



## Thirty-second annual report. July 1993

Waukesha, Wisconsin: Southeastern Wisconsin Regional Planning Commission, July 1993

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# 1992 ANNUAL REPORT



SOUTHEASTERN  
WISCONSIN  
REGIONAL  
PLANNING  
COMMISSION

SOUTHEASTERN  
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REGIONAL  
PLANNING  
COMMISSION

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COMMISSION

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**July 1993**

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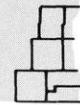
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*Serving the Counties of:*

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July 14, 1993

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

In accordance with the requirements of Section 66.945(8)(b) of the Wisconsin Statutes, this Commission each calendar year prepares and certifies an annual report to the Wisconsin Legislature and to the legislative bodies of the constituent county and local units of government within the Region. This, the 32nd annual report of the Commission, summarizes the work of the Commission in calendar year 1992 and contains a statement of the financial position of the Commission as of the end of that year, as certified by an independent auditor.

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

As do past annual reports, this report contains much useful information on development trends in the Region. This report also summarizes the progress made during 1992 by the Commission in carrying out its three basic functions: data collection and dissemination, regional plan preparation, and promotion of plan implementation.

In 1992, the Commission completed and adopted a new regional land use plan. This plan, for the design year 2010, is a third-generation plan and is conceptually identical to the first- and second-generation regional land use plans which had design years of 1990 and 2000, respectively. As such, the new plan continues to recommend that new urban development be encouraged to occur in those locations of the Region that are covered by soils suitable for urban use; that are not subject to special hazards such as flooding and erosion; and which can be economically provided with sanitary sewer, public water supply, and mass transit services. The new plan continues to call for the preservation and protection of the invaluable natural resources found in the primary environmental corridors of the Region. While those portions of the corridors that are wetlands and floodplains are now relatively well protected and preserved, much remains to be done to properly preserve and protect the upland wooded portions of the corridors. Finally, the new plan continues to call for efforts to preserve and protect the prime agricultural lands of the Region. Adopted in September 1992, the Commission is pleased to note that by the end of the year, Washington County had already acted to adopt the new plan.

Also during 1992, the Commission, working with the counties and local units of government in both the Kenosha and Racine urban areas, completed coordinated sanitary sewerage and water supply system plans for those areas. Following local approval of those plans, the Commission would be in a position to amend appropriately the regional water quality management plan to reflect new sewage treatment plant, trunk sewer, and sewer service area recommendations emanating from those plans. Brief summaries of these two plans, as well as of the new land use plan and other plan development efforts, are set forth in various sections of this report.

Finally, during 1992 the Commission received recognition for the quality of certain technical work. In an international competition entitled "In-Print 1992," the Commission received a first-place award for the production of one of its reports, the award recognizing the design, typography, and register quality of a document with multi-color maps and illustrations. The Commission also received two awards at an international computer software users conference sponsored by Genasys II, Inc., a Fort Collins, Colorado, creator of computer-assisted mapping and information systems software. The Commission was honored both for technical excellence in the use of computers to design, compose, and produce an existing land use map for the Region and for innovative development over a five-year period of the Commission's regional geographic information system. The Commission is indeed proud to receive this recognition.

The Commission hopes that the constituent units and agencies of government concerned are pleased with the work of the Commission in 1992. The Commission looks forward to continuing to serve its constituent counties and local units of government, as well as the State and Federal agencies concerned, by continuing to provide the planning services required to address the areawide environmental and developmental problems facing Southeastern Wisconsin and by promoting the intergovernmental cooperation needed to resolve those problems.

Very truly yours,

David B. Falstad  
Chairman



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# ABOUT THE COMMISSION

## AUTHORITY

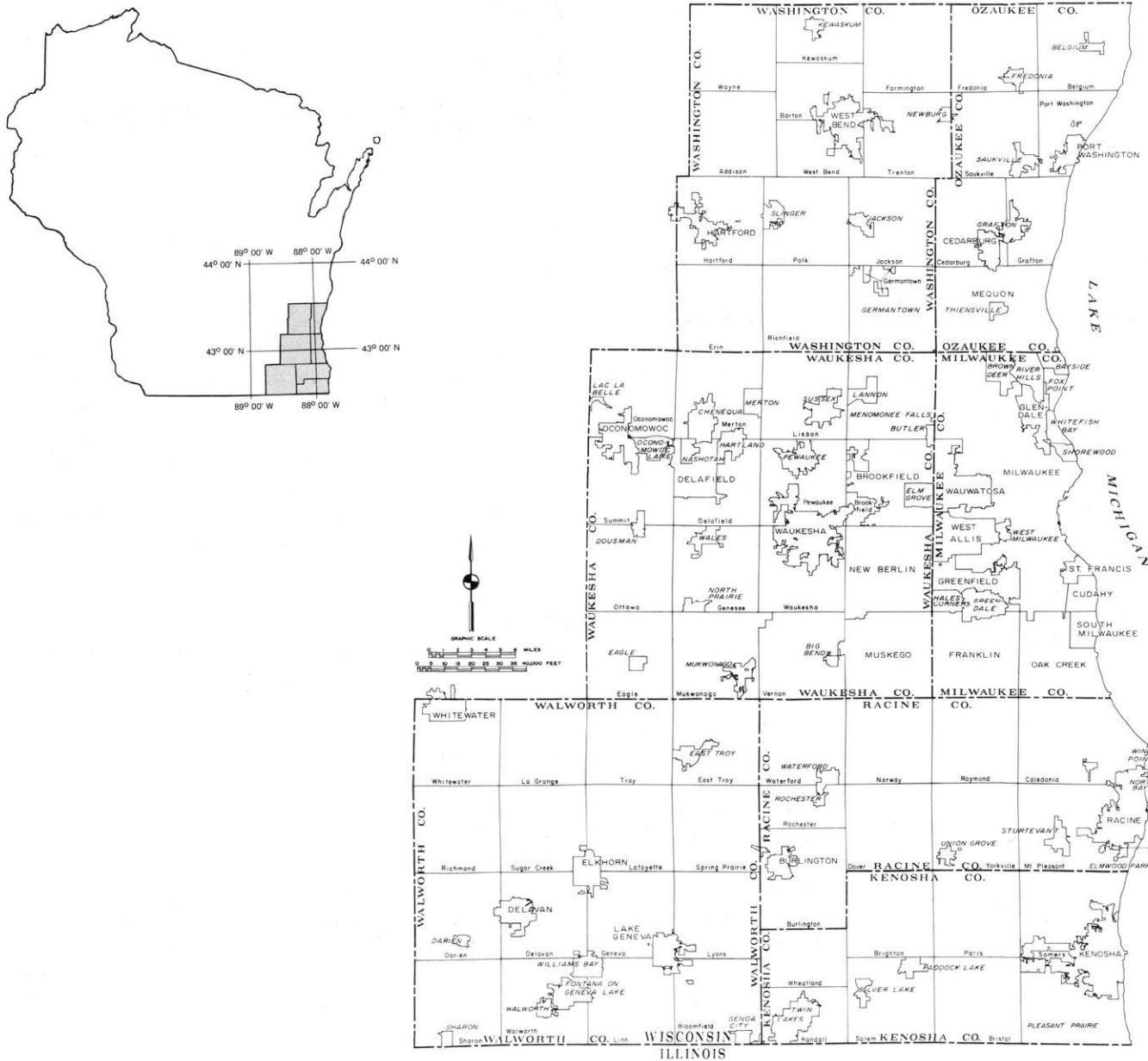
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.945 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning services 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, as shown on Map 1, 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 1.84 million persons, or about 37 percent of the total population of the State. The seven counties provide about 997,400 jobs,

Map 1

### THE SOUTHEASTERN WISCONSIN REGION



or about 39 percent of the total employment of the State, and contain real property worth about \$62.8 billion as measured in equalized valuation, or about 41 percent of all the tangible wealth of the State as measured by such valuation. There are 154 general-purpose local units of government in the seven-county Region, all of which participate in the work of the Commission.

## BASIC CONCEPTS

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

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

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

## COMMISSION OFFICES OLD COURTHOUSE WAUKESHA COUNTY



The work of the Regional Planning Commission is 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. One Commissioner from each county is appointed by the county board and is usually an elected county board supervisor. The remaining two from each county are appointed by the Governor, one from a list prepared by the county 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 communicating 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

28 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 578 persons, is set forth in Appendix B.

## STAFFING

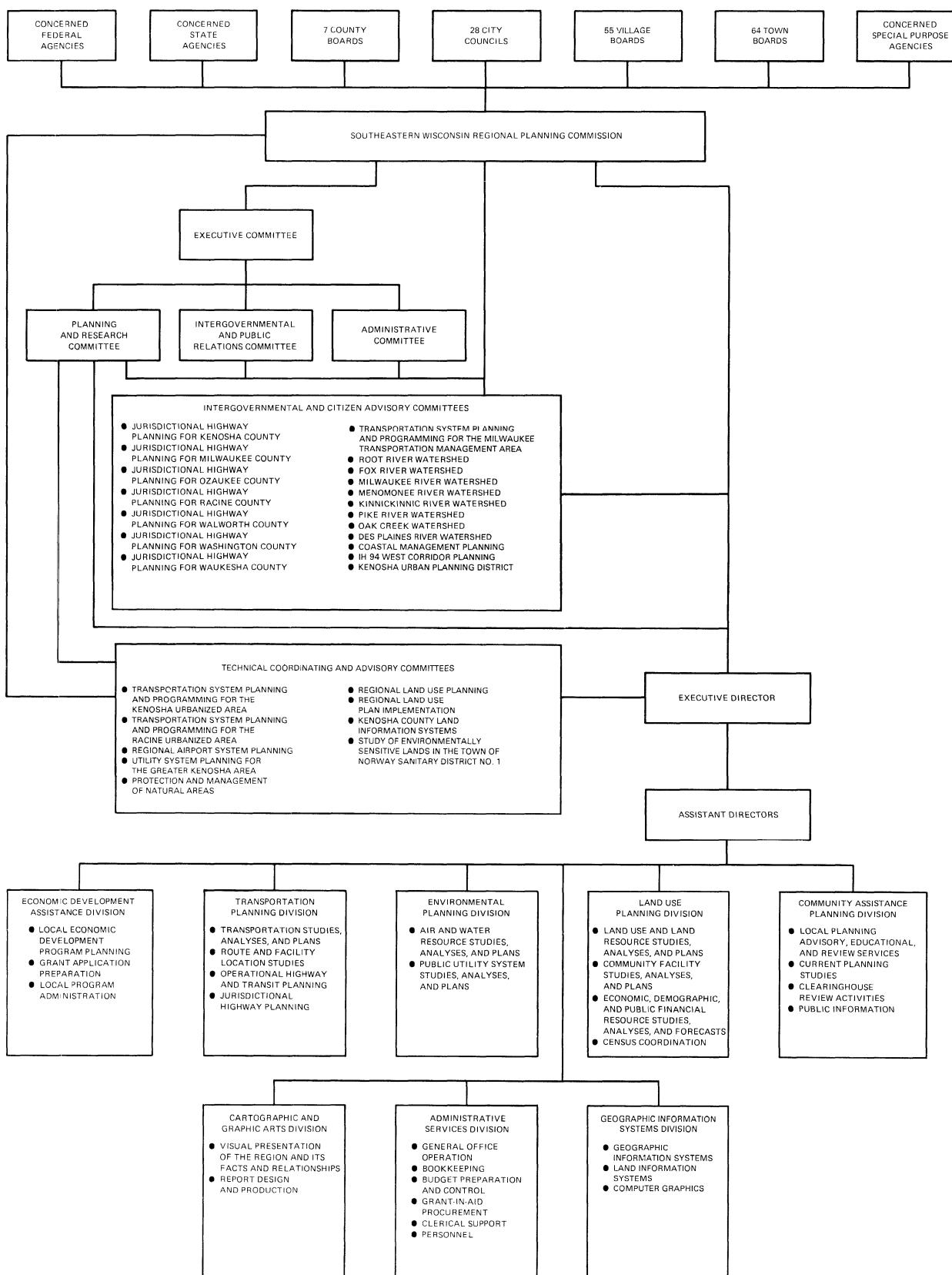
The Commission prepares an annual work program which is reviewed and approved by Federal and State funding agencies. This work program is then carried out by a core staff of full-time professional, technical, administrative, and clerical personnel, supplemented by additional temporary staff and consultants as required by the various work programs under way. At the end of 1992, the staff totaled 111, including 96 full-time and 15 part-time employees.

As shown in Figure 1 and in Appendix C, 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, Cartographic and Graphic Arts, and Geographic Information Systems, 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 1992 totaled about \$5.0 million. County tax levies in 1992 totaled about \$1.3 million, or about \$0.69 per capita. The sources of this revenue for 1992 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



## 1992 MEETINGS

### COMMISSION AND ADVISORY COMMITTEE MEETINGS

Full Commission . . . . .	5	Technical Advisory Committee for the Protection and Management of Natural Areas in Southeastern Wisconsin . . . . .	3
Executive Committee . . . . .	8	Technical Advisory Committee for the Kenosha County Automated Mapping and Land Information System . . . . .	0
Administrative Committee . . . . .	8	Greater Kenosha Area Utility Planning Committee . . . . .	1
Planning and Research Committee . . . . .	4	Intergovernmental Coordinating and Advisory Committee for the Kenosha Urban Planning District . . . . .	2
Intergovernmental and Public Relations Committee . . . . .	0	Technical Coordinating and Advisory Committee on the Study of Environmentally Sensitive Lands in the Town of Norway Sanitary District No. 1 . . . . .	3
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 . . . . .	1		
Racine County . . . . .	0		
Walworth County . . . . .	0		
Washington County . . . . .	0		
Waukesha County . . . . .	0		
Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming			
Kenosha Urbanized Area . . . . .	3	Executive Director . . . . .	300
Milwaukee Urbanized Area . . . . .	3	Assistant Directors . . . . .	248
Racine Urbanized Area . . . . .	3	Cartographic and Graphic Arts Division . . . . .	11
Watershed Committees		Community Assistance Planning Division . . . . .	213
Root River . . . . .	0	Environmental Planning Division . . . . .	180
Fox River . . . . .	0	Land Use Planning Division . . . . .	173
Milwaukee River . . . . .	0	Transportation Planning Division . . . . .	108
Menomonee River . . . . .	0	Economic Development	
Kinnickinnic River . . . . .	0	Assistance Division . . . . .	338
Pike River . . . . .	3	Geographic Information	
Des Plaines River . . . . .	0	Systems Division . . . . .	95
Oak Creek . . . . .	0		
Intergovernmental Coordinating and Technical Advisory Committee for the IH 94 West Freeway Corridor Development Plan . . . . .	2		
Technical Coordinating and Advisory Committee on Regional Land Use Planning . . . . .	0		
Technical and Intergovernmental Advisory Committee on Regional Land Use Plan Implementation . . . . .	5		
Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin . . . . .	0		

### STAFF TECHNICAL MEETINGS

Executive Director . . . . .	300
Assistant Directors . . . . .	248
Cartographic and Graphic Arts Division . . . . .	11
Community Assistance Planning Division . . . . .	213
Environmental Planning Division . . . . .	180
Land Use Planning Division . . . . .	173
Transportation Planning Division . . . . .	108
Economic Development	
Assistance Division . . . . .	338
Geographic Information	
Systems Division . . . . .	95

### STAFF SPEAKING ENGAGEMENTS

Executive Director . . . . .	27
Assistant Directors . . . . .	19
Cartographic and Graphic Arts Division . . . . .	0
Community Assistance Planning Division . . . . .	1
Environmental Planning Division . . . . .	15
Land Use Planning Division . . . . .	22
Transportation Planning Division . . . . .	7
Economic Development	
Assistance Division . . . . .	5
Geographic Information	
Systems Division . . . . .	2

Figure 2

FUNDING TREND: 1961-1992

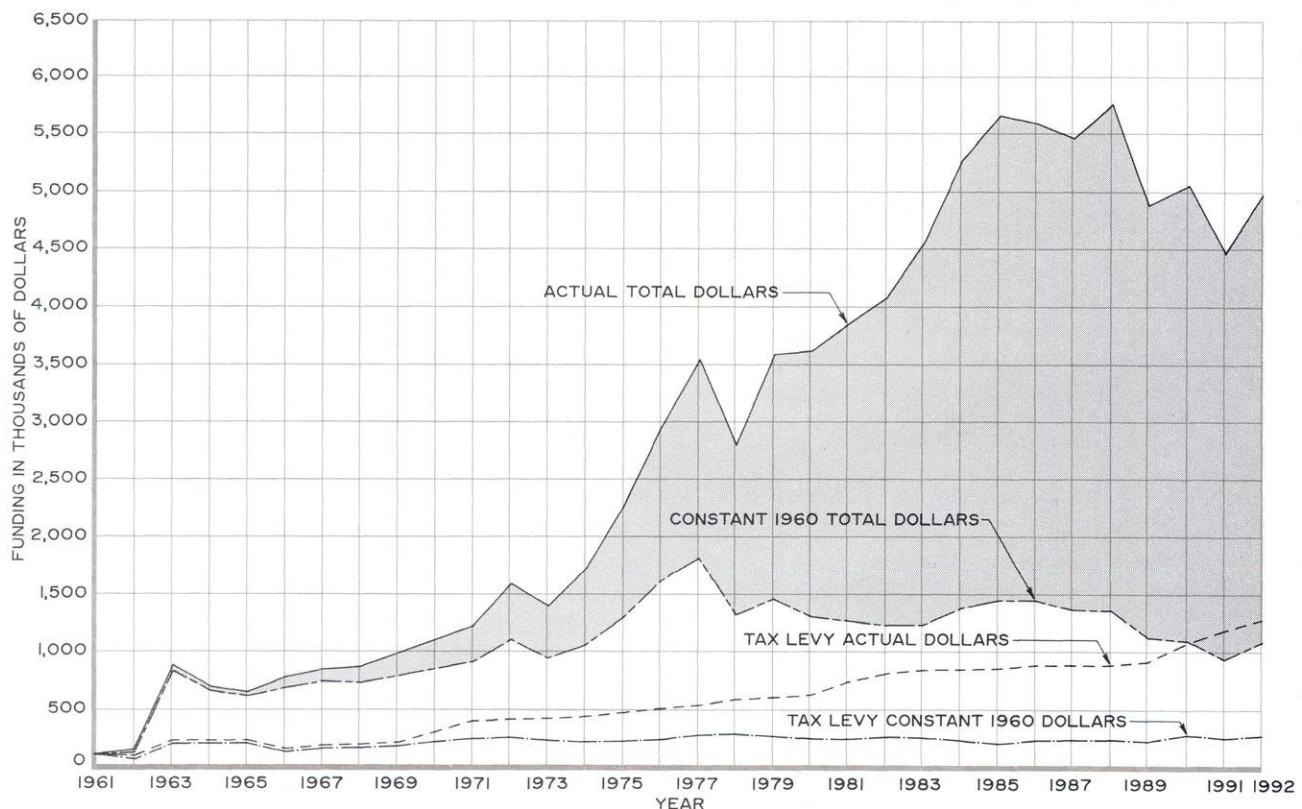


Figure 3

SOURCES OF REVENUES TREND: 1961-1992

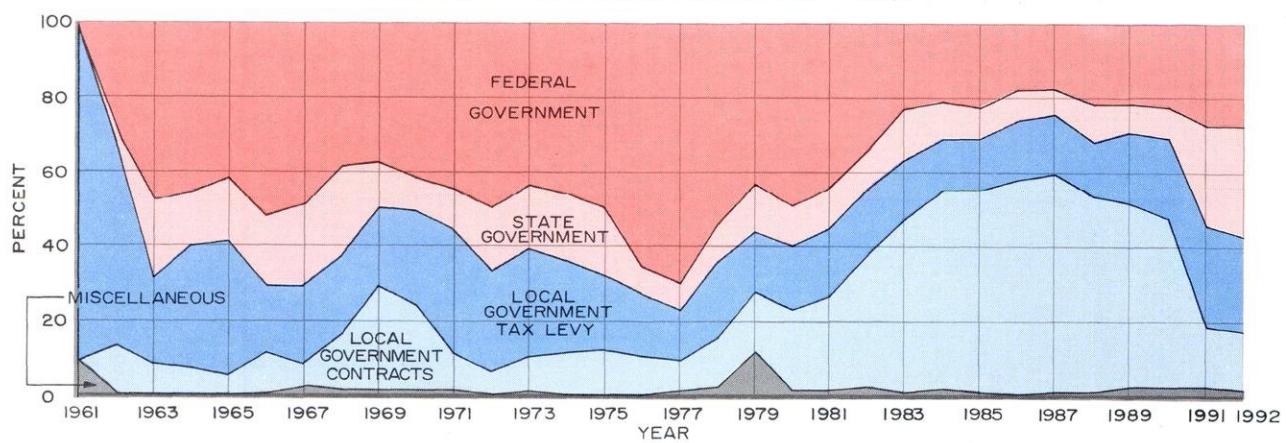
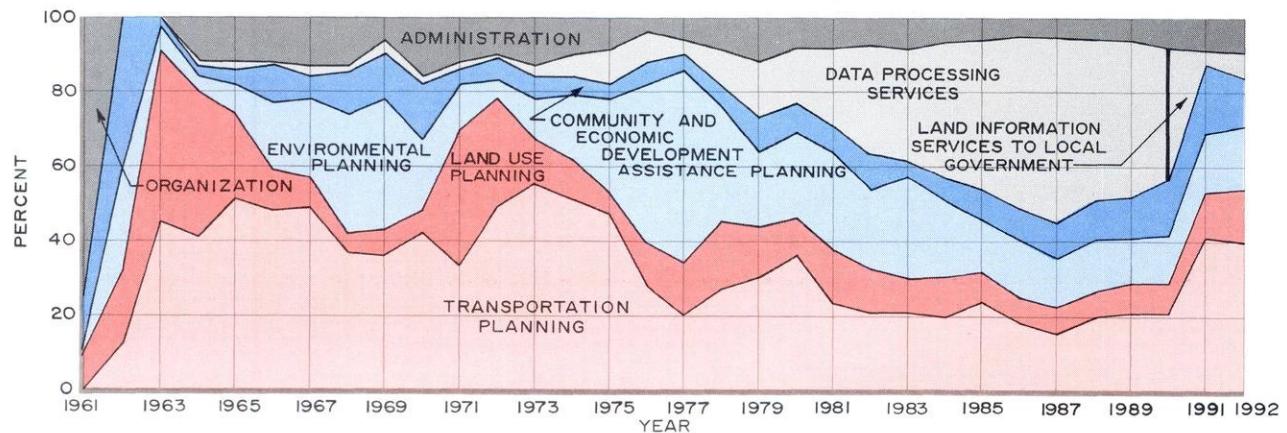


Figure 4

EXPENDITURES TREND: 1961-1992



The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1992 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

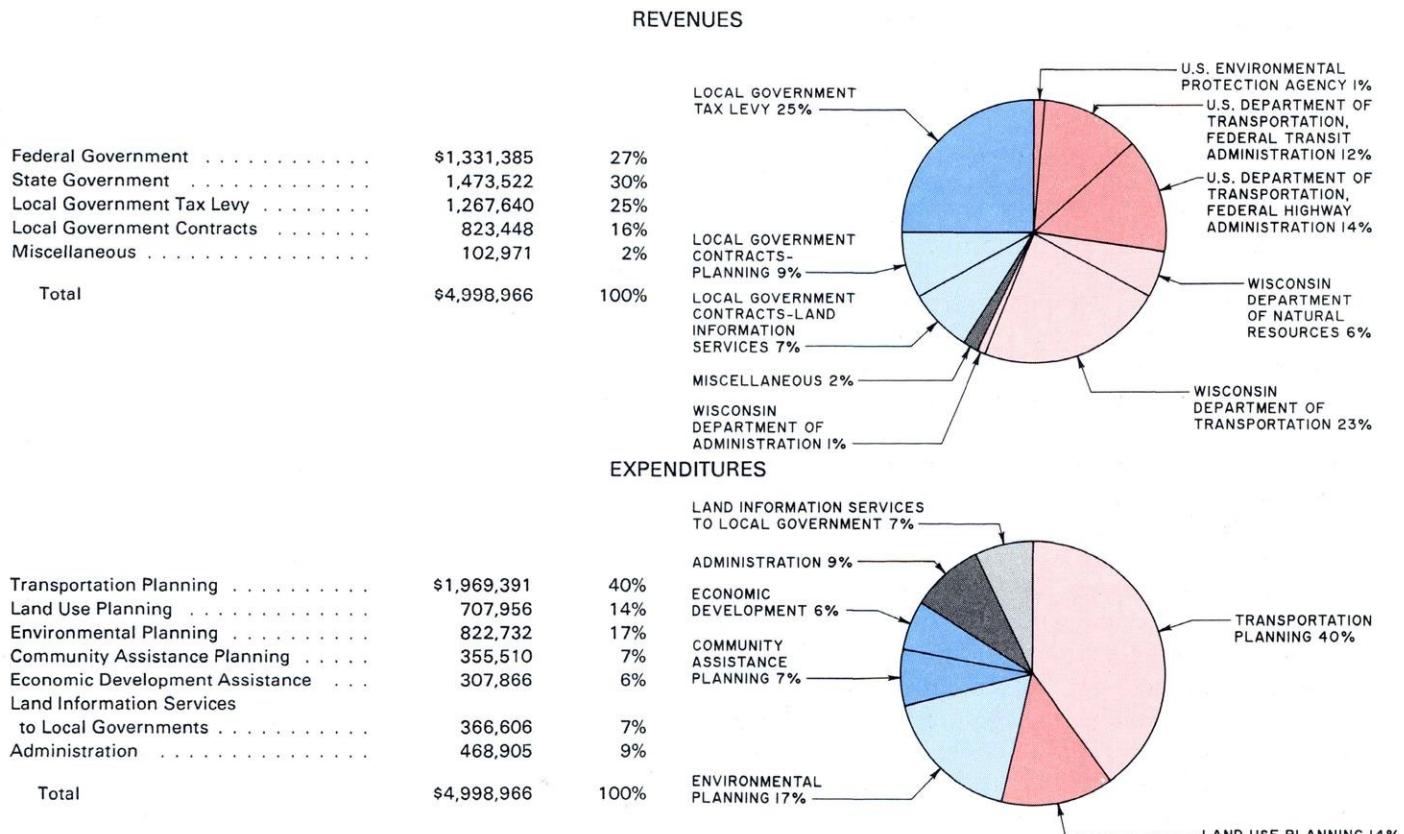
provide a focus for generating enlightened citizen interest in, and action on, plan recommendations. Accordingly, the Commission has established a series of published reports.

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,

Figure 5

### REVENUES AND EXPENDITURES: 1992



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

## ADOPTED PLAN ELEMENTS: 1992

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

By the end of 1992, the adopted regional plan consisted of 24 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: DECEMBER 31, 1992

Functional Area	Plan Element	Plan Document	Date of Adoption
Land Use, Housing, and Community Facility Planning	Regional Land Use Plan <sup>a</sup>	Planning Report No. 40, <u>A Regional Land Use Plan for Southeastern Wisconsin—2010</u>	September 23, 1992
	Amendment—Kenosha County	Community Assistance Planning Report No. 45, <u>A Farmland Preservation Plan for Kenosha County, Wisconsin</u>	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, <u>A Farmland Preservation Plan for Racine County, Wisconsin</u>	June 17, 1982
	Amendment—Ozaukee County	Community Assistance Planning Report No. 87, <u>A Farmland Preservation Plan for Ozaukee County, Wisconsin</u>	June 16, 1983
	Amendment—Pewaukee Area	Community Assistance Planning Report No. 76, <u>A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin</u>	December 1, 1983
	Amendment—Town of Pleasant Prairie	Community Assistance Planning Report No. 88, <u>A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin</u>	March 11, 1985
	Amendment—IH 94 South Corridor	Community Assistance Planning Report No. 200, <u>A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties</u>	January 15, 1992
	Regional Library Facilities and Services Plan	Planning Report No. 19, <u>A Library Facilities and Services Plan for Southeastern Wisconsin</u>	September 12, 1974
	Regional Housing Plan	Planning Report No. 20, <u>A Regional Housing Plan for Southeastern Wisconsin</u>	June 5, 1975
	Regional Park and Open Space Plan	Planning Report No. 27, <u>A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000</u>	December 1, 1977
	Amendment—Ozaukee County Park and Open Space Plan	Community Assistance Planning Report No. 133, <u>A Park and Open Space Plan for Ozaukee County</u>	September 14, 1987
	Amendment—Kenosha County Park and Open Space Plan	Community Assistance Planning Report No. 131, <u>A Park and Open Space Plan for Kenosha County</u>	December 5, 1988
	Amendment—Racine County Park and Open Space Plan	Community Assistance Planning Report No. 134, <u>A Park and Open Space Plan for Racine County</u>	March 6, 1989
	Amendment—Washington County Park and Open Space Plan	Community Assistance Planning Report No. 136, <u>A Park and Open Space Plan for Washington County</u>	March 7, 1990
	Amendment—Waukesha County Park and Open Space Plan	Community Assistance Planning Report No. 137, <u>A Park and Open Space Plan for Waukesha County</u>	March 7, 1990
	Amendment—Walworth County Park and Open Space Plan	Community Assistance Planning Report No. 135, <u>A Park and Open Space Plan for Walworth County</u>	March 4, 1992
	Amendment—Milwaukee County Park and Open Space Plan	Community Assistance Planning Report No. 132, <u>A Park and Open Space Plan for Milwaukee County</u>	June 17, 1992
Transportation Planning	Regional Transportation Plan <sup>b</sup>	Planning Report No. 25, <u>A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</u>	June 1, 1978
	Amendment—Lake Freeway South Corridor	Amendment to the <u>Regional Transportation Plan—2000, Lake Freeway South Corridor</u>	June 18, 1981
	Amendment—Milwaukee Area Primary Transit System	Planning Report No. 33, <u>A Primary Transit System Plan for the Milwaukee Area</u>	June 17, 1982

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	Amendment—Racine County	<u>Amendment to the Regional Transportation Plan—2000, Racine County</u>	December 2, 1982
	Amendment—Waukesha County	<u>Amendment to the Regional Transportation Plan—2000, Waukesha County</u>	December 2, 1982
	Amendment—Milwaukee Northwest Side/Ozaukee County	<u>Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area</u>	September 8, 1983
	Amendment—Lake Freeway North/Park Freeway East	<u>Amendment to the Regional Transportation Plan—2000, Lake Freeway North/Park Freeway East</u>	December 1, 1983
	Amendment—Stadium Freeway South Corridor	<u>Amendment to the Regional Transportation Plan—2000, Stadium Freeway South Corridor</u>	March 11, 1985
	Amendment—Waukesha County	<u>Amendment to the Regional Transportation Plan—2000, Waukesha County</u>	June 20, 1988
	Amendment—Washington County	<u>Amendment to the Washington County Jurisdictional Highway System Plan—2000</u>	June 20, 1990
	Amendment—Racine County	<u>Amendment to the Racine County Jurisdictional Highway System Plan—2000</u>	December 5, 1990
	Amendment—Kenosha County	<u>Amendment to the Regional Transportation Plan—2000, Kenosha County</u>	December 5, 1990
	Amendment—IH 94 South Corridor	<u>Community Assistance Planning Report No. 200, A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties</u>	January 15, 1992
	Amendment—Walworth County	<u>Amendment to the Walworth County Jurisdictional Highway System Plan—2010</u>	March 4, 1992
	Racine Area Transit Development Plan	<u>Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979</u>	September 12, 1974
	Regional Airport System Plan <sup>c</sup>	<u>Planning Report No. 38, A Regional Airport System Plan for Southeastern Wisconsin: 2010</u>	June 15, 1987
	Kenosha Area Transit Development Plan <sup>d</sup>	<u>Community Assistance Planning Report No. 183, Kenosha Transit System Development Plan: 1991-1995, City of Kenosha, Wisconsin</u>	June 17, 1992
	Transportation Systems Management Plan	<u>Community Assistance Planning Report No. 50, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981</u>	December 4, 1980
	Amendment—Milwaukee Northwest Side/Ozaukee County	<u>Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area</u>	September 8, 1983
	Amendment—Milwaukee Area	<u>Planning Report No. 39, A Freeway Traffic Management System Plan for the Milwaukee Area</u>	December 5, 1988
	Elderly-Handicapped Transportation Plan <sup>e</sup>	<u>Planning Report No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982</u>	April 13, 1978
	Amendment—Racine Area	<u>SEWRPC Resolution No. 78-17</u>	December 7, 1978
	Amendment—Milwaukee County	<u>Memorandum Report No. 58, A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System</u>	January 15, 1992
	Amendment—Kenosha Area	<u>Memorandum Report No. 59, A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System</u>	January 15, 1992
	Amendment—Racine Area	<u>Memorandum Report No. 60, A Paratransit Service Plan for Disabled Persons—City of Racine Transit System</u>	January 15, 1992
	Amendment—City of Waukesha	<u>Memorandum Report No. 61, A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility</u>	January 15, 1992
	Amendment—Waukesha County	<u>Memorandum Report No. 62, A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System</u>	January 15, 1992

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	Waukesha Transit Development Plan	Community Assistance Planning Report No. 154, <u>A Transit System Development Plan for the City of Waukesha, 1988-1992</u>	June 20, 1990
	West Bend Transit Development Plan	Community Assistance Planning Report No. 189, <u>A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996</u>	March 4, 1992
Environmental Planning	Root River Watershed Plan	Planning Report No. 9, <u>A Comprehensive Plan for the Root River Watershed</u>	September 22, 1966
	Fox River Watershed Plan	Planning Report No. 12, <u>A Comprehensive Plan for the Fox River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan</u> <u>Amendment to the Comprehensive Plan for the Fox River Watershed</u>	June 4, 1970
	Amendment—Water Pollution Control Time Schedule		September 13, 1973
	Amendment—Lower Watershed Drainage Plan	Community Assistance Planning Report No. 5, <u>Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed</u>	June 5, 1975
	Amendment—Pewaukee Flood Control Plan	Community Assistance Planning Report No. 14, <u>Floodland Management Plan for the Village of Pewaukee</u>	June 1, 1978
	Milwaukee River Watershed Plan	Planning Report No. 13, <u>A Comprehensive Plan for the Milwaukee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan</u>	March 2, 1972
	Amendment—Lincoln Creek Flood Control Plan	Community Assistance Planning Report No. 13 (2nd Edition), <u>Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin</u>	December 1, 1983
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 37, <u>A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</u>	December 7, 1987
	Menomonee River Watershed Plan	Planning Report No. 26, <u>A Comprehensive Plan for the Menomonee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan</u> <u>Amendment—Milwaukee Harbor Estuary Plan</u>	January 20, 1977
	Regional Wastewater Sludge Management Plan	Planning Report No. 37, <u>A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</u>	December 7, 1987
	Kinnickinnic River Watershed Plan	Planning Report No. 29, <u>A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin</u>	September 14, 1978
	Amendment—Milwaukee Harbor Estuary Plan	Planning Report No. 32, <u>A Comprehensive Plan for the Kinnickinnic River Watershed</u>	March 1, 1979
	Regional Water Quality Management Plan	Planning Report No. 37, <u>A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</u>	December 7, 1987
	Amendment—Root River Watershed	Planning Report No. 30, <u>A Regional Water Quality Management Plan for Southeastern Wisconsin, Volume One, Inventory Findings; Volume Two, Alternative Plans; Volume Three, Recommended Plan</u>	July 12, 1979
	Amendment—Walworth County Metropolitan Sewerage District	Community Assistance Planning Report No. 37, <u>A Nonpoint Source Water Pollution Control Plan for the Root River Watershed</u>	March 6, 1980
	Amendment—Cities of Brookfield and Waukesha	Community Assistance Planning Report No. 56 (2nd Edition), <u>Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, Walworth County, Wisconsin</u> <u>Amendment to the Regional Water Quality Management Plan—2000, Cities of Brookfield and Waukesha</u>	December 4, 1991
			December 3, 1981

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Kenosha County	Community Assistance Planning Report No. 45, <u>A Farmland Preservation Plan for Kenosha County, Wisconsin</u>	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, <u>A Farmland Preservation Plan for Racine County, Wisconsin</u>	June 17, 1982
	Amendment—City of Muskego	Community Assistance Planning Report No. 64 (2nd Edition), <u>Sanitary Sewer Service Area for the City of Muskego</u>	March 3, 1986
	Amendment—Ashippun Lake, Waukesha County	Community Assistance Planning Report No. 48, <u>A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin</u>	September 9, 1982
	Amendment—Okauchee Lake, Waukesha County	Community Assistance Planning Report No. 53, <u>A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin</u>	September 9, 1982
	Amendment—Lac La Belle, Waukesha County	Community Assistance Planning Report No. 47, <u>A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin</u>	September 9, 1982
	Amendment—North Lake, Waukesha County	Community Assistance Planning Report No. 54, <u>A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin</u>	December 2, 1982
	Amendment—City of West Bend	Community Assistance Planning Report No. 35, <u>Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin</u> <u>Amendment to the Regional Water Quality Management Plan—2000, Village of Grafton</u>	December 2, 1982
	Amendment—Village of Grafton	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Brookfield</u>	December 2, 1982
	Amendment—City of Brookfield	Community Assistance Planning Report No. 84, <u>Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin</u>	June 16, 1983
	Amendment—Village of Sussex	Community Assistance Planning Report No. 87, <u>A Farmland Preservation Plan for Ozaukee County, Wisconsin</u>	June 16, 1983
	Amendment—Ozaukee County	Community Assistance Planning Report No. 70, <u>Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin</u>	September 8, 1983
	Amendment—Village of Germantown	Community Assistance Planning Report No. 90, <u>Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin</u>	December 1, 1983
	Amendment—Village of Saukville	Community Assistance Planning Report No. 95, <u>Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin</u>	December 1, 1983
	Amendment—City of Port Washington	Community Assistance Planning Report No. 76, <u>A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin</u> <u>Amendment to the Regional Water Quality Management Plan—2000, Onion River Priority Watershed Plan</u>	December 1, 1983
	Amendment—Pewaukee	<u>Amendment to the Regional Water Quality Management Plan—2000, Onion River Priority Watershed Plan</u>	December 1, 1983
	Amendment—Belgium Area	Community Assistance Planning Report No. 99, <u>Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin</u>	March 1, 1984
	Amendment—Geneva Lake Area	Community Assistance Planning Report No. 92, <u>Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin</u>	June 21, 1984
	Amendment—Village of Butler	Community Assistance Planning Report No. 112, <u>Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin</u>	June 21, 1984
	Amendment—City of Hartford	Community Assistance Planning Report No. 96, <u>Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin</u>	September 13, 1984
	Amendment—Mukwonago Area	Community Assistance Planning Report No. 112, <u>Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin</u>	September 13, 1984
	Amendment—Village of Fredonia		
	Amendment—Village of East Troy		

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—City of Milwaukee	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Milwaukee</u>	September 13, 1984
	Amendment—Town of Pleasant Prairie	<u>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</u>	March 11, 1985
	Amendment—Village of Belgium	<u>Community Assistance Planning Report No. 97 (2nd Edition), Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin</u>	June 15, 1987
	Amendment—Town of Addison	<u>Community Assistance Planning Report No. 103, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin</u>	March 11, 1985
	Amendment—Town of Yorkville	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Yorkville</u>	March 11, 1985
	Amendment—Village of Williams Bay	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Williams Bay/Walworth County Metropolitan Sewerage District</u>	March 11, 1985
	Amendment—Town of Trenton City of West Bend	<u>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Town of Trenton</u>	March 11, 1985
	Amendment—Village of Hartland	<u>Community Assistance Planning Report No. 93, Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin</u>	June 17, 1985
	Amendment—Village of Jackson	<u>Community Assistance Planning Report No. 124, Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin</u>	June 17, 1985
	Amendment—Pewaukee Area	<u>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</u>	June 17, 1985
	Amendment—City of Waukesha	<u>Community Assistance Planning Report No. 100, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin</u>	December 2, 1985
	Amendment—Village of Slinger	<u>Community Assistance Planning Report No. 128, Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin</u>	December 2, 1985
	Amendment—DelafIELD/ Nashotah Area	<u>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</u>	December 2, 1985
	Amendment—Kenosha Area	<u>Community Assistance Planning Report No. 106, Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin</u>	December 2, 1985
	Amendment—Town of Eagle	<u>Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District</u>	December 2, 1985
	Amendment—Town of Salem	<u>Community Assistance Planning Report No. 143, Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin</u>	March 3, 1986
	Amendment—Friess Lake, Washington County	<u>Community Assistance Planning Report No. 98, A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin</u>	March 3, 1986
	Amendment—Geneva Lake, Walworth County	<u>Community Assistance Planning Report No. 60, A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin</u>	March 3, 1986
	Amendment—Pewaukee Lake, Waukesha County	<u>Community Assistance Planning Report No. 58, A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin</u>	March 3, 1986
	Amendment—Waterford/ Rochester Area	<u>Community Assistance Planning Report No. 141, Sanitary Sewer Service Area for the Waterford/ Rochester Area, Racine County, Wisconsin</u>	June 16, 1986
	Amendment—City of Burlington	<u>Community Assistance Planning Report No. 78, Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin</u>	June 16, 1986

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—City of Waukesha/Town of Pewaukee	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha/Town of Pewaukee</u>	December 1, 1986
	Amendment—Salem/Paddock Lake/Bristol Area	<u>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</u>	December 1, 1986
	Amendment—Racine Area	<u>Community Assistance Planning Report No. 147, Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin</u>	December 1, 1986
	Amendment—Town of Lyons	<u>Amendment to the Regional Water Quality Management Plan—2000, Country Estates Sanitary District/Town of Lyons</u>	March 2, 1987
	Amendment—Village of Silver Lake	<u>Community Assistance Planning Report No. 119, Sanitary Sewer Service Area, Village of Silver Lake, Kenosha County, Wisconsin</u>	June 15, 1987
	Amendment—Village of Twin Lakes	<u>Community Assistance Planning Report No. 149, Sanitary Sewer Service Area, Village of Twin Lakes, Kenosha County, Wisconsin</u>	June 15, 1987
	Amendment—Cedarburg/Grafton Area	<u>Community Assistance Planning Report No. 91, Sanitary Sewer Service Area, City of Cedarburg, Village of Grafton, Ozaukee County, Wisconsin</u>	June 15, 1987
	Amendment—Town of Walworth	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Walworth Utility District No. 1/Walworth County Metropolitan Sewerage District</u>	June 15, 1987
	Amendment—City of West Bend	<u>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend</u>	June 15, 1987
	Amendment—City of Whitewater	<u>Community Assistance Planning Report No. 94, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin</u>	September 14, 1987
	Amendment—Town of Lyons	<u>Community Assistance Planning Report No. 158, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin</u>	September 14, 1987
	Amendment—City of Hartford	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</u>	September 14, 1987
	Amendment—Milwaukee Harbor Estuary Plan	<u>Planning Report No. 37, A Water Resources Management Plan for the Milwaukee Harbor Estuary, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans</u>	December 7, 1987
	Amendment—City of New Berlin	<u>Community Assistance Planning Report No. 157, Sanitary Sewer Service Area for the City of New Berlin, Waukesha County, Wisconsin</u>	December 7, 1987
	Amendment—Village of Sussex	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex</u>	December 7, 1987
	Amendment—Kenosha Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Kenosha and Environs</u>	December 7, 1987
	Amendment—Village of Kewaskum	<u>Community Assistance Planning Report No. 161, Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin</u>	March 7, 1988
	Amendment—Town of Darien	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Darien/Walworth County Metropolitan Sewerage District</u>	June 20, 1988
	Amendment—Village of Sussex	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Sussex</u>	June 20, 1988
	Amendment—Village of Darien	<u>Community Assistance Planning Report No. 123 (2nd Edition), Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin</u>	September 23, 1992
	Amendment—West Bend Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Town of West Bend</u>	September 12, 1988
	Amendment—Hartford Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</u>	September 12, 1988
	Amendment—Town of Waterford	<u>Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District</u>	September 12, 1988

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Hartford Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Hartford</u>	December 5, 1988
	Amendment—City of Waukesha	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha</u>	December 5, 1988
	Amendment—Oconomowoc Area	<u>Community Assistance Planning Report No. 172, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin</u>	March 6, 1989
	Amendment—Village of Genoa City	<u>Community Assistance Planning Report No. 175, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin</u>	March 6, 1989
	Amendment—Village of Germantown	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Germantown</u>	March 6, 1989
	Amendment—Racine Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</u>	March 6, 1989
	Amendment—Upper Fox River Watershed	<u>Amendment to the Regional Water Quality Management Plan—2000, Upper Fox River Watershed—Brookfield and Sussex Sewage Treatment Plants</u>	May 15, 1989
	Amendment—Racine Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</u>	June 19, 1989
	Amendment—Lake Geneva Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Lake Geneva and Environs</u>	June 19, 1989
	Amendment—Town of Geneva	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District</u>	November 6, 1989
	Amendment—Town of Waterford	<u>Amendment to the Regional Water Quality Management Plan—2000, Western Racine County Sewerage District</u>	December 4, 1989
	Amendment—Delavan Lake Area	<u>Amendment to the Regional Water Quality Management Plan—2000, Delavan Lake Sanitary District/Walworth County Metropolitan Sewerage District</u>	December 4, 1989
	Amendment—East Troy Area	<u>Amendment to the Regional Water Quality Management Plan—2000, Towns of East Troy, LaFayette, and Spring Prairie, and Village of East Troy</u>	December 4, 1989
	Amendment—Waukesha Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Waukesha and Town of Waukesha</u>	June 20, 1990
	Amendment—Village of Silver Lake	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Silver Lake and Salem Utility District No. 2</u>	June 20, 1990
	Amendment—Village of Union Grove	<u>Community Assistance Planning Report No. 180, Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin</u>	September 12, 1990
	Amendment—Town of Somers	<u>Amendment to the Regional Water Quality Management Plan—2000, Kenosha and Racine Sanitary Sewer Service Areas</u>	September 12, 1990
	Amendment—City of Franklin	<u>Community Assistance Planning Report No. 176, Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin</u>	December 5, 1990
	Amendment—Village of Mukwonago	<u>Community Assistance Planning Report No. 191, Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin</u>	December 5, 1990
	Amendment—Village of Dousman	<u>Community Assistance Planning Report No. 192, Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin</u>	December 5, 1990
	Amendment—Towns of Yorkville and Mt. Pleasant	<u>Amendment to the Regional Water Quality Management Plan—2000, Towns of Yorkville and Mt. Pleasant</u>	December 5, 1990
	Amendment—Town of Bristol	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Bristol</u>	March 6, 1991

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of Pewaukee	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Pewaukee</u>	March 6, 1991
	Amendment—Town of Brookfield	<u>Amendment to the Regional Water Quality Management Plan—2000, Brookfield and Waukesha Sanitary Sewer Service Areas</u>	March 6, 1991
	Amendment—Delavan Area	<u>Amendment to the Regional Water Quality Management Plan—2000, Walworth County Metropolitan Sewerage District/Delavan-Delavan Lake Sanitary Sewer Service Area</u>	March 6, 1991
	Amendment—Oconomowoc Lake, Waukesha County	<u>Community Assistance Planning Report No. 181, A Water Quality Management Plan for Oconomowoc Lake, Waukesha County, Wisconsin</u>	June 19, 1991
	Amendment—Town of Salem	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Salem</u>	June 19, 1991
	Amendment—Town of Caledonia	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Caledonia</u>	June 19, 1991
	Amendment—Village of Hartland	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Hartland</u>	June 19, 1991
	Amendment—Town of Caledonia	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Caledonia</u>	September 11, 1991
	Amendment—Town of Norway	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Norway</u>	September 11, 1991
	Amendment—Town of Rochester	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Rochester</u>	September 11, 1991
	Amendment—Town of Norway	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Norway</u>	September 11, 1991
	Amendment—Brookfield/Elm Grove Area	<u>Community Assistance Planning Report No. 109, Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin</u>	December 4, 1991
	Amendment—Racine Area	<u>Amendment to the Regional Water Quality Management Plan—2000, City of Racine and Environs</u>	December 4, 1991
	Amendment—Pewaukee Lake Area	<u>Amendment to the Regional Water Quality Management Plan: 2000, Lake Pewaukee Sanitary District</u>	December 4, 1991
	Amendment—West Bend Area	<u>Amendment to the Regional Water Quality Management Plan: 2000, City of West Bend/Town of West Bend</u>	December 4, 1991
	Amendment—Town of Salem	<u>Amendment to the Regional Water Quality Management Plan: 2000, Town of Salem</u>	December 4, 1991
	Amendment—City of Mequon and Village of Thiensville	<u>Community Assistance Planning Report No. 188, Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin</u>	January 15, 1992
	Amendment—City of West Bend/Town of West Bend/Silver Lake Sanitary District	<u>Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Town of West Bend/Silver Lake Sanitary District</u>	March 4, 1992
	Amendment—Town of Somers	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Somers</u>	June 17, 1992
	Regional Air Quality Plan	<u>Planning Report No. 28, A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000</u>	June 20, 1980
	Amendment—Emission Reduction Credit Banking and Trading System	<u>Amendment to the Regional Air Quality Attainment and Maintenance Plan: 2000, Emission Reduction Credit Banking and Trading System</u>	December 1, 1983
	Pike River Watershed Plan	<u>Planning Report No. 35, A Comprehensive Plan for the Pike River Watershed</u>	June 16, 1983
	Amendment—Town of Mt. Pleasant	<u>Amendment to the Pike River Watershed Plan, Town of Mt. Pleasant</u>	June 15, 1987
	Amendment—City of Kenosha/Town of Somers	<u>Amendment to the Pike River Watershed Plan, City of Kenosha/Town of Somers</u>	June 15, 1987
	Oak Creek Watershed Plan	<u>Planning Report No. 36, A Comprehensive Plan for the Oak Creek Watershed</u>	September 8, 1986

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Community Assistance Planning	Kenosha Planning District Comprehensive Plan	Planning Report No. 10, <u>A Comprehensive Plan for the Kenosha Planning District</u> , Volumes One and Two	June 1, 1972
	Racine Urban Planning District Comprehensive Plan	Planning Report No. 14, <u>A Comprehensive Plan for the Racine Urban Planning District</u> , Volume One, <u>Inventory Findings and Forecasts</u> ; Volume Two, <u>The Recommended Comprehensive Plan</u> ; Volume Three, <u>Model Plan Implementation Ordinances</u>	June 5, 1975

<sup>a</sup>The regional land use plan is a third-generation plan. The initial regional land use plan was adopted by the Commission on December 1, 1966, and documented in SEWRPC Planning Report No. 7, Land Use-Transportation Study, Volume Three, Recommended Regional Land Use and Transportation Plans—1990. The second-generation regional land use plan was adopted by the Commission on December 19, 1977, and documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, and Volume Two, Alternative and Recommended Plans.

<sup>b</sup>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.

<sup>c</sup>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.

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

<sup>e</sup>The 1992 amendments to the 1978 elderly-handicapped transportation plan supersede a series of earlier amendments to the 1978 plan. These earlier amendments are as follows: 1) an amendment adopted by the Commission on June 20, 1980, and documented in SEWRPC Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Two, Milwaukee Urbanized Area/Milwaukee County; 2) three amendments adopted by the Commission on September 11, 1980, and documented in SEWRPC Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, respectively, in Volume One, Kenosha Urbanized Area; Volume Three, Racine Urbanized Area; and Volume Four, Milwaukee Urbanized Area/Waukesha County; 3) an amendment adopted by the Commission on June 18, 1981, and documented in the Amendment to the Public Transit Accessibility Plan for the Milwaukee Urbanized Area/Waukesha County, City of Waukesha Transit System; 4) five amendments adopted by the Commission on December 7, 1987, and documented, respectively, in SEWRPC Memorandum Report No. 17, A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility; SEWRPC Memorandum Report No. 21, A Public Transit Program for Handicapped Persons—Milwaukee County Transit System; SEWRPC Memorandum Report No. 22, A Public Transit Program for Handicapped Persons—Waukesha County Transit System; SEWRPC Memorandum Report No. 23, A Public Transit Program for Handicapped Persons—City of Kenosha Transit System; and SEWRPC Memorandum Report No. 24, A Public Transit Program for Handicapped Persons—City of Racine Transit System.

<sup>f</sup>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.

Eight 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, Racine, Waukesha, and West Bend urban 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 1992, the Commission added one new element to the comprehensive regional plan: a detailed transit development plan for the City of West Bend. In addition, the Commission adopted a new, third-generation, design year 2010 regional land use plan; two amendments to the regional park and open space plan in the form of detailed park and open space plans for Milwaukee and Walworth Counties, respectively; an amendment to the regional transportation plan in the form of an updated jurisdictional highway system plan for Walworth County; a new, third-generation Kenosha-area transit development plan; five amendments to the regional elderly-handicapped transportation plan, which took the form of paratransit service plans respectively designed to help each of the five public entities within the Region operating fixed-route public transit services meet Americans with Disabilities Act requirements pertaining to paratransit service for persons with disabilities; four amendments to the regional water quality management plan dealing with changes to sanitary sewer service areas at various locations throughout the Region; and a new land use-transportation system development plan for the IH 94 South Corridor in Kenosha, Milwaukee, and Racine Counties. The IH 94 South Corridor plan was adopted as an amendment to both the regional land use plan and the regional transportation plan. As



CONFERENCE ATTENDEES  
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appropriate, each of these plan elements and amendments is discussed subsequently in this Annual Report.

The new, year 2010 regional land use plan was presented at a daylong Regional Planning Conference held on May 5, 1992, in Milwaukee, Wisconsin. The conference, whose theme was "Growth Management through Land Use and Transportation Planning: A Renewed Commitment," was sponsored jointly by the Commission and the University of Wisconsin-Extension. About 450 persons attended the conference, including county and local elected officials, municipal engineers, planners, consulting engineers, attorneys, land developers, and citizens with an interest in growth management and land use and transportation planning. In addition to the presentation on the new regional land use plan, the conference also included presentations on the Federal Intermodal Surface Transportation Efficiency Act of 1991, as well as sessions in which panels addressed the costs of growth and the issue of who pays such costs, the implications of the Intermodal Surface Transportation Efficiency Act, the revitalization of the urban environment, the management and preservation of environmentally sensitive areas, tools and techniques for growth management, public transit planning and development in the Region, quality development and balanced growth, and the effects of implementation of the reauthorized and expanded Federal Clean Air Act upon existing and planned development in the Region.

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

By the end of 1979, the second cycle of areawide systems planning for land use, transportation, and water quality management programs had been completed. The resulting plans represent second-generation plans for the Region, incorporating the feedback from the intensive project and facilities planning efforts completed by local agencies after, and in implementation of, the first-generation areawide system plans. In addition, in September 1992, the Commission adopted a new, third-generation regional land use plan as part of the Commission's periodic review and reappraisal of the major elements of the comprehensive regional plan.

The third-generation regional land use plan, which has a design year of 2010, is based upon the same three basic concepts underlying the first- and second-generation regional land use plans, namely, the centralization of new urban land development to the greatest degree practicable, the preservation and protection of primary environmental corridor lands, and the preservation and protection of prime agricultural lands. While the third-generation regional land use plan is thus conceptually identical to the two

previous regional land use plans, it differs 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 first two plans, sometimes at variance with those plans, as well as forecasts of reduced regional population and household growth.

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, such as 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 1992, the Commission had under way a number of programs designed to refine, detail, amend, or extend the existing plan elements. These work efforts included the following:

- The preparation of a third-generation regional transportation system plan. As with the land use plan, this work effort would extend the transportation plan to the design year 2010, and in so doing meet the planning requirements set forth in the new Federal Intermodal Surface Transportation Efficiency Act. 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. An updated jurisdictional highway system plan for Ozaukee County was completed during the year. Work continued during 1992 on a corridor plan for the IH 94 West freeway in Waukesha County.
- The preparation of a bicycle and pedestrian element of the comprehensive regional transportation system plan. This element is intended to further meet the requirements of the Federal Intermodal Surface Transportation Efficiency Act within the Region. This plan element will consist of a bicycle plan and a pedestrian plan which will be set forth in a combined report. The bicycle plan is proposed to be a policy and system plan which will recommend the creation of a system of bikeways for the urbanized areas of the Region. The pedestrian plan is to contain specific recommendations to local units of government within the Region pertaining to the adoption of policies on sidewalks and other means of facilitating pedestrian travel in Southeastern Wisconsin.
- Additional sanitary sewer service area plans being prepared to refine, detail, and amend the regional water quality management plan. At the end of 1992, such locally focused planning efforts were under way for the Oak Creek area in Milwaukee County, the East Troy and Lake Geneva areas in Walworth County, the West Bend area in Washington County, and the Lannon and Menomonee Falls areas in Waukesha County.
- The preparation of a comprehensive plan for the protection and management of the remaining unique and outstanding natural resources and critical species habitats in the Region. The planning effort, funded by the seven counties of the Region and by the Wisconsin Department of Natural Resources, was proposed in a 1989 Commission prospectus.
- The preparation of a second-generation regional water quality management plan. The new plan under preparation builds upon and is envisioned to supersede the first-generation regional water quality management plan adopted by the Commission in 1979.
- The preparation of a new, updated comprehensive plan for the Kenosha Urban Planning District east of IH 94 in Kenosha County. The new plan, recommended in a prospectus completed by the Commission in 1990, is intended to replace the plan prepared by the Commission and adopted by the local units of government concerned in 1972. In April 1992, the Commission and the local units of government concerned entered into a contract for the preparation of the new plan.

## FUTURE WORK PROGRAMS

The Commission is committed to carrying out a series of continuing planning efforts designed to ensure that the already adopted plan elements are both kept current and extended in terms of design year. Thus, the Commission annually carries on a continuing regional land use planning program designed in part to update and extend the regional land use and regional park and open space plans; a continuing regional transportation planning program designed to update and extend the regional highway, transit, 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 1991 Annual Report, a prospectus calling for the preparation of a comprehensive watershed plan for the Des Plaines River watershed was completed by the Commission and submitted to the Kenosha and

Racine County Boards for their consideration during 1991. In 1992, the two County Boards each approved the prospectus. At year's end, funding arrangements for conducting the study envisioned in the prospectus were pending.

# 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 in the Region be adjusted to the limitations of the natural resource base?
- What is the demand for outdoor recreation in the Region, and how can this demand best be met through the provision of park and open space facilities?

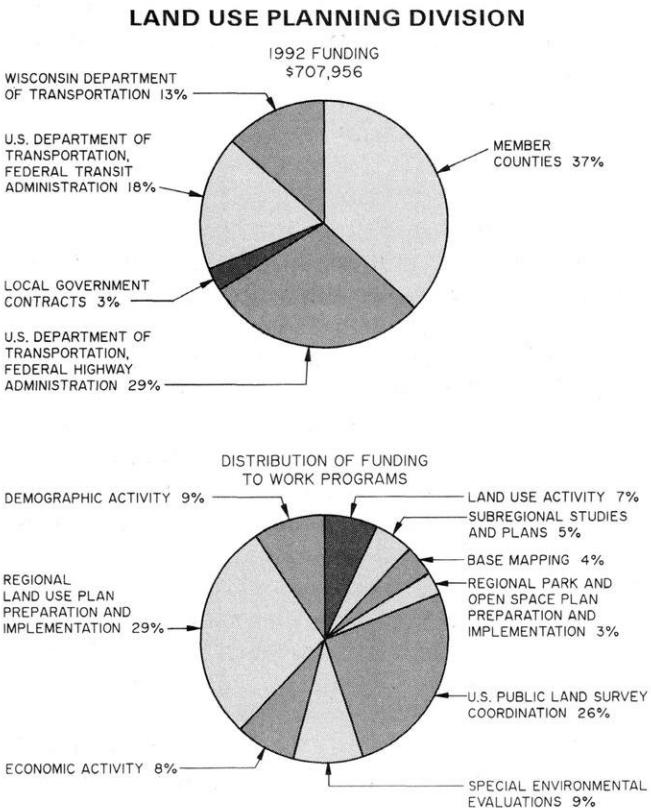
In an attempt to provide answers to these and similar questions, the Land Use Planning Division, during 1992, conducted a number of activities in three identifiable areas: land use

planning, economic and demographic base data collation and analysis, and park and open space planning.

## LAND USE PLANNING

During 1992, the Division efforts in land use planning were directed primarily toward the completion and documentation of a new regional land use plan for the design year 2010. The Division also continued work on updating the regional land use inventory and continued to monitor residential subdivision platting and farmland preservation activity within the seven-county Region during 1992. In addition, efforts were directed toward implementation of the regional land use plan through the application of regional land use plan data to subregional and local planning programs being prepared by the Commission and by county and local units of government in the Region.

Figure 6



## New Regional Land Use Plan

Following a regional planning conference on land use held on May 5, 1992, and following a series of public informational meetings held throughout the Region in the summer of 1992, the Regional Planning Commission, on September 23, 1992, formally adopted a new, third-generation regional land use plan for the year 2010. This plan is documented in SEWRPC Planning Report No. 40, A Regional Land Use Plan for Southeastern Wisconsin—2010, January 1992.

In preparing the new regional land use plan, the Commission used the same basic planning process that was used to prepare the two prior regional land use plans. The process included inventories of population, households, and employment in the Region; of the natural resource and public utility bases; of historic and existing land use patterns; and of the status of county and local land use plans and zoning ordinances. The plan reevaluation effort also involved formulating a revised set of regional land use development objectives, together with supporting planning principles and quantitative design standards. The planning process also included the development of forecasts to the year 2010 of population, household, and employment levels for the Region, its seven counties, and subareas of each county. The effort culminated in the preparation of a new recommended regional land use plan designed to accommodate anticipated growth and change in the Region to the year 2010.

All of the land use planning work was undertaken under the guidance of a Technical Coordinating and Advisory Committee on Regional Land Use Planning. This 30-member Committee consisted of county and local planners from throughout the Region, as well as representatives of concerned Federal and State agencies, the private land development community, and the university community. The membership of this Committee is listed in Appendix B of this report. The Committee members contributed much time and effort over a 13-month period, carefully reviewing the planning work as it proceeded, with particularly careful attention to the land use objectives, to the recommended plan, and to the alternatives thereto. At the completion of the work, the Committee unanimously recommended approval of the new plan.

Like the two preceding plans, the new regional land use plan has been scaled to a selected set of population, household, and employment forecasts for the Region. The Advisory Committee selected the forecasts after reviewing a series of alternative future growth scenarios and population and employment projections attendant to each of the scenarios. Three sets of scenarios were reviewed: high-growth, low-growth, and intermediate-growth, the growth scenario upon which the adopted plan is based.

The population of the Region, which stood at about 1.81 million persons in 1990, would increase by the year 2010 under the high-growth scenario to about 2.32 million persons. It would increase under the intermediate-growth scenario, on which the recommended plan is based, to about 1.91 million persons, about a 6 percent increase. Under the low-growth scenario, the regional population would decline to about 1.52 million persons.

Under the high-growth scenario, the number of households in the Region, which stood at 676,100 in 1990, would increase to about 852,700 households by 2010; and to about 774,300 households under the intermediate-growth scenario, about a 15 percent increase. Under the low-growth scenario, the number of households in the Region would increase to about 701,900.

Under the high-growth scenario, regional employment, which stood at about 990,000 jobs in 1990, would increase to about 1.25 million jobs by 2010; and to about 1.10 million jobs under the intermediate-growth scenario, about an 11 percent increase. Under the low-growth scenario, regional employment would decrease to about 871,000 jobs.

The year 2010 regional land use plan for Southeastern Wisconsin is shown in graphic summary form on Map 2, while salient information concerning the plan is set forth in Table 2. The salient recommendations of the new plan are as follows:

1. Urban Development Location and Density  
Like the two earlier regional land use plans, the new plan recommends a relatively compact, centralized land use pattern. Urban development is recommended to occur generally in concentric rings along the full periphery of, and outward from, existing urban centers. New urban

Map 2

ADOPTED LAND USE PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2010

LEGEND

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



GRAPHIC SCALE  
0 2 3 4 5 6 MILES  
0 5 10 15 20 25 30 35 40,000 FEET

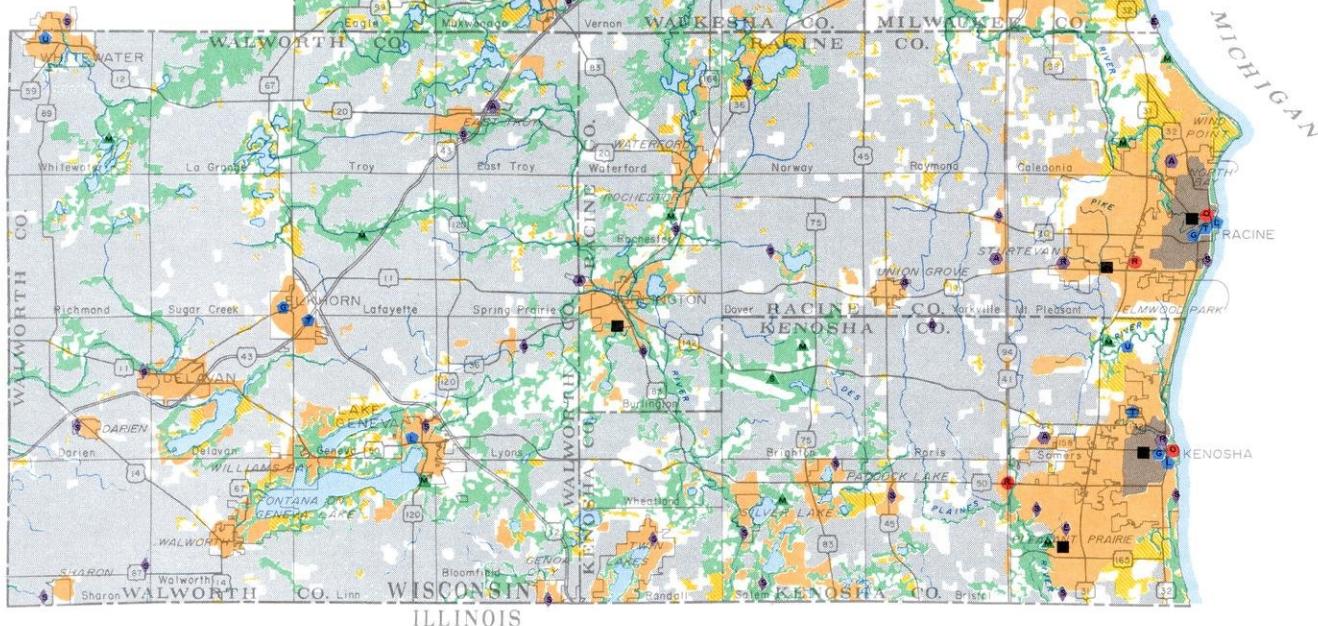


Table 2

## ADOPTED REGIONAL LAND USE PLAN: SELECTED DATA FOR THE REGION

Plan Element	Existing 1985	Planned Increment 1985-2010	Total 2010
Population			
Kenosha County . . . . .	121,100	26,800	147,900
Milwaukee County . . . . .	939,600	-5,600	934,000
Ozaukee County . . . . .	67,500	12,300	79,800
Racine County . . . . .	169,200	16,800	186,000
Walworth County . . . . .	72,200	15,100	87,300
Washington County . . . . .	87,200	24,500	111,700
Waukesha County . . . . .	285,900	78,400	364,300
Region Total	1,742,700	168,300	1,911,000
Households			
Kenosha County . . . . .	44,200	14,900	59,100
Milwaukee County . . . . .	368,200	32,800	401,000
Ozaukee County . . . . .	22,900	7,600	30,500
Racine County . . . . .	61,200	12,700	73,900
Walworth County . . . . .	25,600	10,000	35,600
Washington County . . . . .	28,500	13,100	41,600
Waukesha County . . . . .	93,200	39,400	132,600
Region Total	643,800	130,500	774,300
Employment (jobs)			
Kenosha County . . . . .	42,500	20,500	63,000
Milwaukee County . . . . .	527,300	85,400	612,700
Ozaukee County . . . . .	26,900	11,800	38,700
Racine County . . . . .	74,500	17,600	92,100
Walworth County . . . . .	28,100	12,400	40,500
Washington County . . . . .	31,300	16,600	47,900
Waukesha County . . . . .	141,300	58,800	200,100
Region Total	871,900	223,100	1,095,000
Land Use			
Urban (square miles)			
Residential			
High-Density (10 dwelling units per acre) . . . . .	43.4	2.8	46.2
Medium-Density (4 dwelling units per acre) . . . . .	84.6	48.1	132.7
Low-Density (1 dwelling unit per acre) . . . . .	147.8	4.8	152.6
Suburban-Density (1 dwelling unit per 2 acres) . . . . .	12.6	2.1	14.7
Subtotal	288.4	57.8	346.2
Commercial . . . . .	13.6	2.1	15.7
Industrial . . . . .	18.9	8.1	27.0
Governmental . . . . .	26.9	1.6	28.5
Transportation, Communication, and Utilities <sup>a</sup> . . . . .	187.9	22.8	210.7
Recreational . . . . .	40.0 <sup>b</sup>	6.3 <sup>c</sup>	46.3
Unused . . . . .	30.0	-13.1	16.9
Subtotal	605.7	85.6	691.3
Rural (square miles)			
Residential (5 + acres per dwelling unit) . . . . .	-.d	1.1	1.1
Agricultural . . . . .	1,456.2	-63.3	1,392.9
Other Open Lands <sup>e</sup> . . . . .	627.3	-23.4	603.9
Subtotal	2,083.5	-85.6	1,997.9
Total	2,689.2	0.0	2,689.2

Table 2 (continued)

Plan Element	Existing 1985	Planned Increment 1985-2010	Total 2010
Land Use (continued)			
Major Regional Centers			
Commercial .....	14	5	19
Industrial .....	22	3	25
Recreational .....	27	4	31
Primary Environmental Corridors (square miles) .....	468.1	5.6	473.7
Urban Population Density			
Persons per Square Mile (total) .....	3,600	--	2,800
Public Sanitary Sewer Service			
Urban Land Development Served (square miles) .....	319.8	250.5	570.3
Percent of Total Urban Land .....	67.1	--	85.4
Population Served			
Number .....	1,507,800	231,300	1,739,100
Percent of Total Population .....	86.5	--	91.0
Population Unserved .....	234,900	--	171,900

<sup>a</sup>Includes off-street parking areas.

<sup>b</sup>Includes net site area of public and nonpublic recreational sites.

<sup>c</sup>Includes only that net site area recommended for public recreational use.

<sup>d</sup>Included in 1985 land use inventory as part of urban residential land use.

<sup>e</sup>Includes woodlands, water, wetlands, unused rural land, landfill sites, and quarries.

development would be encouraged in those areas which are covered by soils suitable for development; which are not subject to special hazards, such as flooding and shoreline erosion; and which can be readily served by essential municipal facilities and services, particularly public sanitary sewerage, water supply, and mass transit. The planned urban development areas in the Region are shown in yellow, orange, and brown on Map 2.

Under the recommended plan, the amount of land in urban uses within the Region would increase from about 605 square miles in 1985 to about 691 square miles in 2010, an increase of about 86 miles, or by about 14 percent. Most new urban development would occur in planned neighborhood units at medium densities, about 4,750 persons per square mile, with a typical single-

family lot of one-quarter acre and a typical multi-family development of about 10 dwelling units per acre. All such development would be provided with basic urban services and facilities so that by the year 2010 about 85 percent of all urban land and about 91 percent of the total resident population would be served by public sanitary sewer and water supply services.

The overall resident population density of the developed area of the Region would, under the plan, decline from a 1985 level of about 3,600 persons per square mile to a year 2010 level of about 2,800 persons per square mile, continuing the trend of declining overall population densities evident in the Region since 1920. The rate of decline, however, would be reduced by implementation of plan proposals to develop most new urban land within the Region at medium

rather than low densities and to provide such development with public sanitary sewer and water supply services.

Like the two previously adopted regional land use plans, the design year 2010 plan includes specific recommendations with respect to the development and maintenance of major regional commercial, industrial, and recreational centers.

## 2. Major Commercial Centers

The plan identifies two types of major commercial centers: major retail centers and major office centers. A major retail center is defined as accommodating at least 2,000 retail jobs; a major office center is defined as accommodating at least 3,500 office and service-related jobs. In 1985, there were 14 such major commercial centers in the Region (see Map 3). Together, these 14 centers accommodated about 121,000 retail, service, and office jobs in 1985, or about 30 percent of all such jobs in the Region. Of the 14 sites, seven were classified as major retail centers, four as major office centers, and three as major combined retail and office centers.

Under the adopted plan, all 14 existing major commercial centers would be retained and, in some cases, expanded. Five new major centers are proposed, including four major office centers and one major retail center. These centers are shown by the red dots on Map 3. The five proposed new centers would be located at the intersection of IH 94 and STH 50 in the City of Kenosha, Village of Pleasant Prairie, and Town of Bristol; at the intersection of IH 94 and CTH J in the Town of Pewaukee, Waukesha County; at the Milwaukee County grounds in the City of Wauwatosa; along USH 45 in the northwestern portion of the City of Milwaukee; and along IH 43 in the eastern portion of the City of Mequon. Together, the 19 major commercial centers planned for 2010 would accommodate about 199,000 retail, service, and office jobs, or about 38 percent of all such forecast employment within the Region.

## 3. Major Industrial Centers

A major industrial center is defined as a concentration of industrial land having a

minimum of 3,500 "industrial" jobs. These are jobs in the manufacturing, wholesaling, and construction sectors of the economy. The major industrial centers of Southeastern Wisconsin range in character from older industrial complexes in central-city areas to planned industrial parks in outlying areas of the Region.

In 1985, there were 22 major industrial centers in the Region (see Map 3). Together, these 22 centers accommodated about 168,000 industrial jobs in 1985, or about 58 percent of all such jobs in the Region.

Under the adopted plan, all 22 existing major industrial centers would be retained and, in some cases, expanded. Three new major industrial centers are proposed at locations shown by the red squares on Map 3. The three proposed new centers would be located in or near the Cities of Burlington and Hartford and the Village of Pleasant Prairie.

The plan recommendation to retain all the existing major industrial centers has particular significance for those centers located in the central areas of Milwaukee County and the Cities of Kenosha and Racine. Employment levels at some of these older industrial centers have decreased substantially during the past two decades as a result of the general decline in heavy manufacturing and the overall decentralization of industry within the Region. Despite these declines, the adopted plan proposes that these older industrial areas be retained as major industrial centers, with long-term employment levels at least approximating 1985 levels at most centers. These sites have ready access to regional transportation systems, are well served by existing utility systems, and are readily accessible to large segments of the regional labor force. Given the current trend of industrial decentralization, however, the maintenance of these sites will require effective industrial retention and expansion efforts.

## 4. Major Public Outdoor Recreation Centers

A major public outdoor recreation center is defined as a park having an area of at least 250 acres and providing opportunities

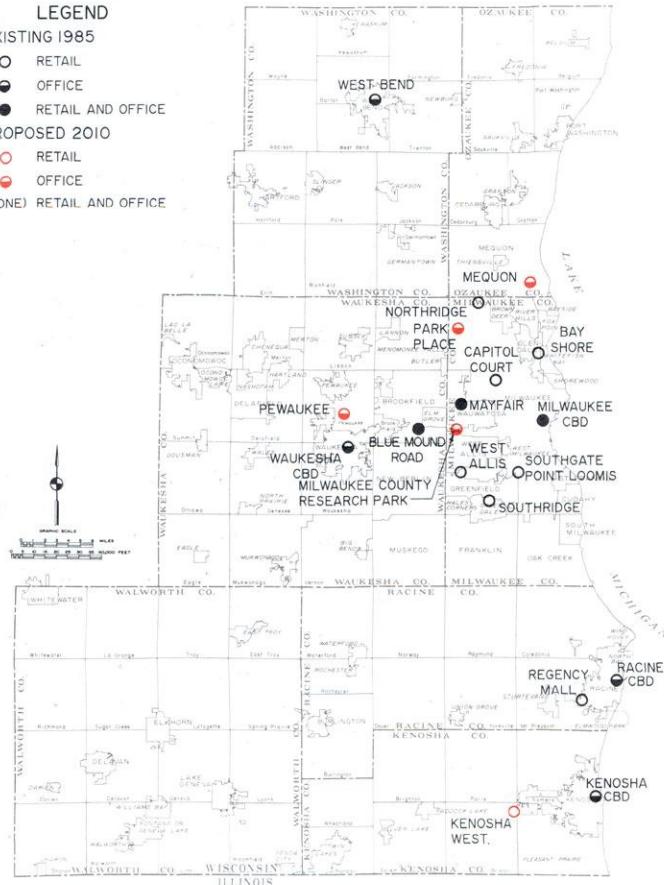
Map 3

MAJOR CENTERS IN THE REGION: 2010 ADOPTED LAND USE PLAN

MAJOR COMMERCIAL CENTERS

LEGEND

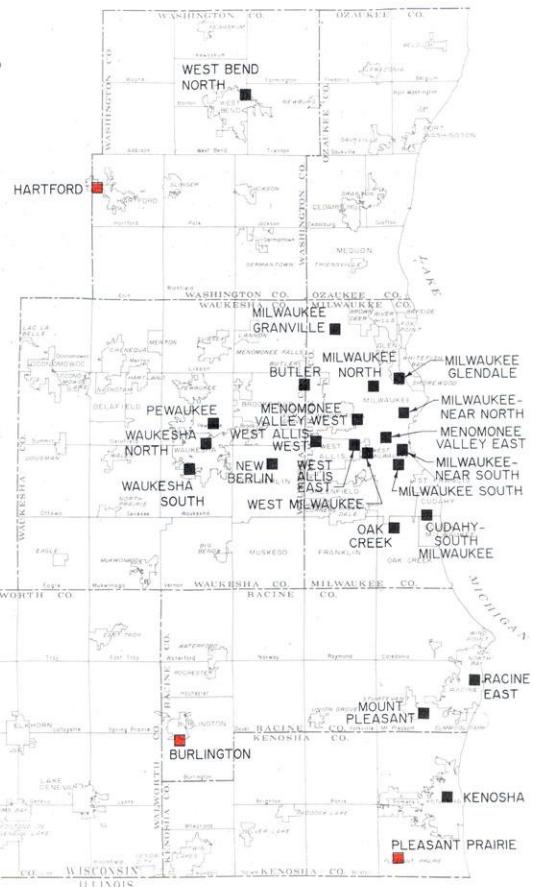
EXISTING 1985  
 ○ RETAIL  
 ● OFFICE  
 ● RETAIL AND OFFICE  
 PROPOSED 2010  
 ○ RETAIL  
 ● OFFICE  
 (NONE) RETAIL AND OFFICE



MAJOR INDUSTRIAL CENTERS

LEGEND

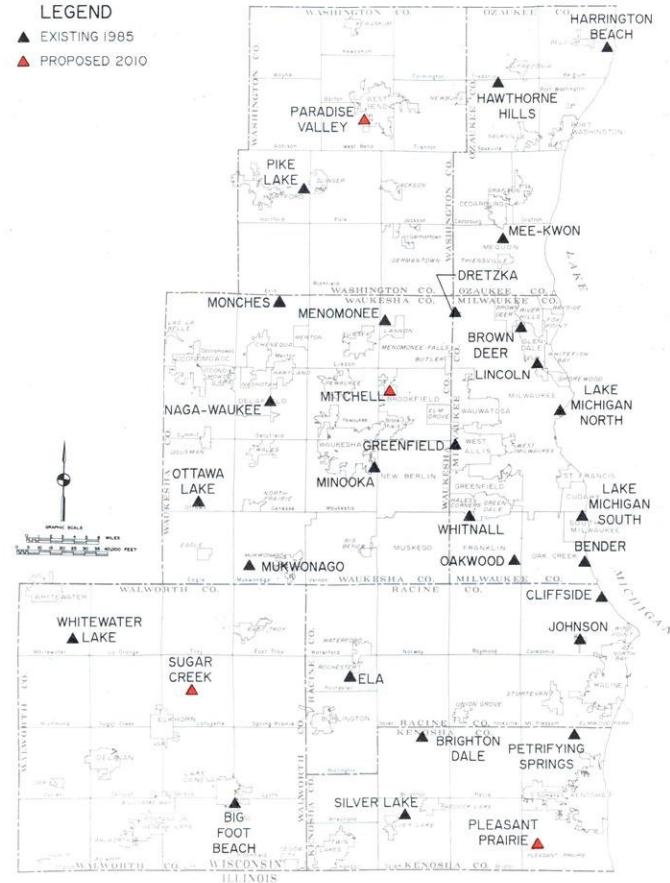
■ EXISTING 1985  
 ■ PROPOSED 2010



MAJOR OUTDOOR RECREATION CENTERS

LEGEND

▲ EXISTING 1985  
 ▲ PROPOSED 2010



for a variety of resource-based outdoor recreation activities. In 1985, there were 27 such major outdoor recreation centers in the Region (see Map 3).

Under the adopted plan, all 27 existing major public outdoor recreation centers would be retained and, in some cases, expanded and fully developed. In addition, the plan proposes four new major parks at locations shown by the red triangles on Map 3. These four proposed new major parks would be located in the southwestern portion of the Village of Pleasant Prairie; along Sugar Creek in the Town of Lafayette, Walworth County; in the northwestern portion of the City of Brookfield; and at Lucas Lake in the Town of West Bend, Washington County.

##### **5. Primary Environmental Corridors**

Like the previous plans, the new plan recommends the preservation of those lands identified as primary environmental corridors (shown in green on Map 2) in essentially open, natural uses. Such corridors include concentrations of natural resource elements, including woodlands, wetlands, wildlife habitat areas, and surface waters and associated floodlands and shorelands, as well as features closely related to those elements, such as historic, scenic, and recreational sites. The essentially linear primary environmental corridors represent a composite of the best remaining elements of the natural resource base of the Region and have immeasurable environmental and recreational value. Environmental corridors currently encompass about 468 square miles, or about 17 percent of the total area of the Region. The plan envisions that certain adjacent floodland areas that are currently in agricultural or other open uses would be restored to wetland condition, thereby making them part of the environmental corridor network. These additional lands encompass about six square miles. The planned environmental corridors thus encompass about 474 square miles, or just under 18 percent of the total area of the Region.

The preservation of these corridors in essentially open, natural uses is perhaps the singularly most important element of

the regional land use plan. Such preservation is essential to maintaining a high level of environmental quality in the Region, protecting its natural heritage and beauty, and providing scientific, educational, and recreational opportunities. The exclusion of urban development from these corridors will also help to prevent the creation of such serious and costly problems as air and water pollution, wet and flooded basements, building and pavement foundation failures, and excessive infiltration and inflow of clear water into sanitary sewerage systems.

##### **6. Prime Agricultural Lands**

Also like the prior regional land use plans, the new year 2010 regional land use plan proposes the preservation, to the greatest extent practicable, of those areas of the Region which have been identified as prime agricultural lands. These areas, shown in gray on Map 2, in 1985 encompassed about 1,047 square miles, or 39 percent of the Region. The new plan proposed to convert to urban use only about 16 square miles, or about 1 percent, of the remaining prime agricultural lands of the Region.

##### **7. Other Rural Development**

The new regional land use plan recommends that the residual agricultural and rural lands of the Region, shown in white on Map 2, continue to be used for agricultural and rural residential purposes. These lands do not meet the criteria for designation as either primary environmental corridors or prime agricultural lands. In addition, these lands were not found in the plan design process to be needed to accommodate urban development through the year 2010. If these lands are converted from agricultural to residential use, the plan recommends that such conversion result in truly rural residential development, defined as a density not exceeding one residence per five acres of land.

The regional land use plan report outlines specific plan implementation recommendations for the local, county, State, and Federal units and agencies of government concerned. These recommendations include the following:

1. Formal adoption or endorsement of the regional land use plan as a guide against which land development proposals can be evaluated as they arise and in light of which better development decisions can be made by all parties concerned. Formal adoption of the regional land use plan by a county or local unit of government would signify basic agreement with the objectives underlying the plan and with the general pattern of urban and rural development identified in the plan, recognizing that the plan is subject to continual interpretation and to refinement and detailing through county and local planning.
2. The preparation by county and local governments of more detailed land use plans set within the overall framework of the regional land use plan. This step is particularly important, since the regional land use plan by design is general in nature and prepared at the systems level of planning. The usefulness of the regional land use plan can be greatly enhanced by the preparation and adoption of county and local land use plans that refine and detail the regional land use plan.
3. The adjustment of county and local zoning ordinances and zoning district maps to reflect the basic use and density recommendations set forth in the regional land use plan and in any subsequent county and local plans which refine and detail that plan. For example, the areas identified for urban development under the plan should be placed into types of zoning districts that would be consistent with the overall urban development densities recommended in the plan. The primary environmental corridors should be placed within types of zoning districts that would seek to preserve and to protect properly the resources concerned. This includes not only floodland, shoreland, and wetland zoning districts, but upland conservancy districts that would permit rural residential development at densities not to exceed one unit per five acres of upland corridor. Prime agricultural lands should be placed in zoning districts that would seek to preserve farmlands by imposing a minimum farm size of 35 acres. Finally, the residual rural areas identified

in the plan should be placed in zoning districts which permit agriculture and truly rural residential development at a density not to exceed one residential unit per five acres of rural land.

Implementation of the new regional land use plan will ultimately provide the Region with a balanced allocation of space to the various urban and rural land uses. This allocation will properly meet the social, physical, and economic needs of the growing and changing regional population. It will also provide a spatial distribution of the various land uses which will result in a more compatible arrangement of land uses properly related to the supporting transportation and utility systems to assure the economical provision of transportation and utility services. Most importantly, implementation of the land use plan will do much to assure the protection and wise use of the natural resource base of the Region.

Implementation of, or failure to implement, the adopted plan will affect not only the efficiency of supporting transportation and utility systems, and thereby directly affect the cost of living and doing business within the Region, but will also affect the overall quality of the environment within the Region for many generations to come. It is therefore hoped that government, business and industry, and interested citizen groups and individuals within the Region will take an active interest in the plan recommendations, which are advisory to all concerned, carefully reviewing their soundness and practicality, and, if in agreement with the recommendations, support and act toward their implementation.

### **Preservation of Farmland**

As already noted, a major recommendation of all three generations of regional land use plans adopted by the Commission 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 counties 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 and zoning 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 farm products with a value of at least \$6,000 in the last year or \$18,000 in the past three years. In addition, all participants in the program are required to adhere to sound soil conservation practices. A farmland owner who claims a farmland preservation tax credit on the basis of exclusive agricultural zoning must include in his or her State income tax return a certificate from the local zoning administrator verifying that his or her land is located within an exclusive agricultural zoning district.

Program changes enacted in 1988 provided an opportunity for 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 could apply for such agreements between July 1, 1988, and June 30, 1991. After that period, for farmers who did not sign such an agreement, the requirement of exclusive agricultural zoning for tax-credit eligibility in urban counties is once again in effect.

Under the Wisconsin 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 or her 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.

The level of participation in the Wisconsin Farmland Preservation Program for tax year 1991 is presented in Table 3, Figure 7, and Map 4. Based upon the number of zoning certificates issued and the number of long-term preservation agreements in effect, a total of 1,356 farms encompassing a combined total of 181,127 acres, or about 27 percent of the prime agricultural land in the Region, were included in the program in tax year 1991. Among the seven counties of the Region, Walworth County had the highest level of participation: 707 farms encompassing 97,380 acres, or about 47 percent of the prime agricultural land in that County.

The vast majority of participants in the program qualified on the basis of exclusive agricultural zoning. Thus, a total of 1,295 zoning certificates for farms encompassing 173,371 acres, or about 26 percent of the prime agricultural land in the Region, were issued in the Region for tax year 1991. In contrast, long-term farmland preservation agreements were in effect on only 61 farms encompassing 7,756 acres, or about 1 percent of the prime agricultural land in the Region, for tax year 1991.

In tax year 1991, the average tax credit for participating landowners in Southeastern Wisconsin was \$1,280, or about 26 percent of the average property tax of \$4,887. Among the seven counties of the Region, the average tax credit level ranged from \$363 in Milwaukee County to \$1,747 in Kenosha County (see Table 4).

#### *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 Wisconsin Legislature in 1977. Six counties in the Southeastern Wisconsin 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).

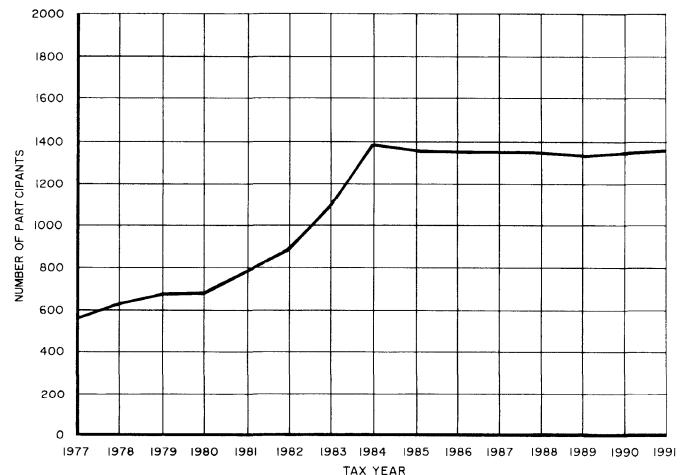
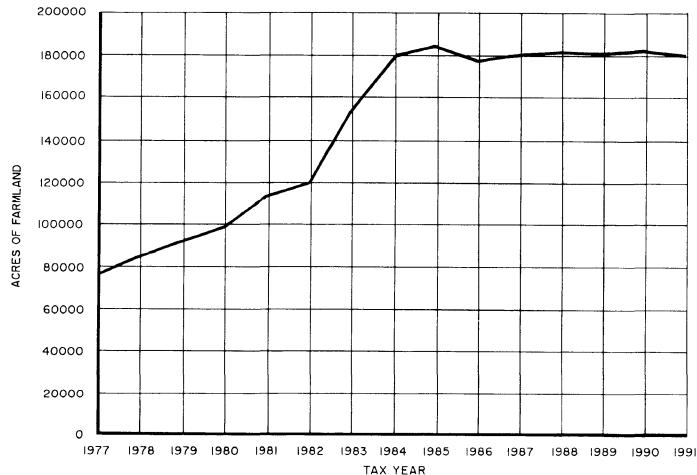
Table 3

## PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM: TAX YEAR 1991

County	Participants				Acres of Farmland				Farmland Preservation Program Acres as a Percent of Prime Agricultural Land	Acres of Prime Agricultural Land: 1985		
	Zoning Certificates	Long-Term Agreements	Total		Zoning Certificates	Long-Term Agreements	Total					
			Number	Percent of Region			Number	Percent of Region				
Kenosha . . . . .	36	8	44	3.3	4,554	1,545	6,099	3.4	8.0	76,471		
Milwaukee . . . . .	4	0	4	0.3	263	0	263	0.1	19.5	1,351		
Ozaukee . . . . .	263	8	271	20.0	32,137	648	32,785	18.1	44.7	73,335		
Racine . . . . .	26	4	30	2.2	4,977	611	5,588	3.1	5.7	98,626		
Walworth . . . . .	707	0	707	52.1	97,380	0	97,380	53.8	46.6	208,941		
Washington . . . . .	126	34	160	11.8	16,680	4,165	20,845	11.5	19.3	108,256		
Waukesha . . . . .	133	7	140	10.3	17,380	787	18,167	10.0	17.6	103,078		
Region	1,295	61	1,356	100.0	173,371	7,756	181,127	100.0	27.0	670,058		

NOTE: The total number of agreements by county as shown in this table may differ from figures shown on Map 4 in cases where a single agreement pertains to lands located in more than one civil division.

Figure 7

PARTICIPATION IN THE WISCONSIN FARMLAND  
PRESERVATION PROGRAM FOR THE REGION: TAX YEARS 1977-1991

## 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 1992, exclusive agricultural zoning ordinances certified by the Wisconsin Land Conservation Board had been adopted by 45 local units of government in the Region. Twenty-six towns, six in Kenosha County, two in Racine County, 16 in Walworth County, and two in Waukesha County, have adopted exclusive agricultural zoning under county-enacted zoning ordinances. Fourteen towns, six in Ozaukee County, five in Washington County, and three in Waukesha County, have applied exclusive agricultural

Table 4

AVERAGE TAX-CREDIT LEVELS UNDER  
THE WISCONSIN FARMLAND PRESERVATION  
PROGRAM: TAX YEAR 1991

County	Average Property Tax	Average Tax Credit	
		Amount	Percent of Property Tax
Kenosha . . . . .	\$4,988	\$1,747	35.0
Milwaukee . . . . .	2,471	363	14.7
Ozaukee . . . . .	4,891	1,172	24.0
Racine . . . . .	5,772	1,223	21.2
Walworth . . . . .	4,803	1,300	27.1
Washington . . . . .	5,204	1,240	23.8
Waukesha . . . . .	5,017	1,481	29.5
Region	\$4,887	\$1,280	26.2

NOTE: Tax and tax credit levels presented in this table are based upon the county of residence of the landowner, which may be different from the county in which the land is located. Data for corporate landowners are not included.

Map 4

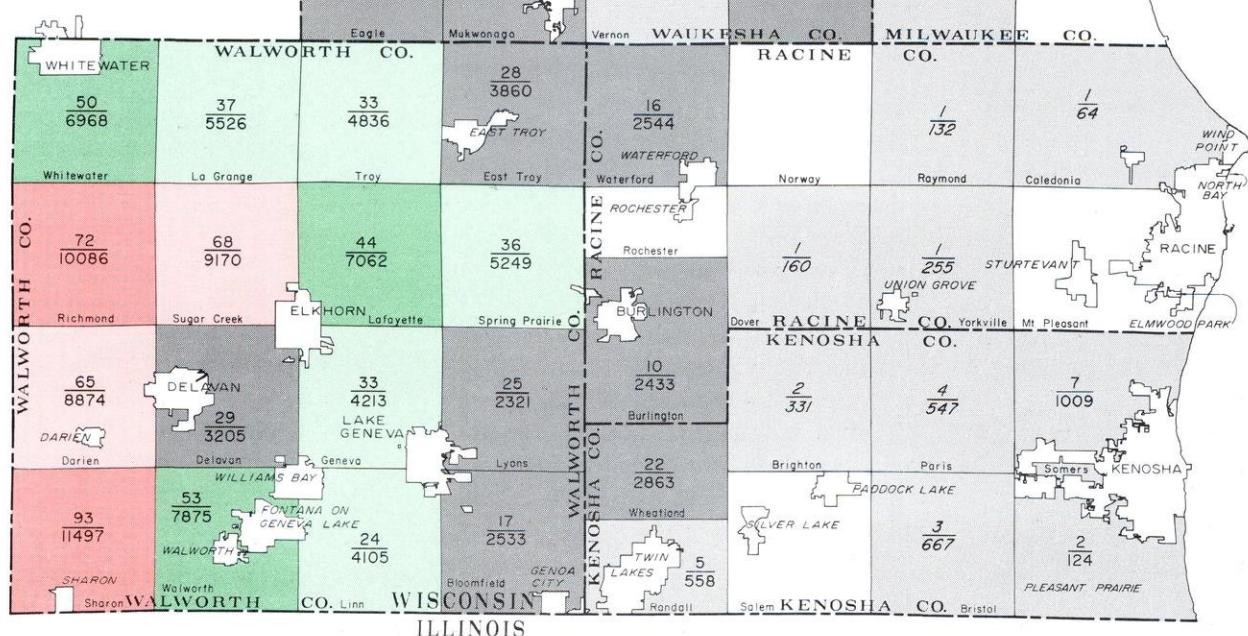
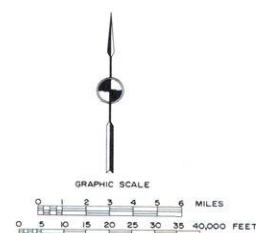
PARTICIPATION IN THE WISCONSIN  
FARMLAND PRESERVATION  
PROGRAM BY MINOR CIVIL DIVISION  
IN THE REGION: TAX YEAR 1991

LEGEND

17  
2533 NUMBER OF ZONING CERTIFICATES ISSUED  
NUMBER OF ACRES CERTIFIED

8  
858 NUMBER OF LONG-TERM AGREEMENTS  
NUMBER OF ACRES UNDER LONG-TERM  
AGREEMENTS

ACRES CERTIFIED OR UNDER  
LONG-TERM AGREEMENTS



Map 5

CERTIFICATION STATUS OF  
FARMLAND PRESERVATION  
PLANS AND EXCLUSIVE  
AGRICULTURAL ZONING IN  
THE REGION: TAX YEAR 1992

## LEGEND

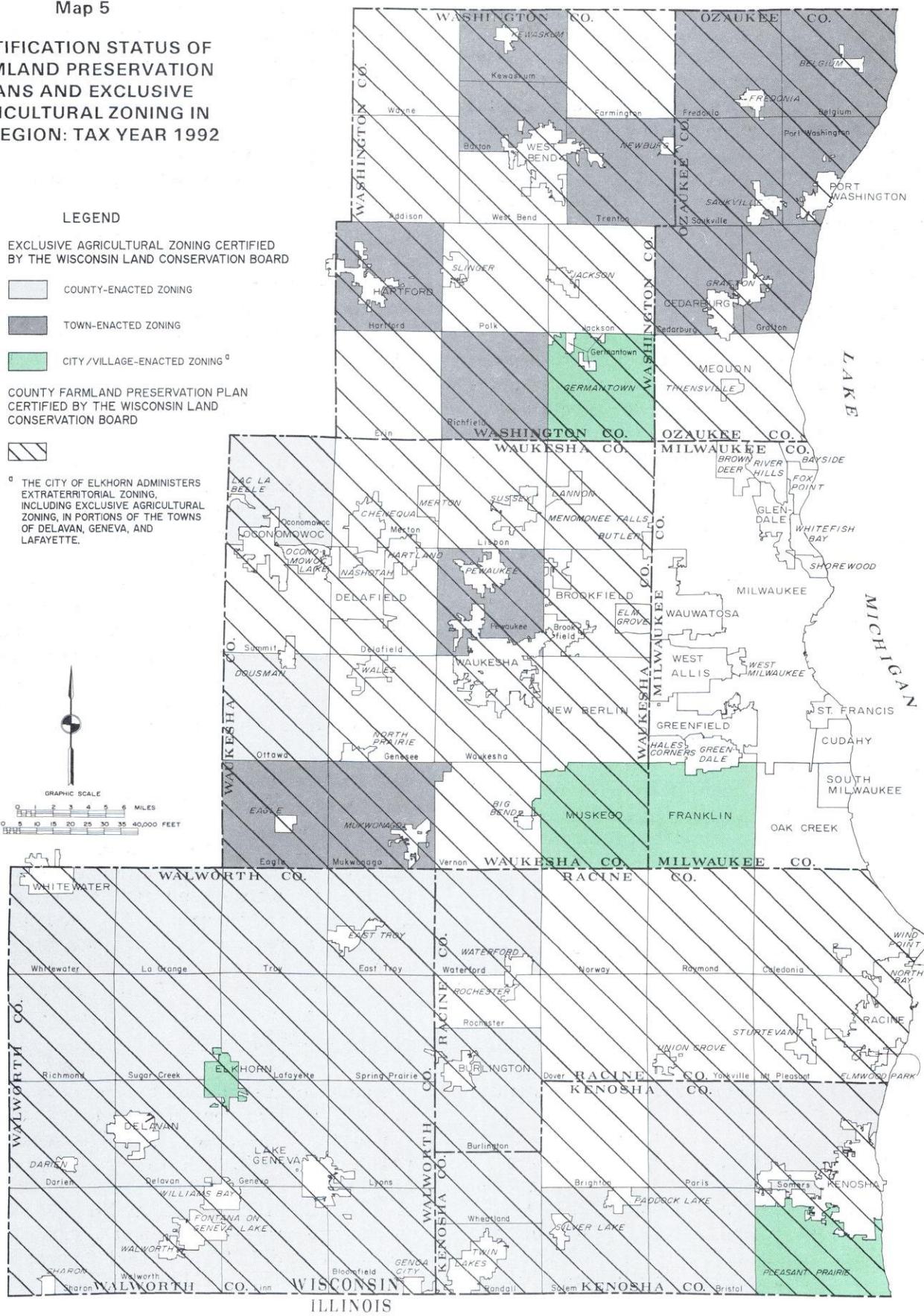
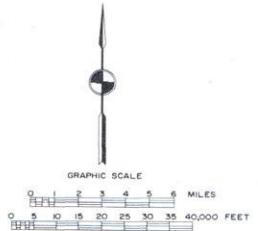
EXCLUSIVE AGRICULTURAL ZONING CERTIFIED  
BY THE WISCONSIN LAND CONSERVATION BOARD

### COUNTY-ENACTED ZONING

 CITY / VILLAGE-ENACTED ZONING <sup>a</sup>

COUNTY FARMLAND PRESERVATION PLAN  
CERTIFIED BY THE WISCONSIN LAND  
CONSERVATION BOARD

<sup>a</sup> THE CITY OF ELKHORN ADMINISTERS EXTRATERRITORIAL ZONING, INCLUDING EXCLUSIVE AGRICULTURAL ZONING, IN PORTIONS OF THE TOWNS OF DELAVAN, GENEVA, AND LAFAYETTE.



zoning under town-enacted zoning ordinances. The City of Franklin in Milwaukee County, the City of 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 Wisconsin Farmland Preservation Act. In addition, the City of Elkhorn administers extraterritorial zoning, including exclusive agricultural zoning, in the Towns of Delavan, Geneva, and Lafayette. (See Map 5.)

### **Regional Land Use Inventory**

Reliable basic planning and engineering data, collected on a uniform, areawide basis, are essential to the formulation of workable development plans and monitoring the implementation of such plans. Particularly important for land use planning is up-to-date information regarding the amount and spatial distribution of the various categories of land use in the Region. Such data were initially developed by the Commission in 1963, with reinventories completed in 1970, 1975, 1980, and 1985. In 1992, the Land Use Division continued work on a reinventory of land use in the Region based upon new aerial photography taken in the spring of 1990. The inventory update involves a visual comparison of 1990 aerial photographs and corresponding 1985 photographs and delineation of any changes, field inspection of areas as necessary to ensure accurate identification of new land uses, and encoding of all identified changes on the Commission computer graphics system. Such encoding allows for automated reproduction of land use inventory maps and related data analysis functions.

### **Residential Subdivision Platting Activity**

The Commission annually monitors land subdivision activities in the Region. A total of 4,650 residential lots were created in the Region during 1992 through subdivision plats, compared with 3,821 lots platted in 1991. Of the residential lots created in 1992, 4,070 lots, or about 88 percent, were served by public sanitary sewers; the remaining 580 lots, or 12 percent, were served by onsite septic tank sewage disposal systems (see Table 5 and Map 6). In the seven counties in Southeastern Wisconsin, the number of residential lots created through subdivision plats in 1992 ranged from a low of

223 lots in Ozaukee County to a high of 1,588 lots in Waukesha County. The historic trend in residential platting activity since 1960 is shown for the Region and by county in Figure 8.

## **ECONOMIC AND DEMOGRAPHIC BASE ANALYSIS**

During 1992, the Division continued to monitor secondary data sources on changes in population, employment, and school enrollment levels and to provide pertinent socio-economic 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 in terms of "place-of-work" employment data. It should be noted that the enumeration of jobs does not distinguish between full- and part-time jobs or indicate whether or not 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 1980, 1990, and 1992 is set forth in Table 6 by employment category.

The number of jobs in the Region in 1992 was estimated at 997,400, an increase of 7,100 jobs, or about 1 percent, from the 1990 level of 990,300 jobs. As shown in Table 6, about one-half of the employment sectors, including wholesale trade; finance, insurance, and real estate; services; government and education; and self-employment provided more jobs in 1992 than in 1990. In terms of jobs lost, the largest decrease in employment between 1990 and 1992 occurred in the manufacturing sector, a decrease of 11,500 jobs, or about 5 percent.

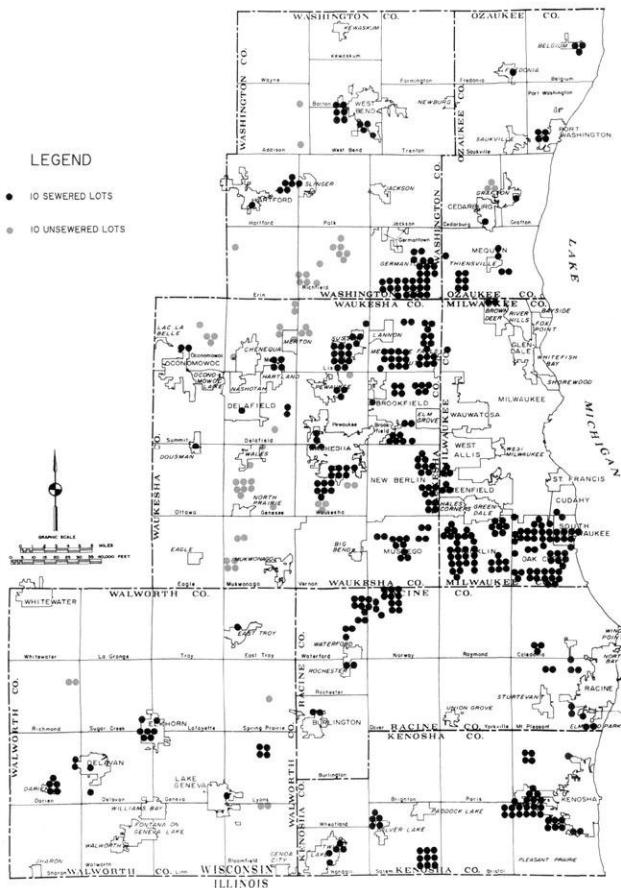
Employment distribution by county is shown in Table 7. In five counties, Kenosha, Ozaukee, Walworth, Washington, and Waukesha, there were more jobs in 1992 than in 1990, with the largest increase, 14,200 jobs, occurring in Waukesha County. In Milwaukee and Racine Counties, there were respectively about 17,000, or about 3 percent, and 1,400, or about 2 percent, fewer jobs available in 1992 than in 1990.

Table 5  
RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1992

County	Sewered Lots		Unsewered Lots		Total Lots	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha . . . . .	506	100.0	0	--	506	10.9
Milwaukee . . . . .	1,031	100.0	0	--	1,031	22.2
Ozaukee . . . . .	197	88.3	26	11.7	223	4.8
Racine . . . . .	423	100.0	0	--	423	9.1
Walworth . . . . .	220	81.8	49	18.2	269	5.8
Washington . . . . .	465	76.2	145	23.8	610	13.1
Waukesha . . . . .	1,228	77.3	360	22.7	1,588	34.1
Region	4,070	87.5	580	12.5	4,650	100.0

Map 6

RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1992



*Comparison of Actual and Alternative Future 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 were prepared 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, have been and 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, May 1984.

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 "low-growth" and "high-growth" extremes of future regional employment levels; the third was intended to identify an intermediate-growth 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 (2nd Edition) were developed using an approach similar to that used successfully by the Commis-

Figure 8

RESIDENTIAL LOTS PLATTED IN THE REGION AND ITS COUNTIES: 1960-1992

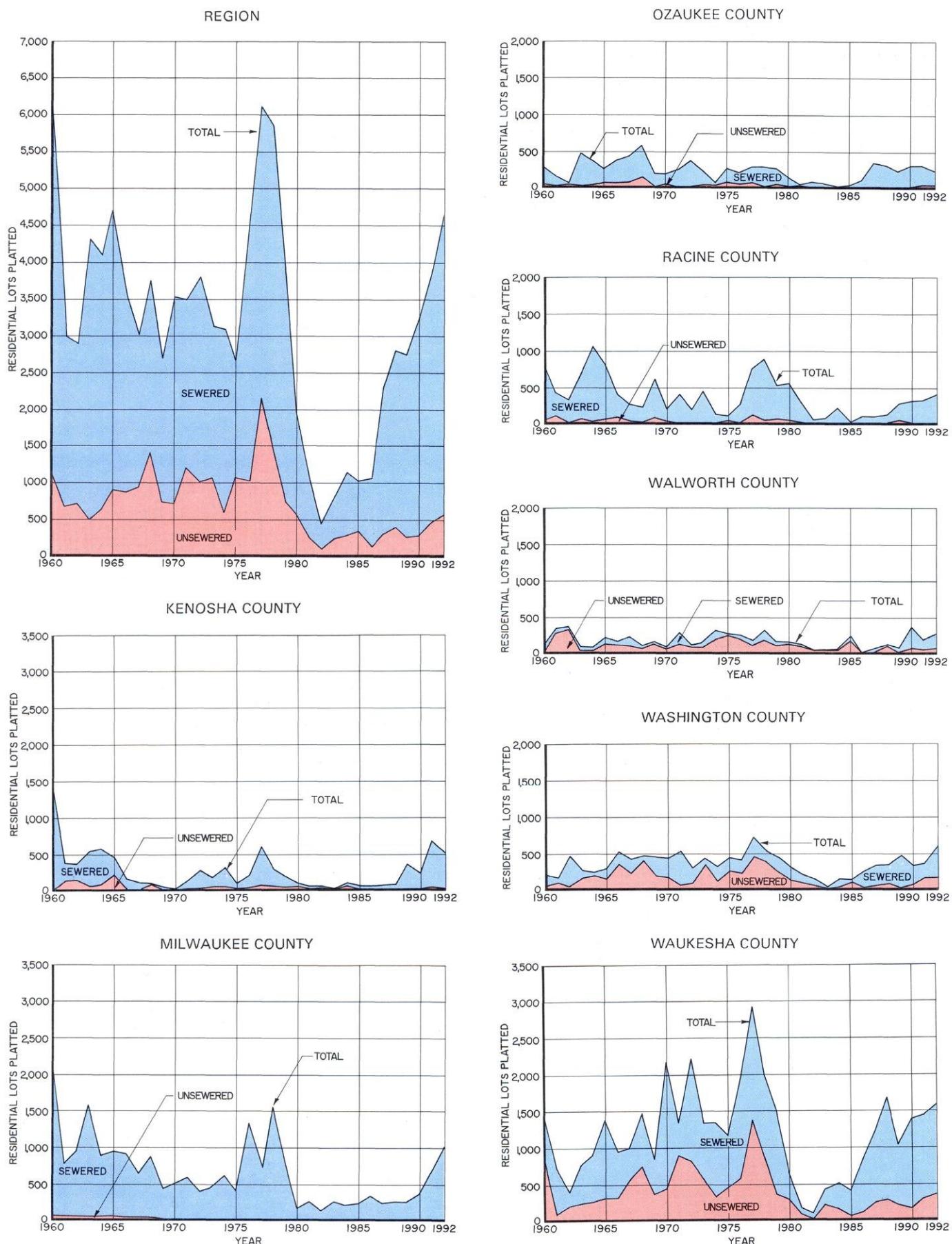


Table 6

## REGIONAL EMPLOYMENT BY CATEGORY: 1980, 1990, AND 1992

Employment Category	1980	1990 <sup>a</sup>	1992	1980-1990 Change		1990-1992 Change	
				Number	Percent	Number	Percent
Agriculture . . . . .	12,800	9,800	9,300	-3,000	-23.4	-500	-5.1
Construction . . . . .	25,800	32,500	32,200	6,700	26.0	-300	-0.9
Manufacturing							
Food and Kindred Products . . . . .	20,900	17,000	16,000	-3,900	-18.7	-1,000	-5.9
Printing and Publishing . . . . .	16,300	23,500	23,700	7,200	44.2	200	0.9
Primary Metals . . . . .	16,600	11,700	10,800	-4,900	-29.5	-900	-7.7
Fabricated Metals . . . . .	31,800	27,500	23,900	-4,300	-13.5	-3,600	-13.1
Nonelectrical Machinery . . . . .	73,100	57,100	52,500	-16,000	-21.9	-4,600	-8.1
Electrical Machinery . . . . .	40,100	24,000	23,000	-16,100	-40.1	-1,000	-4.2
Transportation Equipment . . . . .	21,500	8,700	9,600	-12,800	-59.5	900	10.3
Other Manufacturing . . . . .	41,500	57,600	56,100	16,100	38.8	-1,500	-2.6
Subtotal	261,800	227,100	215,600	-34,700	-13.3	-11,500	-5.1
Transportation, Communication, and Utilities . . . . .	39,600	40,900	40,700	1,300	3.3	-200	-0.5
Wholesale Trade . . . . .	43,500	50,900	51,900	7,400	17.0	1,000	2.0
Retail . . . . .	131,900	155,700	152,400	23,800	18.0	-3,300	-2.1
Finance, Insurance, and Real Estate . . . . .	41,200	49,900	51,200	8,700	21.1	1,300	2.6
Services . . . . .	158,200	218,700	232,200	60,500	38.2	13,500	6.2
Government and Education . . . . .	120,700	139,500	145,700	18,800	15.6	6,200	4.4
Self-Employed, Except Farm . . . . .	46,200	63,000	63,900	16,800	36.4	900	1.4
Miscellaneous <sup>b</sup> . . . . .	2,500	2,300	2,300	-200	-8.0	0	0.0
Total	884,200	990,300	997,400	106,100	12.0	7,100	0.7

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

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

Table 7

## REGIONAL EMPLOYMENT BY COUNTY: 1980, 1990, AND 1992

County	1980	1990	1992	1980-1990 Change		1990-1992 Change	
				Number	Percent	Number	Percent
Kenosha . . . . .	50,100	46,500	49,500	-3,600	-7.2	3,000	6.5
Milwaukee . . . . .	542,300	578,200	561,200	35,900	6.6	-17,000	-2.9
Ozaukee . . . . .	25,600	32,200	34,900	6,600	25.8	2,700	8.4
Racine . . . . .	76,100	82,200	80,800	6,100	8.0	-1,400	-1.7
Walworth . . . . .	31,100	37,100	41,300	6,000	19.3	4,200	11.3
Washington . . . . .	31,400	41,800	43,200	10,400	33.1	1,400	3.3
Waukesha . . . . .	127,600	172,300	186,500	44,700	35.0	14,200	8.2
Region	884,200	990,300	997,400	106,100	12.0	7,100	0.7

**Table 8**  
**ACTUAL AND ALTERNATIVE FUTURE NUMBER OF JOBS BY COUNTY: 1992**

County	Estimated 1992 Jobs	Alternative Future 1992 Jobs		
		Low-Growth Scenario	Recommended Plan	High-Growth Scenario
Kenosha . . . . .	49,500	45,800	51,100	58,300
Milwaukee . . . . .	561,200	484,200	527,500	580,700
Ozaukee . . . . .	34,900	23,800	27,500	33,600
Racine . . . . .	80,800	72,900	82,200	98,900
Walworth . . . . .	41,300	30,300	34,800	42,600
Washington . . . . .	43,200	32,400	36,800	44,000
Waukesha . . . . .	186,500	127,300	139,500	155,700
Region	997,400	816,700	899,400	1,013,800

sion 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 high-growth and low-growth 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.

Subsequent to the preparation of the 2010 employment forecasts and as part of the preparation of the 2010 regional land use plan, the Technical Coordinating and Advisory Committee on Regional Land Use Planning reviewed the employment forecasts in view of recent changes in the economic structure and employment distribution within the Region. Upon completion of this review, the Committee recommended that the intermediate-growth future as set forth in Technical Report No. 10 (2nd Edition) be adjusted and used as the basis for the 2010 recommended plan. The following table, figures, and discussion therefore reflect the forecast on which the new regional land use plan is based as well as alternative projections considered.

Employment in the Region in 1992 was anticipated to total 1,013,800 jobs under the high-growth scenario; 899,400 jobs under the recommended plan; and 816,700 jobs under the low-growth scenario. The estimated 1992 level of 997,400 jobs lies about 2 percent below the level anticipated under the high-growth scenario and

about 11 percent and 22 percent, respectively, above the levels anticipated under the recommended plan and the low-growth scenario. The 1992 employment levels for the Region and each of its seven counties under each of the three alternative futures and the 1992 estimated employment levels for the Region and its counties are set forth in Table 8 and Figure 9.

#### 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 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 Figure 10. 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 951,100 persons in 1992. Between 1990 and 1992, the civilian labor force increased by about 9,900 persons, or about 1 percent, from a 1990

Figure 9

ACTUAL AND ALTERNATIVE FUTURE COUNTY AND REGIONAL EMPLOYMENT LEVELS: 1960-2010

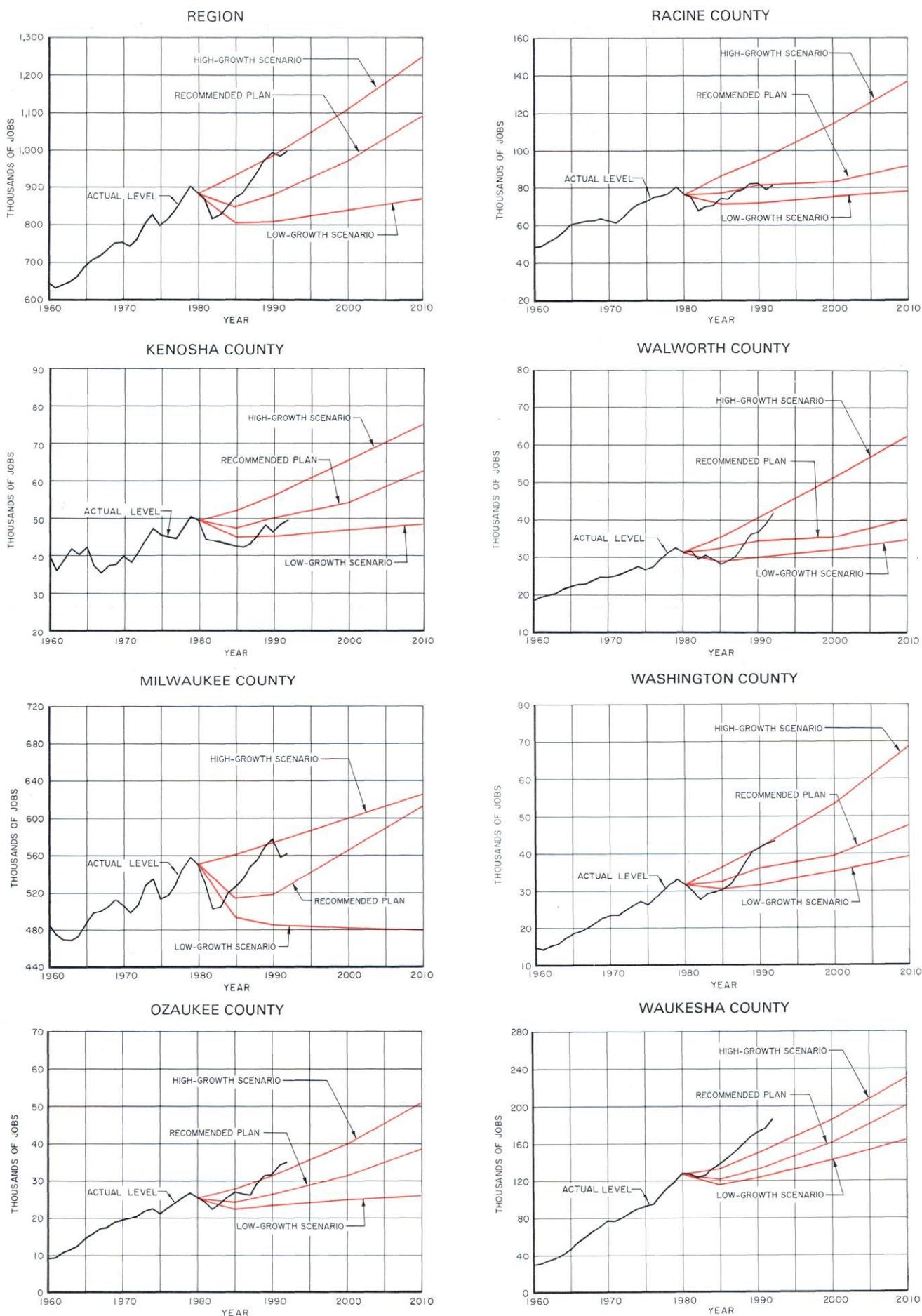


Figure 10

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR THE REGION AND ITS COUNTIES: 1975-1992

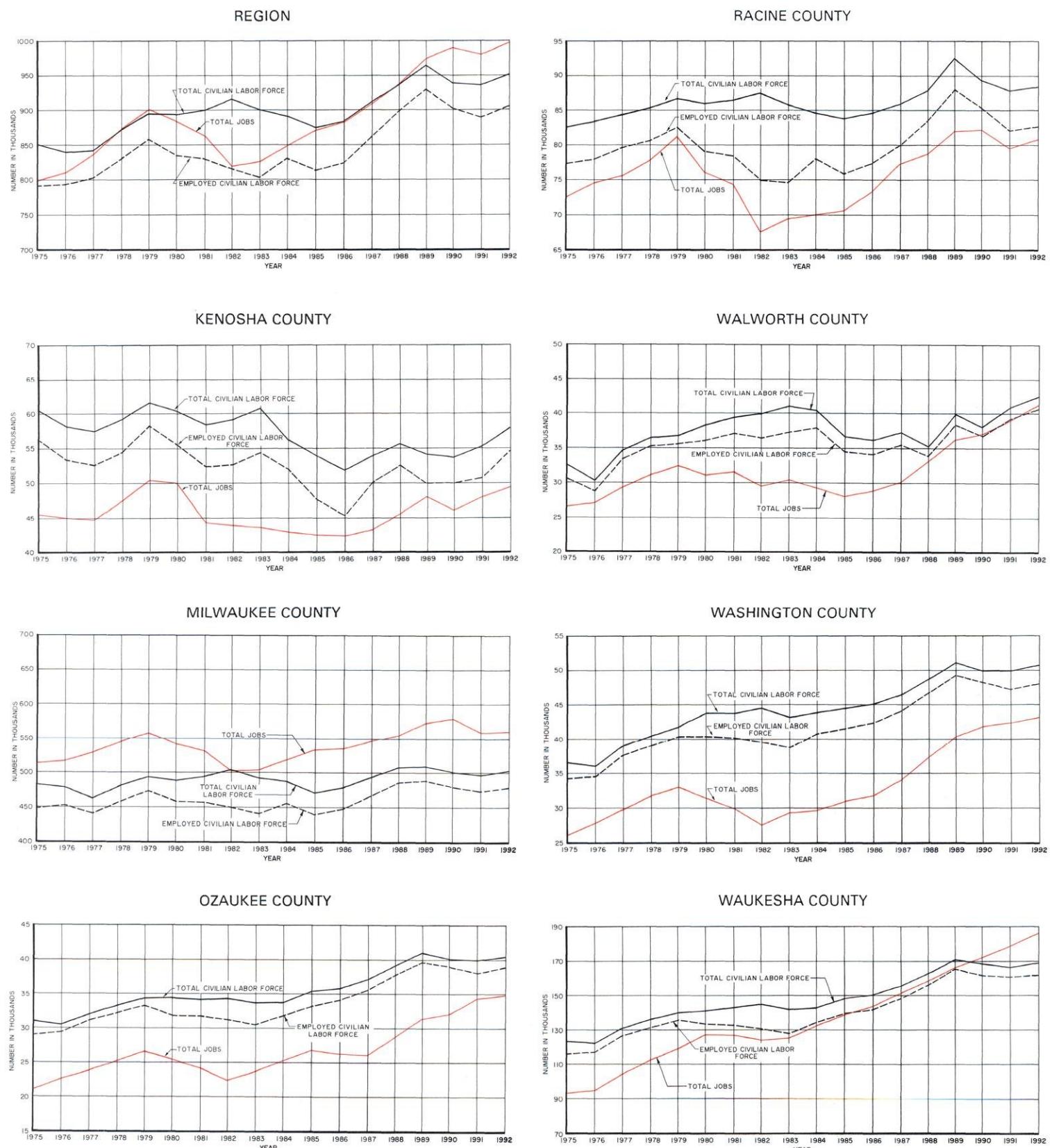


Table 9

## POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 1980, 1990, AND 1992

County	Population			1980-1990 Change		1990-1992 Change	
	1980 Census	1990 Census	1992 Estimate	Number	Percent	Number	Percent
Kenosha . . . . .	123,100	128,200	131,600	5,100	4.1	3,400	2.7
Milwaukee . . . . .	965,000	959,300	965,100	-5,700	-0.6	5,800	0.6
Ozaukee . . . . .	67,000	72,800	74,900	5,800	8.7	2,100	2.9
Racine . . . . .	173,100	175,100	177,900	2,000	1.2	2,800	1.6
Walworth . . . . .	71,500	75,000	77,100	3,500	4.9	2,100	2.8
Washington . . . . .	84,900	95,300	99,400	10,400	12.2	4,100	4.3
Waukesha . . . . .	280,200	304,700	313,500	24,500	8.7	8,800	2.9
Region	1,764,800	1,810,400	1,839,500	45,600	2.6	29,100	1.6

level of 941,200 persons.<sup>1</sup> During the same time period, the number of employed members of the civilian labor force increased from about 903,400 in 1990 to about 906,100 in 1992, an increase of 2,700 persons, or less than 1 percent. The number of unemployed members of the civilian labor force increased from about 37,800 in 1990 to about 45,000 in 1992, an increase of about 7,200, or about 19 percent. The unemployment rate in 1992 was 4.7 percent, compared to 4.0 percent in 1990.

### Actual Population Levels

The size of the resident population of the Region increased from about 1,764,800 residents in 1980 to about 1,810,400 residents in 1990, an increase

of about 45,600 residents, or about 3 percent.<sup>2</sup> This increase was considerably larger than the increase of 8,700 residents, or less than 1 percent, from 1970 to 1980, but still much smaller than the increases of 333,000 residents, or about 27 percent, from 1950 to 1960, and 182,500 residents, or about 12 percent, from 1960 to 1970.

The Wisconsin Department of Administration estimates of 1992 resident population levels for the Region and its counties are set forth in Table 9. The Department 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 for exemptions for dependents claimed on income tax returns. In 1992, the resident population of the Region was

<sup>1</sup>The 1990 total, employed, and unemployed civilian labor force estimates previously set forth in the Commission's 1990 Annual Report were revised by the U. S. Bureau of Labor Statistics during 1991. The revised 1990 data are presented in this Annual Report. The revised 1990 total civilian labor force level of 941,200 as presented in this Annual Report is 11,700, or about 1.2 percent, less than the original estimate of 952,900 presented in the 1990 Annual Report. Similarly, the revised 1990 employed civilian labor force level of 903,400 is 12,200, or about 1.3 percent, less than the original estimate of 915,600 and the revised 1990 unemployed civilian labor force level of 37,800 is 500, or about 1.3 percent, greater than the original estimate of 37,300.

<sup>2</sup>The 1990 total resident population level for Kenosha County set forth in the Commission's 1990 Annual Report was revised by the U. S. Bureau of the Census during 1991, and the revised data for 1990 were presented in the 1991 Annual Report. Upon further review in 1992, the U. S. Bureau of the Census determined that no revision to the original Kenosha County population level of 128,181 was required. Therefore, this report restores the original population level for 1990 for Kenosha County in Table 9.

estimated by the Department to be about 1,839,500 persons, an increase of about 29,100 persons, or about 2 percent, over the 1990 census population level. Every county in the Region experienced population increases between 1990 and 1992, ranging from a low of about 2,100 persons, or about 3 percent, in both Ozaukee and Walworth Counties to a high of about 8,800 persons, or about 3 percent, in Waukesha County.

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 consists of 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 provide one important basis for the evaluation of changes in resident population levels.

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 difference between total population change from a given date to a subsequent date and the computed natural increase between the two dates.

Between the census date of April 1, 1990, and January 1, 1992, the total population increase of 29,100 persons resulted from a natural increase of about 23,600 persons and a net in-migration of about 5,500 persons. Natural increase in the Region has been relatively stable since 1980, ranging from about 10,000 to 14,000 persons yearly. Since 1980, Milwaukee County has recorded a net out-migration of about 7,400 persons, while all other counties in the Region have recorded net in-migration, ranging from a low of about 500 persons in Racine County to a high of about 5,100 persons in Waukesha County.

#### *Comparison of Actual and Alternative Future 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 provided one of the bases upon which all adopted regional plan elements, particularly the adopted regional land use and regional transportation system plans, were and will be reappraised and extended to the year 2010. The projections are documented in SEWRPC Technical Report No. 11 (2nd Edition), The Population of Southeastern Wisconsin, June 1984.

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 "low-growth" and "high-growth" extremes of future regional population levels; the third was intended to identify an "intermediate-growth" 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.

Subsequent to the preparation of the 2010 population forecasts and as part of the preparation of the 2010 regional land use plan, the Technical Coordinating and Advisory Committee on Regional Land Use Planning reviewed the population forecasts in view of the findings of the 1990 U. S. Census of Population and Housing. Upon completion of this review, the Committee recommended that the intermediate-growth future, as set forth in Technical Report No. 11 (2nd Edition), be revised and used as the basis for the 2010 recommended plan. The following table, figure, and discussion therefore reflect the recommended plan population data as adopted by the Committee.

Under the high-growth scenario, the population level of the Region was anticipated to be 1.97 million persons in 1992. The actual 1992 regional population level of 1.84 million persons noted

above is about 6 percent below this anticipated level. Under the low-growth scenario, the population level of the Region was anticipated to be 1.59 million persons in 1992. The actual 1992 population level is about 16 percent above this level. Under the recommended plan, the population level of the Region was anticipated to be 1.76 million persons in 1992. The actual 1992 population level is about 4 percent above this level. The 1992 population levels for each of the Region's seven counties under each of these three alternative futures and the 1992 county population levels are set forth in Table 10 and Figure 11.

### Actual Household Levels

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

The estimated number of households in the Region in 1992 is shown by county in Table 11. Between 1990 and 1992, the number of households in the Region increased from about 676,100 households in 1990 to about 693,200 households in 1992, an increase of 17,100 households, or about 3 percent. Each county in the Region experienced an increase in household levels during the period from 1990 to 1992, ranging from a low of 1,100 households, or about 4 percent, in Ozaukee County to a high of 5,300 households, or about 5 percent, in Waukesha County.

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

As in the preparation of employment and population projections, the conceptual framework used by the Commission to develop the household projections was the "alternative futures" method. Using this method, three alternative future household scenarios, low-growth, intermediate-growth, and high-growth, were devel-

oped. Each of these scenarios is closely linked to a corresponding economic scenario for the Region. As with the year 2010 employment and population forecasts, the Technical Coordinating and Advisory Committee on Regional Land Use Planning reviewed the year 2010 household forecasts in light of the findings of the 1990 U. S. Census of Population and Housing. Upon completion of this review, the Committee recommended that the intermediate-growth future be revised and used as the basis for the 2010 recommended plan. The following table, figure, and discussion therefore reflect the recommended plan household data as adopted by the Committee.

Under the high-growth scenario, it was anticipated that there would be 708,600 households in the Region in 1992. The estimated 1992 regional household level of 693,200 is about 2 percent below this anticipated level. Under the low-growth scenario, it was anticipated that there would be 625,300 households in the Region in 1992. The estimated 1992 regional household level is about 11 percent above this level. Under the recommended plan, it was anticipated that there would be 662,700 households in the Region in 1992. The estimated 1992 regional household level is about 5 percent above this level. The actual and alternative future 1992 household levels for each of the Region's seven counties are set forth in Table 12 and Figure 12.

### School Enrollment

Enrollment in public and nonpublic schools within the Region totaled about 363,800 students in 1992, representing an increase of 14,900 students, or about 4 percent, over the 1990 level of 348,900 students, as indicated in Table 13. Enrollment in public schools was about 292,300 students in 1992, about 9,100 students, or 3 percent, above the 1990 level of 283,200. Enrollment in nonpublic schools was about 71,500 students in 1992, about 5,800 students, or 9 percent, above the 1990 level of 65,700.

Map 7 shows public school enrollment changes between 1990 and 1992 for public 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 single districts for the purpose of preparing this map. Some 46 districts, or 84 percent of the public K-12 and the combined union high school

Table 10

## ACTUAL AND ALTERNATIVE FUTURE RESIDENT POPULATION LEVELS BY COUNTY: 1992

County	1992 Population	Alternative Future 1992 Population		
		Low-Growth Scenario	Recommended Plan	High-Growth Scenario
Kenosha . . . . .	131,600	109,000	119,900	139,100
Milwaukee . . . . .	965,100	855,700	920,200	970,300
Ozaukee . . . . .	74,900	60,200	70,600	88,400
Racine . . . . .	177,900	151,700	166,800	191,900
Walworth . . . . .	77,100	66,500	79,400	89,700
Washington . . . . .	99,400	77,600	99,500	118,600
Waukesha . . . . .	313,500	267,000	307,400	368,000
Region	1,839,500	1,587,700	1,763,800	1,966,000

and K-8 districts, have experienced enrollment increases since 1990. The remaining nine districts, Cedar Grove, Cedarburg, Greenfield, Kewaskum, Nicolet, Norris, Salem Central, Waukesha, and Wauwatosa, experienced enrollment decreases during this period.

### 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.

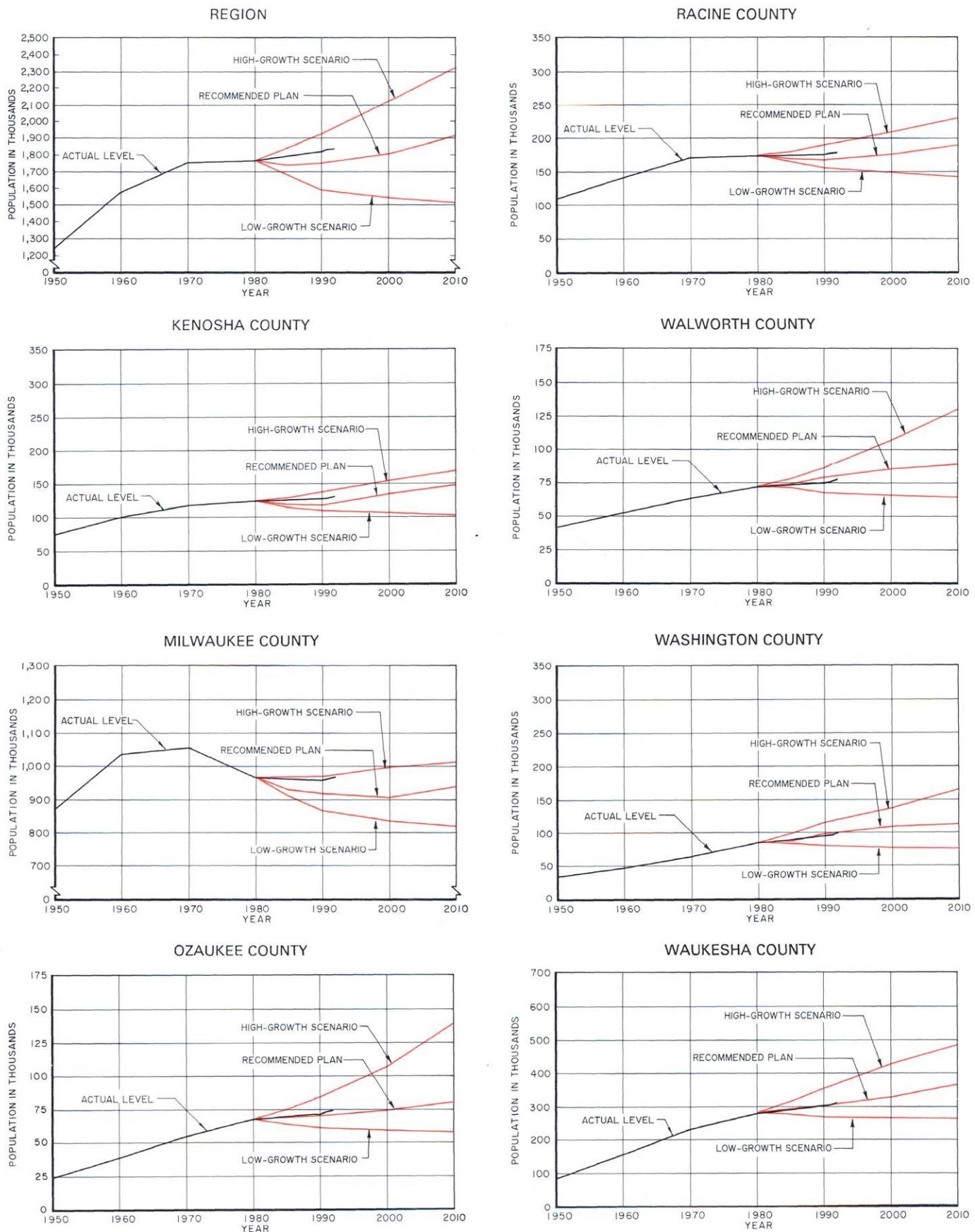
As part of its continuing census coordinating function within the Region, the Commission also serves as a clearinghouse and central repository for a wide variety of census data holdings. A computer-readable geographic base file containing street address ranges and census statistical tabulating and reporting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

### PARK AND OPEN SPACE PLANNING

On December 1, 1977, the Commission adopted a regional park and open space plan for Southeastern Wisconsin consisting of two basic elements: an open space preservation element and an outdoor recreation element. The open space preservation element 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

Figure 11

ACTUAL AND ALTERNATIVE FUTURE COUNTY AND REGIONAL POPULATION LEVELS: 1950-2010



**Table 11**  
**HOUSEHOLDS IN THE REGION BY COUNTY: 1980, 1990, AND 1992**

County	Households			1980-1990 Change		1990-1992 Change	
	1980 Census	1990 Census	1992 Estimate	Number	Percent	Number	Percent
Kenosha . . . . .	43,100	47,000	49,100	3,900	9.0	2,100	4.5
Milwaukee . . . . .	363,600	373,100	376,600	9,500	2.6	3,500	0.9
Ozaukee . . . . .	21,800	25,700	26,800	3,900	17.9	1,100	4.3
Racine . . . . .	59,400	63,700	65,200	4,300	7.2	1,500	2.4
Walworth . . . . .	24,800	27,600	28,900	2,800	11.3	1,300	4.7
Washington . . . . .	26,700	33,000	35,300	6,300	23.6	2,300	7.0
Waukesha . . . . .	88,600	106,000	111,300	17,400	19.6	5,300	5.0
Region	628,000	676,100	693,200	48,100	7.7	17,100	2.5

**Table 12**  
**ACTUAL AND ALTERNATIVE FUTURE HOUSEHOLD LEVELS BY COUNTY: 1992**

County	1992 Households	Alternative Future 1992 Households		
		Low-Growth Scenario	Recommended Plan	High-Growth Scenario
Kenosha . . . . .	49,100	42,200	44,400	49,600
Milwaukee . . . . .	376,600	357,300	366,900	372,300
Ozaukee . . . . .	26,800	21,800	24,500	29,500
Racine . . . . .	65,200	57,200	60,600	67,200
Walworth . . . . .	28,900	25,900	29,700	32,200
Washington . . . . .	35,300	27,100	33,300	38,200
Waukesha . . . . .	111,300	93,800	103,300	119,600
Region	693,200	625,300	662,700	708,600

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, November 1977, 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 1992, 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

Figure 12

ACTUAL AND ALTERNATIVE FUTURE COUNTY AND REGIONAL HOUSEHOLD LEVELS: 1950-2010

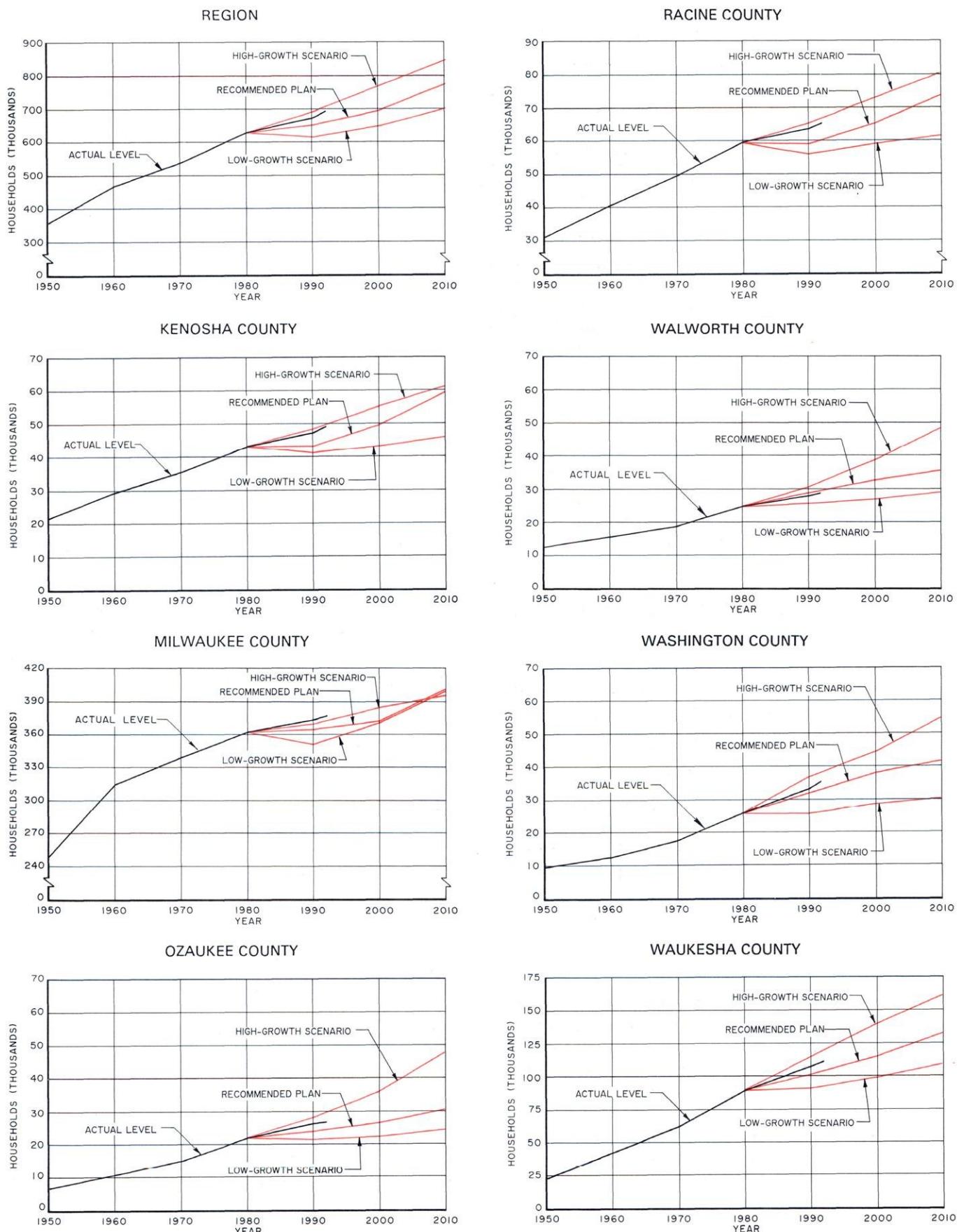


Table 13  
REGIONAL SCHOOL ENROLLMENT BY COUNTY: 1980, 1990, AND 1992

County	1980	1990	1992	Difference			
				1980-1990		1990-1992	
				Number	Percent	Number	Percent
Kenosha . . . . .	26,700	25,000	25,600	-1,700	-6.4	600	2.4
Milwaukee . . . . .	184,900	178,700	183,000	-6,200	-3.4	4,300	2.4
Ozaukee . . . . .	15,000	13,700	14,600	-1,300	-8.7	900	6.6
Racine . . . . .	38,800	35,200	36,600	-3,600	-9.3	1,400	4.0
Walworth . . . . .	13,700	13,200	13,800	-500	-3.6	600	4.5
Washington . . . . .	21,500	20,000	25,000	-1,500	-7.0	5,000	25.0
Waukesha . . . . .	68,700	63,100	65,200	-5,600	-8.2	2,100	3.3
Region	369,300	348,900	363,800	-20,400	-5.5	14,900	4.3

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 local community, present pertinent information on the supply of and the need for park and open space sites in the community, and identify the actions required to meet park and open space needs.

Specifically, during 1992 the Commission published SEWRPC Community Assistance Planning Report No. 202, A Park and Open Space Plan for the City of Muskego, Waukesha County, Wisconsin, January 1992. Adoption of such plans by local communities and approval of the plans by the Wisconsin Department of Natural Resources make the local units of government involved 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 completed 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 documented in a series of seven community

assistance planning reports. The Ozaukee County plan was published and adopted in 1987; the Kenosha County plan was published and adopted in 1988; the Racine County plan was published in 1988 and adopted in 1989; the Washington and Waukesha County plans were published in 1989 and adopted in 1990; and the Milwaukee County plan, documented in SEWRPC Community Assistance Planning Report No. 132, A Park and Open Space Plan for Milwaukee County, and the Walworth County plan, documented in SEWRPC Community Assistance Planning Report No. 135, A Park and Open Space Plan for Walworth County, were published in November 1991 and February 1991, respectively. The Milwaukee County plan was adopted by the Milwaukee County Board of Supervisors on June 18, 1992, and the Walworth County plan was adopted by the Walworth County Board of Supervisors on January 14, 1992. Both plans were also adopted by the Commission in 1992.

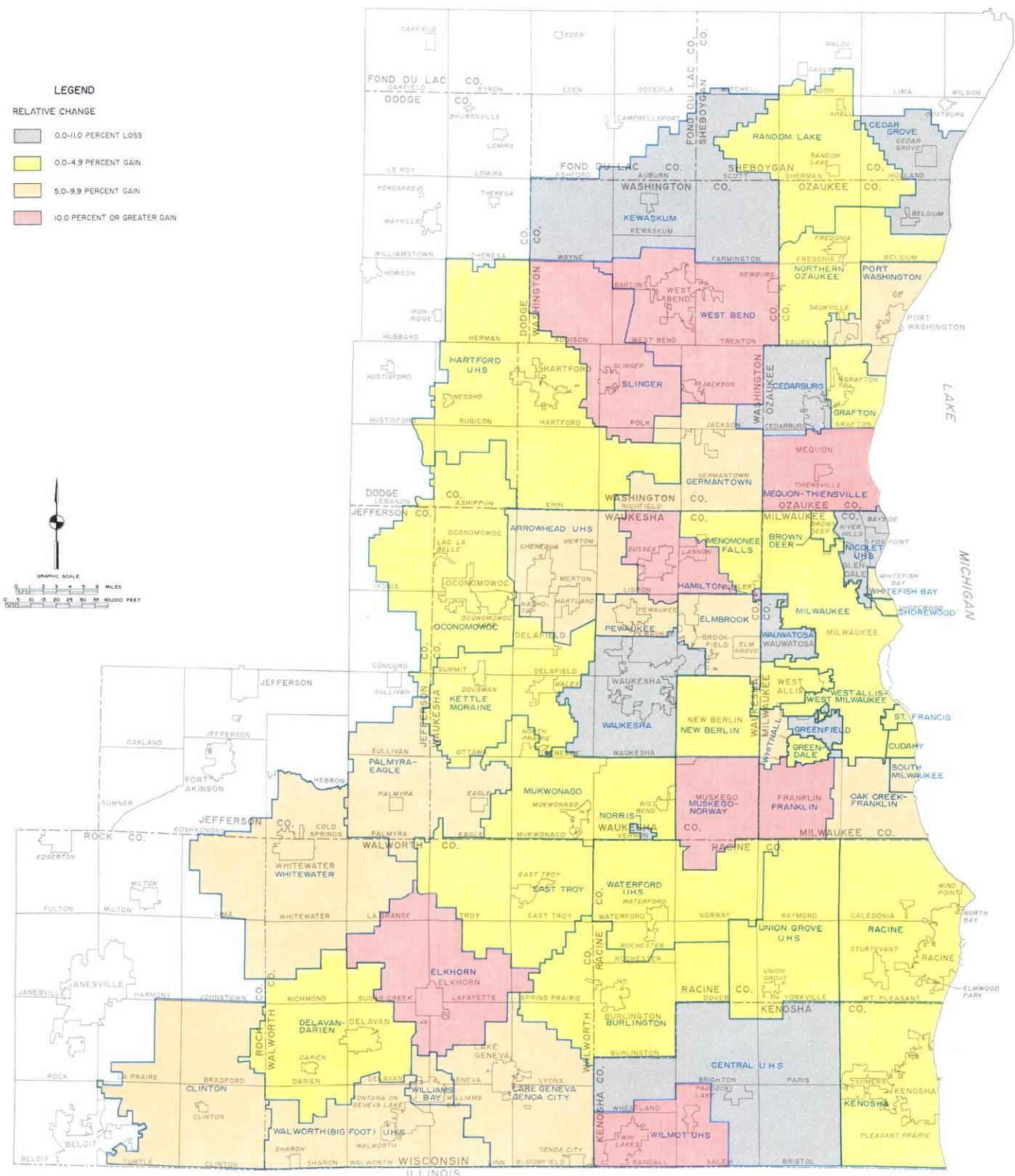
## DATA PROVISION AND TECHNICAL ASSISTANCE

### Economic and Demographic Data

The Land Use Division devotes considerable time 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

## Map 7

## RELATIVE CHANGES IN PUBLIC SCHOOL ENROLLMENT IN THE REGION: 1990-1992



Map 8

REGIONAL PARK AND OPEN SPACE PLAN: 2000

LEGEND

OPEN SPACE PRESERVATION ELEMENT

PRIMARY ENVIRONMENTAL CORRIDOR COMPONENT

- EXISTING STATE OWNERSHIP
- EXISTING LOCAL OWNERSHIP
- EXISTING COMPATIBLE PRIVATE OUTDOOR RECREATION USE (PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION)
- PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION

PRIME AGRICULTURAL LAND COMPONENT

- PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION

OUTDOOR RECREATION ELEMENT

RESOURCE ORIENTED COMPONENT

MAJOR PUBLIC PARK SITE—TYPE I (250 OR MORE ACRES)

▲ EXISTING STATE OWNERSHIP	▲ PROPOSED STATE OWNERSHIP
▲ EXISTING LOCAL OWNERSHIP	▲ PROPOSED LOCAL OWNERSHIP
▲ EXISTING STATE OWNERSHIP	▲ PROPOSED LOCAL OWNERSHIP
▲ EXISTING LOCAL OWNERSHIP	

RECREATION CORRIDOR (TRAIL)

- PROPOSED STATE RESPONSIBILITY
- - - PROPOSED LOCAL RESPONSIBILITY

PROPOSED RECREATIONAL BOATING WATER ACCESS POINT

- MAJOR INLAND LAKE OR RIVER
- LAKE MICHIGAN

URBAN ORIENTED COMPONENT

MAJOR PUBLIC PARK SITE—TYPE III (25-99 ACRES)

● EXISTING	● PROPOSED
● EXISTING	● PROPOSED

OTHER PUBLIC PARK SITE—TYPE IV (5-24 ACRES)

● EXISTING	● PROPOSED
------------	------------

OTHER OUTDOOR RECREATION SITE OR LAND USE

EXISTING MAJOR SPECIAL PURPOSE STATE OUTDOOR RECREATION SITE

EXISTING MAJOR SPECIAL PURPOSE LOCAL OUTDOOR RECREATION SITE

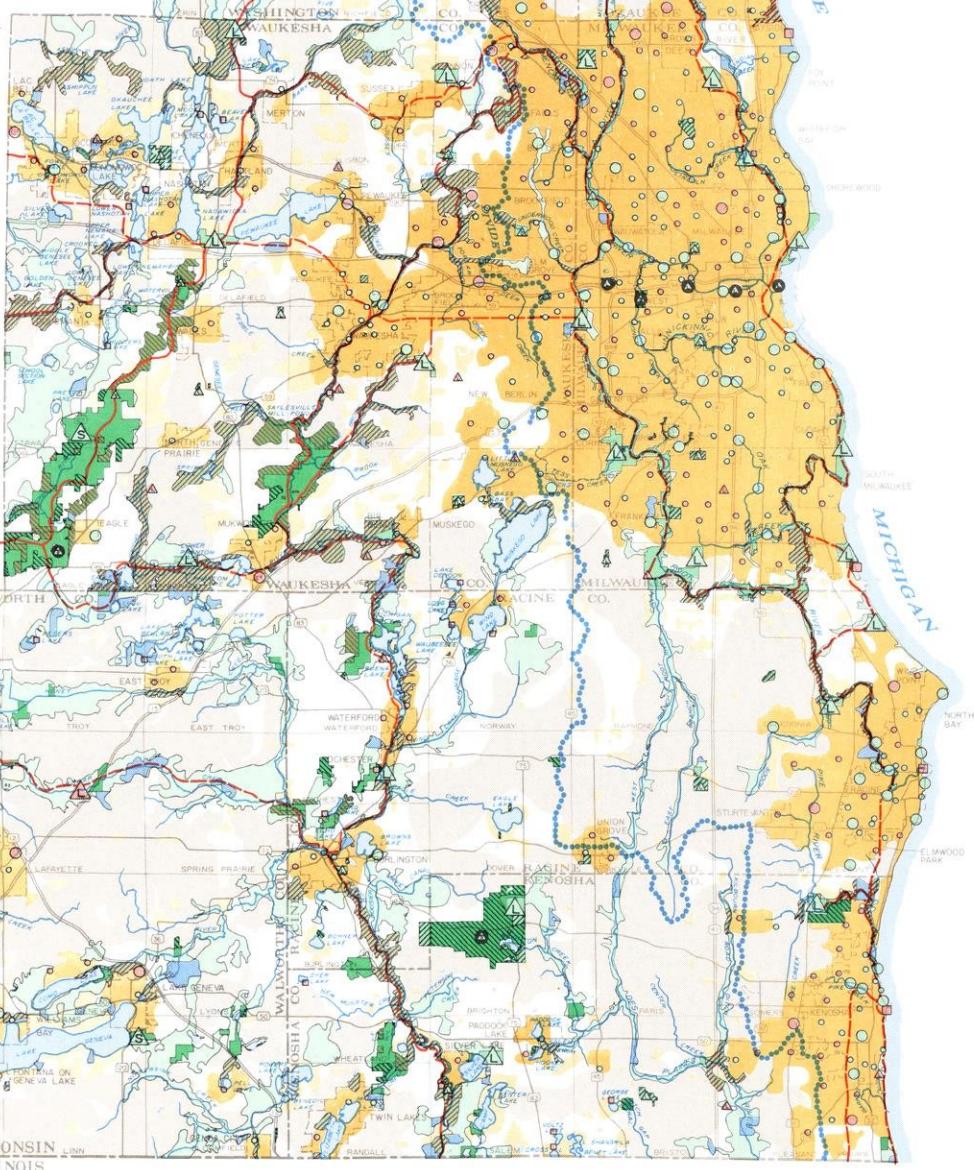
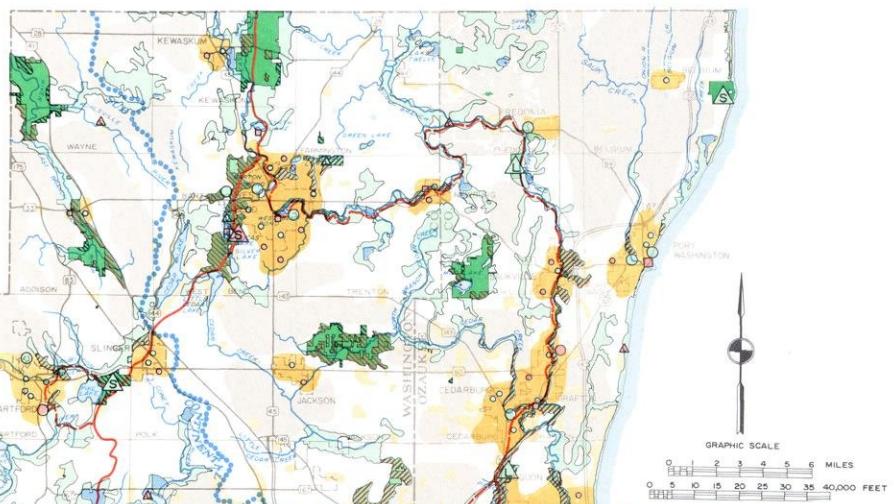
EXISTING OTHER STATE OUTDOOR RECREATION OR OPEN SPACE SITE

EXISTING OTHER LOCAL OUTDOOR RECREATION OR OPEN SPACE SITE

OTHER EXISTING URBAN DEVELOPMENT

OTHER RURAL LAND

WATER



analysis of data. During 1992, the Division prepared letter responses to 296 requests for population, economic, and related information from the Commission data files. In addition, 29 requests were handled by telephone and 68 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 1992 in performing this function:

- Provision of 1990 census data to the Cities of Mequon, Milwaukee, South Milwaukee, and Waukesha; the Town of Linn Sanitary District; and the Waukesha School Board for use in various planning studies.
- Provision of existing and planned population data to consultants preparing sewerage facility plans for the Town of Bristol and the Pell Lake Sanitary District.
- Provision of selected land use data to a consultant preparing an environmental assessment of the proposed Lake Arterial Highway.
- Provision of 1990 land use data for four towns in Waukesha County to the Waukesha County Park and Planning Commission for use in the preparation of town land use plans.
- Provision of 1990 estimated population levels within the Lake Michigan drainage basin in the Southeastern Wisconsin Region by minor civil division to the Great Lakes Commission.

### **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 1992 include the following:

- Provision of existing and historical natural resource and land use data to the Wisconsin Department of Natural Resources to assist the Department in its consideration of methods to preserve the upland resources within primary environmental corridors.

- Provision of land use and natural resource information to The Nature Conservancy, Wisconsin Chapter, for use in the preparation of the preserve design for the Lulu Lake State Natural Area.
- Provision of natural resource and land use information, park and open space plan data, aerial photography, and technical assistance to the Ice Age Park and Trail Foundation; the U. S. Department of the Interior, National Park Service; and the Wisconsin Department of Natural Resources to assist in the identification of the Ice Age National Scenic Trail corridor in Washington and Waukesha Counties.
- Provision of existing residential land use information in the vicinity of Beaver, Nagawicka, North, Okauchee, Pewaukee, and Pine Lakes to the Wisconsin Department of Natural Resources for use in the evaluation of the need for public access to these lakes.
- Provision of park and open space plan data to the City of Franklin Park Commission to assist in the identification of proposed new neighborhood parks in the City.
- Provision of existing and planned land use and population data for the Village of Grafton to the Village's consultant for use in the preparation of a land use plan for the Village.

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

A continuing demand is being placed upon the Commission to help Federal, State, and local units and agencies of government in evaluating and assessing the environmental significance and quality of specific development sites throughout the Region. Each of these evaluations involves field inspection work and requires that a report be prepared and transmitted to the requesting party. During 1992, the Commission fulfilled a total of 145 requests for such information. Most of this work effort may be divided into the following categories:

- Requests for the field identification and staking of wetland and/or primary environmental corridor boundaries on individual parcels in order to facilitate sound consid-

eration by local governments of proposals for private development. During 1992, 69 such requests were fulfilled at sites throughout the Region (see Map 9). Each of these requests was made by a county or local planner or engineer who needed detailed field information in order to carry out local planning and land use control responsibilities properly. Once staked in the field by the Commission staff, the precise boundaries of environmentally significant areas were surveyed by private land surveyors retained by the landowner and the results of the survey were placed on the face of certified survey maps and plats of survey.

- Requests for field evaluation, identification, and delineation of wetland and/or primary environmental corridors on large residential and commercial development sites to determine whether there are environmentally sensitive areas of concern prior to detailed land use planning and site development considerations. During 1992, 42 such

requests were fulfilled throughout the Region (see Map 9).

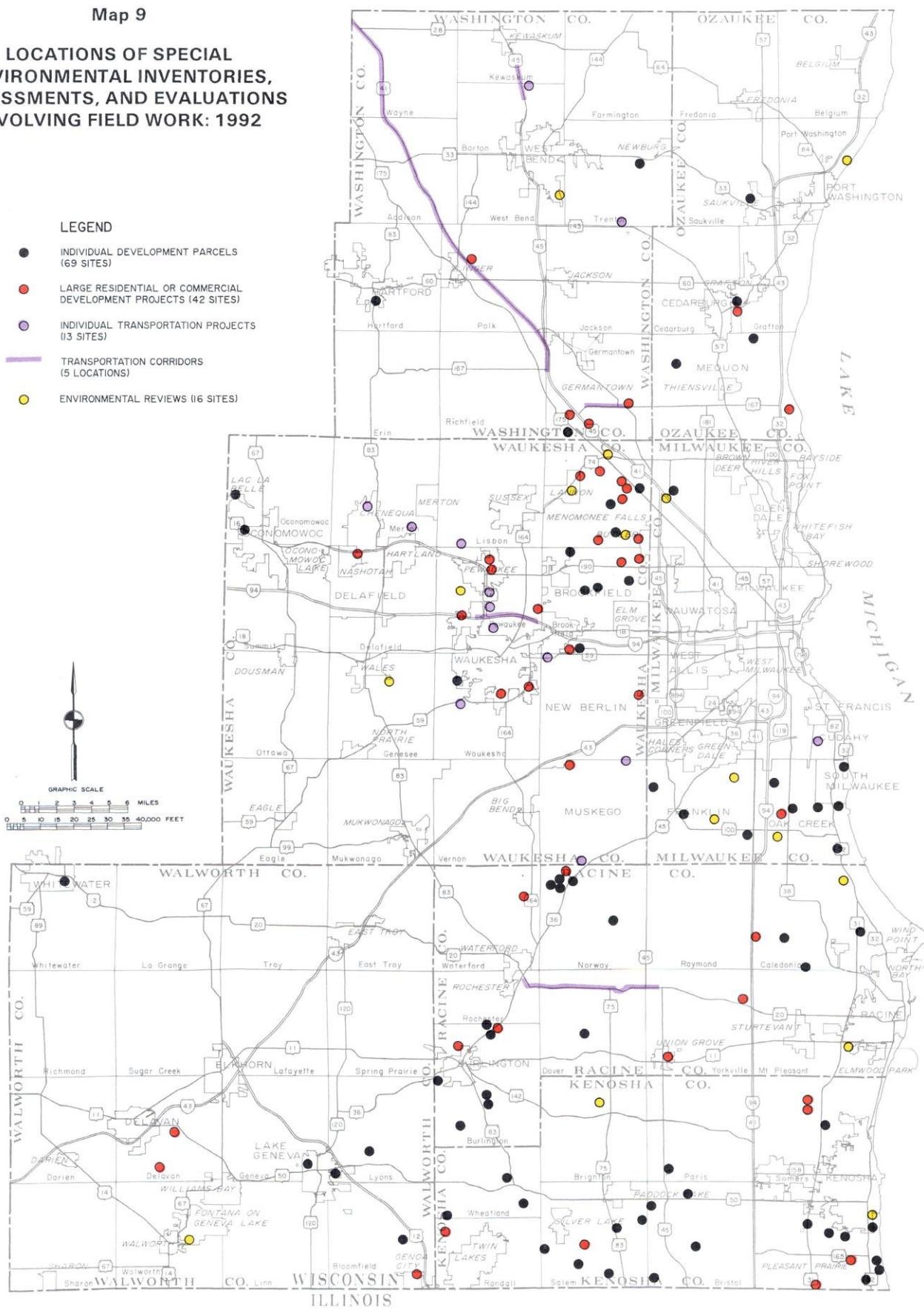
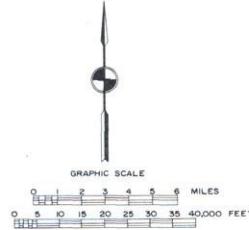
- Requests for the field identification and evaluation of environmentally sensitive sites associated with transportation improvement projects. During 1992, 18 such project-related requests were fulfilled, with requests coming from the Wisconsin Department of Transportation and the Waukesha County Department of Transportation. The project sites and corridors were largely concentrated in Racine, Washington, and Waukesha Counties (see Map 9).
- Finally, the Commission fulfilled requests for the survey of specific sites to identify and evaluate the flora and fauna present, including a determination as to whether any wetlands and/or rare, threatened, or endangered species occur on the subject site. During 1992, 16 such requests by Federal and State agencies, as well as county and local governments, were fulfilled throughout the Region (see Map 9).

Map 9

LOCATIONS OF SPECIAL  
ENVIRONMENTAL INVENTORIES,  
ASSESSMENTS, AND EVALUATIONS  
INVOLVING FIELD WORK: 1992

LEGEND

- INDIVIDUAL DEVELOPMENT PARCELS (69 SITES)
- LARGE RESIDENTIAL OR COMMERCIAL DEVELOPMENT PROJECTS (42 SITES)
- INDIVIDUAL TRANSPORTATION PROJECTS (13 SITES)
- TRANSPORTATION CORRIDORS (5 LOCATIONS)
- ENVIRONMENTAL REVIEWS (16 SITES)





# TRANSPORTATION PLANNING DIVISION

## DIVISION FUNCTIONS

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

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

In attempting to find sound answers to these and other questions, to formulate plans containing recommendations concerning these questions, and to monitor transportation system development activities in the Region, the Transportation Planning Division during 1992 conducted a number of activities in eight identifiable areas: data collection, collation, and development; long-range planning; transportation systems management planning and traffic engineering; transportation planning for the elderly and disabled; transportation improvement programming; railway transportation planning; air transportation planning; and data provision and technical assistance.

As the official metropolitan planning organization for transportation planning in the Southeastern Wisconsin Region, the Commission not only conducts transportation planning work

programs with its own staff and with consultants, but also oversees related subregional transportation planning by other governmental agencies. In 1992, 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, whether or not they are directly conducted by the Commission.

## DATA COLLECTION, COLLATION, AND DEVELOPMENT

During 1992, 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 13  
TRANSPORTATION PLANNING DIVISION

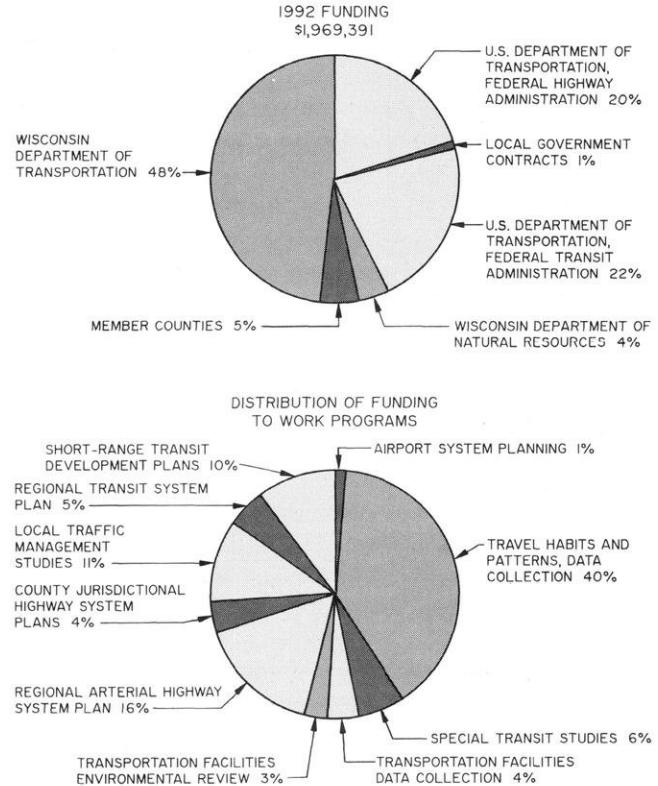


Table 14  
AUTOMOBILE AVAILABILITY

County	1963	1972	1991	1992
Kenosha . . . . .	35,160	48,010	68,180	69,340
Milwaukee . . . . .	304,120	397,690	455,070	452,860
Ozaukee . . . . .	14,320	24,430	43,180	44,130
Racine . . . . .	47,580	68,270	93,050	93,630
Walworth . . . . .	19,440	27,430	43,600	44,450
Washington . . . . .	16,240	27,030	53,250	54,990
Waukesha . . . . .	61,900	102,910	184,300	188,880
Total	498,760	695,770	940,630	948,280

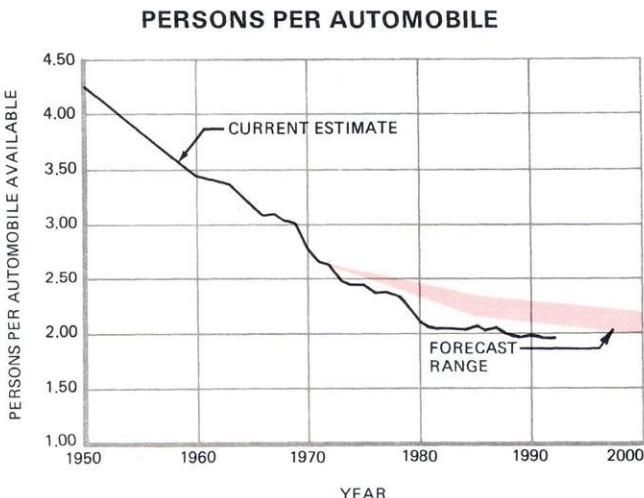
### Automobile and Truck Availability

The number of automobiles available to residents of the Region in 1992 totaled about 948,280. This represents an increase of 7,650, or about 1 percent, over the 1991 level of 940,630 (see Table 14). Increases in automobile availability in 1992 occurred in each county in the Region, with the exception of Milwaukee County, continuing the generally steady, long-term trend of continued increases in the number of automobiles available to residents of the Region over the past 30 years. The average annual rate of growth in automobile availability within the Region from 1963 through 1992 was 2.2 percent.

The number of persons per automobile within the Region was estimated to be 1.94 in 1992, essentially the same as that estimated in 1991, as shown in Figure 14. The estimated number of automobiles available within the Region in 1992 may be compared to the forecast range of automobile availability as developed under the long-range regional transportation system plan, as shown in Figure 15, which depicts the historical and forecast growth in automobile availability. The 1992 forecast automobile availability ranged from 900,000 under the adopted regional transportation system plan to 980,000 under the "no build" alternative. Thus, the 1992 regional automobile availability of 948,280 was about 3.2 percent lower than the "no build" forecast, and about 5.4 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 188,910, an increase of about 4,090, or about 2.2 percent, over

Figure 14



the 1991 level of 184,820 trucks (see Table 15 and Figure 16). The increase in 1992 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, 79 percent of all trucks in 1991, and 78 percent of all trucks in 1992. The number of light trucks available in 1992 totaled about 147,880, an increase of 2,370, or about 1.6 percent, over the number of light trucks available in 1991. The number of heavy trucks and municipal trucks totaled 41,030 in 1992, an increase of about 1,720 trucks, or about 4.4 percent, from the 1991 level of 39,310. The average annual rate of growth in motor truck availability within the Region from 1963 to 1992 was 4.3 percent.

Table 15  
TRUCK AVAILABILITY

County	1963	1972	1991	1992
Kenosha . . . . .	4,860	7,040	18,150	18,500
Milwaukee . . . . .	25,870	33,350	64,190	64,870
Ozaukee . . . . .	2,290	3,290	8,380	8,480
Racine . . . . .	6,200	9,140	22,270	22,460
Walworth . . . . .	4,490	6,430	15,230	15,300
Washington . . . . .	3,410	5,400	15,020	16,280
Waukesha . . . . .	8,280	15,060	41,580	43,020
Total	55,400	79,710	184,820	188,910

Figure 15

FORECAST RANGE OF AUTOMOBILE AVAILABILITY

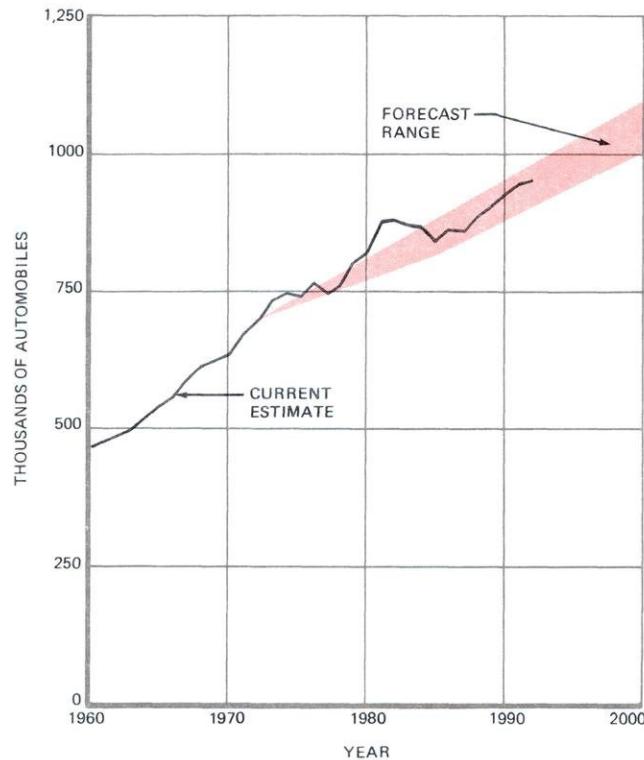
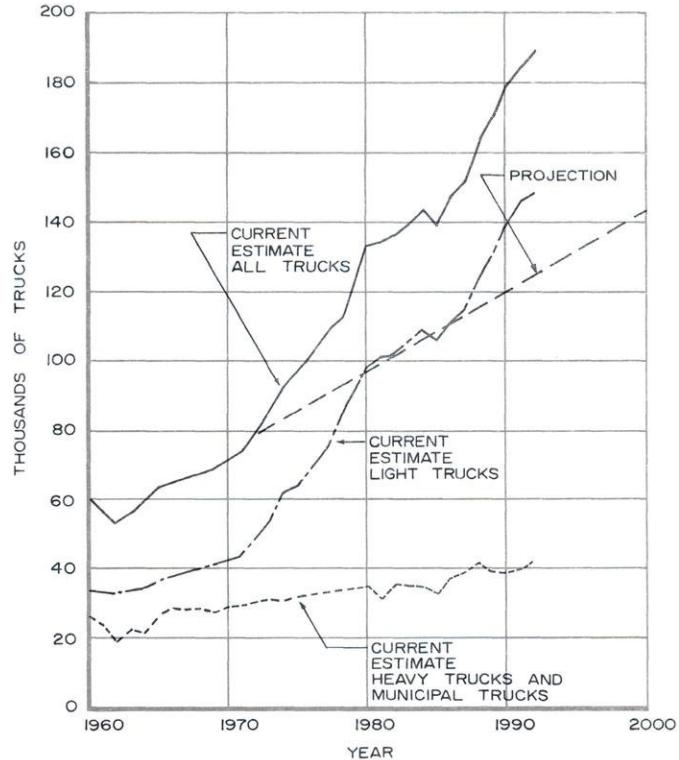


Figure 16

TRUCK AVAILABILITY



### Public Transit Ridership

Publicly owned mass transit service was provided in the Region in 1992 through six intra-county systems and two intercounty systems (see Table 16 and Figure 17). As shown in Table 16, total public transit ridership in the Region decreased from about 50.3 million passengers in 1991 to about 48.6 million passengers in 1992, a decrease of about 3 percent. This

decrease is largely attributable to the decrease in ridership on the Milwaukee County Transit System, as detailed below.

#### *Intracounty Services*

##### *Milwaukee County*

Ridership on the Milwaukee County Transit System, which provides publicly subsidized, fixed-route transit service, decreased by about

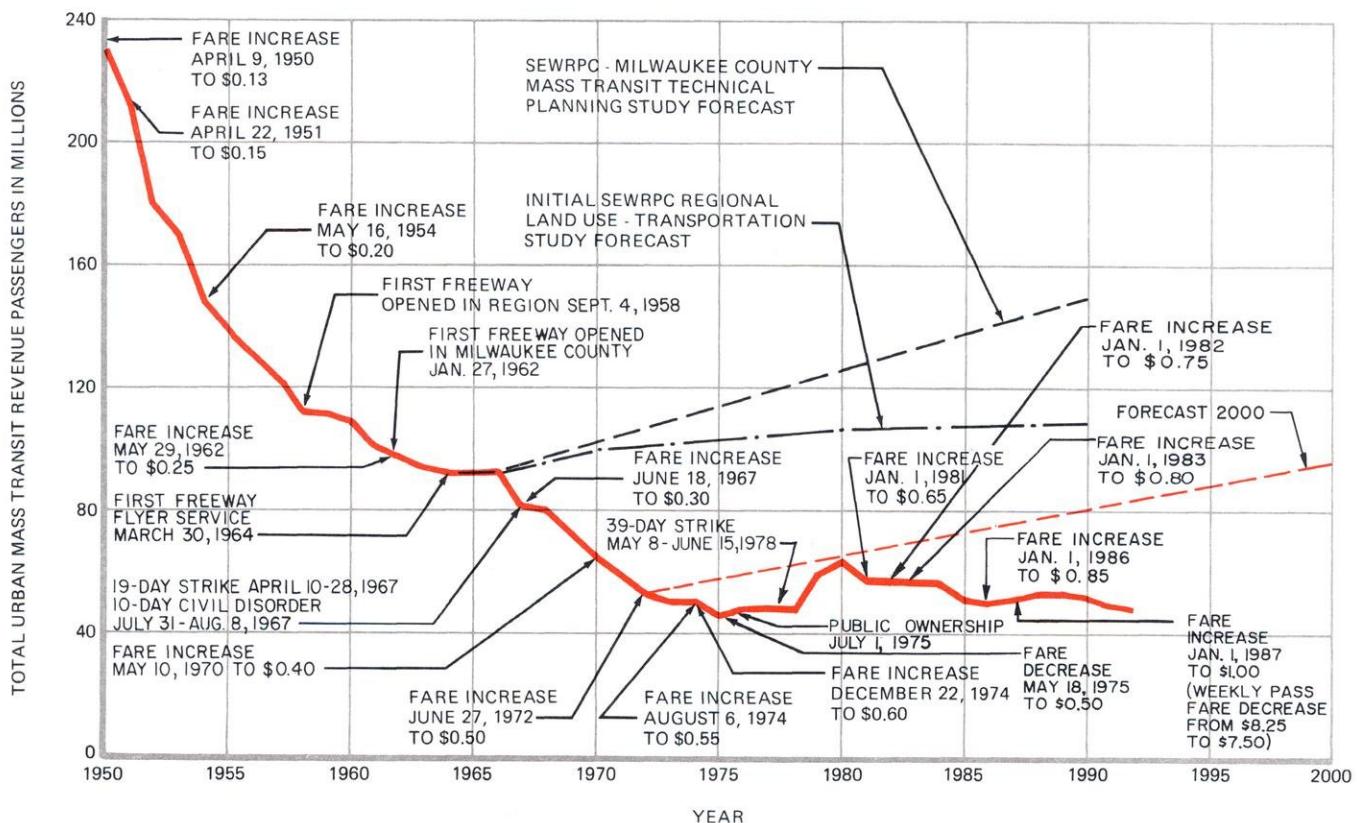
Table 16  
PUBLIC TRANSIT RIDERSHIP

Transit Services	1963	1972	1991	1992	Percent Change 1991-1992
Intracounty Systems					
Milwaukee County .....	88,546,000	52,141,000	46,460,300	44,791,300	-3.6
City of Racine .....	2,907,000	526,000	1,827,800	1,820,600	-0.4
City of Kenosha .....	1,876,000	503,000	1,128,000	1,103,800	-2.1
City of Waukesha .....	451,000	227,000	434,400	461,300	6.2
City of Whitewater .....	--	--	37,900	35,300	-6.9
City of Hartford .....	--	--	8,100	18,000	122.2
Subtotal	93,780,000	53,397,000	49,896,500	48,230,300	-3.3
Intercounty Systems					
Waukesha-Milwaukee Counties .....	534,000 <sup>a</sup>	240,000	290,400	299,400	3.1
Kenosha-Racine-Milwaukee Counties .....	230,000 <sup>a</sup>	153,000	82,000	82,600	0.7
Subtotal	764,000	393,000	372,400	382,000	2.6
Region Total	94,544,000	53,790,000	50,268,900	48,612,300	-3.3

<sup>a</sup>Estimated.

Figure 17

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.

Figure 18

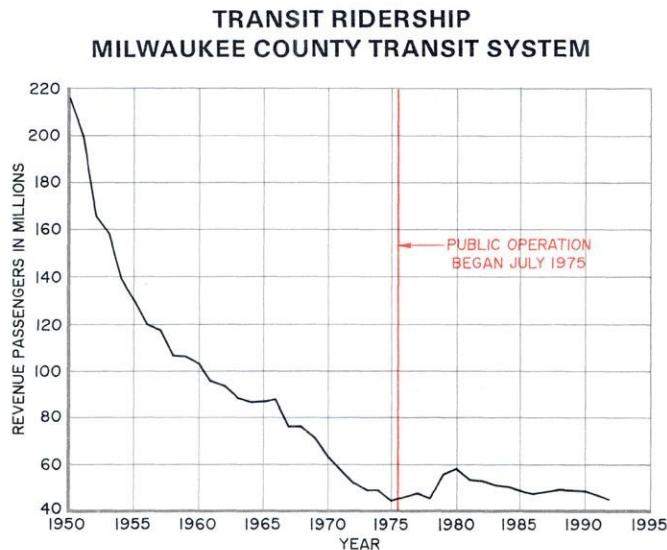
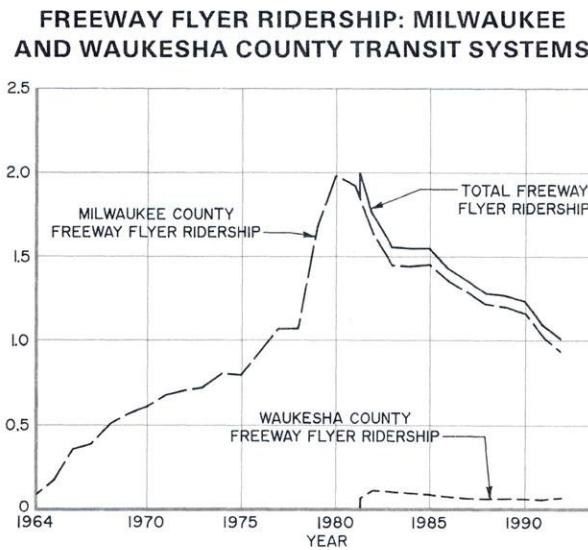


Figure 19



4 percent from the 1991 level of about 46.5 million revenue passengers to about 44.8 million revenue passengers (see Figure 18). This decrease in systemwide ridership occurred even though the transit system implemented a new express bus route and supporting feeder bus routes serving the northwest corridor of the County between the Milwaukee central business district and the Northridge Shopping Center. The basic cash fare for the Milwaukee County Transit System remained unchanged at \$1.00 in 1992; the price of a weekly pass or a book of 10 tickets remained unchanged at \$8.50 in 1992.

During 1992, freeway flyer bus service was operated by Milwaukee County from 14 outlying parking terminals to the Milwaukee central business district and to the University of Wisconsin-Milwaukee. Ridership on the freeway flyer bus service totaled about 929,200 revenue passengers in 1992, a decrease of about 9 percent from the 1,025,400 revenue passengers carried in 1991 (see Figure 19). This decrease in freeway flyer ridership may be attributed in part to continued low fuel prices, ample and reasonably priced parking in the Milwaukee central business district, and the continuing decentralization of homes and jobs to outlying communities.

#### City of Racine

During 1992, ridership on the fixed-route public transit system serving the City of Racine

Figure 20

**TRANSIT RIDERSHIP  
CITY OF RACINE TRANSIT SYSTEM**



decreased by less than 1 percent, from the 1991 level of approximately 1,827,800 revenue passengers to about 1,820,600 revenue passengers in 1992 (see Figure 20). The number of bus miles operated in revenue service also decreased by less than 1 percent during 1992, from about 1,258,500 bus miles in 1991 to about 1,257,300 bus miles in 1992. The basic fare for the Racine transit system remained at \$0.60 in 1992, unchanged from 1991.

Transit ridership declines on the City of Racine transit system during 1982 and 1983 and again during the years 1985 through 1992 broke a trend of increasing ridership which began in July 1975 upon 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 the years 1975 through 1979.<sup>1</sup> Nearly all the plan recommendations for transit route layout, schedule, fare structure, and service levels were implemented in the first years of public operation. In 1984, the Commission completed work on another transit development program for the City of Racine transit system for the period 1984 through 1988.<sup>2</sup> Several of the routing changes recommended under the new plan were implemented by the transit system by December 1985. During 1992, the Commission began work on a third Racine-area transit system development plan for the period 1993 through 1997.

#### City of Kenosha

Ridership on the fixed-route public transit system serving the City of Kenosha decreased during 1992 (see Figure 21). Ridership during the year approximated 1,103,800 revenue passengers, a decrease of about 2 percent from the 1991 ridership level of about 1,128,000 revenue passengers. The number of bus miles operated in revenue service totaled about 781,600, an increase of about 6 percent from the 735,300 bus miles operated during 1991. The basic fare for the Kenosha system was \$0.60, unchanged from 1991.

To assist in the public operation of the transit system, the Commission prepared, at the request of the City, a five-year transit system development plan in 1976 for the years 1976 through

Figure 21

#### TRANSIT RIDERSHIP CITY OF KENOSHA TRANSIT SYSTEM



1980.<sup>3</sup> Many of the plan's recommendations regarding transit route layout and scheduling were implemented in the mid-1970s as ridership increased on the system. In 1984, the Commission completed work on another transit system development plan for the City of Kenosha transit system for the period from 1984 through 1988.<sup>4</sup> Virtually all the routing changes recommended under the new plan were implemented by the transit system in late December 1984. During 1991, the Commission completed work on a third transit system development plan for the period from 1991 through 1995.<sup>5</sup> This plan, described in the Commission's 1991 Annual Report, was adopted by the Commission as an element of the regional transportation plan in June 1992, thus superseding the second-generation plan adopted in 1985.

<sup>1</sup>See SEWRPC Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979, June 1974.

<sup>2</sup>See SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1988, May 1984.

<sup>3</sup>See SEWRPC Community Assistance Planning Report No. 7, Kenosha Area Transit Development Program: 1976-1980, March 1976.

<sup>4</sup>See SEWRPC Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1988, June 1984.

<sup>5</sup>See SEWRPC Community Assistance Planning Report No. 183, Kenosha Transit System Development Plan: 1991-1995, September 1991.

Figure 22

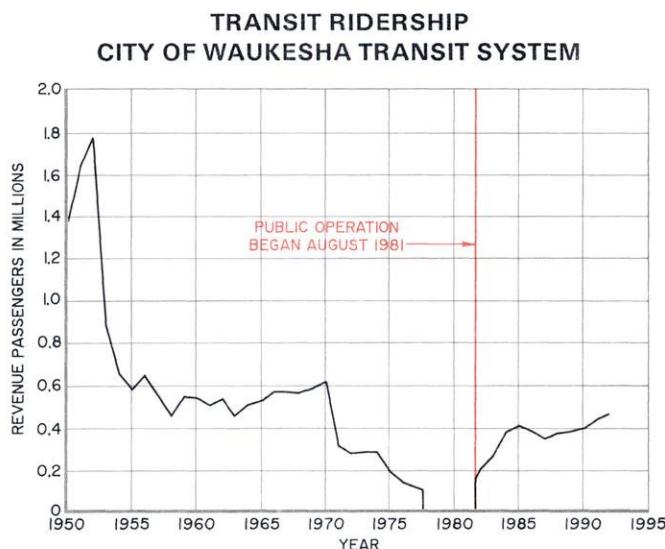
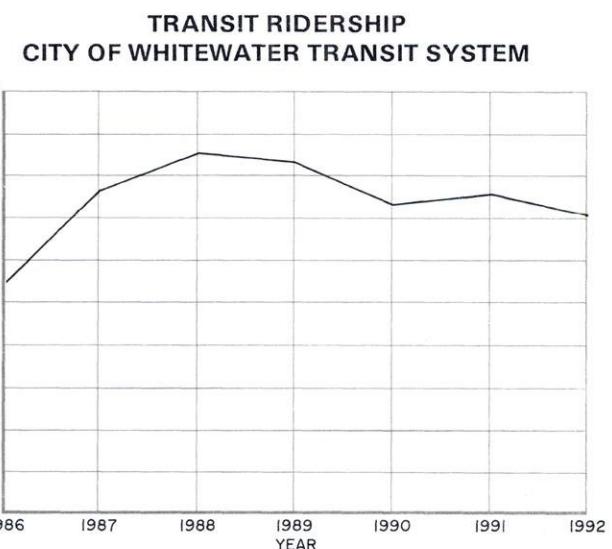


Figure 23



#### City of Waukesha

Local bus service was reestablished in the City of Waukesha in August 1981, when the City placed into full-scale operation a new fixed-route transit system. The community had previously been without public transit service since June 1976, when local bus service provided by a private transit operator was discontinued. The reinstitution of transit service was guided by a transit development plan prepared by the Regional Planning Commission in 1980 at the request of the City of Waukesha.<sup>6</sup> The new Waukesha transit system and its routes, schedule, service levels, and fare structure were implemented essentially as recommended by that plan. In December 1989 the Commission completed work on another transit development plan for the period from 1988 through 1992.<sup>7</sup> During calendar year 1992, the system carried

approximately 461,300 revenue passengers, an increase of about 6 percent over the 434,400 revenue passengers carried on the system during 1991 (see Figure 22). This relatively large increase in ridership may be attributed to the extension of bus service over one route into the Blue Mound Road corridor in the Town of Brookfield and the City of Brookfield in late 1992. The basic fare for the City of Waukesha transit system was \$0.60, unchanged from 1991.

#### City of Whitewater

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 disabled users. The service was initiated using Federal funds available for capital and operating assistance under the Federal Section 18 rural transportation assistance program. During 1992, the Whitewater taxicab service carried approximately 35,300 revenue passengers, a decrease of about 7 percent from the 37,900 revenue passengers carried in 1991 (see Figure 23). It operated about 54,800 total vehicle miles, a decrease of about 31 percent from the 78,900 total vehicle miles operated in 1991.

<sup>6</sup>See SEWRPC Community Assistance Planning Report No. 31, *Waukesha Area Transit Development Program: 1981-1985*, February 1980.

<sup>7</sup>See SEWRPC Community Assistance Planning Report No. 154, *A Transit System Development Plan for the City of Waukesha: 1988-1992*, December 1989.

## City of Hartford

Publicly operated transit service was also provided during 1992 by the City of Hartford in Washington County, which operated a shared-ride taxicab service through 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. During 1992, the Hartford transit service carried approximately 18,000 revenue passengers and operated about 45,600 total vehicle miles. These figures represent an increase of about 122 percent from the 8,100 revenue passengers carried in 1991 (see Figure 24), and an increase of about 85 percent from the 24,700 total vehicle miles operated during 1991. The large increases in ridership and total vehicle miles resulted from a reduction in passenger fares during 1992 to \$1.00 per one-way trip for all trips made within the City of Hartford. This represented a substantial reduction from the 1991 fares of \$1.25 per one-way trip plus mileage charges of between \$0.65 and \$1.05 per mile depending upon trip distance.

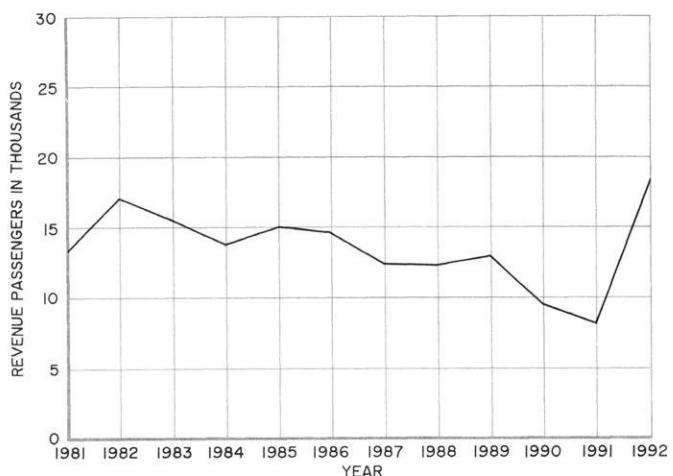
## Intercounty Services

### Waukesha County

During 1992, Waukesha County provided seven regular bus routes between Waukesha County and downtown Milwaukee, an increase of one route over the six provided during 1991. Waukesha County contracts for all elements of their operation from two transit operators in the Milwaukee area. Five of the routes are operated by Wisconsin Coach Lines, Inc., and the remaining two are operated by Milwaukee County as extensions of the Milwaukee County Transit System. The routes operated by Wisconsin Coach Lines include three routes in the Oconomowoc-Waukesha-Milwaukee travel corridor, sponsored by Waukesha County since 1977; a freeway flyer route operated between Oconomowoc and downtown Milwaukee, initiated by Waukesha County in 1981; and a new freeway flyer route operated between Mukwonago and downtown Milwaukee, initiated in 1992. The two routes operated by the Milwaukee County Transit System were initiated in 1981 and include one freeway flyer bus route operated between the Village of Menomonee Falls and downtown Milwaukee and one providing local bus service from Milwaukee County to the Brookfield Square

Figure 24

### TRANSIT RIDERSHIP CITY OF HARTFORD TRANSIT SYSTEM



Shopping Center. The bus routes initiated during 1981 were three of seven new routes implemented by Waukesha County on April 1, 1981. The Commission identified these seven routes in 1980 at the request of Waukesha County and proposed that service be implemented on a trial basis.<sup>8</sup> Additional service changes were made in 1988 on the basis of the analyses and recommendations presented in a new transit service plan for Waukesha County completed by the Commission in that year.<sup>9</sup>

During 1992, total ridership on the Waukesha County transit system increased by about 3 percent, from 290,400 trips in 1991 to 299,400 trips in 1992 (see Figure 25). Transit fares on the Waukesha County Transit System, which are distance-related, were between \$1.00 and \$2.50 in 1992, unchanged from 1991.

As noted above, three of the seven routes operated by Waukesha County in 1992 were operated as freeway flyer routes. As shown in

<sup>8</sup>See SEWRPC Community Assistance Planning Report No. 44, Proposed Public Transit Service Improvements—1980, Waukesha County, Wisconsin, July 1980.

<sup>9</sup>See SEWRPC Community Assistance Planning Report No. 105, Waukesha County Transit Plan: 1988-1992, September 1988.

Figure 25

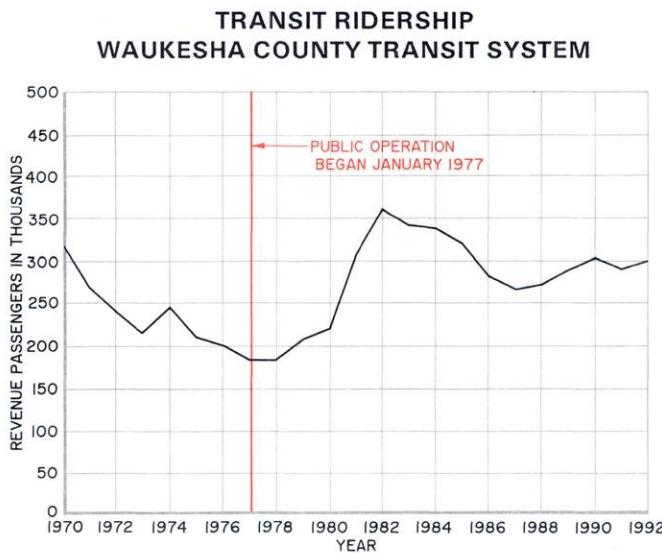


Figure 26

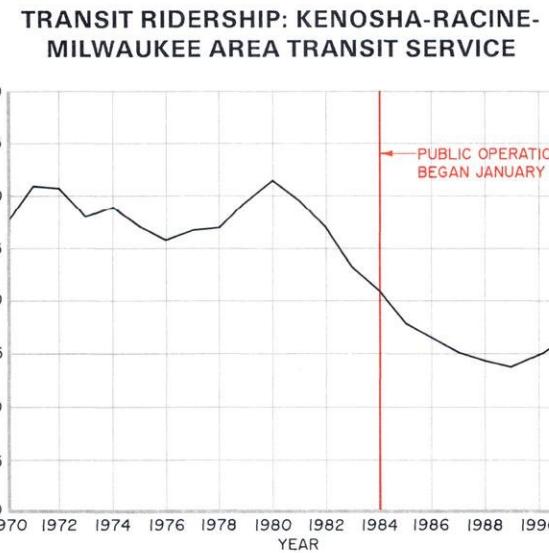


Figure 19, total ridership on freeway flyer routes operated by Waukesha County in 1992 was about 78,200 revenue passengers, an increase of 19 percent from the 65,500 revenue passengers carried on Waukesha County-operated freeway flyer routes in 1991. The freeway flyer service in Waukesha County served a total of seven outlying parking terminals in 1992.

#### Kenosha-Racine-Milwaukee Service

During 1992, the City of Racine, in a joint effort with the City of Kenosha and with Racine and Kenosha Counties, provided commuter bus service between downtown Milwaukee and the Racine and Kenosha areas. The commuter bus service had been provided by a private transit operator, Wisconsin Coach Lines, Inc. This service is provided over arterial streets as an express bus service, but is not considered freeway flyer service. Until 1984, the route was operated without public subsidy; the passenger and freight revenues were sufficient to offset the operating costs. More recently, however, the operation of the route suffered a loss. During 1984, the company approached the four governmental units and asked for financial subsidy for the operation of the route. As a result, the four local units of government joined to help provide the company with the necessary financial assistance, through the State of Wisconsin, to operate the bus service.

The City of Racine has assumed responsibility as the lead agency for the commuter bus project by acting as the applicant/grantee for the State urban transit assistance funds needed to subsidize the operation of the commuter service. State transit assistance funds are the only public monies being used to subsidize the operating costs of the service. Ridership on the service approximated 82,600 revenue passengers during 1992, an increase of about 1 percent over the 1991 ridership level of about 82,000 revenue passengers (see Figure 26). The number of bus miles operated in revenue service increased slightly, from 253,300 bus miles in 1991 to 254,400 bus miles in 1992, an increase of less than 1 percent.

#### Public Transit Stations

Progress in providing the public transit stations recommended in the adopted year 2000 transportation plan is summarized on Map 10. During 1992, no new public transit stations were constructed to add to the 15 existing in 1991. Freeway flyer bus service was initiated in 1992 from three existing carpool parking lots along IH 43 in Waukesha County, at STH 83, STH 164, and CTH O (Moorland Road), bringing the total number of transit stations to 18 for 1992. The number of shopping center lots used as freeway flyer terminal facilities decreased from six during 1991 to five during 1992, because the agreement for using the Kohl's Department

Map 10

PRIMARY TRANSIT SYSTEM  
PLAN FOR THE REGION: 2000

LEGEND

EXISTING SYSTEM  
 ○ LOADING AND UNLOADING POINT  
 ▲ TRANSIT STATION  
 — PRIMARY TRANSIT ROUTE  
 — NONFREEWAY EXTENSION  
 — MAJOR ARTERIAL EXPRESS BUS ROUTE

2000 ADOPTED PLAN  
 ▲ PROPOSED BUS TRANSIT STATION  
 — PROPOSED BUS PRIMARY TRANSIT ROUTE  
 — PROPOSED NONFREEWAY EXTENSION  
 — PROPOSED MAJOR ARTERIAL EXPRESS BUS ROUTE

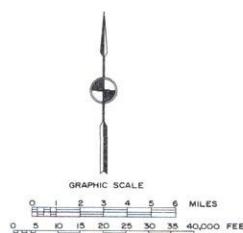


Table 17

## AVERAGE WEEKDAY USE OF PARKING AT FREEWAY FLYER TERMINALS: 1992

Location	Available Parking Spaces	Autos Parked on an Average Weekday: 1992	Percent of Spaces Used
Public Transit Stations			
W. College Avenue (Milwaukee) . . . . .	530	298	56
W. Watertown Plank Road (Wauwatosa) . . . . .	200	100	50
North Shore (Glendale) . . . . .	175	67 <sup>a</sup>	38
Brown Deer (River Hills) . . . . .	250	136	54
Goerkes Corners (Brookfield) . . . . .	250	130	52
Milwaukee Area Technical College (Mequon) . . . . .	200	10 <sup>b</sup>	5
W. Holt Avenue (Milwaukee) . . . . .	240	75	31
Whitnall (Hales Corners) . . . . .	370	246	66
Pilgrim Road (Menomonee Falls) . . . . .	65	62	95
STH 67 and IH 94 (Summit) . . . . .	80	51	64
State Fair Park (West Allis) . . . . .	200	150	75
Timmerman Field (Milwaukee) . . . . .	140	42	30
W. Loomis Road (Greenfield) . . . . .	415	92	22
W. Good Hope Road (Milwaukee) . . . . .	135	14 <sup>b</sup>	10
Northridge (Milwaukee) . . . . .	100	23	23
STH 83 and IH 43 (Mukwonago) . . . . .	95	45	47
STH 164 and IH 43 (Big Bend) . . . . .	100	35	35
Moorland Road and IH 43 (New Berlin) . . . . .	200	32	16
Subtotal	3,745	1,608	43
Shopping Center Lots			
Silver Mill (Milwaukee) . . . . .	100	19	19
Phar-Mor (Brookfield) . . . . .	200	59	30
Southridge (Greendale) . . . . .	250	76	30
Kohl's (Brown Deer) . . . . .	125	72	58
Olympia (Oconomowoc) . . . . .	50	— <sup>c</sup>	— <sup>c</sup>
Subtotal	725	226	31
Total	4,470	1,834	41

<sup>a</sup>The North Shore Transit Station was closed from August 1992 through December 1992 because of reconstruction of the IH 43-E. Silver Spring Drive interchange.

<sup>b</sup>Public transit service to this station was not provided during 1992. The number of autos parked represents use by carpoolers.

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

Store parking lot at S. 108th Street and W. Cleveland Avenue was not renewed. Table 17 and Figure 27 provide data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 1992 at all transit stations by patrons of freeway flyer bus service and carpoolers. As shown in the table, transit service was provided at 16 of the 18 public transit/park-ride stations and at five shopping center lots. The total of 23 freeway flyer terminal facilities represents an increase of

two facilities from the 21 facilities that existed in 1991. The number of spaces available at public transit/park-ride stations increased to 3,745 spaces in 1992 from 3,350 spaces in 1991, and at shopping center lots, decreased to 725 spaces in 1992 from 975 spaces in 1991 because of the closing of the shopping center lot at the aforementioned Kohl's Department Store. The total number of spaces available increased to 4,470 spaces in 1992 from the 4,325 spaces available in 1991.

Table 18

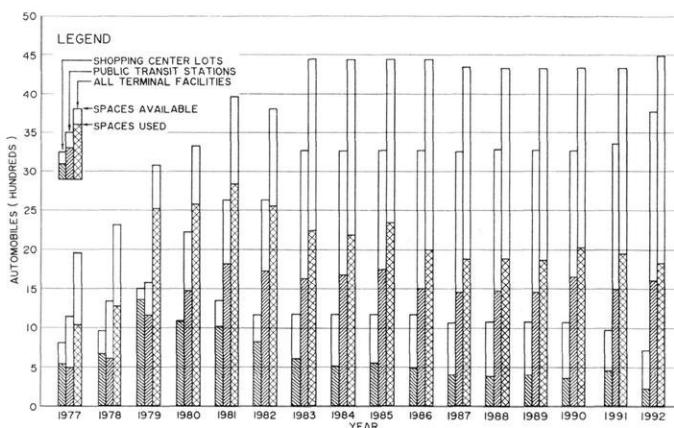
## PUBLIC TRANSIT OPERATING SUBSIDIES WITHIN THE REGION: 1991-1992

Transit Services	Public Transit Operating Assistance (dollars)							
	1991 Actual				1992 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Intracounty Services								
Milwaukee County .....	5,179,700	30,263,200	11,518,300	46,961,200	5,123,100	35,040,400	11,530,100	51,693,600
City of Racine .....	857,100	1,394,800	414,700	2,666,600	907,200	1,578,400	479,100	2,964,700
City of Kenosha .....	547,300	851,900	319,100	1,718,300	549,900	994,700	287,200	1,831,800
City of Waukesha .....	174,400	511,100	399,500	1,085,000	185,100	633,400	372,700	1,191,200
City of Whitewater .....	22,500	43,300	1,200	67,000	30,300	52,300	--	82,600
City of Hartford .....	26,100	37,200	14,500	77,800	29,200	43,800	18,800	91,800
Subtotal	6,807,100	33,101,500	12,667,300	52,575,900	6,824,800	38,343,000	12,687,900	57,855,700
Intercounty Services								
Waukesha-Milwaukee Counties .....	295,300	600,800	115,900	1,012,000	335,600	749,900	155,100	1,240,600
Kenosha-Racine-Milwaukee Counties .....	--	257,300 <sup>a</sup>	161,200 <sup>a</sup>	418,500 <sup>a</sup>	--	283,800	138,000	421,800
Subtotal	295,300	858,100	277,100	1,430,500	335,600	1,033,700	293,100	1,662,400
Region Total	7,102,400	33,959,600	12,944,400	54,006,400	7,160,400	39,376,700	12,981,000	59,518,100

Transit Services	Operating Subsidy per Ride (dollars)							
	1991 Actual				1992 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Intracounty Services								
Milwaukee County .....	0.11	0.65	0.25	1.01	0.11	0.78	0.26	1.15
City of Racine .....	0.47	0.76	0.23	1.46	0.50	0.87	0.26	1.63
City of Kenosha .....	0.49	0.76	0.27	1.52	0.50	0.90	0.26	1.66
City of Waukesha .....	0.40	1.18	0.92	2.50	0.40	1.37	0.81	2.58
City of Whitewater .....	0.59	1.14	0.04	1.77	0.86	1.48	--	2.34
City of Hartford .....	3.22 <sup>a</sup>	4.59 <sup>a</sup>	1.79 <sup>a</sup>	9.60 <sup>a</sup>	1.62	2.43	1.05	5.10
Average	0.14	0.66	0.25	1.05	0.14	0.80	0.26	1.20
Intercounty Services								
Waukesha-Milwaukee Counties .....	1.02	2.07	0.39	3.48	1.12	2.50	0.52	4.14
Kenosha-Racine-Milwaukee Counties .....	--	3.14	1.96	5.10	--	3.44	1.67	5.11
Average	0.79	2.30	0.75	3.84	0.88	2.70	0.77	4.35
Region Average	0.14	0.67	0.26	1.07	0.15	0.81	0.27	1.23

<sup>a</sup>Estimated.

Figure 27

FREEWAY FLYER  
PARKING LOT USE: 1977-1992

Of the 3,745 spaces available at the 18 public transit/park-ride stations, 1,608 spaces were used on an average weekday during 1992, a utilization rate of about 43 percent. Of the 725 spaces available at the five shopping center lots, 226 spaces were utilized during 1992, a utilization rate of about 31 percent. In total, about 41 percent of all available parking spaces were used on an average weekday during 1992.

## Public Transit Operating Subsidies

Transit operating subsidies in the Region during 1992 totaled about \$59.5 million, compared with about \$54.0 million during 1991, as shown in Table 18. The per-ride operating subsidies for the individual intracounty public transit operators in the Region in 1991 and 1992, respectively,

Figure 28

PUBLIC TRANSIT OPERATING SUBSIDIES: MILWAUKEE COUNTY TRANSIT SYSTEM

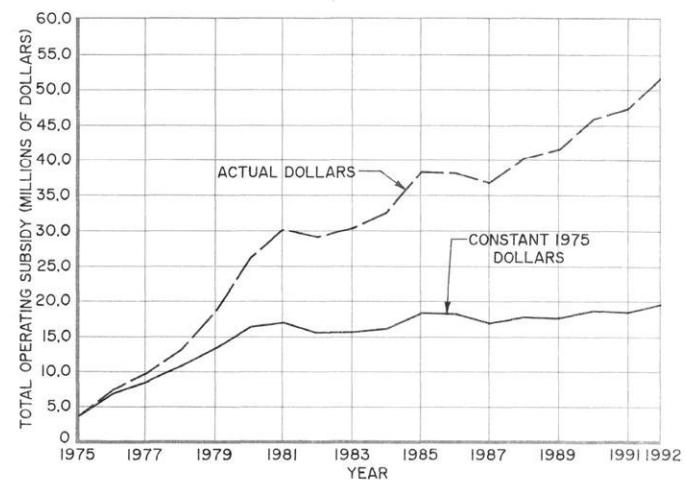
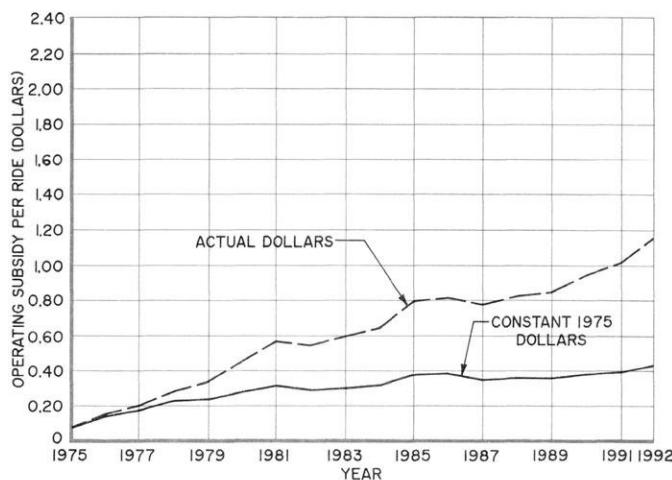
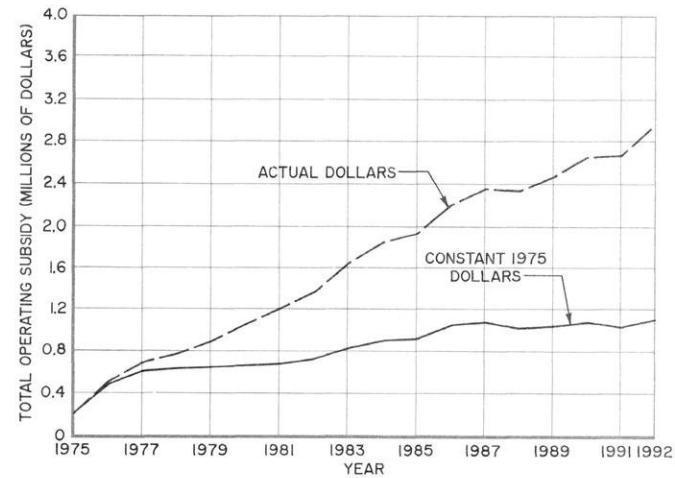
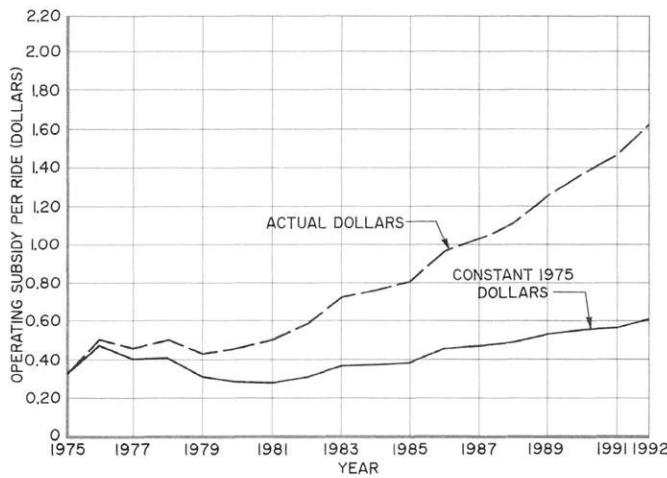


Figure 29

PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF RACINE TRANSIT SYSTEM



were as follows: Milwaukee County, \$1.01 and \$1.15 (see Figure 28); City of Racine, \$1.46 and \$1.63 (see Figure 29); City of Kenosha, \$1.52 and \$1.66 (see Figure 30); City of Waukesha, \$2.50 and \$2.58 (see Figure 31); City of Whitewater, \$1.77 and \$2.34 (see Figure 32); and City of Hartford, \$9.60 and \$5.10 (see Figure 33). For the Waukesha County transit service, the per-ride operating subsidies in 1991 and 1992, respectively, were \$8.48 and \$4.14 (see Figure 34); for the Kenosha-Racine-Milwaukee County transit service, the per-ride operating subsidies in 1991 and 1992, respectively, were \$5.10 and \$5.11 (see Figure 35).

### Carpool Parking Facilities

During 1992, the Commission collected data on the use of available parking supply at carpool parking facilities within the Region. As shown in Table 19, 18 publicly owned carpool parking facilities were in operation at key freeway interchanges in the outlying areas of the Region in 1992. During 1992, about 462 of the total 1,275 parking spaces available were used on an average weekday (see Figure 36). This represents a utilization rate of 36 percent in 1992, about the same as that of 1991. The progress in providing

Figure 30

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

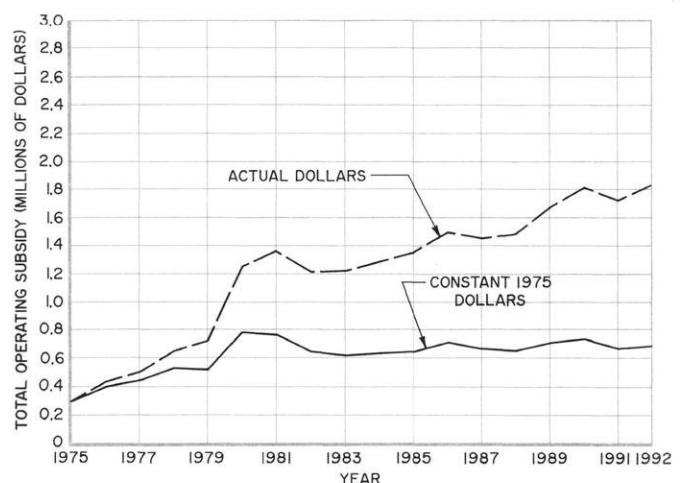
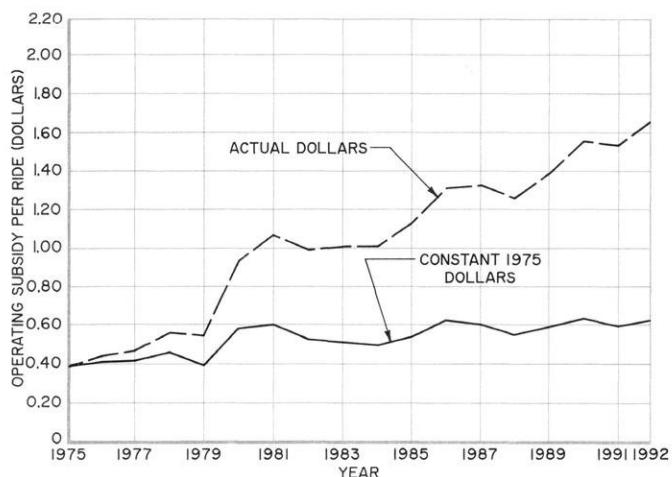


Figure 31

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

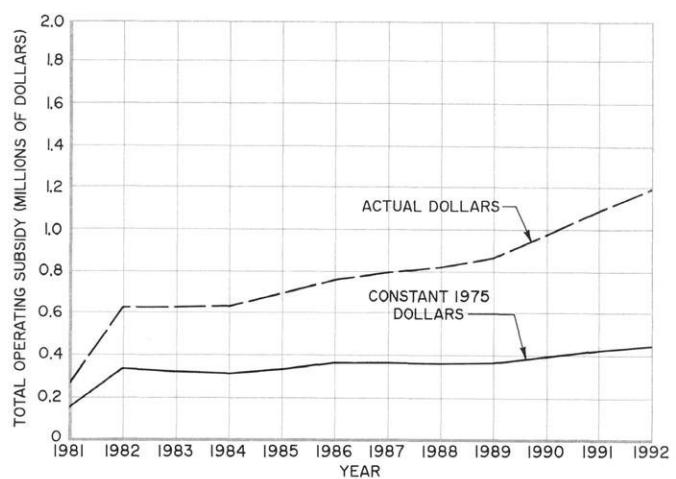
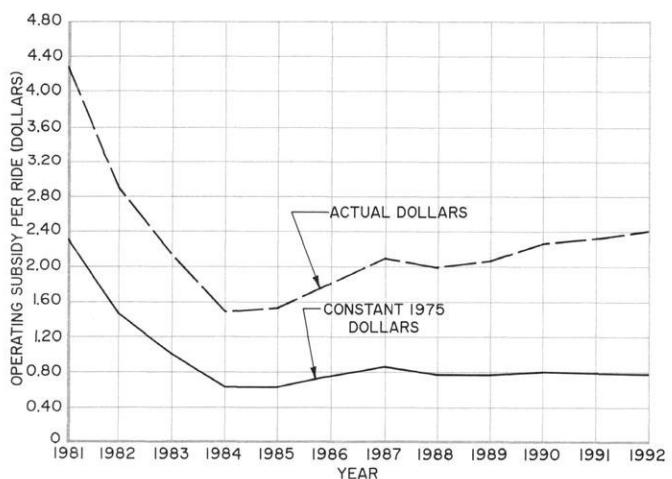


Figure 32

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

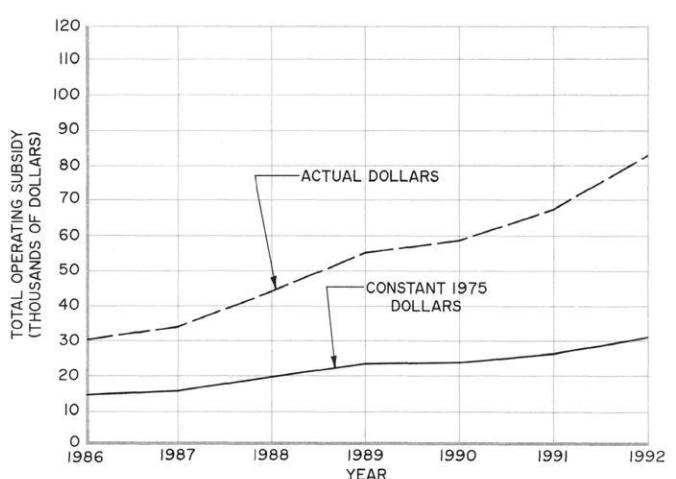
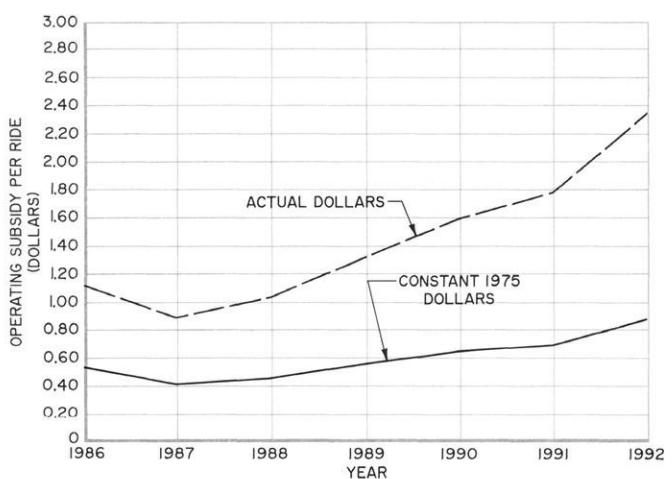


Figure 33

PUBLIC TRANSIT OPERATING SUBSIDIES: CITY OF HARTFORD TRANSIT SYSTEM

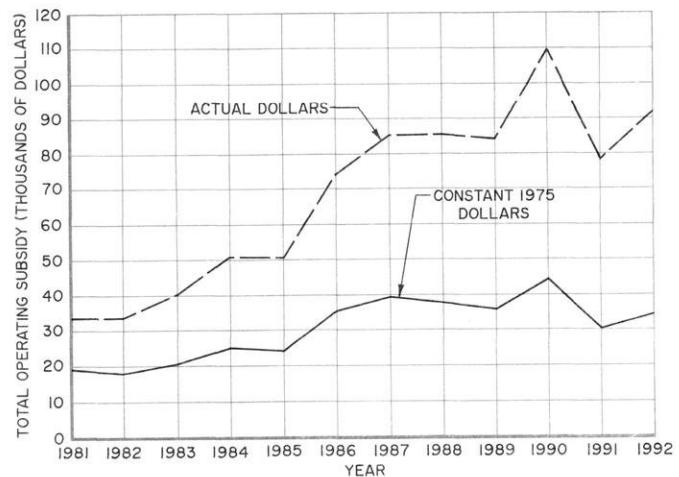
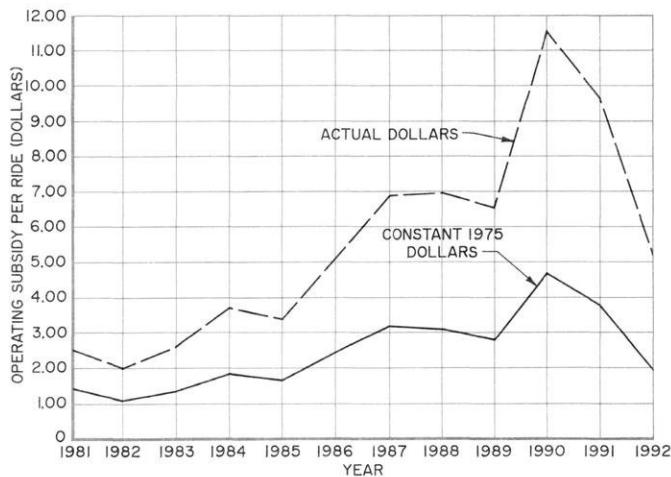


Figure 34

PUBLIC TRANSIT OPERATING SUBSIDIES: WAUKESHA COUNTY TRANSIT SYSTEM

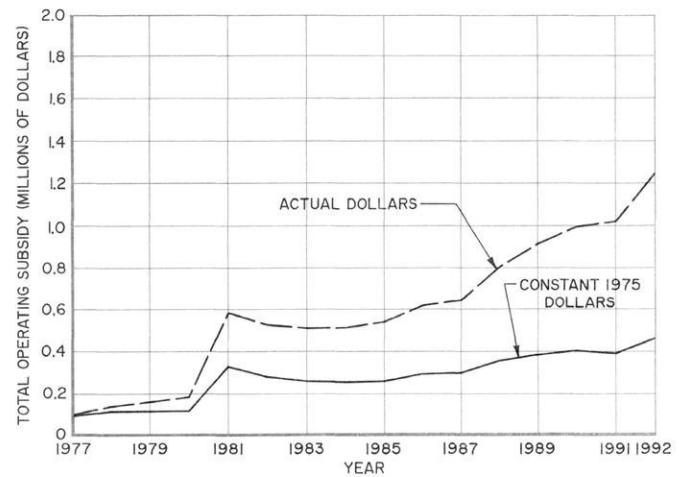
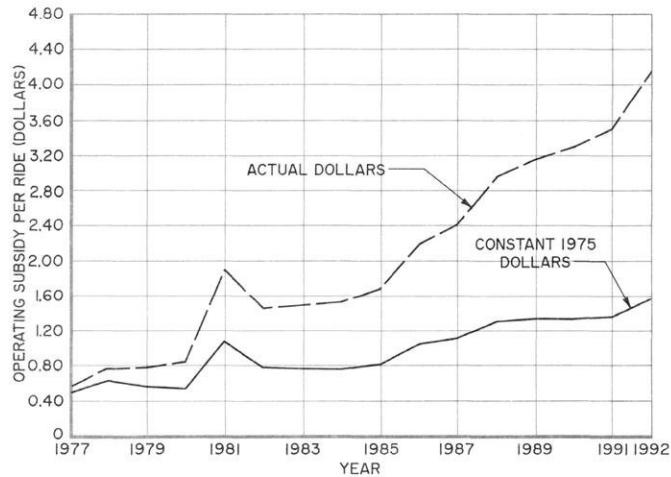


Figure 35

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

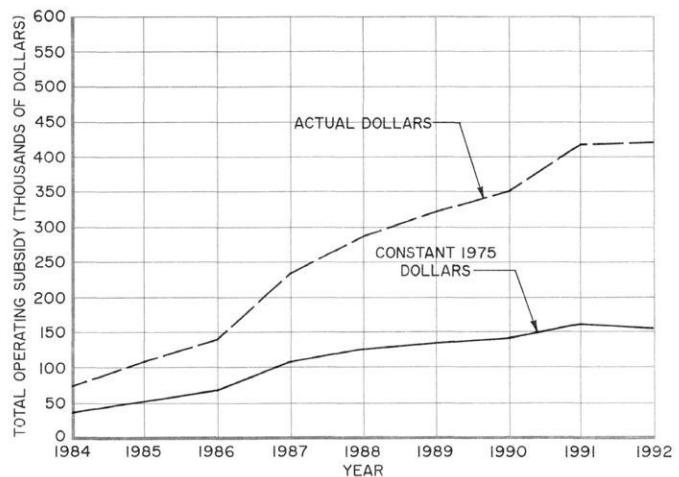
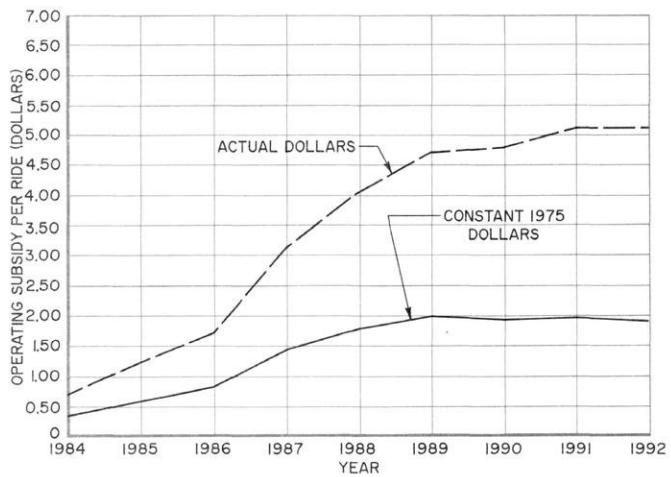


Table 19  
AVERAGE WEEKDAY USE OF PARKING AT CARPOOL LOTS: 1992

Location	Available Parking Spaces	Autos Parked on an Average Weekday Fourth Quarter 1992	Percent of Spaces Used
Ozaukee County			
IH 43 and STH 32/STH 84 (Port Washington) . . . . .	50	4	8
IH 43 and STH 57 (Grafton) . . . . .	100	14	14
IH 43 and CTH C (Cedarburg) . . . . .	50	26	52
STH 57 and STH 84 (Fredonia) . . . . .	10	6	60
Washington County			
USH 41 and CTH Y (Germantown) . . . . .	100	26	26
STH 60 and CTH P (Jackson) . . . . .	30	13	43
Waukesha County			
STH 16 and CTH C (Nashotah) . . . . .	50	12 <sup>a</sup>	24
STH 16 and STH 83 (Chenequa) . . . . .	65	11	17
IH 94 and STH 67 (Oconomowoc) . . . . .	80	51 <sup>a</sup>	64
STH 16 and CTH P (Oconomowoc) . . . . .	45	17	38
IH 94 and CTH C (Delafield) . . . . .	30	16	53
IH 94 and CTH G (Pewaukee) . . . . .	50	26 <sup>a</sup>	52
IH 94 and STH 164 (Pewaukee) . . . . .	80	50	63
IH 43 and STH 83 (Mukwonago) . . . . .	95	45 <sup>a</sup>	47
IH 43 and STH 164 (Big Bend) . . . . .	100	35 <sup>a</sup>	35
IH 43 and CTH Y (New Berlin) . . . . .	60	16	27
IH 43 and CTH O (New Berlin) . . . . .	200	32 <sup>a</sup>	16
USH 41 and Pilgrim Road (Menomonee Falls) . . . . .	80	62 <sup>a</sup>	78
Total	1,275	462	36

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

the carpool parking lots recommended in the adopted year 2000 regional transportation plan is summarized on Map 11.

### Traffic Count Data

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

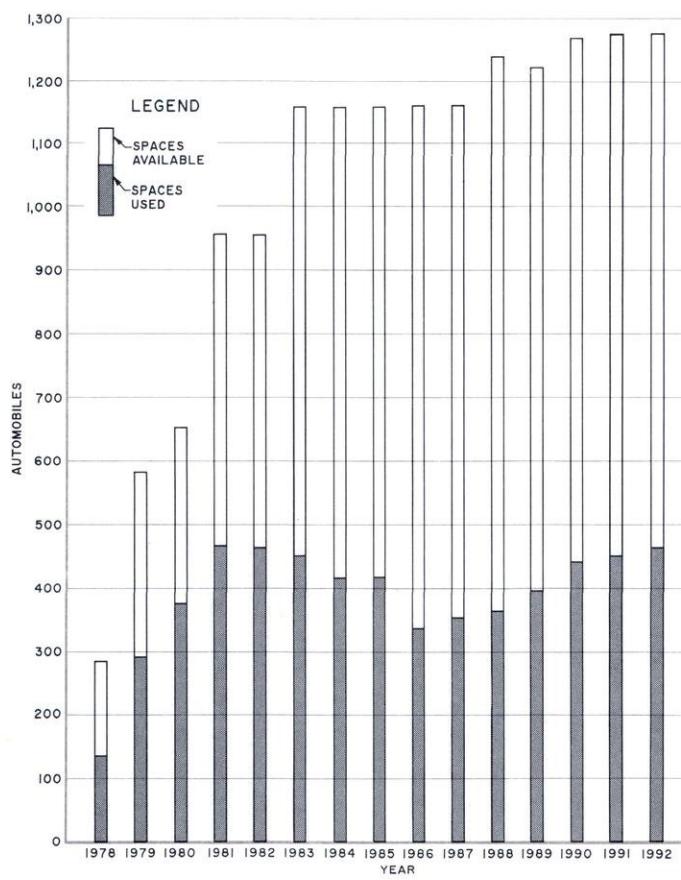
An estimate of the amount of travel on the arterial street and highway system within the Region was prepared for the year 1988 using collated traffic count data. For purposes of comparison, the historic and forecast levels of

travel measured in terms of vehicle miles of travel per average weekday are shown on Table 20 and Figure 37. The data indicated that traffic on the arterial street and highway system has exceeded forecast levels. Arterial street and highway traffic in Southeastern Wisconsin, measured in terms of vehicle miles of travel per average weekday, increased between 1972 and 1988 at an average annual rate of 2.7 percent, as opposed to the forecast rate of 1.5 percent. As a result, arterial traffic in the Region has reached a level not anticipated to occur until the year 2000. In particular, freeway system traffic and traffic congestion have grown rapidly since 1972, as shown on Maps 12 and 13 and in Table 21.

The faster-than-anticipated growth in arterial street and highway traffic since 1972 may be attributed in part to the failure to implement the

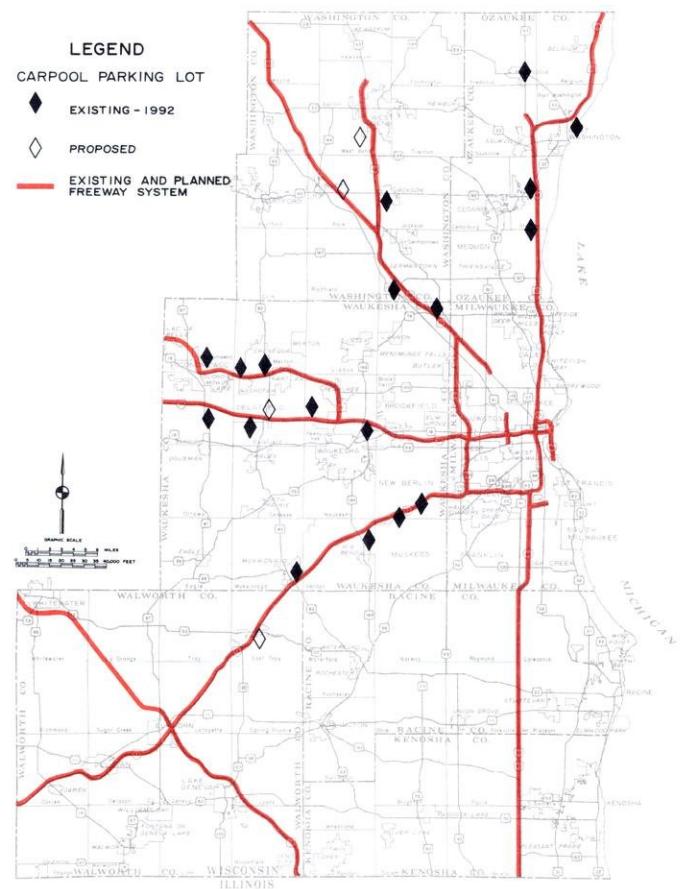
Figure 36

CARPOOL PARKING LOT USE: 1978-1992



Map 11

EXISTING 1992 AND PROPOSED CARPOOL PARKING LOTS



transit system improvements recommended in the adopted regional transportation system plan; in part to a decline in carpooling and vanpooling and in automobile occupancy, which may, in turn, be attributed to a failure to implement recommended carpooling and vanpooling incentives and promotion; and the continuing occurrence of some land use development in the Region at variance with the adopted regional land use plan, principally suburban sprawl and the growth of unplanned major commercial centers in freeway corridors.

It is important to note that the higher-than-forecast levels of arterial traffic are not a result of overall economic and demographic growth in the Region exceeding forecast levels. Analyses show that actual levels of household and employment growth in the Region from 1970 to 1988 closely conformed to forecast levels. Also,

estimated total person-trip generation on an average weekday within Southeastern Wisconsin has increased as forecast, that is, from about 4.5 million person-trips in 1972 to about 5.0 million person-trips in 1988. This current level of trip making is below the forecast year 2000 level of 5.7 million person-trips and is about the level that was projected to occur in 1988. Also, the higher-than-planned levels of highway traffic are not a result of unanticipated increases in suburb-to-suburb traffic. Such increases were specifically foreseen in the first-generation plan, adopted in 1966. Nearly 80 percent of the residential development in the Region and most of the commercial and industrial development has taken place in conformance with the second-generation regional land use plan, which the adopted transportation plan was carefully designed to serve. Thus, the first- and second-generation transportation system plans antici-

Table 20

**HISTORIC AND FORECAST ARTERIAL STREET AND HIGHWAY SYSTEM VEHICLE  
MILES OF TRAVEL ON AN AVERAGE WEEKDAY IN SOUTHEASTERN WISCONSIN**

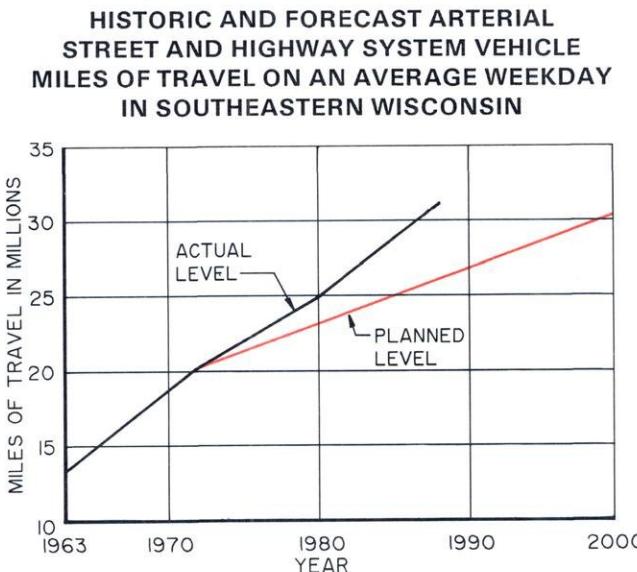
Facility Type	Average Weekday Vehicle Miles of Travel			Average Annual Rate of Increase		
	Estimated Actual			Planned 2000 (thousands)	Actual 1963-1972 (percent)	Actual 1972-1988 (percent)
	1963 (thousands)	1972 (thousands)	1988 (thousands)			
Kenosha County						
Freeway .....	204	382	582	881	7.2	2.7
Standard Arterial ...	734	1,046	1,520	1,948	4.0	2.4
Subtotal	938	1,428	2,102	2,829	4.8	2.4
Milwaukee County						
Freeway .....	531	3,977	6,295	5,894	25.1	2.9
Standard Arterial ...	6,817	6,718	8,341	6,477	-0.2	1.4
Subtotal	7,348	10,695	14,636	12,371	4.3	2.0
Ozaukee County						
Freeway .....	20	223	711	682	30.7	7.5
Standard Arterial ...	464	627	925	837	3.4	2.5
Subtotal	484	850	1,636	1,519	6.5	4.2
Racine County						
Freeway .....	203	415	634	1,177	8.3	2.7
Standard Arterial ...	922	1,398	2,012	1,903	4.7	2.3
Subtotal	1,125	1,813	2,646	3,080	5.4	2.4
Walworth County						
Freeway .....	0	56	338	1,236	--	11.9
Standard Arterial ...	685	817	1,198	1,214	2.0	2.4
Subtotal	685	873	1,536	2,450	2.7	3.4
Washington County						
Freeway .....	0	190	462	852	--	5.7
Standard Arterial ...	696	961	1,441	1,147	3.6	2.6
Subtotal	696	1,151	1,903	1,999	5.8	3.2
Waukesha County						
Freeway .....	159	970	2,149	1,887	22.2	5.1
Standard Arterial ...	1,637	2,344	4,255	3,997	4.1	3.8
Subtotal	1,796	3,314	6,404	5,884	7.0	4.2
Region						
Freeway .....	1,117	6,213	11,171	12,609	21.0	3.7
Standard Arterial ...	11,955	13,911	19,692	17,523	1.7	2.2
Total	13,072	20,124	30,863	30,132	4.9	2.7

pated a substantial increase in traffic in the outlying portions of Milwaukee County and the adjacent portions of Ozaukee, Washington, and Waukesha Counties and in portions of Racine and Kenosha Counties as well. The third-generation regional transportation plan now under development will be designed to serve the current, third-generation, regional land use plan adopted in September 1992.

The particularly substantial increase in freeway traffic may be attributed in part to factors already noted: lack of public transit and travel

demand management plan implementation; the variance of some land use development from the second-generation regional land use plan; and, importantly, the failure to date to implement many required arterial street improvements recommended in the adopted regional transportation plan. Such improvements include the extension of the Lake Arterial in Racine and Milwaukee Counties, the improvement of Ryan Road and Rawson Avenue in Milwaukee County, the improvement of Moorland Road and Pilgrim Road in Waukesha County, the improvement of Racine Avenue and extensions of Barker Road

Figure 37



in Waukesha County, the completion of the Waukesha area bypass in Waukesha County, the improvement of Capitol Drive and Greenfield Avenue in Waukesha County, the improvement of Mequon Road in Washington and Ozaukee Counties, the improvement of Wauwatosa Road in Ozaukee County, and the improvement of STH 164 and of CTH K in Waukesha and Racine Counties. The improvement of these arterials was recommended in the regional plan to provide attractive standard arterial street alternatives to the area freeway system. Lack of implementation of plans for these arterials has resulted in such traffic being too highly concentrated on the freeway system.

## 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, May 1978. The plan extends and amends the regional transportation system plan for the design year 1990 adopted in 1966. The adopted plan is summarized graphically on Map 14. 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 27 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 mileage 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 regional land use objectives. As noted above, the new, third-generation regional transportation plan now being prepared is designed to serve and promote implementation of the adopted third-generation regional land use plan.

The current regional transportation plan did not include a number of previously planned freeways, such as 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. It 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.

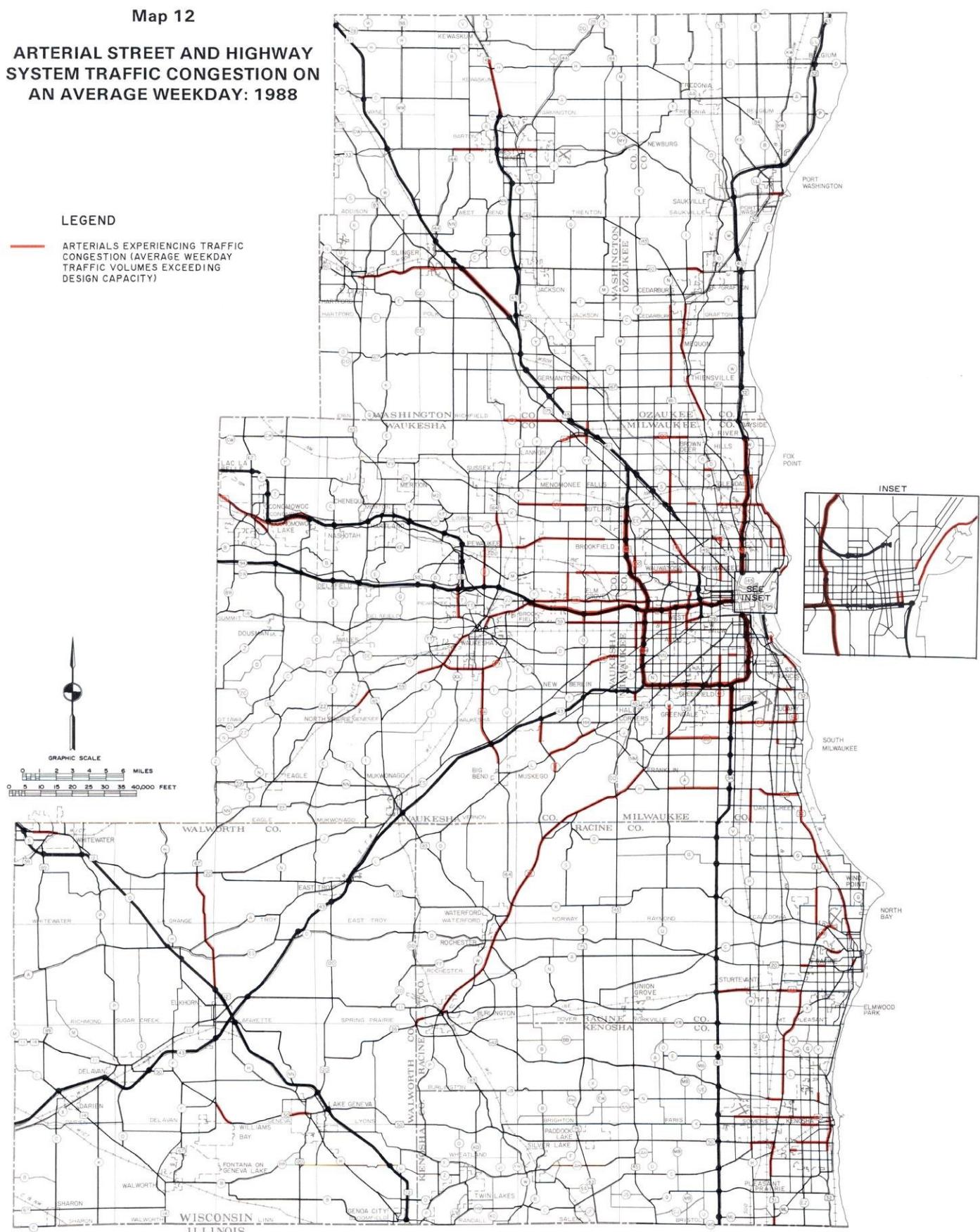
In 1981, the plan was amended to replace the Lake Freeway-South with a four-lane, limited-access surface arterial. In 1983, the plan was further amended to remove the Milwaukee Downtown Loop Freeway and to add in its place a connection of the Park Freeway-East leg of that loop to N. Jefferson Street 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.

Map 12

ARTERIAL STREET AND HIGHWAY  
SYSTEM TRAFFIC CONGESTION ON  
AN AVERAGE WEEKDAY: 1988

LEGEND

— ARTERIALS EXPERIENCING TRAFFIC CONGESTION (AVERAGE WEEKDAY TRAFFIC VOLUMES EXCEEDING DESIGN CAPACITY)



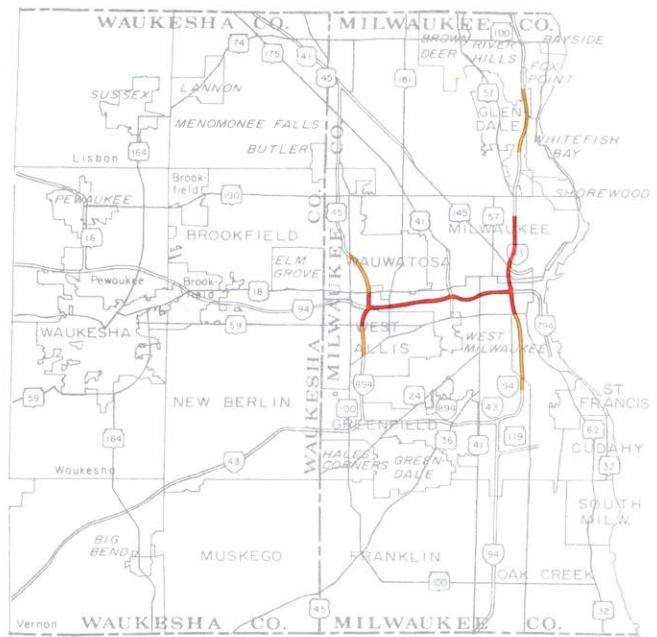
Map 13

## HISTORIC TRENDS IN REGIONAL FREEWAY SYSTEM TRAFFIC CONGESTION: 1972, 1980, AND 1988

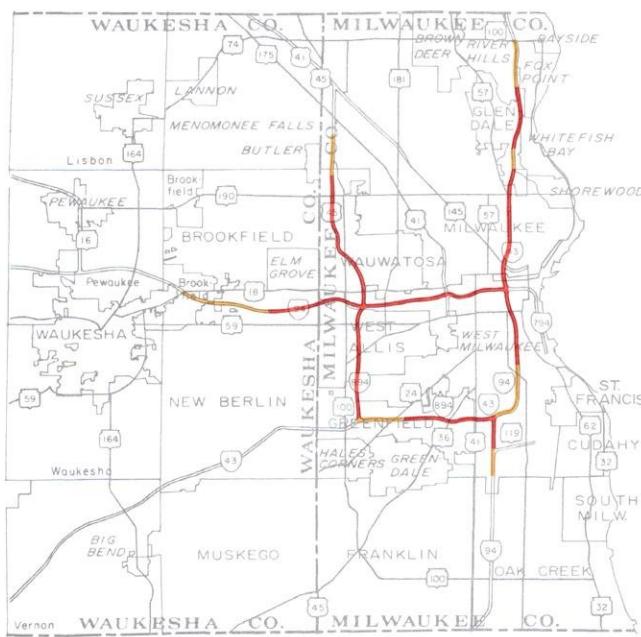
1972



1980



1988



## LEGEND

## TRAFFIC CONGESTION

#### MODERATE (TRAFFIC VOLUMES OVER DESIGN CAPACITY)

SEVERE (TRAFFIC VOLUMES SUBSTANTIALLY OVER DESIGN CAPACITY AND AT OR APPROACHING MAXIMUM CAPACITY)

NOTE: TRAFFIC CONGESTION OCCURS WHEN ARTERIAL FACILITIES CARRY TRAFFIC VOLUMES WHICH EXCEED THEIR DESIGN CAPACITY. SUCH TRAFFIC CONGESTION TYPICALLY OCCURS ONLY DURING THE MORNING AND EVENING PEAK TRAFFIC HOURS OR, IN SOME CASES, DURING THE THREE-HOUR MORNING AND EVENING PEAK TRAFFIC PERIODS. DURING MIDDAY, EVENING, AND EARLY MORNING HOURS, THERE WILL GENERALLY BE LITTLE, IF ANY, TRAFFIC CONGESTION AND DELAY. ALSO, ON MOST URBAN ARTERIAL HIGHWAYS, WEEKEND TRAFFIC PEAKS WILL BE LESS THAN WEEKDAY TRAFFIC PEAKS.

FREeways WHICH CARRY TRAFFIC VOLUMES WHICH MODESTLY EXCEED THEIR DESIGN CAPACITY—BY 10 TO 15 PERCENT OR LESS—TYPICALLY EXPERIENCE REDUCED SPEEDS OF ABOUT 40 TO 50 MILES PER HOUR. SUCH FREeways ALSO EXPERIENCE SEVERE LIMITATIONS ON FREEDOM TO MANEUVER, AND MINOR INCIDENTS CAN CAUSE STOP-AND-GO TRAFFIC. FREeways WHICH CARRY TRAFFIC VOLUMES WHICH SUBSTANTIALLY EXCEED THEIR DESIGN CAPACITY—BY 15 PERCENT OR MORE—EXPERIENCE STOP-AND-GO TRAFFIC AND AVERAGE SPEEDS OF 30 TO 40 MILES PER HOUR OR LESS.

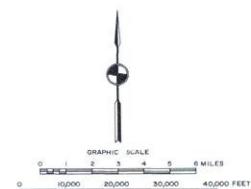


Table 21  
ARTERIAL STREET AND HIGHWAY SYSTEM TRAFFIC CONGESTION ON  
AN AVERAGE WEEKDAY: 1963, 1972, AND 1988 AND PLANNED 2000

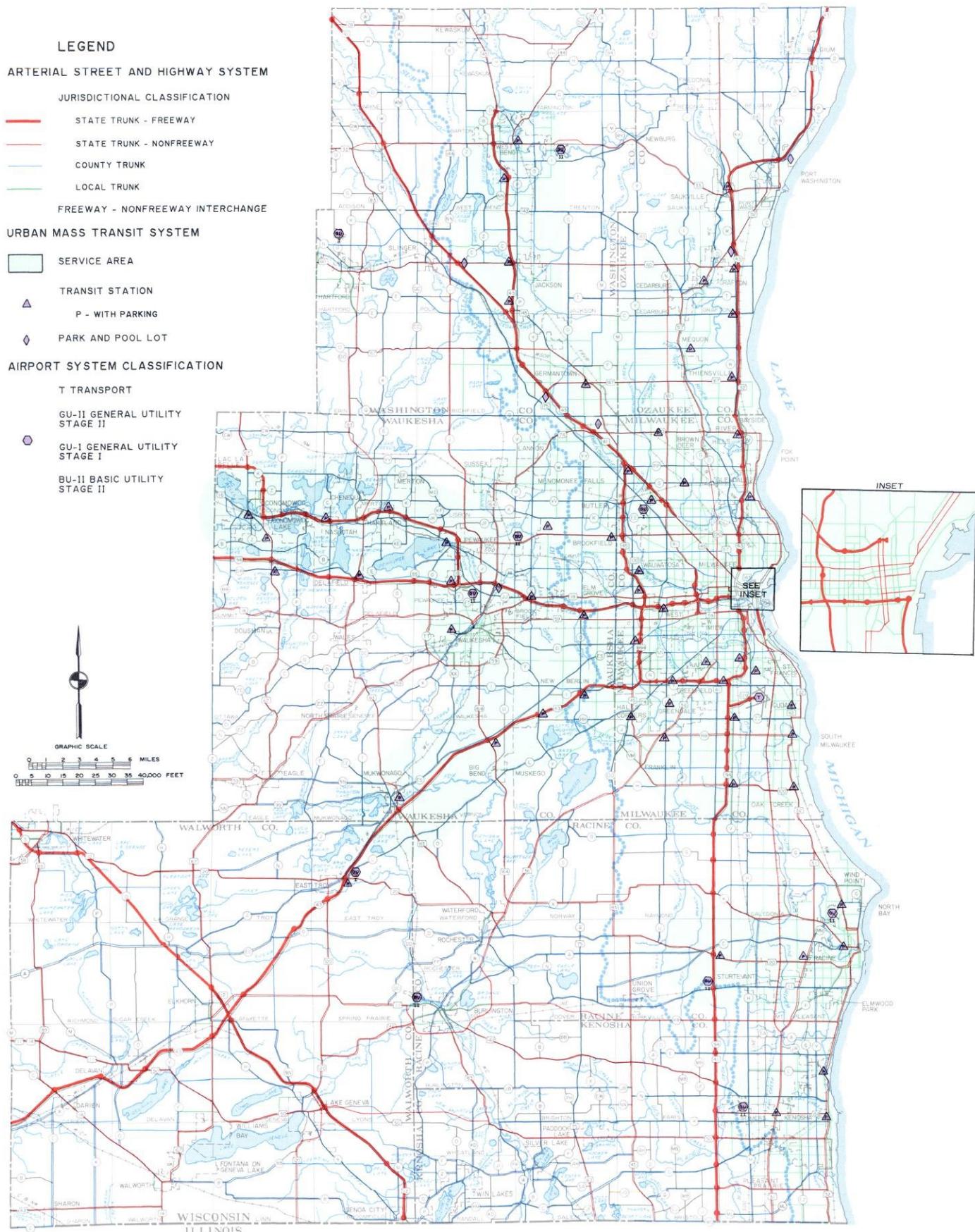
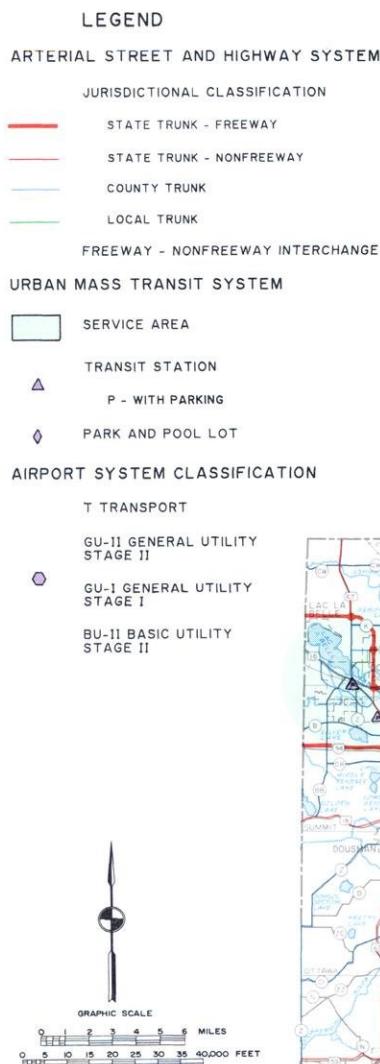
Facility Type	Arterial Facilities Carrying Average Weekday Traffic Volumes Exceeding Design Capacity and Experiencing Traffic Congestion							
	Historical and Existing						Planned 2000	
	1963		1972		1988			
	Mileage	Percent of Total System	Mileage	Percent of Total System	Mileage	Percent of Total System	Mileage	Percent of Total System
Kenosha County								
Freeway .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Arterial .....	13.5	5.0	22.0	8.2	20.8	6.5	3.2	1.0
Subtotal	13.5	4.8	22.0	7.9	20.8	6.3	3.2	0.9
Milwaukee County								
Freeway .....	0.0	0.0	5.3	8.3	41.2	60.4	5.3	7.8
Standard Arterial .....	116.3	14.9	55.7	8.3	55.9	8.2	26.3	3.7
Subtotal	116.3	14.7	61.0	8.3	97.1	12.9	31.6	4.1
Ozaukee County								
Freeway .....	0.0	0.0	0.0	0.0	0.0	0.0	1.9	7.2
Standard Arterial .....	8.3	3.1	5.5	2.3	12.6	4.6	0.0	0.0
Subtotal	8.3	3.1	5.5	2.2	12.6	4.2	1.9	0.6
Racine County								
Freeway .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Arterial .....	13.6	4.0	20.3	6.0	31.5	8.0	0.0	0.0
Subtotal	13.6	3.9	20.3	5.8	31.5	7.7	0.0	0.0
Walworth County								
Freeway .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Arterial .....	5.3	1.3	4.8	1.2	11.1	2.8	0.0	0.0
Subtotal	5.3	1.3	4.8	1.2	11.1	2.5	0.0	0.0
Washington County								
Freeway .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Standard Arterial .....	0.0	0.0	9.1	2.7	22.5	5.3	0.0	0.0
Subtotal	0.0	0.0	9.1	2.7	22.5	5.1	0.0	0.0
Waukesha County								
Freeway .....	0.0	0.0	0.0	0.0	5.3	9.3	0.0	0.0
Standard Arterial .....	34.8	5.0	42.9	7.0	66.3	9.8	9.2	1.3
Subtotal	34.8	5.0	42.9	6.6	71.6	9.7	9.2	1.2
Region								
Freeway .....	0.0	0.0	5.3	3.3	46.5	19.3	7.2	2.5
Standard Arterial .....	191.8	6.1	160.3	5.6	220.7	6.9	38.7	1.2
Total	191.8	6.0	165.6	5.5	267.2	7.8	45.9	1.3

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

Map 14

REGIONAL TRANSPORTATION SYSTEM PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2000



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 Transportation Company 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. 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, Milwaukee County, Wisconsin, December 1986.

At the request of the Wisconsin Department of Transportation and working with an advisory committee of local public officials established by the Department, the Commission in 1991 completed the first phase of a detailed study of the proposed Lake Arterial extension in Milwaukee, Racine, and Kenosha Counties. The results of this work effort are set forth in SEWRPC Memorandum Report No. 64, Lake Arterial Extension Planning Study, August 1991. The report documents the findings of the first, or facility planning, phase of the study. The second phase of the study, the conduct of preliminary engineering, is now being carried out by the Wisconsin Department of Transportation.

The facility planning phase of the study reviewed alternative ways in which to provide additional arterial street capacity in the Lake Arterial corridor. After examining six basic alternative alignments for providing such capacity, it was concluded that the preliminary engineering phase should give detailed consideration to three basic alternatives: 1) the long-planned alignment of the Lake Arterial on new right-of-way paralleling the Chicago & North Western Transportation Company freight line right-of-way, 2) an alignment that would follow the long-planned Lake Arterial route in Racine County, connecting with S. Pennsylvania Avenue in Milwaukee County, and 3) an alignment following the long-planned Lake Arterial route in Racine County connecting with STH 38

(S. Howell Avenue) in Milwaukee County. The preliminary engineering study will focus on these three alignments. That study is scheduled for completion in June 1993.

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

As described earlier, the Commission in 1966 adopted regional land use and transportation system plans to guide development in the Region to the year 1990. The Commission completed the first major review, reevaluation, and revision of the adopted regional land use and transportation system plans in 1977, which extended the design year of the plans to the year 2000. The Commission now has under way a second major review, reevaluation, and revision of the land use and transportation system plans, which will extend the design year of the plans to the year 2010. This review, reevaluation, and revision process, as noted above, has been completed with respect to the preparation and adoption of a new, design year 2010 regional land use plan. A new, third-generation, design year 2010 regional transportation plan is now under preparation.

In 1991, the Commission initiated a comprehensive travel survey to assist in the reevaluation of the existing regional transportation system plan and to aid in the design of the third-generation regional transportation system plan. Information collected as part of the new travel survey will be compared to data obtained during similar surveys conducted by the Commission in 1963, 1972, and, partially, in 1984. Such a comparison will allow the identification of long-term trends in travel characteristics and patterns. Detailed analysis can also be made of emerging travel and transportation issues, including multi-stop travel; two-worker household travel; jobs requiring the use of an automobile or multiple trips during the work day; and the travel characteristics of households located in planned urban service areas versus those located outside such areas.

The data collected through the survey will also be used to update, test, and, if necessary, recalibrate the travel simulation models for the Region. These models, which were developed with data now over 15 years old, are essential for the preparation of forecasts of travel patterns and traffic volumes that may be expected to be

carried on each existing and proposed highway and transit facility in the Region. Such travel data analysis and travel simulation modeling will be needed to evaluate properly transportation control measures required in response to the new Federal Clean Air Act, to study light rail development in the greater Milwaukee area, to study commuter rail and express bus service in the Region, and to enable continuing study of highway, transit, and transportation system management measures.

The comprehensive travel survey will include four major elements and four special surveys. Two elements, a survey of resident household travel and a survey of public transit travel, were completed in 1991. Surveys of truck travel and external travel were completed in 1992. Also completed in 1992 were three of the four special surveys: 1) a group-quartered population survey; 2) a screenline survey; and 3) a taxi, limousine, and specialized carrier survey. An intercity bus and rail survey is scheduled for 1993. These four major elements and the special travel surveys are described below.

#### *Household Travel Survey*

One of the most important elements of the comprehensive travel survey is the survey of the Region's households, since travel by members of those households is estimated to represent about 90 percent of the total travel in the Region. One of the more important uses of the household survey will be the identification of current travel patterns and travel pattern trends for major subareas of the Region. The analysis of this survey data will, for example, permit establishing the trends in suburb-to-suburb travel and assist in identifying the need for, and location of, suburb-to-suburb and reverse-commute transit and highway facilities. Another important use of the survey would be to characterize the travel patterns of certain socio-economic groups, such as elderly households, one-worker families, and two-worker families.

The household travel survey was conducted during October and November 1991. Nearly 17,500 completed samples have been obtained, comprising more than 133,000 internal personal trips. The 17,500 samples represent about 676,100 households with a population of about 1,759,000 persons who make about 5,541,000 internal person-trips on an average weekday.

#### *Public Transit Travel Survey*

Travel by public transit on the urban transit systems in the Region is estimated to represent about 3 percent of the total travel in the Region on an average weekday. A survey of riders on the City of Kenosha, City of Waukesha, and Waukesha County public transit systems was conducted in October 1991 and a survey of Milwaukee County Transit System riders was conducted in November 1991. The results of an earlier, separate survey of the City of Racine transit system conducted in April 1991 will be incorporated into the current travel survey. In all, about 10,600 completed on-board bus surveys were obtained. Coding and expansion of the survey data was completed in 1992. The data are being utilized in the testing and calibration of the regional modal split model for simulation of future travel conditions and in calibrating existing transit system networks preparatory to alternative system development and evaluation.

#### *Truck Travel Survey*

Commercial truck travel within the Region is estimated to represent about 8 percent of all intraregional travel. A truck travel survey of one of every six trucks, or about 16 percent of the trucks registered in the Region, was conducted by mail in April and May 1992. A total of 4,100 usable samples were obtained using a mail-back questionnaire. The survey data were coded preparatory to expansion in 1992.

#### *External Travel Survey*

External travel, which includes trips originating and/or ending outside the Region, is believed to represent about 3 percent of the total travel in the Region on an average weekday. Although it represents a relatively low proportion of total travel, external travel can represent a substantial portion of travel on certain facilities, such as the interstate highways. Data obtained through the external travel survey will be used to validate and recalibrate external traffic models and to identify external traffic patterns. A survey of external street and highway traffic was conducted on selected Tuesdays, Wednesdays, and Thursdays in May and June 1992. Of the approximately 159,000 mail-back questionnaires distributed, about 47,100 usable questionnaires were returned. Coding and expansion of the survey data was completed in 1992. The

expanded data represent about 273,000 average weekday vehicle trips crossing the boundaries of the Region.

### *Special Travel Surveys*

Three of four special surveys intended as supplementary elements of the new regional travel survey were completed in 1992, namely, the group-quartered population survey, the screenline survey, and the taxi, limousine, and specialized carrier survey. The intercity bus and rail survey is scheduled for completion in 1993.

The group-quartered population survey was conducted in April and May 1992, collecting the same information gathered in a home interview survey conducted in 1991. For this survey, 1,400, or approximately 3.6 percent, of the 38,800 residents of the Region living in group quarters such as Huber Law facilities; shelters; nursing homes; motels, hotels, and rooming houses; and schools and institutions were surveyed. Not surveyed were residents of such group quarters as mental hospitals; prisons; invalid homes; and other types of group quarters in which residents were either incarcerated on a full-time basis or for whom the ability to travel was restricted. A total of 1,375, or 98 percent, of the group-quartered population surveyed provided complete information on their travel habits and patterns. The data, coded and expanded in 1992, represent the 38,800 persons in survey findings to complete the inventory of internal person travel by residents of the Region.

The screenline survey was conducted in April and May 1992 and collected manual classifications and machine counts of vehicles crossing the Kenosha, Milwaukee, and Racine screenlines. These data are used to adjust travel survey data. In all, 708,000 vehicles were classified.

The taxi, limousine, and specialized carrier survey was conducted in April and May 1992. A 100 percent mail-back sample of these carriers was conducted. During the initial compilation of the universe of taxicabs, it was determined that limousines and specialized carriers provide service for a large portion of the market that was served by taxicabs in 1972, the last year that a study of this type was conducted. Therefore, a universe of limousines and specialized carriers was also established and surveyed at a 100 percent rate using a mail-back question-

naire. The rate of return for taxicabs was too low to allow any meaningful use of the questionnaires returned within that category. This is evidenced by the fact that in 1963, an estimated 500 taxicabs were registered in the Region; by 1972 the estimate was 450; and in 1992 the estimate was 330. In 1972 it was found that 82 percent of the registered taxicabs were actually in operation. Factors contributing to the decline of taxicab use include the trend among out-of-town visitors to rent automobiles, the increased use of shuttle limousines for travel to and from General Mitchell International Airport, the use of specialized carriers to meet the transportation needs of the elderly and handicapped, and the increasing number of vehicles available to residents of the Region. A total of 381 samples were obtained to represent the approximately 780 specialized carriers; 31 samples were obtained to represent the 116 shuttle limousines estimated to be operating in the Region. Coding and contingency checks were completed in 1992 and the data were prepared for expansion.

### **New County Highway System Plan Completed for Ozaukee County**

A new, second-generation, jurisdictional highway system plan for Ozaukee County was completed in 1992. The new plan updates the recommendations contained in the original plan, adopted in 1973 and documented in SEWRPC Planning Report No. 17, A Jurisdictional Highway System Plan for Ozaukee County, December 1973. Preparation of the new plan was requested in 1990 by the Ozaukee County Highway Committee and guided by the 19-member Technical Coordinating and Advisory Committee on Jurisdictional Highway Planning for Ozaukee County. In February 1992, the Advisory Committee recommended adoption of the plan to the Ozaukee County Board and to the Regional Planning Commission following a public hearing on the plan in October 1991. Recommended changes in jurisdictional responsibility to the jurisdictional highway system plan adopted in 1973 are listed in Table 22.

The new jurisdictional highway system plan for Ozaukee County is shown on Map 15. The plan envisions a proposed system of arterial facilities that can meet existing and probable future traffic demands at an adequate level of service. The plan identifies the location and configura-

Table 22

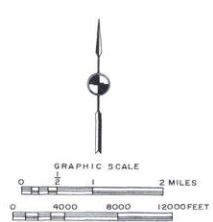
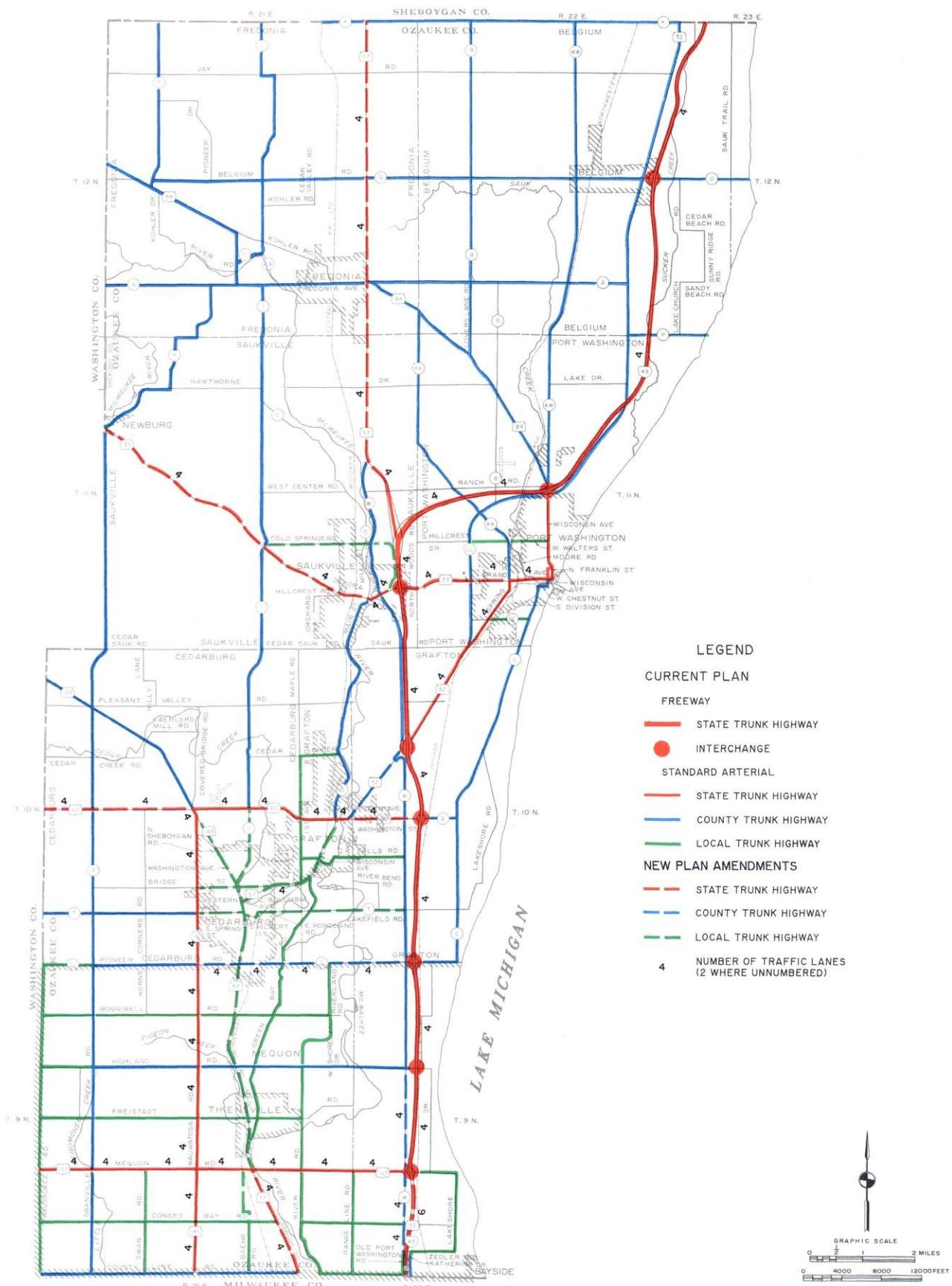
**CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITIES  
UNDER THE NEW OZAUKEE COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN<sup>a</sup>**

Civil Division	Planned	Existing	Facility	From	To	Distance (miles)	Included in First-Generation Plan
Town of Belgium	County trunk highway County trunk highway Local nonarterial	State trunk highway Local trunk highway County trunk highway	STH 84 Lovers Lane Road CTH B	Town of Fredonia CTH A CTH A	Town of Port Washington Town of Port Washington Town of Port Washington	0.71 1.01 1.00	Yes Yes Yes
Town of Cedarburg	State trunk highway County trunk highway  Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway	County trunk highway State trunk highway  New facility State trunk highway State trunk highway County trunk highway County trunk highway County trunk highway County trunk highway County trunk highway	CTH N STH 143  Maple Road extension STH 57 STH 143 CTH C CTH I CTH T CTH T	STH 143 STH 60  Cedar Creek Road City of Cedarburg CTH N Granville Road City of Cedarburg Town of Grafton CTH N	Pioneer Road Washington-Ozaukee County line Village of Grafton Town of Grafton City of Cedarburg CTH M STH 60 City of Cedarburg City of Cedarburg	1.77 3.90 0.44 0.48 0.36 0.50 0.65 0.50 0.33	Yes Yes Yes No Yes Yes No No No
Town of Fredonia	County trunk highway County trunk highway  County trunk highway County trunk highway County trunk highway Local nonarterial	New facility State trunk highway  State trunk highway Local trunk highway Local trunk highway County trunk highway	Belgium-Kohler Road extension STH 84  STH 84 Belgium-Kohler Road Belgium-Kohler Road CTH AA	CTH I Washington-Ozaukee County line Village of Fredonia CTH E Cedar Valley Road CTH I	Cedar Valley Road  Village of Fredonia Town of Belgium CTH I STH 57 STH 84	1.00 4.84 1.17 2.08 1.00 0.74	Yes Yes Yes Yes Yes Yes
Town of Grafton	County trunk highway Local trunk highway Local trunk highway Local trunk highway	State trunk highway New facility County trunk highway County trunk highway	STH 57 Maple Road extension CTH T CTH Q	IH 43 Cedar Creek Road Town of Cedarburg IH 43	Village of Grafton Village of Grafton CTH W CTH C	1.85 0.44 1.98 0.67	No Yes No No
Town of Port Washington	County trunk highway County trunk highway County trunk highway Local trunk highway Local trunk highway Local nonarterial Local nonarterial	State trunk highway Local trunk highway Local trunk highway New facility County trunk highway County trunk highway County trunk highway	STH 84 Lovers Lane Road Spring Street Walters Street CTH CC CTH B CTH LL CTH KK	City of Port Washington STH 84 City of Port Washington CTH KK CTH LL CTH C CTH LL Spring Street	Town of Belgium Town of Belgium CTH KK City of Port Washington STH 32 Town of Belgium City of Port Washington	3.82 0.41 0.15 1.00 0.52 3.26 0.28	Yes Yes Yes Yes Yes Yes Yes
Town of Saukville	Local trunk highway Local trunk highway Local nonarterial	New facility Local nonarterial County trunk highway	Cold Springs Road extension Cold Springs Road CTH O	CTH O STH 33 CTH I	STH 33 CTH O Village of Saukville	0.86 1.60 3.91	No No Yes
Village of Fredonia	County trunk highway Local nonarterial	State trunk highway County trunk highway	STH 84 CTH AA	STH 57 STH 84	CTH AA STH 84	1.42 0.79	Yes Yes
Village of Grafton	Local trunk highway	State trunk highway	STH 57	Town of Grafton	Town of Grafton	1.84	No
Village of Saukville	Local trunk highway Local trunk highway Local nonarterial	Local nonarterial New facility County trunk highway	Cold Springs Road Cold Springs Road CTH O	West Village limits of Village of Saukville North Village limits of Village of Saukville STH 33	East Village limits of Village of Saukville STH 33	0.35 0.52	No No
Village of Thiensville	Local trunk highway	State trunk highway	STH 57	City of Mequon	City of Mequon	0.92	No
City of Cedarburg	State trunk highway County trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway	County trunk highway Local trunk highway State trunk highway State trunk highway State trunk highway State trunk highway County trunk highway County trunk highway	CTH N Pioneer Road STH 57 STH 57 STH 57 STH 143 CTH I CTH T	Pioneer Road STH 57 Pioneer Road Washington Avenue City of Mequon STH 57 Town of Cedarburg Town of Cedarburg Webster Avenue	STH 143 Town of Cedarburg Columbia Road Keup Road Pioneer Road Town of Cedarburg Town of Cedarburg Evergreen Boulevard	1.08 0.53 1.21 0.74 0.23 1.53 0.87 0.16	Yes Yes No No No Yes No Yes
City of Mequon	State trunk highway State trunk highway County trunk highway County trunk highway County trunk highway County trunk highway County trunk highway Local trunk highway	New interchange Local trunk highway New facility Local trunk highway Local trunk highway Local trunk highway Local trunk highway New facility New facility New facility State trunk highway Local nonarterial	IH 43 Wauwatosa Road Granville Road extension County Line Road Granville Road Granville Road Highland Road Highland Road Pioneer Road River Road River Road Industrial Drive/Executive Drive/Baehr Road STH 57 STH 167 Industrial Drive	Highland Road STH 167 Freistadt Road Wasaukee Road County Line Road Highland Road Highland Road Granville Road Highland Road Pioneer Road River Road Highland Road Grace Avenue	-- Pioneer Road Highland Road STH 57 Freistadt Road Pioneer Road IH 43 IH 43 Bonniwell Road Freistadt Road	-- 3.95 1.00 2.42 2.98 2.00 6.27 3.16 1.20 0.17	No No Yes Yes Yes Yes Yes Yes Yes Yes
City of Port Washington	State trunk highway State trunk highway State trunk highway County trunk highway County trunk highway County trunk highway Local trunk highway Local nonarterial	Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway Local trunk highway County trunk highway	Wisconsin Street Swing Street Jackson Street Chestnut Street Division Street Spring Street Wisconsin Street CTH CC CTH KK	Jackson Street Franklin Street Swing Street Division Street Town of Port Washington STH 33 Chestnut Street Grand Avenue CTH C Spring Street	Grand Avenue Jackson Street Franklin Street Wisconsin Street Chestnut Street CTH KK Grand Avenue CTH C Town of Port Washington	0.20 0.02 0.08 0.20 0.41 0.60 0.12 0.28 0.04	No No No Yes Yes Yes Yes Yes Yes

<sup>a</sup>The jurisdictional transfers should all be initiated as soon as possible because the transfers will promote implementation of the recommended plan improvement.

Map 15

FINAL RECOMMENDED OZAUKEE COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



tion 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 which level of government should assume responsibility for the construction, operation, and maintenance of each facility making up the arterial system.

Changes recommended by the Advisory Committee include the widening of IH 43 between the Ozaukee-Milwaukee County line and STH 167 from four to six travel lanes, the easterly extension of Cold Springs Road across the Milwaukee River between CTH O and STH 33, the improvement of CTH W between the Ozaukee-Milwaukee County line and Highland Road from two to four travel lanes, the improvement of STH 57 between IH 43 and the Ozaukee-Sheboygan County line from two to four travel lanes, the improvement of STH 57 between STH 167 and the Ozaukee-Milwaukee County line and between Bridge Street and First Avenue from two to four travel lanes, the improvement of STH 33 between the Ozaukee-Washington County line and STH 32 from two to four travel lanes, the improvement of STH 60 between the Ozaukee-Washington County line and STH 143 from two to four travel lanes, and the improvement of Pioneer Road (CTH C) between CTH N and IH 43 from two to four travel lanes.

The Advisory Committee also reaffirmed the need for a new freeway-to-surface arterial interchange on IH 43 at Highland Road to provide relief to STH 167 and CTH W, the need for the jurisdictional transfer to the State trunk highway system and the improvement from two to four travel lanes of Wauwatosa Road and CTH N between STH 167 and STH 143, and the need for the jurisdictional transfer of STH 143 to the county trunk highway system between the Ozaukee-Washington County line and STH 60.

Finally, the Advisory Committee recommended the jurisdictional transfer of STH 57 between IH 43 and STH 60 and between STH 60 and STH 167, respectively, to the county trunk highway system and the local trunk highway system, the jurisdictional transfer of STH 143 between CTH N and STH 57 to the local trunk highway system, the jurisdictional transfer of CTH I between STH 60 and the City of Cedarburg north corporate limits to the local trunk highway system, and the jurisdictional transfer of CTH T between CTH N and the City of Cedarburg west corporate limits and between the City of Cedar-

burg east corporate limits and CTH W to the local trunk highway system. The Advisory Committee also recommended the addition of Cold Springs Road between CTH I and CTH O to the arterial system as a local trunk highway and the addition of Industrial Drive and Executive Drive between STH 167 and Donges Bay Road to the arterial system as a local trunk highway.

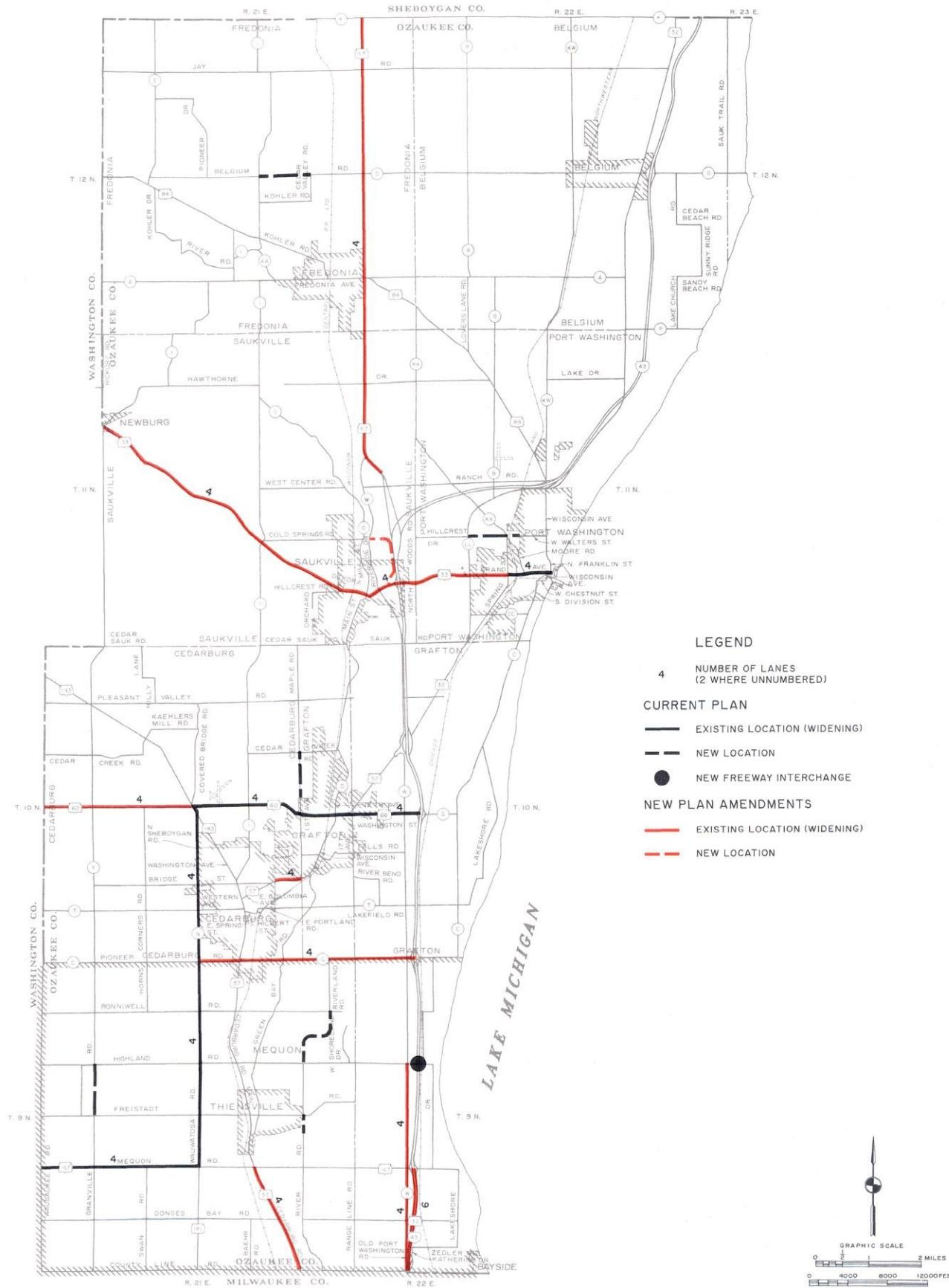
The major capacity improvements recommended under the new plan are shown on Map 16. These capacity improvements include the widening of existing facilities to provide additional traffic lanes and the construction of new arterial facilities. The recommended changes in jurisdictional responsibility are shown on Map 17.

In the year 2010, the design year of the new plan, the recommended arterial system would consist of about 314 miles of streets and highways, or about 33 percent of the 965-mile total street and highway system expected to serve Ozaukee County. The recommended State trunk highway element of the plan would consist of 80 miles of arterial facilities, or about 25 percent of the 314-mile planned arterial system. The recommended county trunk highway element of the plan would consist of about 162 miles of arterial facilities, or about 52 percent of the 314-mile planned arterial system. The recommended local trunk highway element of the plan would consist of about 72 miles of arterial facilities, or about 23 percent of the 314-mile planned arterial system. Under the recommended plan, the total mileage of State trunk highways in the County would decrease from about 101 miles to about 80 miles, or by about 21 percent. The total mileage of county trunk highways would increase from 138 to 162 miles, or by about 17 percent. The total local trunk highway mileage would decrease from 82 to 72 miles, or by about 12 percent.

Of the total 314 miles of the planned arterial system in Ozaukee County, 257 miles, or 82 percent, would require only preservation or resurfacing and reconstruction; 50 miles, or 16 percent, would require improvement or widening to provide additional traffic lanes; and seven miles, or 2 percent, would consist of new facilities. Of the 50 miles of proposed improvement projects, 41 miles, or 82 percent, would be on the planned State trunk highway system; eight miles, or 16 percent, would be on the planned county trunk highway system; and one mile, or

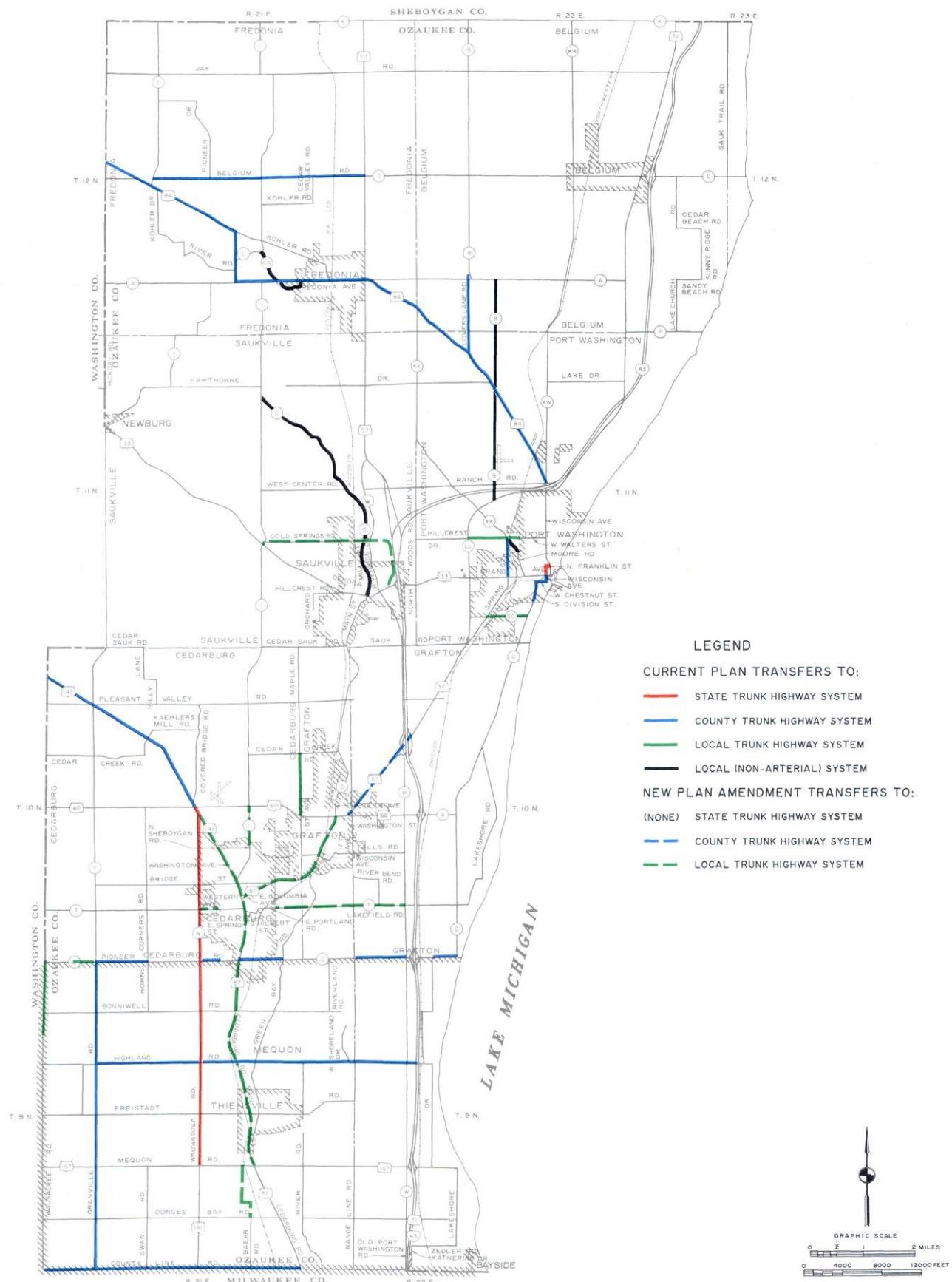
Map 16

CAPACITY IMPROVEMENTS RECOMMENDED UNDER THE FINAL  
NEW OZAUKEE COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



### Map 17

## CHANGES IN HIGHWAY SYSTEM JURISDICTIONAL RESPONSIBILITY IN OZAUKEE COUNTY RECOMMENDED UNDER THE FINAL NEW OZAUKEE COUNTY JURISDICTIONAL HIGHWAY SYSTEM PLAN



2 percent, would be on the planned local trunk highway system. None of the seven miles of proposed new arterial facilities would be on the State trunk highway system; two miles, or 29 percent, would be on the county trunk highway system; and five miles, or 71 percent, would be on the local arterial system.

The report documenting the above recommendations of the Advisory Committee was completed, published, and transmitted to the Ozaukee County Highway Committee. Published in February 1992, it is entitled Amendment to the Ozaukee County Jurisdictional Highway System Plan: 2010. The plan was adopted by the Ozaukee County Board of Supervisors on October 7, 1992, and, at year's end, awaited action by the Regional Planning Commission.

#### **New County Highway System Plan for Walworth County Adopted by Commission**

In March 1992, the Commission adopted a new, second-generation jurisdictional highway plan for Walworth County as an amendment to the regional transportation plan. The new plan, which was also adopted by the Walworth County Board of Supervisors in January 1992, is set forth in the Commission document entitled Amendment to the Walworth County Jurisdictional Highway System Plan—2010, October 1991, and was summarized in the 1991 Annual Report. The new plan amends SEWRPC Planning Report No. 15, A Jurisdictional Highway System Plan for Walworth County, October 1972.

#### **Development Plan for the IH 94 West Corridor**

Work continued during 1992 on the preparation of a land use and supporting transportation system plan for the IH 94 West Corridor in Waukesha County. The corridor extends west from the CTH T interchange in the City of Waukesha and Town of Pewaukee to the Waukesha-Jefferson County line. The study is being undertaken at the request of the Wisconsin Department of Transportation. The Department's request was precipitated by concerns at the State level that land use changes were occurring rapidly in this corridor, that such changes were contributing to increased traffic congestion in the corridor, and that there was a need to seek cooperative agreement among Waukesha County and the several local governments concerned as to future land use patterns

for the corridor. Based upon that future land use pattern, supporting arterial highway and transit system plans would be developed, giving due consideration to the need for additional freeway interchanges and the reconfiguration of existing freeway interchanges and frontage roads.

Work on this subregional planning effort is being overseen by a 14-member Intergovernmental Coordinating and Technical Advisory Committee. During 1990, the Advisory Committee met to consider initial report materials developed by Commission staff setting forth inventory findings regarding natural resources; existing land uses and land use regulations; and existing and forecast population, housing, and employment data. The Committee also reviewed proposed objectives and standards for land use development within the corridor. During 1991, the Committee met to review and consider alternative land use development plans for the corridor for the design year 2010. Anticipated transportation impacts associated with each of the alternative land use plans were reviewed by the Committee in 1992. Also in 1992, modifications of the land use plan were recommended by the Committee on the basis of a review of the transportation system impacts brought about by the preliminary land use alternatives and final land use plans were prepared for analysis in 1993. It is anticipated that the transportation recommendations attendant to these alternative land use plans, along with additional development proposals in the City of Oconomowoc area and the City of Delafield in the vicinity of STH 83 and IH 94, will be prepared and documented in the planning report.

#### **City of West Bend Transportation System Plan**

Work on a detailed transportation system plan for the City of West Bend initiated in 1991 continued in 1992 after the adoption of a land use plan for the City in June 1992. Inventories related to the physical and operating characteristics of the arterial street and highway system were completed. Existing and anticipated future traffic problems on the existing arterial street and highway system based on current and forecast design year 2010 traffic volumes were identified. At year's end, analyses of improvements to study area arterials recommended in the adopted Washington County jurisdictional highway system plan were being conducted to establish their ability to abate the identified problems.

## IH 94 South Corridor Plan Adopted

In January 1992, the Commission adopted a new land use-transportation system development plan for the IH 94 South Corridor in Kenosha, Milwaukee, and Racine Counties as an amendment to both the regional land use plan and the regional transportation plan. The new plan is documented in SEWRPC Community Assistance Planning Report No. 200, A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties, December 1991, and was summarized in the "Transportation Planning Division" section of the Commission's 1991 Annual Report.

## TRANSPORTATION SYSTEMS MANAGEMENT PLANNING AND TRAFFIC ENGINEERING

During 1992, the Commission continued a work effort to carry out transportation systems management studies for communities in Southeastern Wisconsin. One such study was under way during the year and is described in the following section. In addition, work efforts attendant to ridesharing and transit system short-range planning were carried out.

### Traffic Engineering Study of Ann Rita Drive, Coventry Drive, and Macauley Drive in the Canterbury Hills Subdivision in the City of Brookfield

In October 1990, the City of Brookfield requested that the Commission staff conduct a traffic engineering study of the streets in the Canterbury Hills subdivision in the City. Inventories of average weekday traffic volumes, vehicular operating speeds, motor vehicle accidents, and the physical characteristics of the streets were conducted, as was a license plate survey, to determine existing traffic problems. Three traffic problems were identified: 1) traffic utilizing the study segments which neither originated nor ended at a property abutting the study segments, 2) a modest vehicular speeding problem, and 3) inappropriate traffic control at three study segment intersections. At the end of 1992, a number of traffic engineering actions were identified and were being evaluated to determine their potential to abate the existing traffic problems. The final findings and recommendations of the study will be set forth in a report to be transmitted to the City for its consideration.

## 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, March 1977. 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 among commuters.

On the basis of the survey findings, it was recommended that the program be continued, since the benefits derived from the program substantially outweighed its modest cost. It was further recommended that the program be extended to residents of Kenosha, Racine, and Walworth Counties; that techniques be employed to improve the timeliness of response to ride-share requests; that the use of public park-ride and park-and-pool lots be promoted for ridesharing purposes; that the promotion of the use of vanpools, buspools, and taxipools be expanded;

and that 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, May 1983.

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 with 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 1992, a total of 150 inquiries were made to the Wisconsin Department of Transportation concerning carpooling. Of this total, 60 matches were found in the computerized file maintained by the Commission, and in each such case the requesting individual was provided with a list of potential carpoolers.

### **Racine Transit System Development Plan**

During 1992, the Commission began preparation of a new transit system development plan for the City of Racine. The new plan is intended to provide direction in the operation and development of the City of Racine transit system into the mid-1990s in much the same way that previous plans provided direction to the City during the late 1970s and early 1980s. The original transit plan for the City was completed by the Commission in 1974. A second-generation plan was completed in 1984. The majority of the recommendations in the previous plans have been successfully implemented.

At year's end, work on the City of Racine transit system development plan had progressed to the point at which the operating and service characteristics of the City's existing transit services had been described and the land use, socio-economic, and travel characteristics of the study area had been identified. This was done with particular regard for their impacts on the need for changes in the City's transit system and included information obtained through a special on-bus passenger survey conducted by the Commission in April 1991. The work completed during 1992 also included documentation of a performance evaluation of the existing transit system. At year's end, work was under way on the identification and analysis of alternative service changes for the period from 1993 through 1997. Work on the City of Racine transit system development plan is expected to be completed during 1993.

### **Kenosha Area Transit Development Plan Adopted by Commission**

As noted above, in June 1992, the Commission adopted a new, third-generation transit development plan for the Kenosha area. The new plan, documented in SEWRPC Community Assistance Planning Report No. 183, Kenosha Transit System Development Plan: 1991-1995, September 1991, was summarized in the Commission's 1991 Annual Report. The new plan supersedes a second-generation plan adopted by the Commission in 1985.

### **Transit Development Plan for City of West Bend Adopted**

In March 1992, the Commission adopted a transit system development plan for the City of West Bend as a new element of the comprehensive regional plan. The plan, documented in SEWRPC Community Assistance Planning Report No. 189, A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996, February 1991, was summarized in the Commission's 1991 Annual Report.

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

During 1992, short-range transit planning activities for the Milwaukee County Transit System were conducted by the staff of that system and the Milwaukee County Department of Public

Works. Through this planning effort, the following major activities were carried out during the year: development of the annual element of the regional transportation improvement program, preparation of a Title VI assessment evaluating the provision of transit service to special population groups, and updating of programs for the inclusion of business enterprises operated by the disadvantaged, minorities, and women in the provision of transit service.

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

In 1978, the Commission adopted a transportation plan for transportation-handicapped people in the Region. The plan is documented in SEWRPC Planning Report No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, April 1978. The plan is designed to reduce, and sometimes to eliminate, the existing physical and/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 semi-ambulatory persons. For those transportation-handicapped persons in the three urbanized areas who would continue to be unable to use public bus systems, the institution of a user-side subsidy program was recommended. Such a program would enable eligible transportation-handicapped persons to arrange for their own transportation by taxi or private wheelchair van carrier, with the local transit operator subsidizing the cost of the trip. For transportation-handicapped persons living outside the three major urban areas, the plan recommended that each county implement a demand-responsive transportation service administered through the county and operated by either an interested privately owned transportation service provider or a social service transportation provider. The plan also recommended that the transportation services provided by existing social service agencies in each county be coordinated to make more efficient use of their transportation-related facilities and services, with the county board in each county given the responsibility of effecting such coordination.

## **Section 504 Public Transit Programs for Disabled Persons**

The adopted transportation plan for the transportation-handicapped was amended during 1987 following the completion of public transit plans for disabled 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 and is implementing regulations issued by the U. S. Department of Transportation in 1986. The 1986 regulations required that each recipient's public transportation program make services available to disabled 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 semi-ambulatory persons, 2) providing fixed-route bus service which is accessible to wheelchair-bound and semi-ambulatory persons over the regular routes operated by the recipient, or 3) providing a mix of accessible specialized transportation and accessible bus services. The public transit programs then recommended 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, May 1987; 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, all published in June 1987. These plan documents have since been superseded by the plan documents described in the following section.

## **Americans with Disabilities Act**

On July 26, 1990, the Americans with Disabilities Act (ADA) was signed into law. The Act can be characterized as an omnibus civil rights law for persons with disabilities. With respect to public transit service, the ADA includes two provisions that will have a significant impact on the operation of public transit services. One provision requires all vehicles used in providing fixed-route transit for which purchase or lease

contracts are entered into after August 26, 1990, to be accessible to persons with disabilities, including those using wheelchairs. A second provision requires all public entities that provide fixed-route transit service to provide comparable paratransit service to disabled persons unable to use the fixed-route system. Regulations designed to implement this paratransit service provision of the ADA were issued by the U. S. Department of Transportation, Federal Transit Administration (FTA), on September 6, 1991. These regulations amended previous Federal regulations pertaining to the provision of paratransit services to the disabled. Specifically, the comparable paratransit service provided by each public entity must:

1. Serve any individual with a permanent or temporary disability who is unable independently to board, ride, or disembark from the buses used to provide fixed-route transit service; or is capable of using an accessible bus providing fixed-route transit service, but no accessible bus is available for the desired trip; or is unable to travel to or from the boarding or disembarking location on the fixed-route transit system.
2. Serve all trip origins and destinations within three-quarters of a mile on either side of the regular noncommuter bus routes operated by the public transit agency.
3. Provide service on a desired day in response to a request made before the end of normal business hours on the previous day and make reservation service available during both normal weekday business hours and during similar hours on weekends and holidays preceding a normal service day.
4. Limit fares for disabled individuals to no more than twice the full fare for fixed-route transit service.
5. Eliminate fares for needed personal-care attendants.
6. Eliminate restrictions based on trip purpose.
7. Provide service during the same hours and on the same days as the fixed-route service.
8. Eliminate capacity constraints, such as restrictions on the number of trips an individual can take, waiting lists, consistent denial of trip requests on the basis of insufficient capacity, and consistent untimeliness with respect to scheduled pickup times or trip durations.

The 1991 regulations required each public entity operating a fixed-route transit system to prepare and submit to the FTA by January 26, 1992, a plan for providing the required complementary paratransit service. Additionally, in each case, annual updates of the initial plan, which would document the progress achieved in implementing the plan and any significant changes to the plan content or timetable, were also required to be submitted each year thereafter. The five public entities in the Region that operate fixed-route transit systems, Milwaukee and Waukesha Counties and the Cities of Kenosha, Racine, and Waukesha, each requested Commission assistance during 1991 in preparing the initial paratransit service plans submitted in January 1992 to comply with the new Federal regulations. These 1992 paratransit service plans are documented in SEWRPC Memorandum Reports No. 58, A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System; No. 59, A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System; No. 60, A Paratransit Service Plan for Disabled Persons—City of Racine Transit System; No. 61, A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility; and No. 62, A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System, all published in January 1992 and adopted by the Commission during that month as amendments to the 1978 regional elderly-handicapped transportation plan. These five 1992 amendments, whose plan documents were summarized in the 1991 Annual Report, thus supersede a series of earlier amendments to the regional elderly-handicapped transportation plan, as set forth in a footnote to Table 1 of this 1992 Annual Report.

Further assistance was provided during 1992 by the Commission to each transit operator in preparing the required updates of the 1992 plans to be submitted in January 1993. Summaries of the recommended changes to the paratransit services of each transit operator proposed under each operator's initial 1992 paratransit service

plan, along with the progress made in implementing these changes during 1992, as identified in each operator's 1993 plan update, are provided in the following sections.

#### *Milwaukee County*

The 1992 paratransit service plan for the Milwaukee County Transit System proposed that the County comply with the current Federal regulations by making modifications to the County's existing paratransit service for disabled persons, provided through the Milwaukee County user-side subsidy program. Under this program, eligible disabled users have their transportation publicly subsidized so that they can purchase service from participating private service providers of their choice. With the user-side subsidy program, the user has the freedom to choose the service provider and when and where he or she wishes to travel within Milwaukee County. During 1992, one private taxicab company and 15 private van carriers were under contract with the County to participate in the program. The most significant modifications proposed under the 1992 plan were as follows:

- Expanding eligibility so as to provide paratransit service to all disabled persons identified by the new regulations as eligible.
- Expanding wheelchair van service hours to match the hours of operation of the fixed-route bus system.
- Establishing a "next-day," seven-day-a-week reservation system for wheelchair van carrier service.
- Limiting one-way fares charged eligible recipients to no more than twice the base cash fare for fixed-route bus service within the ADA-required service area and eliminating fares for personal-care attendants.
- Eliminating the annual registration fee.
- Expanding the capacity of the program to enable the paratransit service to accommodate the expanded program eligibility and ridership.

Milwaukee County's 1993 plan update indicates that the County made substantial progress during 1992 in implementing most of the modifications to the user-side subsidy program proposed under the 1992 plan in accordance with the

plan timetable or with only minor delays. The 1993 plan update also indicates that some program modifications are now proposed to be implemented over a time span with deadlines extended beyond those set forth in Milwaukee County's 1992 plan. More specifically, under the 1993 plan update, Milwaukee County proposes to:

- Delay from January 1, 1993, to April 1, 1993, full implementation of expanded eligibility for program users and a revised eligibility certification process meeting Federal ADA eligibility guidelines.
- Delay from July 1, 1992, to January 1, 1994, the implementation of a new process for suspension of service to individuals for repeated violations of program policies.
- Delay from January 1, 1993, to January 1, 1994, the elimination of the current \$7.00 annual registration fee for program users.
- Delay from January 1, 1993, to January 1, 1996, the implementation of "next-day" service scheduling for wheelchair-van service providers; currently, 24- to 48-hour advance reservations are needed.
- Delay from January 1, 1993, to January 1, 1997, the provision of additional capacity for the program to assure the ability to respond to all trip requests in accordance with Federal ADA service criteria.
- Implement, on January 1, 1997, an expanded service area for the program, including small portions of Milwaukee County and adjacent Waukesha County which are within three-quarters of a mile of a Milwaukee County Transit System bus route. This new plan recommendation was prepared in response to FTA comments on the 1992 plan.

With the proposed changes to the 1992 plan timetable, the date when the County's user-side subsidy program would be in full compliance with Federal regulations would be extended from January 1, 1993, as proposed under the 1992 plan, to January 1, 1997. During 1992, about 406,300 one-way trips were made under the user-side subsidy program, an increase of about 4 percent over the 389,200 one-way trips made under the program during 1991.

## *Waukesha County*

The 1992 paratransit service plan for the Waukesha County Transit System proposed that the County comply with the current Federal regulations by making modifications to the County's existing program providing paratransit service for disabled persons unable to use its fixed-route bus service, the parallel commuter bus program. Under the current program, Waukesha County offers door-to-door lift-equipped van service to disabled individuals for trips with origins and destinations within one mile on either side of three regular noncommuter bus routes which are subsidized by Waukesha County within the major travel corridor between the City of Waukesha and the City of Milwaukee central business district. The paratransit service offered under the parallel commuter bus program is administered for the Waukesha County Transportation Department by the Waukesha County Department of Aging and directly operated by the County through the Department of Aging's Ride-Line transportation program, a countywide, advance-reservation, door-to-door transportation service for elderly and disabled individuals. The most significant modifications proposed under the County's 1992 plan were as follows:

- Expanding eligibility to provide paratransit service to all disabled persons identified as eligible by the new regulations.
- Expanding service hours to match the hours of operation of the fixed-route system.
- Establishing a "next-day," seven-day-a-week reservation system.
- Limiting one-way fares charged eligible recipients to no more than twice the base cash fare for fixed-route bus service within the ADA-required service area and eliminating fares for personal-care attendants.
- Eliminating rules giving priority to medical, nutritional, and work-related trips, as well as the rule limiting trips into Milwaukee County to five per year for each user.
- Expanding the capacity of the program by acquiring one additional vehicle to enable the paratransit service to accommodate the expanded program eligibility and ridership.

Waukesha County's 1993 plan update indicates that the County made substantial progress during 1992 in implementing most of the modi-

fications to the parallel commuter bus program proposed under the 1992 plan in accordance with the plan timetable or with only minor delays. The 1993 plan update also indicates that some program modifications are now proposed to be implemented over a timetable with deadlines extended beyond those set forth in Waukesha County's 1992 plan. More specifically, under the 1993 plan update, Waukesha County proposes to:

- Delay from January 1, 1993, to January 1, 1995, the provision of additional capacity for the program to assure the ability to respond to all trip requests in accordance with Federal ADA service criteria. The additional time is needed for the County to acquire up to five additional vehicles for the program during 1993 and 1994.
- Delay from January 1, 1993, to January 1, 1995, the provision of service with "next-day" scheduling and the elimination of restrictions on travel between Waukesha and Milwaukee Counties, full implementation of which will be tied to the additional capacity to be provided through planned vehicle acquisitions.

With the proposed changes to the 1992 plan timetable, the date when the parallel commuter bus program would be in full compliance with Federal regulations would be extended from January 1, 1993, to January 1, 1995. During 1992, about 1,300 one-way trips were made under the program, an increase of about 8 percent over the 1,200 one-way trips made under the program during 1991.

## *City of Kenosha*

The 1992 paratransit service plan for the City of Kenosha Transit System proposed that the City comply with the current Federal regulations by making modifications to the City's existing paratransit service for disabled persons provided through the Kenosha County Care-A-Van program. This paratransit service is designed to provide door-to-door transportation to disabled individuals who are unable to use the fixed-route bus service provided by the City's fixed-route transit system. To provide the service, the City annually participates in, and contributes funds to, the Care-A-Van program, a door-to-door paratransit service administered by the Kenosha County Department of Aging and provided by the Kenosha Achievement Center, Inc. The funds annually contributed to the program by

the City of Kenosha, however, are used specifically to support the provision of paratransit service for disabled persons who are certified as unable to use the City's fixed-route transit system and who use the service to travel within only that portion of Kenosha County east of IH 94 plus an area of commercial development within the County located west of IH 94 at the intersection of IH 94 and STH 50. The service is provided on a contract basis by the Kenosha Achievement Center, Inc., and is available throughout the area served by the City's fixed-route transit system. The most significant modifications proposed under the City's 1992 plan were as follows:

- Establishing "next-day" service, with reservation service available on all days preceding a normal service day.
- Expanding service hours to hours identical to the hours of operation for the fixed-route bus system.
- Providing sufficient capacity to accommodate anticipated demand for the program, which had been experiencing lack of available space prior to the new Federal requirements.

The City of Kenosha's 1993 plan update indicates that all the modifications proposed under the 1992 plan were implemented during 1992 in accordance with the plan timetable or with only minor delays. The plan update proposes no significant changes or additions to the original plan recommendations. The City's paratransit service would, consequently, be in full compliance with Federal regulations by January 1, 1993, as proposed under the original plan. During 1992, about 13,700 one-way trips were made on the paratransit service, an increase of about 5 percent over the 13,100 one-way trips made on the service during 1991.

#### *City of Racine*

The 1992 paratransit service plan for the City of Racine transit system proposed that the City comply with the current Federal regulations by making modifications to the existing paratransit service for disabled persons provided through the City's paratransit program. The City's paratransit service is designed to provide door-to-door transportation to disabled individuals who are unable to use the fixed-route bus service provided by the City's fixed-route bus system,

the Belle Urban System. To provide the service, the City of Racine annually participates in, and contributes funds to, the paratransit program administered by the Racine County Human Services Department. The funds annually contributed to the program by the City of Racine, however, are used specifically to support the provision of paratransit service for disabled persons who are certified as transportation-handicapped and who use the service to travel within only that portion of Racine County east of IH 94 and to the University of Wisconsin-Parkside in Kenosha County. The service is provided on a contract basis by Laidlaw-Jelco, Inc., and is available throughout the area served by the City's fixed-route transit system. The most significant modifications proposed under the City's 1992 plan were as follows:

- Establishing "next-day" service, with reservation service available on all days preceding a normal service day.
- Eliminating fares for personal-care attendants.
- Expanding service hours to more closely match the hours of operation of the fixed-route bus system.

The City of Racine's 1993 plan update indicates that all the modifications proposed under the 1992 plan were implemented during 1992 in accordance with the plan timetable or with only minor delays. The plan update proposes no significant changes or additions to the original plan recommendations. The City's paratransit service would, consequently, be in full compliance with Federal regulations by January 1, 1993, as proposed in the original plan. During 1992, about 34,700 one-way trips were made on the paratransit service, an increase of about 5 percent over the 32,900 one-way trips made on the service in 1991.<sup>10</sup>

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<sup>10</sup>*This figure is considerably larger than the 19,000 one-way trips reported for the City of Racine paratransit service in the 1991 Annual Report. The figures in that report pertained to ridership attributed to the Belle Urban System only. The figures given above are estimates of ridership for the paratransit service provided in eastern Racine County.*

## *City of Waukesha*

The 1992 paratransit service plan for the City of Waukesha Transit System Utility proposed that the City comply with the current Federal regulations by making modifications to the existing paratransit service for disabled persons provided through the City's METROLIFT program. The paratransit service provided under the METROLIFT program is designed to provide door-to-door transportation to disabled individuals who are unable to use the fixed-route bus service provided by the City's fixed-route bus system, Waukesha Metro Transit. To provide the service offered under the METROLIFT program, the Waukesha Transit System Utility currently contracts with Dairyland Buses, Inc., a private "yellow school bus" operator in the area. The most significant modifications proposed under the City's 1992 plan were as follows:

- Establishing "next-day" service, with reservation service available on all days preceding a normal service day.
- Limiting one-way fares charged eligible recipients to no more than twice the base cash fare for fixed-route bus service, and eliminating fares for personal-care attendants.
- Providing service to all trip origins and destinations within three-quarters of a mile on either side of the fixed bus routes operated by the Utility.
- Acquiring three small accessible buses for operation by the contract transit operator or by transit system employees to provide the paratransit service.

The City of Waukesha's 1993 plan update indicates that all the service modifications proposed under the 1992 plan were implemented during 1992 in accordance with the plan timetable or with only minor delays. The City was also in the process of acquiring the three small buses recommended by the plan. The plan update proposes no significant changes in, or additions to, the original plan. The City's paratransit service would, consequently, be in full compliance with Federal regulations by January 1, 1993, as proposed in the original plan. During 1992, about 12,700 one-way trips were made on the paratransit service, an increase of about 15 percent over the 11,000 one-way trips made on the service during 1991.

## *Adoption Status*

All the original 1992 paratransit service plans had been adopted by the respective public transit operators involved and by the Commission prior to their transmittal to the Federal Transit Administration in January 1992. At the end of 1992, all the 1993 paratransit service plan updates described above had been completed and were being published by the Commission. The City of Waukesha Common Council adopted its 1993 paratransit plan update on December 15, 1992. The paratransit plan updates for the remaining communities were scheduled to be acted upon by the respective communities involved and by the Commission early in 1993.

## **Waukesha County Specialized Transportation Service Plan**

At the request of the Waukesha County Executive, the Commission during 1992 completed a study of the unmet transportation needs of elderly and disabled Waukesha County residents. The study identified potential improvements to the existing specialized transportation services available within the County during 1992 which would address these unmet transportation needs. The study was conducted under the guidance of a Waukesha County Specialized Transportation Advisory Committee appointed by the County Executive; the findings and recommendations of the study were unanimously endorsed by the Committee. The findings and recommendations of the study are documented in SEWRPC Memorandum Report No. 71, A Specialized Transportation Service Plan for Elderly and Disabled Persons within Waukesha County, June 1992.

In order to assess properly the need for improvements, the study identified the transportation services which are currently available to elderly and disabled individuals in Waukesha County. The specialized transportation services identified included publicly operated services provided by Waukesha County and other local units of government, services provided by private non-profit organizations, services provided by hospitals within the County, and services provided by private for-profit transportation companies.

The study included the conduct of a special survey of the elderly, defined as persons aged 55 and older, and disabled residents of the County to collect information about the number

and characteristics of trips which elderly and disabled Waukesha County residents would like to make but presently either cannot make at all, or make only with personal difficulty. The survey identified a number of needs for improvement in the existing specialized transportation services, including:

- A need for better access to information about available specialized transportation services.
- A need for an increase in the capacity of the specialized transportation services available during weekday daytime hours.
- A need for an expansion of service availability to include weekday evenings and weekends.
- A need for an expansion of the areas served to accommodate trips between Waukesha and Milwaukee Counties.

The study also compared the existing specialized transportation services available within Waukesha County with those in other counties within Southeastern Wisconsin to identify aspects of such services in other counties which might be of use in developing improved specialized transportation services in Waukesha County. The potential improvements in the existing services within the County which were identified in this manner included:

- The use, where feasible, of general public transit services, such as the shared-ride taxi services, to provide local transportation to the elderly and disabled within individual communities.
- The provision of some services currently provided through the Waukesha County Department of Aging's Ride-Line Program for other Waukesha County programs through contracts with other operators.
- The use of the Ride-Line Program outside of regular weekday hours by other agencies or organizations for group trips and special events at modest costs.

On the basis of these findings, the Advisory Committee recommended a number of improvements in the existing specialized transportation services available within the County. Initially, the Advisory Committee recommended that the County pursue the following actions:

- Encouraging the development of public transit services for the general public by individual communities, with such transit services providing transportation for local trips made by elderly and disabled individuals. Within the eastern, urbanized portion of the County, these transit services would be expected to be developed as a supplement to fixed-route transit services extended from Milwaukee County or the City of Waukesha. Within the western, nonurbanized portion of the County, it is envisioned that such transit services would be provided through local shared-ride taxi systems established to serve individual communities and the immediately surrounding area. In cases where local communities did not desire to initially develop general public transit services, they would be encouraged to begin by developing specialized transportation services serving only the elderly and/or disabled population.
- Making modifications, as required by Federal regulations, to the transportation service which the County provides for disabled individuals unable to use the County's fixed-route bus service for the general public within the Waukesha-Milwaukee travel corridor.
- Increasing the daytime capacity of the Ride-Line Program operated by the Waukesha County Department of Aging. This would involve expanding the vehicle fleet and operating budget for the program to include the operation of additional vehicles between 1993 and 1996. The Department of Aging would also consider the possibility of contracting out certain elements of the service provided through the Ride-Line Program for other county programs, such as transportation for disabled persons within the Waukesha-Milwaukee travel corridor.
- Expanding the days and hours when specialized transportation service would be available under the Ride-Line Program beginning in 1993, when the program would be expanded to include regular service hours on Saturdays and service for group trips and special events sponsored by public and private agencies and organizations outside normal program service hours on weekday evenings and weekends.
- Reducing the advance reservation requirements for the Ride-Line Program from 48

hours, two working days, to 24 hours, one working day, for trip requests which are not for recurring nonemergency medical trips, such as those for treatment or therapy. Advance reservation requirements for such recurring medical trips would be lengthened to four days to enable more efficient service scheduling. The County would also computerize the trip reservation and scheduling activities of the Ride-Line Program. This also would improve scheduling efficiency and potentially increase the number of requested trips which could be served.

- Undertaking a major public information and marketing campaign which would include the development of informational materials describing the existing transportation services.

The Advisory Committee envisioned that these recommendations would be initial actions under a long-range plan for developing specialized transportation services for elderly and disabled persons within the County. The long-range plan envisions the development of community-based transportation services to provide local transportation for elderly and disabled individuals. The County would, over time, assume principal responsibility for providing transportation for elderly and disabled individuals between communities within Waukesha County and also between Waukesha and Milwaukee Counties. The long-range plan also envisions a need to continue the specialized transportation services provided by private nonprofit service providers within the County, in particular for medical trips, between Waukesha and Milwaukee Counties. In addition, because the transportation needs of elderly and disabled individuals receiving medical treatment and services at hospitals within the County may be expected to increase in the future, the long-range plan also envisions the development of privately operated transportation services by area hospitals. A final element of the long-range plan would be the development of a centralized information and dispatching service by the County. Such a service would enable elderly and disabled individuals to call a single telephone number to get information on available transportation service options, or assistance in scheduling service with an appropriate service provider.

The actions recommended by the Committee, as set forth under the specialized transportation service plan, are intended to serve as a guide to the County as it considers transportation service improvements to meet the needs of elderly and disabled Waukesha County residents.

## **TRANSPORTATION IMPROVEMENT PROGRAMMING**

In December 1992, the Commission completed an updated six-year transportation improvement program (TIP) for Southeastern Wisconsin, as required by the U. S. Department of Transportation. This program is set forth in a document entitled A Transportation Improvement Program for Southeastern Wisconsin: 1993-1998, December 1992. 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 Region, 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 1993-1998 TIP document identifies all highway and mass transportation projects in the two transportation management areas of the Region, the Milwaukee transportation management area, which includes Milwaukee, Ozaukee, Washington, and Waukesha Counties, and the Kenosha-Racine-Walworth transportation management area, programmed for implementation during this six-year period with the aid of U. S. Department of Transportation funds administered through the Federal Highway Administration (FHWA) and the Federal Transit Administration. Following approval of the 1993-1998 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 2, 1992.

The 1993-1998 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 Milwaukee-Waukesha County line to the Marquette Interchange, modernization of the Marquette Interchange, and reconditioning of the Zoo Freeway (IH 894) between IH 94 and IH 43. 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 construction of alternate fuel facilities for the Milwaukee County Transit System and the City of Waukesha Transit System Utility. 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 Brown Deer Interchange on IH 43 in Milwaukee County, as well as reconstruction of the Waukesha bypass between CTH X and Sunset Drive in the City of Waukesha.

The 1993-1998 TIP contains 964 projects for the six-year programming period, representing a total potential investment in transportation improvement and services of about \$2.09 billion. Of this total, \$986 million, or about 47 percent, is proposed to be provided in Federal funds; \$667 million, or about 32 percent, in State funds; and \$438 million, or about 21 percent, in local funds.

While the entire six-year program is an important planning tool, it is the first two years which are of primary interest, because a transportation system improvement project in the Region may be eligible for Federal funding in 1993 only if it is included in these first two years of the TIP. Proposed expenditures in the first two years of the TIP total \$324,840,500 in 1993 and \$349,769,200 in 1994, and include 366 highway improvement and 127 transit projects in 1993. A cost summary for these projects is shown in Table 23.

In order to provide a basis for a better understanding of the types of transportation improvements proposed to be undertaken in the Region, projects have been grouped into nine categories: 1) highway preservation, or reconstruction of existing facilities to maintain present capacities; 2) highway improvement, or reconstruction of existing facilities to expand present capacities; 3) highway expansion, or construction of new facilities; 4) highway safety; 5) highway-related environmental enhancement projects; 6) highway improvement off the Federal aid system; 7) transit preservation; 8) transit improvement; and 9) transit expansion projects. Figure 38 reflects graphically the proposed expenditures in the first two years of the TIP of these nine project categories for each of the two transportation management areas. At least three of the expenditure patterns apparent in the figures deserve comment:

- A significant portion, 57 percent, of financial resources is to be devoted to the preservation of the existing transportation facilities and services in 1993 and 1994. This allocation of resources is especially notable when it is realized that virtually none of the funding for routine highway maintenance activities, such as 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 Region. About 14 percent of the total expenditures in the Region is proposed for this purpose in 1993 and 1994.
- A significant portion of financial resources is devoted to public transit projects, accounting for about 33 percent of the programmed resources in 1993 and 1994. Of the total programmed resources for public transit, 87 percent is for preservation, and only 7 percent and 6 percent for service improvement and expansion, respectively.

## **RAILWAY TRANSPORTATION PLANNING**

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

As of December 31, 1992, railway freight service was being provided within Southeastern Wisconsin over a total of 504 miles of active railway line by six railway companies. Three of the six carriers operated about 76 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 Ltd., which operated 109 miles, or 22 percent of the railway miles in the Region; and the CP Rail System (Soo Line), which operated 96 miles, or 19 percent of the railway miles in the Region. Operation of the remaining 24 percent of the railway mileage in the Region was divided among three other carriers: the Fox River Valley

Table 23

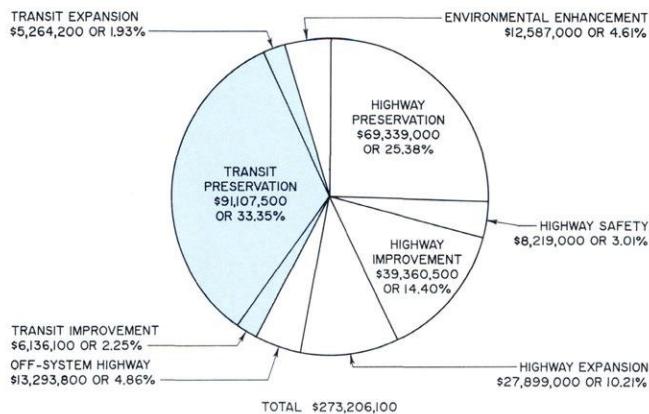
**COST SUMMARY OF PROJECTS WITHIN FIRST TWO YEARS OF 1993-1998 TRANSPORTATION IMPROVEMENT PROGRAM BY TRANSPORTATION MANAGEMENT AREA, COUNTY, AND FUNDING SOURCE**

Transportation Management Area	1993	1994
<b>Milwaukee Area</b>		
<b>Milwaukee County</b>		
Federal . . . . .	\$ 99,952,400	\$ 99,851,400
State . . . . .	80,649,700	118,627,700
Local . . . . .	48,963,300	51,778,700
Total	\$229,565,400	\$270,257,800
<b>Ozaukee County</b>		
Federal . . . . .	\$ 1,211,900	\$ 4,371,200
State . . . . .	372,200	232,400
Local . . . . .	961,400	1,693,400
Total	\$ 2,545,500	\$ 6,297,000
<b>Washington County</b>		
Federal . . . . .	\$ 6,922,600	\$ 11,059,900
State . . . . .	5,856,400	5,509,300
Local . . . . .	2,663,700	651,000
Total	\$ 15,442,700	\$ 17,220,200
<b>Waukesha County</b>		
Federal . . . . .	\$ 14,189,300	\$ 11,659,800
State . . . . .	3,608,000	3,610,500
Local . . . . .	7,855,200	10,776,400
Total	\$ 25,652,500	\$ 26,046,700
<b>Milwaukee Area Subtotal</b>		
Federal . . . . .	\$122,276,200	\$126,942,300
State . . . . .	90,486,300	127,979,900
Local . . . . .	60,443,600	64,899,500
Total	\$273,206,100	\$319,821,700
<b>Kenosha-Racine-Walworth Area</b>		
<b>Kenosha County</b>		
Federal . . . . .	\$ 6,187,600	\$ 5,927,500
State . . . . .	7,874,800	1,422,400
Local . . . . .	3,469,300	2,306,400
Total	\$ 17,531,700	\$ 9,656,300
<b>Racine County</b>		
Federal . . . . .	\$ 8,155,100	\$ 5,801,700
State . . . . .	2,694,500	4,876,400
Local . . . . .	2,024,000	2,602,200
Total	\$ 12,873,600	\$ 13,280,300
<b>Walworth County</b>		
Federal . . . . .	\$ 16,154,100	\$ 4,481,200
State . . . . .	4,193,200	1,894,900
Local . . . . .	881,800	634,800
Total	\$ 21,229,100	\$ 7,010,900
<b>Kenosha-Racine-Walworth Area Subtotal</b>		
Federal . . . . .	\$ 30,496,800	\$ 16,210,400
State . . . . .	14,762,500	8,193,700
Local . . . . .	6,375,100	5,543,400
Total	\$ 51,634,400	\$ 29,947,500
<b>Region Total</b>		
Federal . . . . .	\$152,773,000	\$143,152,700
State . . . . .	105,248,800	136,173,600
Local . . . . .	66,818,700	70,442,900
Total	\$324,840,500	\$349,769,200

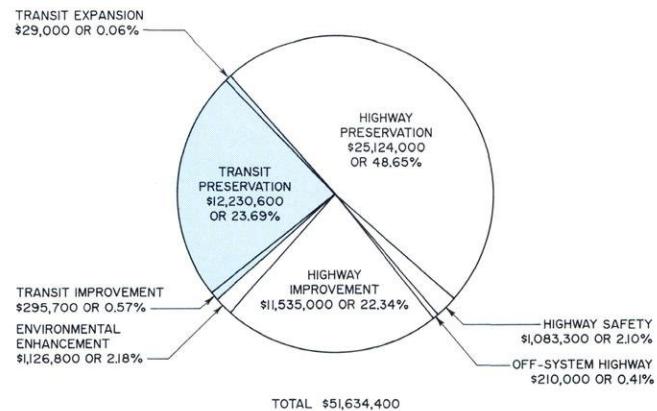
Figure 38

**DISTRIBUTION OF EXPENDITURES IN 1993 AND 1994 OF THE 1993-1998 TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY**

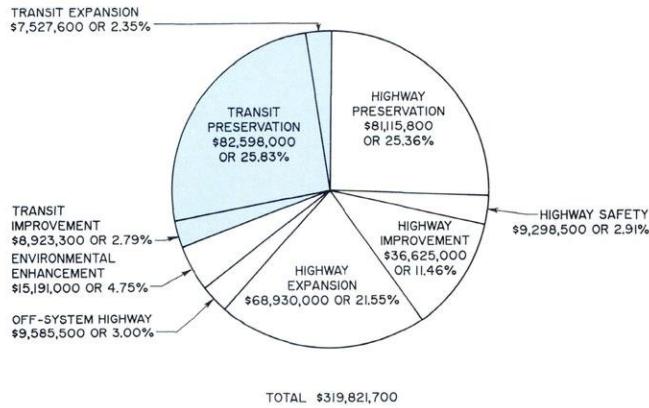
**MILWAUKEE TRANSPORTATION MANAGEMENT AREA: 1993**



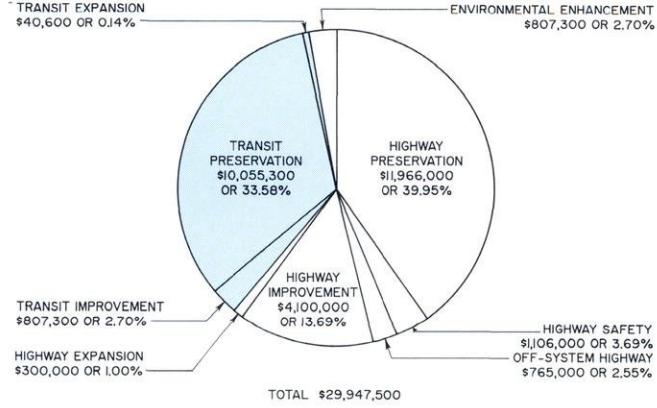
**KENOSHA-RACINE-WALWORTH TRANSPORTATION MANAGEMENT AREA: 1993**



**MILWAUKEE TRANSPORTATION MANAGEMENT AREA: 1994**



**KENOSHA-RACINE-WALWORTH TRANSPORTATION MANAGEMENT AREA: 1994**



Railroad Company, 27 miles; the Wisconsin & Southern Railroad Company, 91 miles; and the Municipality of East Troy Wisconsin Railroad, six miles.

Intercity passenger service in the Region is provided by the National Railroad Passenger Corporation, or Amtrak, between Chicago and Minneapolis-St. Paul over CP Rail System trackage, with stops in Southeastern Wisconsin at Milwaukee and Sturtevant. Commuter rail service is provided between Kenosha and Chicago, with intermediate stops throughout the north shore suburbs of northeastern Illinois, by the Chicago & North Western Transportation Company under an agreement with the North-

east Illinois Railroad Corporation, or Metra, the commuter rail division of the Regional Transportation Authority (RTA) in northeastern Illinois.

The locations of common-carrier railway lines in Southeastern Wisconsin are shown on Map 18. The extent of railway mileage in each of the seven counties is set forth in Table 24.

**Changes during 1992**

Several changes occurred during 1992 in the railways that operate within Southeastern Wisconsin. First, the Soo Line Railroad Company now does business under the name CP Rail System. The Soo Line Railroad Company, which

Map 18

COMMON-CARRIER RAILWAY  
FREIGHT LINES IN SOUTHEASTERN  
WISCONSIN: DECEMBER 31, 1992

LEGEND

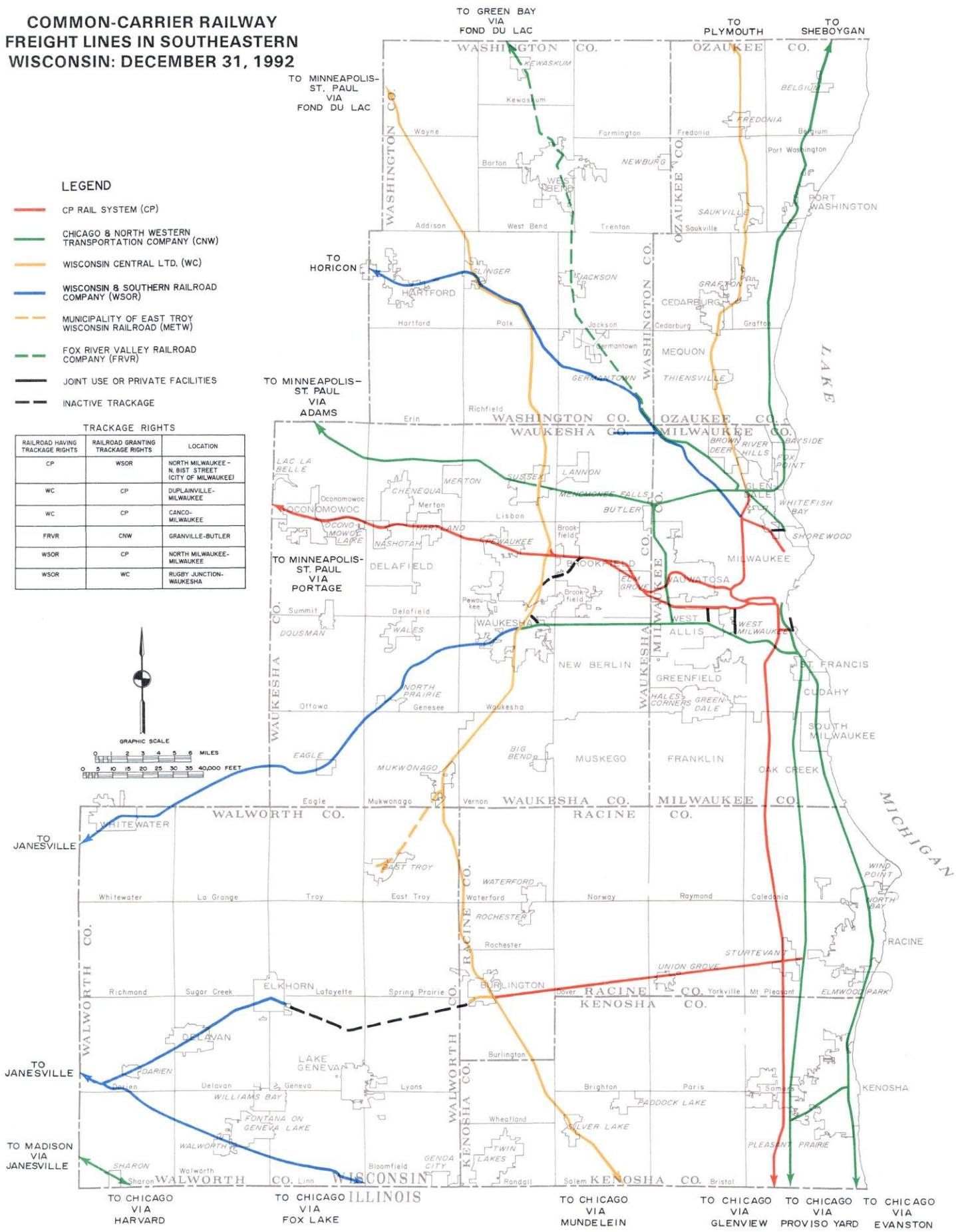
- CP RAIL SYSTEM (CP)
- CHICAGO & NORTH WESTERN TRANSPORTATION COMPANY (CNW)
- WISCONSIN CENTRAL LTD. (WC)
- WISCONSIN & SOUTHERN RAILROAD COMPANY (WSR)
- MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD (METW)
- FOX RIVER VALLEY RAILROAD COMPANY (FRVR)
- JOINT USE OR PRIVATE FACILITIES
- INACTIVE TRACKAGE

TRACKAGE RIGHTS

RAILROAD HAVING TRACKAGE RIGHTS	RAILROAD GRANTING TRACKAGE RIGHTS	LOCATION
CP	WSR	NORTH MILWAUKEE - N. BIST STREET (CITY OF MILWAUKEE)
WC	CP	DUPLANVILLE - MILWAUKEE
WC	CP	CANCO - MILWAUKEE
FRVR	CNW	GRANVILLE-BUTLER
WSR	CP	NORTH MILWAUKEE - MILWAUKEE
WSR	WC	RUGBY JUNCTION - WAUKESHA



0 5 10 15 20 25 30 35 40,000 FEET



**Table 24**  
**ACTIVE COMMON-CARRIER RAILWAY MAINLINE MILEAGE**  
**IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1992**

County	Chicago & North Western Transportation Company		Wisconsin Central Ltd.		CP Rail System		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
Kenosha . . . . .	28.5	5.6	10.2	2.0	12.2	2.4	--	--	--	1.8	--	--	50.9	10.1
Milwaukee . . . . .	61.2	12.1	4.7	0.9	32.5	6.4	--	--	9.1	--	--	--	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	7.3	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	5.3	25.6	5.1	0.1	0.0	22.2	4.4	1.3	0.3	106.9	21.2
Total	175.0	34.7	109.3	21.7	95.5	18.9	27.4	5.4	90.9	18.0	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.

has been a long-time subsidiary of the Canadian Pacific Railway, became fully controlled by Canadian Pacific Ltd. in April 1990. During 1992, operations of the Soo Line and other railway subsidiaries of Canadian Pacific Ltd. were integrated under the single name CP Rail System to provide single-carrier freight service within and between the United States and Canada.

During August 1992, the Wisconsin & Calumet Railroad Company, Inc., was purchased by the Wisconsin & Southern Railroad Company. At the end of 1992, operations of both railways were being integrated under the Wisconsin & Southern name, and trackage rights over the Wisconsin Central had been acquired between Rugby Junction and Waukesha to connect the two systems.

In January 1992, an agreement was announced under which Wisconsin Central Transportation Corporation, parent company of Wisconsin Central Ltd., would acquire the operating assets of the Fox River Valley Railroad Company and the Green Bay and Western Railroad Company from Itel Rail Corporation. The Interstate Commerce Commission approved this transaction in December 1992. At the end of 1992, steps toward acquisition of these two railways was still under way.

At the end of 1992, two railway line segments in the Region were identified as potential candidates for future abandonment. Both segments

are operated by CP Rail System and have served few customers in recent years. One is a 7.5-mile-long segment of rail line located within Racine County between the east side of the City of Burlington and the west side of the unincorporated settlement of Kansaville. The other is an 0.8-mile-long segment located between N. Richards Street and E. Chambers Street in the City of Milwaukee on what remains of the former Milwaukee Road Chestnut Street Line, or "Beer Line."

Also during 1992, two segments of railway switching line were abandoned in Milwaukee County. Both segments were operated by the Chicago & North Western Transportation Company and have served very few customers in recent years. One is a 3.0-mile-long segment at the end of what was known as the Capitol Drive Spur Track. The abandoned segment extends from E. Bradford Avenue on the City of Milwaukee's east side to a junction near E. Hampton Avenue in the Village of Whitefish Bay. The other is a 2.1-mile-long segment, known as the Chase Spur Track, extending from approximately S. 8th Street and W. Montana Avenue to E. Washington Street, entirely within the City of Milwaukee. Because these lines have seen such little use in the last few years, the abandonment of both segments was approved under an exemption from the normal abandonment procedures.

## AIR TRANSPORTATION PLANNING

During 1992, 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; and other related airport planning activities. 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, May 1987, and is shown on Map 19.

### Aviation Activity

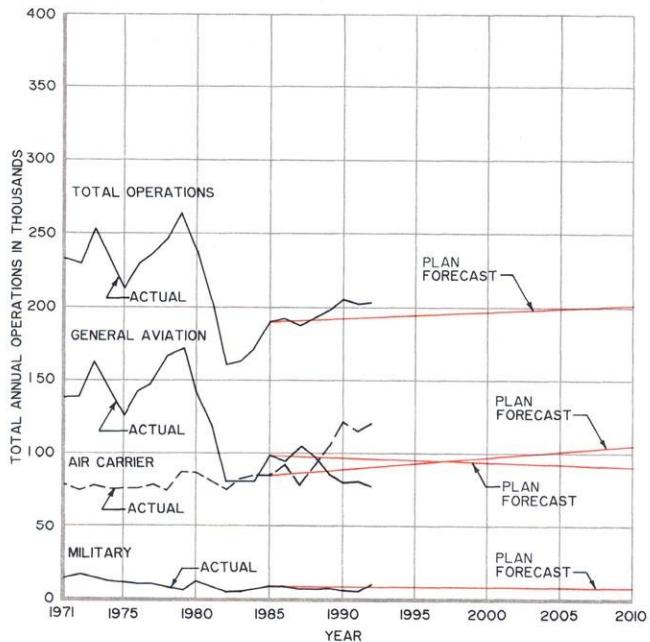
The Commission staff continued to monitor aviation activity within the Region during 1992. General trends in the level of aviation activity within Southeastern Wisconsin are indicated by the number of aircraft operations at, and passengers using, General Mitchell International Airport. General Mitchell 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 39, in 1992 aircraft operations of all types at Mitchell International totaled about 203,000, representing virtually no change from the 202,000 operations in 1991. The 1992 total is about 6 percent above the 191,900 operations forecast to occur at Mitchell International during 1992 under the 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 1992 totaled about 118,900, about a 2 percent increase from the 1991 level of 116,200 operations. General aviation operations at Mitchell International Airport totaled about 77,100 during 1992, a decrease of about 4 percent from the 1991 level of 79,900 operations. Military aircraft operations at Mitchell International Airport during 1992 totaled about 7,000, an increase of about 19 percent from the 1991 level of 5,900 operations.

From 1991 to 1992, the number of air carrier enplaning and deplaning passengers at General Mitchell International Airport increased by about 308,000, to about 4,422,000 passengers, or about 7 percent above the 1991 level of about

Figure 39

### ANNUAL AIRCRAFT OPERATIONS AT GENERAL MITCHELL INTERNATIONAL AIRPORT, MILWAUKEE



4,114,000 passengers. The 1992 level was about 761,000, or about 21 percent, greater than the 3,661,000 passengers forecast for 1992 under the regional airport system plan, as shown in Figure 40.

General aviation activity can also be measured in terms of the number of aircraft based within Southeastern Wisconsin. As shown in Figure 41 and Table 25, a total of 1,421 aircraft were based in the Region in 1992, a decrease of 25 aircraft, or about 2 percent, from the total of 1,446 aircraft based in the Region during 1991. The number of aircraft based in the Region during 1992 was about 23 percent lower than the total of 1,851 forecast for 1992 under the 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

### Map 19

## REGIONAL AIRPORT SYSTEM PLAN: 2010

## LEGEND

#### PUBLIC USE AIRPORT SITES

- PUBLIC OWNERSHIP
- PRIVATE OWNERSHIP

## AIRPORT CLASSIFICATION

T TRANSPORT  
GU-II GENERAL UTILITY-STAGE II  
GU-I GENERAL UTILITY-STAGE I  
BU-II BASIC UTILITY-STAGE II

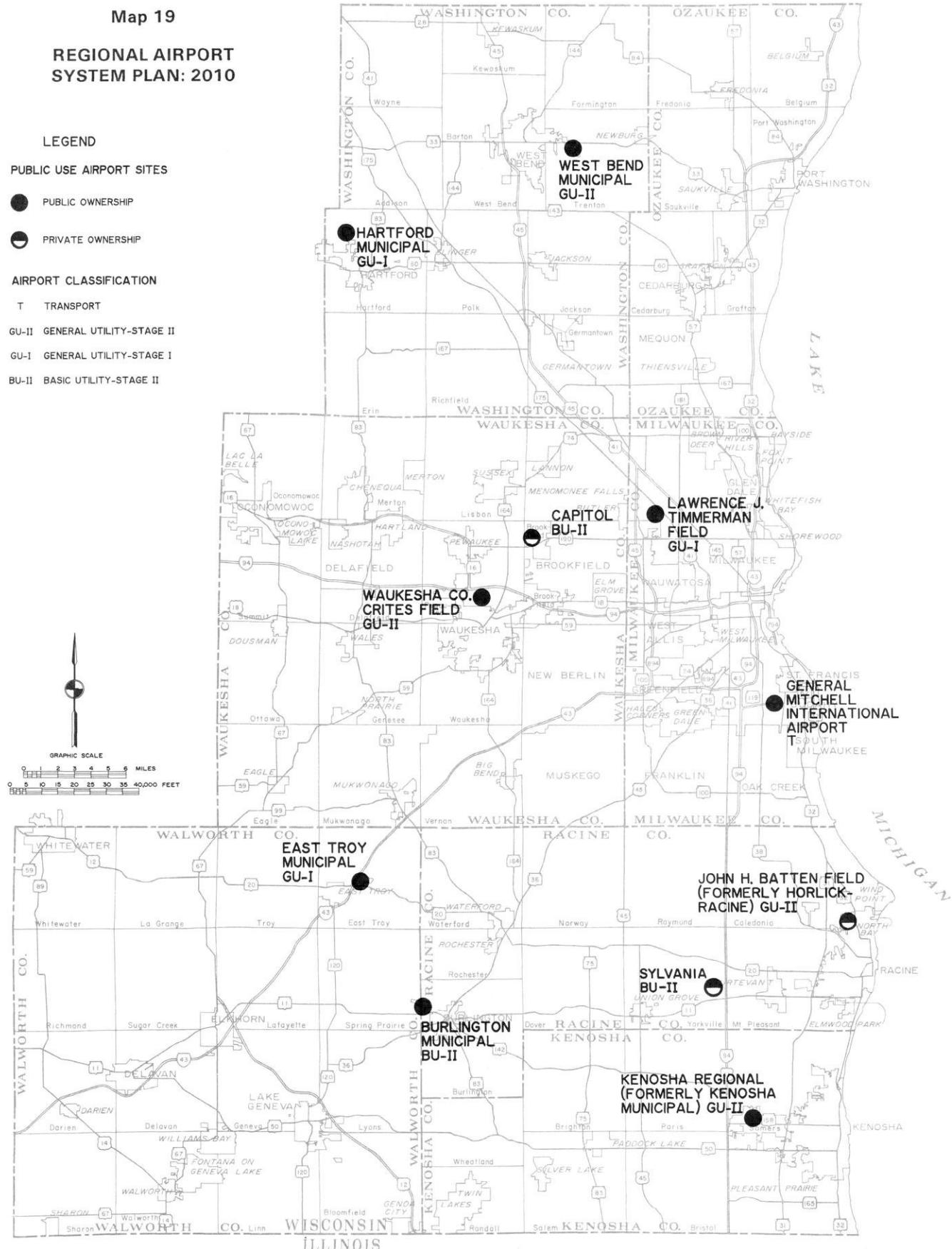


Table 25  
GENERAL AVIATION AIRCRAFT BASED IN THE REGION

County	1960	1965	1970	1975	1980	1985	1990	1992
Kenosha . . . . .	28	60	76	148	123	112	195	197
Milwaukee . . . . .	338	362	356	371	388	373	358	355
Ozaukee . . . . .	19	13	32	28	29	27	28	25
Racine . . . . .	65	89	108	151	179	207	228	194
Walworth . . . . .	23	31	48	82	98	121	127	134
Washington . . . . .	45	63	118	136	158	165	191	188
Waukesha . . . . .	118	163	243	255	304	350	341	328
Total	636	781	981	1,171	1,279	1,355	1,468	1,421

Figure 40

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

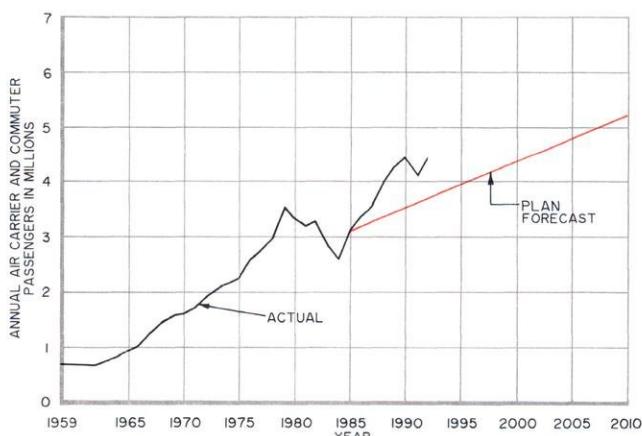
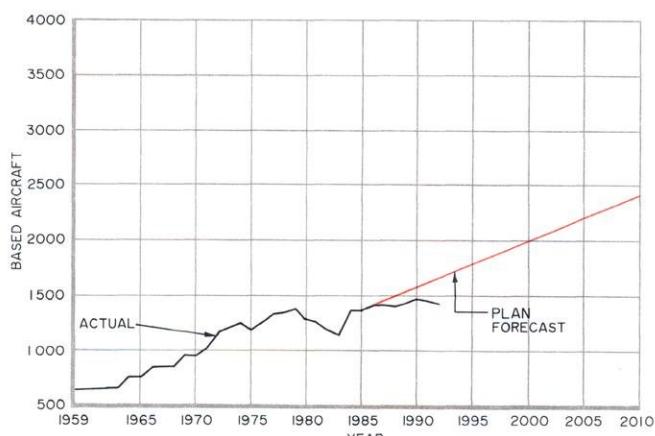


Figure 41

**GENERAL AVIATION AIRCRAFT BASED IN THE REGION**



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, which are primarily the responsibility of the local implementing governmental agency, establishes 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. During 1992, work continued on an updated airport master plan for the Kenosha Regional Airport and on an initial airport master plan for Capitol Airport, in the City of Brookfield. Preparation of an airport master plan for this Waukesha County airport was recommended in the regional airport system plan. Also during 1992, work was begun on an updated airport layout plan for the Burlington Municipal Airport. Consideration by

local officials continued to be given to making significant improvements at Hartford Municipal Airport, West Bend Municipal Airport, Waukesha County-Crites Field, East Troy Municipal Airport, and John H. Batten Field in Racine. During 1992, the Commission staff continued to provide planning data, technical information, and other assistance to these local efforts.

In 1977, all technical work was completed 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 1992.

### **Other Airport Planning Activities**

In 1992, the Commission continued work on a special study to assess the need for a general aviation airport in the immediate area of Elkhorn 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 completing the estimate of existing and future demand for general aviation airport facilities and services in the Elkhorn area, identifying any deficiencies in the level of service provided to the Elkhorn area by the current regional airport system plan, and identifying and screening basic airport alternatives that would serve to reduce or eliminate such deficiencies.

### **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 1992:

- At the request of the City of Elkhorn, Commission staff prepared a staff memorandum entitled Year 2010 Traffic Forecasts and Improvement Alternatives for STH 67 between Lincoln Street and USH 12 in the City of Elkhorn, March 1992, to address concerns over land use development occurring adjacent to STH 67.
- At the request of Waukesha County, a traffic impact analysis was prepared for a proposed commercial development on W. Sunset Drive in the Town of Waukesha.
- Travel forecasts and associated user cost data were prepared and provided to the Wisconsin Department of Transportation for the proposed western Waukesha bypass.
- Existing traffic counts and forecast traffic volumes were provided to the City of Brookfield for the intersection of North Avenue and Pilgrim Road.
- At the request of the Town of Brookfield, traffic counts were conducted and an analysis of proposed traffic control was completed for the intersection of Springdale Road and Davidson Road.
- At the request of the Village of Whitefish Bay, Commission staff acted as the technical resource for the conduct of a review of pedestrian safety issues related to the preparation of a booklet presenting safe routes to school. The booklet, which was published by the Village in 1992, included maps identifying safe routes to each elementary school in the Village.
- At the request of the Town of Erin, Commission staff evaluated the potential for St. Patrick's Lane to accommodate the additional traffic expected to be generated by a proposed development.
- At the request of the Wisconsin Department of Transportation, data were provided

from the 1991 home interview travel survey and the 1992 external travel survey for the analysis of possible Amtrak service extensions.

- Commission staff completed work on a Waukesha County study of transportation

needs of the elderly and disabled. The staff assisted the County in presenting the study findings and recommendations to the public and in answering questions from City of Oconomowoc officials concerning the possibility of the City establishing a shared-ride taxi service for the general public.

# 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 its water quality getting better or worse over time?
- What are the sources of water pollution? How can these sources best be controlled to abate water pollution and meet water quality objectives?
- What 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, to develop recommendations concerning environmental protection and enhancement, to monitor levels of environmental

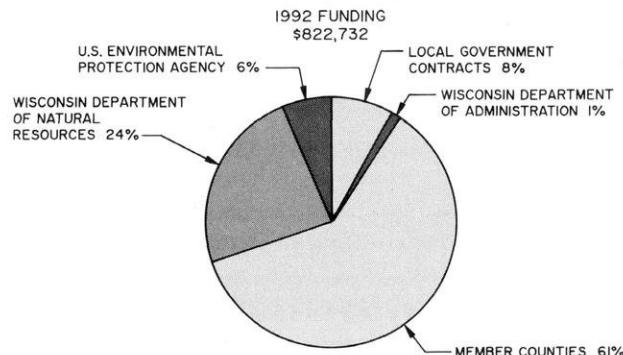
quality in the Region, and to respond to requests for data and technical assistance, activities were conducted in 1992 in four identifiable program areas: water quality management planning; watershed, floodland, and stormwater management planning; coastal management planning; and solid waste management planning.

## WATER QUALITY MANAGEMENT PLANNING

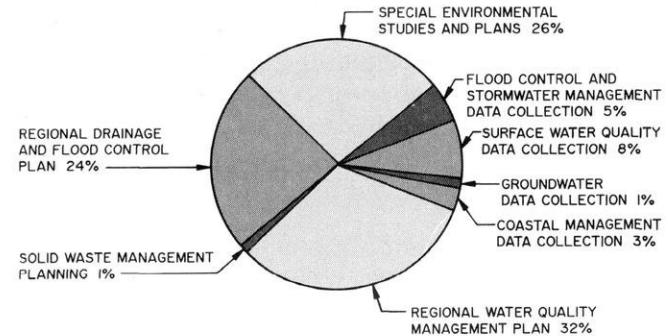
During 1992, Commission water quality planning efforts continued to be focused primarily on activities relating to implementation of the adopted regional water quality management plan. Such activities included providing assistance and coordination in the preparation of more detailed and refined nonpoint source pollution abatement plans, providing assistance in the preparation of inland lake water quality management plans, and preparing local sanitary sewer service area plans. In addition, the

Figure 42

### ENVIRONMENTAL PLANNING DIVISION



### DISTRIBUTION OF FUNDING TO WORK PROGRAMS



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 in the adopted regional plan as needed. 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.

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

In 1979, the Commission completed and adopted a regional water quality management plan. The plan, designed in part to meet the Congressional mandate that the waters of the United States be made to the extent practicable "fishable and swimmable," is set forth in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, September 1978; Volume Two, Alternative Plans, February 1979; and Volume Three, Recommended Plan, June 1979. The plan provides recommendations for the control of water pollution from such point sources as sewage treatment plants, points of separate and combined sewer overflow, and industrial waste outfalls and from such nonpoint sources as urban and rural stormwater runoff. This regional plan element is one of the more important plan elements adopted by the Commission since, in addition to providing clear and concise recommendations for the control of water pollution, it provides the basis for the continued eligibility of local units of government for Federal and State grants in partial support of sewerage system development and redevelopment, for the issuance of waste discharge permits by the Wisconsin Department of Natural Resources, for the review and approval of public sanitary sewer extensions by that Department, for the review and approval of private sanitary sewer extensions and large onsite sewage disposal systems and holding tanks by the Wisconsin Department of 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**

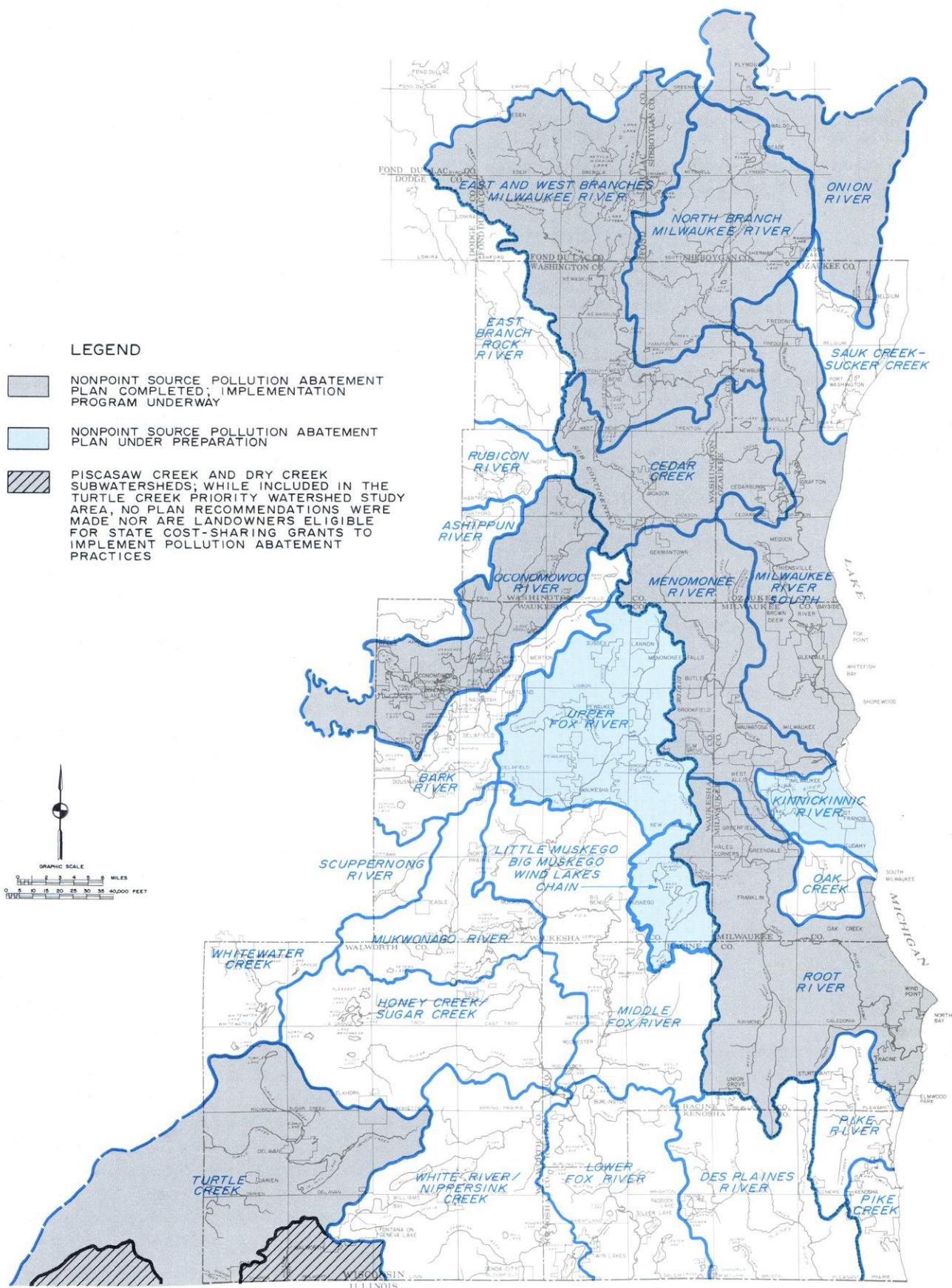
The adopted regional water quality management plan recommends that local agencies charged with responsibility for nonpoint source pollution control prepare refined and detailed local-level nonpoint source pollution control plans. Such plans are to identify the nonpoint source pollution control practices 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 amounting to 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 Department of Natural Resources has divided the Southeastern Wisconsin Region into 28 "priority" watersheds, as shown on Map 20. Prior to 1992, 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; for the Ocono-

Map 20

STATUS OF PRIORITY WATERSHEDS IN SOUTHEASTERN WISCONSIN: 1992



mowoc River watershed, major portions of which lie within Washington and Waukesha Counties and which drains west out of the Region through Jefferson County; for the East and West Branches of the Milwaukee River priority watershed and the North Branch of the Milwaukee River priority watershed, both of which lie partly within Ozaukee and Washington Counties; for the Menomonee River priority watershed, which lies in Milwaukee, Ozaukee, Washington, and Waukesha Counties; and for the Milwaukee River South priority watershed, which lies in Ozaukee and Milwaukee Counties. During 1992, such a plan was completed for the Cedar Creek priority watershed, which lies in Ozaukee and Washington Counties. Also during 1992, work continued on the preparation of a plan for the Upper Fox (Illinois) River watershed in Washington and Waukesha Counties and on plans for the Kinnickinnic River watershed in Milwaukee County and for the Little Muskego-Big Muskego-Wind Lakes chain subwatershed.

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 streambank erosion control, landfill site runoff control, stormwater runoff control, and the installation of spent-oil disposal stations. For rural areas, the plans include specific recommendations for improved cropping practices, better livestock waste management, streambank 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 five years after the end of the project sign-up phase.

The respective implementation periods of the completed priority watershed plans are summarized in Table 26. For the Root River, Onion River, and Turtle Creek priority watersheds, the full project implementation period has ended. As shown in Table 26, the project implementation end dates for the other priority watersheds with completed detailed plans range from April 1994 to March 2000.

The Wisconsin Department of Natural Resources is continuing with the preparation of three other priority watershed plans. It is anticipated that a plan for the Upper Fox (Illinois) River watershed will be completed in 1993. The Kinnickinnic River watershed and the Little Muskego-Big Muskego-Wind Lakes chain subwatershed plans are expected to be completed in 1993 or early 1994.

During 1992, the Commission continued to assist the Department of Natural Resources in the preparation of the priority watershed plans, data collection and analysis, and report production efforts for the priority watersheds. The Commission staff attended interagency coordinating meetings with the Department. In addition, base mapping and planned land use mapping were provided to the Wisconsin Department of Natural Resources for use in the Upper Fox (Illinois) River watershed and the Little Muskego-Big Muskego-Wind Lakes chain subwatershed priority watershed planning programs.

Also during 1992, the Commission continued to assist the counties and other local units of government of the Region in establishing sound nonpoint source pollution abatement measures. The following are examples of such work:

- At the request of Kenosha County, review comments and recommendations were made to improve stormwater management non-point source pollution controls and construction erosion controls attendant to plans for a large business expansion in the Town of Randall and for a proposed warehouse and office building complex in the Town of Somers.
- The Commission assisted the Wisconsin Department of Natural Resources and the site developer in the design of stormwater management facilities, including detention ponds for nonpoint source pollution control, proposed to be constructed for the Ambrosia Chocolate Company plant under construction in the City of Milwaukee. These recommendations were intended to limit stormwater management facility impacts on the primary environmental corridor adjacent to the plant site.

Table 26

## IMPLEMENTATION PERIODS OF COMPLETED AND APPROVED PLANS IN SOUTHEASTERN WISCONSIN: 1992

Watershed	Counties	Date Selected	Date Plan Completed	Project Sign-Up End Date	Project Implementation End Date
Root River . . . . .	Racine Milwaukee Waukesha Kenosha	1979	1980	December 1984	December 1989
Onion River . . . . .	Ozaukee Sheboygan	1980	1981	June 1984	June 1989
Turtle Creek . . . . .	Walworth Rock	1982	1984	April 1987	April 1992
Oconomowoc River . . . . .	Washington Waukesha Jefferson Dodge	1983	1986	April 1989	April 1994
East and West Branches of the Milwaukee River . . . . .	Washington Ozaukee Fond du Lac Sheboygan Dodge	1984	1989	December 1993 <sup>a</sup>	June 1997
North Branch of the Milwaukee River . . . . .	Washington Ozaukee Sheboygan Fond du Lac	1984	1989	December 1993 <sup>a</sup>	July 1997
Menomonee River . . . . .	Washington Waukesha Milwaukee Ozaukee	1984	1991	October 1994 <sup>a</sup>	October 1999
Milwaukee River South . . . . .	Ozaukee Milwaukee	1984	1991	October 1994 <sup>a</sup>	October 1999
Cedar Creek . . . . .	Ozaukee Washington	1984	1992	March 1995 <sup>a</sup>	March 2000

<sup>a</sup>Urban nonpoint source management practices can be signed up during the entire project implementation period.

- At the request of Walworth County, the Commission staff reviewed the hydrologic and hydraulic aspects of the proposed Mound Road wetland restoration project in the Town of Delavan, which is intended to reduce nonpoint source pollution under the Delavan Lake rehabilitation program.

- At the request of the City of Kenosha, the Commission staff prepared a stormwater management plan for the CTH HH corridor neighborhood which included provisions for reducing nonpoint source pollution loadings from proposed large-scale development projects.

## **Lake Water Quality Management Planning**

The adopted regional water quality management plan recommends 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 Wisconsin Department of Natural Resources 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 Commission community assistance planning reports. These reports describe the existing chemical, biological, and physical water quality conditions of each lake in question; 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 the required point and nonpoint source pollution abatement measures.

Prior to 1992, comprehensive lake water quality management plans were completed for the following lakes: Powers in Kenosha and Walworth Counties; Wind in Racine County; Ashipun, La Belle, Pewaukee, North, Oconomowoc, and Okauchee in Waukesha County; Geneva in Walworth County; and Friess in Washington County. Except for the Powers and Wind Lake plans, which are expected to be adopted by the Commission during 1993, these plans have been adopted by the Commission as amendments to the regional water quality management plan. In addition, a water quality management plan was completed for Waubeesee Lake and the Anderson Canal, which connects Long Lake (Kee Nong Go Mong Lake) to Waubeesee Lake, in Racine County. This plan, however, is not intended for adoption as an amendment to the regional water quality management plan.

In addition to these comprehensive water quality management plans for lakes, the Commission continued to provide technical assistance to certain lake districts and associations. During 1992, the Commission participated in lake-related meetings convened by the Wisconsin Department of Natural Resources and the Wisconsin Association of Lakes. Technical assistance relating to selected lake management needs was provided to lake associations or

districts for George Lake in Kenosha County and the unnamed ponds in the Sunburst Heights subdivision in Racine County. Information provided included an analysis of dredging costs and fluctuating water levels. Work continued on the Fowler Lake management plan for the City of Oconomowoc, scheduled for completion in 1993, and a study design was prepared for a proposed project on Quarry Lake in the City of Brookfield.

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

During 1992, 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 Wisconsin Legislature in 1978 and administered by the Wisconsin Department of Natural Resources, and good engineering practice. Work activities during 1992 included the provision of basic economic, demographic, land use, and natural resource base data for use in the preparation of the facilities plans; the extension of the findings and recommendations of the regional water quality management plan, particularly those regarding sanitary sewer service areas, trunk sewer configurations, and treatment plant locations, capacities, and levels of treatment; and the review of, and comment on, the preliminary plans.

The Commission was directly involved in the following local and subregional sewerage facility planning efforts in 1992:

- The continued 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. During 1992, detailed facility planning was largely completed by 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 and Bohner Lake Sanitary District, Racine County, for the Bohner Lake area; and the Silver Lake Sanitary District in the Town of

West Bend, Washington County. The detailed planning studies are designed to ascertain the need for sewerage facilities and the probable cost of installing such facilities. These facility planning programs are currently being conducted by consultants using funding provided by the Wisconsin Department of Natural Resources based upon grant application materials prepared by the Commission. During 1992, the Commission continued to assist in these efforts through the provision of needed data for use in these facility plans; by review of plan materials, by participating in local committee and public meetings to discuss the findings of these facility plans, and by the preparation of amendments to the regional water quality management plan as appropriate to incorporate the findings of these local plans.

- Continued assistance to local units of government in the Region in developing modifications to existing public sewerage systems or providing new centralized sanitary sewer service to existing urban development. During 1992, local sewerage facilities plans were completed for the Village of Lannon in Waukesha County, the Twin Lakes Randall School in Kenosha County, and the Walworth County Metropolitan Sewerage District. These plans set forth recommendations for the construction of new sewerage facilities in accordance with the recommendations of the adopted regional water quality management plan. As such, these facilities plans were recommended by the Commission to the Wisconsin Department of Natural Resources for approval. At year's end similar sewerage facilities plans were under development for the Village of Darien in Walworth County, the Village of Jackson in Washington County, the City of Brookfield in Waukesha County, and the Village of Newburg in Washington and Ozaukee Counties.

#### *Kenosha Area Sewer and Water Utility Plans*

Work was completed in 1992 on the preparation of coordinated sanitary sewerage and water supply system plans for the greater Kenosha area. The recommended plans are intended to serve as a guide to the long-range development

of sewerage and water supply facilities within the Kenosha area by all levels and agencies of government concerned. The preparation of the plans was necessitated by, and the plans were designed to meet, the rapid urban development being experienced, and anticipated to continue to be experienced, within the Kenosha area. The recommended sewerage system plan also is intended to serve as the basis for extending the regional water quality management plan to a design year of 2010 in the greater Kenosha area.

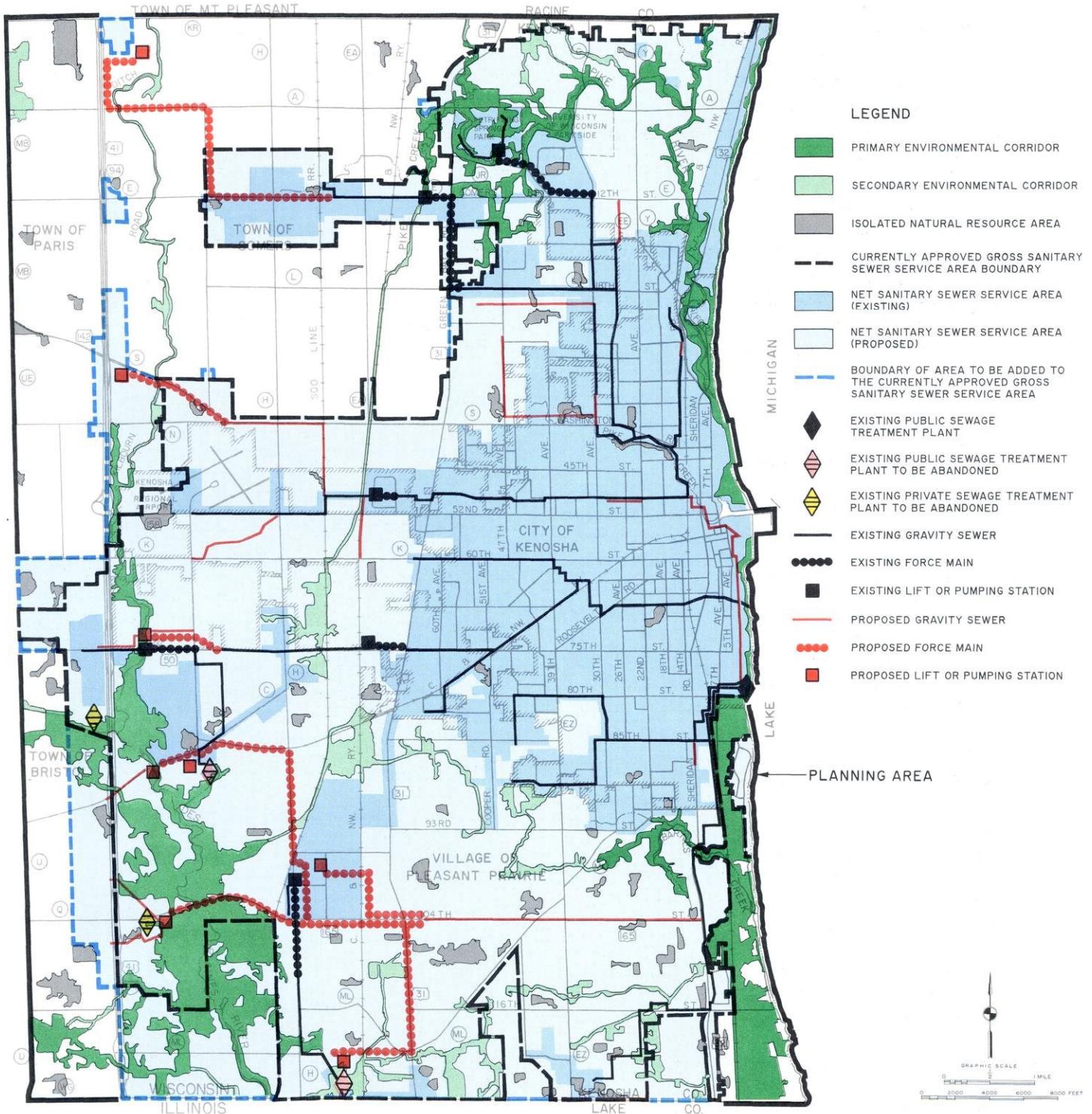
The utility planning area consists of all that part of Kenosha County extending from Lake Michigan to a distance one mile west of IH 94. This area encompasses about 98 square miles and includes all of the City of Kenosha, the Village of Pleasant Prairie, and the Town of Somers, as well as portions of the Towns of Bristol and Paris.

The study was prepared under the direction of the Technical Advisory and Intergovernmental Coordinating Committee for Utility System Planning for the Greater Kenosha Area. Technical work on the study was carried out by the engineering firm of Ruekert & Mielke, Inc. The findings are documented in the report entitled A Coordinated Sanitary Sewer and Water Supply System Plan for the Greater Kenosha Area, published by the consultants in October 1991. The Commission staff served as staff to the Technical Advisory Committee and administered the consultant contract. Funding for the study was provided by Kenosha County and the local units of government involved. Volume 33, No. 1 of the SEWRPC Newsletter (January-February 1993) serves as the executive summary of the plan.

Alternative sanitary sewer and water supply system plans were prepared for the design year 2010 conditions based upon the land use element of the IH 94 South Freeway Corridor plan and the new regional land use plan, both prepared by the Commission and discussed earlier in this Annual Report. After careful evaluation of the costs, environmental impacts, socio-economic impacts, and implementability of the alternatives considered, the Committee recommended system plans for both the sanitary sewerage system and the water supply system as shown, respectively, on Maps 21 and 22.

Map 21

RECOMMENDED SEWERAGE SYSTEM FACILITIES FOR THE GREATER KENOSHA UTILITY PLANNING AREA



## Map 22

## RECOMMENDED WATER SUPPLY SYSTEM FACILITIES FOR THE GREATER KENOSHA UTILITY PLANNING AREA

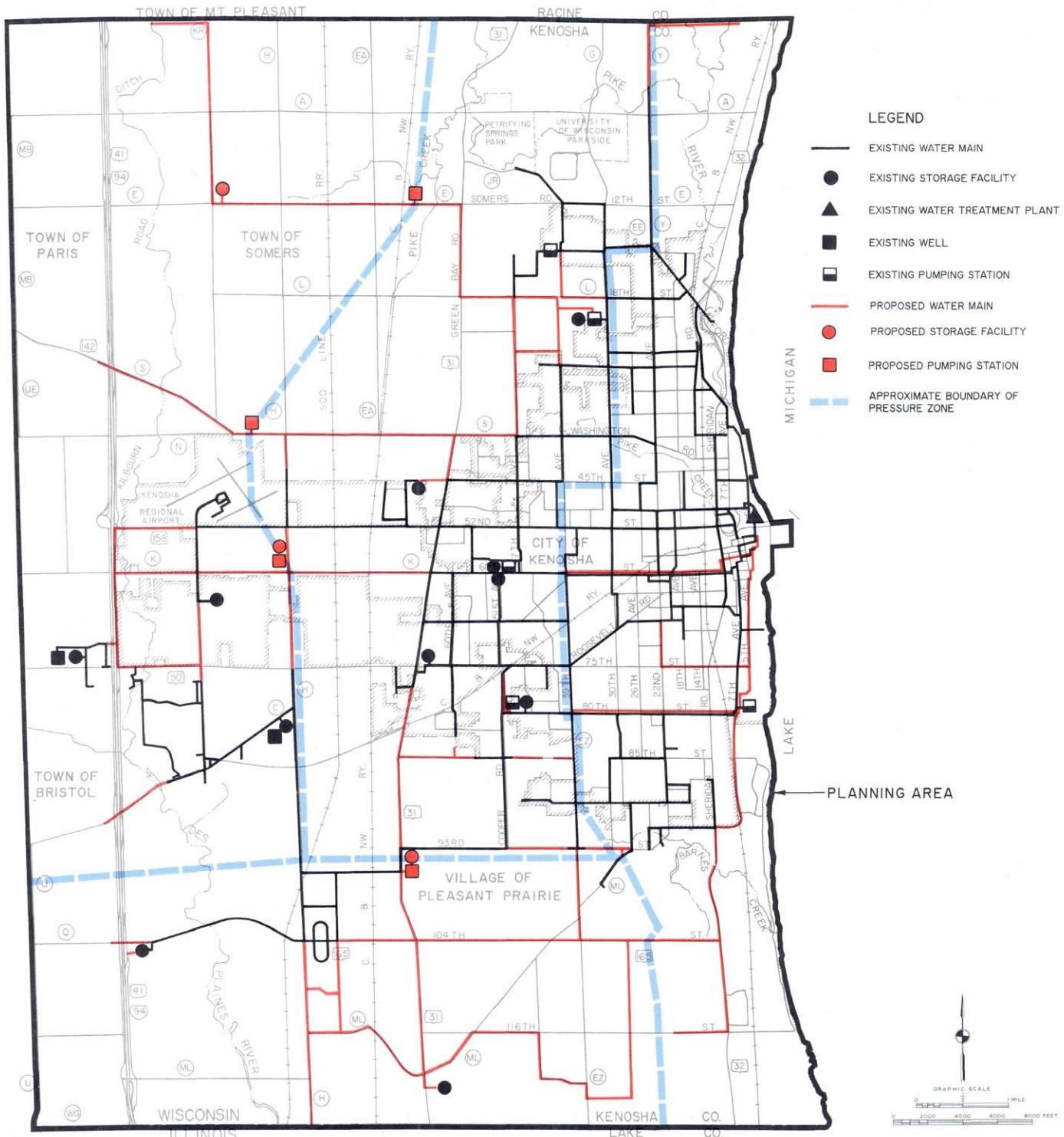


Table 27

## COMPARISON OF INSTITUTIONAL OPTIONS FOR THE GREATER KENOSHA UTILITY PLANNING AREA

Alternative	Advantages	Disadvantages
Regional Authority	Coordinated effort to plan and implement recommended improvements Independent nonpolitical agency Uniform sewer and water rates would aid in attracting regional development Ability of regional agency to issue debt would relieve existing debt burden on communities Minimizes fiscal impact of constructing recommended improvements Eliminates need of local governments to maintain and improve local system infrastructure	Absence of statutory authority to create joint agency and/or regional water agency Length of time and amount of effort required to establish a regional authority Difficulty in administering credit of existing asset base to communities Loss of control over local system infrastructure and connection to local systems
Modified Regional Authority	Coordinated effort to plan and implement recommended improvements Independent nonpolitical agency Ability of regional agency to issue debt would relieve existing debt burden on communities Minimizes fiscal impact of constructing recommended improvements Local communities maintain greater control over local system infrastructure and connection to local systems	Absence of statutory authority to create joint agency and/or regional water agency Length of time and amount of effort required to establish a regional authority Difficulty in administering credit of existing asset base to communities Requires local communities to continue maintaining and improving local infrastructure
Existing Contract	Contractual structure in place for majority of communities in service area Existing contract structure easily modified for remaining communities	Difficult to properly allocate costs to the communities Places higher economic costs on developing communities than regional authority option Could be subject to political pressures
Modified Contract	Minimizes economic impact of existing contract Ease to which existing contractual structure can be altered Future users pay their fair share of facilities cost	Places higher economic costs on developing communities than regional authority option Potential imposition of greater debt burden on Kenosha Water Utility

The report contains an analysis of various funding options for, and the fiscal implications of, implementing the recommended sewerage and water supply system plans; a review of the institutional options for plan implementation; and recommended measures for plan adoption and implementation. Several institutional options for implementing the recommended

sewerage and water supply system plans were considered. A comparison of the institutional options as presented in the study is summarized in Table 27.

On the basis of the findings of the fiscal impact analysis and consideration of the other advantages and disadvantages of the alternative

institutional arrangements, the planning report recommends the creation of an areawide sewer and water authority as the most equitable approach to implementing the recommended sewerage and water supply system plans. Such an authority would own and operate at a minimum all of the major, that is, areawide, sewerage and water supply facilities in the planning area. It is also recommended that the plan recommendation regarding ownership and control of the local sewerage and water supply facilities be considered further by a committee of local officials and citizens. Given the political complexities entailed in the creation of an areawide authority and the length of time required, the plan recommends that the modified intermunicipal contract option be utilized during the interim because of its ease of administration and reduced financial impact on undeveloped areas.

The plan recommends that the municipalities in the planning area establish an advisory committee to work cooperatively toward creation of the recommended areawide sewer and water authority. This committee should include elected officials representing Kenosha County and each of the municipalities in the planning area, together with representatives of the private sector and the citizenry at large.

The plan also recommends that the advisory committee address such issues as the governance of the authority, including the size and composition of the governing body and whether that body should be elected or appointed, whether the authority should have powers of taxation and bonding, what existing facilities should be acquired by the authority, how communities contributing debt-free facilities should be compensated, how the existing debt on facilities to be acquired should be handled, and how the authority should be staffed.

If the areawide authority does not ultimately own and operate all sewerage and water supply facilities, including the local collector sewerage and water distribution mains, as recommended in the plan, the authority should be empowered to provide retail services on a cooperative contract basis to all municipal customers. Under such an arrangement, the municipalities should not be required to accept retail service and should be allowed to remain wholesale customers and be billed based on master meters.

### *Racine Area Sewer and Water Utility Plans*

Work was completed in 1992 on the preparation of coordinated sewerage and water supply system plans for the greater Racine area. The recommended plans are intended to serve as a guide to the long-range development of sewerage and water supply facilities within the Racine area by all levels and agencies of government concerned. The preparation of the plans was necessitated by, and the plans were designed to meet, the urban development being experienced, and anticipated to continue to be experienced, within the Racine area, particularly within the IH 94 corridor. The recommended sewerage system plan is intended to serve as the basis for extending the regional water quality management plan to a design year of 2010 in the greater Racine area.

The utility planning area consists of all that part of Racine County extending from Lake Michigan to a distance two miles west of IH 94, as well as about 0.6 square mile within the Town of Somers "KR" Sewer Utility District in Kenosha County served by the City of Racine's wastewater treatment facility. In addition to the portion of the Town of Somers just noted, the planning area includes that area defined under the planning effort as the greater Racine area: all of the City of Racine, the Villages of Elmwood Park, North Bay, Sturtevant, and Wind Point, and the Towns of Caledonia and Mt. Pleasant, as well as portions of the Towns of Raymond and Yorkville.

The study was prepared under the direction of the Greater Racine Area Utility Advisory Committee. Technical work on the study was carried out by the engineering firm of Alvord, Burdick & Howson, with assistance from Applied Technologies, Inc. The findings are documented in the report entitled A Coordinated Sanitary Sewer and Water Supply System Plan for the Greater Racine Area, published by the consultants in September 1992. The Commission staff served as staff to the Advisory Committee and administered the consultant contract. Funding for the study was provided by Racine County, the local units of government involved, and the Wisconsin Department of Corrections, which became involved in the study because of the need for utility services at a prison facility located in

the study area. Volume 32, No. 5 of the SEWRPC Newsletter (September-October 1992) serves as the executive summary of the plan.

Alternative sanitary sewer and water supply system plans were prepared for the design year 2010 conditions on the basis of the land use element of the IH 94 South Freeway Corridor plan and the new regional land use plan, both prepared by the Commission and discussed earlier in this Annual Report.

After careful evaluation of the costs, environmental impacts, socio-economic impacts, and implementability of the alternatives considered, the Committee recommended system plans for both the sanitary sewerage system and the water supply system as shown, respectively, on Maps 23 and 24.

The report contains an analysis of various funding options for, and the fiscal implications of, implementing the recommended sewerage and water supply system plans; a review of the institutional options for plan implementation; and recommended measures for plan adoption and implementation. Several institutional options for implementing the recommended sewerage and water supply system plans were considered. A comparison of the institutional options as presented in the study is summarized in Table 28.

Based upon the findings of the fiscal impact analysis and consideration of the other advantages and disadvantages of the alternative institutional arrangements, the Advisory Committee recommended the creation of an areawide sewer and water authority as the most effective and equitable approach to implementing the recommended sewerage and water supply system plans. Such an authority would own and operate all of the major, that is, areawide, sewerage and water supply facilities in the planning area. This would include the sewage treatment plant, major trunk sewers, including gravity sewers, pumping stations, and force mains, the water treatment plant, and water storage, pumping, and major transmission mains. The authority would be able to enter into intergovernmental agreements for the provision of services on a retail as well as wholesale basis and could establish rates and charges for services to customers.

The study consultants also recommended that the City of Racine Water and Wastewater Utilities take the lead role in the formation of the areawide authority. Recognizing that it will take some time to form the areawide authority, the study consultants recommended a staged approach to the creation of the authority, including the formation of an intergovernmental committee to coordinate and promote the implementation process. This committee should be specifically distinguished from a negotiating committee, which might also be formed during the implementation process, since the intended functions of the coordinating committee do not include any tasks related to negotiations concerning the acquisition of the City of Racine facilities by the authority. Until the areawide authority is actually formed, there will be a need to continue utility operations under the current intermunicipal cooperative contract arrangements in the interim.

#### **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

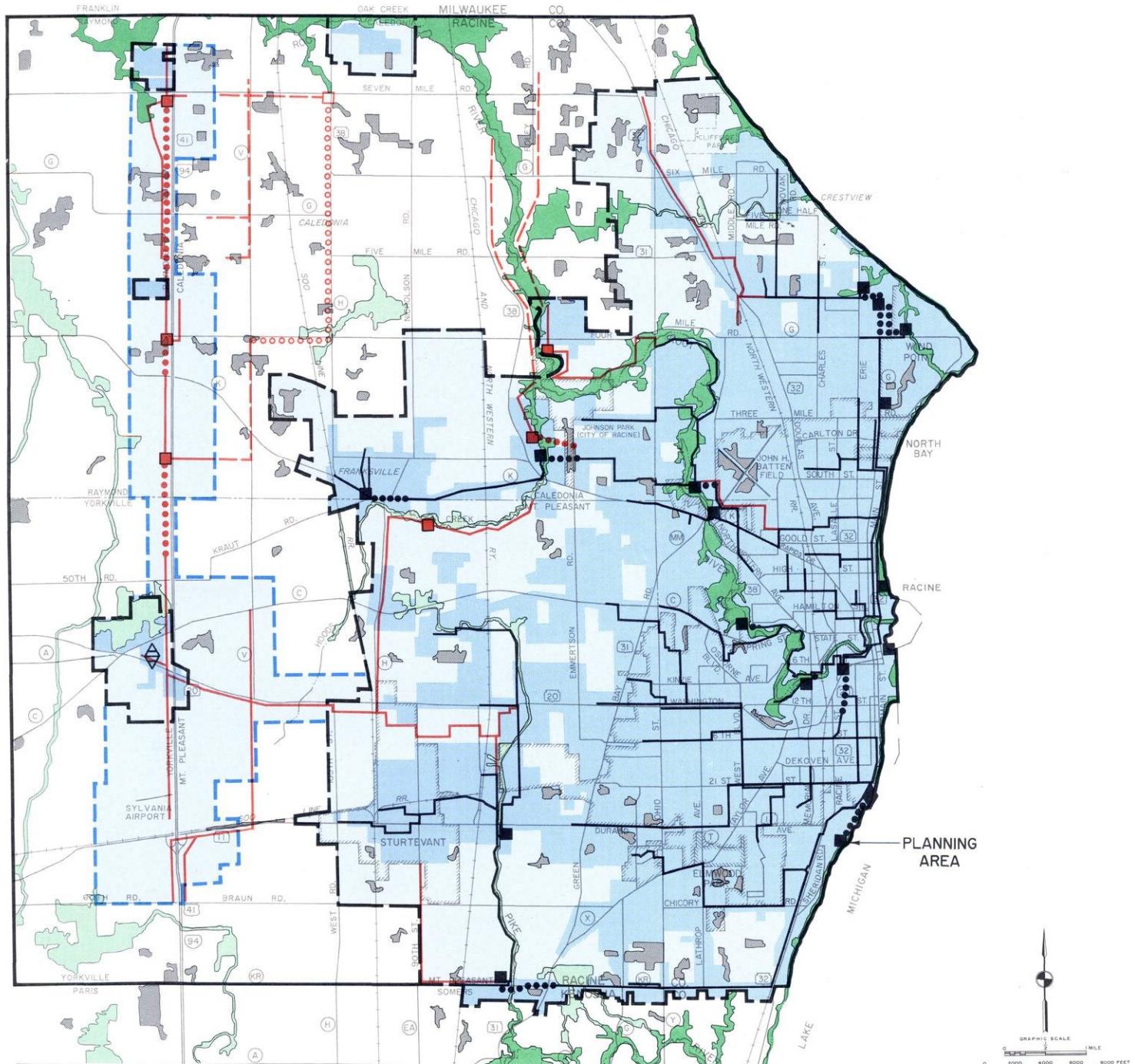
Table 28

## COMPARISON OF INSTITUTIONAL OPTIONS FOR THE GREATER RACINE UTILITY PLANNING AREA

Option 1—Continuation of Existing Special-Purpose Units of Government	
Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Provided for under existing legislation. No enabling legislation needed</li> <li>• Contract agreements can be modified for new entities or expansion of existing entities</li> <li>• Provides for distribution of development costs to areas where services are needed</li> <li>• System is understood by entities</li> <li>• Wisconsin Public Service Commission and water rate requirements are in place</li> <li>• Provides for high level of local control</li> </ul>	<ul style="list-style-type: none"> <li>• New contract agreements for a water supply have been difficult to negotiate. Delays plan implementation</li> <li>• Generally accepted that system is not workable particularly for water supply</li> <li>• High operation and maintenance cost due to duplication of staff and activities</li> <li>• Wide variations in unit cost of water and sewerage services on an areawide basis</li> <li>• Lack of centralized control for implementation of the selected plans</li> <li>• Inability of some local units of government to raise initial capital costs for system development</li> </ul>
Option 2—Consolidation of Special-Purpose Units of Government	
Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Similar to Option 1</li> <li>• Improves economies of scale over Option 1 due to fewer units and larger unit base</li> <li>• Local entities pay for services to their respective areas</li> <li>• Development costs are allocated over a larger user base</li> <li>• Allows for a more coordinated action among general-purpose units of government</li> </ul>	<ul style="list-style-type: none"> <li>• Similar to Option 1</li> <li>• Reduces the range of impact in unit cost of services</li> <li>• Local opposition may develop to consolidation</li> </ul>
Option 3—Creation of Areawide Authority	
Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Creates centralized and coordinated control of utility systems</li> <li>• Minimizes political influence on utility system development</li> <li>• Improves economies of scale</li> <li>• Ability to finance facilities is improved</li> <li>• Less variation in cost of service between areas</li> <li>• Coordinated effort to plan and implement improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Need for enabling legislation</li> <li>• Need for intergovernmental agreements</li> <li>• Valuation of assets and contributions transfer is difficult</li> <li>• Establishment of details for organization, staff, premises, and rates is difficult</li> <li>• Potential increase in financial burden for areas already served</li> <li>• Potential local opposition to consolidation</li> </ul>

Map 23

RECOMMENDED SEWERAGE SYSTEM FACILITIES FOR THE GREATER RACINE UTILITY PLANNING AREA

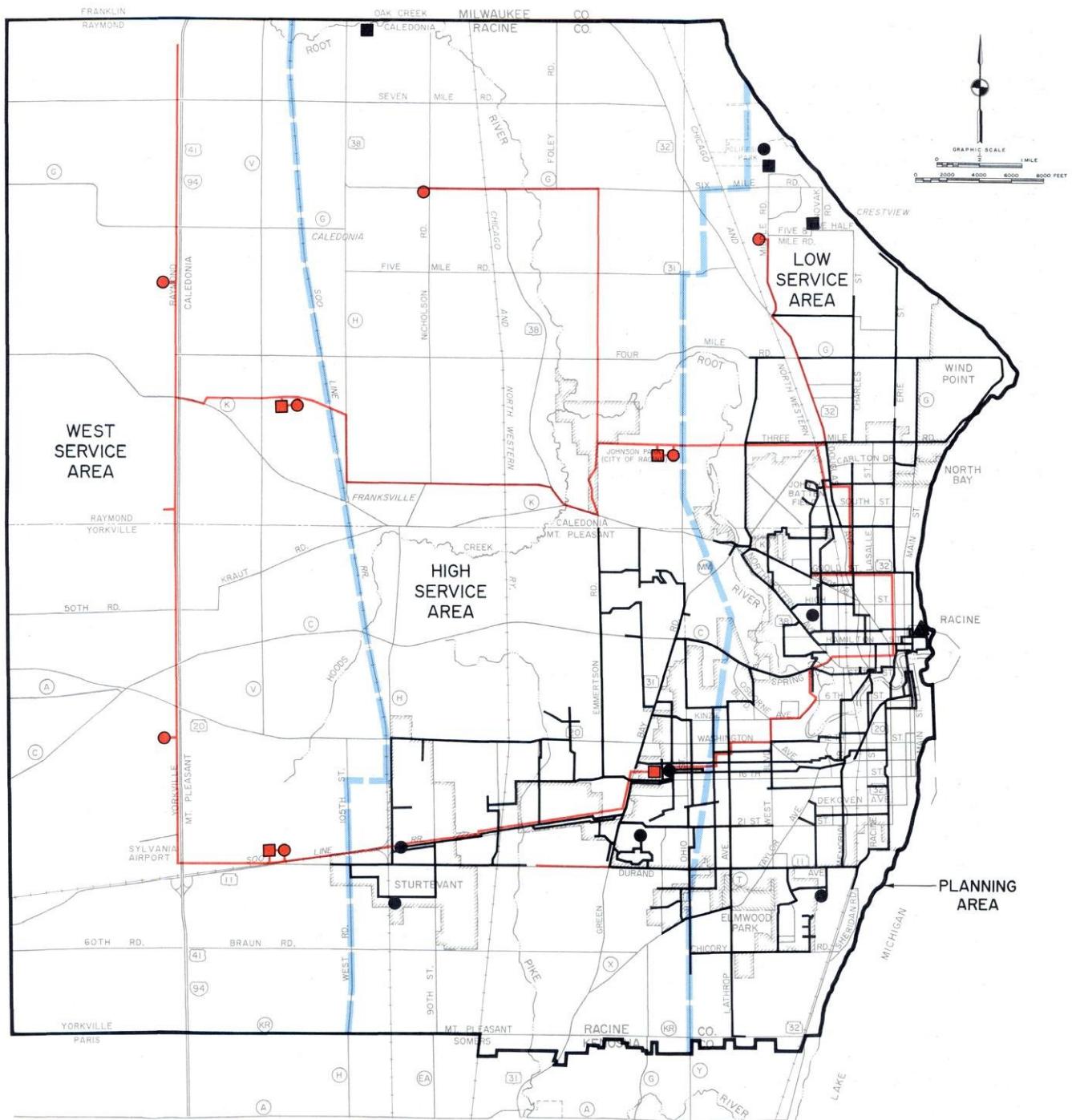


LEGEND

PRIMARY ENVIRONMENTAL CORRIDOR	NET SANITARY SEWER SERVICE AREA (EXISTING)	EXISTING PUBLIC SEWAGE TREATMENT PLANT TO BE ABANDONED	PROPOSED FORCE MAIN: 2010
SECONDARY ENVIRONMENTAL CORRIDOR	NET SANITARY SEWER SERVICE AREA (PROPOSED)	—	PROPOSED PUMPING STATION: 2010
ISOLATED NATURAL AREA	—	—	PROPOSED GRAVITY SEWER: BEYOND 2010
CURRENTLY APPROVED GROSS SANITARY SEWER SERVICE AREA BOUNDARY	—	—	PROPOSED FORCE MAIN: BEYOND 2010
—	—	—	PROPOSED PUMPING STATION: BEYOND 2010
EXISTING PUBLIC SEWAGE TREATMENT PLANT	—	—	—
—	—	—	—
—	—	—	—

Map 24

RECOMMENDED WATER SUPPLY SYSTEM FACILITIES FOR THE GREATER RACINE UTILITY PLANNING AREA



LEGEND

— EXISTING WATER MAIN	— PROPOSED WATER MAIN	— BOUNDARY OF LOW, HIGH, AND WEST SERVICE AREAS
● EXISTING STORAGE FACILITY	● PROPOSED STORAGE FACILITY	
▲ EXISTING WATER TREATMENT PLANT	■ PROPOSED PUMPING STATION	
■ EXISTING WELL TO BE ABANDONED		

NOTE: DURING THE PLANNING PERIOD THE CADDY VISTA AND CRESTVIEW SANITARY DISTRICTS WERE CONNECTED TO THE CITY OF OAK CREEK WATER SUPPLY SYSTEM

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 second-generation 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, which corridors contain 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 also 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 1992, the recommended plan refinement process had been completed for 64 of the 85 initially identified sanitary sewer service areas. During 1992, such detailed planning efforts were completed for the Mequon-Thiensville sanitary sewer service area; for the Village of Darien, whose 1992 service area plan was an update of a plan completed in 1988; for the Eagle Lake Utility District in the Town of Dover, Racine County; and for the Delafield-Nashotah area of Waukesha County. At year's end, the Mequon-Thiensville plan and the new Darien plan had been adopted by the Commission. The Eagle Lake Sanitary District and the Delafield-Nashotah plans had been adopted by the respective local units of government concerned at the end of 1992, but awaited action by the Commission. In addition, amendments were made to the sewer service area plans for the Kenosha service area and the West Bend service area. The plan amendments for these areas were adopted locally and by the Commission during 1992. The refinement process has resulted in a redefinition and combination of certain areas so that, upon completion of the refinement of the 64 areas, only 54 such areas remain.

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 seven new sanitary sewer service areas. The refined sewer service area plans for these seven service areas, Alpine Valley, Army Lake, the Country Estates Sanitary District, and Geneva National-Interlaken, 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 1992.

The existing status of all planned sanitary sewer service areas is summarized in Table 29 and on Map 25. The table identifies the originally defined 85 sewer service areas and the relationship of those areas to the 64 initially identified sewer service areas for which the recommended plan refinement process was completed at the end of 1992, as well as the 54 redefined areas and the seven new sewer service areas mentioned above. It also identifies the documents setting forth each refined and detailed sewer service area and the respective dates on which the Commission adopted those documents as amendments to the regional water quality management plan.

**Table 29**  
**PLANNED SANITARY SEWER SERVICE AREAS IN THE REGION: 1992**

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area(s)	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, <u>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</u> , October 1986
	Bristol IH 94 Pleasant Prairie North	Bristol/Pleasant Prairie	December 2, 1985	SEWRPC Community Assistance Planning Report No. 106, <u>Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin</u> , November 1985
	Camp-Center Lakes Cross Lake Rock Lake Wilmot	Salem South	March 3, 1986	SEWRPC Community Assistance Planning Report No. 143, <u>Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin</u> , February 1986
	Hooker-Montgomery Lakes	Salem North	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, <u>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</u> , October 1986
	Kenosha Pleasant Park Somers	Kenosha	December 2, 1985	SEWRPC Community Assistance Planning Report No. 106, <u>Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin</u> , November 1985
	Paddock Lake	Paddock Lake	December 1, 1986	SEWRPC Community Assistance Planning Report No. 145, <u>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</u> , October 1986
	Pleasant Prairie South	Pleasant Prairie South	December 2, 1985	SEWRPC Community Assistance Planning Report No. 106, <u>Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin</u> , November 1985
	Silver Lake	Silver Lake	June 15, 1987	SEWRPC Community Assistance Planning Report No. 119, <u>Sanitary Sewer Service Area for the Village of Silver Lake, Kenosha County, Wisconsin</u> , May 1987

Table 29 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area(s)	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Kenosha (continued)	Twin Lakes	Twin Lakes	June 15, 1987	SEWRPC Community Assistance Planning Report No. 149, <u>Sanitary Sewer Service Area for the Village of Twin Lakes, Kenosha County, Wisconsin, May 1987</u>
Milwaukee	Milwaukee Metropolitan Sewerage District (portion)	Franklin	December 5, 1990	SEWRPC Community Assistance Planning Report No. 176, <u>Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, October 1990</u>
	Milwaukee Metropolitan Sewerage District (portion)	--	--	--
	South Milwaukee	--	--	--
Ozaukee	Belgium	Belgium	June 15, 1987	SEWRPC Community Assistance Planning Report No. 97, 2nd Edition, <u>Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, June 1987</u>
	Cedarburg Grafton	Cedarburg Grafton	June 15, 1987	SEWRPC Community Assistance Planning Report No. 91, <u>Sanitary Sewer Service Area for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, May 1987</u>
	Fredonia Waubeka	Fredonia Waubeka	September 13, 1984	SEWRPC Community Assistance Planning Report No. 96, <u>Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, July 1984</u>
	Lake Church	--	--	--
	Mequon Thiensville	Mequon Thiensville	January 15, 1992	SEWRPC Community Assistance Planning Report No. 188, <u>Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin, January 1992</u>
	Port Washington	Port Washington	December 1, 1983	SEWRPC Community Assistance Planning Report No. 95, <u>Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983</u>
	Saukville	Saukville	December 1, 1983	SEWRPC Community Assistance Planning Report No. 90, <u>Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983</u>
Racine	Burlington	Burlington	June 16, 1986	SEWRPC Community Assistance Planning Report No. 78, <u>Sanitary Sewer Service Area for the City of Burlington, Racine County, Wisconsin, April 1986</u>
	Eagle Lake	--	--	--

Table 29 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area(s)	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Racine (continued)	Racine Caddy Vista	Racine Caddy Vista	December 1, 1986	SEWRPC Community Assistance Planning Report No. 147, <u>Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin, November 1986</u>
	Southern Wisconsin Center	Southern Wisconsin Center	September 12, 1990	SEWRPC Community Assistance Planning Report No. 180, <u>Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990</u>
	Union Grove	Union Grove	September 12, 1990	SEWRPC Community Assistance Planning Report No. 180, <u>Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990</u>
	Waterford/Rochester Tichigan Lake	Waterford/Rochester	June 16, 1986	SEWRPC Community Assistance Planning Report No. 141, <u>Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, May 1986</u>
	Wind Lake	--	--	--
	Yorkville	--	--	--
Walworth	--	Alpine Valley	December 4, 1989	<u>Amendment to the Regional Water Quality Management Plan—2000, Towns of East Troy, LaFayette, and Spring Prairie, and Village of East Troy, December 1989</u>
	--	Country Estates Sanitary District	March 3, 1987	<u>Amendment to the Regional Water Quality Management Plan—2000, Country Estates Sanitary District, Town of Lyons, March 1987</u>
	Darien	Darien	September 23, 1992	SEWRPC Community Assistance Planning Report No. 123, 2nd Edition, <u>Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, July 1992</u>
	Delavan Delavan Lake Elkhorn Walworth County Institutions Lake Como Williams Bay	Delavan-Delavan Lake Elkhorn Lake Como Williams Bay	December 4, 1991	SEWRPC Community Assistance Planning Report No. 56, 2nd Edition, <u>Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, November 1991</u>
	East Troy Potter Lake	East Troy Potter Lake Army Lake	September 13, 1984	SEWRPC Community Assistance Planning Report No. 112, <u>Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, August 1984</u>
	Fontana	--	--	--

Table 29 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area(s)	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Walworth (continued)	--	Geneva National-Interlaken	November 6, 1989	<u>Amendment to the Regional Water Quality Management Plan—2000, Town of Geneva, Walworth County Metropolitan Sewerage District, November 1989</u>
	Genoa City	Genoa City	March 6, 1989	<u>SEWRPC Community Assistance Planning Report No. 175, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, February 1989</u>
	Lake Geneva	--	--	--
	Lyons	Lyons	September 14, 1987	<u>SEWRPC Community Assistance Planning Report No. 158, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, November 1987</u>
	Sharon	--	--	--
	Walworth	--	--	--
	Whitewater	Whitewater	September 14, 1987	<u>SEWRPC Community Assistance Planning Report No. 94, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, September 1987</u>
Washington	Allenton	Allenton	March 11, 1985	<u>SEWRPC Community Assistance Planning Report No. 103, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, September 1984</u>
	Germantown	Germantown	September 8, 1983	<u>SEWRPC Community Assistance Planning Report No. 70, Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983</u>
	Hartford	Hartford	June 21, 1984	<u>SEWRPC Community Assistance Planning Report No. 92, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, March 1984</u>
	Jackson	Jackson	June 17, 1984	<u>SEWRPC Community Assistance Planning Report No. 124, Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin, May 1985</u>
	Kewaskum	Kewaskum	March 7, 1988	<u>SEWRPC Community Assistance Planning Report No. 161, Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin, December 1988</u>
	Newburg	--	--	--

Table 29 (continued)

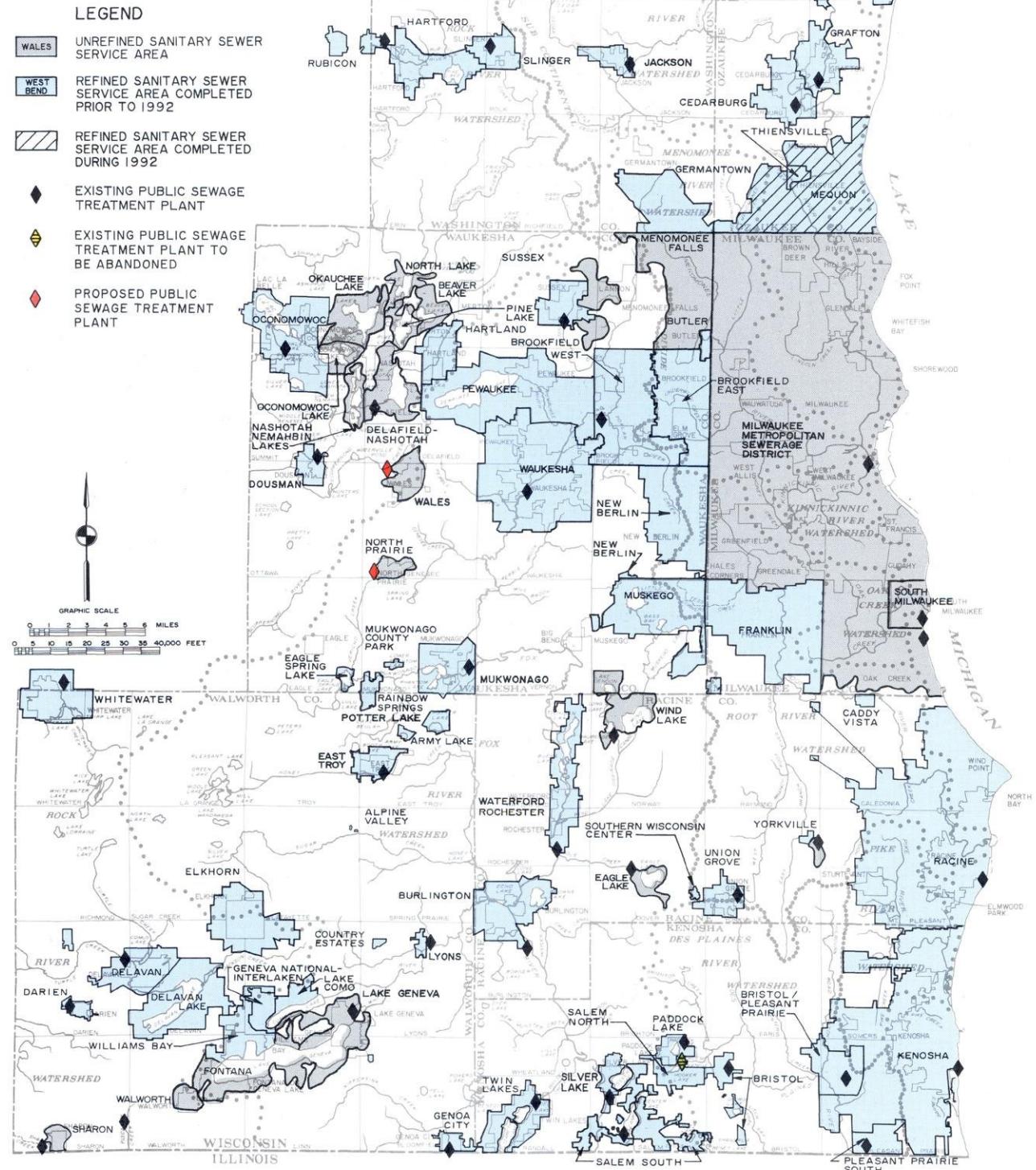
County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area(s)	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Washington (continued)	Slinger	Slinger	December 2, 1985	SEWRPC Community Assistance Planning Report No. 128, <u>Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin</u> , November 1985
	West Bend	West Bend	December 2, 1982	SEWRPC Community Assistance Planning Report No. 35, <u>Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin</u> , December 1982
Waukesha	Beaver Lake	--	--	--
	Brookfield East Elm Grove Brookfield West	Brookfield East Brookfield West	December 4, 1991	SEWRPC Community Assistance Planning Report No. 109, <u>Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin</u> , November 1991
	Butler	Butler	March 1, 1984	SEWRPC Community Assistance Planning Report No. 99, <u>Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin</u> , February 1984
	Delafield-Nashotah	--	--	--
	Dousman	Dousman	December 5, 1990	SEWRPC Community Assistance Planning Report No. 192, <u>Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin</u> , December 1990
	--	Eagle Spring Lake	December 2, 1985	<u>Amendment to the Regional Water Quality Management Plan—2000, Eagle Spring Lake Sanitary District</u> , December 1985
	Hartland	Hartland	June 17, 1985	SEWRPC Community Assistance Planning Report No. 93, <u>Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin</u> , April 1985
	Menomonee Falls	--	--	--
	Mukwonago	Mukwonago	December 5, 1990	SEWRPC Community Assistance Planning Report No. 191, <u>Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin</u> , November 1990
	--	Mukwonago County Park	June 21, 1984	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago</u> , June 1984

Table 29 (continued)

County	Name of Initially Defined Sanitary Sewer Service Area(s)	Name of Refined and Detailed Sanitary Sewer Service Area(s)	Date of SEWRPC Adoption of Plan Amendment	Plan Amendment Document
Waukesha (continued)	Muskego	Muskego	March 3, 1986	SEWRPC Community Assistance Planning Report No. 64, 2nd Edition, <u>Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin</u> , March 1986
	Nashotah-Nemahbin Lakes	--	--	--
	New Berlin	New Berlin	December 7, 1987	SEWRPC Community Assistance Planning Report No. 157, <u>Sanitary Sewer Service Area for the City of New Berlin, Waukesha County, Wisconsin</u> , November 1987
	North Lake	--	--	--
	North Prairie	--	--	--
	Oconomowoc-Lac La Belle Silver Lake	Oconomowoc	March 6, 1989	SEWRPC Community Assistance Planning Report No. 172, <u>Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin</u> , February 1989
	Oconomowoc Lake	--	--	--
	Okauchee Lake	--	--	--
	Pewaukee	Pewaukee	June 17, 1985	SEWRPC Community Assistance Planning Report No. 113, <u>Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin</u> , June 1985
	Pine Lake	--	--	--
	--	Rainbow Springs	June 21, 1984	<u>Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago</u> , June 1984
	Sussex-Lannon	Sussex	June 16, 1983	SEWRPC Community Assistance Planning Report No. 84, <u>Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin</u> , February 1983
	Wales	--	--	--
	Waukesha	Waukesha	December 2, 1985	SEWRPC Community Assistance Planning Report No. 100, <u>Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin</u> , June 1985

Map 25

RECOMMENDED SANITARY SEWER  
SERVICE AREAS IN THE REGION: 1992



Additional sewer service area refinement plans were under way at the end of 1992, including plans for the Lake Geneva area in Walworth County, the Newburg area of Ozaukee and Washington Counties, and the Menomonee Falls-Lannon area 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 proposed sanitary sewer extensions. During 1992, such review comments were provided on 245 public sanitary sewer extensions and 208 private main sewers or building sewer extensions, distributed by county as shown in Table 30.

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

During 1992, Commission efforts in watershed, floodland, and stormwater management consisted of continued work on stormwater management plans for the City of West Bend and the Village of Menomonee Falls; the publication of a stormwater drainage and flood control system plan for Grantosa Creek in Milwaukee County; 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 26 indicates the coverage of the watershed studies conducted by the Commission through 1992.

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

During 1992, 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; 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.

**Table 30**  
**SANITARY SEWER EXTENSION REVIEWS: 1992**

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Kenosha . . . . .	37	14	51
Milwaukee . . . . .	53	37 <sup>a</sup>	90
Ozaukee . . . . .	20	17	37
Racine . . . . .	31	26	57
Walworth . . . . .	20	14	34
Washington . . . . .	25	32	57
Waukesha . . . . .	59	68	127
<b>Total</b>	<b>245</b>	<b>208</b>	<b>453</b>

<sup>a</sup>*The Commission has delegated the responsibility for the review of building sewer extensions within the City of Milwaukee to the City. During 1992, 291 reviews of building sewer extensions were conducted by the City.*

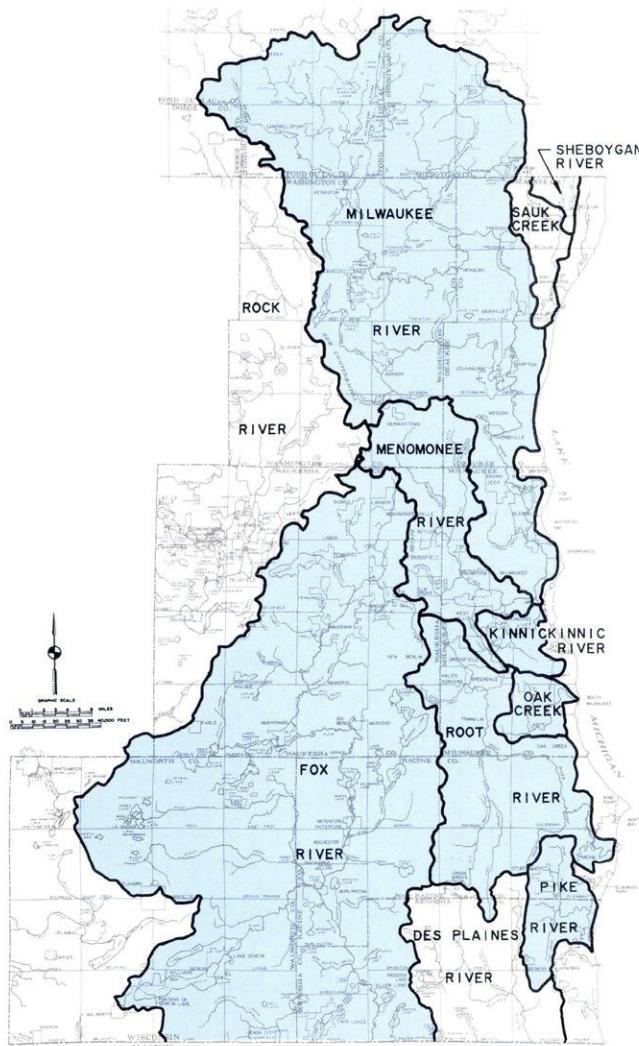
In contrast, drainage is defined by the Commission as the disposal of excess stormwater on the land surface before such water has entered defined stream channels. While the Commission continues to be extensively involved in flood control planning, its work efforts in recent years have been increasingly directed toward stormwater management planning.

In 1992, 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:

- At the request of the Kenosha County Highway Department, the Commission staff provided a preliminary evaluation of the potential effects of the removal of the Wilmot Dam on the Fox (Illinois) River. The evaluation considered the effects on river flows and stages, wetlands, recreational uses, water supply, stream sediment and erosion characteristics, and water quality.
- At the request of Kenosha County, the Commission staff prepared a hydrologic and hydraulic analysis of an unnamed tributary to the Fox (Illinois) River chain of lakes. The study included development of flood profiles and mapping of the 100-year recurrence interval flood hazard area along a 5.1-mile-long reach of the tributary, including Camp, Center, and Peat Lakes.
- A stormwater management plan for Grantosa Creek, Milwaukee County, was completed. The plan, which was requested

Map 26

SEWRPC WATERSHED STUDIES COMPLETED: 1992



by the County, was prepared by the Commission working in cooperation with the County and the Cities of Milwaukee and Wauwatosa. The plan is documented in SEWRPC Memorandum Report No. 53, A Stormwater Drainage and Flood Control System Plan for Grantosa Creek, Cities of Milwaukee and Wauwatosa, Milwaukee County, Wisconsin, February 1992. The plan is intended to serve as a guide to public officials in making decisions regarding the resolution of stormwater drainage and flood control problems occurring within the Grantosa Creek subwatershed. This subwatershed is located within the northwestern

portion of Milwaukee County and is a part of the Menomonee River watershed. The planning effort involved a systematic and comprehensive inventory of historic stormwater damage and flooding problems in the subwatershed; an analysis of the cause and severity of those problems, using hydrologic and hydraulic simulation techniques; and an assessment of the risk of monetarily significant flood damages occurring in the subwatershed under planned land use and existing channel and drainage conditions. The components of the recommended plan are summarized on Map 27.

- At the request of the City of Milwaukee, the Commission staff prepared a hydraulic analysis of a revised design for a replacement bridge over the Menomonee River at N. 124th Street. The base hydraulic model used in the analysis was developed by Commission staff under the stormwater drainage and flood control system plan prepared for the Milwaukee Metropolitan Sewerage District.
- At the request of Racine County, the Commission staff investigated the likelihood of successfully augmenting the water levels of a series of ponds located adjacent to the Sunburst Heights subdivision in the Town of Waterford.
- The Commission staff provided the City of West Bend with hydrologic and hydraulic data which the City was to submit to the Federal Emergency Management Agency in support of the City's request for revisions to the Federal flood insurance study and National Flood Insurance Program maps for portions of Silver, Silverbrook, and Washington Creeks. The City implemented flood control recommendations for Silver and Silverbrook Creeks as set forth in SEWRPC Community Assistance Planning Report No. 173, A Stormwater Management Plan for the City of West Bend, Washington County, Wisconsin, Volume 2, Alternatives and Recommended Plan for the Silver Creek Subwatershed, June 1990, and planned to request revision of the Federal flood insurance study to reflect the lower flood profiles and the reduced flood hazard area resulting from implementation of the recommendations.

Map 27

**RECOMMENDED  
STORMWATER DRAINAGE AND  
FLOOD CONTROL SYSTEM PLAN  
FOR GRANTOSA CREEK**



**LEGEND**

- GRANTOSA CREEK SUBWATERSHED BOUNDARY
- 100-YEAR RECURRENCE INTERVAL FLOODPLAIN UNDER PLANNED LAND USE AND PLANNED CHANNEL CONDITIONS
- 100-YEAR RECURRENCE INTERVAL FLOODPLAIN UNDER PLANNED LAND USE AND EXISTING CHANNEL CONDITIONS WHICH WOULD BE ELIMINATED UNDER PLANNED CHANNEL CONDITIONS
- EXISTING STORM SEWER AND DIRECTION OF FLOW<sup>a</sup>
- EXISTING MANHOLE
- EXISTING JUNCTION CHAMBER
- PROPOSED DETENTION BASIN
- DRAINAGE AREA TRIBUTARY TO PROPOSED DETENTION BASIN
- PROPOSED STORM SEWER AND DIRECTION OF FLOW
- PROPOSED JUNCTION CHAMBER
- PROPOSED CHANNEL MODIFICATIONS
- HE HORIZONTAL ELLIPTICAL

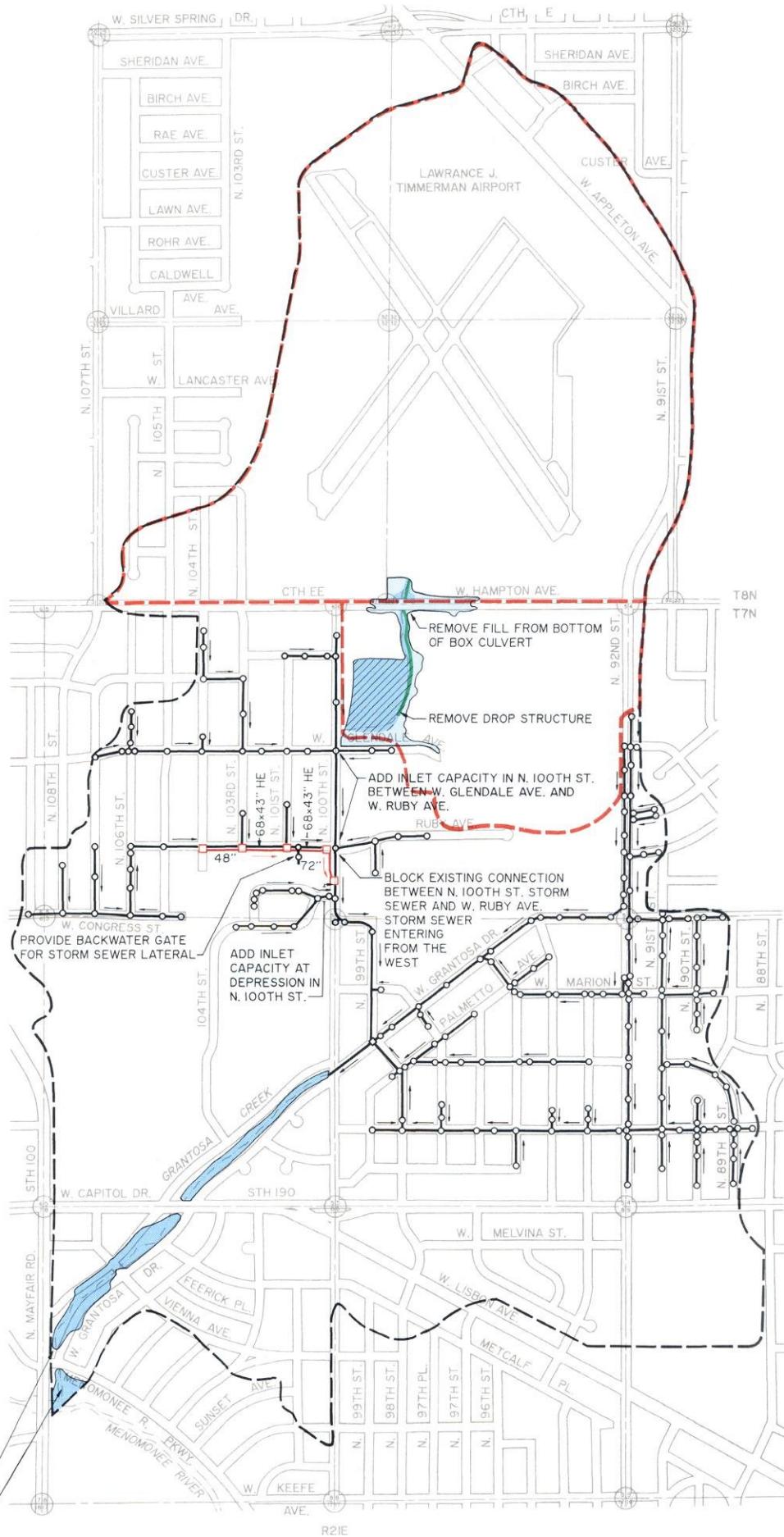
NOTE: 100-YEAR RECURRENCE INTERVAL FLOODPLAIN NOT DELINEATED WITHIN THE SOUTHWEST 1/4 SECTION OF 32 T. 8 N., R. 21 E., DUE TO LACK OF LARGE-SCALE TOPOGRAPHIC MAPPING AT THE DATE OF PUBLICATION OF MEMORANDUM REPORT NO. 53.

NOTE: DUE TO MAP SCALE LIMITATIONS, THE DIFFERENCE BETWEEN THE 100-YEAR RECURRENCE INTERVAL FLOODLANDS UNDER PLANNED LAND USE AND EXISTING DRAINAGE AND CHANNEL CONDITIONS, AND THE 100-YEAR RECURRENCE INTERVAL FLOODLANDS UNDER PLANNED LAND USE AND PLANNED DRAINAGE CHANNEL CONDITIONS, MAY NOT APPEAR ON THIS MAP. EXCEPT AT THE PROPOSED DETENTION BASIN, THE 100-YEAR RECURRENCE INTERVAL FLOOD STAGE UNDER PLANNED DRAINAGE AND CHANNEL CONDITIONS WOULD BE LESS THAN UNDER EXISTING DRAINAGE AND CHANNEL CONDITIONS.

<sup>a</sup> ONLY THOSE EXISTING STORM SEWERS TRIBUTARY TO THE GRANTOSA CREEK CHANNEL ENCLOSURE ARE SHOWN.

PERIODICALLY REMOVE SEDIMENT ACCUMULATION AT THE INLET AND OUTLET OF THE MENOMONEE RIVER PARKWAY DOUBLE BOX CULVERT

PERIODICALLY REMOVE VEGETATION AND BRUSH ALONG GRANTOSA CREEK DOWNSTREAM OF MENOMONEE RIVER PARKWAY



- At the request of the Village of Slinger, the Commission staff completed hydrologic and hydraulic analyses aimed at determining regulatory flood flows and stages for an unnamed tributary to the Rubicon River in the Village.
- At the request of the Town of Lisbon, Waukesha County, the Commission staff conducted hydrologic and hydraulic analyses for proposed roadway culvert replacements for Mary Hill Road over the south branch of Sussex Creek and for Woodside Road over an unnamed tributary to the Fox (Illinois) River.
- At the request of the Pike River Watershed Technical Advisory Committee, the Commission staff conducted analyses to refine the flood flows and stages for the Kenosha Branch of the Pike River in the City of Kenosha to reflect updated topographic and roadway elevations and to evaluate alternatives for proposed culvert replacements.
- The Commission staff conducted analyses to refine the flood flows and stages for Pike Creek resulting from the impacts of existing and proposed filling in the floodplain in the vicinity of the Prairie Lake Estates single-family residential development project located in the City of Kenosha north of STH 50.
- The Commission staff routinely provides hydrologic and hydraulic data to Federal, State, and local units of government and to private consultants for use in the design of bridges and other structures over and adjacent to streams in the Region. During 1992, data were provided for: the Fox (Illinois) River in the Town of Salem, Kenosha County; the Root River in the City of Greenfield; the Kinnickinnic, Menomonee, and Milwaukee Rivers, and Woods Creek in the City of Milwaukee; and the North Tributary to Southbranch Creek in the Village of Brown Deer, all in Milwaukee County; Waxdale Creek in the Town of Mt. Pleasant, Racine County; the North Branch of the Milwaukee River in the Town of Farmington, Washington County; and the Menomonee River and the Woodshaven Tributary to Lilly Creek in the Village of Menomonee Falls, Waukesha County.

In 1993, 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 28. The Commission has completed comprehensive watershed studies for the Fox (Illinois), 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 for a total of about 64 additional miles of stream channel, with data for about eight miles of that total having been developed in 1992. Large-scale flood hazard maps prepared to Commission specifications are available for the riverine areas along about 540 miles of stream channel for which the Commission, the Wisconsin Department of Natural Resources, and the Federal Emergency Management Agency have developed flood hazard data. The large-scale mapping total represents a 4 percent increase over the 1991 total.

### **Flood Insurance Rate Studies**

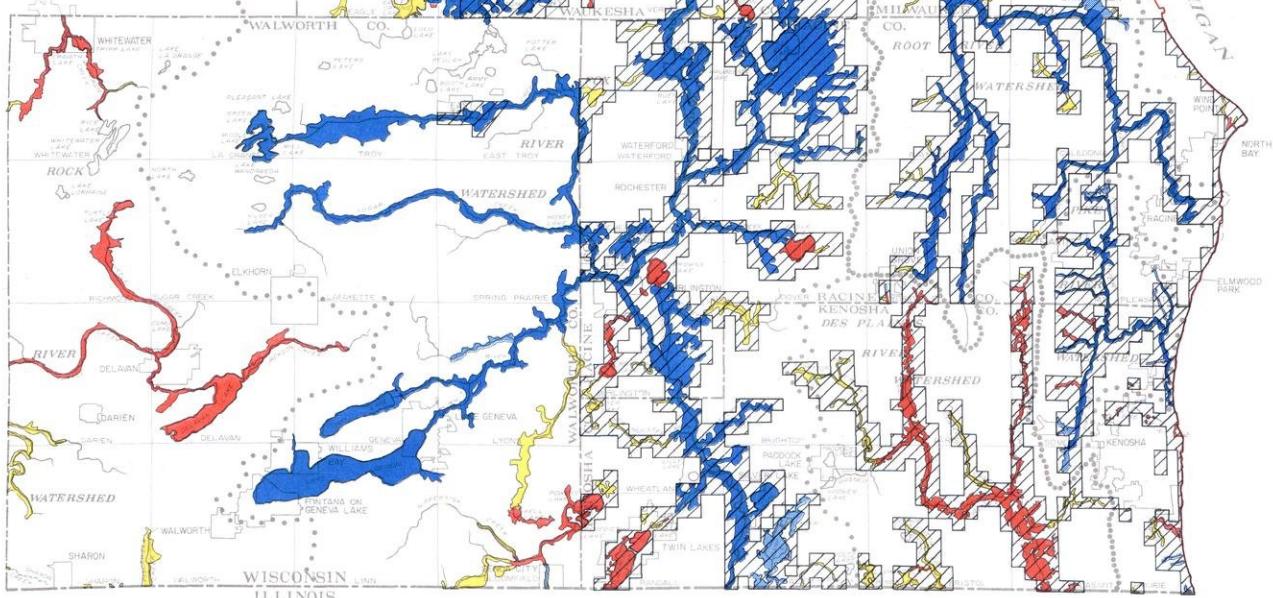
Under the National Flood Insurance Act of 1968, the Federal Emergency Management Agency was given authority to conduct studies to determine the location and extent of floodlands and the monetary damage risks related to the insurance of urban development in floodland areas. The Agency is proceeding with the conduct of such studies on a community-by-community basis throughout the United States. While the Commission has not directly contracted with the Agency for the conduct of such studies, the Commission does cooperate with 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

Map 28

DELINEATION OF FLOODLANDS: 1992

LEGEND

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



to the contractors all 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 the Agency to carry out the flood insurance rate studies more efficiently and at considerably less cost than if such data had to be developed on a community-by-community basis. Commission participation in and review of the study findings, moreover, assures consistency between studies for communities located along a given river or stream.

Federal flood insurance studies are carried out individually for incorporated cities and villages and for the remaining unincorporated areas of counties. The status of flood insurance rate studies in the Region at the end of 1992 is shown on Map 29. During 1992, a second study of Poplar Creek in the City of New Berlin was being conducted by the U. S. Army Corps of Engineers. It is the intent of the Federal Emergency Management Agency to update older studies, depending upon need and funding availability.

As shown on Map 29, as of 1992, there were 24 cities or villages in the Region for which the Federal Emergency Management Agency had not conducted a flood insurance rate study. In eight cases, the Agency has instead published a "flood hazard boundary map," which shows the approximate location of floodlands without the support of detailed engineering studies. The remaining 16 cities or villages in the Region are not considered by the Agency to contain flood hazard areas. In one of those 16, the Village of Newburg in Washington and Ozaukee Counties, a flood hazard area was identified and delineated by the Commission in the Milwaukee River watershed study. Although the Agency has not yet undertaken a flood insurance study for the Village of Newburg, the Village has enacted appropriate floodland zoning regulations.

Besides providing available data from the Commission files to the contractors conducting such studies for the Federal Emergency Management Agency, the Commission staff helps to delineate 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 commu-

nities in enacting sound floodland regulations as required for participation in the Federal Flood Insurance Program.

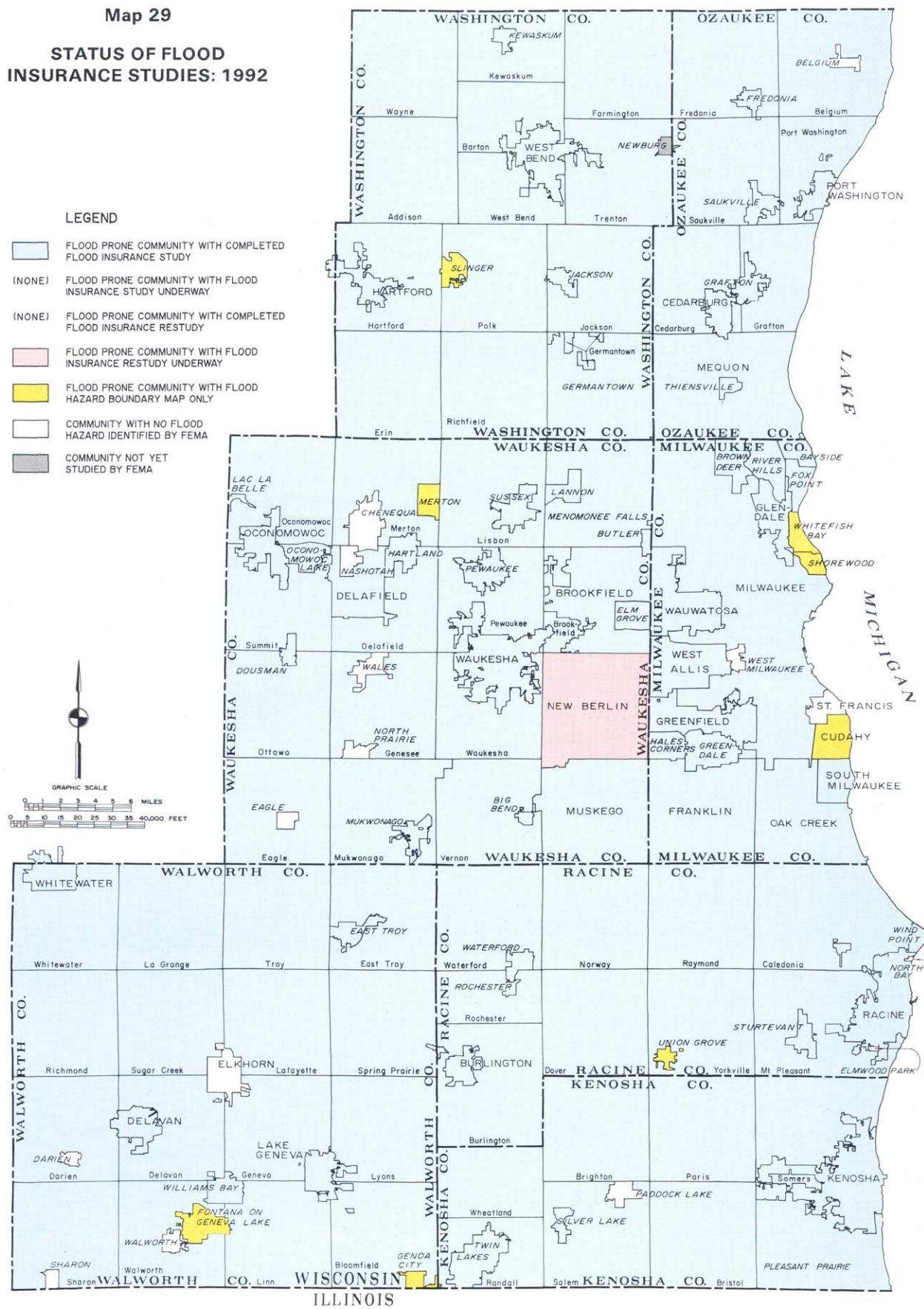
### Stream Gaging Program

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 30). The U. S. Geological Survey annually publishes the data collected under this streamflow monitoring program. In 1992, there were 19 continuous recording streamflow gages in operation to monitor stream reaches lying or originating within the Region. The total number of gages is one more than in 1991. 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 program. In addition, one gage was supported by the Fontana/Walworth Water Pollution Control Commission (WPCC), one gage was supported by the Wisconsin Department of Natural Resources, one gage was supported by the U. S. Army Corps of Engineers, and two were supported by the Illinois Department of Transportation. The gage supported by the Fontana/Walworth WPCC was placed in operation on Piscasaw Creek in 1992.

### COASTAL MANAGEMENT PLANNING

During 1992, 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.

**Map 29**  
**STATUS OF FLOOD  
 INSURANCE STUDIES: 1992**



Map 30

**LOCATION OF U. S. GEOLOGICAL SURVEY STREAM GAGING STATIONS**

## LEGEND

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

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

▲ CONTINUOUS STAGE RECORDER GAGE-OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE U.S. ARMY, CORPS OF ENGINEERS (1)

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

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

▲ CONTINUOUS STAGE RECORDER GAGE-NO LONGER IN OPERATION (20)

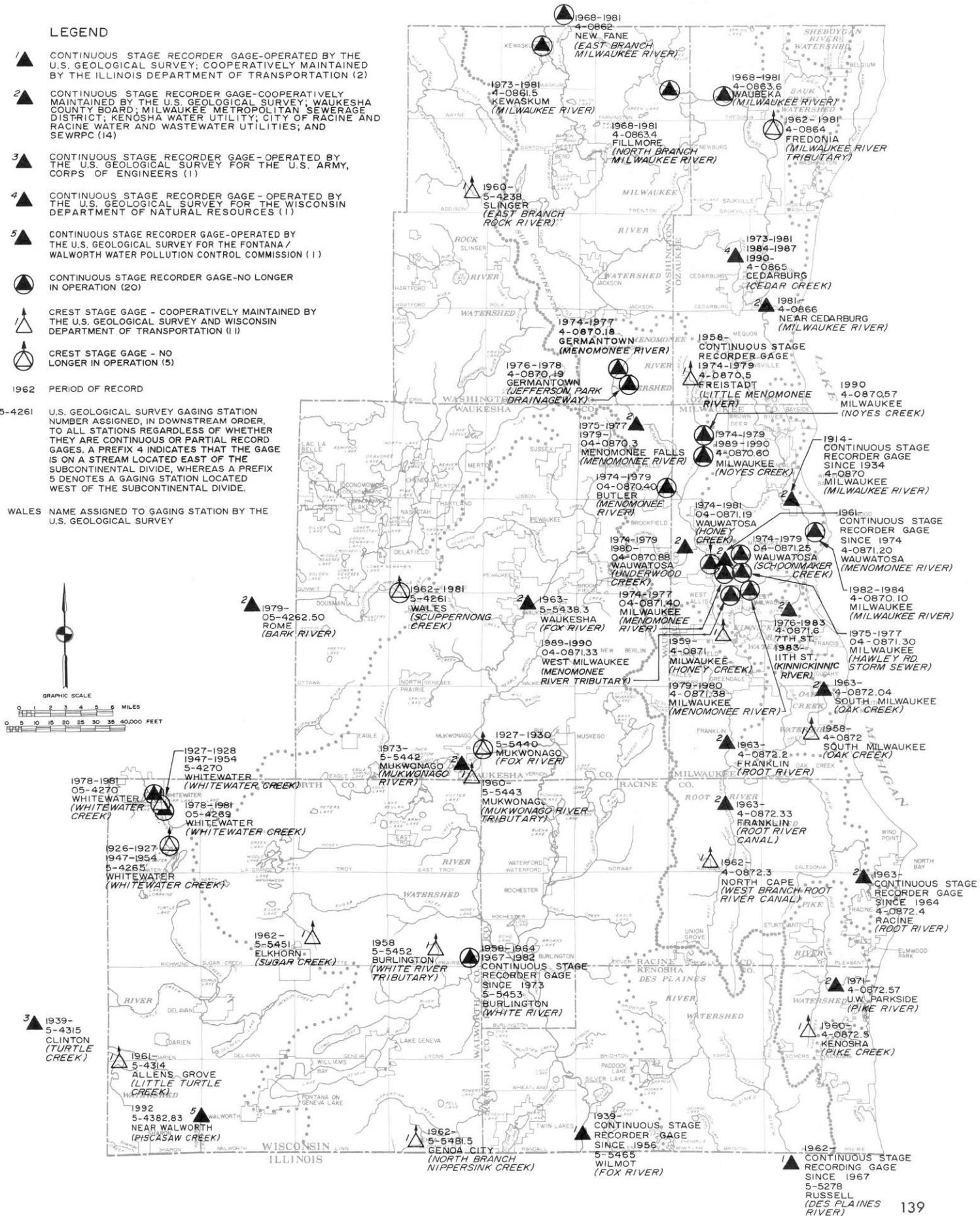
▲ CREST STAGE GAGE - COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF TRANSPORTATION (1)

▲ CREST STAGE GAGE - NO LONGER IN OPERATION (5)

1962 PERIOD OF RECORD

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

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



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 1992, 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 31. These special areas have natural, scientific, economic, cultural, or historic importance. Designation by the Wisconsin Coastal Management Council as a special coastal area ensures eligibility for financial or technical assistance for special coastal area management activities through the Wisconsin Coastal Management Program and focuses attention on a valuable coastal resource.

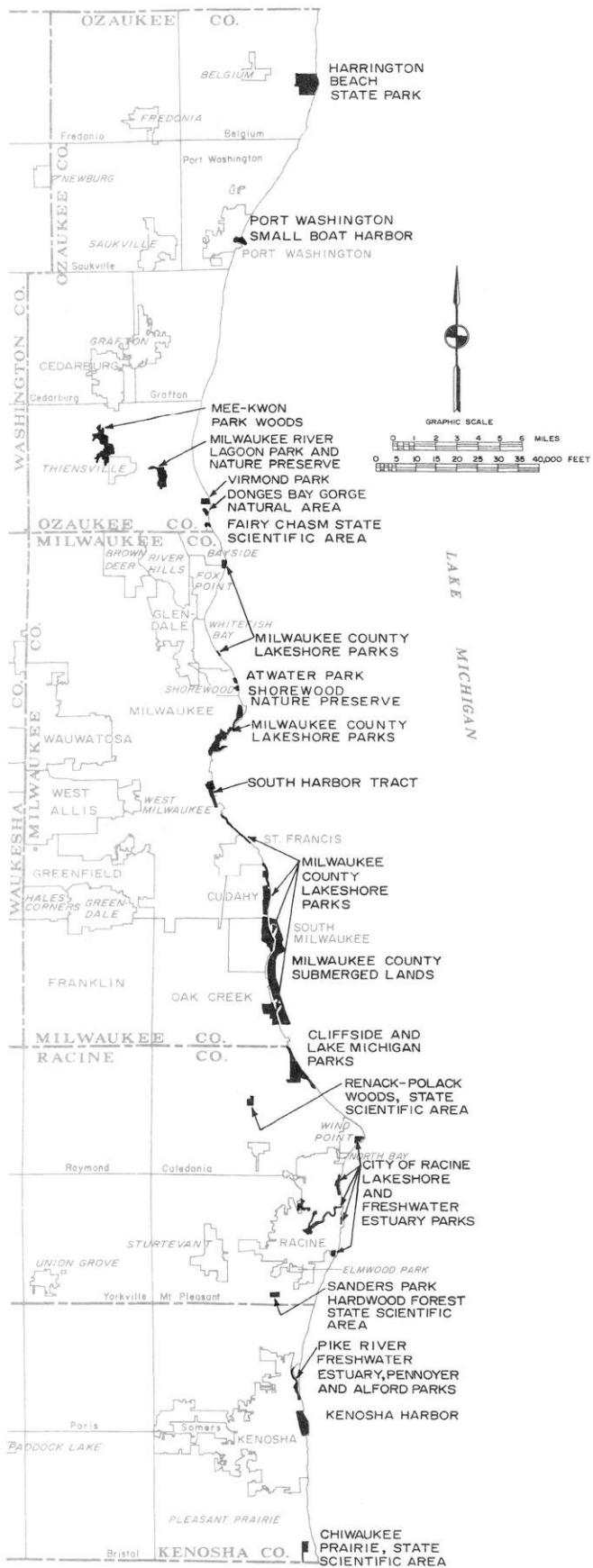
In 1992, the Commission continued to assist local units of government in the implementation of locally developed shoreline erosion control plans. Comprehensive plans have been developed cooperatively by the Commission for Milwaukee and Racine Counties. These plans were described, respectively, in the 1989 and 1982 Annual Reports. Also during 1992, work was initiated on the preparation of a prospectus for preparing a comprehensive Lake Michigan estuary, direct drainage area, and nearshore area planning program. This prospectus is being prepared by the Commission under a cooperative work program being carried out with the Wisconsin Department of Natural Resources.

## SOLID WASTE MANAGEMENT PLANNING

During 1992, the Commission continued to assist counties in the Region in the preparation and implementation of locally developed, county-oriented solid waste management plans. Prior annual reports have summarized such plans for Kenosha, Milwaukee, and Walworth Counties. These plans were described, respectively, in the 1989, 1987, and 1982 Annual Reports. Also during 1992, at the request of the Walworth County Solid Waste Management Board, work was initiated on an update of the Walworth County solid waste plan.

Map 31

### DESIGNATED COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 1992



# ECONOMIC DEVELOPMENT ASSISTANCE DIVISION

## DIVISION FUNCTIONS

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

## LOCAL ECONOMIC DEVELOPMENT PROGRAM PLANNING

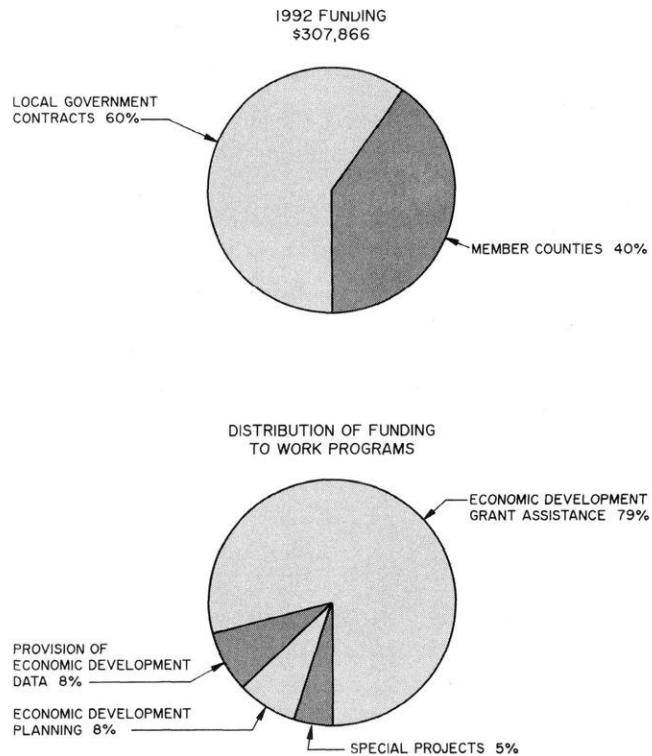
Increasingly, communities within the Southeastern Wisconsin Region have identified a need for ongoing local economic development activities. This need has been evidenced by a variety of local and regional economic development problems, including: 1) structural changes in the regional and national economies, 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 a community within the Region.

There has been an increasing interest in carefully planning local economic development programs in order to contain the rising costs of promoting economic development. In order to attract new and retain existing employers, some communities have chosen to purchase land for industrial parks and to provide the necessary infrastructure for development. Examples of the latter policy include roadway, sanitary sewer, water supply, and stormwater drainage improvements. Other communities have improved central commercial business districts through street resurfacing; improvements to curbs and gutters, sidewalks, public parking lots, and utilities; and the provision of such streetscape amenities as trees and curbside benches. Because the costs of

these improvements have continued to escalate, however, and because business establishments have become less attached to existing geographic locations, many communities have begun to reevaluate previous decisions to promote economic development. While some have decided not to promote the growth of existing business and industry or the location of new firms within their boundaries, others have decided to continue to pursue a range of local economic development measures. These include identifying the types of economic development compatible with overall community development goals and objectives and promoting such compatible economic development activities. In response to the increased interest in furthering economic development at the local level, the Commission has developed a staff capability to assist public agencies and private organizations in such efforts.

During 1992, the Commission engaged in the following local economic development program planning efforts:

**Figure 43**  
**ECONOMIC DEVELOPMENT ASSISTANCE DIVISION**



- Completion of a City of Cudahy overall economic development program (OEDP) plan and the continuation of the preparation of a City of Cudahy economic development fact book. The fact book is scheduled for completion in 1993.
- Provision of the demographic and socioeconomic data necessary to enable preparation of county overall economic development program plan annual reports for Kenosha, Racine, and Washington Counties. These reports serve to maintain county eligibility for Federal public works grants and revolving loan fund programs to further economic development.

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

Considerable Commission staff effort is directed at responding to requests for economic development-related data. This function also includes the provision of short-term technical assistance to local units of government, public agencies, and local development corporations in the analysis of economic development data. During 1992, the Division prepared written responses from the Commission files to 80 requests for economic development-related data. In addition, the Division responded to approximately 345 requests made by telephone and through personal visits to the Commission offices. These requests came from local units of government, Federal and State agencies, local development organizations, businesses, and individual citizens. The following are some examples of Division activity in performing this function during 1992:

- Provision of Wisconsin Department of Industry, Labor and Human Relations (DILHR) data identifying the number of industries and employees by industry type within communities in southeastern Wisconsin. In addition, U. S. Bureau of the Census, U. S. Bureau of Economic Analysis, U. S. Bureau of Labor Statistics, and Southeastern Wisconsin Regional Planning Commission demographic and socioeconomic data were provided upon request. These types of data were provided to various units and agencies of government, nonprofit organizations, and businesses in southeastern Wisconsin.

- Provision of assistance to local community staff and representatives of businesses interested in locating or expanding in communities in southeastern Wisconsin, utilizing information on State and Federal business loan and infrastructure development programs. This assistance was provided on 65 separate occasions at locations in each of the Region's seven counties.

## **ECONOMIC DEVELOPMENT PROJECT PLANNING SERVICES**

Economic development project planning involves conducting detailed economic development planning studies for local units of government, development corporations, and other organizations concerned with economic development and seeking Commission assistance. During 1992, the following representative project planning services were provided:

- The Commission staff completed updates for community economic profiles of the Cities of Franklin and Whitewater. These profiles are part of a series of community economic profiles originally prepared in 1984 and updated in 1988 and 1990 with the assistance of the Wisconsin Electric Power Company. The profiles are intended to be used by local units of government and private development organizations in southeastern Wisconsin 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 statistics, financial and educational institutions, public and private utilities and public services, transportation facilities, housing stock, health facilities and services, and media outlets. In addition, each profile is illustrated with a map of the community and of the Southeastern Wisconsin Region. The series includes community profiles for the Region, the Milwaukee metropolitan area, each of the constituent seven counties, and 57 cities, villages, and towns within the Region. Figure 44 shows an example of an economic development profile, reduced for the purpose of reproduction here. The communities for which profiles have been prepared are shown on Map 32 and are listed in Appendix D.

Figure 44

EXAMPLE OF COMMUNITY ECONOMIC DEVELOPMENT PROFILE

**ECONOMIC PROFILE**

City of Whitewater, WI  
OCTOBER 1991

**Population**

Year	Number	Percent Change
1960	6,380	—
1970	10,222	58.8
1980	11,520	3.7
1990	12,638	9.7

Source: U. S. Bureau of the Census.

**Housing**

Year	Total Units	Percent Change	Persons per Unit
1980	3,270	2.5	
1990	3,831	17.2	2.4

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

**Income**

1987 Per Capita Income	
City of Whitewater	\$ 9,039
Jefferson County	10,609
Walworth County	11,168
Southeastern Wisconsin Region	12,823
Wisconsin	11,417

Source: U. S. Bureau of the Census.

**Transportation**

**Highways**  
IH 90 is located 14 miles to the west, IH 34 18 miles to the north, and IH 43 18 miles to the south of the City of Whitewater. USH 12, and STH's 59 and 89 also serve the City.

**Public Transit**  
The City contracts for shared-ride taxi service from a private taxi company. The City is also served by a private intercity bus company, and by the specialized transportation service provided by the Walworth County Department of Aging to elderly and handicapped county residents.

**Air Service**  
The City of Whitewater is served by three general aviation airports that are capable of handling a wide variety of business aircraft. These are: East Troy Municipal Airport, located 16 miles east of the City; Fort Atkinson Municipal Airport, located seven miles north of the City; and Rock County Airport, located 20 miles east of the City. The Rock County Municipal Airport, located 10 miles northwest of the City of Whitewater, is a fourth general aviation airport that can handle small aircraft.

**Railway**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.  
**Water Transportation Facilities**  
The Port of Milwaukee is located 50 miles northeast of the City of Whitewater.

and General Mitchell International Airport is located 46 miles northeast in the City of Milwaukee. Chicago's O'Hare International Airport is located 78 miles to the southeast.

**Trucking**  
There are 55 trucking and warehousing establishments located in Walworth County.

**State and Local Government**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**General**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Accommodation and Food Services**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Entertainment and Recreation**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Healthcare**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Manufacturing**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Trade, Transportation, and Warehousing**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Finance, Insurance, and Real Estate**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Administrative, Support, and Waste Management Services**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Construction**  
The City of Whitewater is served by the Wisconsin & Calumet Railroad Company.

**Manufacturing**  
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**Utilities**  
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**Transportation and Warehousing**  
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**Information, Media, and Telecommunications**  
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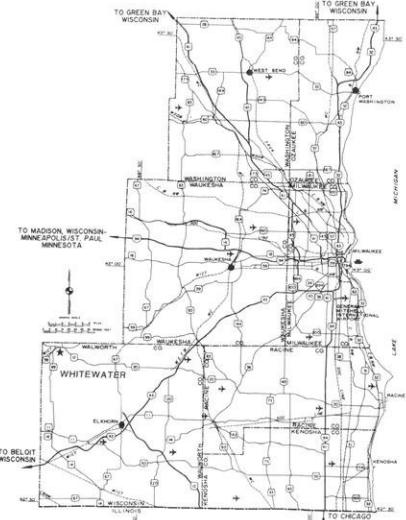


Figure 44

EXAMPLE OF COMMUNITY ECONOMIC DEVELOPMENT PROFILE

**Labor and Wages**

WALWORTH COUNTY EMPLOYMENT: 1990\*

Employment by Industry	Number of Persons Employed	Percent of Persons Employed	Occupational Category	Median Hourly Wages for Selected Occupations: 1990
Agriculture, Forestry, and Fishing	200	0.7	Executive, Administrative, and Managerial	\$14.76
Construction	1,100	4.0	Professional	14.37
Manufacturing	7,400	26.9	Technical	9.82
Transportation, Communications	1,100	4.0	Sales	5.25
Wholesale Trade	1,100	21.8	Administrative Support (including clerical)	7.50
Retail Trade	6,000	2.5	Service Occupations	6.74
Finance, Insurance, Real Estate	4,600	16.7	Mechanics and Repair Workers	11.21
Services	5,300	19.3	Precision Production	10.36
Government	27,500	100.0	Production Workers	8.50
Total	27,500	100.0	Transportation and Material Workers	11.20
			Handlers, Equipment Cleaners, and Laborers	8.33

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

Source: Wisconsin Department of Industry, Labor and Human Relations, March 1990; and SEWRPC.

WALWORTH COUNTY CIVILIAN LABOR FORCE: 1990\*

Total Labor Force	39,500
Employed Labor Force	38,200
Unemployed Labor Force	1,280

Source: Wisconsin Department of Industry, Labor and Human Relations—Average for 1990.

\*Wage rates are for the Southeastern Wisconsin Service Delivery Area, which includes Walworth, Racine, and Kenosha Counties, and may vary in specific locations within the three-county area.

Source: Wisconsin Department of Industry, Labor and Human Relations, 1990; and SEWRPC.

**Manufacturing**

MAJOR MANUFACTURING EMPLOYERS IN THE CITY OF WHITETWATER

Machinery Except Electrical

Electric and Electronic Equipment

Clinton Power, Inc.

Rubber and Miscellaneous Plastics Products

Polymer Technologies

Secure Medical

Star Packaging

Trottel Packings, Ltd.

Food and Kindred Products

Hawthorn Melody Farm, a division of

Perman-Rouque Company

Printing and Publishing

Forms Systems, Inc.

Source: 1990 Classified Directory of Wisconsin Manufacturers, the City of Whitewater, and SEWRPC.

**Financial**

Badgerland Credit Union

200 W. Whitewater Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-5401

Commercial Bank

200 S. Fremont Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-5111

The Community Credit Union

303 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-2130

First Citizens State Bank

207 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-2112

First Financial

216 Center Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-6860

Replicat Capital Bank

200 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-3666

Taxes

Local Property Taxes, 1990

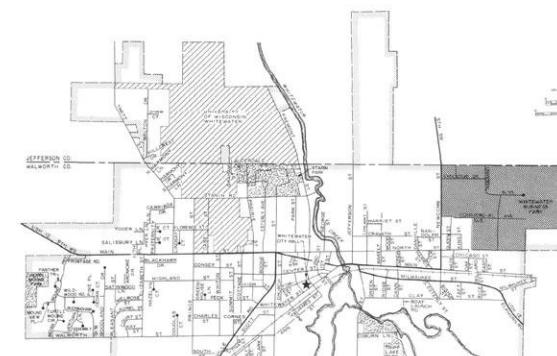
—Assessment Ratio: 0.9497

—Net Rate: \$1,000: \$27.74

—Total Equalized Value: \$151,849,200

Source: The City of Whitewater and SEWRPC.

**City of Whitewater**



**Contacts**

For industrial, commercial, or business information about the City of Whitewater contact:

**Local Contacts**

• Project Manager—Community Development

402 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-7036

Telescopier: (414) 473-7935

• Project Manager—Community Development

402 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-4005

Telescopier: (414) 223-3999

• Manager—Economic Development

Business Development Company

231 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 221-3842

Telescopier: (414) 221-3987

• City Manager

312 W. Whitewater Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-3812

Telescopier: (414) 473-7634

**State Contacts**

• City Manager

312 W. Whitewater Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-3812

Telescopier: (414) 473-7634

• Project Manager—Community Development

402 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-4005

Telescopier: (414) 223-3999

• Manager—Economic Development

Business Development Company

231 W. Main Street

Whitewater, Wisconsin 53190

Telephone: (414) 221-3842

Telescopier: (414) 221-3987

• City Manager

312 W. Whitewater Street

Whitewater, Wisconsin 53190

Telephone: (414) 473-3812

Telescopier: (414) 473-7634

**Wisconsin Electric Power Company**

1000 University Avenue, Suite 1001

Milwaukee, Wisconsin 53203

Telephone: (414) 273-1607

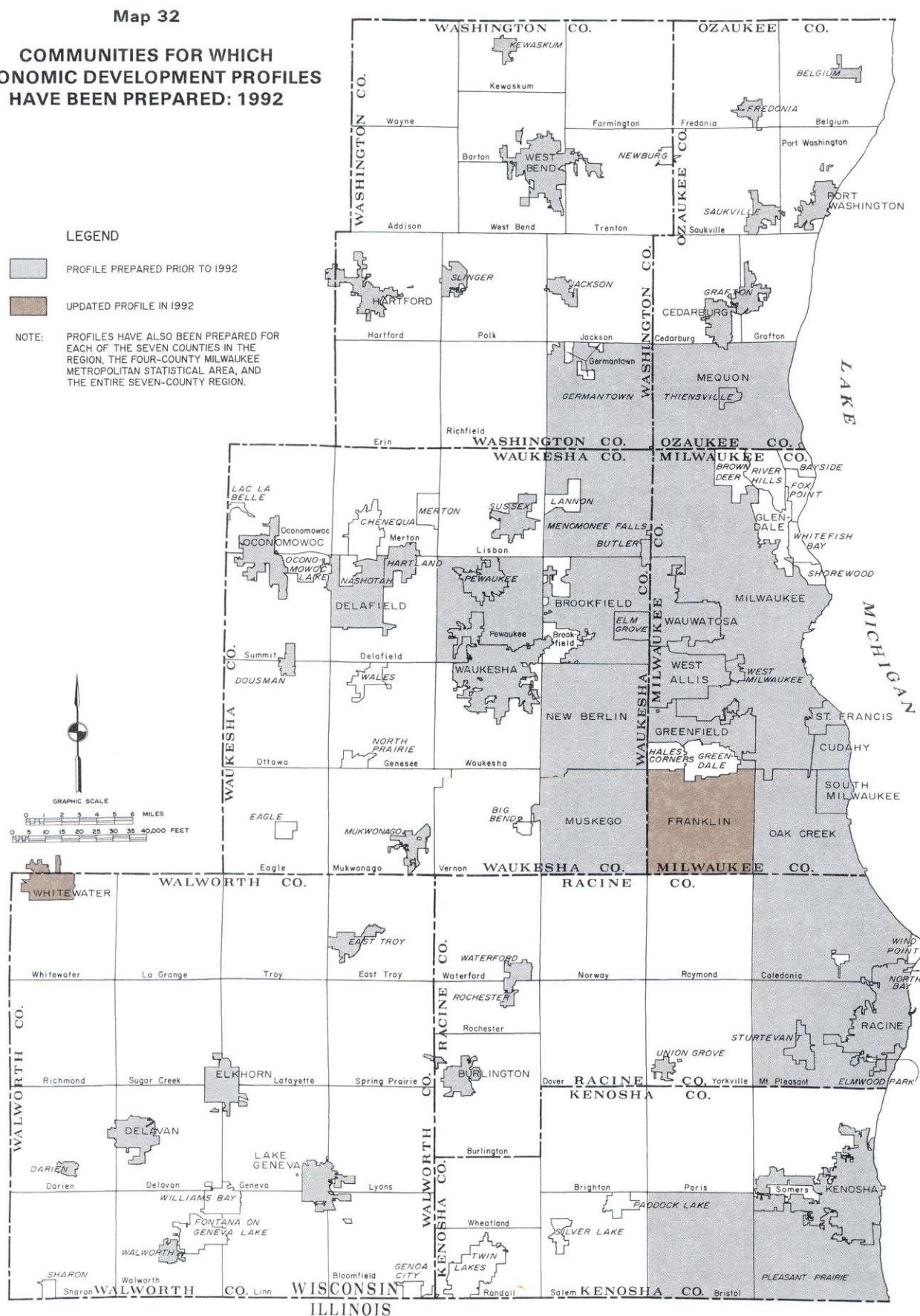
Map 32

COMMUNITIES FOR WHICH  
ECONOMIC DEVELOPMENT PROFILES  
HAVE BEEN PREPARED: 1992

LEGEND

- [Light Gray Box] PROFILE PREPARED PRIOR TO 1992
- [Dark Brown Box] UPDATED PROFILE IN 1992

NOTE: PROFILES HAVE ALSO BEEN PREPARED FOR EACH OF THE SEVEN COUNTIES IN THE REGION, THE FOUR-COUNTY MILWAUKEE METROPOLITAN STATISTICAL AREA, AND THE ENTIRE SEVEN-COUNTY REGION.



- At the request of the Racine County Economic Development Corporation, the Commission staff prepared an industry attraction study that identified targeted manufacturing and service industries for inclusion in a countywide industry attraction program and provided technical assistance in survey design and data analysis for a Burlington Area Chamber of Commerce wage survey.
- Commission staff assisted the Waukesha Area Chamber of Commerce in survey design, data analysis, and report generation for a community assessment survey.
- Commission staff provided assistance to the City of Burlington in the coding, keypunching, and computer analysis of a merchants' survey and two consumer surveys for the Burlington Main Street Program.
- Commission staff served on the Advisory Board for the Center for Urban Economic Development at the University of Wisconsin-Milwaukee and the Waukesha Area Chamber of Commerce Economic Development Committee.
- Commission staff distributed to all participating local governments and development corporations a directory of industrial and business parks in the Southeastern Wisconsin Region that was completed in 1991.
- Commission staff assisted the East Side Housing Action Coalition, Inc. (ESHAC) with the identification of a methodology to be used in the development of an industry attraction program.

## **ECONOMIC DEVELOPMENT, HOUSING, AND PUBLIC FACILITY GRANT ASSISTANCE**

The Commission staff provides assistance to local units of government in the preparation of State and Federal economic development, housing, and public facility grant applications and in the administration of the programs after issuance of a grant award. The grant applications seek State or Federal funding to provide below-market-interest-rate loans to businesses in an effort to expand employment opportunities and to increase the community tax base, to provide for the rehabilitation of existing housing for low-

and moderate-income persons, and to improve deficient public facilities serving low- and moderate-income persons.

### **Grant Preparation**

In 1992, the Commission assisted local units of government in obtaining a total of \$1.1 million in Wisconsin Development Fund-Economic Development grant awards that were used to finance business expansion and start-up projects. These monies resulted in the creation of 56 new jobs and \$4.6 million in private investment. In addition, the Commission assisted local units of government in obtaining \$690,000 in Wisconsin Department of Administration grant awards to assist 80 low- and moderate-income homeowners and renters with housing rehabilitation and rent assistance. The specific grant awards made under these categories are summarized as follows:

- The City of Burlington was the recipient of a \$120,400 Wisconsin Development Fund-Economic Development grant award that was loaned to RKW Ready-Mix, Inc. The loan will be used to purchase land, construct a new manufacturing facility, purchase capital equipment, and provide working capital for the start-up ready-mix concrete facility. The loan is expected to result in six new jobs and generate \$133,500 in private investment.
- The City of Hartford was the recipient of a \$269,700 Wisconsin Development Fund-Economic Development grant award that was loaned to Mantz Automation, Inc. The loan will be used to purchase land and capital equipment and to provide working capital for the manufacturer of plastic injection molds. The loan is expected to result in 14 new jobs and generate \$270,700 in private investment.
- The City of Port Washington was the recipient of a \$607,000 Wisconsin Development Fund-Economic Development grant award that was loaned to Exactech, Inc. The loan will be used to purchase land and capital equipment and to provide working capital for the start-up custom fabrication, machining, and assembly operation. The loan is expected to result in 30 new jobs and generate \$1.9 million in private investment.

- The City of Port Washington was the recipient of a \$110,000 Wisconsin Development Fund-Economic Development grant award that was loaned to Harborside, Ltd. The loan will be used to purchase furniture, fixtures, and equipment for the expansion of the Harborside Motor Inn in the City. The loan is expected to result in six new jobs and generate \$2.3 million in private investment.
- The City of Hartford was the recipient of a \$500,000 Small Cities Community Development Block Grant award that was provided by the Wisconsin Department of Administration, Division of Housing. The grant funds will be used to rehabilitate 44 units of renter-occupied, multi-family housing and 14 single-family residences.
- The City of Hartford was the recipient of a \$190,300 Home Investment Partnerships Program (HOME) grant award that was provided by the Wisconsin Department of Administration, Division of Housing. The grant funds will be used to provide tenant-based rental assistance for 22 low- and moderate-income households in the City.

The Commission staff also assisted the Racine County Economic Development Corporation in obtaining approval of applications for the following U. S. Small Business Administration (SBA) 7(a) loan guarantees for businesses located in the City of Racine: 1) a \$68,400 loan guarantee for Custom Control Products, Inc., to finance working capital needs; 2) a \$78,750 loan guarantee for Racine Plastic, Inc., to purchase machinery and equipment; 3) a \$52,000 loan guarantee for Arrow Heating and Air Conditioning, Inc., to finance an employee buy-out of the firm; and 4) a \$106,000 loan guarantee for Custom Control Products, Inc., to refinance existing debt.

The Commission staff also assisted the Racine County Economic Development Corporation with the preparation of an application for a U. S. Economic Development Administration Title IX Long-Term Economic Deterioration grant award. The application, in the amount of \$300,000, was submitted to the Economic Development Administration in 1992, and, if approved, the monies obtained would be used to recapitalize the Racine County revolving loan fund program.

The Commission staff initiated work on the following grant applications during 1992 that will be completed in 1993:

- A Village of Menomonee Falls application for a \$260,000 Wisconsin Development Fund-Economic Development grant award that would be loaned to Performance Mold Products, Inc. The monies obtained would be used to finance the purchase of inventory and capital equipment for the expansion of the firm's finish-machined components business in the Village.
- A City of Hartford Community Development Authority application for a \$230,000 Home Investment Partnerships Program (HOME) grant award that would be used to construct new low- and moderate-income apartments in the City.

Following is a list of the grant-related technical assistance activities that were conducted with the assistance of Commission staff in 1992.

- Provision of assistance to the Racine County Economic Development Corporation in determining the feasibility of submitting Wisconsin Development Fund-Economic Development grant applications for business development projects in the Towns of Mt. Pleasant and Yorkville, Racine County, and the City of Burlington.
- Provision of assistance to the Village of East Troy in determining the feasibility of submitting a Wisconsin Development Fund-Economic Development grant application for a business development project in the Village.
- Provision of assistance to the City of White-water in determining the feasibility of submitting a Wisconsin Development Fund-Public Facilities grant application to finance water system improvements in the City.
- Provision of assistance to the Racine County Economic Development Corporation in determining the feasibility of submitting U. S. Economic Development Administration Title I Public Works and Development applications on behalf of an industrial park expansion project in the City of Burlington

and the rehabilitation of an incubator facility in the City of Racine.

- Provision of assistance to the City of Hartford in determining the feasibility of submitting a U. S. Farmers Home Administration Intermediary Relending Program application for the capitalization of a revolving loan fund in the City.
- Provision of assistance to the City of Hartford in its efforts to create a community-based housing development organization in the City to provide for low- and moderate-income housing development.
- Review of applications and submission of letters of support for eight Wisconsin Department of Development Community-Based Economic Development grant applications for neighborhood groups in the City of Milwaukee: the Avenues West Association, Inc.; the East Side Housing Action Coalition, Inc.; Esperanza Unida; the Greater Mitchell Street Association; Lisbon Avenue Neighborhood Development; Metro-Works Business Development Centers; the West End Development Corporation; and the YWCA of Greater Milwaukee.
- Provision of written comments to the Wisconsin Department of Development on proposed amendments to the administrative rules for the Wisconsin Development Fund-Economic Development Program and the Wisconsin Development Fund-Public Facilities Program.

### **Grant Administration**

In addition to helping local communities apply for available Federal and State funds, the Commission will, upon request, contract with successful applicants for the administration of the grant awards and for the administration of revolving loan funds financed with repayments on loans to businesses and homeowners. A number of activities are involved in administering the grant awards, including ensuring that the terms of each grant award are met. During 1992, the Commission provided contract services to administer the following Federal and State grant awards:

- A Wisconsin Development Fund-Economic Development grant award in the amount of

\$425,000 obtained by the Village of Menomonee Falls with the assistance of the Commission in 1989. The grant funds were used to provide a business loan to CAAP, Inc., an asbestos abatement contractor. The loan resulted in the creation of 29 new jobs and \$425,000 in private investment.

- A Wisconsin Development Fund-Economic Development grant award in the amount of \$174,750 obtained by Washington County with the assistance of the Commission in 1990. The grant funds were used to provide a business loan to Craft-Cast Company, Inc., a precision investment casting foundry. The loan resulted in the creation of nine new jobs and \$177,750 in private investment.
- A Wisconsin Development Fund-Economic Development grant award in the amount of \$207,000 obtained by the Village of Sussex with the assistance of the Commission in 1991. The grant funds were used to provide a business loan to the Infographix Corporation to finance working capital needs. The loan resulted in the creation of 11 new jobs and \$207,000 in private investment.
- A Wisconsin Development Fund-Economic Development grant award in the amount of \$448,000 obtained by the Village of Menomonee Falls with the assistance of the Commission in 1991. The grant funds were used to provide a business loan to the Children's Community Center, Inc., for the construction of a new day-care facility in the Village. The loan resulted in the creation of five new jobs, the retention of 17 existing jobs, and the expenditure of \$1.2 million in private investment.
- A Wisconsin Development Fund-Economic Development grant award in the amount of \$747,000 obtained by Kenosha County with the assistance of the Commission in 1991. The grant funds were used to provide a business loan to Nitro-Bar, Ltd., for the purchase of capital equipment and the financing of working capital needs. The loan is expected to result in the creation of 38 new jobs and \$1.8 million in private investment.
- A Wisconsin Development Fund-Economic Development grant award in the amount of \$372,000 obtained by the Town of Bristol,

Kenosha County, with the assistance of the Commission in 1991. The grant funds were used to provide a business loan to Northlake Engineering, Inc., for the purchase of capital equipment and the financing of working capital needs. The loan is expected to result in the creation of 20 new jobs and \$1.4 million in private investment.

- A Wisconsin Development Fund-Economic Development grant award in the amount of \$269,700 obtained by the City of Hartford with the assistance of the Commission in 1992. The grant funds were used to provide a business loan to Mantz Automation, Inc., for the purchase of land and capital equipment and the financing of working capital needs. The loan is expected to result in the creation of 14 new jobs and \$270,700 in private investment.
- A Wisconsin Development Fund-Economic Development grant award in the amount of \$120,400 obtained by the City of Burlington with the assistance of the Commission in 1992. The grant funds were used to provide a business loan to RKW Ready-Mix, Inc., for the purchase of land, the construction of a new manufacturing facility, the purchase of capital equipment, and the financing of working capital needs. The loan is expected to result in the creation of six new jobs and \$133,500 in private investment.
- A Wisconsin Development Fund housing grant award in the amount of \$558,000 obtained by Kenosha County with the assistance of the Commission in 1990. The grant funds were used to finance the continuation of the housing rehabilitation program in the County outside the City of Kenosha. The funds thus obtained for the program were used to provide low- or no-interest loans to low- and moderate-income persons to rehabilitate 54 owner-occupied units, five renter-occupied units, and four vacant rental units; to provide accessibility improvements for persons with disabilities to 14 housing units; to defray the cost of installing sanitary sewer laterals to 15 housing units; and to defray the cost of removing three blighted properties owned by Kenosha County.
- A Wisconsin Department of Administration Housing Cost Reduction Initiative program

grant award in the amount of \$60,000 obtained by the City of Hartford with the assistance of the Commission in 1991. The Commission is assisting the City with the implementation of that portion of the program that provides down payments and closing costs for low- and moderate-income home buyers.

- A Wisconsin Department of Administration Community Development Block Grant award in the amount of \$500,000 obtained by the City of Hartford with the assistance of the Commission in 1992. The grant funds are being used to assist low- and moderate-income residents through the rehabilitation of 44 units of renter-occupied multi-family housing and 14 single-family residences.

Finally, the Commission provided technical assistance in the administration of the following revolving loan fund programs established through repayments on Wisconsin Development Fund grant awards as follows: 1) provision of assistance to the Village of East Troy in meeting with businesses interested in obtaining financing from the Village's revolving loan fund program and in making a \$45,000 loan for the Rodger N. and Catherine A. Trader, d/b/a Tradecraft Wood Products expansion project in the Village; 2) provision of assistance to the Village of Menomonee Falls in amending the Village's revolving loan fund plan and meeting with businesses interested in obtaining financing from the Village's revolving loan fund program; 3) provision of assistance to the City of Mequon in meeting with businesses interested in obtaining financing from the City's revolving loan fund program; 4) provision of assistance to the City of Muskego in meeting with businesses interested in obtaining financing from the City's revolving loan fund program; 5) provision of assistance to the City of Whitewater in reviewing applications for the City's revolving loan fund program; and 6) provision of assistance to the Kenosha County Housing Authority in making six loans to low- and moderate-income homeowners with monies from the Kenosha County housing rehabilitation revolving loan fund program. In addition, the Commission provided technical assistance to the Waukesha County Economic Development Corporation in reviewing applications for business loans from the Waukesha County Community Development Block Grant program.

# 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.

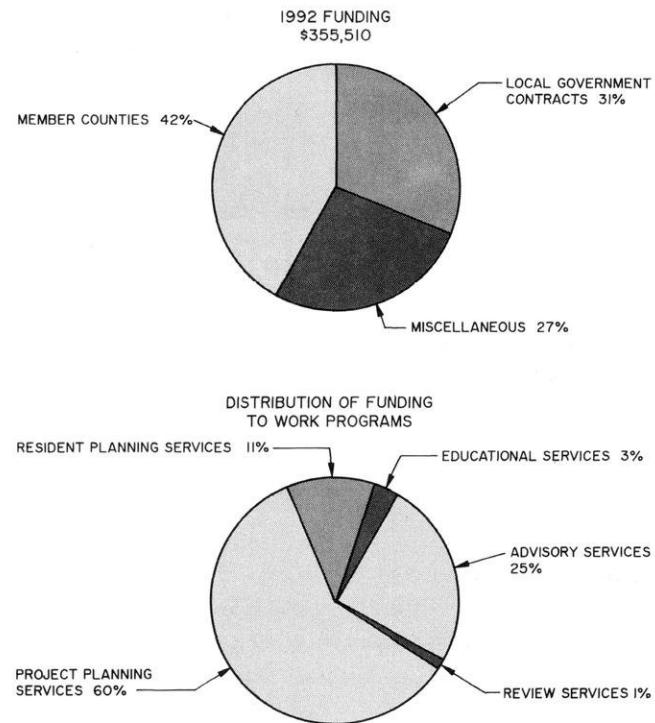
## EDUCATIONAL SERVICES

Educational services are provided by the Division staff to local units of government and citizen groups on request. They are directed at explaining the need for, and purposes of, continuing local, regional, and State planning programs and the relationships that should exist between these different levels of planning. In addition, these efforts are directed at encouraging the creation, organization, staffing, and financing of local planning programs. During 1992, educational efforts included:

- Presentations regarding the general scope of work done by the Commission and the details of specific work programs to local governmental, student, professional, and civic groups, including classes at Milwaukee Area Technical College and the University of Wisconsin-Milwaukee; to the Wisconsin County Boards Association and Elkhorn Community Action, Inc.; and to the Elm Grove Rotary Club, the Fontana Rotary Club, the Mukwonago Kiwanis Club, the West Allis Chapter of the Izaak Walton League, the Kenosha Chapter of the American Association of Retired Persons, the Wisconsin Landscape Contractors Association, the University of Wisconsin Rural Leadership Seminar, and the Waukesha County Board of Realtors. A presentation on the functions and duties of regional planning commissions was made at a joint meeting of officials from Adams, Columbia, Dodge, Jefferson, Rock, and Sauk Counties.

- Presentations on land information systems and attendant demonstrations to the Kenosha County Land Conservation Committee and the Waukesha County Land Use, Parks, and Environment Committee; to classes at Waukesha County Technical College and at Carroll College; and to U. S. Soil Conservation Service and Wisconsin Department of Transportation personnel.
- Wetland preservation presentations to classes at the University of Wisconsin-Milwaukee, the University of Wisconsin-Waukesha, and the University of Wisconsin-Whitewater; to the Wisconsin Chapter of The Nature Conservancy, the Midwest Chapter of the Society of Wetland Scientists, the Wisconsin Sustainable Farmers Association, the Citizens for a

Figure 45  
COMMUNITY ASSISTANCE PLANNING DIVISION



Better Environment, a study group at Beautiful Savior Lutheran Church in Waukesha, and the Asbury Fellowship Group at First United Methodist Church in Waukesha; and to Wisconsin Department of Natural Resources wastewater management and water regulation and zoning personnel.

- Wildlife and nature tours for the general public and school classes conducted by Commission staff in the Beulah Bog, Vernon Marsh, and Lulu Lake wetlands.
- Preparation of six Commission newsletters discussing Commission planning programs and related activities. The newsletters are distributed to over 1,500 public officials and interested citizens.
- Preparation and distribution to newspapers and to radio and television stations of four news releases: 1) concerning the conduct of a new regional travel origin and destination study; 2) announcing the completion of the year 2010 regional land use plan and the 16th Regional Planning Conference, whose theme was growth management through land use-transportation planning; 3) announcing the receipt by the Commission of three international-level printing-related awards, including a first-place award for cartographic composition and a special award for "five years of [geographic information systems] excellence" at the International Print and Map Design Conference in Fort Collins, Colorado, as well as a first-place award given to the Commission for a comprehensive development plan it prepared for the City of Cedarburg by the In-Plant Management Association and In-Plant Reproductions magazine; and 4) announcing the election of Mr. David B. Falstad of Racine County as the 1993 Chairman of the Southeastern Wisconsin Regional Planning Commission.
- Preparation and distribution of the Commission's 1991 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 to private interests and the provision, on an ad hoc basis, of technical

planning and engineering assistance to local communities. Representative advisory services performed during 1992 included:

- Provision of model zoning regulations governing planned unit developments, parking of junked and abandoned vehicles, mailboxes, adult entertainment establishments, and upland conservancy areas to the Village of Slinger, the Town of Belgium, the Town of Jackson, the City of Lake Geneva, and the University of Wisconsin-Milwaukee Urban Research Center.
- Provision of model zoning administration and enforcement forms to the Village of Newburg.
- Provision of a model land subdivision control ordinance to the Village of Mukwonago and provision of alternative plat restrictions for preserving environmentally significant lands to Racine County.
- A presentation on procedures regarding annexation to officials of the Village of East Troy.
- Provision of fire station location standards and assistance in their application to officials of the Town of Caledonia.
- A presentation on extraterritorial zoning procedures to officials of the Village of Mukwonago.
- Discussion with Town of Lisbon officials of defensible reasons for downzoning and of past litigation in Wisconsin on downzoning.
- Preparation of work programs for the development of local land use plans for the Cities of Cudahy and Oconomowoc, the Village of Kewaskum, and the Town of Cedarburg.

## REVIEW SERVICES

Review services are intended to encourage the incorporation into local planning programs, plans, and plan implementation devices, such as zoning and subdivision control ordinances, of regional studies and plans. In addition, review services are intended to prevent unnecessary duplication of planning efforts and to coordinate and encourage regional plan implementation. Three basic types of review services are performed: review of local plans, plan implementa-

**Table 31**  
**STATE AND FEDERAL GRANT REVIEWS**

Review Category	Number of Reviews	Aggregate Amount of Federal and/or State Grant, Loan, or Mortgage Insurance Requests
Community Action . . . . .	41	\$ 43,153,606
Community Development . . . . .	14	19,096,109
Community Facilities . . . . .	4	3,360,000
Conservation . . . . .	40	91,820,897
Historic Programs . . . . .	1	957,976
Housing . . . . .	12	13,110,880
Law Enforcement . . . . .	2	886,319
Park and Open Space . . . . .	5	618,905
Solid Waste . . . . .	3	5,420,075
Transportation . . . . .	36	41,122,473
Water Facilities . . . . .	1	6,520,000
<b>Total</b>	<b>159</b>	<b>\$226,067,240</b>

tion devices, and development proposals; review of Federal and State grant applications; and review of environmental impact statements, reports, and assessments. The following is a representative sample of review services provided by the Division staff in 1992 in the first review category:

- Review of, and comment on, 57 preliminary land subdivision plats, including four plats reviewed at the request of Kenosha County for subdivisions located in the Towns of Bristol and Somers; 18 plats at the request of Racine County for subdivisions located in the Towns of Burlington, Caledonia, Mt. Pleasant, Norway, Waterford, and Yorkville; eight plats at the request of Walworth County for subdivisions located in the Towns of Bloomfield, Delavan, Geneva, Lyons, Richmond, and Spring Prairie; one plat at the request of the City of Burlington; one plat at the request of the City of Port Washington; two plats at the request of the City of Waukesha; two plats at the request of the Village of Belgium; one plat at the request of the Village of Fredonia; nine plats at the request of the Village of Germantown; one plat at the request of the Village of Pleasant Prairie; one plat at the
- request of the Village of Saukville; five plats at the request of the Village of Sussex; one plat at the request of the Town of Delafield; one plat at the request of the Town of Genesee; one plat at the request of the Town of Port Washington; and one plat at the request of the Town of Somers.
- Review of, and comment on, 24 certified survey maps, including the review of 14 certified survey maps in the City of Burlington, one certified survey map in the Village of Walworth, one certified survey map in the Village of Williams Bay, and eight certified survey maps in the Town of Somers.
- Review of, and comment on, 19 petitions to rezone lands, including two in the City of Burlington, six in the Village of Menomonee Falls, nine in the Town of Somers, and two in the Town of Wheatland.

Commission activities regarding the review of Federal and State grant applications are summarized in Table 31. In total, review comments were provided for 159 applications for Federal and/or State grants, loans, or mortgage insurance guarantees requesting in the aggregate more than \$226 million in Federal and State

**Table 32**  
**ENVIRONMENTAL IMPACT STATEMENTS REVIEWED: 1992**

Document Reviewed	Requesting Agency
Environmental Impact Statement to construct a U. S. Army Reserve Center in the Village of Sturtevant	Department of the Army
Environmental Impact Statement to construct an electrical substation on the University of Wisconsin-Milwaukee campus	University of Wisconsin System
Environmental Impact Statement to construct a combustion turbine power plant in the Town of Paris	Public Service Commission of Wisconsin
Environmental Impact Statement for a child-care facility on the Milwaukee Area Technical College-North Campus	Milwaukee Area Technical College-North Campus

financial assistance. Of the 159 requests, 18 were found to be in conformance with, and to serve to implement, the adopted regional plan elements and 141 were found to be not in conflict with the adopted regional plan elements. None was 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 32. Comments are provided, when required, relating the proposed projects and the data contained in the environmental impact statements to the adopted regional plans.

### **PROJECT PLANNING SERVICES**

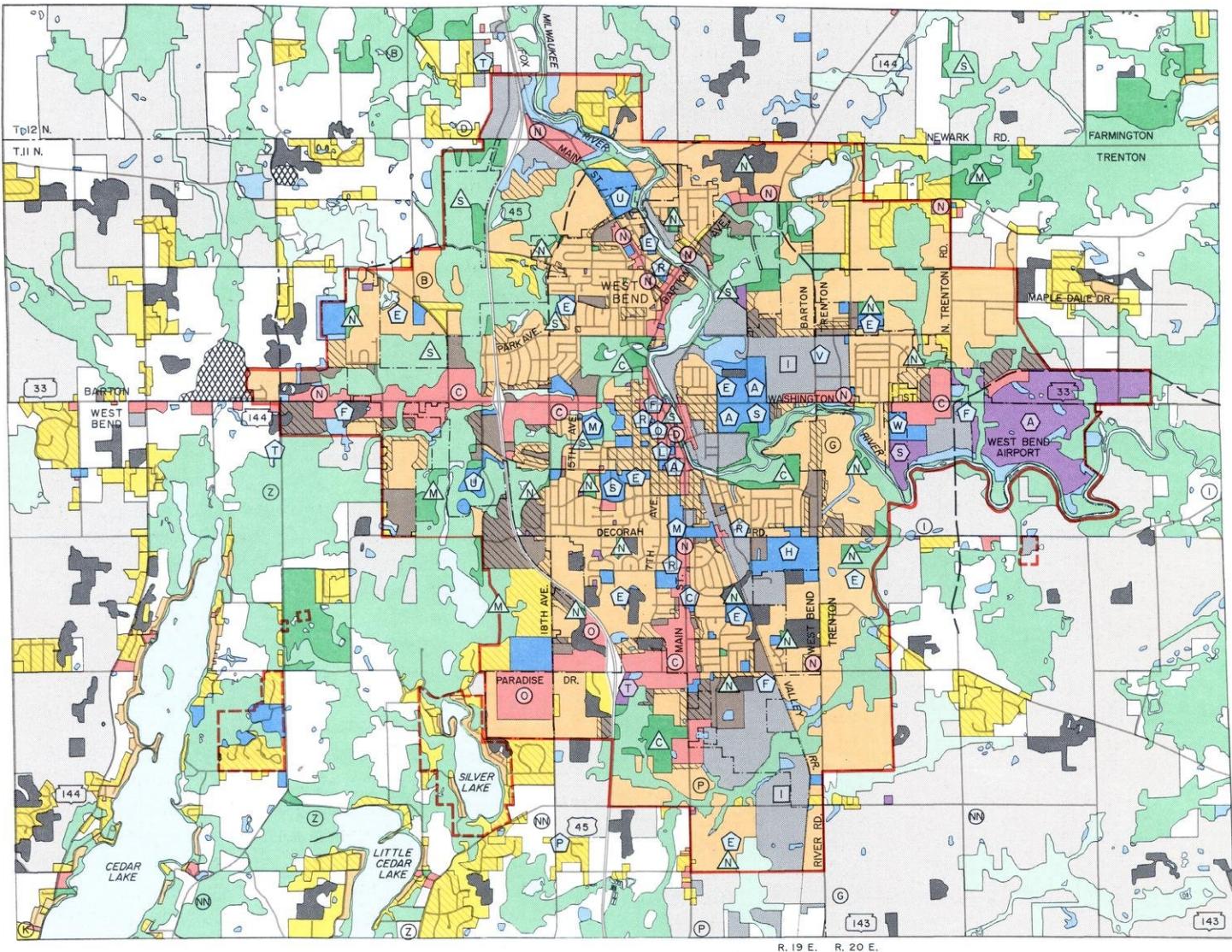
Project planning services involve the conduct for local member units of government, at cost, of detailed planning studies resulting in the preparation of local plans and plan implementation devices. During 1992, the following representative project planning efforts were conducted:

- Completion of a land use plan for the City of West Bend. This plan, documented in SEWRPC Community Assistance Planning Report No. 167, A Land Use Plan for the City of West Bend: 2010, Washington County, Wisconsin, July 1992, refines and details the adopted regional land use plan. The plan provides a sound point of departure in land use development decision making by City officials. The land use plan for the City is shown in graphic summary form on Map 33. The plan also sets forth a framework for further refinement of the
- Completion of the Burlington Industrial Park Neighborhood plan. This plan, documented in SEWRPC Community Assistance Planning Report No. 165, A Development Plan for the Burlington Industrial Park Neighborhood, City of Burlington, Racine County, Wisconsin, January 1991, is the third in a series of 10 proposed neighborhood unit plans for the City of Burlington. Neighborhood unit plans previously prepared by the Commission included the Quarry Ridge and the Echo Lake Neighborhoods. The Industrial Park Neighborhood plan sets forth a design for the City Industrial Park, sets forth site design criteria for individual industrial sites, and provides institutional mechanisms for managing the appearance of the industrial park.
- Completion of a land subdivision control ordinance for the Town of LaGrange. This ordinance regulates the creation of plats and certified survey maps within the Town and is intended to help implement the Town land use plan adopted in 1991.
- Completion of zoning district maps for the City of Burlington, the Town of Grafton, and the Town of LaGrange.

plan by delineating 23 neighborhood planning units and eight special planning districts. These delineations follow the long-standing recommendation in the regional land use plan that urban areas be formed of, and developed in, a number of individual cellular units and not as a single, large, formless mass.

Map 33

## RECOMMENDED LAND USE PLAN FOR THE CITY OF WEST BEND PLANNING AREA: 2010



## LEGEND

- URBAN SERVICE AREA BOUNDARY
- DASHED LINE SPECIAL SANITARY SEWER SERVICE AREAS
- PROPOSED ARTERIAL STREET
-  SINGLE-FAMILY SUBURBAN RESIDENTIAL (1.5 TO 4.9 ACRE LOTS)
-  SINGLE-FAMILY LOW DENSITY RESIDENTIAL (20,000- TO 65,399- SQUARE-FOOT LOTS)
-  SINGLE-FAMILY MEDIUM DENSITY RESIDENTIAL (7,200- TO 19,999- SQUARE-FOOT LOTS)
-  TWO-FAMILY RESIDENTIAL DEVELOPMENT (6.1 TO 10.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  MULTI-FAMILY MEDIUM-HIGH DENSITY RESIDENTIAL (6.1 TO 10.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  MULTI-FAMILY HIGH DENSITY RESIDENTIAL (11.0 TO 15.0 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  COMMERCIAL DEVELOPMENT
  - D CENTRAL BUSINESS DISTRICT
  - C COMMUNITY RETAIL AND SERVICE CENTER
  - N NEIGHBORHOOD RETAIL AND SERVICE CENTER
  - O OFFICE CENTER
-  QUARRYING AND EXTRACTIVE DEVELOPMENT
-  INDUSTRIAL DEVELOPMENT
  - I INDUSTRIAL PARK

 TRANSPORTATION, COMMUNICATIONS, AND UTILITIES

- A AIRPORT
- T TRANSIT STATION
- S SEWAGE TREATMENT PLANT

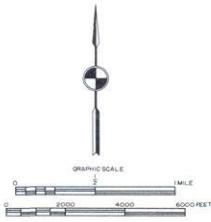
 GOVERNMENTAL AND INSTITUTIONAL

- C CITY HALL AND POLICE DEPARTMENT
- A COUNTY ADMINISTRATIVE OFFICES
- T TOWN HALL
- L LIBRARY
- F FIRE STATION
- W PUBLIC WORK FACILITIES
- V VEHICLE EMISSIONS TESTING STATION
- O POST OFFICE
- S HOSPITAL
- P PUBLIC PRE-SCHOOL
- E PUBLIC ELEMENTARY SCHOOL
- M PUBLIC MIDDLE SCHOOL
- H PUBLIC HIGH SCHOOL
- R PRIVATE SCHOOL
- U COLLEGE

 PARKS AND RECREATION

- M MAJOR PARK
- C COMMUNITY PARK
- N NEIGHBORHOOD PARK
- S SPECIAL OUTDOOR RECREATION AND OTHER OPEN SPACE SITES

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



- Completion of a study assessing the potential environmental impacts of the proposed development of the Millard Sand and Gravel pit in the Town of Sugar Creek. The results of this study are set forth in SEWRPC Memorandum Report No. 69, Environmental Assessment of the Proposed Development of the Millard Sand and Gravel Pit, July 1992. In addition to identifying the potential environmental impacts of significance expected to be associated with the proposed sand and gravel pit operation, the report identifies mitigation measures which can be considered by the Town to minimize those impacts.
- Completion of a prospectus for a study of emergency medical services in Waukesha County. The study outlined in the prospectus would examine the feasibility of establishing a county paramedic emergency medical delivery system in Waukesha County. The prospectus was prepared under the guidance of the Waukesha County Paramedic Advisory Committee appointed by the Waukesha County Executive.

## RESIDENT PLANNING SERVICES

The Commission provides part-time resident staff assistance, on request, to local units of government within the Region. This type of assistance involves a commitment by the Commission staff to attend all local plan commission meetings and to provide such local planning recommendations 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 1992, resident planning assistance was provided on a contractual basis to the Cities of Burlington and New Berlin; to the Villages of Menomonee Falls, Saukville, and Sussex; and to the Towns of Somers and Wheatland. Together, these services required Division staff attendance and participation in a total of 91 plan commission, town board, village board, and city council meetings. Representative examples of services provided in 1992 include:

- Preparation of five zoning text amendments to the City of Burlington Zoning Ordinance regarding signs in industrial districts, driveway widths in industrial districts, decorative fences in all districts, office uses in industrial districts, and truck sales in

industrial districts. The Commission staff participated in ongoing discussions of minimum street cross-sections and regulation of bed-and-breakfast establishments.

- Review of, and comment on, 13 development site plans, six conditional use permit applications, and one sign permit application in the City of Burlington.
- Preparation of a zoning text amendment to the Village of Menomonee Falls Zoning Ordinance addressing regulation of non-conforming uses. The Commission staff also reviewed and commented on two conditional use permit applications and reviewed a conceptual plan for the Civic Center Campus.
- Review of, and comment on, a site plan for a gasoline service station and convenience food store in the Village of Saukville. Two conceptual subdivision plats were also reviewed.
- Preparation of three zoning text amendments to the Village of Sussex Zoning Ordinance regarding erosion control, regulation of terrestrial and earth satellite antennas, and enumeration of conditional uses in business districts. The Commission interpreted yard requirements for corner lots and the status of nonconforming structures. The Commission staff also reviewed and commented on a conditional use permit application, a multi-family development site plan, and a proposed Village compost ordinance.
- Review of, and comment on, one development site plan, 13 conditional use permit applications, and 12 applications for zoning variances in the Town of Somers. The Commission staff also reviewed and commented on a proposed annexation to the City of Kenosha and a proposed detachment from the City of Kenosha.
- Review of, and comment on, a conditional use permit to expand a dog kennel, review of, and comment on, a conceptual subdivision plat, and review of suggested changes to the Town Subdivision Control Ordinance in the Town of Wheatland. The Commission staff also reviewed proposed changes to the Kenosha County Zoning Ordinance with Town Plan Commission members.

# CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

## DIVISION FUNCTIONS

The Commission's Cartographic and Graphic Arts Division provides basic services to other Commission divisions in a number of functional areas. The Division is responsible for creating and maintaining current a series of regional planning base maps that are used not only by the Commission, but are extensively used also by other units of government and by private interests. In addition, the Division is responsible for securing aerial photography of the Region at five-year intervals selected to coincide with U. S. Bureau of the Census decennial census years and related 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 by 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, upon request, of contracts and specifications for large-scale mapping efforts by county and 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 1992, work continued on the updating of the Commission's 1-inch>equals-2,000-feet-scale county planning base maps, using 1990 ratioed and rectified aerial photography and Wisconsin Department of Transportation state aid mileage summary maps. In 1992, this 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 1992, all of Kenosha and Milwaukee Counties and portions of Walworth, Washington, and Waukesha Counties had been

updated. This updating effort represents about 32 percent of the total area of the Region.

## TOPOGRAPHIC MAPPING AND SURVEY CONTROL

The Commission prepares, and encourages county and 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 counties and local communities in the preparation of contracts and specifications for these programs. All the horizontal and vertical control survey data obtained as part of these mapping efforts are compiled by the Division. The Commission thus serves as a center for the collection, collation, and coordination of control survey data throughout the Region.

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 U. S. Public Land Survey corners within the County. That work was done in accordance with specifications prepared by the 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 included 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. In 1991, Milwaukee County undertook a countywide program under which the land survey and control survey work was completed and the topographic mapping work was started with the Commission staff providing the neces-

sary supervision and assistance. In 1992, Walworth and Washington Counties also undertook countywide programs under which land survey and control survey work was initiated with the Commission providing assistance in the preparation of controls and specifications and with the field inspections and office analyses required for quality control. These county-level surveying and mapping programs represent model programs of national interest.

Map 34 shows those areas of the Region for which, by the end of 1992, large-scale topographic maps have been or are being prepared to Commission-recommended standards. As shown in Figure 46 and Table 33, this area totals 1,559 square miles, or about 58 percent of the total area of the Region. A total of 7,958 U. S. Public Land Survey corners in the Region have been or are being relocated, monumented, and coordinated, representing about 68 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 1992 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 1992, requests for such information were fulfilled for 20 sites, bringing to 184 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 increase somewhat 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 through construction or other activities and for maintaining a record of the surveys required for such perpetuation. This act became effective on May 28, 1984.

In 1992, under the requirements of this legislation, the Division received, indexed, and filed 1,903 records of land surveys completed within Milwaukee County, the only county within the Region which meets the statutory criteria. This brings the total number of records of land surveys completed within Milwaukee County which have been filed by the Division to 17,622.

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, the Milwaukee County Register of Deeds, 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.

Map 34

LARGE-SCALE TOPOGRAPHIC  
MAPPING AND RELOCATION,  
MONUMENTATION, AND  
COORDINATION OF U. S. PUBLIC  
LAND SURVEY CORNERS: 1992

## LEGEND

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

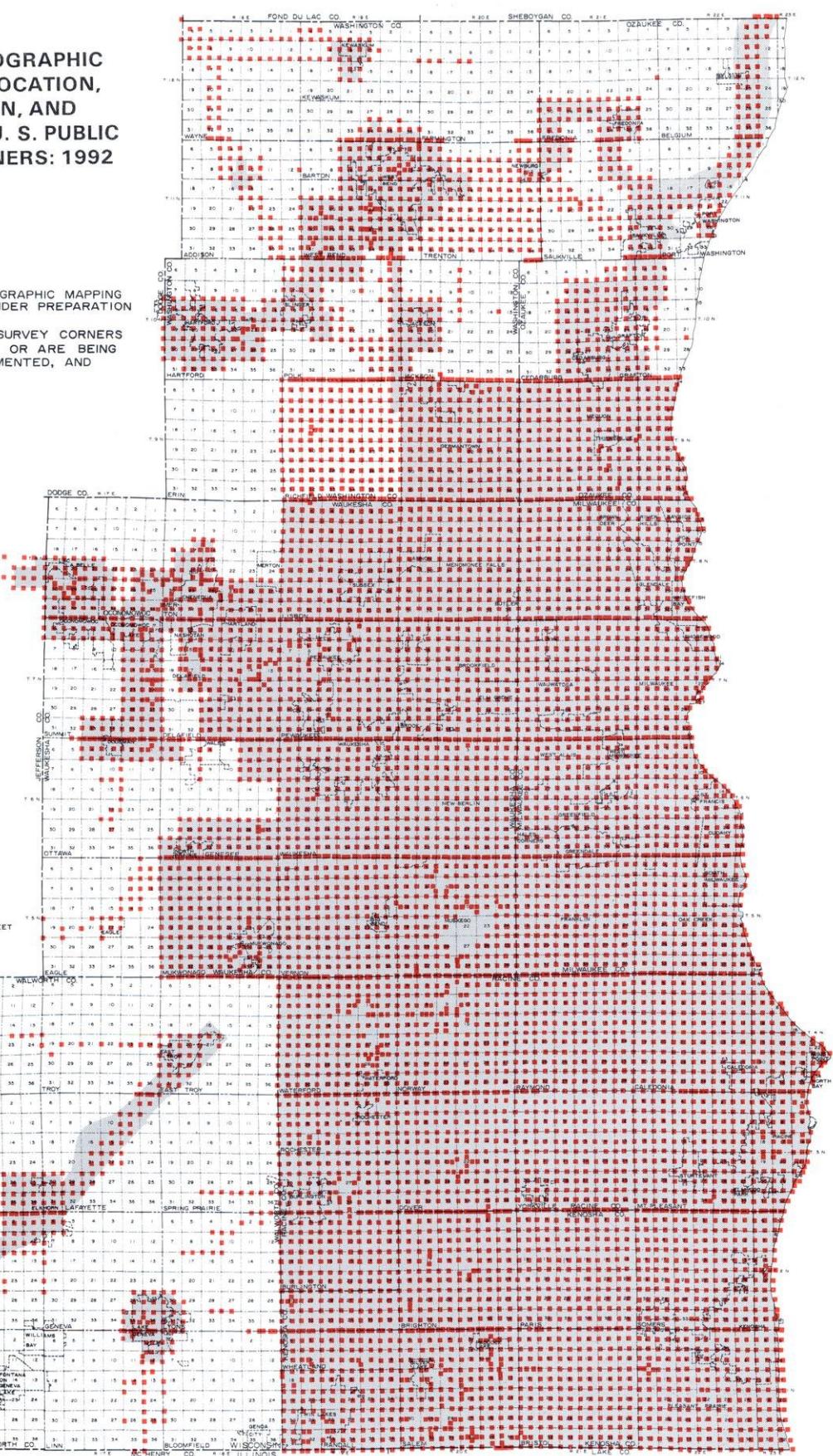
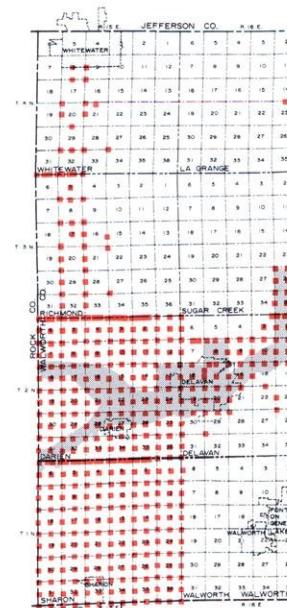
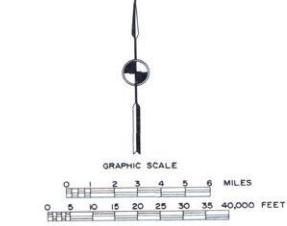
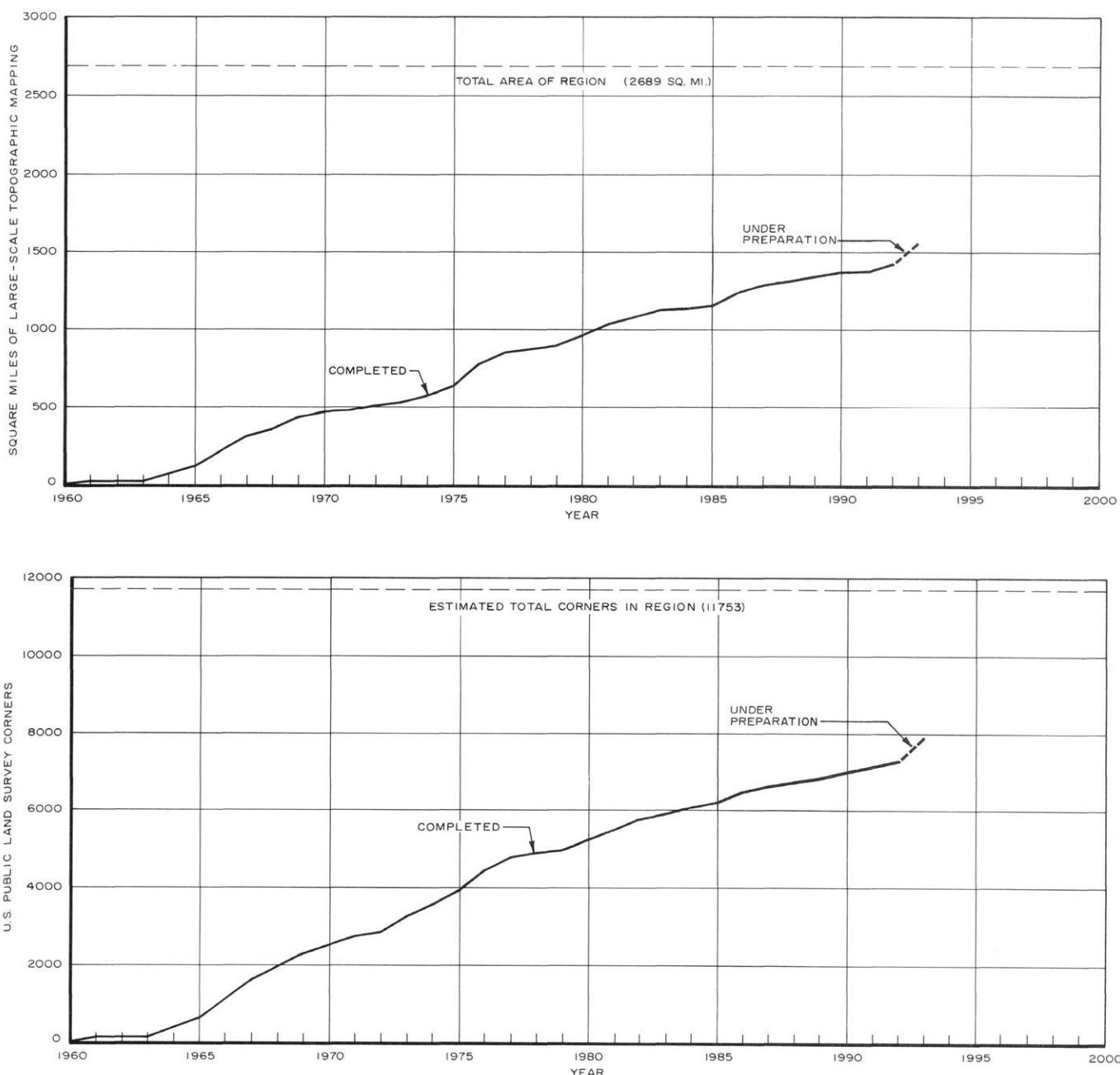


Figure 46

STATUS OF U. S. PUBLIC LAND SURVEY SECTION AND  
QUARTER-SECTION CORNER RELOCATION, MONUMENTATION, AND  
COORDINATION AND LARGE-SCALE TOPOGRAPHIC MAPPING IN THE REGION: 1992



Public Land Survey System in Milwaukee County. In 1992, 87 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 sub-standard monumentation. This brings to 301 the total number of such corners so perpetuated in Milwaukee County since 1984. Also in 1992, dossier sheets were prepared for the 87 remonumented corners as well as for 111 corners which were referenced by the Commission staff subse-

TYPICAL SEWRPC MONUMENT



Table 33

LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION,  
AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1992

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 <sup>a</sup>	Multi- Agency	Total	Percent
Kenosha . . . .	278	--	27.75	236.25	--	14.00	--	278.00	100.00
Milwaukee . . . .	242	--	11.00	102.00	49.50	77.00	2.50	242.00	100.00
Ozaukee . . . .	234	26.75	24.25	43.25	--	17.50	--	111.75	47.76
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	194.50	--	145.25	--	419.75	72.25
Region	2,689	59.75	190.00	890.11	49.50	367.00	2.50	1,558.86	57.97

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, 67.00 square miles have been updated by other agencies. Of the 890.11 square miles originally mapped under county programs, 2.00 square miles have been updated by other agencies. Of the 367.00 square miles originally mapped under local programs, 135.50 square miles have been updated by other agencies.

<sup>a</sup>Includes 20 cities, 18 villages, and 3 towns.

County	Estimated Total Corners <sup>a</sup>	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 <sup>b</sup>	Multi- Agency	Total	Percent
Kenosha . . . .	1,203	58	168	914	--	63	--	1,203	100.00
Milwaukee . . . .	1,065	72	184	132	159	492	26	1,065	100.00
Ozaukee . . . .	1,064	133	179	146	3	110	--	571	53.67
Racine . . . .	1,478	--	172	1,306	--	--	--	1,478	100.00
Walworth . . . .	2,503	282	--	269	--	121	11	683	27.29
Washington . . . .	1,905	139	149	267	--	428	6	989	51.92
Waukesha . . . .	2,535	76	463	834	--	596	--	1,969	77.67
Region	11,753	760	1,315	3,868	162	1,810	43	7,958 <sup>c</sup>	67.71

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

<sup>b</sup>Includes 20 cities, 18 villages, and 3 towns.

<sup>c</sup>Because of the need to set witness corners, these 7,958 U. S. Public Land Survey corners, including the centers of the sections, are marked by 7,470 monuments.

quent to perpetuation by the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, and city engineers. This brings to 512 the total number of such corners so referenced in Milwaukee County since 1984.

## 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 7,754 prints of aerial photographs of portions of the Region were reproduced, along with 73 soil map prints and 332 prints of maps in the Commission base map series. Aerial photographs were purchased primarily by local units of government, utilities, real estate agents, retail businesses, and service and manufacturing companies. Soil photo prints and base maps were purchased primarily by real estate agents, utilities, surveyors, engineers, and individual property owners.

## FINAL REPORT PRODUCTION

The Commission produces most of its documents using in-house staff and equipment. In June 1992, the Commission received a first place award for the production in 1991 of SEWRPC Community Assistance Planning Report No. 144, A Development Plan for the City of Cedarburg: 2010. The award was given in a competition entitled, "In-Print 1992" co-sponsored by the In-Plant Management Association and In-Plant Reproductions magazine. Judging criteria include print definition, ink coverage, register, design, typography, degree of difficulty, and overall excellence. The In-Plant Management Association is international in scope, serving managers of in-house printing and graphic communication activities. In-Plant Reproductions serves in-house printing plants in business, industry, and government.

During 1992, the Cartographic and Graphic Arts Division was responsible for the production of the following Commission publications:

## PROSPECTUSES

- Prospectus for a Study of Emergency Medical Services in Waukesha County, March 1992, 44 pages

## OVERALL WORK PROGRAMS

- Overall Work Program—1993 Southeastern Wisconsin Regional Planning Commission, December 1992, 258 pages

## ANNUAL REPORTS

- 1991 Annual Report, July 1992, 216 pages

## TECHNICAL REPORTS

- No. 33, Integration of the Computer-Assisted Management and Planning System with a Parcel-Based Land Information System: A Demonstration Project in Kenosha County, September 1992, 58 pages

## PLANNING REPORTS

- No. 40, A Regional Land Use Plan for Southeastern Wisconsin—2010, January 1992, 473 pages

## COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 123, 2nd Edition, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, July 1992, 32 pages
- No. 127, Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, November 1992, 38 pages
- No. 142, A Land Information System Plan for Ozaukee County, April 1992, 77 pages
- No. 167, A Land Use Plan for the City of West Bend: 2010, Washington County, Wisconsin, July 1992, 211 pages
- No. 184, A Land Information System Plan for Washington County, March 1992, 77 pages
- No. 188, Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin, January 1992, 43 pages
- No. 202, A Park and Open Space Plan for the City of Muskego, Waukesha County, Wisconsin, January 1992, 59 pages
- No. 203, Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin, December 1992, 35 pages
- No. 206, Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin, December 1992, 28 pages

## MEMORANDUM REPORTS

- No. 53, A Stormwater Drainage and Flood Control System Plan for Grantosa Creek, Cities of Milwaukee and Wauwatosa, Milwaukee County, Wisconsin, February 1992, 43 pages
- No. 58, A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System, January 1992, 178 pages

- No. 59, A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System, January 1992, 120 pages
- No. 60, A Paratransit Service Plan for Disabled Persons—City of Racine Transit System, January 1992, 118 pages
- No. 61, A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility, January 1992, 124 pages
- No. 62, A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System, January 1992, 158 pages
- No. 66, City of Cudahy Overall Economic Development Program Plan, Milwaukee County, Wisconsin, June 1992, 180 pages
- No. 69, Environmental Assessment of the Proposed Development of the Millard Sand and Gravel Pit, July 1992, 36 pages
- No. 71, A Specialized Transportation Service Plan for Elderly and Disabled Persons within Waukesha County, June 1992, 152 pages

## NEWSLETTERS

- Volume 32, Numbers 1-6, 216 pages

## OTHER

- Proceedings of the 16th Regional Planning Conference, May 5, 1992, 222 pages
- A Transportation Improvement Program for Southeastern Wisconsin: 1993-1998, December 1992, 337 pages
- Amendment to the Ozaukee County Jurisdictional Highway System Plan: 2010, February 1992, 93 pages
- Amendment to the Regional Water Quality Management Plan—2000, Town of Somers, June 1992, 3 pages
- Amendment to the Regional Water Quality Management Plan—2000, City of West Bend/Town of West Bend/Silver Lake Sanitary District, March 1992, 11 pages



# GEOGRAPHIC INFORMATION SYSTEMS DIVISION

## DIVISION FUNCTIONS

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

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

The following sections present a technical description of the Commission's computer mapping capabilities, which are evolving from year to year to take advantage of changes in the state of the art; a discussion of the status of the regional GIS; and a review of the status of the seven county-based land information systems in Southeastern Wisconsin.

## COMPUTER MAPPING CAPABILITIES

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. Superficially, 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.

CAD software functions quite well in situations where the only need is for the creation, maintenance, and replication of maps. 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 of simultaneously extracting information from more than one map, synthesizing and analyzing that information, and producing "new" information and "new" maps from the process. The ability to perform these types of operations is especially valuable to the Commission's area-wide planning efforts.

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 relatively recent past; prior to 1987, the Commission utilized CAD-type software for its computer-assisted mapping applications. In 1986, the Commission staff evaluated a number of GIS software products then commercially available to identify a software system most suitable for its use. 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 a 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-related analytical functions, including network- and land parcel-based functions.

The computer graphics hardware configuration upon which GENAMAP operates is based upon two networked Hewlett-Packard series 9000, Model 380, engineering work stations, each having a 19-inch, 16-color monitor and two 571-megabyte 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 19-inch, 256-color terminals, six of which are attached to Calcomp 44-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, color-line, and solid color-fill finished drawings at a resolution of 400 dots per inch.

## **DEVELOPMENT OF A REGIONAL GEOGRAPHIC INFORMATION SYSTEM**

Since the mid-1970s, the Commission has had under development a regional geographic information system with an emphasis on regional planning data needs. Efforts to date to build that system have been concentrated on the computerization of land use and related inventories that previously were quantified, manipulated, and stored in non-computerized fashion. Consequently, through 1992 the regional GIS consists largely of data on land use, soils, watersheds, floodlands, shorelands, vegetation, wildlife habitat, and scientific and natural areas. Not all these data sets have as yet been fully converted to digital format for computerized storage and retrieval. The Commission continues to work annually toward completing the computerized regional planning data base.

In addition to the foregoing land-based data sets, the GIS also includes at the present time limited cultural boundary features, including civil divisions, traffic analysis zones, and planning analysis areas used for regional planning purposes. Over time, the Commission intends to build its GIS by adding base mapping information as well as network and line data attendant to the Region's transportation systems. Because the regional GIS is continually evolving, potential users of the data residing in the system need to specifically inquire of the Commission as to data availability.

Using the Commission's regional GIS, the Commission conducted during 1992, at the request of the Wisconsin Department of Transportation, a demonstration effort in which the computer technology was used to identify for the Department potential wetland mitigation and enhancement sites. The identification of such sites is critical in carrying out an agreement between the Wisconsin Departments of Natural Resources and Transportation under which the latter Department will mitigate wetland losses caused by State-sponsored highway and airport construction projects.

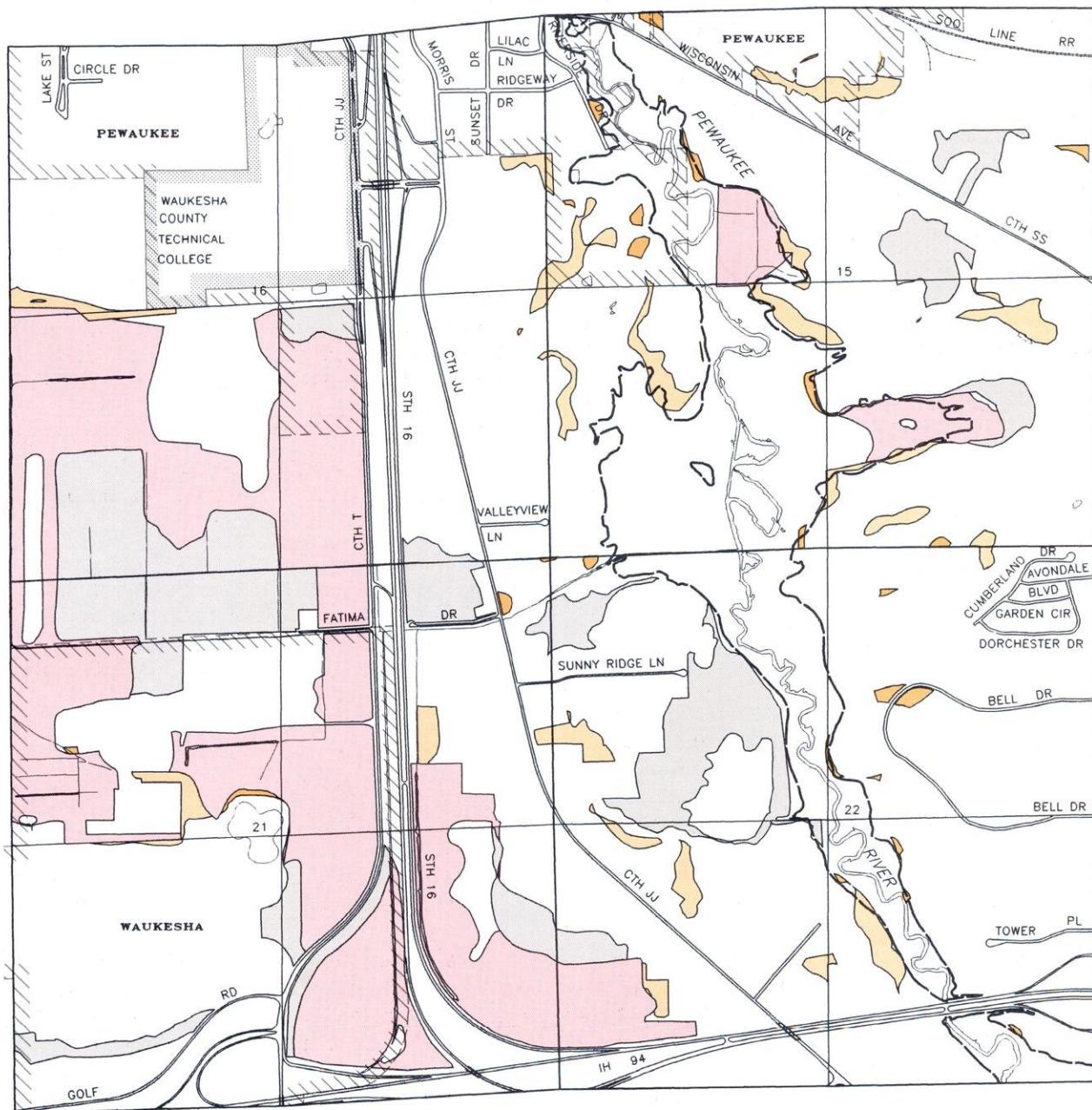
To demonstrate the capabilities of the GIS to assist in this matter, the Wisconsin Department of Transportation selected a four-square-mile study area in the Town of Pewaukee. Within that study area, the data base residing in the GIS was expanded to include all relevant data on soils, wetlands, woodlands, natural areas, critical species habitats, wildlife habitat areas, land use, and primary environmental corridors. Using a set of locational criteria developed jointly by the Wisconsin Department of Transportation, the Wisconsin Department of Natural Resources, and the Commission, the computerized GIS was then used to locate, quantify, and map specific areas that would be suitable for wetland mitigation and for wetland enhancement within the study area. The results of this demonstration work effort are summarized graphically on Map 35. With this information, the Department of Transportation was then in a position to identify specific areas for potential use as wetland mitigation and/or enhancement sites.

On the basis of the results of the demonstration study, the Department of Transportation indicated to the Commission its intent to use the GIS technique to identify potential wetland mitigation and enhancement sites throughout the Region. Indeed, at year's end, the Department had contracted with the Commission to identify such sites attendant to several highway improvement projects being programmed by the Department. This cooperative working relationship with the Department of Transportation will contribute to the further building of the regional digital GIS data base.

During 1992 the Commission received two awards attendant to the development and application of its GIS. Both awards were announced at an international computer software users' conference sponsored by Genasys II, Inc., the

Map 35

SUITABLE WETLAND MITIGATION AND ENHANCEMENT  
SITES IN THE PEWAUKEE-IH 94 STUDY AREA: 1992



WETLAND MITIGATION SITES

- LESS THAN 1.0 ACRE
- 1.0 - 5.0 ACRES
- GREATER THAN 5.0 ACRES

— FLOODPLAIN BOUNDARY

WAUKESHA COUNTY

T 07 N	16	21	21	15
3	4	3	4	
2	1	4	1	
R 19 E	21	2	1	22
3	4	3	4	

WETLAND ENHANCEMENT SITES

- LESS THAN 1.0 ACRE
- 1.0 - 5.0 ACRES ( NONE )
- GREATER THAN 5.0 ACRES

GRAPHIC SCALE

400 0 400 800 1200 FEET

firm that designed the computer software used by the Commission in its GIS work. The first award was for the use of computers to help design, compose, and produce a multi-color wall map displaying detailed land uses in the Region as of 1985. The second award was given to the Commission in recognition of innovative development of its GIS over a five-year period.

## DEVELOPMENT OF COUNTY-BASED LAND INFORMATION SYSTEMS

Since its inception, the Commission has recommended that county and local units of government in the Region prepare large-scale topographic and cadastral, or property-boundary, base maps founded upon a Commission-recommended monumented control survey network that precisely and accurately relates the U. S. Public Land Survey System to the State Plane Coordinate System. With the advent of computer-assisted mapping and geographic information systems, counties and local units of government in the Region are beginning to convert conventionally mapped data to digital, that is, computer-readable, form and are also developing new mapping directly in digital form. Such mapping forms the foundation for modernized systems of land records management.

Efforts to develop county-based land information systems were significantly enhanced by the initiation in 1990 of the Wisconsin Land Information Program. This program, overseen by the Wisconsin Land Information Board, provides a focal point for land records modernization issues and efforts within Wisconsin. Under the program, it is envisioned that counties throughout the State will prepare and implement plans to modernize land records systems. The program includes, through June 30, 1996, a supplemental Register of Deeds filing and recording fee of \$6.00. Counties retain \$4.00, to be used exclusively for implementing county land records modernization plans. The remaining \$2.00 is forwarded to the Wisconsin Land Information Board and is used by that Board primarily to award grants to county and local governments for projects that would implement county plans.

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

## Kenosha County

The Kenosha County plan is documented in SEWRPC Community Assistance Planning Report No. 185, A Plan for the Creation of an Automated Mapping and Parcel-based Land Information System for Kenosha County, August 1990. The plan was adopted by the County Board on September 25, 1990, and approved by the Wisconsin Land Information Board on January 7, 1991. The plan formalized a work effort that had begun in the mid-1980s following a land information system demonstration project undertaken jointly by the Commission and Kenosha County using the Town of Randall as a demonstration area. Based on that pilot project, the Kenosha County plan included the following elements which, when completed, would provide an initial, usable land information system for the County:

- Land and control surveys as recommended by the Commission to locate and remonument all 1,203 U. S. Public Land Survey corners in the County and establish State Plane Coordinates and elevations for those corners. This work was completed prior to the preparation of the County plan in accordance with long-standing Commission recommendations.
- The completion of topographic base maps at a scale of one inch equals 200 feet with two-foot contour intervals. This mapping was also completed by Kenosha County to Commission specifications in conventional format prior to the development of digital mapping capabilities. Consequently, the demonstration study and the plan recommended that the conventional maps be converted to digital form by digitizing and/or scanning techniques.
- The completion of cadastral overlay maps in digital form at a scale of one inch equals 200 feet providing detailed information on real property boundaries and parcel identification numbers.
- The completion of an initial series of planning-oriented parcel-related digital files, including parcel ownership, assessed valuation, soil, land use, wetland, floodplain, shoreland, and zoning data.

The following major steps were taken during 1992 toward completion of the Kenosha County land information system:

- The Commission and Kenosha County executed an agreement under which the Commission would prepare for the County the automated land information system for an additional approximately five-square-mile area lying in portions of the City of Kenosha and the Village of Pleasant Prairie. This area contains about 6,250 parcels. Funding for this project was provided by a grant from the Wisconsin Land Information Board and by County-retained document-filing fees.
- The Commission and Kenosha County executed a second agreement under which the Commission would prepare for the County the automated land information system for an additional approximately six-square-mile area in the City of Kenosha. This area contains about 11,430 parcels. Funding for this project was provided by a grant from the Wisconsin Land Information Board, by County-retained document-filing fees, and by a contribution from the Kenosha Water Utility.
- With the assistance of the Commission, Kenosha County submitted to the Wisconsin Land Information Board a grant application in the December 1992 filing period. The project to be supported by the State grant would complete the initially envisioned land information system throughout the remainder of Kenosha County. At year's end, Kenosha County was awaiting action by the State Board on that application.

Map 36 identifies the status of completion of the initial land information system in Kenosha County as of December 31, 1992. The automated base map, cadastral overlays, and planning and zoning overlays have been completed and are available for use over approximately 112 square miles, or 40 percent of the area of the County, representing about 17,300 parcels, or 30 percent of the number of parcels in the County. In addition, the automated system was under preparation at year's end for an additional 59 square miles, or 21 percent of the County, representing an additional approximately 23,400 parcels, or 41 percent of the parcels in the County.

In a related effort, the Commission during 1992 completed a special study of the potential for integrating the Kenosha County land information system automated planning data base with the Computer-Assisted Management and Planning System (CAMPSS) data base developed and used by the U. S. Soil Conservation Service. The findings of this study are set forth in SEWRPC Technical Report No. 33, Integration of the Computer-Assisted Management and Planning System with a Parcel-Based Land Information System: A Demonstration Project in Kenosha County, September 1992. The study found that the integration of the Federal CAMPSS and the Kenosha County land information system data bases was feasible and practical; would allow some planning and resource management tasks to be accomplished more effectively and economically; and would permit planners and other users to perform some tasks that currently cannot be readily performed. The integrated system would comprise the foundation for the eventual development of a true rural resource management data system. The study concluded by recommending that Kenosha County pursue integration of the two data systems, beginning with a pilot study.

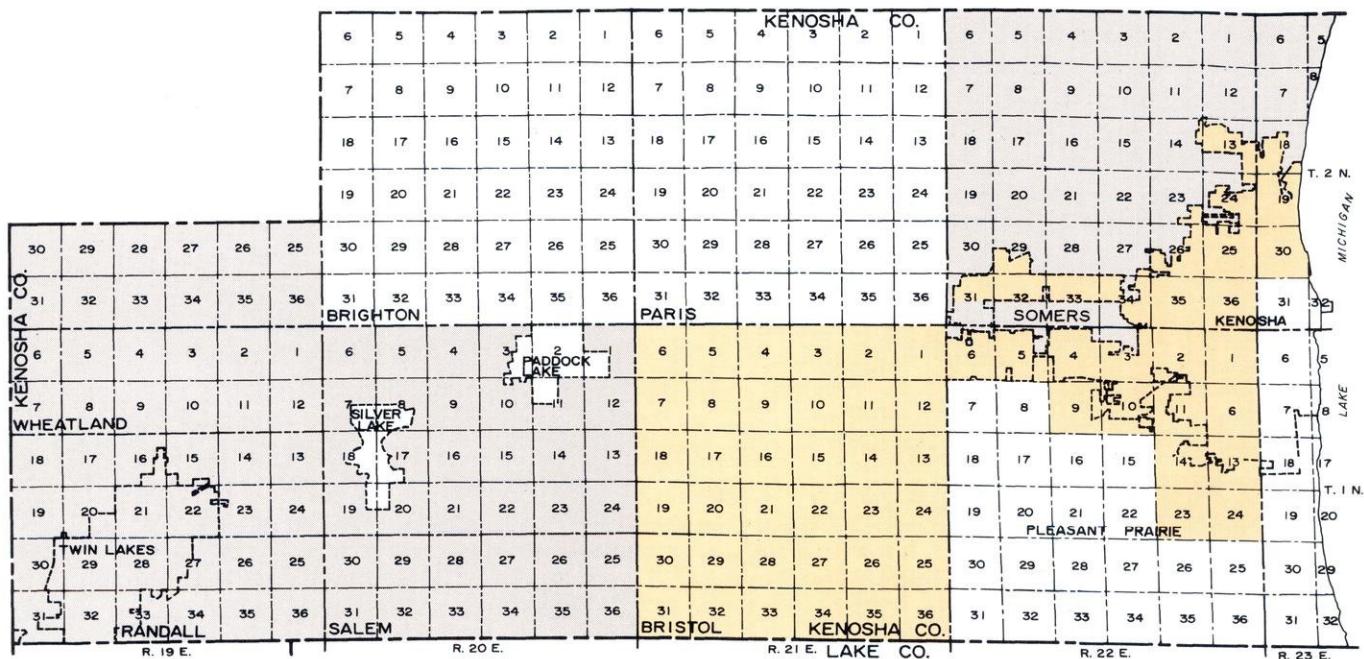
#### **Milwaukee County**

The Milwaukee County plan is documented in SEWRPC Community Assistance Planning Report No. 177, Feasibility Study for a Milwaukee County Automated Mapping and Land Information System, October 1989. The plan was adopted by the County Board on February 15, 1990, and approved by the Wisconsin Land Information Board on January 7, 1991. The plan proposed the creation of an automated digital mapping base for the entire County based upon Commission-recommended control survey and mapping specifications. The proposed mapping would build upon historic base mapping efforts carried out by Milwaukee County, the Milwaukee Metropolitan Sewerage District, and many of the cities and villages in the County. The Milwaukee County plan also proposed the creation of a public-private partnership jointly to develop, to own, and to manage the automated base map.

As reported in prior annual reports, a number of major steps have been taken to implement the Milwaukee County land information system plan. These steps include the execution of a cooperative agreement between Milwaukee County, Wisconsin Bell, Wisconsin Electric

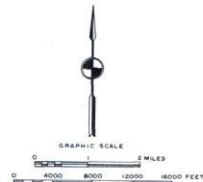
Map 36

STATUS OF COMPLETION OF INITIAL LAND INFORMATION  
SYSTEM IN KENOSHA COUNTY: DECEMBER 31, 1992



LEGEND

- AREA WHERE AUTOMATED BASE MAP, CADASTRAL OVERLAY, AND PLANNING AND ZONING OVERLAYS WERE COMPLETED AND AVAILABLE FOR USE AT YEAR'S END
- AREA WHERE AUTOMATED BASE MAP, CADASTRAL OVERLAY, AND PLANNING AND ZONING OVERLAYS WERE UNDER PREPARATION AT YEAR'S END



Power Company, and Wisconsin Gas Company jointly to develop and maintain the recommended land information system. The development of that system, known by the acronym MCAMLIS, is being overseen by a Steering Committee chaired by the Milwaukee County Surveyor, who by State law is the Executive Director of the Regional Planning Commission. The Steering Committee in turn has contracted with the Commission to provide for the day-to-day technical management of the program.

The MCAMLIS work program, as refined in an implementation study completed in 1991, consists of the following basic tasks:

- The completion of the location and remonumentation of all U. S. Public Land Survey corners in the County, including the centers of the sections.

- The completion of high-order horizontal and vertical control surveys to establish the State Plane Coordinates and elevations of the U. S. Public Land Survey corners.

- The completion of large-scale topographic base maps in digital form at a scale of one inch equals 100 feet with two-foot contour intervals.

- The completion of cadastral overlay maps in digital form at a scale of one inch equals 100 feet providing detailed information on the location and configuration of all real property boundaries, including the property boundaries of all streets and public ways and other public land holdings; and assigning a parcel identification number (tax key

number) to each ownership parcel to enable the linking of geographic with nongeographic data files.

- The creation of a data set containing the street addresses of all structures identified in the mapping program.
- The development of a neutral spatial data exchange mechanism so that computerized data can be readily exchanged between the several proprietary hardware and software systems of the MCAMLIS partners.
- A data integration work effort that would eliminate the redundancies that exist in the conventional maps prepared by U. S. Public Land Survey one-quarter section, for example, common quarter-section lines and text associated with those lines, as well as the elimination of data "overlaps" along conventionally mapped borders. In effect, this work effort would create in digital form a "seamless" map of the County.

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

- The Commission and the MCAMLIS Steering Committee executed an agreement under which the Commission would secure large-scale digital topographic base maps for an approximately 28.5-square-mile area of the County. Funding for this project was provided by a grant from the Wisconsin Land Information Board, by County retained filing fees, and by contributions from the utilities participating in the MCAMLIS effort.
- The MCAMLIS Steering Committee entered into an agreement with the U. S. Geological Survey (USGS) as the first step toward developing and implementing the required vendor-neutral digital spatial data exchange mechanism. The USGS is in the process of resolving similar data exchange problems being encountered by the Federal government. Working with the MCAMLIS Steering Committee, the USGS has agreed to provide technical support to demonstrate the feasibil-

ity of implementing a new Federal data transfer standard in a "real world" environment, namely, that represented by the integrated geographic data base being developed under the MCAMLIS program. At year's end, the Steering Committee was seeking similar cooperative agreements with the private vendors which provide computer hardware and software to the participants concerned.

- With the assistance of the Commission, Milwaukee County submitted a grant application to the Wisconsin Land Information Board in the December 1992 filing period. The project to be supported by the State grant would complete new large-scale digital topographic maps over an approximately 76-square-mile area of the County. At year's end, Milwaukee County was awaiting action by the State Board on that application.

Under Steering Committee guidance, other projects that began in 1991 continued throughout 1992. These consisted of several interrelated efforts to prepare cadastral overlay mapping. In addition to a project in which the Commission is preparing for the Steering Committee new cadastral overlay maps, work was under way by the City of West Allis to prepare cadastral overlay maps for that City and by the City of Milwaukee to adjust its previously prepared digital cadastral overlay mapping to the horizontal control data secured by the Steering Committee in 1991.

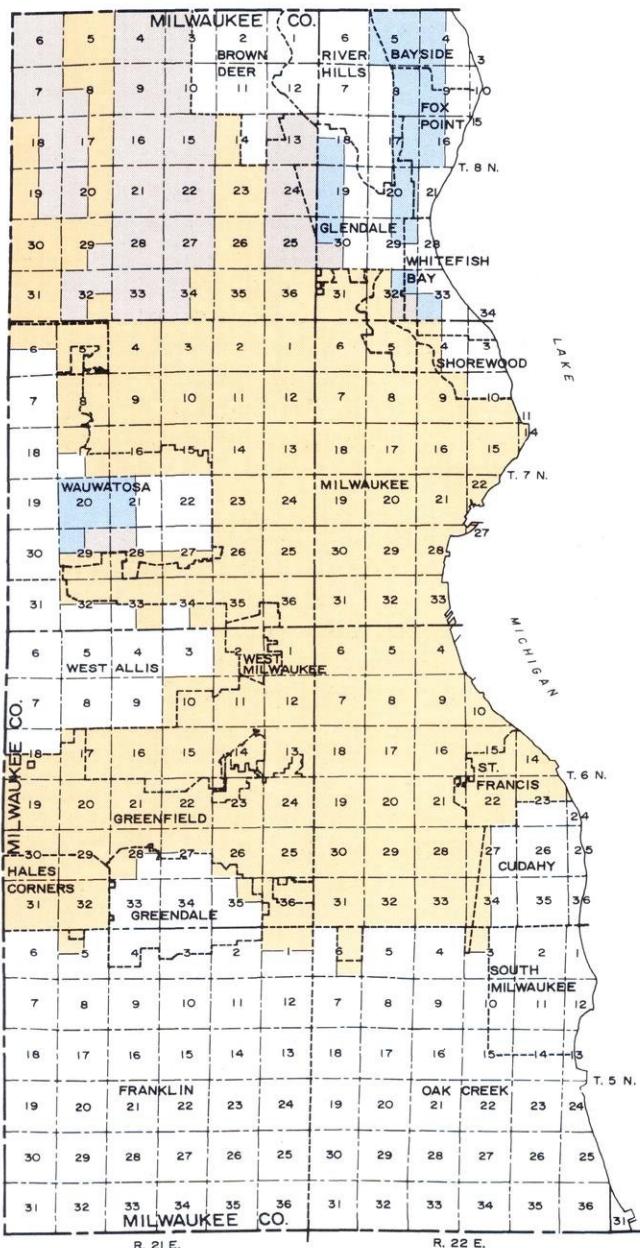
Map 37 identifies the status of completion of digital topographic base mapping and cadastral overlay mapping in Milwaukee County as of December 31, 1992. The automated end product, digital topographic base maps and cadastral overlays, has been completed and is available for use over approximately 20 square miles, or 8 percent of the area of the County. In addition, digital topographic base maps are completed and available for use over an additional seven square miles, or 3 percent of the County, while digital cadastral overlays are completed and available for use over an additional 106 square miles, or 44 percent of the area of the County.

#### Ozaukee County

The Ozaukee County plan was completed in 1992. The plan is documented in SEWRPC Community Assistance Planning Report

Map 37

STATUS OF COMPLETION OF DIGITAL  
TOPOGRAPHIC BASE MAPPING AND  
CADASTRAL OVERLAY MAPPING IN  
MILWAUKEE COUNTY: DECEMBER 31, 1992



LEGEND

- AREA WHERE DIGITAL TOPOGRAPHIC BASE MAP AND CADASTRAL OVERLAY WERE COMPLETED AND AVAILABLE FOR USE AT YEAR'S END
- AREA WHERE DIGITAL TOPOGRAPHIC BASE MAP WAS COMPLETED AND AVAILABLE FOR USE AT YEAR'S END
- AREA WHERE DIGITAL CADASTRAL OVERLAY WAS COMPLETED AND AVAILABLE FOR USE AT YEAR'S END



No. 142, A Land Information System Plan for Ozaukee County, April 1992. The plan was adopted by the County Board on May 6, 1992, and approved by the Wisconsin Land Information Board on June 8, 1992. The plan builds upon prior limited topographic base mapping efforts completed to Commission-recommended specifications. More specifically, the plan includes the following elements:

- Land and control surveys as recommended by the Commission to locate and remonument all 1,064 U. S. Public Land Survey section and quarter-section corners in the County and establish State Plane Coordinates and elevations for those corners. When the plan was adopted, the Ozaukee County Surveyor and others had completed the relocation and remonumentation of 751 such corners, while State Plane Coordinates had been obtained for 494 corners and elevations for 438 corners.
- The completion of digital topographic base maps at a scale of one inch equals 200 feet with two-foot contour intervals.
- The completion of cadastral overlay maps in digital form at a scale of one inch equals 200 feet providing detailed information on real property boundaries and parcel identification numbers.

The Commission worked with Ozaukee County in developing an initial project to begin implementation of the County land information system plan in 1993. That project would complete digital topographic mapping over an approximately 46-square-mile area comprised of the City of Mequon and the Villages of Bayside and Thiensville. With the assistance of the Commission, Ozaukee County submitted to the Wisconsin Land Information Board a grant application for this project in the December 1992 filing period. At year's end, Ozaukee County was awaiting action by the State Board on that application.

Racine County

The Racine County plan is documented in SEWRPC Community Assistance Planning Report No. 194, A Land Information System Plan for Racine County, August 1991. The plan was adopted by the County Board on September 9, 1991, and approved by the Wisconsin

Land Information Board on October 14, 1991. The plan built upon control survey and conventional base mapping work completed by Racine County based upon Commission-recommended mapping specifications. Indeed, Racine County was the first county within the Region to complete the Commission-recommended control survey and topographic mapping program, in 1976. The Racine County plan included the following elements:

- Land and control surveys as recommended by the Commission to locate and remonument all 1,478 U. S. Public Land Survey corners in the County and establish State Plane Coordinates and elevations for those corners. This work was completed prior to the preparation of the County plan.
- The completion of topographic base maps at a scale of one inch equals 200 feet with two-foot contour intervals. This work was also completed prior to the preparation of the County plan. Consequently, the plan recommended that the conventional maps be converted to digital form by digitizing and/or scanning techniques.
- The completion of cadastral overlay maps at a scale of one inch equals 200 feet providing detailed information on real property boundaries and parcel identification numbers. At the time of the preparation of the County plan, Racine County had completed cadastral mapping in conventional form for the entire County except the City of Racine. Consequently, the plan recommended that work efforts be undertaken to prepare in digital form cadastral maps for the City of Racine and that the conventional cadastral maps completed for areas outside the City of Racine be converted to digital form.
- The completion of an initial series of planning-oriented parcel-related digital files, including parcel ownership, assessed valuation, soil, land use, wetland, floodplain, shoreland, and zoning data.
- The establishment of a computerized image indexing, storage, retrieval, transmittal, and copying system in the Register of Deeds office. This system would use optical-disk technology, in which a scanning device electronically captures the image on each

document page and stores that image on an optical platter similar to a compact disc. With proper indexing and processing, it is possible to view documents on computer terminals and also to obtain hard copies of the viewed image.

The following steps were taken during 1992 toward completion of the Racine County land information system:

- Racine County executed an agreement with the firm of Greenhorn and O'Mara, Inc., to prepare digital cadastral maps for the City of Racine. Funding for this project was provided by a grant from the Wisconsin Land Information Board and by County-retained document-filing fees.
- Racine County acquired and installed a document image storage and retrieval system in the Register of Deeds office. That system, beginning on a "day forward" basis, became operational in May 1992.
- Racine County submitted to the Wisconsin Land Information Board a grant application in the December 1992 filing period. Work to be supported by the State grant would include the conversion to digital form of the existing hard-copy cadastral maps of areas outside the City of Racine and the conversion of stored documents in the Register of Deeds office for use in the new imaging system. At year's end, Racine County was awaiting action by the State Board on that application.

### Walworth County

The Walworth County plan is documented in SEWRPC Community Assistance Planning Report No. 139, A Land Information System Plan for Walworth County, September 1991. The plan was adopted by the County Board on October 15, 1991, and approved by the Wisconsin Land Information Board on December 9, 1991. The plan builds upon prior limited topographic base mapping efforts completed to Commission-recommended specifications. More specifically, the plan includes the following elements:

- Land and control surveys as recommended by the Commission to locate and remonument all 2,503 U. S. Public Land Survey section and quarter-section corners in the

County and establish State Plane Coordinates and elevations for those corners. When the plan was adopted, the Walworth County Surveyor and others had completed the relocation and remonumentation of 1,778 such corners, while State Plane Coordinates had been obtained for 466 corners and elevations for 266 corners. The plan recommended that Walworth County focus its available resources in completing the land and control surveys throughout the County.

- The completion of digital topographic base maps and digital cadastral overlay maps at a scale of one inch equals 200 feet. The plan envisioned that such efforts would be initiated primarily by the local units of government in the County. The County would provide support for such efforts, particularly in seeking Wisconsin Land Information Board grants.
- The creation of an automated tract index pursuant to Section 59.55 of the Wisconsin Statutes.

The following steps were taken in 1992 toward implementation of the Walworth County plan:

- The Commission and Walworth County executed an agreement under which the Walworth County Surveyor and the Commission would work together to complete the land and control surveys required in a 31-square-mile area of the Town of Sharon. Funding for this project was provided by a grant from the Wisconsin Land Information Board and by Walworth County through tax-levy monies and retained document-filing fees.
- The Commission and Walworth County executed a second agreement under which the Walworth County Surveyor and the Commission would work together to complete the land and control surveys required in a 41-square-mile area in the Towns of Sharon and Darien and the Village of Darien. Funding for this project was provided by Walworth County through tax-levy monies and retained document-filing fees.
- With the assistance of the Commission, Walworth County submitted to the Wisconsin Land Information Board a grant application in the December 1992 filing period. The project to be supported by the State

grant would extend the land and control survey work to an additional 43-square-mile area in the Town of Delavan and City of Delavan. At year's end, Walworth County was awaiting action by the State Board on that application.

## Washington County

The Washington County plan was completed in 1992. The plan is documented in SEWRPC Community Assistance Planning Report No. 184, A Land Information System Plan for Washington County, March 1992. The plan was adopted by the County Board on April 21, 1992, and approved by the Wisconsin Land Information Board on June 8, 1992. The plan builds upon prior topographic base mapping efforts completed to Commission-recommended specifications. More specifically, the plan includes the following elements:

- Land and control surveys as recommended by the Commission to locate and remonument all 1,905 U. S. Public Land Survey section and quarter-section corners in the County and establish State Plane Coordinates and elevations for those corners. When the plan was adopted, the Washington County Surveyor and others had completed the relocation and remonumentation of 1,163 such corners, while State Plane Coordinates had been obtained for 786 corners and elevations for 593 corners.
- The completion of digital topographic base maps and digital cadastral overlay maps at a scale of one inch equals 200 feet. The plan envisioned that such efforts would be initiated primarily by the local units of government in the County. The County would provide support for such efforts in seeking Wisconsin Land Information Board grants and, potentially, in providing County monies to accelerate the mapping efforts.

The following steps were taken in 1992 toward implementation of the Washington County plan:

- The Washington County Surveyor completed the land survey work required in a 14-square-mile area in the Town of Richfield. Funding for this project was provided by Washington County using tax-levy monies. The Commission provided inspection ser-

vices to Washington County to ensure that the specifications set forth in the County plan were met.

- The Commission and Washington County executed an agreement under which the Commission completed the control surveys required in the southern portion of the Town of Richfield, an area approximating 18 square miles. Funding for this project was provided by Washington County through retained document-filing fees.
- With the assistance of the Commission, Washington County submitted to the Wisconsin Land Information Board a grant application in the December 1992 filing period. The project to be supported by the State grant would conduct land and control surveys over an additional 18-square-mile area in the Town of Trenton. At year's end, Washington County was awaiting action by the State Board on that application.

### **Waukesha County**

The Waukesha County plan is documented in SEWRPC Community Assistance Planning Report No. 193, A Land Information System Plan for Waukesha County, April 1991. The plan was adopted by the County Board on June 18, 1991, and approved by the Wisconsin Land Information Board on July 8, 1991. The plan builds upon prior topographic and cadastral base mapping efforts completed to Commission-recommended specifications. More specifically, the plan includes the following elements:

- Land and control surveys as recommended by the Commission to locate and remonument all 2,535 U. S. Public Land Survey section and quarter-section corners in the County and establish State Plane Coordinates and elevations for those corners. When the plan was adopted, the Waukesha County Surveyor and others had completed the relocation and remonumentation of, and obtained State Plane Coordinates for, 1,737 such corners, while elevations had been obtained for 1,663 corners.
- The completion of topographic base maps at a scale of one inch equals 200 feet with two-foot contour intervals, or at a larger scale of one inch equals 100 feet should local units of government in the County share in the additional cost of the larger-scale mapping.

At the time of the completion of the County plan, large-scale topographic mapping had been completed for 354 square miles, or about 61 percent of the area of the County. The plan called for any such already-completed mapping in hard-copy form to be converted over time to digital form.

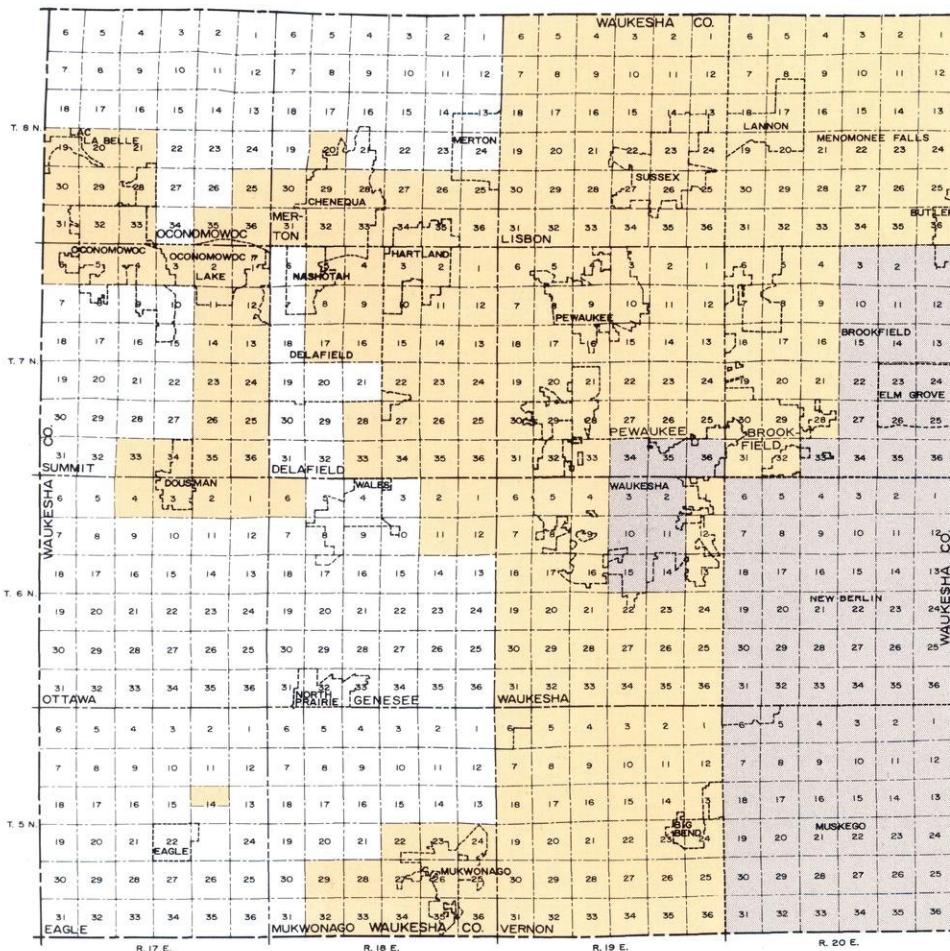
- The completion of cadastral overlay maps in digital form at scales of either one inch equals 200 feet or one inch equals 100 feet, depending upon the underlying topographic mapping scale. At the time of the preparation of the County plan, about 136 square miles of cadastral maps had been completed in conventional form. The plan recommends the conversion of that mapping to digital form over time.

The following steps were taken during 1992 toward implementation of the Waukesha County land information system plan:

- The Commission and Waukesha County executed an agreement under which the Commission completed the land and control surveying and digital topographic mapping over an approximately 23-square-mile area comprising portions of the City of Delafield; the Villages of Chenequa, Hartland, and Merton; and the Towns of Delafield and Merton. Funding for this project was provided by Waukesha County using tax-levy monies.
- The Commission and Waukesha County executed an agreement under which the Commission is to complete three tasks: 1) the preparation of new cadastral maps over an approximately 17-square-mile area containing about 8,600 parcels, 2) the conversion of existing hard-copy cadastral maps to digital form over an approximately 55-square-mile area containing about 16,900 parcels, and 3) the conversion to digital form of the planimetric features of conventionally prepared topographic maps over an approximately 55-square-mile area. Funding for this project was provided by a grant from the Wisconsin Land Information Board and by County-retained document-filing fees.
- The City of Waukesha executed an agreement with the firm of Ruekert & Mielke to prepare digital cadastral maps to County plan standards for an approximately nine-

### Map 38

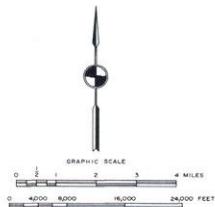
STATUS OF COMPLETION OF DIGITAL TOPOGRAPHIC BASE MAPPING AND  
CADASTRAL OVERLAY MAPPING IN WAUKESHA COUNTY: DECEMBER 31, 1992



## LEGEND

AREA WHERE ALL WORK NECESSARY  
TO COMPLETE AUTOMATED MAPPING BASE  
IS CURRENTLY UNDER CONTRACT

AREA WHERE WORK NEEDED TO COMPLETE AUTOMATED MAPPING BASE HAS STARTED BUT WHERE AT LEAST ONE WORK ELEMENT REMAINS TO BE PLACED UNDER CONTRACT



square-mile area containing about 8,400 parcels. Funding for this project was provided by a grant from the Wisconsin Land Information Board and by the City of Waukesha through the property-tax levy.

- The Commission and the City of New Berlin continued work under an agreement under which the Commission would convert existing hard-copy cadastral overlay maps to digital form over an approximately 37-square-mile area containing about 12,200 parcels. This project was supported by the City of New Berlin from the property-tax levy.
- With the assistance of the Commission, Waukesha County submitted to the Wisconsin Land Information Board a grant application in the December 1992 filing period. The project to be supported by the State grant

would involve the preparation of additional digital cadastral maps, the conversion to digital form of additional conventionally prepared cadastral maps, and the conversion to digital form of additional conventionally prepared topographic maps. At year's end, Waukesha County was awaiting action by the State Board on that application.

Map 38 identifies the status of the preparation of an automated base map for Waukesha County as of December 31, 1992. Work is currently under way to complete the automated base map, including cadastral overlays, for an area of about 100 square miles, or 17 percent of the County. For an additional 280 square miles of the County, work toward partial completion of the automated mapping base has begun, but at least one work element has yet to be placed under contract. With respect to the remaining 201 square miles of the County, no automated base mapping work had yet begun.

# 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, book-keeping, 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's 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 1992 by maintaining a trust account with a minority-controlled bank within the Commission's service area. In addition, the Commission has established a business enterprise program, including the completion, maintenance, and expansion of a list of disadvantaged/women-owned businesses which are contacted as potential Commission vendors.

The Division is also responsible for preparing the Commission's 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 1992 the Commission continued to make progress in carrying out a comprehensive equal employment opportunity program in the areas of recruitment, employment, promotion, transferring, and training. Action was taken to better monitor applicant flow in order to gauge progress in attracting minority applicants as required in the affirmative action program. Efforts were continued toward attracting qualified minority and women applicants during the year.

### GRANT-IN-AID PROCUREMENT

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

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

The Commission's annual overall work program, a document, as 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 1992 the Division distributed a total of 21,031 copies of Commission publications. These included: 169 prospectuses, 753 planning reports, 396 amendments to planning reports, 441 technical reports, 2,605 community assistance planning reports, 884 memorandum reports,

27 technical records, 635 annual reports, 11,747 newsletters, 11 conference proceedings, 2,995 community economic development profiles, 73 lake use reports, 5 planning guides, 246 transportation improvement programs, 32 overall work programs, and 12 copies of the special publication entitled Twenty-Five Years of Regional Planning. In addition, the Division distributed 7,754 aerial photographs, 73 soils maps, 351 topographic maps, 655 control survey station dossiers and control survey summary diagrams, and 332 maps from the Commission's base map series.

**APPENDICES**



**Appendix A**  
**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**  
**COMMISSIONERS AND COMMITTEES: 1992**

COMMISSIONERS	TERM EXPIRES	COMMITTEES
<b>KENOSHA COUNTY</b>		<b>EXECUTIVE COMMITTEE</b>
***Leon T. Dreger . . . . .	1994	Frank F. Uttech, Chairman
*Francis J. Pitts . . . . .	1992	Allen L. Morrison, Vice-Chairman
**Sheila M. Siegler . . . . .	1998	Anthony F. Balestrieri
		David B. Falstad
		Robert F. Hamilton
		Jean M. Jacobson
		Thomas W. Meaux
		Francis J. Pitts
		William D. Rogan
		Elroy J. Schreiner
		Sheila M. Siegler
<b>MILWAUKEE COUNTY</b>		<b>ADMINISTRATIVE COMMITTEE</b>
***William Ryan Drew . . . . .	1996	Francis J. Pitts, Chairman
*Patrick Marchese . . . . .	1996	Jean M. Jacobson, Vice-Chairman
**Thomas W. Meaux . . . . .	1992	Anthony F. Balestrieri
		Thomas H. Buestrin
		Richard A. Congdon
		David B. Falstad
		Allen L. Morrison
		William D. Rogan
		Sheila M. Siegler
		Frank F. Uttech
<b>OZAUKEE COUNTY</b>		<b>INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE</b>
*Leroy A. Bley . . . . .	1996	Jean M. Jacobson, Chairman
**Thomas H. Buestrin . . . . .	1996	Allen L. Morrison, Vice-Chairman
***Elroy J. Schreiner . . . . .	1994	Leroy A. Bley
		Robert F. Hamilton
		Thomas W. Meaux
		Francis J. Pitts
		William D. Rogan
		Patricia A. Strachota
		Frank F. Uttech
<b>RACINE COUNTY</b>		<b>PLANNING AND RESEARCH COMMITTEE</b>
***David B. Falstad . . . . .	1998	Sheila M. Siegler, Chairman
**Martin J. Itzin . . . . .	1994	Daniel S. Schmidt, Vice-Chairman
*Jean M. Jacobson, Secretary . . . . .	1996	John D. Ames
		Anthony F. Balestrieri
		Leroy A. Bley
		Leon T. Dreger
		William Ryan Drew
		Martin J. Itzin
		Jean M. Jacobson
		Patrick Marchese
		Allen L. Morrison
		William D. Rogan
		Elroy J. Schreiner
		Patricia A. Strachota
		Frank F. Uttech
<b>WALWORTH COUNTY</b>		
**John D. Ames . . . . .	1996	
***Anthony F. Balestrieri . . . . .	1994	
*Allen L. Morrison, Vice-Chairman . . . . .	1994	
<b>WASHINGTON COUNTY</b>		
**Daniel S. Schmidt . . . . .	1998	
*Patricia A. Strachota . . . . .	1996	
***Frank F. Uttech, Chairman . . . . .	1994	
<b>WAUKESHA COUNTY</b>		
***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.



## Appendix B

### COMMISSION ADVISORY COMMITTEES: 1992

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

William D. Rogan	Commissioner,
Chairman	Southeastern Wisconsin
	Regional Planning Commission
Kurt W. Bauer	Executive Director,
Secretary	Southeastern Wisconsin
	Regional Planning Commission
C. Barry Bateman	Airport Director, General
	Mitchell International Airport
Richard A. Bolte	Director of Transportation, Waukesha County
Edwin H. Daniels	Citizen Member, Darien
Dennis H. Eiler	Airport Director, Kenosha Regional Airport
George Gundersen	Director, Bureau of System 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
Patrick Marchese	Director of Public Works and Development, Milwaukee County
Paul E. Milewski	Director of Community Development, City of Oak Creek
Glen A. Orcutt	Airport Planner, U. S. Department of Transportation, Federal Aviation Administration
Sylvester N. Weyker	Highway Commissioner, Ozaukee County

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR KENOSHA COUNTY

Frederick J. Patrie	Highway Commissioner, Kenosha County
Chairman	
Kurt W. Bauer	Executive Director,
Secretary	Southeastern Wisconsin
	Regional Planning Commission
John Antaramian	Mayor, City of Kenosha
Shirley Boening	Chairman, Town of Salem
Ralph L. Drinkwine, Jr.	President, Village of Silver Lake
Raymond A. Forgianni, Jr.	Director of City Development, 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
Donald K. Holland	Administrator, City of Kenosha
David D. Holtze	Chairman, Town of Somers
Thomas W. Kerkman	Chairman, Town of Brighton
Norman H. Krueger	President, Village of Paddock Lake
George E. Melcher	Director of Planning and Development, Kenosha County
Larry Oberhofer	President, Village of Twin Lakes
Robert R. Packee	District Director, Wisconsin Department of Transportation
Robert W. Pitts	Chairman, Kenosha County
Michael R. Pollockoff	Highway and Parks Committee
Donald Smitz	Administrator, Village of Pleasant Prairie
Audrey J. Van Slochteren	Chairman, Town of Wheatland
August Zirbel, Jr.	Chairman, Town of Bristol

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR MILWAUKEE COUNTY

Patrick Marchese	Director of Public Works and
Chairman and Secretary	Development, Milwaukee County
Kurt W. Bauer	Executive Director, Southeastern
	Wisconsin Regional Planning Commission
John A. Erickson	City Engineer, City of Milwaukee

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR MILWAUKEE COUNTY

(continued)

Thomas L. Frank	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
James R. Grassman	Administrator, City of Wauwatosa
Dennis M. Johnson	Acting City Engineer, City of West Allis
Robert R. Packee	District Director, Wisconsin Department of Transportation
Nick T. Paulos	Village Engineer, Village of Greendale
James St. John	Division Administrator, U. S. Department of Transportation, Federal Highway Administration
David M. Weis	City Engineer, City of Glendale

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR RACINE COUNTY

James F. Rooney	Commissioner, Racine County Highway Commission
Cecil F. Mehring	Highway Engineer, Racine County Secretary
Gilbert B. Bakke	President, Village of Waterford
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Arnold L. Clement	Planning and Development Director, Racine County
Thomas L. Frank	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Robert J. Grady	President, Village of Wind Point
Lloyd Human	Chairman, Town of Norway
Edmund Karczewski	Chairman, Town of Dover
Christopher Koceja	Acting City Engineer, City of Burlington
William J. Korducki	Chairman, Town of Burlington
John Korzilius	Trustee, Village of Union Grove
Robert Langmesser	Chairman, Town of Waterford
Fred H. Larson	Commissioner of Public Works, City of Racine
Brian J. Lawler	Trustee, Village of Elmwood Park
Wayne A. Lopnow	Chairman, Town of Raymond
Dennis C. Mahoney	President, Village of North Bay
Clay E. Morgan	President, Village of Sturtevant
James E. Moyer	Chairman, Town of Yorkville
Robert R. Packee	District Director, Wisconsin Department of Transportation
Richard G. Rehberg	Chairman, Town of Rochester
Antony Rogers	Trustee, Village of Rochester
Michael F. Weber	Administrator, Town of Mt. Pleasant
Robert L. Wilson	Chairman, Town of Caledonia
Thomas N. Wright	Director of City 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
Secretary	Regional Planning Commission
Leland J. Allen	Chairman, Town of Port Washington
Lester A. Bartel, Jr.	Chairman, Town of Grafton
Paul H. Brunquell	Supervisor, Town of Saukville
Donald C. Bystricky	President, Village of Belgium
Anthony R. Depies	City Engineer, City of Port Washington

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
JURISDICTIONAL HIGHWAY PLANNING FOR OZAUKEE COUNTY  
(continued)

Robert R. Dreblow	Director of Engineering and Public Works, City of Cedarburg
Thomas L. Frank	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Robert Gerke	Street Commissioner, Village of Thiensville
William S. Heimlich	Planning Supervisor, Wisconsin Department of Transportation
Frederick Kaul	Chairman, Ozaukee County Highway Committee
Francis J. Kleckner	Chairman, Town of Belgium
Jeffery P. Knight	President, Village of Saukville
Fred W. Koehler, Jr.	Chairman, Town of Fredonia
D. Michael Mucha	Assistant City Engineer, City of Mequon
William Rathstack	President, Village of Fredonia
Kenneth A. Roell	Administrator, Town of Cedarburg
James R. Struck	Public Works Director, Village of Grafton

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
JURISDICTIONAL HIGHWAY PLANNING FOR WALWORTH COUNTY

Benjamin J. Coopman, Jr.	Highway Commissioner, Walworth County
Chairman	
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
James Bilskey	Chairman, Town of Darien
Gary W. Boden	City Manager, City of Whitewater
David Bollweg	Chairman, Town of Linn
Gerald E. Byrnes	Chairman, Town of Troy
James W. Byrnes	Chairman, Town of East Troy
Beatrice A. Dale	Mayor, City of Lake Geneva
Thomas L. Frank	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Harold J. Friestad	President, Village of Williams Bay
Carl A. Gustafson	Supervisor, Town of LaFayette
Craig A. Guthrie	Chairman, Town of Sugar Creek
William S. Heimlich	Planning Supervisor, Wisconsin Department of Transportation
Albert J. Jones	President, Village of Walworth
Neal J. Kedzie	Chairman, Town of LaGrange
Marilyn Kienbaum	Chairman, Town of Whitewater
Paul Kitzman	Chairman, Town of Richmond
Dean Logertman	President, Village of Darien
Alfred Lynch	President, Village of Sharon
William R. Mangold	Chairman, Town of Lyons
James A. Mitchell	President, Village of East Troy
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
David S. Stebnitz	Chairman, Town of Delavan
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 Dreser	Chairman, Town of Walworth

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
JURISDICTIONAL HIGHWAY PLANNING FOR WASHINGTON COUNTY

Kenneth M. Pesch	City Engineer, City of West Bend
Chairman	
George B. Allman	Chairman, Town of Kewaskum
Vice-Chairman	
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Gerald E. Boldt	President, Village of Jackson
Howard O. Butch	Supervisor, Washington County
John B. Capelle	Director of Community Development, City of West Bend
David L. Dourn	Chairman, Town of Barton
Peter L. Gonnering	Supervisor, Washington County
James E. Heipp	Supervisor, Town of West Bend
Willard F. Heppe	Chairman, Town of Polk
Gordon C. Hoffmann	Clerk, Town of Jackson
Carl Hohlweck	Chairman, Town of Wayne
John B. Kohl	Chairman, Town of Richfield
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
Dean A. Otte	Clerk, Village of Slinger
Robert R. Packee	District Director, Wisconsin Department of Transportation
William Ripp	City Engineer, City of Hartford
James St. John	Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Franklin B. Scharrer	Commissioner, Washington County Highway Department
Reuben J. Schmahl	Chairman, Washington County Board
Daniel S. Schmidt	Administrator, Village of Kewaskum
Donald M. Shane	Citizen Member, Town of Trenton
Robert C. Skeen	Chairman, Town of Erin
John C. Spielmann	Economic Development Coordinator, City of Hartford
Maurice P. Strupp	Chairman, Town of Hartford
John Theusch	Chairman, Town of Farmington
Cheryl Vogt	Clerk, Town of Addison
Gary Wendorff	Member, Planning Commission, City of Hartford
Todd W. Wetterau	Trustee, Village of Germantown
Milton Wilkens	President, Village of Newburg
Arthur H. Zabel	President, Village of Germantown
Richard A. Bolte	Director of Transportation, Waukesha County
Chairman	
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Robert T. Audley	Chairman, Town of Delafield
Marvin Becker	President, Village of Merton
James R. Behrend	Mayor, City of Delafield
Kathryn C. Bloomberg	Mayor, City of Brookfield
John W. Brunner	Chairman, Town of Waukesha
Randall A. Burr	President, Village of Elm Grove
Richard A. Ensslin	President, Village of Butler
Lawrence E. Farrell	President, Village of Pewaukee
Paul Fleischmann	President, Village of Sussex
Thomas L. Frank	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Cheri A. Frederick	Chairman, Waukesha County Public Works Committee
Terry Gissel	President, Village of Lannon
James Hansen	President, Village of North Prairie
Donald R. Holt	Chairman, Town of Lisbon
Vytautas P. Janusonis	Chairman, Town of Ottawa
Rasmus Kalnes	President, Village of Eagle
Thomas E. Kraus	Chairman, Town of Merton
Craig H. Lake	President, Village of Big Bend
David C. Lamerand	President, Village of Hartland

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
JURISDICTIONAL HIGHWAY PLANNING FOR WAUKESHA COUNTY  
(continued)**

Robert A. Macur	Chairman, Town of Vernon
Robert R. Packee	District Director, Wisconsin Department of Transportation
Brent J. Redford	Chairman, Town of Pewaukee
Edwin H. Rohloff	Chairman, Town of Summit
Joseph St. Thomas	Chairman, Town of Oconomowoc
Wayne G. Salentine	Mayor, City of Muskego
Gordon Scheuneman	President, Village of Nashotah
Robert N. Schreiber	Chairman, Town of Genesee
Marlene M. Schumacher	Mayor, City of Oconomowoc
Robert J. Steliga	President, Village of Menomonee Falls
George Stumpf	President, Village of Lac La Belle
Bryce Styza	Trustee, Village of Chenequa
Edmund O. Templeton	President, Village of Oconomowoc Lake
Eugene E. Tenges	Supervisor, Town of Brookfield
Duane A. Thornton	Trustee, Village of Mukwonago
Timothy K. Tully	Mayor, City of New Berlin
Paul G. Vrakas	Mayor, City of Waukesha
Jay Weintraub	President, Village of Dousman
Michael J. Wettstein	President, Village of Wales
Don Wilton	Chairman, Town of Eagle
Gilbert Yerke	Chairman, Town of Mukwonago

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

James F. Rooney	Director of Public Works, Racine County
Chairman	
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
James J. Blazek	City Engineer, City of Racine
Jon J. Dederich	Plan Commissioner, Village of Elmwood Park
Joel P. Ettinger	Area Director, U. S. Department of Transportation, Federal Transit Administration
Michael J. Glasheen	Transit Planner, Department of Transportation, City of Racine
Robert J. Grady	President, Village of Wind Point
Gerard Griswold	Engineer, Town of Caledonia
George Gunderson	Director, Bureau of System Planning, Division of Planning and Budget, Wisconsin Department of Transportation
Janice R. Hand	Chairman, Town of Mt. Pleasant
Michael L. Hansen	Chairman, Wisconsin Coach Lines, Inc.
Wolfgang H. Klassen	Director, Bureau of Air Management, Wisconsin Department of Natural Resources
Dennis C. Mahoney	President, Village of North Bay
Clay E. Morgan	President, Village of Sturtevant
Toya M. Nelson	Director, Bureau of Transit, Wisconsin Department of Transportation
Cheryl L. Newton	Environmental Protection Specialist, Region V, U. S. Environmental Protection Agency
Robert R. Packee	District Director, Wisconsin Department of Transportation
James St. John	Wisconsin Division Administrator, U. S. Department of Transportation, Federal Highway Administration

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

Frederick J. Patrie	Highway Commissioner, Kenosha County
Chairman	
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Joel P. Ettinger	Area Director, U. S. Department of Transportation, Federal Transit Administration
George Gunderson	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
Wolfgang H. Klassen	Director, Bureau of Air Management, Wisconsin Department of Natural Resources

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

Joseph McCarthy	Director, Transportation, City of Kenosha
Toya M. Nelson	Director, Bureau of Transit, Wisconsin Department of Transportation
Cheryl L. Newton	Environmental Protection Specialist, Region V, U. S. Environmental Protection Agency
Robert R. Packee	District Director, Wisconsin Department of Transportation
Francis J. Pitts	Commissioner, Southeastern Wisconsin Regional Planning Commission
James St. John	Wisconsin Division Administrator, U. S. Department of Transportation, Federal Highway Administration

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

Lawrence J. Kenny	Supervisor, Milwaukee County Board
Chairman	
F. Thomas Ament	County Board Chairman, Milwaukee County
Richard A. Bolte	Director of Transportation, Waukesha County
Daniel Cupertino, Jr.	Supervisor, Milwaukee County Board
Brian G. DuPont	City Engineer, City of Greenfield
John A. Erickson	City Engineer, City of Milwaukee
Richard H. Halfman	Engineer, Village of Brown Deer
Milton L. Howell, Jr.	Director of Public Works, City of New Berlin
Dennis M. Johnson	Acting City Engineer, City of West Allis
James C. Kaminski	Commissioner of Public Works, City of Milwaukee
Kenneth Kinney	Strategic Planner, Office of the Mayor, City of Milwaukee
Patrick Marchese	Director of Public Works and Development, Milwaukee County
Michael Morgan	Director, Intergovernmental Relations, City of Milwaukee
Kirsten A. Nyrop	Commissioner, Department of City Development, City of Milwaukee
Nick T. Paulos	Village Engineer, Village of Greendale
Paul G. Vrakas	Mayor, City of Waukesha
Robert J. Welch	Director of Intergovernmental Relations, Milwaukee County
Sylvester N. Weyker	Highway Commissioner, Ozaukee County
S. Howard Young	Engineering and Operations Administrator, City of Wauwatosa

**Ex Officio Nonvoting Members**

Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Joel P. Ettinger	Area Director, U. S. Department of Transportation, Federal Transit Administration
Michael L. Hansen	Chairman, Wisconsin Coach Lines, Inc.
Wolfgang H. Klassen	Director, Bureau of Air Management, Wisconsin Department of Natural Resources
Thomas P. Kujawa	Managing Director, Milwaukee County Transit System
Toya M. Nelson	Director, Bureau of Transit, Wisconsin Department of Transportation
Robert R. Packee	District Director, Wisconsin Department of Transportation
James St. John	Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Ernest Wittwer	Director, Bureau of Program Management, Wisconsin Department of Transportation

#### ROOT RIVER WATERSHED COMMITTEE

Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County  
 Chairman  
 Thomas N. Wright . . . . . Director of Community Development, City of Racine  
 Vice-Chairman  
 Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Secretary  
 John M. Bennett . . . . . City Engineer, City of Franklin  
 James J. Blazek . . . . . City Engineer, City of Racine  
 N. Owen Davies . . . . . Mayor, City of Racine  
 Brian G. DuPont . . . . . City Engineer, City of Greenfield  
 Ruth Hilfiker . . . . . Natural Resources Agent, Racine County  
 Ralph E. Hollmon . . . . . Executive Director, Milwaukee Metropolitan Sewerage District  
 Dennis M. Johnson . . . . . Acting City Engineer, City of West Allis  
 R. Daniel Kimick . . . . . Acting City Engineer, City of Greenfield  
 Orville L. Kurth . . . . . District Conservationist, U. S. Soil Conservation Service, Milwaukee and Waukesha Counties  
 Neal T. O'Reilly . . . . . Water Resources Planner, Southeast District, Wisconsin Department of Natural Resources  
 Nick T. Paulos . . . . . Village Engineer, Village of Greendale  
 Dale B. Richards . . . . . Mayor, City of Oak Creek  
 James F. Rooney . . . . . Director of Public Works, Racine County  
 James R. Ryan . . . . . President, Village of Hales Corners  
 Wayne G. Salentine . . . . . Mayor, City of Muskego

#### FOX RIVER WATERSHED COMMITTEE

William D. Rogan . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission  
 Chairman  
 Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Secretary  
 Nolan Anderson . . . . . Agricultural Agent, Walworth County  
 Gilbert B. Bakke . . . . . President, Village of Waterford  
 Kathryn C. Bloomberg . . . . . Mayor, City of Brookfield  
 William Burmeister . . . . . Chairman, Norway-Dover Drainage District  
 Arnold L. Clement . . . . . Planning and Development Director, Racine County  
 Frank H. Dobbs . . . . . Director, Walworth County Planning, Zoning and Sanitation Department  
 George S. Hardie . . . . . Chairman, Western Racine County Sewerage District  
 Robert E. Harvey . . . . . Citizen Member, Town of Vernon  
 Jeannie Hefty . . . . . Mayor, City of Burlington  
 Ruth Hilfiker . . . . . Resource Agent, UW-Extension, Kenosha County and Racine County  
 Lloyd Human . . . . . Chairman, Town of Norway  
 Ronald W. Kazmierczak . . . . . Assistant District Director, Southeast District, Wisconsin Department of Natural Resources  
 Francis Kerkman . . . . . Chairman, Town of Wheatland  
 Roger Kieffer . . . . . President, Village of Rochester  
 Orville L. Kurth . . . . . District Conservationist, U. S. Soil Conservation Service  
 Robert Langmesser . . . . . Chairman, Town of Waterford  
 Robert A. Macur . . . . . Chairman, Town of Vernon  
 George E. Melcher . . . . . Director, Office of Planning and Development, Kenosha County  
 John H. Mielke . . . . . Consulting Engineer, Ruekert & Mielke, Waukesha  
 Raymond J. Moyer, Jr. . . . . Citizen Member, Town of Waterford  
 Cloyd A. Porter . . . . . Wisconsin State Representative  
 Richard G. Rehberg . . . . . Chairman, Town of Rochester  
 Wayne G. Salentine . . . . . Mayor, City of Muskego  
 Phil Sander . . . . . Representative, Southeastern Wisconsin Sportsmen's Federation  
 Dr. Bruno E. Schiffleger . . . . . Citizen Member, City of Elkhorn  
 Arthur Stratton . . . . . Commissioner, Hoosier Creek Drainage District  
 Walter J. Tarmann . . . . . Director, Waukesha County Park and Planning Commission  
 Rodney M. Vanden Noven . . . . . Director of Public Works, City of Waukesha  
 Stan Wilson . . . . . Citizen Member, City of Burlington  
 John R. Zillmer . . . . . Secretary, Ice Age Park and Trail Foundation, Milwaukee

#### MILWAUKEE RIVER WATERSHED COMMITTEE

Richard W. Cutler . . . . . Attorney, Milwaukee  
 Chairman  
 Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Secretary  
 Lawrence Brumm . . . . . President, Milwaukee River Restoration Council, Inc.  
 Randy J. Lukas . . . . . Administrator, Village of Saukville  
 Delbert J. Cook . . . . . Chairman, Cedar Creek Restoration Council  
 Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County  
 Arthur G. Degnitz . . . . . Clerk, Washington County  
 James B. Esselman . . . . . Chairman, Town of Trenton  
 Edward Frauenheim . . . . . County Board Chairman, Sheboygan County  
 Lawrence W. Hillman . . . . . Citizen Member  
 Ralph E. Hollmon . . . . . Executive Director, Milwaukee Metropolitan Sewerage District  
 John Justen . . . . . Citizen Member  
 James C. Kaminski . . . . . Commissioner of Public Works, City of Milwaukee  
 Ronald W. Kazmierczak . . . . . Assistant District Director, Southeast District, Wisconsin Department of Natural Resources  
 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  
 Richard E. Zarling . . . . . Director of Elementary Education, Kewaskum Community Schools

#### MENOMONEE RIVER WATERSHED COMMITTEE

James C. Kaminski . . . . . Commissioner of Public Works, City of Milwaukee  
 Chairman  
 Gordon Rozmus . . . . . City Planner, City of Wauwatosa  
 Vice-Chairman  
 Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Secretary  
 Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County  
 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  
 Ralph E. Hollmon . . . . . Executive Director, Milwaukee Metropolitan Sewerage District  
 Dennis M. Johnson . . . . . Acting City Engineer, City of West Allis  
 Ronald W. Kazmierczak . . . . . Assistant District Director, Southeast District, Wisconsin Department of Natural Resources  
 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  
 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

#### KINNICKINNICK RIVER WATERSHED COMMITTEE

Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County  
 Chairman  
 John A. Erickson . . . . . City Engineer, City of Milwaukee  
 Vice-Chairman  
 Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
 Secretary  
 E. Craig Faust . . . . . Director of Engineering, City of Cudahy  
 Ralph E. Hollmon . . . . . Executive Director, Milwaukee Metropolitan Sewerage District  
 Dennis M. Johnson . . . . . Acting City Engineer, City of West Allis  
 R. Daniel Kimick . . . . . Acting City Engineer, City of Greenfield  
 Patrick Marchese . . . . . Director of Public Works and Development, Milwaukee County  
 Stanley Polewski . . . . . Proprietor, Polewski Pharmacy, Milwaukee  
 Rudolfo N. Salcedo . . . . . Environmental Scientist, Department of City Development, City of Milwaukee  
 Frank C. Schultz . . . . . Chief, Solid and Hazardous Waste Management, Southeast District, Wisconsin Department of Natural Resources  
 Frank J. Wabiszewski . . . . . Vice-President, Maynard Steel Casting Company, Milwaukee

#### PIKE RIVER WATERSHED COMMITTEE

George E. Melcher . . . . . Director of Planning and Chairman  
Richard C. Christensen . . . . . Chairman, Mt. Pleasant Vice-Chairman  
Vice-Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern Secretary Wisconsin Regional Planning Commission  
Les Aspin . . . . . Congressman, 1st District  
Arnold L. Clement . . . . . Planning and Development Director, Racine County  
Raymond A. Forgianni, Jr. . . . . Director of Development, City of Kenosha  
Janice R. Hand . . . . . Chairman, Town of Mt. Pleasant  
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  
Chelvadurai Manogaran . . . . . Associate Professor, Department of Geography, University of Wisconsin-Parkside  
Clay E. Morgan . . . . . President, Village of Sturtevant  
O. Fred Nelson . . . . . Manager, Kenosha Water Utility  
Neal T. O'Reilly . . . . . Water Resources Planner, Southeast District, Wisconsin Department of Natural Resources  
Francis J. Pitts . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission  
Charles A. Schweitzer . . . . . Representative, Racine Water and Wastewater Utility  
Michael F. Weber . . . . . Administrator, Town of Mt. Pleasant

#### OAK CREEK WATERSHED COMMITTEE

Jon J. Syndergaard . . . . . Administrator, City of South Milwaukee Chairman  
Paul E. Milewski . . . . . Director of Community Development, Vice-Chairman City of Oak Creek  
Kurt W. Bauer . . . . . Executive Director, Southeastern Secretary Wisconsin Regional Planning Commission  
John M. Bennett . . . . . City Engineer, City of Franklin  
Thomas D. Borgwardt . . . . . Airport Engineer, Milwaukee County Department of Public Works  
Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County  
John A. Erickson . . . . . City Engineer, City of Milwaukee  
Ralph E. Hollmon . . . . . Executive Director, Milwaukee Metropolitan Sewerage District  
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 . . . . . Former Supervisor, Milwaukee County  
Douglas R. Sleight . . . . . Member, South Milwaukee Yacht Club

#### DES PLAINES RIVER WATERSHED COMMITTEE

George E. Melcher . . . . . Director of Planning and Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern Secretary Wisconsin Regional Planning Commission  
Nancy Braker . . . . . Director of Science and Stewardship, The Nature Conservancy  
Lawrence B. Christmas . . . . . Executive Director, Northeastern Illinois Planning Commission  
Arnold L. Clement . . . . . Director of Planning and Development, Racine County  
Raymond A. Forgianni, Jr. . . . . Director, City Development, City of Kenosha  
Richard E. Hart . . . . . Kenosha County Board Supervisor; Member, Kenosha County Land Use Committee  
David D. Holtze . . . . . Chairman, Town of Somers  
Leonard R. Johnson . . . . . Kenosha County Board Supervisor; Chairman, Kenosha County Land Conservation Committee  
Wayne E. Koessl . . . . . Senior Local Relations Representative, WEPCo; Representative, WISPARK Corporation  
Norman H. Krueger . . . . . President, Village of Paddock Lake  
O. Fred Nelson . . . . . Manager, City of Kenosha Water Utility

#### DES PLAINES RIVER WATERSHED COMMITTEE

(continued)

Michael R. Pollocoff . . . . . Administrator, Village of Pleasant Prairie  
Phil Sander . . . . . Representative, Southeastern Wisconsin Sportsmen's Federation  
Carroll Schaal . . . . . Planner, Lake County Stormwater Management Commission  
Audrey J. Van Slochteren . . . . . Chairman, Town of Bristol  
Mary Ellen Vollbrecht . . . . . Supervisor, Water Regulation and Zoning Program, Wisconsin Department of Natural Resources  
Pamela A. Wallis . . . . . Kenosha County Conservationist  
August Zirbel, Jr. . . . . Chairman, Town of Paris

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

Dr. Norman P. Lasca . . . . . Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee Chairman  
Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County Vice-Chairman  
Donald M. Reed . . . . . Principal Biologist, Southeastern Wisconsin Regional Planning Commission Secretary  
Hubert J. Albert . . . . . Port Washington Yacht Club  
Carl W. Birks . . . . . Director, Engineering, Environment and Energy, Milwaukee County  
Josephine Boucher . . . . . Member, North Shore League of Women Voters  
Benjamin C. Chapla . . . . . Citizen Member, Town of Caledonia  
Mark D. Dybdahl . . . . . Mayor, City of Port Washington  
E. Craig Faust . . . . . Director of Engineering, City of Cudahy  
Ruth Hilfiker . . . . . Natural Resource Agent, Racine County  
Ralph E. Hollmon . . . . . Executive Director, Milwaukee Metropolitan Sewerage District  
James C. Kaminski . . . . . Commissioner of Public Works, City of Milwaukee  
Dr. Harold M. Mayer . . . . . Professor, Department of Geography, University of Wisconsin-Milwaukee  
Gloria L. McCutcheon . . . . . District Director, Southeast District, Wisconsin Department of Natural Resources  
Allan Medoff . . . . . Manager, Village of Fox Point  
Dr. William G. Murphy . . . . . Former Professor, Soils Mechanics, College of Engineering, Marquette University; Engineers and Scientists of Milwaukee  
C. William Nelson . . . . . Member, Great Lakes Sports Fisherman's Club  
Mary C. Nelson . . . . . City of South Milwaukee Shoreline Property Owner  
Dr. William T. Painter . . . . . President, Foundation Engineering, Inc., Milwaukee  
Neil H. Palmer . . . . . Senior Legislative Representative, Wisconsin Electric Power Company  
James M. Phinney . . . . . Resident, Village of Fox Point  
Phil Sander . . . . . Representative, Southeastern Wisconsin Sportsmen's Federation  
Jon J. Syndergaard . . . . . Administrator, City of South Milwaukee  
Kenneth J. Szallai . . . . . Port Director, Board of Harbor Commissioners, City of Milwaukee

#### GREATER KENOSHA AREA UTILITY PLANNING COMMITTEE

David D. Holtze . . . . . Chairman, Town of Somers Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern Secretary Wisconsin Regional Planning Commission  
Harvey D. Elmer . . . . . Director of Public Works, City of Kenosha  
Donald K. Holland . . . . . Administrator, City of Kenosha  
Orlando Infusino . . . . . Clerk, Town of Paris  
Ronald W. Kazmierczak . . . . . Assistant District Director, Wisconsin Department of Natural Resources  
Wayne E. Koessl . . . . . Senior Local Relations Representative, WEPCo; Representative, WISPARK Corporation  
George E. Melcher . . . . . Director, Kenosha County Office of Planning and Zoning Administration  
O. Fred Nelson . . . . . Manager, Kenosha Water Utility  
Michael R. Pollocoff . . . . . Administrator, Town of Pleasant Prairie  
Michael J. Serpe . . . . . Councilman, City of Kenosha  
Audrey J. Van Slochteren . . . . . Chairman, Town of Bristol  
August Zirbel, Jr. . . . . Chairman, Town of Paris

TECHNICAL COORDINATING AND ADVISORY  
COMMITTEE ON REGIONAL LAND USE PLANNING

Arnold L. Clement . . . . . Director of Planning and Development, Racine County  
Chairman  
Harlan E. Clinkenbeard . . . . . Administrator/Planner, Town of Pewaukee  
Vice-Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary  
John B. Capelle . . . . . Director of Community Development, City of West Bend  
Thurmon D. Dansby . . . . . Director of Parks, Recreation and Culture, Milwaukee County  
Lewis R. Dixon . . . . . Manager, Land Use Planning, Wisconsin Energy Corporation  
Francis H. Dobbs . . . . . Director, Walworth County Planning, Zoning, and Sanitation Department  
Robert R. Dreblow . . . . . Director of Engineering and Public Works, City of Cedarburg  
Daniel F. Ertl . . . . . Director of Planning and Zoning, City of Brookfield  
Raymond A. Forgianni, Jr. . . . . Director of City Development, City of Kenosha  
George E. Hall . . . . . Chief, Boundary Review Section, Bureau of Intergovernmental Relations, Wisconsin Department of Administration  
Frank M. Hedcock . . . . . Director of Community Development, City of Waukesha  
Gregory I. Igli . . . . . District Conservationist, U. S. Soil Conservation Service, Walworth County  
J. David Jelinski . . . . . Director, Land and Water Resources Bureau, Wisconsin Department of Agriculture, Trade and Consumer Protection  
Gordon M. Kacala . . . . . Executive Director, Racine County Economic Development Corporation  
G. Andrew Larsen . . . . . Director, Riveredge Nature Center  
James J. Lynch . . . . . Director of Community Development, Village of Shorewood  
Gloria L. McCutcheon . . . . . District Director, Southeast District, Wisconsin Department of Natural Resources  
George E. Melcher . . . . . Director of Planning and Development, Kenosha County  
Paul E. Milewski . . . . . Director of Community Development, City of Oak Creek  
Paul E. Mueller . . . . . Administrator, Washington County Land Use and Park Department  
Kirsten A. Nyrop . . . . . Commissioner, Department of City Development, City of Milwaukee  
David L. Peterson . . . . . Attorney, Quarles and Brady  
Gordon Rozmus . . . . . City Planner, City of Wauwatosa  
Brad Lee G. Steinke . . . . . Director of Community Development, City of Mequon  
Walter J. Tarmann . . . . . Director, Waukesha County Park and Planning Commission  
Jean M. Werbie . . . . . Planning and Zoning Administrator, Village of Pleasant Prairie  
Dan A. Wilson . . . . . Resource/Horticulture Agent, UVEX-Washington County  
Lawrence P. Witzling . . . . . Associate Dean of Architecture and Urban Planning, University of Wisconsin-Milwaukee  
Thomas N. Wright . . . . . Director of City Development, City of Racine

TECHNICAL AND INTERGOVERNMENTAL ADVISORY  
COMMITTEE ON REGIONAL LAND USE PLAN IMPLEMENTATION

Richard W. Cutler . . . . . Attorney at Law  
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Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary  
James H. Baxter III . . . . . Attorney at Law, Quarles & Brady  
Howard O. Buth . . . . . Washington County Board Supervisor  
Arnold L. Clement . . . . . Director of Planning and Development, Racine County  
Benjamin J. Coopman, Jr. . . . . Walworth County Highway Commissioner  
Daniel M. Finley . . . . . Waukesha County Executive  
Herbert A. Goetsch . . . . . Citizen Member; Former Director of Public Works, City of Milwaukee  
Richard E. Hart . . . . . Kenosha County Board Supervisor  
Vytautas P. Janusonis . . . . . Chairman, Town of Ottawa  
Frances M. Kennedy . . . . . Superintendent of Schools, Cedarburg School District

TECHNICAL AND INTERGOVERNMENTAL ADVISORY  
COMMITTEE ON REGIONAL LAND USE PLAN IMPLEMENTATION  
(continued)

Thomas P. Kujawa . . . . . Managing Director, Milwaukee County Transit System  
Gary S. Langlais . . . . . Ozaukee County Board Supervisor  
G. Andrew Larsen . . . . . Executive Director, Riveredge Nature Center  
Patrick Marchese . . . . . Director of Public Works and Development, Milwaukee County  
Timothy J. McElhatton . . . . . Senior Researcher, Public Policy Forum  
George E. Melcher . . . . . Director of Planning and Development, Kenosha County  
J. Michael Mooney . . . . . Principal, Mooney, LeSage & Associates  
Paul E. Mueller . . . . . Administrator, Washington County Land Use and Park Department  
Robert R. Packee . . . . . District Director, Wisconsin Department of Transportation  
Richard G. Rehberg . . . . . Racine County Board Supervisor  
Chairman, Town of Rochester  
Ronald P. Siepmann . . . . . President, Siepmann Realty Corporation  
Robert W. Tilton . . . . . Walworth County Board Supervisor  
Chairman, Town of Bloomfield  
Paul G. Vrakas . . . . . Mayor, City of Waukesha  
Thomas N. Wright . . . . . Director of City Development, City of Racine

INTERGOVERNMENTAL COORDINATING AND  
TECHNICAL ADVISORY COMMITTEE FOR THE IH 94  
WEST FREEWAY CORRIDOR DEVELOPMENT PLAN

William D. Rogan . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission  
Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary  
Robert T. Audley . . . . . Chairman, Town of Delafield  
James R. Behrend . . . . . Mayor, City of Delafield  
Harlan E. Clinkenbeard . . . . . Administrator/Planner, Town of Pewaukee  
Paul A. Feller . . . . . City Engineer, City of Waukesha  
Thomas L. Frank . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration  
Cheri A. Frederick . . . . . Chairman, Waukesha County Public Works Committee  
Robert F. Hamilton . . . . . Supervisor, Waukesha County Board  
Robert R. Packee . . . . . District Director, Wisconsin Department of Transportation  
Frank M. Paulus . . . . . Administrator, Village of Pewaukee  
Edwin H. Rothloff . . . . . Chairman, Town of Summit  
Marlene M. Schumacher . . . . . Mayor, City of Oconomowoc  
Patric Spheeris . . . . . Village Representative, Village of Oconomowoc Lake

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

Dr. Forest W. Stearns . . . . . Chairman, Wisconsin Scientific Areas Preservation Council; Professor Emeritus, Department of Biological Sciences, University of Wisconsin-Milwaukee  
Donald M. Reed . . . . . Principal Biologist, Southeastern Wisconsin Regional Planning Commission  
Dr. Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
John E. Bielefeldt . . . . . Naturalist, Racine County Parks Department  
Dr. Martyn J. 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  
Andrew A. Holschbach . . . . . Land Conservation Director, Ozaukee County  
Marlin P. Johnson . . . . . Associate Professor, Department of Biological Sciences, University of Wisconsin-Waukesha Center  
G. Andrew Larsen . . . . . Director, Riveredge Nature Center, Ozaukee County

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

Paul E. Matthiae	Chief, Natural Areas Section, Wisconsin Department of Natural Resources-Madison
Peter E. McKeever	State Director, The Nature Conservancy, Wisconsin Chapter
James P. Morrissey	Environmental Impact Coordinator, Wisconsin Department of Natural Resources-Southeast District
Robert M. Nichols	Director, Schlitz Audubon Center
Dr. David F. Overstreet	Principal Investigator, Great Lakes Archaeological Research Center
Jerry A. Schwarzmeier	Park Naturalist, Retzer Nature Center, Waukesha County
Dr. S. Galen Smith	Professor, Department of Biology, University of Wisconsin-Whitewater
David W. White	Director, YWCA River Bend Nature Center, Racine
Dan A. Wilson	Resources Agent, University of Wisconsin-Extension, Washington County

KENOSHA COUNTY AUTOMATED MAPPING AND LAND INFORMATION SYSTEMS TECHNICAL ADVISORY COMMITTEE

George E. Melcher	Director of Planning and Development, Kenosha County
Richard E. Ellison	County Assessor, Kenosha County
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Ronald J. Betz	Real Estate Information and Planning Administrator, Wisconsin Power & Light Company
Donna M. Dietman	Register of Deeds, Kenosha County
Harvey D. Elmer	Director of Public Works, City of Kenosha
Raymond A. Forgianni, Jr.	Director of City Development, City of Kenosha
Paul M. Hess	Director of Emergency Services, Kenosha County
Kim G. House	Chief MIS Consultant, Information Systems Department, Kenosha County
John A. Kilsdonk	Vice-President of Operations, Wisconsin Southern Gas Company
Mark Laburda	Director of Management and Budget, Kenosha County
O. Fred Nelson	General Manager, City of Kenosha Water Utility
Frederick J. Patrie	Highway Commissioner, Kenosha County
Michael R. Pollocoff	Administrator, Village of Pleasant Prairie
Herman R. Reback	General Superintendent Technical Services, Wisconsin Electric Power Company
Roger J. Schoenfeld	Chief Deputy Sheriff, Kenosha County
Robert L. Smith	County Surveyor, Kenosha County
Kevin Walker	Chief Engineer, Jones Intercable
Robert H. Zuehsdorf	Director of Facilities and Services, Kenosha Unified School District

INTERGOVERNMENTAL COORDINATING AND ADVISORY COMMITTEE FOR THE KENOSHA URBAN PLANNING DISTRICT

Anthony F. Bisciglia	Superintendent, Kenosha Unified School District No. 1
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Robert G. Anderson	Planning Analyst, Wisconsin Department of Transportation District 2
Wanda Lynn Bellow	Alderman and Plan Commissioner, City of Kenosha
Harvey D. Elmer	Director of Public Works, City of Kenosha
Raymond A. Forgianni, Jr.	Director of City Development, City of Kenosha
Richard E. Hart	Supervisor, Kenosha County Board of Supervisors
David D. Holtze	Chairman, Town of Somers
Ronald W. Kazmierczak	Assistant Southeast District Director, Wisconsin Department of Natural Resources
George E. Melcher	Director of Planning and Development, Kenosha County
O. Fred Nelson	General Manager, Kenosha Water Utility
Frederick J. Patrie	Director of Public Works, Kenosha County
Michael R. Pollocoff	Administrator, Village of Pleasant Prairie
Phil Sander	Citizen Member, Village of Pleasant Prairie
Michael J. Serpe	Trustee, Village of Pleasant Prairie
Jean M. Werbie	Community Development Director, Village of Pleasant Prairie
Geoffrey L. Wheeler	Board of Directors, Kenosha Area Development Corporation

TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON THE STUDY OF ENVIRONMENTALLY SENSITIVE LANDS  
IN THE TOWN OF NORWAY SANITARY DISTRICT NO. 1

Richard G. Rehberg	Chairman, Planning and Development Committee, Racine County
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Kathy A. Aron	Chairperson, Wind Lake Management District
Arnold L. Clement	Director of Planning and Development, Racine County
Lloyd Human	Chairman, Town of Norway
Philip T. Jacobson	Member, Town of Norway Plan Commission
Roland Kieffer	Member, Town of Norway Plan Commission
Robert J. Malsack	Vice-President, Tri-Lakes Conservation, Inc.
Delores Otto	Supervisor, Town of Norway
Dale J. Pfeiffle	Environmental Protection Specialist, U. S. Army Corps of Engineers
Donald J. Quarford	District Manager, Town of Norway Sanitary District No. 1
Mary Ellen Vollbrecht	Water Regulation and Zoning Supervisor, Southeast District, Wisconsin Department of Natural Resources
Robert F. Welch	Citizen Member
Melvin Wendt	Citizen Member



## Appendix C

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 1992

#### 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 Executive Secretary
Holly V. Halbrucker Secretary	

<b>GEOGRAPHIC INFORMATION SYSTEMS DIVISION</b>	<b>COMMUNITY ASSISTANCE PLANNING DIVISION</b>	<b>ENVIRONMENTAL PLANNING DIVISION</b>	<b>TRANSPORTATION PLANNING DIVISION</b>
Thomas D. Patterson Geographic Information Systems Manager	Roland O. Tonn, AICP Chief Community Assistance Planner	Robert P. Biebel, PE Chief Environmental Engineer	Donald R. Martinson, PE Chief Transportation Engineer
John G. McDougall Assistant Geographic Information Systems Manager	Richard R. Kania Principal Planner	Michael G. Hahn, PE Ronald J. Printz, PE Principal Engineers	Robert E. Beglinger Principal Engineer
	Nancy A. Holguin Christopher N. Jakubiak Senior Planners	Donald E. Berghammer Senior Engineer	Albert A. Beck Otto P. Dobnick Principal Planners
Paul J. Clavette Principal Programmer/Analyst	Scott K. Enk Senior Editor	Najoua Ksontini Engineer	John D. Harasha Principal Programmer/Analyst
John T. Washburn Senior Specialist	Robert S. McGonigal Planner	Jeffrey A. Thornton Principal Planner	John L. Zastrow Principal Specialist
Roy T. Grasse Geographic Information Systems Supervisor	Nancee A. Nejedlo Senior Planning Draftsman	Donald M. Reed Principal Specialist	John L. Forslund Senior Planner
Kenneth P. Hall Graphics Specialist	John R. Meland Chief Economic Development Planner	Rachel E. Lang Lawrence A. Leitner Senior Specialists	David C. Dryer Rhonda A. Hosey Engineers
Karen J. Goralski Programmer/Analyst	Philip L. Cosson Principal Planner	Brian S. Lennie Jennifer L. McCauley Jennifer J. Reek Research Analysts	Mary B. Schultz Specialist
Mark K. Harris Bradley G. Javenkoski James G. Landwehr Lead Digitizer Operators	Kevin S. Hall Senior Planner	Irene A. Brown Secretary	Philip W. Johnson Kathryn E. Sobottke Research Analysts
Diane L. Curtiss Steven A. Friedrich Joyce A. Gramz James W. Huff Eva Dawn F. Kraemer Christopher Petersen Donna M. Rantanen Jerald J. Sommerfeld Bradley T. Subotnik Rosemary K. Wilcenski Thomas L. Woodzick Digitizer Operators	Paul E. Tonies Senior Specialist	<b>LAND USE PLANNING DIVISION</b>	<b>CARTOGRAPHIC AND GRAPHIC ARTS DIVISION</b>
	ADMINISTRATIVE SERVICES DIVISION	Bruce P. Rubin Chief Land Use Planner	Leland H. Kreblin, RLS Chief Planning Illustrator
	Joan A. Zenk Administrative Officer	Gerald H. Emmerich, Jr. William J. Stauber, AICP Principal Planners	Ronald H. Heinen B. Lynn Nowak Donald P. Simon Principal Planning Draftsmen
	Elizabeth A. Larsen Administrative Assistant	Donald G. Dittmar David A. Schilling Senior Specialists	Dean W. Boyer Jean C. Johnson Bergetta J. Ruehmer Christel A. Syrrakos Planning Draftsmen
	Wendy J. Burton-Whitcomb Luella M. Fredrickson Secretaries	Joel E. Dietl Todd L. Every Edward J. Koconis Research Analysts	Patricia M. Kokan Typesetting Operator
	Jean L. Clark Bookkeeping Clerk	Joyce G. Pariseau Research Aide	Randy T. Dvorak Mark S. Stabo Office Equipment Operators
	Sylvia Carlson Receptionist	James M. Kocher Office Clerk	Arno M. Klausmeier Librarian



## Appendix D

### PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-DECEMBER 1992

#### 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

Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus, September 1978

Milwaukee Area Primary Transit System Alternatives Analysis Prospectus, October 1978

Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Prospectus, November 1978

Milwaukee Area Work Time Rescheduling Study Prospectus, December 1978

Pike River Watershed Planning Program Prospectus, April 1979

Milwaukee Area Freeway Traffic Management System Study Prospectus, June 1979

Oak Creek Watershed Planning Program Prospectus, December 1979

Prospectus for an Energy Emergency Contingency Plan for Southeastern Wisconsin, December 1983

Milwaukee River Priority Watersheds Program Prospectus, March 1985

Stormwater Drainage and Flood Control Planning Program Prospectus for the Milwaukee Metropolitan Sewerage District, March 1985

Infrastructure Study for the Southeastern Wisconsin Region, June 1986

Milwaukee High Lake Level Impact Study Prospectus, December 1987

Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Kenosha Area, June 1988

Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Racine Area, May 1989\*

Natural Area Protection and Management Planning Program Prospectus, August 1989\*

Prospectus for the Preparation of a Comprehensive Plan for the Kenosha Urban Planning District, December 1990

Des Plaines River Watershed Planning Program Prospectus, September 1991

Prospectus for a Study of Emergency Medical Services in Waukesha County, March 1992

## OVERALL WORK PROGRAMS

Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1976-1980, December 1975

Overall Work Program of the Southeastern Wisconsin Regional Planning Commission: 1977-1981, December 1976

Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1978-1982, December 1977

Overall Work Program—1979 Southeastern Wisconsin Regional Planning Commission, October 1978

Overall Work Program—1980 Southeastern Wisconsin Regional Planning Commission, November 1979

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Overall Work Program—1982 Southeastern Wisconsin Regional Planning Commission, November 1981

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Overall Work Program—1984 Southeastern Wisconsin Regional Planning Commission, November 1983

Overall Work Program—1985 Southeastern Wisconsin Regional Planning Commission, October 1984

Overall Work Program—1986 Southeastern Wisconsin Regional Planning Commission, October 1985

Overall Work Program—1987 Southeastern Wisconsin Regional Planning Commission, September 1986

Overall Work Program—1988 Southeastern Wisconsin Regional Planning Commission, November 1987

Overall Work Program—1989 Southeastern Wisconsin Regional Planning Commission, November 1988

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

Overall Work Program—1991 Southeastern Wisconsin Regional Planning Commission, November 1990

Overall Work Program—1992 Southeastern Wisconsin Regional Planning Commission, December 1991

Overall Work Program—1993 Southeastern Wisconsin Regional Planning Commission, December 1992

## 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

## PLANNING REPORTS—continued

No. 13 - A Comprehensive Plan for the Milwaukee River Watershed  
Volume 1 - Inventory Findings and Forecasts, December 1970\*  
Volume 2 - Alternative Plans and Recommended Plan, October 1971\*

No. 14 - A Comprehensive Plan for the Racine Urban Planning District  
Volume 1 - Inventory Findings and Forecasts, December 1970  
Volume 2 - The Recommended Comprehensive Plan, October 1972  
Volume 3 - Model Plan Implementation Ordinances, September 1972

No. 15 - A Jurisdictional Highway System Plan for Walworth County, October 1972

No. 16 - A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974

No. 17 - A Jurisdictional Highway System Plan for Ozaukee County, December 1973

No. 18 - A Jurisdictional Highway System Plan for Waukesha County, January 1974

No. 19 - A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974

No. 20 - A Regional Housing Plan for Southeastern Wisconsin, February 1975

No. 21 - A Regional Airport System Plan for Southeastern Wisconsin, December 1975

No. 22 - A Jurisdictional Highway System Plan for Racine County, February 1975

No. 23 - A Jurisdictional Highway System Plan for Washington County, October 1974\*

No. 24 - A Jurisdictional Highway System Plan for Kenosha County, April 1975

No. 25 - A Regional Land Use Plan and a Regional Transportation Plan for  
Southeastern Wisconsin: 2000  
Volume 1 - Inventory Findings, April 1975  
Volume 2 - Alternative and Recommended Plans, May 1978

No. 26 - A Comprehensive Plan for the Menomonee River Watershed  
Volume 1 - Inventory Findings and Forecasts, October 1976  
Volume 2 - Alternative Plans and Recommended Plan, October 1976

No. 27 - A Regional Park and Open Space Plan for Southeastern Wisconsin, 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\*

No. 40 - A Regional Land Use Plan for Southeastern Wisconsin—2010, January 1992

## 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\*

## PLANNING GUIDES—continued

- 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\*
- No. 7 - 2nd Edition, Horizontal and Vertical Survey Control in Southeastern Wisconsin, August 1990
- 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
- No. 31 - Costs of Urban Nonpoint Source Water Pollution Control Measures, June 1991

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- No. 32 - General Mitchell International Airport Enplaning Passenger Survey  
Findings: 1989, August 1990
- No. 33 - Integration of the Computer-Assisted Management and Planning System with a Parcel-Based Land Information System: A Demonstration Project in Kenosha County, September 1992

## COMMUNITY ASSISTANCE PLANNING REPORTS

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

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- 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\*
- 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. 56 - 2nd Edition, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, Walworth County, Wisconsin, November 1991

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- 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\*
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- No. 65 - A Public Transportation Service Plan for Walworth County, January 1982
- No. 66 - A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, October 1981
- No. 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. 71 - A Park and Open Space Plan for the Town of Waterford, Racine County, Wisconsin, January 1990
- No. 72 - A Park and Open Space Plan for the City of Oconomowoc, Waukesha County, Wisconsin, November 1987
- No. 73 - A Shoreland Development Management Study for Racine County, Wisconsin, January 1982
- No. 74 - Kenosha County Overall Economic Development Program (OEDP) Update-1981, April 1982\*
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- 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

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 86 - A Lake Michigan Coastal Erosion Management Study for Racine County, Wisconsin, October 1982
- No. 87 - A Farmland Preservation Plan for Ozaukee County, Wisconsin, May 1983
- No. 88 - A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin, February 1985\*
- No. 89 - A Stormwater Management Plan for the Village of Sussex, Waukesha County, Wisconsin, October 1983\*
- No. 90 - Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983
- No. 91 - Sanitary Sewer Service Area for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, May 1987
- No. 92 - Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, March 1984
- No. 93 - Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin, April 1985
- No. 94 - Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, September 1987
- No. 95 - Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983
- No. 96 - Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, July 1984
- No. 97 - Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, November 1984\*
- No. 97 - 2nd Edition, Sanitary Sewer Service Area, Village of Belgium, Ozaukee County, Wisconsin, June 1987
- No. 98 - A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin, August 1983
- No. 99 - Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin, February 1984
- No. 100 - Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, June 1985\*
- No. 101 - Kenosha Area Transit System Plan and Program: 1984-1988, June 1984
- No. 102 - City of Whitewater Overall Economic Development Program Plan, January 1985
- No. 103 - Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, September 1984
- No. 104 - A Park and Open Space Plan for the City of West Bend, Washington County, Wisconsin, June 1985
- No. 105 - Waukesha County Transit Plan: 1988-1992, September 1988
- No. 106 - Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin, November 1985
- No. 107 - East Moreland Boulevard Short-Range and Long-Range Highway Improvement Plan, April 1984
- No. 108 - A Park and Open Space Plan for the City of Brookfield, Waukesha County, Wisconsin, August 1991
- No. 109 - Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, November 1991
- No. 110 - A Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis, Wisconsin, August 1984
- No. 111 - Land Use and Urban Design Plan for the City of New Berlin: 2010, April 1987
- No. 112 - Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, August 1984

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 113 - Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin, June 1985\*
- No. 114 - Village of Shorewood Comprehensive Traffic Plan, Milwaukee County, Wisconsin, September 1984
- No. 115 - A Fire Station Building Program and Site Analysis, Village of Sturtevant, Racine County, Wisconsin, September 1984
- No. 116 - Milwaukee County Overall Economic Development Program Plan, October 1985
- No. 117 - Washington County Overall Economic Development Program Plan, December 1985
- No. 118 - Waukesha County Overall Economic Development Program Plan, December 1985
- No. 119 - Sanitary Sewer Service Area, Village of Silver Lake, Kenosha County, Wisconsin, May 1987
- No. 120 - A Solid Waste Management Plan for Milwaukee County, Wisconsin, July 1987\*
- No. 121 - A Stormwater Management Plan for the Village of Hales Corners, Milwaukee County, Wisconsin, March 1986
- No. 122 - A Park and Open Space Plan for the Town of Vernon, Waukesha County, Wisconsin, March 1985
- No. 123 - Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, May 1988
- No. 123 - 2nd Edition, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, July 1992
- No. 124 - Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin, May 1985
- No. 125 - A Transportation Plan for the Village of Germantown: 2000, Washington County, Wisconsin, October 1985
- No. 126 - A Development Plan for Kenosha County, Wisconsin, Volume One, Inventory Findings, May 1987
- No. 127 - Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, November 1992
- No. 128 - Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin, November 1985
- No. 129 - A Solid Waste Management Plan for Kenosha County, Wisconsin, May 1989
- No. 130 - A Stormwater Drainage and Flood Control Policy Plan for the Milwaukee Metropolitan Sewerage District, March 1986\*
- No. 131 - A Park and Open Space Plan for Kenosha County, November 1987
- No. 132 - A Park and Open Space Plan for Milwaukee County, November 1991
- No. 133 - A Park and Open Space Plan for Ozaukee County, July 1987
- No. 134 - A Park and Open Space Plan for Racine County, September 1988\*
- No. 135 - A Park and Open Space Plan for Walworth County, February 1991
- No. 136 - A Park and Open Space Plan for Washington County, March 1989
- No. 137 - A Park and Open Space Plan for Waukesha County, December 1989
- No. 138 - A Development Plan for the Franklin Industrial Park Neighborhood, City of Franklin, Milwaukee County, Wisconsin, July 1988
- No. 139 - A Land Information System Plan for Walworth County, September 1991
- No. 140 - A Park and Open Space Plan for the Town of Jackson, Washington County, Wisconsin, September 1986
- No. 141 - Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, May 1986
- No. 142 - A Land Information System Plan for Ozaukee County, April 1992
- No. 143 - Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin, February 1986
- No. 144 - A Development Plan for the City of Cedarburg: 2010, February 1991

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 145 - Sanitary Sewer Service Area for the Town of Salem Utility District No. 1, Village of Paddock Lake, and Town of Bristol Utility District Nos. 1 and 1B, Kenosha County, Wisconsin, October 1986
- No. 146 - A Wildlife Habitat Management Plan for the Nicholson Wildlife Center, Town of Caledonia, Racine County, Wisconsin, May 1986
- No. 147 - Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin, November 1986
- No. 148 - A Park and Open Space Plan, Village of Walworth, Walworth County, Wisconsin, November 1986
- No. 149 - Sanitary Sewer Service Area, Village of Twin Lakes, Kenosha County, Wisconsin, May 1987
- No. 150 - A Rapid Transit Facility Plan for the Milwaukee Northwest Corridor, January 1988
- No. 151 - A Transportation System Plan for the Blue Mound Road (USH 18) Corridor, December 1987
- No. 152 - A Stormwater Drainage and Flood Control System Plan for the Milwaukee Metropolitan Sewerage District, December 1990
- No. 153 - Traffic Management and Control Plan for the Village of Whitefish Bay, July 1988
- No. 154 - A Transit System Development Plan for the City of Waukesha: 1988-1992, December 1989
- No. 155 - A Lake Michigan Shoreline Erosion Management Plan for Northern Milwaukee County, Wisconsin, December 1988
- No. 156 - Waukesha County Animal Waste Management Plan, August 1987
- No. 157 - Sanitary Sewer Service Area, City of New Berlin, Waukesha County, Wisconsin, November 1987
- No. 158 - Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, November 1987
- No. 159 - Waukesha County Agricultural Soil Erosion Control Plan, June 1988
- No. 160 - Racine County Agricultural Soil Erosion Control Plan, July 1988
- No. 161 - Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin, December 1988
- No. 162 - A Land Use and Transportation System Plan for the Village of Menomonee Falls: 2010, April 1990
- No. 163 - A Lake Michigan Shoreline Erosion Management Plan for Milwaukee County, Wisconsin, October 1989
- No. 164 - Kenosha County Agricultural Soil Erosion Control Plan, April 1989
- No. 165 - A Development Plan for the Burlington Industrial Park Neighborhood, City of Burlington, Racine County, Wisconsin, January 1991
- No. 166 - A Park and Open Space Plan for the Village of Sussex, Waukesha County, Wisconsin, September 1988
- No. 167 - A Land Use Plan for the City of West Bend: 2010, Washington County, Wisconsin, July 1992
- No. 168 - A Land Use Plan for the Town of LaGrange: 2010, March 1991
- No. 170 - Washington County Agricultural Soil Erosion Control Plan, March 1989
- No. 171 - Ozaukee County Agricultural Soil Erosion Control Plan, February 1989
- No. 172 - Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, February 1989
- No. 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  
Volume Two - Alternatives and Recommended Plan for the Silver Creek Subwatershed, June 1990
- No. 174 - An Evaluation of Alternative Means for the Governance of the Delavan Lake Area, Walworth County, Wisconsin, March 1989

## COMMUNITY ASSISTANCE PLANNING REPORTS—continued

- No. 175 - Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, February 1989
- No. 176 - Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, October 1990
- No. 177 - Feasibility Study for a Milwaukee County Automated Mapping and Land Information System, October 1989
- No. 178 - A Park and Open Space Plan for the Village of Grafton, Ozaukee County, Wisconsin, March 1989
- No. 179 - A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin, November 1989
- No. 180 - Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990
- No. 181 - A Water Quality Management Plan for Oconomowoc Lake, Waukesha County, Wisconsin, March 1990
- No. 182 - A Water Use Management Plan for Waubeesee Lake and the Anderson Canal, Racine County, Wisconsin, December 1990\*
- No. 183 - Kenosha Transit System Development Plan: 1991-1995, City of Kenosha, Wisconsin, September 1991\*
- No. 184 - A Land Information System Plan for Washington County, March 1992
- No. 185 - A Plan for the Creation of an Automated Mapping and Parcel-Based Land Information System for Kenosha County, August 1990
- No. 188 - Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin, January 1992
- No. 189 - A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996, February 1991
- No. 191 - Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin, November 1990
- No. 192 - Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin, December 1990
- No. 193 - A Land Information System Plan for Waukesha County, April 1991
- No. 194 - A Land Information System Plan for Racine County, August 1991
- No. 196 - A Management Plan for Powers Lake, Kenosha and Walworth Counties, Wisconsin, November 1991
- No. 197 - A Wildlife Habitat Management Plan for the General Electric Company, Medical Systems Group, Lands, City of Waukesha and Town of Pewaukee, Waukesha County, Wisconsin, June 1991
- No. 198 - A Management Plan for Wind Lake, Racine County, Wisconsin, December 1991
- No. 199 - A Park and Open Space Plan for the Town of Mt. Pleasant, Racine County, Wisconsin, November 1991
- No. 200 - A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties, December 1991
- No. 202 - A Park and Open Space Plan for the City of Muskego, Waukesha County, Wisconsin, January 1992
- No. 203 - Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin, December 1992
- No. 206 - Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin, December 1992

## MEMORANDUM REPORTS

- No. 1 - Cedarburg Central Business District Parking Study, City of Cedarburg, Ozaukee County, Wisconsin, December 1986
- No. 2 - Courthouse Parking Study, Ozaukee County, Wisconsin, December 1986

MEMORANDUM REPORTS—continued

- No. 3 - Alternative Industrial Park Site Location and Cost Estimate Analysis, City of Oconomowoc, Waukesha County, Wisconsin, December 1986\*
- No. 4 - Pilgrim Parkway Traffic Study, Village of Elm Grove, Waukesha County, Wisconsin, December 1986\*
- No. 5 - Capital Improvements Program: 1987-1991, Village of East Troy, Walworth County, Wisconsin, December 1986\*
- No. 6 - Report of the Hoan Bridge South Task Force, Milwaukee County, Wisconsin, December 1986
- No. 7 - Public Transit Ridership Trends in Southeastern Wisconsin: 1975-1986, May 1987
- No. 8 - Assessment of Transportation Needs of Elderly and Handicapped Residents of Ozaukee County, June 1987
- No. 9 - An Arterial Highway System Plan for Eastern Racine County, April 1987
- No. 10 - City of Elkhorn Fact Book, Walworth County, Wisconsin, November 1986
- No. 11 - City of Elkhorn Overall Economic Development Program Plan, Walworth County, Wisconsin, December 1986\*
- No. 12 - Economic Development Fact Book, City of Oconomowoc, Waukesha County, Wisconsin, March 1987
- No. 13 - Overall Economic Development Program Plan, City of Oconomowoc, Waukesha County, Wisconsin, March 1987
- No. 14 - Village of Menomonee Falls Economic Development Fact Book, September 1991
- No. 15 - Overall Economic Development Program Plan, Village of Menomonee Falls, Waukesha County, Wisconsin, September 1987
- No. 16 - Unpolluted Dredge Materials Disposal Plan for the Port Washington Harbor, City of Port Washington, Ozaukee County, Wisconsin, May 1987
- No. 17 - A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility, May 1987
- No. 18 - A Central Public Works Facility Building Program, Site Location Analysis, and Site Development Plan for the City of New Berlin, May 1987
- No. 19 - Overall Economic Development Program Plan, City of Burlington, Racine County, Wisconsin, March 1988
- No. 20 - CTH N Traffic Study, City of Cedarburg, Ozaukee County, Wisconsin, February 1987
- No. 21 - A Public Transit Program for Handicapped Persons—Milwaukee County Transit System, June 1987
- No. 22 - A Public Transit Program for Handicapped Persons—Waukesha County Transit System, June 1987
- No. 23 - A Public Transit Program for Handicapped Persons—City of Kenosha Transit System, June 1987
- No. 24 - A Public Transit Program for Handicapped Persons—City of Racine Transit System, June 1987
- No. 25 - Traffic Impact Study of Proposed Development along Paradise Drive between the USH 45 Bypass and S. Main Street, City of West Bend, Washington County, Wisconsin, September 1987\*
- No. 26 - Official Map, City of Burlington, Racine County, Wisconsin, December 1987
- No. 27 - Village of Mukwonago Industrial Park Development Plan, Waukesha County, Wisconsin, March 1988
- No. 28 - Streams and Watercourses for Which the Milwaukee Metropolitan Sewerage District Has Assumed Jurisdiction for Drainage and Flood Control Purposes, August 1987
- No. 29 - A Plan for the Abatement of Through Traffic Problems in the Village of West Milwaukee, March 1988
- No. 30 - Overall Economic Development Program Plan, City of South Milwaukee, Milwaukee County, Wisconsin, March 1988
- No. 31 - Analysis of the Conversion from One-Way to Two-Way Operation of Pine Street from State Street to Jefferson Street, City of Burlington, Racine County, Wisconsin, January 1988

MEMORANDUM REPORTS—continued

- No. 32 - Traffic Engineering Study of West and North Beach Roads in the Village of Oconomowoc Lake, Waukesha County, Wisconsin, January 1991
- No. 33 - Traffic Engineering Study of Robinhood Drive in the Village of Menomonee Falls, Waukesha County, Wisconsin, December 1989
- No. 34 - Overall Economic Development Program Plan, City of West Allis, Milwaukee County, Wisconsin, September 1988
- No. 35 - A Stormwater Management Plan for the Crayfish Creek Subwatershed, City of Oak Creek, Milwaukee County, Wisconsin, June 1988
- No. 36 - Traffic Engineering Study of Milwaukee Avenue (STH 36) between the Central Business District and the Northern Corporate Limits of the City of Burlington, Racine County, Wisconsin, August 1988
- No. 37 - Economic Development Fact Book, City of South Milwaukee, Milwaukee County, Wisconsin, May 1988
- No. 38 - A Regional Transportation Authority Feasibility Study for Southeastern Wisconsin, November 1990
- No. 39 - A Flood Control Plan for a Portion of the Menomonee River Estuary Area, June 1989
- No. 40 - An Inventory of Vacant or Underutilized Lands in the Riverine Areas of Central Milwaukee County, May 1989
- No. 41 - A Traffic Safety Study of N. Berkeley Boulevard between E. Montclaire Avenue and E. School Road in the Village of Whitefish Bay, Milwaukee County, Wisconsin, November 1991
- No. 42 - Traffic Engineering Study of Grandview Boulevard—CTH T—from Northview Road to Fatima Drive, Waukesha County, Wisconsin, July 1989
- No. 43 - Amtrak Milwaukee-Chicago Passenger Survey Findings: May 1989, August 1989
- No. 44 - Town of Lisbon Southeast Area Quarry Operations—Environmental Impact Evaluation, September 1990
- No. 45 - Overall Economic Development Program Plan, Village of Slinger, Washington County, Wisconsin, October 1989
- No. 46 - Traffic Impact Study of the Interchange of STH 33 and CTH LL, Ozaukee County, Wisconsin, September 1989
- No. 47 - Economic Development Fact Book, City of West Allis, Milwaukee County, Wisconsin, October 1989
- No. 48 - Washington Avenue (STH 57) Traffic Study in the City of Cedarburg, Ozaukee County, Wisconsin, January 1991
- No. 49 - Overall Economic Development Program Plan, City of Brookfield, Waukesha County, Wisconsin, December 1989
- No. 50 - Traffic Engineering Study of County Line Road (CTH Q) between the Intersection with Appleton Avenue (STH 175) and USH 41/45, December 1990
- No. 51 - Traffic Study of W. Fond du Lac Avenue in the Village of Menomonee Falls between N. 124th Street (STH 145) and W. Main Street (STH 74), Waukesha County, Wisconsin, January 1991
- No. 52 - Traffic Impact Study of the Alpine Valley Music Theatre in the Town of LaFayette, January 1991
- No. 53 - A Stormwater Drainage and Flood Control System Plan for Grantosa Creek, Cities of Milwaukee and Wauwatosa, Milwaukee County, Wisconsin, February 1992
- No. 54 - Traffic Engineering Study of E. Birch Avenue in the Village of Whitefish Bay, January 1991
- No. 58 - A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System, January 1992
- No. 59 - A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System, January 1992
- No. 60 - A Paratransit Service Plan for Disabled Persons—City of Racine Transit System, January 1992

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- No. 61 - A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility, January 1992
- No. 62 - A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System, January 1992
- No. 63 - A Land Use-Transportation Study of the N. 76th Street Corridor, August 1991
- No. 64 - Lake Arterial Extension Planning Study, August 1991
- No. 65 - Analysis of the Intersection of S. Pine Street (STH 83) and E. State Street (STH 83) in the City of Burlington, Racine County, Wisconsin, September 1991
- No. 66 - City of Cudahy Overall Economic Development Program Plan, Milwaukee County, Wisconsin, June 1992
- No. 69 - Environmental Assessment of the Proposed Development of the Millard Sand and Gravel Pit, July 1992
- No. 70 - A Wildlife Habitat Management Plan for the Franklin Lions Legend Park Study Area, August 1991
- No. 71 - A Specialized Transportation Service Plan for Elderly and Disabled Persons within Waukesha County, June 1992

## ECONOMIC DEVELOPMENT PROFILES

Economic Development Profiles have been prepared for the Southeastern Wisconsin Region, for each of the seven counties in the Region, for the Milwaukee Metropolitan Statistical Area, and for the following communities within each of the seven counties:

Kenosha County	Racine County	Washington County (continued)
City of Kenosha	City of Burlington	Village of Germantown
Village of Pleasant Prairie	City of Racine	Village of Jackson
Town of Bristol	Village of Rochester	Village of Kewaskum
Milwaukee County	Village of Sturtevant	Village of Slinger
City of Cudahy	Village of Union Grove	Waukesha County
City of Franklin	Village of Waterford	City of Brookfield
City of Greenfield	Town of Caledonia	City of Delafield
City of Milwaukee	Town of Mt. Pleasant	City of Muskego
City of Oak Creek	Walworth County	City of New Berlin
City of St. Francis	City of Delavan	City of Oconomowoc
City of South Milwaukee	City of Elkhorn	City of Waukesha
City of Wauwatosa	City of Lake Geneva	Village of Butler
City of West Allis	City of Whitewater	Village of Dousman
Village of West Milwaukee	Village of Darien	Village of Elm Grove
Ozaukee County	Village of East Troy	Village of Hartland
City of Cedarburg	Village of Walworth	Village of Menomonee Falls
City of Mequon	Washington County	Village of Mukwonago
City of Port Washington	City of Hartford	Village of Pewaukee
Village of Belgium	City of West Bend	Village of Sussex
Village of Fredonia		Town of Pewaukee
Village of Grafton		
Village of Saukville		
Village of Thiensville		

## 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, Lake Geneva  
No. FX- Lauderdale Lakes  
(17, Green Lake,  
20, Middle Lake,  
18, Mill Lake)

No. FX-39, Lulu Lake  
No. FX-21, North Lake  
No. FX-37, Pell Lake  
No. FX-43, Peters Lake  
No. FX-25, Pleasant Lake  
No. FX-24, Potters Lake  
No. FX-38, Silver Lake  
No. FX-30, Wandawega Lake

### Waukesha County

No. FX-3, Big Muskego Lake  
No. FX-23, Denoon Lake  
No. FX-19, Eagle Spring Lake  
No. FX-10, Little Muskego Lake

No. FX-14, Lower Phantom Lake  
No. FX-2, Pewaukee Lake  
No. FX-34, Spring Lake  
No. FX-33, Upper Phantom Lake

## LAKE USE REPORTS-MILWAUKEE RIVER WATERSHED

### Fond du Lac County

No. ML-2, Long Lake  
No. ML-9, Auburn Lake  
No. ML-21, Forest Lake  
No. ML-12, Mauthe Lake  
No. ML-18, Mud Lake  
No. ML-5, Kettle Moraine Lake

### Ozaukee County

No. ML-4, Mud Lake  
No. ML-17, Spring Lake

### Sheboygan County

No. ML-6, Random Lake\*  
No. ML-10, Crooked Lake  
No. ML-7, Lake Ellen

### Washington County

No. ML-3, Little Cedar Lake  
No. ML-14, Green Lake  
No. ML-19, Lake Twelve  
No. ML-13, Lucas Lake  
No. ML-11, Smith Lake  
No. ML-20, Wallace Lake\*  
No. ML-15, Barton Pond  
No. ML-1, Big Cedar Lake\*  
No. ML-8, Silver Lake  
No. ML-16, West Bend Pond

## TECHNICAL RECORDS

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

Regional Planning in Southeastern Wisconsin  
by Kurt W. Bauer, Executive Director  
The SEWRPC Land Use-Transportation Study  
by J. Robert Doughty, Study Director  
Home Interview Sample Selection - Part I  
by Kenneth J. Schlager, Chief Systems Engineer  
Truck and Taxi Sample Selection  
by Thomas A. Winkel, Urban Planning Supervisor  
A Backward Glance: Early Toll Roads in Southeastern Wisconsin  
by Richard E. Rehberg, Editor

Volume 1-No. 2, December 1963-January 1964

Arterial Network and Traffic Analysis Zones  
by Richard B. Sheridan, Chief Transportation Planner  
Conducting the Household Postal Questionnaire Survey  
by Wade G. Fox, Cartography and Design Supervisor  
Conducting the Home Interview Survey  
by Sheldon W. Sullivan, Administrative Officer  
Aerial Photographs and Their Use in the Land Use Inventory  
by Harlan E. Clinkenbeard, Land Use Planning Chief  
A Backward Glance: The U. S. Public Land Survey in Southeastern Wisconsin  
by Richard E. Rehberg, Editor

Volume 1-No. 3, February-March 1964

Conducting the Truck and Taxi Survey  
by Sheldon W. Sullivan, Administrative Officer  
Conducting the Truck and Taxi Postal Questionnaire Survey  
by Wade G. Fox, Cartography and Design Supervisor  
Conducting the External Survey  
by William E. Creger, P.E., Traffic Operations Engineer  
Rail and Transit Inventory and Design of the Transit Network  
by David A. Kuemmel, P.E., Transportation Planning Engineer  
A Backward Glance: The Man-Made Ice Age  
by Richard E. Rehberg, Editor

Volume 1-No. 4, April-May 1964\*

The Application of Soil Studies to Regional Planning  
by Kurt W. Bauer, Executive Director  
Coding  
by Wade G. Fox, Cartography and Design Supervisor, and  
Robert L. Fisher, Coding Supervisor  
Inventory of Existing Outdoor Recreation Facilities  
and Historic Sites in Southeastern Wisconsin  
by Theodore F. Lauf, Research Analyst  
Inventory of Potential Park and Related Open Space Sites  
by Karl W. Holzwarth, Landscape Architect  
A Backward Glance: The Electric Interurban Railway  
by Richard E. Rehberg, Editor

## TECHNICAL RECORDS—continued

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

Reconciliation of Sample Coverage in the Internal O & D Surveys  
by Eugene G. Muhich, P.E., Transportation Planning Engineer

The Contingency Check Program  
by Wade G. Fox, Cartography and Design Supervisor

Inventory of the Arterial Street Network  
by William T. Wambach, Jr., P.E.

A Backward Glance: The Milwaukee and Rock River Canal  
by James E. Seybold, Editor

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

Checking the Network Description for Arterial Highway and Transit Networks  
by Richard B. Sheridan, Chief Transportation Planner

A Study of the Water Quality and Flow of Streams in Southeastern Wisconsin  
by Roy W. Ryling, Hydrologist

Expanding the Origin-Destination Sample  
by Richard B. Sheridan, Chief Transportation Planner, and  
Wade G. Fox, Cartography and Design Supervisor

A Backward Glance: Greendale-Garden City in Wisconsin  
by Kurt W. Bauer, Executive Director

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

Simulation Models in Urban and Regional Planning  
by Kenneth J. Schlager, Chief Systems Engineer

### Volume 2-No. 2, December 1964-January 1965

Capacity of Arterial Network Links  
by Richard B. Sheridan, Chief Transportation Planner

The ABC Method of Current Population Estimating  
by Donald L. Gehrke, Economics and Population Analyst, and  
Orlando E. Delogu, Financial Resources and Legal Analyst

O & D Surveys Accuracy Checks  
by Eugene G. Muhich, P.E., Transportation Planning Engineer

A Backward Glance: Railroad Transportation in Southeastern Wisconsin  
by Patricia J. Tegge, Editor

### Volume 2-No. 3, February-March 1965

Determination of Historical Flood Frequency for the Root River of Wisconsin  
by James C. Ringenoldus, P.E., Harza Engineering Company

The Regional Multiplier  
by Kenneth J. Schlager, Chief Systems Engineer

A Backward Glance: The Street Railway in Milwaukee  
by Henry M. Mayer, Administrative Assistant,  
Milwaukee & Suburban Transport Corporation

TECHNICAL RECORDS—continued

Volume 2-No. 4, April-May 1965\*

Determination of Runoff for Urban Storm Water Drainage System Design  
by Kurt W. Bauer, Executive Director

Volume 2-No. 5, June-July 1965

Screen Line Adjustment of Trip Data  
by Richard B. Sheridan, P.E., Chief Transportation Planner  
Inventory of Land Development Regulations in Southeastern Wisconsin  
by William J. Kockelman, Chief Community Assistance Planner  
A Backward Glance: Highway Development in Southeastern Wisconsin-Part I  
by Jean C. Meier, Librarian and Research Assistant

Volume 2-No. 6, August-September 1965

A Modal Split Model for Southeastern Wisconsin  
by Edward Weiner, Highway Engineer

Volume 3-No. 1, 1968

Transit System Development Standards  
by Edward Weiner, Transportation Planning Engineer  
Modified Rapid Transit Service in the Southeastern Wisconsin Region  
by Sheldon W. Sullivan, Administrative Officer  
A Backward Glance: Highway Development in Southeastern Wisconsin-Part II  
by Jean C. Meier, Research Assistant, and  
Sheldon W. Sullivan, Administrative Officer

Volume 3-No. 2, 1969

Characteristics of Travel in the Milwaukee Central Business District  
by Sheldon W. Sullivan, Administrative Officer  
Computing the Center of Population and the Geographic Center  
by Wayne H. Faust, Associate Planner  
A Backward Glance: Downtown Yesterdays  
by Gerald P. Caffrey, Milwaukee Municipal Reference Librarian

Volume 3-No. 3, September 1971\*

Hydrogeologic Considerations in Liquid Waste Disposal,  
with a Case Study in Southeastern Wisconsin  
by Martha J. Ketelle, Department of Geology and Geophysics,  
University of Wisconsin-Madison

Volume 3-No. 4, September 1971

Characteristics of Air and Ground Travel Generated by  
General Mitchell Field Airport Terminal: May 1968  
by Sheldon W. Sullivan, Chief of Data Collection  
Shifts in Centers of Population within the Region: 1960-1970  
by Wayne H. Faust, Associate Planner  
A Backward Glance: The Development of General Mitchell Field  
by Sheldon W. Sullivan, Chief of Data Collection

## TECHNICAL RECORDS—continued

### Volume 3-No. 5, March 1973\*

Freeway Flyer Service in Southeastern Wisconsin-A Progress Report: 1964-1971  
by Sheldon W. Sullivan, Chief of Data Collection

Development of Equations for Rainfall Intensity-Duration-Frequency Relationship  
by Stuart G. Walesh, Water Resources Engineer

A Backward Glance: The American Automobile-A Brief History of the Development  
of the American Automobile and the Growth of Automobile Registrations in the  
United States, Wisconsin, and the Southeastern Wisconsin Region: 1896-1970  
by Sheldon W. Sullivan, Chief of Data Collection

### Volume 3-No. 6, April 1976\*

Floodland Management: The Environmental Corridor Concept  
by Stuart G. Walesh, SEWRPC Water Resources Engineer

Characteristics of Travel in the Milwaukee Central Business District: 1963 and 1972  
by Sheldon W. Sullivan, SEWRPC Chief of Data Collection, and  
Jean Lusk, SEWRPC Research Analyst

The Changing Factorial Ecology of Milwaukee's Black Ghetto  
by Harold McConnell, Richard A. Karsten, and Marilyn Ragusa

A Backward Glance: Environmental Corridors of Yesterday and Today  
by Dr. Jeremy M. Katz, Research Psychologist, and  
Jeanne Sollen, Editor

### Volume 4-No. 1, March 1978\*

A Backward Glance: Milwaukee's Water Story  
by Milwaukee Water Works

Is There a Groundwater Shortage in Southeastern Wisconsin?  
by Douglas A. Cherkaver and Vinton W. Bacon,  
University of Wisconsin-Milwaukee

An Overview of the Sources of Water Pollution in Southeastern Wisconsin  
by Kurt W. Bauer, Executive Director, SEWRPC

The Effect of Sample Rate on Socioeconomic and Travel Data  
Obtained through Standard Home Interview  
by Jean Lusk, SEWRPC Planner

### Volume 4-No. 2, March 1981

Refining the Delineation of the Environmental Corridors in Southeastern Wisconsin  
by Bruce P. Rubin, Chief Land Use Planner, SEWRPC, and  
Gerald H. Emmerich, Jr., Senior Planner, SEWRPC

Water Quality and Quantity Simulation Modeling for the Areawide  
Water Quality Management Planning Program for Southeastern Wisconsin  
by Thomas R. Sear, P.E., Senior Water Resources Engineer, SEWRPC

Evaluation of a Water Quality Standard for Total Phosphorus in  
Flowing Streams in Southeastern Wisconsin  
by David B. Kendzierski, Senior Planner, SEWRPC

Bibliography of Lake Michigan Shore Erosion and Nearshore Process Studies  
by Norman P. Lasca, Professor, Department of Geological Sciences and Center  
for Great Lakes Studies, University of Wisconsin-Milwaukee, and  
David Baier, Warren Baumann, Patrick Curth, and Jan H. Smith, Geologists,  
Department of Geological Sciences and Center for Great Lakes Studies,  
University of Wisconsin-Milwaukee

A Backward Glance: Historic Evolution of the Local Governmental  
Structure in Southeastern Wisconsin  
by Eileen Hammer

## TECHNICAL RECORDS—continued

### Volume 4-No. 3, February 1982

Preservation of Scientifically and Historically Important Geologic Sites  
in Milwaukee County, Wisconsin  
by Donald G. Mikulic, Staff Geologist, Illinois State Geological Survey, and  
Joanne Kluessendorf, Geologic Research Assistant, Illinois State Geological  
Survey, Champaign, Illinois

Inventory of Solid Waste Management Facilities in Southeastern Wisconsin: 1980  
by Robert P. Biebel, Principal Engineer, SEWRPC, and  
Joseph E. Stuber, Senior Engineer, SEWRPC

Inventory Findings of Cannonball Passenger Surveys: 1980 and 1971  
by Jean M. Lusk, SEWRPC Planner

A Backward Glance: Historic Evolution of the Local Governmental Structure  
in Southeastern Wisconsin  
by Eileen Hammer

### Volume 4-No. 4, February 1984

Characteristics of Travel in Six Major Attractors in the Southeastern Wisconsin Region  
by Jean M. Lusk, SEWRPC Planner, and  
John L. Zastrow, SEWRPC Senior Specialist

Shopping Centers: Characteristics of Travel-1963-1972  
by Jean M. Lusk, SEWRPC Planner, and  
John L. Zastrow, SEWRPC Senior Specialist

A Backward Glance: Historic Evolution of the Local Governmental  
Structure in Southeastern Wisconsin  
by Eileen Hammer

### Volume 4-No. 5, December 1989

Review and Analysis of Lake Michigan Water Levels at Milwaukee, Wisconsin  
by David P. Kendziora, 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.

## ANNUAL REPORTS

1961\*, 1962\*, 1963, 1964, 1965, 1966, 1967, 1968, 1969\*, 1970, 1971, 1972\*, 1973, 1974, 1975, 1976, 1977,  
1978\*, 1979\*, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, and 1991

## CONFERENCE PROCEEDINGS

1st Regional Planning Conference, December 6, 1961\*  
2nd Regional Planning Conference, November 4, 1962\*  
3rd Regional Planning Conference, November 20, 1963\*  
4th Regional Planning Conference, May 12, 1965\*  
5th Regional Planning Conference, October 26, 1965\*  
6th Regional Planning Conference, May 6, 1969  
7th Regional Planning Conference, January 19, 1972  
8th Regional Planning Conference, October 16, 1974  
Regional Conference on Sanitary Sewerage System User and  
Industrial Waste Treatment Recovery Charges, July 18, 1974  
9th Regional Planning Conference, April 14, 1976

## CONFERENCE PROCEEDINGS—continued

- 10th Regional Planning Conference, March 15, 1978
- 11th Regional Planning Conference, April 19, 1979
- 12th Regional Planning Conference, January 31, 1980
- 13th Regional Planning Conference, November 9, 1983
- 14th Regional Planning Conference, May 13, 1985
- 15th Regional Planning Conference, November 14, 1988
- 16th Regional Planning Conference, May 5, 1992

## NEWSLETTERS

Volumes 2-32

## TRANSPORTATION IMPROVEMENT PROGRAMS

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978-1982, December 1977\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979-1983, December 1978\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980-1984, December 1979\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981-1985, December 1980\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1982-1986, December 1981\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1983-1987, December 1982\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1984-1988, December 1983\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1986-1990, December 1985\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1987-1991, December 1986\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1988-1992, December 1987\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1989-1993, December 1988
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994, December 1989
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1991-1995, December 1990
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1992-1996, October 1991
- A Transportation Improvement Program for Southeastern Wisconsin: 1993-1998, December 1992

## OTHER

Twenty-Five Years of Regional Planning, December 1985

\*Out of print.



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

August 24, 1993

Independent Auditor's Report

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

We have audited the accompanying general purpose financial statements of the Southeastern Wisconsin Regional Planning Commission, as of December 31, 1992, and for the year then ended. The information included in these statements are the responsibility of the Southeastern Wisconsin Regional Planning Commission's management. Our responsibility is to express an opinion on these general purpose financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that the audit be planned and performed to provide reasonable assurance that the general purpose financial statements are free of material misstatement. The audit included examining, on a test basis, evidence supporting the amounts and disclosures in the general purpose financial statements. The audit also included assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall general purpose financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the financial position of the Southeastern Wisconsin Regional Planning Commission, as of December 31, 1992, and the results of its operations for the year then ended in conformity with generally accepted accounting principles.



VICTOR L. YOUNG, S.C.

Southeastern Wisconsin Regional Planning Commission

Combined Balance Sheet - All Fund Types and Account Groups

December 31, 1992

<u>Assets</u>	<u>Governmental Fund Types</u>		<u>Account Groups</u>	<u>Totals</u>		
	<u>General</u>	<u>Special Revenue</u>		<u>(Memorandum Only)</u>	<u>1991</u>	
				<u>1992</u>		
Treasurer's cash	\$ 702,062.45	\$	\$	\$ 702,062.45	\$ 725,174.12	
Due from service agreements					82,300.16	
Other receivable		621.32		621.32	1,058.00	
Grants receivable		394,021.03		394,021.03	341,418.86	
Contracts receivable	380,632.16	135,340.78		515,972.94	232,060.27	
Service agreements receivable	284,109.71			284,109.71	305,215.86	
Prepaid expense	32,954.82			32,954.82	19,357.50	
Fixed assets			1,266,501.89	1,266,501.89	1,089,180.59	
Due from/(to) other funds	490,283.29	(490,283.29)				
<b>Total Assets</b>	<b>\$ 1,890,042.43</b>	<b>\$ 39,699.84</b>	<b>\$ 1,266,501.89</b>	<b>\$ 3,196,244.16</b>	<b>\$ 2,795,765.36</b>	
 <u>Liabilities</u>						
State sales tax	\$ 633.16	\$	\$	\$ 633.16	\$ 587.58	
Accounts payable	286,761.08	39,699.84		326,460.92	184,624.50	
Vacation accrual	107,930.23			107,930.23	107,930.23	
<b>Total Liabilities</b>	<b>395,324.47</b>	<b>39,699.84</b>		<b>435,024.31</b>	<b>293,142.31</b>	
 <u>Fund Equity</u>						
Investment in fixed assets			1,266,501.89	1,266,501.89	1,089,180.59	
Fund balances - designated	883,195.00			883,195.00	883,195.00	
- undesignated	611,522.96			611,522.96	530,247.46	
<b>Total Fund Equity</b>	<b>1,494,717.96</b>		<b>1,266,501.89</b>	<b>2,761,219.85</b>	<b>2,502,623.05</b>	
<b>Total Liabilities and Fund Equity</b>	<b>\$ 1,890,042.43</b>	<b>\$ 39,699.84</b>	<b>\$ 1,266,501.89</b>	<b>\$ 3,196,244.16</b>	<b>\$ 2,795,765.36</b>	

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Statement of Revenues, Expenditures and Changes in Fund Balance - All Governmental Fund Types

For the Year Ended December 31, 1992

	<u>Governmental Fund Types</u>		<u>Total</u>	
	<u>General</u>	<u>Special Revenue</u>	<u>(Memorandum Only)</u>	<u>1991</u>
				<u>1991</u>
<b>Revenues</b>				
Contributions from counties	\$ 1,267,640.00	\$ 2,209,403.86	\$ 1,267,640.00	\$ 1,174,150.00
Grant revenues			2,209,403.86	2,001,215.74
Contract revenues	708,123.57	810,527.26	1,518,650.83	1,565,448.21
Service grants	859,966.61		859,966.61	271,779.85
Interest on invested funds	56,714.64		56,714.64	83,090.29
Other income	151,102.14	2,844.30	153,946.44	342,762.64
<b>Total Revenues</b>	<b>3,043,546.96</b>	<b>3,022,775.42</b>	<b>6,066,322.38</b>	<b>5,438,446.73</b>
 <b>Expenditures</b>				
Salaries and fringe benefits	1,824,691.12	1,849,932.02	3,674,623.14	3,175,004.44
Office and other expenses	425,668.53	459,806.58	885,475.11	1,049,436.86
Technical consultants	37,299.07	43,450.88	80,749.95	63,816.39
Office supplies	29,107.57	24,789.92	53,897.49	55,730.31
Insurance, audit, legal fees	14,442.55	13,093.68	27,536.23	21,864.52
Library acquisition and dues	80,098.93	96,437.89	176,536.82	199,990.86
Reprographics and publication	10,417.46	12,049.32	22,466.78	6,615.81
Newsletter	7,946.16	51,151.70	59,097.86	69,003.98
Postage expense	51,389.64	23,224.17	74,613.81	140,031.92
Travel expense	11,937.97	14,116.59	26,054.56	73,653.40
Telephone expense	61,151.01	70,729.99	131,881.00	120,130.80
Rent	175,788.88	225,383.63	401,172.51	609,489.68
Computer graphics hardware and maintenance	734.38	849.42	1,583.80	6,681.10
Annual report	3,566.11	17,555.12	21,121.23	35,776.99
Other operating expenses	310.96	14,442.54	14,753.50	
Unemployment compensation expense	100,227.66	20,420.55	120,648.21	25,369.50
Auto/office equipment maintenance	206,635.40		206,635.40	88,718.44
Capital outlay	2,874.59	3,324.89	6,199.48	
Regional conference				
<b>Total Expenditures</b>	<b>3,044,287.99</b>	<b>2,940,758.89</b>	<b>5,985,046.88</b>	<b>5,741,315.00</b>
 <b>Excess (Deficit) Revenues Over Expenditures</b>	<b>(741.03)</b>	<b>82,016.53</b>	<b>81,275.50</b>	<b>(302,868.27)</b>
 <b>Operating Transfers in (out)</b>	<b>82,016.53</b>	<b>(82,016.53)</b>		
 <b>Fund Balance - beginning of year</b>	<b>1,413,442.46</b>	<b>-</b>	<b>1,413,442.46</b>	<b>1,716,310.73</b>
 <b>Fund Balance - end of year</b>	<b>\$ 1,494,717.96</b>	<b>\$ -</b>	<b>\$ 1,494,717.96</b>	<b>\$ 1,413,442.46</b>

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, 1992

	<u>Budget</u>	<u>Actual</u>	<u>Variance</u>
			<u>Favorable</u> <u>(Unfavorable)</u>
<b>Revenues</b>			
Contributions from counties	\$ 1,267,640.00	\$ 1,267,640.00	\$ 586,728.86
Grant revenues	1,622,675.00	2,209,403.86	1,513,650.83
Contract revenues	5,000.00	1,518,650.83	82,081.61
Service grants	777,885.00	859,966.61	56,714.64
Interest on invested funds		56,714.64	
Other income		153,946.44	153,946.44
<b>Total Revenues</b>	<b>3,673,200.00</b>	<b>6,066,322.38</b>	<b>2,393,122.38</b>
<b>Expenditures</b>			
Salaries and fringe benefits	2,989,700.00	3,674,623.14	(684,923.14)
Office and other expenses			
Technical consultants	75,000.00	885,475.11	(810,475.11)
Office supplies	42,500.00	80,749.95	(38,249.95)
Insurance, audit, legal fees	37,300.00	53,897.49	(16,597.49)
Library acquisition and dues	20,000.00	27,536.23	(7,536.23)
Reprographics and publication	155,000.00	176,536.82	(21,536.82)
Newsletter	5,700.00	22,466.78	(16,766.78)
Postage expense	19,000.00	59,097.86	(40,097.86)
Travel expense	39,260.00	74,613.81	(35,353.81)
Telephone expense	16,000.00	26,054.56	(10,054.56)
Rent	114,450.00	131,881.00	(17,431.00)
Computer graphics hardware and maintenance	35,000.00	401,172.51	(366,172.51)
Annual report	1,000.00	1,583.80	(583.80)
Other operating expenses	7,000.00	21,121.23	(14,121.23)
Unemployment compensation expense	4,500.00	14,753.50	(10,253.50)
Auto/office equipment/maintenance	78,790.00	120,648.21	(41,858.21)
Capital outlay	30,000.00	206,635.40	(176,635.40)
Regional conference	3,000.00	6,199.48	(3,199.48)
<b>Total Expenditures</b>	<b>3,673,200.00</b>	<b>5,985,046.88</b>	<b>(2,311,846.88)</b>
<b>Excess Revenues Over Expenditures</b>		<b>81,275.50</b>	<b>81,275.50</b>
<b>Fund Balance - beginning of year</b>	<b>-</b>	<b>1,413,442.46</b>	<b>-</b>
<b>Fund Balance - end of year</b>	<b>\$ -</b>	<b>\$ 1,494,717.96</b>	<b>\$ -</b>

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

Southeastern Wisconsin Regional Planning Commission

Combined Notes to Financial Statements

For the Year Ended December 31, 1992

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 by the Governmental Accounting Standards Board to determine the scope of the Commission's reporting entity. The accompanying financial statements reflect all significant operations of the Commission which are under control of the Commissioners of Southeastern Wisconsin Regional Planning Commission.

Basis of Presentation

Southeastern Wisconsin Regional Planning Commission is a public agency serving the local communities within the counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha.

The accounts of the Commission are organized on the basis of funds and account groups, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures. Government resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled. The following funds and account groups are used by the Commission:

Governmental Funds

General Fund - The General Fund is the general operating fund of the Commission. It is used to account for all financial resources except those required to be accounted for in another fund.

Special Revenue 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, 1992

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 Commission's annual budget is prepared principally on the cash basis and represents departmental appropriations as authorized and any authorized revisions during the year to reflect changes in programs and activities. The budget cash basis differs from generally accepted accounting principles (GAAP). Actual amounts in the accompanying budgetary comparison statement are presented on the modified accrual basis.

Cash and Cash Equivalents

In addition to bank accounts and petty cash, this classification includes all short-term investments.

Basis of Accounting

The modified accrual basis of accounting is followed by the governmental funds. Under the modified accrual basis those items of revenue for which a valid receivable can be determined in advance of their due date should be recognized on the accrual basis. All other items are recognized on the cash basis because the time of collection generally coincides with the determination of the amount. Expenditures are recognized when a liability to be met from fund assets is incurred.

Fixed Assets

Governmental general fixed assets acquired during the year ended December 31, 1992 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, 1992

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:

	<u>1992</u>	<u>1991</u>
Desks	\$ 19,533.23	\$ 14,205.60
Chairs	24,424.88	23,021.98
Calculators and adding machines	13,638.97	13,588.90
Filing cabinets	43,195.83	41,693.43
Typewriters	22,815.77	22,078.77
Book cases	21,868.95	19,847.78
Tables	33,513.22	29,536.17
Data processing equipment	785,798.28	657,966.94
Major equipment	151,508.42	118,057.42
Automobiles	98,955.00	108,502.10
Miscellaneous	51,249.34	40,681.50
	<b>\$1,266,501.89</b>	<b>\$1,089,180.59</b>

Southeastern Wisconsin Regional Planning Commission  
Combined Notes to the Financial Statements  
For the Year Ended December 31, 1992

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 1992 were \$282,622.60.

All employees expected to work over 600 hours a year are eligible to participate in the Wisconsin Retirement System. Covered employees are required by statute to contribute 6.2% of their salary to the plan. Employers may make these contributions to the plan on behalf of the employees. Employers are required to contribute the remaining amounts necessary to pay the projected cost of future benefits. The total contributions for the year ending December 31, 1992 was \$282,622.60. This amount was paid by Southeastern Wisconsin Regional Planning Commission.

Employees who retire at or after age 65, are entitled to receive an unreduced retirement benefit. The benefit is calculated as 1.6% of final average earnings for each year of creditable service. Final average earnings is the average of the employee's three highest years' earnings. Employees may retire at age 55 and receive reduced benefits. Employees terminating covered employment before becoming eligible for a retirement benefit may withdraw their contributions and forfeit all rights to any subsequent benefit. Benefits are fully vested upon entry into the Wisconsin Retirement System.

The Wisconsin Retirement System also provides death and disability benefits for employees. Eligibility for and the amount of all benefits is determined under Chapter 40 of the Wisconsin Statutes.

Wisconsin Act 13, Laws of 1989, effective May 16, 1989, made significant benefit changes in participant requirements, interest crediting, early retirement actuarial reduction, asset valuation, vesting requirements and actuarial assumptions. Some of these changes were not effective until 1990.

The System utilizes the "Entry Age Normal with Frozen Initial Liability" actuarial method in establishing employer contribution rates. Under this method the Unfunded Accrued Actuarial Liability is affected only by the monthly amortization payments, compound interest, the added liability created by new employer units, and any added liabilities caused by changes in benefit provisions.

Southeastern Wisconsin Regional Planning Commission  
Combined Notes to the Financial Statements  
For the Year Ended December 31, 1992

Note 3 Employee Retirement Plan (Cont'd)

All actuarial gains or losses arising from the difference between actual and assumed experience are reflected in the determination of the normal costs. The unfunded accrued actuarial liability is being amortized over a 40-year period beginning January 1, 1990. The unfunded liability for Southeastern Wisconsin Regional Planning Commission as of December 31, 1992 was \$587,039.23 or .030% of the total system's unfunded liability of \$1.98 billion.

The "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date and disregarding the Wisconsin Retirement System funding objective of maintaining stable contribution rates over the long-term future. The measure, which is the actuarial present value of credited projected benefits, is intended to help users assess the Wisconsin Retirement System's funding status on a going concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and measurements of assets and pension benefit obligation of individual employers. The Wisconsin Retirement System does not make separate measurements of assets and pension benefit obligation for individual employers. The pension benefit obligations as of December 31, 1992 for the Wisconsin Retirement System as a whole, determined through an actuarial valuation performed as of that date, was \$20,818.0 million. The Wisconsin Retirement System's net assets available for benefits on that date were \$22,943.2 million, leaving assets in excess of pension benefit obligation of \$125.2 million.

Ten year historical trend information showing the Wisconsin Retirement System's progress in accumulating sufficient assets to pay benefits when due is presented in the Wisconsin Retirement System's June 30, 1993 Comprehensive Annual Financial Report.

Southeastern Wisconsin Regional Planning Commission  
Combined Notes to the Financial Statements  
For the Year Ended December 31, 1992

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	\$ 79,464.08
Temporary cash investments	<u>622,598.37</u>
<b>Total</b>	<b><u>\$ 702,062.45</u></b>

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, 1994. The Commission has the option of renewing the lease for two successive periods of three years each. The minimum lease payments are as follows:

1993	\$ 135,739.00
1994	\$ 135,739.00

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	100,000.00
Computer Graphics Reserve Account	350,000.00
Stream Gaging	13,195.00
Office Computer Reserve Account	<u>320,000.00</u>
	<b><u>\$ 883,195.00</u></b>





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