Retzer Nature Center, Waukesha County
Dr. S. Galen Smith . . . . . .Professor, Department of Biology, University of Wisconsin-Whitewater
Dan Wilson . . . . . .Resources Agent, University of Wisconsin-Extension, Washington County

ADVISORY COMMITTEE ON THE GOVERNANCE OF THE DELAVAN LAKE AREA

Jane Bohn . . . . . .Citizen Member and President, Delavan Lake Improvement Association
Chairperson
Peter F. Dantone . . . . . .Mayor, City of Delavan
Co-Vice-Chairperson
Nicholas F. Marsicano . . . . . .President, Delavan Lake Sanitary District
Co-Vice-Chairperson
Kurt W. Bauer, Secretary . . . . . .Executive Director, Southeastern Wisconsin Regional Planning Commission
Richard J. Brown . . . . . .Citizen Member, Town of Delavan
Robin Sargent . . . . . .Supervisor, Town of Delavan
James E. Sullivan . . . . . .Citizen Member and Commissioner, Delavan Lake Sanitary District
Miller Upton . . . . . .Citizen Member and Chairman, Greater Delavan Development Council
James L. Van Dreser . . . . . .Chairman, Town of Walworth; Supervisor, Walworth County

TECHNICAL ADVISORY COMMITTEE FOR THE MILWAUKEE COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEM FEASIBILITY STUDY

Harout O. Sanasarian . . . . . .Director of Intergovernmental Relations, Milwaukee County
Chairman
Kurt W. Bauer . . . . . .Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
Walter R. Barczak . . . . . .Register of Deeds, Milwaukee County
John M. Bennett . . . . . .Director of Public Works, City of Franklin
Anne Spray Brooker . . . . . .Director of Budget and Management, City of Milwaukee
Chester P. Brown . . . . . .Staff Manager-Distribution Services, Wisconsin Bell
Ricardo Diaz . . . . . .Commissioner of City Development, City of Milwaukee
John A. Erickson . . . . . .City Engineer, City of Milwaukee
Kathleen A. Isleb . . . . . .Assessor, City of Wauwatosa
Kenneth Kehl . . . . . .Manager, Information Management Services, Milwaukee County
Holly S. Loveland . . . . . .Director of Information Services, City of Milwaukee
James J. Lynch . . . . . .Director of Community Development, Village of Shorewood
Reinhard B. Meihsner . . . . . .Manager-Engineering Services, Wisconsin Gas Company
Harvey A. Pollack . . . . . .President and Co-Owner, Land Title Services
Herman R. Reback . . . . . .General Superintendent-Technical Services, Wisconsin Electric Power Company
Wayne St. John . . . . . .Manager of Engineering Services, Milwaukee Metropolitan Sewerage District
Ronald P. Schaefer . . . . . .Management Information Specialist, Wisconsin Department of Transportation
Gerald Schwerm . . . . . .Director of Transportation, Milwaukee County
John E. Schumacher . . . . . .City Engineer, City of West Allis

Appendix C

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 1989

EXECUTIVE DIVISION

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

Philip C. Evenson, AICP
Assistant Director

Kenneth R. Yunker, PE
Assistant Director

Margaret M. Shanley
Executive Secretary

Ruth D. Jaeger
Secretary

Joan M. Starr
Secretary

INFORMATION SYSTEMS DIVISION

John W. Ernst
Information Systems Manager

John C. Stelpflug
Assistant Information Systems Manager

Thomas D. Patterson
Graphics Systems Manager

John D. Harasha
Programming Supervisor

Paul J. Clavette
Richard A. Runte
Systems Programmers

Richard L. Henley
Victor J. Janka, Jr.
Michael J. Miller
Martin E. Staszak
Senior Systems Analysts

Robert J. Burnell
Donald S. Johnson
Senior Programmer/Analysts

Robert J. Baier
Lawrence D. Langowski
Community Services Representatives

Heather W. Kluth
Lead Computer Operator

Lon M. Scott
Computer Operator

Kristine M. Engelhardt
Melody M. Patrie
Communications Specialists

Damien D. Gessler
Graphics Systems Programmer/Analyst

Karen J. Goralski
Lead Digitizer Operator

INFORMATION SYSTEMS DIVISION (continued)

Debra L. Bahnub
Bradford C. Domine
Digitizer Operators

Valerie A. Greenleaf
Cadastral Map Draftsman

Rosemary K. Wilcenski
Lead Key Entry Operator

Diane L. Curtiss
Key Entry Operator

COMMUNITY ASSISTANCE PLANNING DIVISION

Roland O. Tonn, AICP
Chief Community Assistance Planner

Richard R. Kania
Principal Planner

Nancy A. Holquin
Senior Planner

Robert S. McGonigal
Planner

Nancee A. Nejedlo
Senior Planning Draftsman

ECONOMIC DEVELOPMENT PLANNING DIVISION

Gordon M. Kacala
Chief Economic Development Planner

John R. Meland
Principal Planner

Philip L. Cosson
Craig V. Kettleson
Senior Planners

ADMINISTRATIVE SERVICES DIVISION

Joan A. Zenk
Administrative Officer

Rita L. Rolfson
Administrative Assistant

Luella M. Fredrickson
Secretary

Sylvia Carlson
Receptionist

ENVIRONMENTAL PLANNING DIVISION

Robert P. Biebel, PE
Chief Environmental Engineer

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

Donald M. Reed
Principal Specialist

David B. Kendziorski
Principal Planner

Rachel E. Lang
Specialist

Irene A. Brown
Secretary

LAND USE PLANNING DIVISION

Bruce P. Rubin
Chief Land Use Planner

Gerald H. Emmerich, Jr.
William J. Stauber, AICP
Principal Planners

Donald G. Dittmar
David A. Schilling
Senior Specialists

LAND USE PLANNING DIVISION (continued)

Joyce G. Pariseau
Research Aide

Ann G. Arntson
Secretary

TRANSPORTATION PLANNING DIVISION

Donald R. Martinson
Chief Transportation Engineer

Robert E. Beglinger
Principal Engineer

Albert A. Beck
Otto P. Dobnick
Principal Planners

Peter C. Daniels
Senior Engineer

David C. Dryer
Engineer

Kathryn E. Sobottke
Research Analyst

CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Leland H. Kreblin, RLS
Chief Planning Illustrator

Ronald H. Heinen
B. Lynn Nowak
Donald P. Simon
Principal Planning Draftsmen

Bergetta J. Ruehmer
Planning Draftsman

Patricia M. Kokan
Word Processor

Randy T. Dvorak
Office Equipment Operator

Appendix D

PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-DECEMBER 1989

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, October 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
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
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
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

PROSPECTUSES—continued

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

STUDY DESIGNS

Study Design for the Continuing Regional Land Use-Transportation Study: 1970-1974*
Study Design for the Continuing Land Use-Transportation Study: 1972-1976*
Study Design for the Areawide Water Quality Planning and Management Program for Southeastern Wisconsin: 1975-1977*
Study Design for the Milwaukee Harbor Estuary Comprehensive Water Resources Planning Program, September 1981

PLANNING REPORTS

No. 1 - Regional Planning Systems Study, December 1962*
No. 2 - Regional Base Mapping Program, July 1963*
No. 3 - The Economy of Southeastern Wisconsin, June 1963*
No. 4 - The Population of Southeastern Wisconsin, June 1963*
No. 5 - The Natural Resources of Southeastern Wisconsin, June 1963*
No. 6 - The Public Utilities of Southeastern Wisconsin, July 1963*
No. 7 - The Land Use-Transportation Study
  Volume 1 - Inventory Findings: 1963, May 1965
  Volume 2 - Forecasts and Alternative Plans: 1990, June 1966
  Volume 3 - Recommended Regional Land Use and Transportation Plans: 1990, November 1966*
No. 8 - Soils of Southeastern Wisconsin, June 1966*
No. 9 - A Comprehensive Plan for the Root River Watershed, July 1966*
No. 10 - A Comprehensive Plan for the Kenosha Planning District
  Volume 1 - Inventory Findings, Forecasts, and Recommended Plans, February 1967*
  Volume 2 - Implementation Devices, February 1967*
No. 11 - A Jurisdictional Highway System Plan for Milwaukee County, March 1969*
No. 12 - A Comprehensive Plan for the Fox River Watershed
  Volume 1 - Inventory Findings and Forecasts, April 1969*
  Volume 2 - Alternative Plans and Recommended Plan, February 1970
No. 13 - A Comprehensive Plan for the Milwaukee River Watershed
  Volume 1 - Inventory Findings and Forecasts, December 1970
  Volume 2 - Alternative Plans and Recommended Plan, October 1971
No. 14 - A Comprehensive Plan for the Racine Urban Planning District
  Volume 1 - Inventory Findings and Forecasts, December 1970
  Volume 2 - The Recommended Comprehensive Plan, October 1972
  Volume 3 - Model Plan Implementation Ordinances, September 1972
No. 15 - A Jurisdictional Highway System Plan for Walworth County, October 1972
No. 16 - A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974
No. 17 - A Jurisdictional Highway System Plan for Ozaukee County, December 1973
No. 18 - A Jurisdictional Highway System Plan for Waukesha County, January 1974
No. 19 - A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974
No. 20 - A Regional Housing Plan for Southeastern Wisconsin, February 1975

PLANNING REPORTS—continued

No. 21 - A Regional Airport System Plan for Southeastern Wisconsin, December 1975
No. 22 - A Jurisdictional Highway System Plan for Racine County, February 1975
No. 23 - A Jurisdictional Highway System Plan for Washington County, October 1974*
No. 24 - A Jurisdictional Highway System Plan for Kenosha County, April 1975
No. 25 - A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000
Volume 1 - Inventory Findings, April 1975
Volume 2 - Alternative and Recommended Plans, May 1978
No. 26 - A Comprehensive Plan for the Menomonee River Watershed
Volume 1 - Inventory Findings and Forecasts, October 1976
Volume 2 - Alternative Plans and Recommended Plan, October 1976
No. 27 - A Regional Park and Open Space Plan for Southeastern Wisconsin, November 1977
No. 28 - A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000, June 1980
No. 29 - A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin, July 1978*
No. 30 - A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000
Volume 1 - Inventory Findings, September 1978
Volume 2 - Alternative Plans, February 1979*
Volume 3 - Recommended Plan, June 1979*
No. 31 - A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, April 1978
No. 32 - A Comprehensive Plan for the Kinnickinnic River Watershed, December 1978
No. 33 - A Primary Transit System Plan for the Milwaukee Area, June 1982
No. 34 - A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area, August 1983
No. 35 - A Comprehensive Plan for the Pike River Watershed, June 1983
No. 36 - A Comprehensive Plan for the Oak Creek Watershed, August 1986
No. 37 - A Water Resources Management Plan for the Milwaukee Harbor Estuary
Volume 1 - Inventory Findings, March 1987
Volume 2 - Alternative and Recommended Plans, December 1987
No. 38 - A Regional Airport System Plan for Southeastern Wisconsin: 2010, May 1987
No. 39 - A Freeway Traffic Management System Plan for the Milwaukee Area, November 1988

PLANNING GUIDES

No. 1 - Land Development, November 1963*
No. 2 - Official Mapping, February 1964
No. 3 - Zoning, April 1964*
No. 4 - Organization of Planning Agencies, June 1964*
No. 5 - Floodland and Shoreland Development, November 1968
No. 6 - Soils Development, August 1969*

TECHNICAL REPORTS

No. 1 - Potential Parks and Related Open Spaces, September 1965*
No. 2 - Water Law in Southeastern Wisconsin, January 1966*
No. 2 - 2nd Edition, Water Law in Southeastern Wisconsin, December 1977
No. 3 - A Mathematical Approach to Urban Design, January 1966*
No. 4 - Water Quality and Flow of Streams in Southeastern Wisconsin, November 1966
No. 5 - Regional Economic Simulation Model, October 1966*
No. 6 - Planning Law in Southeastern Wisconsin, October 1966*
No. 6 - 2nd Edition, Planning Law in Southeastern Wisconsin, April 1977
No. 7 - Horizontal and Vertical Survey Control in Southeastern Wisconsin, July 1968*

TECHNICAL REPORTS—continued

No. 8 - A Land Use Design Model
Volume 1 - Model Development, January 1968
Volume 2 - Model Test, October 1969
Volume 3 - Final Report, April 1973
No. 9 - Residential Land Subdivision in Southeastern Wisconsin, September 1971
No. 10 - The Economy of Southeastern Wisconsin, December 1972
No. 10 - 2nd Edition, The Economy of Southeastern Wisconsin, May 1984
No. 11 - The Population of Southeastern Wisconsin, December 1972
No. 11 - 2nd Edition, The Population of Southeastern Wisconsin, June 1984
No. 12 - A Short-Range Action Housing Program for Southeastern Wisconsin: 1972 and 1973, June 1972
No. 13 - A Survey of Public Opinion in Southeastern Wisconsin, September 1974
No. 14 - An Industrial Park Cost-Revenue Analysis in Southeastern Wisconsin: 1975, June 1975
No. 15 - Household Response to Motor Fuel Shortages and Higher Prices in Southeastern Wisconsin, August 1976
No. 16 - Digital Computer Model of the Sandstone Aquifer in Southeastern Wisconsin: April 1976
No. 17 - Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975, June 1978
No. 18 - State of the Art of Water Pollution Control in Southeastern Wisconsin
Volume 1 - Point Sources, July 1977
Volume 2 - Sludge Management, August 1977
Volume 3 - Urban Storm Water Runoff, July 1977
Volume 4 - Rural Storm Water Runoff, December 1976
No. 19 - A Regional Population Projection Model, October 1980
No. 20 - Carpooling in the Metropolitan Milwaukee Area, March 1977
No. 21 - Sources of Water Pollution in Southeastern Wisconsin: 1975, September 1978*
No. 22 - Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977, September 1979
No. 23 - Transit-Related Socioeconomic, Land Use, and Transportation Conditions and Trends in the Milwaukee Area, December 1980
No. 24 - State-of-the-Art of Primary Transit System Technology, February 1981
No. 25 - Alternative Futures for Southeastern Wisconsin, December 1980
No. 26 - Milwaukee Area Alternative Primary Transit System Plan Preparation, Test, and Evaluation, March 1982
No. 27 - Milwaukee Area Work Time Rescheduling Study, August 1981
No. 28 - Evaluation of the Milwaukee Area Rideshare Program: 1972-1982, May 1983
No. 29 - Industrial Land Use in Southeastern Wisconsin, November 1984
No. 30 - The Development of an Automated Mapping and Land Information System: A Demonstration Project for the Town of Randall, Kenosha County, Wisconsin, December 1985

COMMUNITY ASSISTANCE PLANNING REPORTS

No. 1 - Residential, Commercial, and Industrial Neighborhoods, City of Burlington and Environs, February 1973
No. 2 - Alternative Land Use and Sanitary Sewerage System Plans for the Town of Raymond: 1990, January 1974
No. 3 - Racine Area Transit Development Program: 1975-1979, June 1974
No. 4 - Floodland Information Report for the Rubicon River, City of Hartford, Washington County, Wisconsin, December 1974
No. 5 - Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed, May 1975*
No. 6 - A Uniform Street Naming and Property Numbering System for Racine County, Wisconsin, November 1975*
No. 7 - Kenosha Area Transit Development Program: 1976-1980, March 1976

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

No. 8 - Analysis of the Deployment of Paramedic Emergency Medical Services in Milwaukee County, April 1976
No. 9 - Floodland Information Report for the Pewaukee River, Village of Pewaukee, Waukesha County, Wisconsin, October 1976
No. 9 - 2nd Edition, Floodland Information Report for the Pewaukee River, Village of Pewaukee, Waukesha County, Wisconsin, March 1985
No. 10 - Land Use and Arterial Street System Plans, Village of Jackson, Washington County, Wisconsin, December 1976
No. 11 - Floodland Information Report for Sussex Creek and Willow Springs Creek, March 1977
No. 12 - Waukesha Area Transit Development Program: 1977-1981, January 1977
No. 13 - Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1977
No. 13 - 2nd Edition, Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1983
No. 14 - Floodland Management Plan for the Village of Pewaukee, February 1978*
No. 15 - Off-Airport Land Use Development Plan for General Mitchell Field and Environs: 1977, May 1977
No. 16 - A Plan for the Whittier Neighborhood, City of Kenosha and Town of Pleasant Prairie, Kenosha County, Wisconsin, June 1977
No. 17 - A Plan for the Jefferson Park Neighborhood, Village of Germantown, Washington County, Wisconsin, March 1978
No. 18 - A Land Use Plan for the Town of Erin: 2000, July 1978*
No. 19 - Storm Water Storage Alternatives for the Crossway Bridge and Port Washington-Bayfield Drainage Area in the Village of Fox Point, August 1977
No. 20 - A Rail Transportation Service Plan for the East Troy Area, September 1977
No. 21 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978, December 1977
No. 22 - Alternative and Recommended Land Use Plans for the Town of Genesee: 2000, February 1978
No. 23 - A Park and Recreation Plan for Ozaukee County, August 1978*
No. 24 - A Park and Open Space Plan for the Village of Darien, December 1978*
No. 25 - A Plan for the Delrock Neighborhood, City of Delavan, Walworth County, Wisconsin, January 1979*
No. 26 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 1978
No. 27 - A Park and Open Space Plan for the Town of Eagle, April 1979
No. 28 - Oconomowoc Area Traffic Management Plan, City of Oconomowoc, Waukesha County, Wisconsin, December 1979
No. 29 - A Development Plan for the Quarry Ridge Neighborhood, City of Burlington, Racine County, Wisconsin, July 1979*
No. 30 - Whitewater Area Rail Service Plan, August 1979
No. 31 - Waukesha Area Transit Development Program: 1981-1985, February 1980
No. 32 - Recommended Electronic Data Processing and Transmittal System for Criminal Justice Agencies in Southeastern Wisconsin, September 1979
No. 33 - A Land Use Plan for the Town of Fredonia: 2000, September 1979
No. 34 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980, December 1979*
No. 35 - Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin, December 1982
No. 36 - A Land Use Plan for the Village of Germantown: 2000, Village of Germantown, Washington County, Wisconsin, July 1980
No. 37 - A Nonpoint Source Water Pollution Control Plan for the Root River Watershed, March 1980
No. 38 - A Land Use and Traffic Circulation Plan for the Village of Fredonia: 2000, Ozaukee County, Wisconsin, September 1980*

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

No. 39 - A Public Transit System Accessibility Plan
Volume 1 - Kenosha Urbanized Area, June 1980
Volume 2 - Milwaukee Urbanized Area, Milwaukee County, May 1980
Volume 3 - Racine Urbanized Area, June 1980
Volume 4 - Milwaukee Urbanized Area, Waukesha County, June 1980
No. 40 - Recommended Locations for Motor Vehicle Inspection and Emissions Test Facilities in the Southeastern Wisconsin Region, October 1980
No. 41 - A Park and Open Space Plan for the Kenosha Planning District, December 1980*
No. 42 - A Park and Open Space Plan for the Town and Village of Pewaukee, Waukesha County, Wisconsin, October 1980
No. 43 - A Development Plan for the Woodview Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1980
No. 44 - Proposed Public Transit Service Improvements: 1980, Waukesha County, Wisconsin, July 1980*
No. 45 - A Farmland Preservation Plan for Kenosha County, Wisconsin, June 1981*
No. 46 - A Farmland Preservation Plan for Racine County, Wisconsin, August 1981*
No. 47 - A Water Quality Management Plan for Lac La Belle, December 1980*
No. 48 - A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin, January 1982
No. 49 - A Land Use and Traffic Circulation Plan for the Village of Hartland: 2000, Waukesha County, Wisconsin, July 1981*
No. 50 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981, June 1981
No. 51 - A Land Use Plan for the Village of Sussex: 2000, Waukesha County, Wisconsin, January 1982*
No. 52 - Housing Opportunities Guide for the Southeastern Wisconsin Region, December 1980
No. 53 - A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin, August 1981
No. 54 - A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin, July 1982
No. 55 - A Land Use Plan for the Village of Darien: 2000, Walworth County, Wisconsin, December 1981
No. 56 - Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, August 1981
No. 57 - A Development Plan for the Forest Hills Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1983*
No. 58 - A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin, March 1984
No. 59 - A Development Plan for the Whitnall Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1985*
No. 60 - A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin, October 1985
No. 61 - A Public Transportation Service Plan for Washington County, October 1981*
No. 62 - A Traffic Circulation Plan for the West Bend Central Business District, August 1981*
No. 63 - A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1982
No. 63 - 2nd Edition, A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1984
No. 64 - Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, February 1982
No. 64 - 2nd Edition, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, March 1986
No. 65 - A Public Transportation Service Plan for Walworth County, January 1982

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

No. 66 - A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, October 1981
No. 67 - A Traffic Circulation Plan for Lac La Belle, Waukesha County, Wisconsin, March 1982*
No. 68 - Upland Disposal Area Siting Study for Dredged Materials from the Port of Milwaukee, December 1981*
No. 69 - A Land Use and Urban Design Plan for the City of Elkhorn: 2000, Walworth County, Wisconsin, January 1985
No. 70 - Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983
No. 72 - A Park and Open Space Plan for the City of Oconomowoc, Waukesha County, Wisconsin, November 1987
No. 73 - A Shoreland Development Management Study for Racine County, Wisconsin, January 1982
No. 74 - Kenosha County Overall Economic Development Program (OEDP) Update-1981, April 1982
No. 74 - 2nd Edition, Kenosha County Overall Economic Development Program (OEDP) Plan-1986 Update, September 1986
No. 75 - A Solid Waste Management Plan for Walworth County, Wisconsin, September 1982
No. 76 - A Land Use Plan for the Town and Village of Pewaukee: 2000, December 1982*
No. 77 - A Wetland Protection and Management Plan for the City of Waukesha and Environs, February 1983*
No. 78 - Sanitary Sewer Service Area for the City of Burlington, April 1986
No. 79 - Racine Area Transit System Plan and Program: 1984-1988, May 1984
No. 80 - A Lake Michigan Public Access Study for Racine County, Wisconsin, September 1982*
No. 81 - Hartford Area Traffic Management Plan, June 1983
No. 82 - A Central Transfer Site Location and Design Analysis for the City of Waukesha Transit System, December 1982
No. 83 - A Transit System Operations Analysis for the City of Waukesha Transit System, February 1983
No. 84 - Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, February 1983*
No. 85 - A Land Use Plan for the Village of Eagle: 2000, Waukesha County, Wisconsin, September 1983
No. 86 - A Lake Michigan Coastal Erosion Management Study for Racine County, Wisconsin, October 1982
No. 87 - A Farmland Preservation Plan for Ozaukee County, Wisconsin, May 1983
No. 88 - A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin, February 1985*
No. 89 - A Stormwater Management Plan for the Village of Sussex, Waukesha County, Wisconsin, October 1983
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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
- Town of Bristol
- Town of Pleasant Prairie

Milwaukee County
- City of Cudahy
- City of Franklin
- City of Greenfield
- City of Milwaukee
- City of Oak Creek
- City of South Milwaukee
- City of Wauwatosa
- City of West Allis
- 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

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

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

Washington County (continued)
- Village of Germantown
- Village of Jackson
- Village of Kewaskum
- Village of Slinger

Waukesha County
- City of Brookfield
- City of Delafield
- City of Muskego
- City of New Berlin
- City of Oconomowoc
- City of Waukesha
- Village of Butler
- Village of Dousman
- Village of Elm Grove
- Village of Hartland
- Village of Menomonee Falls
- Village of Mukwonago
- Village of Pewaukee
- Village of Sussex
- Town of Pewaukee

LAKE USE REPORTS-FOX RIVER WATERSHED

Kenosha County
- No. FX-40, Benedict Lake
- No. FX-12, Camp Lake
- No. FX-27, Center Lake
- No. FX-35, Cross Lake
- No. FX-45, Dyer Lake
- No. FX-7, Elizabeth Lake
- No. FX-34, Lilly Lake
- No. FX-17, Marie Lake
- No. FX-13, Powers Lake
- No. FX-11, Silver Lake*
- No. FX-45, Voltz Lake

Racine County
- No. FX-25, Bohner Lake
- No. FX-15, Browns Lake
- No. FX-9, Eagle Lake
- No. FX-42, Echo Lake
- No. FX-32, Kee Nong Go-Mong Lake
- No. FX-29, Long Lake
- No. FX-6, Waterford-Tichigan Lakes
- No. FX-26, 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, Geneva Lake
- 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

LAKE USE REPORTS-FOX RIVER WATERSHED—continued

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
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  by Richard E. Rehberg, Editor

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A Backward Glance: Highway Development in Southeastern Wisconsin-Part I
by Jean C. Meier, Librarian and Research Assistant

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Shifts in Centers of Population within the Region: 1960-1970
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An Overview of the Sources of Water Pollution in Southeastern Wisconsin
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Evaluation of a Water Quality Standard for Total Phosphorus in
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Bibliography of Lake Michigan Shore Erosion and Nearshore Process Studies
by Norman P. Lasca, Professor, Department of Geological Sciences and Center for
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by Bruce W. Jordan, M.A.

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A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1983-1987, December 1982*
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1984-1988, December 1983*
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984*
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1986-1990, December 1985*
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1987-1991, December 1986*
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1988-1992, December 1987*
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1989-1993, December 1988
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994, December 1989

OTHER

Twenty-Five Years of Regional Planning, December 1985

*Out of print.

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July 27, 1990

The Commissioners of
Southeastern Wisconsin
Regional Planning Commission
Waukesha, Wisconsin

We have examined the general purpose financial statements of the Southeastern Wisconsin Regional Planning Commission as of December 31, 1989 and for the year then ended, as listed in the table of contents. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the general purpose financial statements referred to above present fairly the financial position of Southeastern Wisconsin Regional Planning Commission at December 31, 1989, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Victor L. Young S.C.

VICTOR L. YOUNG, S.C.

Southeastern Wisconsin Regional Planning Commission

Combined Balance Sheet - All Fund Types and Account Groups

December 31, 1989

Assets	Governmental Fund Types: General	Governmental Fund Types: Special Revenue	Account Groups: General Fixed Assets	Totals (Memorandum Only): 1989	Totals (Memorandum Only): 1988
Treasurer's cash	$ 416,453.17	$	$	$ 416,453.17	$ 438,392.67
Due from service agreements	404,250.61			404,250.61	290,979.59
Tax levy receivable	58,290.00			58,290.00	
Grants receivable		275,499.00		275,499.00	238,986.15
Contracts receivable	102,329.22	280,044.47		382,373.69	340,169.49
Service agreements receivable	189,046.33			189,046.33	280,934.49
Prepaid expense	27,974.60			27,974.60	
Fixed assets			1,884,693.74	1,884,693.74	1,853,420.83
Due from/(to) other funds	508,994.04	(508,994.04)			
Total Assets	$1,707,337.97	$ 46,549.43	$1,884,693.74	$3,638,581.14	$3,442,883.22
Liabilities					
State sales tax	$ 358.06	$	$	$ 358.06	$ 292.90
Accounts payable	200,712.61	46,549.43		247,262.04	364,309.88
Vacation accrual	107,930.23			107,930.23	107,930.23
Notes payable			379,573.43	379,573.43	740,206.21
Total Liabilities	309,000.90	46,549.43	379,573.43	735,123.76	1,212,739.22
Fund Equity					
Investment in fixed assets			1,505,120.31	1,505,120.31	1,113,214.62
Fund balances - designated	306,761.00			306,761.00	298,411.00
- undesignated	1,091,576.07			1,091,576.07	818,518.38
Total Fund Equity	1,398,337.07	-	1,505,120.31	2,903,457.38	2,230,144.00
Total Liabilities and Fund Equity	$1,707,337.97	$ 46,549.43	$1,884,693.74	$3,638,581.14	$3,442,883.22

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Statement of Revenues, Expenditures and Changes in Fund Balances - All Governmental Fund Types

For the Year Ended December 31, 1989

Revenues	Governmental Fund Types: General	Governmental Fund Types: Special Revenue	Total (Memorandum Only): 1989	Total (Memorandum Only): 1988
Contributions from counties	$ 911,210.00	$	$ 911,210.00	$ 884,670.00
Grant revenues		1,157,708.00	1,157,708.00	1,248,995.00
Contract revenues	497,537.59	1,020,534.47	1,518,072 06	1,242,490.81
Service grants	2,292,420.28		2,292,420.28	2,744,393.55
Interest on invested funds	69,152.94		69,152.94	57,409.10
Other income	43,909.84		43,909.84	60,962.83
Total Revenues	3,814,230.65	2,178,242.47	5,992,473.12	6,238,921.29
Expenditures				
Salaries and fringe benefits	1,948,132.53	1,005,167.58	2,953,300.11	3,078,823.18
Office and other expenses				
Technical consultants	336,561.48	740,834.13	1,077,395.61	692,083.25
Office supplies	39,569.50	14,479.84	54,049.34	48,317.01
Insurance, audit, legal fees	27,111.12	10,433.03	37,544.15	42,433.02
Library acquisition and dues	8,938.56	8,891.85	17,830.41	18,026.35
Reprographics and publication	79,755.06	57,920.72	137,675.78	163,933.59
Newsletter	3,471.73	2,041.62	5,513.35	4,693.24
Postage expense	9,728.02	8,540.25	18,268.27	14,649.10
Travel expense	37,766.65	13,660.03	51,426.68	37,554.25
Telephone expense	16,666.03	9,551.88	26,217.91	40,797.72
Rent	130,629.21	45,395.23	176,024.44	149,531.00
D.P. computer graphics/equipment supplies	850,844.85	152,424.54	1,003,269.39	1,714,817.68
Annual report	3,403.09	2,001.26	5,404.35	4,873.11
Other operating expenses	2,684.23	1,701.32	4,385.55	21,178.05
Unemployment compensation expense				797.83
Auto/office equipment maintenance	40,811.06	55,579.82	96,390.88	91,401.81
Capital outlay	46,369.21		46,369.21	32,126.96
Total Expenditures	3,582,442.33	2,128,623.10	5,711,065.43	6,156,037.15
Excess Revenues Over Expenditures	231,788.32	49,619.37	281,407.69	82,884.14
Operating Transfers in (out)	49,619.37	(49,619.37)		
Fund Balance - beginning of year	1,116,929.38	-	1,116,929.38	1,034,045.24
Fund Balance - end of year	$1,398,337.07	$ -	$1,398,337.07	$1,116,929.38

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements

Southeastern Wisconsin Regional Planning Commission

Combined Statement of Revenues, Expenditures and Changes in Fund Balances - Budget and Actual - All Governmental Fund Types

For the Year Ended December 31, 1989

	Budget	Actual	Variance Favorable (Unfavorable)
Revenues			
Contributions from counties	$ 911,210.00	$ 911,210.00	$
Grant revenues	1,326,275.00	1,157,708.00	(168,567.00)
Contract revenues	114,500.00	1,518,072.06	1,403,572.06
Service grants	2,217,555.00	2,292,420.28	74,865.28
Interest on invested funds		69,152.94	69,152.94
Other income		43,909.84	43,909.84
Total Revenues	4,569,540.00	5,992,473.12	1,422,933.12
Expenditures			
Salaries and fringe benefits	3,138,355.00	2,953,300.11	185,054.89
Office and other expenses			
Technical consultants	45,000.00	1,077,395.61	(1,032,395.61)
Office supplies	65,770.00	54,049.34	11,720.66
Insurance, audit, legal fees	33,670.00	37,544.15	(3,874.15)
Library acquisition and dues	16,000.00	17,830.41	(1,830.41)
Reprographics and publication	120,000.00	137,675.78	(17,675.78)
Newsletter	4,360.00	5,513.35	(1,153.35)
Postage expense	17,000.00	18,268.27	(1,268.27)
Travel expense	48,155.00	51,426.68	(3,271.68)
Telephone expense	55,445.00	26,217.91	29,227.09
Rent	148,835.00	176,024.44	(27,189.44)
D.P. computer graphics/equipment and supplies	626,920.00	1,003,269.39	(376,349.39)
Annual report	6,650.00	5,404.35	1,245.65
Other operating expenses	9,500.00	4,385.55	5,114.45
Unemployment compensation expense	4,500.00		4,500.00
Auto/office equipment/maintenance	203,500.00	96,390.88	107,109.12
Capital outlay	25,880.00	46,369.21	(20,489.21)
Total Expenditures	4,569,540.00	5,711,065.43	(1,141,525.43)
Excess Revenues Over Expenditures	-	281,407.69	281,407.69
Fund Balance - beginning of year	-	1,116,929.38	-
Fund Balance - end of year	$ -	$1,398,337.07	$ -

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to Financial Statements

For the Year Ended December 31, 1989

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 the 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 in National Council on Governmental Accounting Statement 3 and Interpretation 7 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 Funds - 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 Financial Statements

For the Year Ended December 31, 1989

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

Account Groups

General Fixed Asset Group - Used to account for fixed assets not accounted for in any other fund.

Total (Memorandum Only) - The column captioned Total (Memorandum Only) in the combined financial statements is a total of the columnar statements by fund type and account groups. The total column is not comparable to a consolidation and does not present financial position and results of operations in conformity with generally accepted accounting principles because the same basis of accounting is not used by all funds and interfund transactions and balances and account groups balancing accounts have not been eliminated.

Budget

The 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, 1989 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.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to the Financial Statements

For the Year Ended December 31, 1989

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

Accrued Vacation

The Commission accrues unused vacation time since the unused vacation time is cumulative from year to year. The maximum accrual per individual is 20 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

Fixed Assets as of December 31 are as follows:

	1989	1988
Desks	$ 14,205.60	$ 14,205.60
Chairs	16,621.64	15,770.27
Calculators and adding machines	13,447.39	13,274.41
Filing cabinets	41,492.53	40,873.79
Typewriters	21,815.97	21,151.07
Book cases	17,971.61	17,629.83
Tables	18,507.05	16,708.44
Data processing equipment	1,540,538.01	1,539,308.01
Major equipment	98,493.38	70,733.88
Automobiles	71,740.78	74,461.08
Miscellaneous	29,859.78	29,304.45
	$1,884,693.74	$1,853,420.83

Note 3 - Employee Retirement Plan

The Commission is a participant in the State of Wisconsin Retirement System covering substantially all full-time employees on a non-contributory basis. The annual employer's contribution rate, which is actuarially determined by the State of Wisconsin, provides for funding of prior service costs. Information concerning the amount, if any, of the excess of the actuarially computed value of vested benefits over the total assets available in the pension fund is not maintained by individual participant units. Retirement plan expenses, which include amortization of prior service costs, for the year 1989 were $233,553.07.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to the Financial Statements

For the Year Ended December 31, 1989

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	$ 72,722.49
Temporary cash investments	343,730.68
Total	$ 416,453.17

Note 5 - Cognizant Agency

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

Note 6 - Commitments

Rent

The Commission leases space from Waukesha County under a lease agreement that runs through December 31, 1991. The Commission has the option of renewing the lease for three successive periods of three years each. The minimum lease payments are as follows:

1990	$ 173,893.42
1991	112,443.99

Equipment

The Commission purchased various pieces of equipment on monthly payments. The remaining minimum payments are as follows:

1990	$ 153,753.96
1991	128,781.96
1992	97,037.51
	$ 379,573.43

Note 7 - Designated Funds

The Commission has designated the following funds for future purposes:

Equipment replacement	$ 50,000.00
Unemployment Compensation Trust	50,000.00
Errors and Omissions Insurance	80,000.00
Computer Graphics Reserve Account	126,761.00
	$ 306,761.00

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