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# 1979 ANNUAL REPORT

SEP 25 1980

Graduate Research Center  
Dept. of Urban & Regional Planning  
The University of Wisconsin  
Old Music Hall, 925 Lathrop Dr.  
Madison, Wisconsin 53706



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Lyman F. Wible, P.E. . . . . Chief Environmental Engineer  
Kenneth R. Yunker, P.E. . . . . Chief Special Projects Engineer

## **NINETEENTH ANNUAL REPORT**

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

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July 1980

Inside Region \$2.00  
Outside Region \$4.00





# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

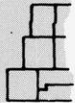
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July 31, 1980

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

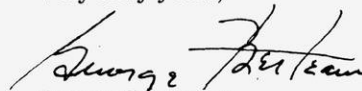
In accordance with the requirements of Section 66.945(8)(b) of the Wisconsin Statutes, the Commission each calendar year prepares, publishes, and certifies an annual report to the State Legislature of Wisconsin and to the legislative bodies of the constituent county and local units of government within the Region. This, the 19th annual report of the Commission, summarizes the accomplishments of the Commission for the calendar year 1979 and contains a statement of financial position of the Commission certified by an independent auditor.

The Commission annual report is intended to serve a number of functions in addition to meeting the specific legislative requirement noted above. As the publication documenting activities conducted during the year under the continuing regional land use-transportation study, it serves as an annual report to the federal and state Departments of Transportation. In addition, the annual report is intended to meet certain requirements of the U. S. Department of Housing and Urban Development, including a yearly account of progress and planning for the resolution of housing problems in the Region. Most importantly, however, the Commission annual report is intended to provide state, county, and local public officials and interested citizens with a comprehensive overview of current and proposed Commission activities and thereby to provide a focal point for participation in regional plan preparation and implementation. Consequently, the Commission annual report is lengthy in comparison to the annual reports of other planning agencies in the State and nation, being intended to serve as a permanent reference document concerning the activities of the Commission.

During 1979 the Commission adopted two new major regional plan elements: a comprehensive plan for the Kinnickinnic River watershed and the areawide water quality management plan. While both of these plan elements contain important recommendations, the areawide water quality management plan is particularly significant in that it, by virtue of federal and state law, becomes the basis for the making of decisions concerning sanitary sewerage system development in the Region. In the transportation planning area, the Commission began two major studies. The Milwaukee Northwest Side/Ozaukee County transportation improvement study, when completed, will result in recommendations for both highway and transit improvements in that subarea of the Region that previously was proposed to be served by the Park Freeway-West and the Stadium Freeway-North, two freeways removed from the adopted regional transportation plan by the Commission in 1978. The Milwaukee area primary transit system alternatives analysis study will involve a reexamination and redetermination of the best way in which to provide rapid transit service in the Region, including consideration of the reestablishment of commuter rail and light rail streetcar systems in the Region. Progress was also made during the year toward completion of the regional air quality management plan.

The Commission believes that significant progress has been made in gathering and maintaining in current form the planning and engineering data required to make sound areawide development decisions within the Region, some of which are included in this annual report; in cooperatively preparing and adopting key elements of the comprehensive plan for the development of the Region; and in working toward the implementation of those plan elements in order to create a better environment for working and living within the Region. The progress achieved to date reflects the strong commitment in southeastern Wisconsin to a voluntary system of cooperative, areawide, intergovernmental planning.

Very truly yours,

  
George C. Berteau  
Chairman





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# ABOUT THE COMMISSION

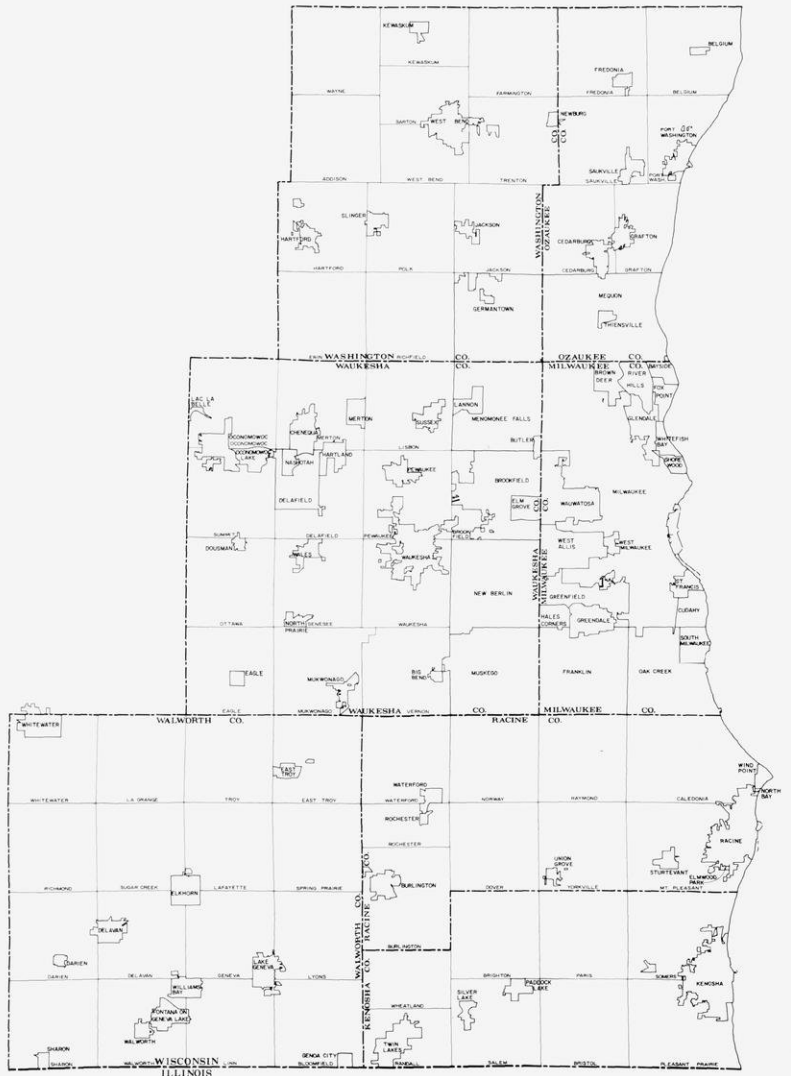
## AUTHORITY

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 rapidly urbanizing southeastern region of the State. The Commission was created to provide the basic information and planning services necessary to solve problems which transcend the corporate boundaries and fiscal capabilities of the local units of government comprising the Region.

## AREA SERVED

The Commission serves a Region consisting of the seven counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha. These seven counties have an area of about 2,689 square miles, or about 5 percent of the total area of the State. These counties, however, have a resident population of 1.78 million persons, or about 38 percent of the total population of the State. The seven counties provide about 877,300 jobs, or about 39 percent of the total employment

## THE SOUTHEASTERN WISCONSIN REGION





of the State, and contain real property worth about \$37.1 billion as measured in equalized valuation, or about 38 percent of all the tangible wealth of the State as measured by such valuation. There are 154 general-purpose local units of government in the seven-county Region, of which all but two—the Town of Vernon in Waukesha County and the Town of Saukville in Ozaukee County—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, sewerage and water supply, and park and open space facilities. A regional basis is also essential to provide a sound approach to the resolution of such environmental problems as flooding, air and water pollution, natural resource base deterioration, and changing land use.

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

OLD COURTHOUSE  
COMMISSION OFFICES  
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 the state enabling legislation. While

the scope and content of these plans can extend to all phases of regional development, the Commission believes that emphasis should be placed on the preparation of plans for land use and supporting transportation, utility, and community facilities. The third function involves the provision of a center for the coordination of day-to-day planning and plan implementation activities of all of the units and levels of government operating within the Region. Through this function, the Commission seeks to integrate regional and local plans and planning efforts and thereby to promote regional plan implementation.

## ORGANIZATION

The Commission consists of 21 members, three from each of the seven member counties, who serve without pay. One Commissioner from each county is appointed by the county board and is an elected county board supervisor. The remaining two from each county are appointed by the Governor, one from a list prepared by the county board.

The full Commission meets at least four times a year and is responsible for establishing overall policy, adopting the annual budget, and adopting regional plan elements. The Commission has four standing committees—Executive, Administrative, Planning and Research, and Intergovernmental and Public Relations. The Executive Committee meets monthly to oversee the work effort of the Commission and is empowered to act for the Commission in all matters except the adoption of the budget and the adoption of the regional plan elements. The Administrative Committee meets monthly to oversee the routine but essential housekeeping activities of the Commission. The Planning and Research Committee meets at least monthly and reviews all of the technical work carried out by the Commission staff and its consultants. The Intergovernmental and Public Relations Committee serves as the Commission's principal arm in the communication process with the constituent county boards. The Committee meets as necessary to consider intergovernmental problems. The Commission and committee rosters are set forth in Appendix A.

The Commission is assisted in its work by 39 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 876 persons, is set forth in Appendix B.

## STAFFING

The Commission prepares an annual work program which is reviewed and approved by federal and state funding agencies. This work program is then carried out by a core staff of full-time professional, technical, administrative, and clerical personnel, supplemented by additional temporary staff and consultants as required by the various work programs underway. At the end of 1979, the staff totaled 130, including 109 full-time and 21 part-time employees. One staff member from the University of Wisconsin-Extension was assigned to the Commission during the year.

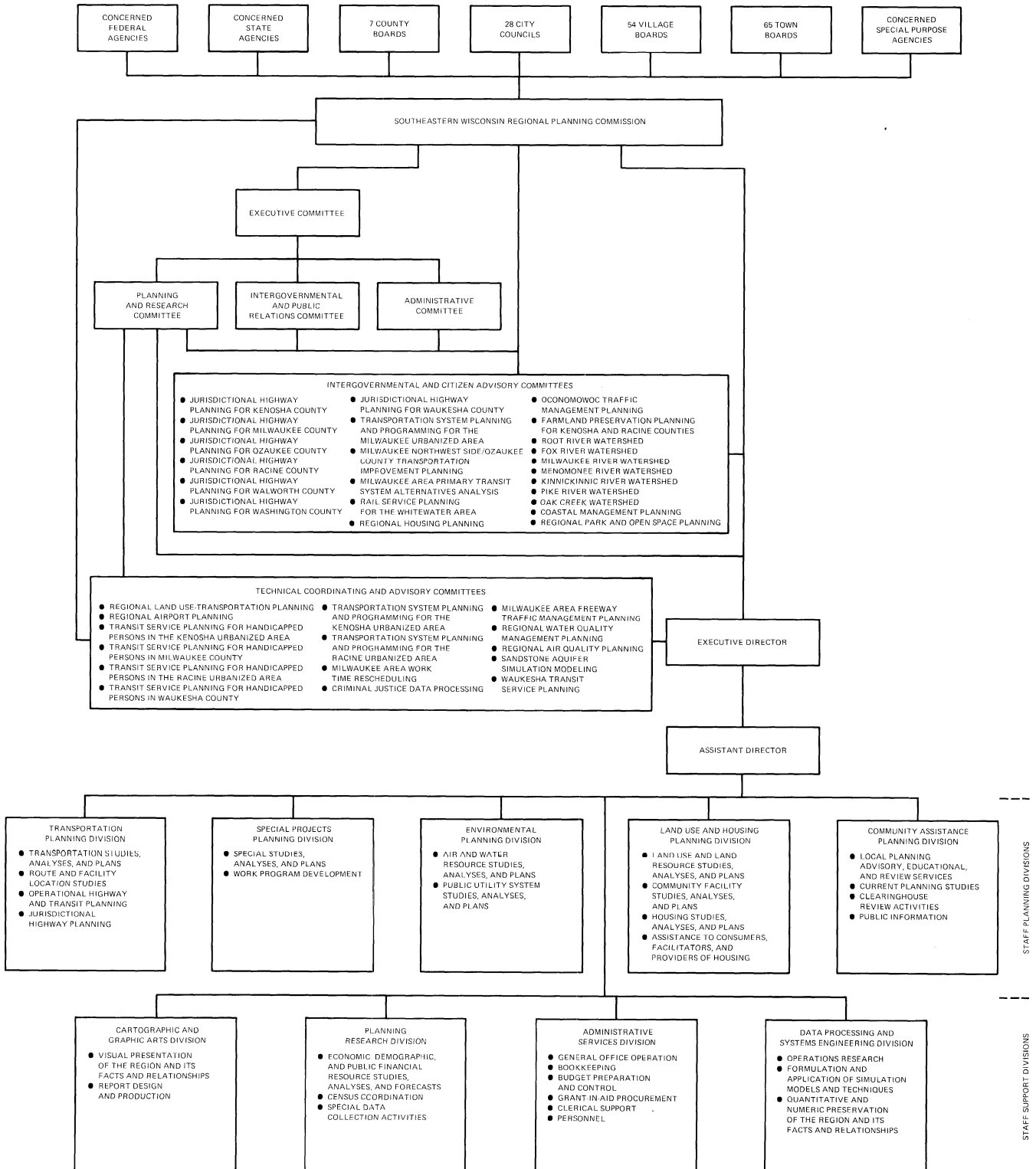
As shown in the figure on page 4, the Commission is organized into nine divisions. Five of these divisions—Transportation Planning, Environmental Planning, Land Use and Housing Planning, Community Assistance Planning, and Special Projects Planning—have direct responsibility for the conduct of the Commission's major planning programs. The remaining four divisions—Planning Research, Administrative Services, Data Processing and Systems Engineering, and Cartographic and Graphic Arts—provide day-to-day support of the five planning divisions.

## FUNDING

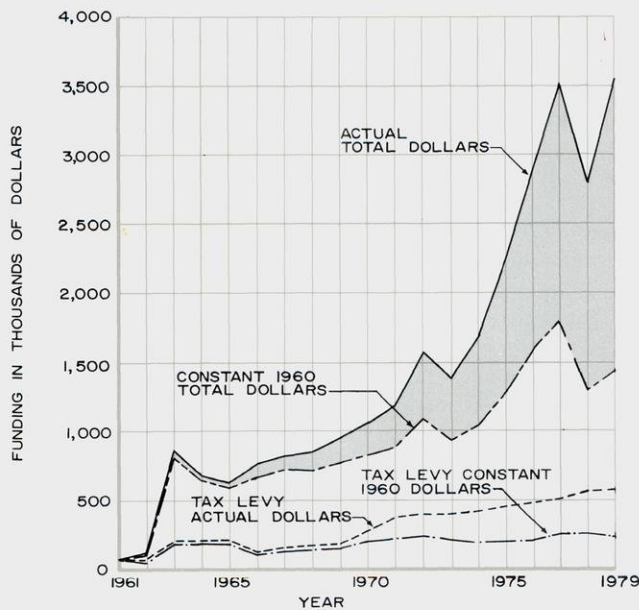
Basic financial support for the Commission's work program is provided by county tax levies apportioned on the basis of equalized valuation. These basic funds are heavily supplemented by state and federal aids. Revenues received by the Commission during 1979 totaled about \$3.5 million. County tax levies in 1979 totaled \$584,121, or about \$0.33 per capita. The sources of this revenue for 1979 and the trend in funding since the inception of the Commission in 1960 are shown in the accompanying figures. It may be seen from the first of these figures that there has been little change in the tax levy for regional planning since 1963, when that levy is expressed in constant 1960 dollars.

The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1979 is set forth in full in Appendix E. In addition to the Com-

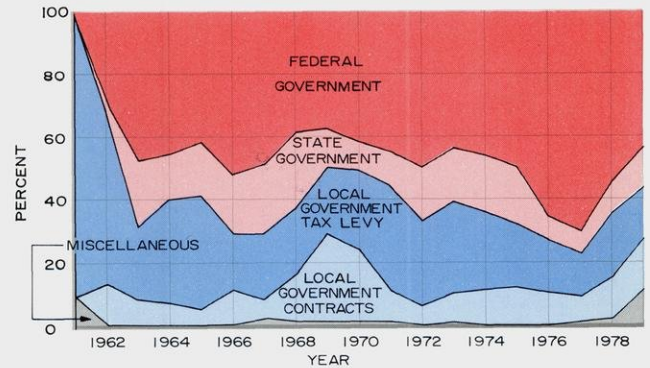
# SEWRPC ORGANIZATIONAL STRUCTURE



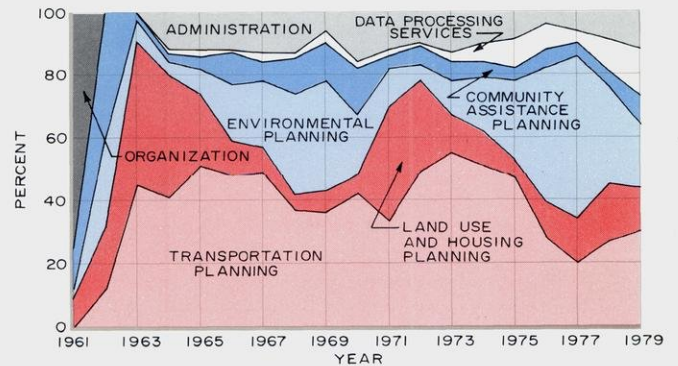
## FUNDING TREND : 1961-1979



## SOURCE OF REVENUES TREND : 1961-1979



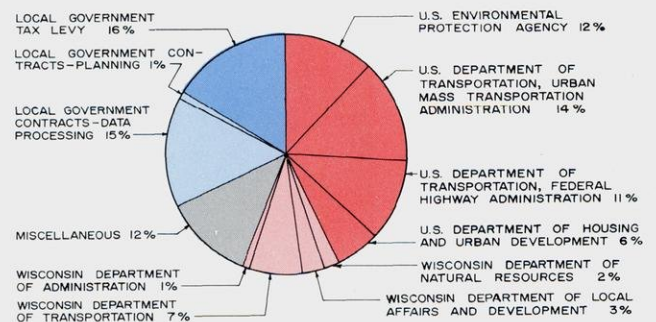
## EXPENDITURES TREND : 1961-1979



## REVENUES AND EXPENDITURES

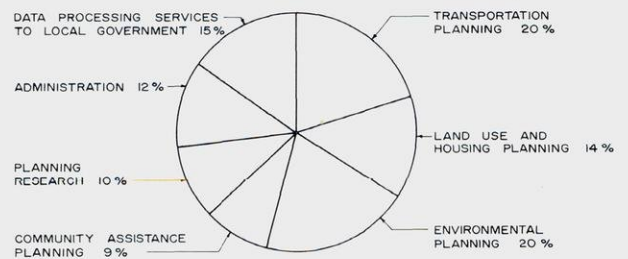
### REVENUES

Federal Government . . . . .	\$1,506,392	43%
State Government . . . . .	456,823	13%
Local Government Tax Levy . . . . .	584,121	16%
Local Government Contracts . . . . .	571,403	16%
Miscellaneous . . . . .	432,733	12%
<b>Total</b>	<b>3,551,472</b>	<b>100%</b>



### EXPENDITURES

Transportation Planning . . . . .	\$ 727,184	20%
Land Use and Housing Planning . . . . .	484,789	14%
Planning Research . . . . .	363,592	10%
Environmental Planning . . . . .	696,885	20%
Community Assistance Planning . . . . .	333,293	9%
Data Processing Services to Local Governments . . . . .	518,000	15%
Administration . . . . .	427,729	12%
<b>Total</b>	<b>3,551,472</b>	<b>100%</b>



## 1979 MEETINGS

### COMMISSION AND ADVISORY COMMITTEE MEETINGS

Full Commission . . . . .	5	Planning for Handicapped Persons	
Executive Committee . . . . .	10	Kenosha Urbanized Area . . . . .	0
Administrative Committee . . . . .	11	Milwaukee County . . . . .	0
Planning and Research Committee . . . . .	7	Racine Urbanized Area . . . . .	0
Intergovernmental and Public		Waukesha County . . . . .	0
Relations Committee . . . . .	1	Technical Coordinating and Advisory	
Technical Coordinating and		Committee on Farmland Preservation	
Advisory Committee on Regional		for Kenosha and Racine Counties . . . . .	4
Land Use-Transportation Planning		Watershed Committees	
Land Use Subcommittee . . . . .	0	Root River . . . . .	1
Highway Subcommittee . . . . .	0	Fox River . . . . .	0
Transit Subcommittee . . . . .	0	Milwaukee River . . . . .	0
Socioeconomic Subcommittee . . . . .	1	Menomonee River . . . . .	0
Utility Subcommittee . . . . .	0	Kinnickinnic River . . . . .	0
Natural and Recreation-Related		Pike River . . . . .	3
Resources Subcommittee . . . . .	0	Oak Creek . . . . .	2
Traffic Studies, Models, and		Technical Coordinating and Advisory	
Operations Subcommittee . . . . .	0	Committee on Sandstone Aquifer	
Technical Coordinating and Advisory		Simulation Modeling . . . . .	0
Committee on Regional Airport Planning . .	0	Technical Advisory Committee	
Technical and Intergovernmental		on Areawide Water Quality	
Coordinating and Advisory Committees on		Management Planning . . . . .	2
Jurisdictional Highway System Planning		Citizens Advisory Panel for Public	
Kenosha County . . . . .	0	Participation on Areawide Water	
Milwaukee County . . . . .	0	Quality Management Planning . . . . .	1
Ozaukee County . . . . .	1	Technical Coordinating and	
Racine County . . . . .	0	Advisory Committee on Regional	
Walworth County . . . . .	0	Air Quality Planning . . . . .	4
Washington County . . . . .	0	Technical and Citizen Advisory	
Waukesha County . . . . .	0	Committee on Coastal Management	
Intergovernmental Coordinating and		in Southeastern Wisconsin . . . . .	0
Advisory Committees on Transportation		Technical and Citizen Advisory	
System Planning and Programming		Committee on Regional Park	
Kenosha Urbanized Area . . . . .	1	and Open Space Planning . . . . .	0
Milwaukee Urbanized Area . . . . .	2	Technical and Citizen Advisory Committee	
Racine Urbanized Area . . . . .	1	on Regional Housing Studies . . . . .	0
Milwaukee Northwest Side/Ozaukee		Technical Coordinating and Advisory	
County Transportation Improvement		Committee on Electronic Data	
Study Citizens Intergovernmental		Transmittal Systems for Criminal	
and Technical Coordinating and		Justice Agencies in Southeastern	
Advisory Committee . . . . .	4	Wisconsin . . . . .	4
Milwaukee Area Primary Transit		STAFF TECHNICAL MEETINGS	
System Alternatives Analysis Citizens		Executive Director . . . . .	339
Intergovernmental and Technical		Assistant Directors . . . . .	248
Coordinating and Advisory Committee . . .	3	Administrative Services Division . . . . .	7
Milwaukee Area Work Time Rescheduling		Cartographic and Graphic Arts Division . . .	16
Study Advisory Committee . . . . .	2	Community Assistance Planning Division . . .	216
Milwaukee Area Freeway Traffic		Environmental Planning Division . . . . .	306
Management System Study		Land Use and Housing Planning Division . . .	322
Prospectus Steering Committee . . . . .	1	Planning Research Division . . . . .	77
Technical Coordinating and Advisory		Transportation Planning Division . . . . .	83
Committee on Rail Service Planning		STAFF SPEAKING ENGAGEMENTS	
in the Whitewater Area . . . . .	3	Executive Director . . . . .	27
Citizens and Technical Advisory		Assistant Director . . . . .	46
Committee for the City of Oconomowoc		Administrative Services Division . . . . .	4
Traffic Management Study . . . . .	6	Community Assistance Planning Division . . .	3
Waukesha Mass Transit Citizens and		Environmental Planning Division . . . . .	54
Technical Coordinating and		Land Use and Housing Planning Division . . .	32
Advisory Committee . . . . .	6	Planning Research Division . . . . .	6
Citizens and Technical Advisory		Transportation Planning Division . . . . .	3
Committees on Transit Service			



mission's own audit, the federal and state funding agencies perform periodic independent audits of projects to which they contribute financial support.

## 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 to thereby promote sound community development properly coordinated on a regionwide basis. The guides discuss basic planning and plan implementation principles, contain examples of good planning practice, and provide local governments with model ordinances and forms to assist them in their everyday planning efforts.

The third type of report in the series is the technical report. Technical reports are intended to make available to various public and private agencies within the Region valuable information assembled by the Commission staff during the course of its planning work on a work progress basis. Technical reports document the findings of such important basic inventories as detailed soil

surveys, stream water quality surveys, potential park and open space site inventories, and horizontal and vertical control surveys.

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

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

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

The seventh type of report in the series is the annual report. The annual report has served an increasing number of functions over the period of the Commission's existence. Originally, and most importantly, the Commission's annual report was, and still is, intended to satisfy a very sound legislative requirement that a regional planning commission each calendar year prepare, publish,

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

In addition to the seven basic types of reports described above, the Commission documents its work in certain miscellaneous publications, includ-

ing the bimonthly newsletter, regional planning conference proceedings, study designs, public hearing and public informational meeting minutes, transportation improvement programs, and internal staff memoranda.

While many of the Commission's publications are relatively long and are, necessarily, written in 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 with respect to 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

As already noted, 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 this land use plan comprises the most basic regional plan element, an element on which all other elements are based. The Commission believes the importance of securing agreement upon areawide development plans through the formal adoption of such plans not only by the Commission but also by county and local units of government and state agencies cannot be overemphasized.

The Commission has placed great emphasis upon the preparation of a comprehensive plan for the physical development of the Region in the belief that such a plan is essential if land use development is to be properly coordinated with the development of supporting transportation, utility, and community facility systems; if the development of each of these individual functional systems is to be coordinated with the development of the others; if serious and costly environmental and developmental problems are to be minimized; and if a more healthful, attractive, and efficient regional settlement pattern is to be evolved. Under the Commission's approach, the preparation, adoption, and use of the comprehensive plan are considered to be the primary objectives of the planning

process; and all planning and plan implementation techniques are based upon, or related to, the comprehensive plan.

\*The validity of the concept of the comprehensive plan has been questioned in recent years and its application, in fact, opposed by some segments of the planning profession. The Commission believes, however, that the comprehensive plan remains a viable and valid concept, a concept essential to coping with the developmental and environmental problems generated by areawide urbanization. The comprehensive plan not only provides the necessary framework for coordinating and guiding growth and development within a multijurisdictional urbanizing region having essentially a single community of interest, but provides the best conceptual basis available for the application of systems engineering skills to the growing problems of such a region. This is because systems engineering basically must focus upon a design of physical systems. It seeks to achieve good design by setting good objectives; determining the ability of alternative plans to meet these objectives through quantitative analyses; cultivating interdisciplinary team activity; and considering all of the relationships involved both within the system being designed and between the system and its environment.

## ADOPTED PLAN ELEMENTS—1979

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

By the end of 1979, the adopted regional plan consisted of 20 individual plan elements. These plan elements are identified in the accompanying table. 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.

# THE ADOPTED REGIONAL PLAN—1979

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. 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>	December 19, 1977
	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 Recreation Plan	Community Assistance Planning Report No. 23, <u>A Park and Recreation Plan for Ozaukee County</u>	September 14, 1978
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
	Racine Area Transit Development Plan	Community Assistance Planning Report No. 3, <u>Racine Area Transit Development Program: 1975-1979</u>	September 12, 1974
	Regional Airport System Plan	Planning Report No. 21, <u>A Regional Airport System Plan for Southeastern Wisconsin</u>	March 4, 1976
	Kenosha Area Transit Development Plan	Community Assistance Planning Report No. 7, <u>Kenosha Area Transit Development Program: 1976-1980</u>	June 3, 1976
	Transportation Systems Management Plan	Community Assistance Planning Report No. 34, <u>A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980</u>	December 6, 1979
	Elderly-Handicapped Transportation Plan	Planning Report No. 31, <u>A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982</u>	April 13, 1978
	Amendment—Racine Area	SEWRPC Resolution No. 78-17	December 7, 1978
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>	June 4, 1970
	Amendment—Water Pollution Control Time Schedule	<u>Amendment to the Comprehensive Plan for the Fox River Watershed</u>	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

## THE ADOPTED REGIONAL PLAN—1979

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	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
	Regional Sanitary Sewerage System Plan	Planning Report No. 16, <u>A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin</u>	May 13, 1974
	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>	January 20, 1977
	Wastewater Sludge Management Plan	Planning Report No. 29, <u>A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin</u>	September 14, 1978
	Kinnickinnic River Watershed 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. 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
Community Assistance Planning	Kenosha Planning District Comprehensive Plan	Planning Report No. 10, <u>A Comprehensive Plan for the Kenosha Planning District, Volumes One and Two</u>	June 1, 1972
	Racine Urban Planning District Comprehensive Plan	Planning Report No. 14, <u>A Comprehensive Plan for the Racine Urban Planning District, Volume One, Inventory Findings and Forecasts; Volume Two, The Recommended Comprehensive Plan; Volume Three, Model Plan Implementation Ordinances</u>	June 5, 1975

<sup>a</sup> The regional land use plan represents a second generation plan. The initial regional land use plan was adopted by the Commission on December 1, 1966, and documented in SEWRPC Planning Report No. 7, Regional Land Use-Transportation Study, Volume Three, Recommended Regional Land Use and Transportation Plans—1990.

<sup>b</sup> The regional transportation plan represents 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, Regional 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.

Six of the plan elements relate to transportation. These consist of the regional transportation plan (highway and transit), the regional airport system plan, the transportation systems management plan, the elderly and handicapped transportation plan, and detailed transit development plans for the Kenosha and Racine urbanized areas.

Eight of the adopted plan elements fall within the broad functional area of environmental planning. These consist of the regional sanitary sewerage system plan, the regional water quality management plan, the regional wastewater sludge management plan, and comprehensive watershed development plans for the Root, Fox, Milwaukee, Menomonee, and Kinnickinnic River watersheds. The regional water quality management plan and the Kinnickinnic River watershed plan were completed and adopted in 1979.

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

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

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

By the end of 1979, the second cycle of areawide systems planning for land use, transportation, and water quality management programs had been completed. The resultant plans represent "second

generation" plans for the Region incorporating the "feedback" from the intensive project and facilities planning efforts completed by local agencies after, and in implementation of, the first generation area-wide system plans.

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

The new regional transportation plan differs in some important respects from the first generation regional transportation plan, reflecting decisions made during the project planning phase of the first cycle of planning. For example, planned freeway segments—the Park Freeway-West in its entirety and the Stadium Freeway-North in its entirety, the Bay Freeway from Pewaukee to Whitefish Bay, the Metropolitan Belt Freeway in its entirety, and the Racine Loop Freeway—as well as one major transit proposal—the exclusive freeway in the East-West travel corridor of Milwaukee County—were deleted from the new 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 beginning of 1980, the Commission had underway several major planning programs designed to prepare new regional plan elements or to refine, detail, and amend existing adopted plan elements. New regional plan elements were to be provided by the regional air quality planning program, with completion and plan adoption scheduled for mid-1980, and the Pike River watershed study, with completion and plan adoption scheduled for mid-1981. Other major studies underway include county level agricultural land preservation plans for Kenosha and Racine Counties, designed to refine and detail the regional land use plan; the Milwaukee Northwest Side/Ozaukee County transportation improvement study and the Milwaukee area primary transit alternatives study, both designed to refine and detail and possibly amend the regional transportation plan; a transit development program for the Waukesha area, also designed to refine and detail the regional transportation plan; a nonpoint source water pollution abatement plan for the Root River watershed, designed to refine and detail the regional water quality management plan; a work time rescheduling study,

designed to investigate the potential for reducing peak travel demand by rescheduling work hours in the Milwaukee area and to refine and detail the regional transportation plan; and transit operator "transition" plans, designed to meet new federal guidelines on nondiscrimination in public transit systems on the basis of handicap and to refine, detail, and possibly amend the regional elderly and handicapped transportation plan.

#### **POSSIBLE FUTURE WORK PROGRAMS**

The Commission is committed to carrying out a series of continuing planning efforts designed to ensure that the already adopted plan elements are kept up to date. In addition, the Commission follows an established policy of preparing prospectuses prior to the undertaking of any new major regional or subregional planning programs. By the end of 1979 the Commission had prepared such prospectuses for three major studies: a study of the flooding and drainage problems of the Pike River watershed, a study of the flooding, water pollution, and related problems of the Oak Creek watershed, and a study of the feasibility of establishing a comprehensive freeway traffic management system in the Milwaukee urbanized area. At year's end, efforts were underway to seek funding of these three major studies according to recommendations contained in the prospectuses.





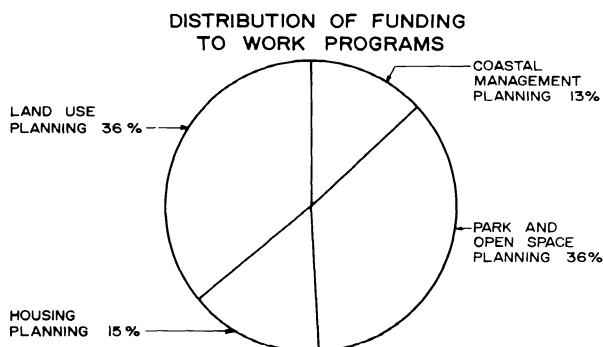
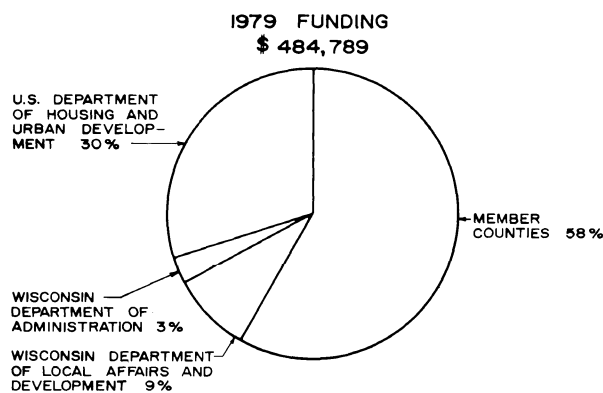
# LAND USE AND HOUSING PLANNING DIVISION

## DIVISION FUNCTIONS

The Land Use and Housing Planning Division conducts studies and prepares plan recommendations concerning the physical aspects of land use development. The kind of basic questions addressed by this Division include:

- What is the existing pattern of land use development in the Region? How is this pattern changing over time?
- Where are the sensitive natural resource areas of the Region located, including the wetlands, woodlands, wildlife habitat areas, and prime agricultural lands? What is happening to these resources over time?
- What are the probable future demands within the Region for each of the land use categories, and what appears to be the best way to accommodate these demands?
- How can new urban development and redevelopment be adjusted to the limitations of the natural resource base?
- What is the demand for outdoor recreation in the Region and how can this demand best be met through the provision of park and open space facilities?
- What is the need for housing in physical and economic terms?
- How much publicly assisted housing is needed in the Region and where should it be located?

## LAND USE AND HOUSING PLANNING DIVISION



In an attempt to help find answers to these and similar questions, the Land Use and Housing Planning Division during 1979 conducted a number of activities in four identifiable areas: land use planning, park and open space planning, housing planning, and coastal management planning.

## LAND USE PLANNING

During 1979 Division staff efforts in land use planning were directed toward implementation of the regional land use plan for the year 2000. A major effort in this regard involved preparing farmland preservation plans for Kenosha and Racine Counties, scheduled for completion in 1980. In addition, an inventory was conducted of subdivision platting activity during 1979.

## Regional Land Use Plan—An Overview

The new regional land use plan for the year 2000, documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume Two, Alternative and Recommended Plans, was formally adopted by the Commission in December 1977, published in the spring of

1978, and subsequently certified to various units and agencies of government for adoption and implementation.

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

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

The recommended regional land use plan envisions converting about 113 square miles of land from rural to urban use over the period 1970 through 2000, less than half of the approximately 235 square miles that would have to be converted if decentralization of urban development were allowed to continue unrestrained, and seeks to encourage new urban development to occur primarily in planned neighborhood development units at medium-density population levels; that is, at about four dwelling units per net residential acre, or about 5,000 persons per gross square mile. The plan envisions that by the year 2000 about 92 per-

cent of all urban land and about 93 percent of all the people in the Region will be served with public sanitary sewer service.

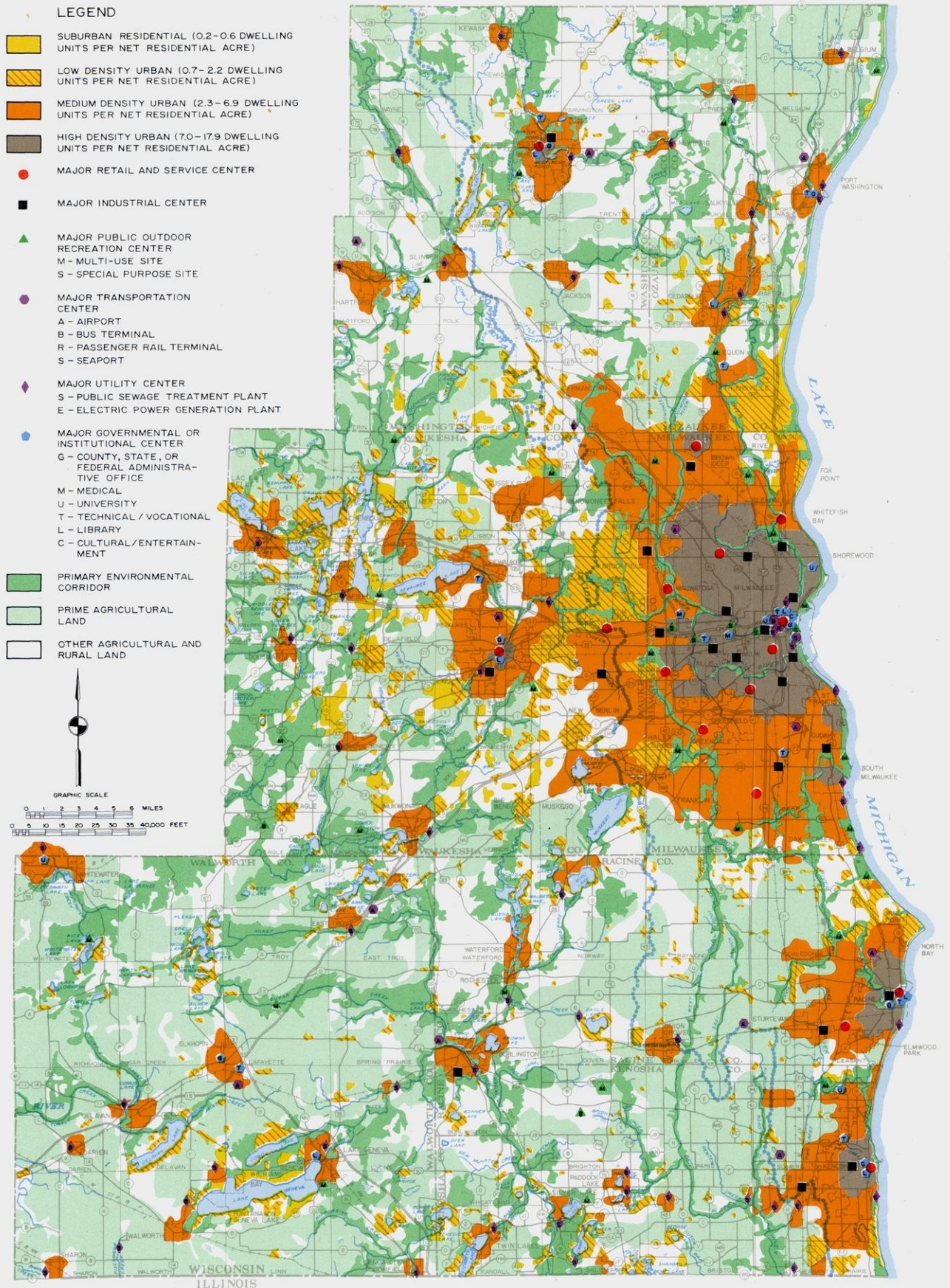
The most important elements of the natural resource base of the Region, including the best remaining woodlands; wetlands; wildlife habitat areas; surface waters and associated shorelands and floodlands; areas covered by organic soils; areas containing rough topography and significant geological formations; scenic, historic, and scientific sites; groundwater recharge and discharge areas; existing park sites; and the best remaining potential park and related open space sites, have been found to occur largely together in linear patterns and have been termed primary environmental corridors. Like the 1990 regional land use plan, the year 2000 regional land use plan proposes that these environmental corridors be protected and preserved in essentially natural, open space uses. Such protection and preservation is considered essential to the protection and wise use of the natural resource base; to the preservation of the Region's cultural heritage and natural beauty; and to the enrichment of the physical, intellectual, and spiritual development of the resident population, as well as to the prevention of new and intensification of existing environmental problems such as flooding and water pollution. The topography, soils, and flood hazards existing in these corridors, moreover, make them poorly suited to intensive urban development of any kind, but well suited to recreational and conservancy uses. Together, the primary environmental corridors encompass about 503 square miles, or 20 percent, of the area of the Region.

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

By the end of 1979, the year 2000 regional land use plan had been adopted by the Kenosha, Racine, and Waukesha County Boards of Supervisors; the



# REGIONAL LAND USE PLAN: 2000



Common Councils of the Cities of Burlington and Milwaukee; the Village Board of the Village of River Hills; the Kenosha County Park Commission; the City of Oconomowoc Plan Commission; and the Town of Dover Plan Commission. In addition, the plan had been endorsed by the U. S. Department of Agriculture, Soil Conservation Service; the U. S. Department of Housing and Urban Development; the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; the Wisconsin Department of Transportation; and the Wisconsin State Board of Soil and Water Conservation Districts.

### **Preservation of Farmland**

During 1979 the Land Use and Housing Planning Division continued to monitor applications for tax credit eligibility pursuant to the Wisconsin Farmland Preservation Act, which became law on June 29, 1977. The Act was created to help county and local units of government preserve agricultural lands by providing tax relief to farmland owners who participate in a farmland preservation program. Under the Act, a farmland owner may agree not to develop his land for urban uses and in return becomes eligible for tax relief in the form of a state income tax credit. The income tax credit is based on a formula which takes into account the household income and the property taxes. Basically, the higher the property tax and the lower the household income, the higher the tax credit. The maximum property tax eligible for tax credit is \$6,000, and the maximum tax credit is \$4,200. The farmland owner is also exempt from special tax assessments levied to provide sewer, water, or other public facilities and services.

Wisconsin's farmland preservation program is divided into two parts—an initial, temporary program and a permanent program. The duration of the initial program extends from October 1, 1977 to September 30, 1982. Under the initial program, an owner residing in a county with an exclusive agricultural zoning ordinance approved by the Wisconsin Agricultural Lands Preservation Board is automatically eligible for an income tax credit. A farmland owner residing in a county that does not have an approved exclusive agricultural zoning ordinance must apply to the county board for a farmland preservation contract. Upon county board approval of the application, the owner signs a contract which states that the farmland will remain in agricultural use through September 30, 1982. The owner then becomes eligible for an

income tax credit. In order for a farmland owner to receive the maximum tax credit, the county must have adopted a farmland preservation plan and an exclusive agricultural zoning ordinance.

The second part of the farmland preservation program—the permanent program—will begin on October 1, 1982. After this date, farmland owners within southeastern Wisconsin will be eligible for tax credits only if their land is within an exclusive agricultural zoning district. Maximum tax credits will again be contingent upon county adoption of a farmland preservation plan and exclusive agricultural zoning.

It should be noted that several changes in the Wisconsin farmland preservation law were enacted in 1979. As they apply within the Southeastern Wisconsin Region, these changes relate primarily to the eligibility of individual farmland owners and to the level of tax credit. For example, under the amended law, certain farm corporations, particularly family farm corporations, can more readily qualify for program benefits. Moreover, tax credits have been increased for all levels of income, with the largest increases occurring in the lower income brackets. The basic farmland preservation program planning and zoning requirements as they affect the Southeastern Wisconsin Region are essentially unchanged under the amended law.

Of the seven counties in southeastern Wisconsin, only Walworth County—following recommendations set forth in the initial SEWRPC regional land use plan adopted in 1966—has adopted both an exclusive agricultural zoning ordinance and an agricultural land preservation plan. All towns in Walworth County, except the Town of Lafayette, have adopted the county zoning ordinance, making farmland owners eligible for the maximum tax credit. In the Town of Lafayette, where town-exclusive agricultural zoning has been enacted, farmers are eligible for 70 percent of the maximum credit. In addition, Washington County has prepared and adopted the text of an exclusive agricultural zoning ordinance meeting state program standards. The Town of Barton is the only town in Washington County which has prepared a zoning district map based on the county ordinance and which has obtained state certification. Farmers in the Town of Barton are eligible for 70 percent of the maximum tax credit. Farmland owners in the remaining areas of the Region are presently eligible for only 50 percent of the maximum tax credit, or a maximum of \$2,100.



As indicated in the accompanying table, a total of 618 farmland owners in southeastern Wisconsin participated in the Wisconsin farmland preservation program in 1979. This includes 237 farmland owners who participated for the first time in 1979 and 381 farmland owners who participated in both 1978 and 1979. A total of 146 farmland owners who participated in 1978 did not participate in 1979. It may be assumed that the latter group are farmland owners who no longer meet the farm income requirements or who received such a small tax credit that their continued participation was not considered worthwhile.

As further indicated in the accompanying table, participants in the farmland preservation program owned a total of about 104,900 acres, or 104 square miles, of agricultural land, which represents about 11 percent of the 1,557 square miles of agricultural land in the Region. About 164 square miles, or 84 percent of this total, have been designated as prime agricultural land by the Commission. This represents about 22 percent of the total prime agricultural land in the Region.

Among the seven counties in the Region, Walworth County accounted for the largest number of participants in the state farmland preservation program in 1979, with 519 participants, or 84 percent of the total. Participants in the program in Walworth County owned more than 86,900 acres of agricultural land, accounting for 83 percent of the total regional farmland in the program. The high level of program activity in Walworth County may be attributed to at least two factors. First, most farmland in Walworth County has been placed in an exclusive agricultural district under the county zoning ordinance. It is, therefore, automatically eligible for tax relief assuming that the program eligibility requirements regarding farm size and farm income are met. Second, since Walworth County has adopted both a farmland preservation plan and exclusive agricultural zoning, farms in Walworth County are eligible for the maximum tax credit available under the program, while farmers in the rest of the Region—except for those in the Town of Barton—are currently eligible for only 50 percent maximum credit.

In an effort to ensure the preservation of farmland and to provide for the continued program eligibility of farmland owners after 1982, Racine and Kenosha Counties, in conjunction with the Regional Planning Commission, initiated a joint farmland preservation planning program in 1978. This planning program, partially funded through a planning grant from the Wisconsin Agricultural

Lands Preservation Board, is being carried out under the guidance of the Technical Coordinating and Advisory Committee on Farmland Preservation in Kenosha and Racine Counties, whose membership includes a farmland owner from each town in Racine and Kenosha Counties, county agricultural agents, and representatives from the U. S. Department of Agriculture, Soil Conservation Service and Agricultural Stabilization and Conservation Service. The planning program will result in farmland preservation plans for Racine and Kenosha Counties, which, in turn, will serve as a basis for the application of exclusive agricultural zoning within each county. While the focus of the planning program is on the preservation of agricultural lands, the plans will be comprehensive, addressing urban land use development and natural resource preservation objectives as well. Such a comprehensive approach is required for approval of the plan by the Wisconsin Agricultural Lands Preservation Board. By the end of 1979, work had been completed on the inventory phase of the study; the preparation of farmland preservation objectives, principles, and standards; and the preliminary mapping of prime agricultural lands in Kenosha and Racine Counties. The plan is scheduled to be completed in 1980.

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

The division staff annually monitors land subdivision activity in the Region. A total of 3,869 residential lots were created in the Region during 1979 through subdivision plats, compared with 5,845 lots platted in 1978. Of this total, 3,109 lots, or about 80 percent, were served by public sanitary sewers, with the remaining 760 lots, or 20 percent, designed to be served by onsite septic tank sewage disposal systems. By contrast, in 1978 about 25 percent of the lots platted, were to be served by onsite sewage disposal systems, representing a total of 1,451 lots. Waukesha County accounted for the greatest number of lots platted in 1979. Of the 1,488 lots created in Waukesha County, about 25 percent were designed to be served by septic tanks. The greatest proportion of lots to be served by septic tanks was found in Walworth County, where more than 58 percent of the 127 lots platted were designed for septic tank use. The historic trend in residential platting activity since 1960 is shown by county in the accompanying graphs.

#### **PARK AND OPEN SPACE PLANNING**

The Commission adopted a regional park and open space plan for southeastern Wisconsin on December 1, 1977. The plan consists of two basic

**PARTICIPATION IN THE FARMLAND PRESERVATION PROGRAM  
AUGUST 1977-DECEMBER 1979**

**LEGEND**

- PLANNED URBAN DEVELOPMENT — 2000
- PRIMARY ENVIRONMENTAL CORRIDOR
- PRIME AGRICULTURAL LAND
- OTHER AGRICULTURAL AND RURAL LAND
- PARTICIPATING FARM 1978 AND CONTINUING IN 1979
- PARTICIPATING FARM NEW 1979

**GRAPHIC SCALE**

0 5 10 15 20 25 30 35 40 MILES

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

**PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM: AUGUST 1977-DECEMBER 1979**

County	Year	Participants		Total Farmland Preserved		Prime Agricultural Land Preserved	
		Number	Percent of Region	Acres	Percent of Region	Acres	Percent of Region
Kenosha	1978	6	1.1	877	1.0	722	1.0
	1979	18	2.9	3,520	3.4	3,036	3.5
Milwaukee	1978	--	--	--	--	--	--
	1979	--	--	--	--	--	--
Ozaukee	1978	6	1.1	1,100	1.3	911	1.3
	1979	6	1.0	1,100	1.0	911	1.0
Racine	1978	19	3.6	3,320	4.0	1,360	1.9
	1979	28	4.5	4,707	4.5	1,885	2.1
Walworth	1978	468	88.8	71,649	86.1	65,202	91.8
	1979	519	84.0	86,929	82.9	77,860	88.8
Washington	1978	14	2.7	2,304	2.8	1,191	1.7
	1979	24	3.9	3,360	3.2	1,681	1.9
Waukesha	1978	14	2.7	3,987	4.8	1,613	2.3
	1979	23	3.7	5,272	5.0	2,323	2.7
Region	1978	527	100.0	83,237	100.0	70,999	100.0
	1979	618	100.0	104,888	100.0	87,696	100.0

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 lands. The outdoor recreation element consists of 1) a resource-oriented outdoor recreation plan, which includes recommendations for the number and location of large parks, proposed recreation corridors to accommodate trail-oriented activities, and water access facilities to facilitate 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 recreation facilities required in urban areas of the Region. The plan is documented in SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000, and is graphically summarized on the accompanying map.

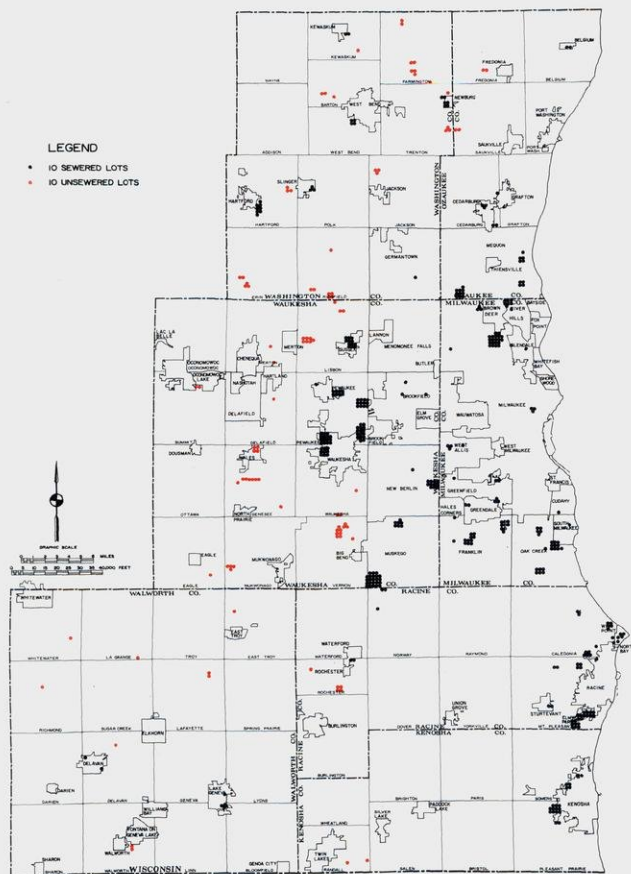
The regional park and open space plan was certified to various governmental units and agencies for adoption and implementation early in 1978. Five of the seven constituent counties in southeastern Wisconsin—Kenosha, Milwaukee, Racine, Washington, and Waukesha Counties—adopted the regional plan as their county plan in 1978. In addition, the

Commission prepared a refinement of the regional plan as it related specifically to Ozaukee County. This plan was adopted by Ozaukee County in 1978. Thus, all of 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.

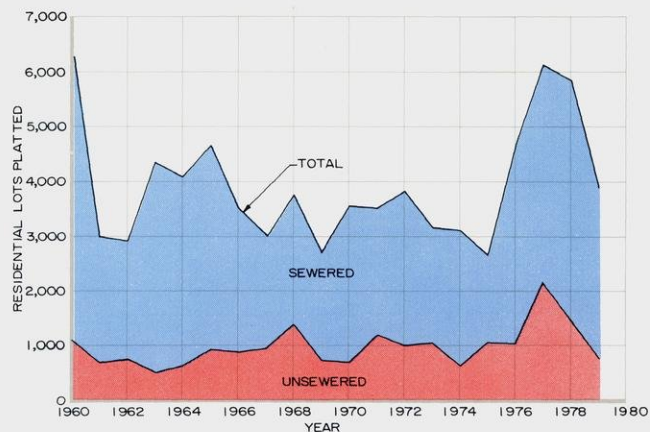
During 1979 the Division staff efforts on park and open space planning were directed primarily toward the implementation of the regional park and open space plan. Implementation activities consisted of assisting local units of government in preparing detailed local park and open space plans consistent with the guidelines provided by the regional plan and in refining and detailing primary and secondary environmental corridors on large-scale, 1" = 400' aerial photographs. During 1979 a local park and open space plan was prepared for the Town of Eagle, and work was begun on two additional park and open space plans, one for the Kenosha Planning District, which encompasses the City of Kenosha and the Towns of Somers and Pleasant Prairie, and one for the Pewaukee joint community planning area, which encompasses the Village and Town of Pewaukee.



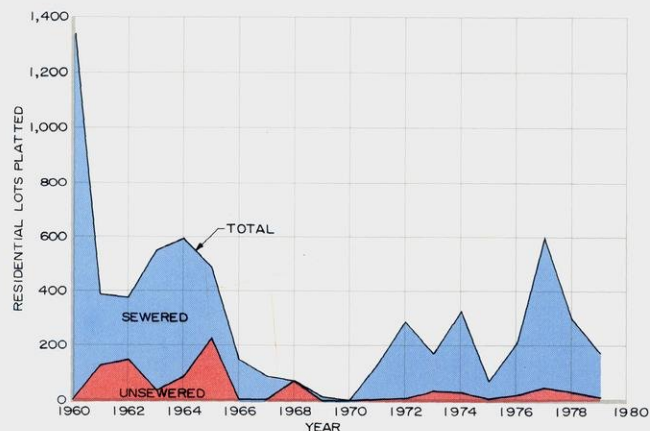
## RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1979



## RESIDENTIAL LOTS PLATTED IN THE REGION: 1960-1979



## RESIDENTIAL LOTS PLATTED IN KENOSHA COUNTY: 1960-1979

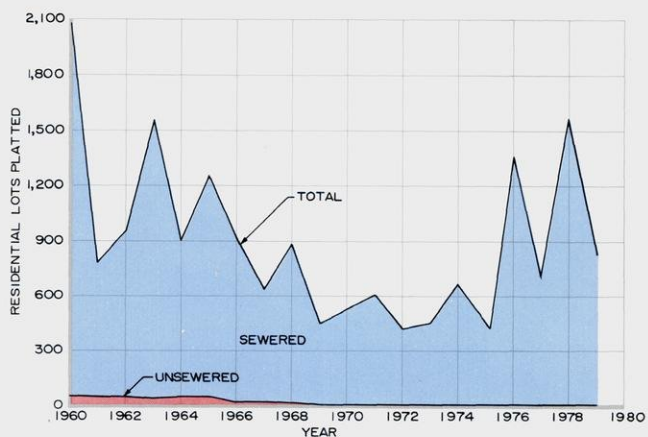


## RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1979

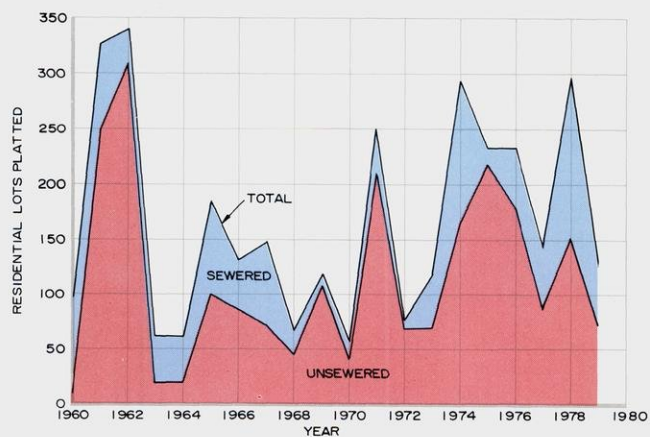
County	Sewered Lots		Unsewered Lots		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Regional Total
Kenosha . . . . .	160	90.4	17	9.6	177	4.6
Milwaukee . . . . .	829	100.0	--	--	829	21.4
Ozaukee . . . . .	243	90.3	26	9.7	269	7.0
Racine . . . . .	474	90.5	50	9.5	524	13.5
Walworth . . . . .	53	41.8	74	58.2	127	3.3
Washington . . . . .	230	50.5	225	49.5	455	11.8
Waukesha . . . . .	1,120	75.3	368	24.7	1,488	38.4
Region	3,109	80.4	760	19.6	3,869	100.0



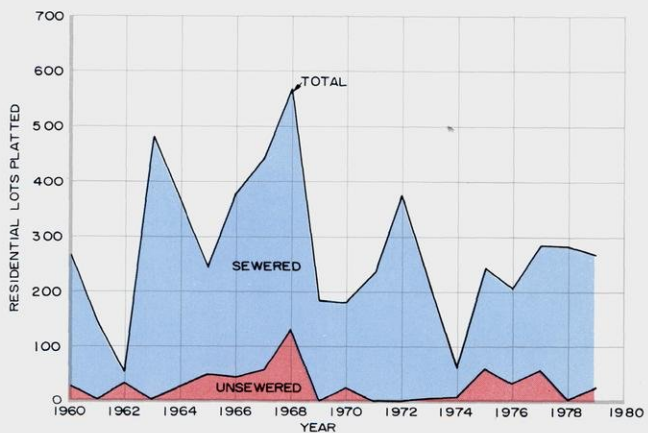
**RESIDENTIAL LOTS PLATTED  
IN MILWAUKEE COUNTY: 1960-1979**



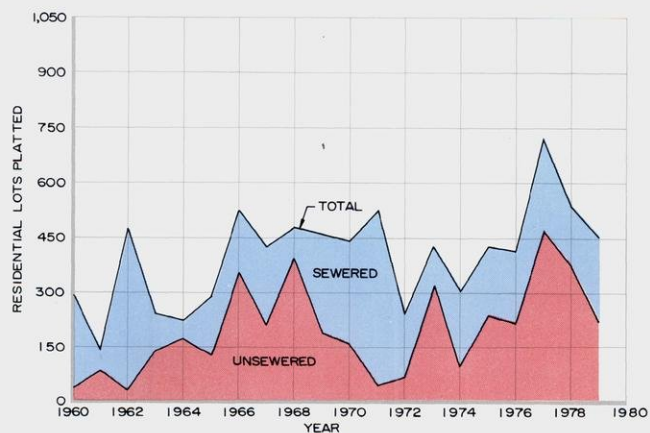
**RESIDENTIAL LOTS PLATTED  
IN WALWORTH COUNTY: 1960-1979**



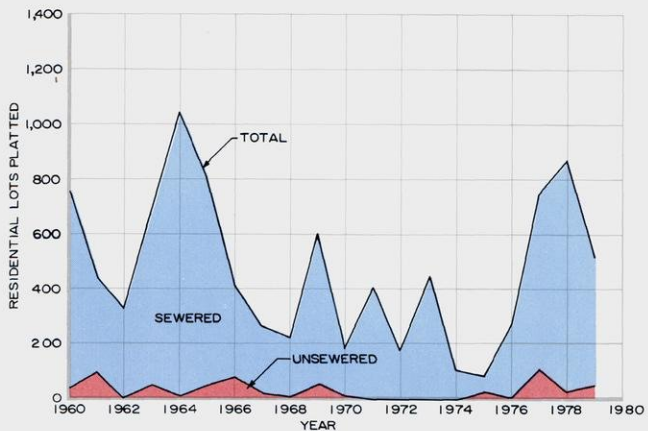
**RESIDENTIAL LOTS PLATTED  
IN OZAUKEE COUNTY: 1960-1979**



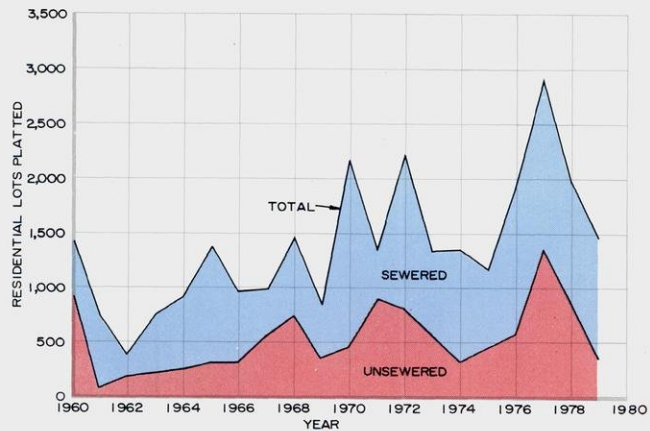
**RESIDENTIAL LOTS PLATTED  
IN WASHINGTON COUNTY: 1960-1979**



**RESIDENTIAL LOTS PLATTED  
IN RACINE COUNTY: 1960-1979**



**RESIDENTIAL LOTS PLATTED  
IN WAUKESHA COUNTY: 1960-1979**





This is a detailed map of the Milwaukee area, Wisconsin, showing the Milwaukee River and its tributaries. The map is color-coded: orange for urban areas, green for parks and forests, and blue for water bodies. Major roads and highways are shown in red and black. The map includes a graphic scale (0 to 30 miles) and a north arrow. The map is titled 'MILWAUKEE' and 'MILWAUKEE RIVER'.



## Primary Environmental Corridor Refinement

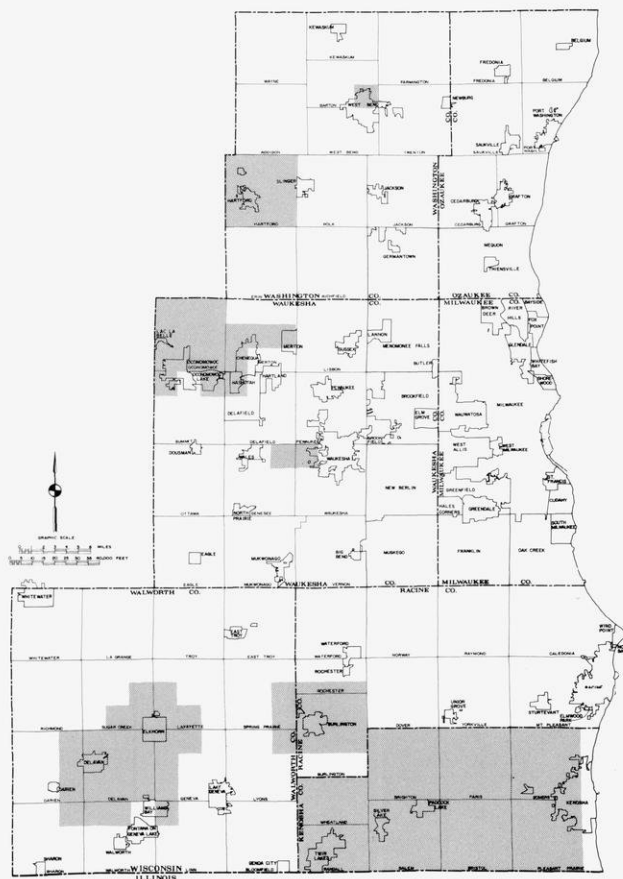
One of the key recommendations of the adopted regional land use and park and open space plans is the protection and preservation of environmental corridors in essentially natural open uses. Such corridors in southeastern Wisconsin lie along the major stream valleys, around major lakes, and in the Kettle Moraine area. The corridors contain the best remaining elements of the natural resource base of southeastern Wisconsin and have immeasurable environmental and recreational value.

During 1979 the Commission initiated an environmental corridor refinement process. This process was developed to meet plan implementation needs for a detailed delineation of environmentally significant lands. At the systems level of planning, the environmental corridor delineations were necessarily general in nature. More detailed project level planning and other local planning efforts which are designed to implement the regional plan recommendations necessitate a more detailed delineation of environmental corridors. A process was thus developed for defining environmental corridors on 1" = 400' scale aerial photographs. A sample primary environmental corridor delineation in the West Bend area of the Region is shown in the accompanying figure. By the end of 1979 the corridor refinement process had been completed for about 525 square miles of area, or about 20 percent of the total area of the Region. The areas for which this process has been completed are distributed throughout the Region, as shown on the accompanying map.

## Park and Open Space Plan for the Town of Eagle

During 1979 the Commission completed a park and open space plan for the Town of Eagle. The plan was prepared under the direction of the Town Park Commission and is documented in SEWRPC Community Assistance Planning Report No. 27, A Park and Open Space Plan for the Town of Eagle. The report contains a set of park and open space preservation, acquisition, and development objectives and supporting standards relevant to the needs of the citizens of the Town of Eagle; presents pertinent information on the supply of and need for park and open space sites in the Town; and identifies the function of the Town in meeting park and open space needs. This town plan element is graphically summarized on the accompanying map.

## PORTIONS OF THE REGION FOR WHICH THE ENVIRONMENTAL CORRIDOR REFINEMENT PROCESS HAS BEEN COMPLETED: 1979



## HOUSING PLANNING

The Commission adopted a housing plan for southeastern Wisconsin in 1975. This plan addresses unmet housing needs in the Region and includes a recommended geographic allocation of publicly assisted housing to remedy the most serious of the identified housing problems. During 1979 the Division staff continued its efforts to implement the adopted regional housing plan through the provision of housing assistance services under the housing outreach program. In addition, the staff continued to provide housing planning data in response to requests from public housing agencies and from the private sector. The staff also continued to monitor progress toward meeting the goals for housing assistance recommended under the regional subsidized housing allocation strategy.



## AREA OF ENVIRONMENTALLY SIGNIFICANT LANDS IN THE WEST BEND STUDY AREA



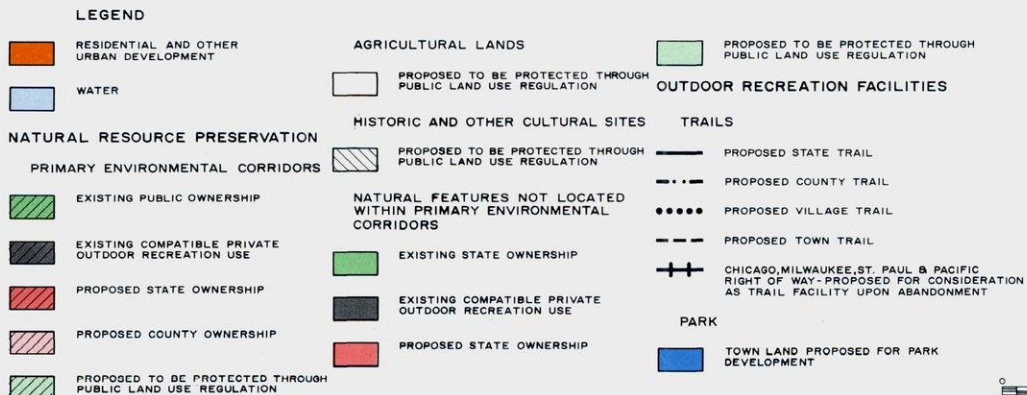
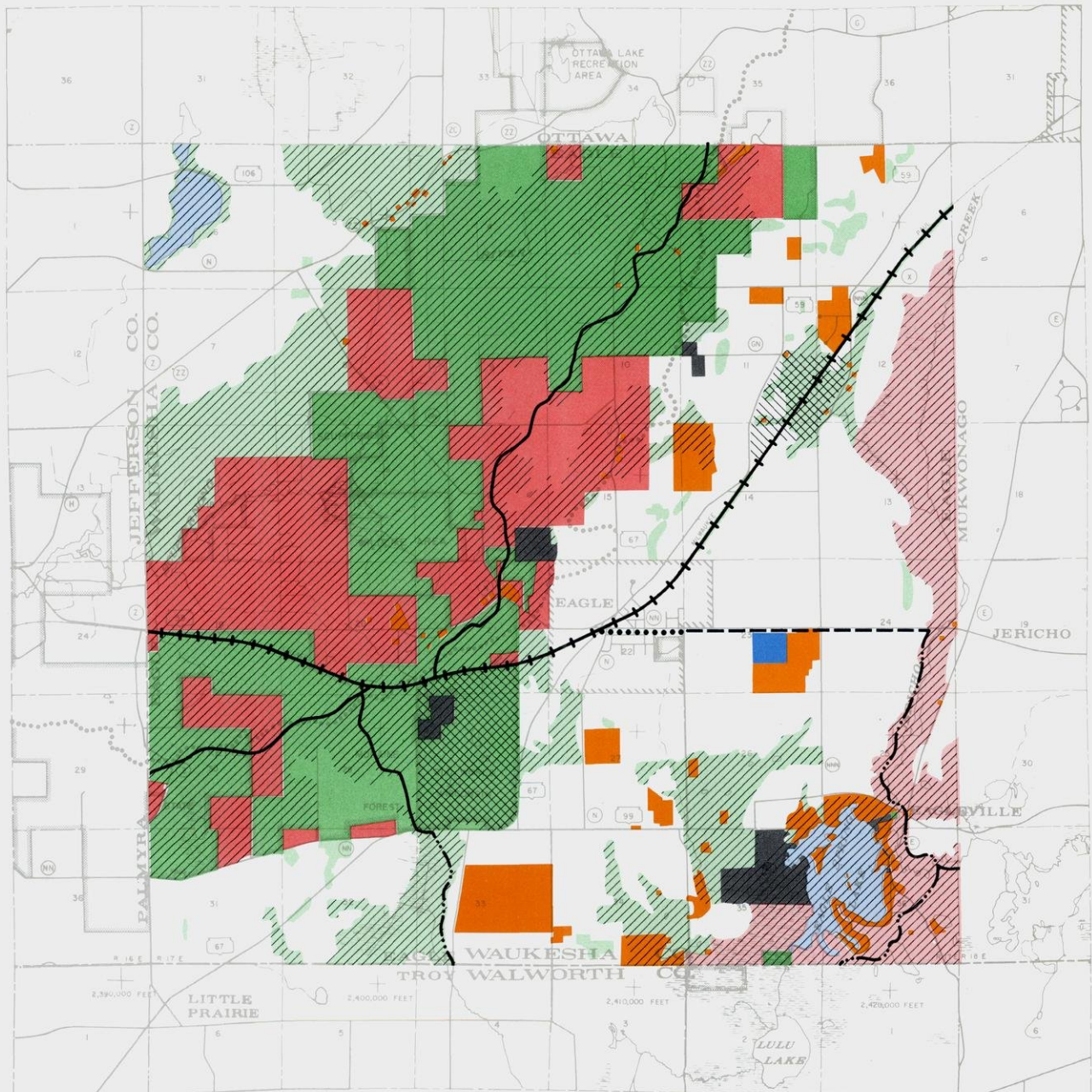
### Housing Outreach Program

Even before the adoption of the regional housing plan, the Commission, recognizing the urgency of the need to address serious existing housing problems, initiated a housing outreach program. The Commission continued the housing outreach program in 1979, retaining one staff member whose primary responsibility is to work with

communities, public housing agencies, and private housing interest groups in initiating activities that will influence the housing market to meet the adopted regional housing objectives. To a large extent, outreach efforts are channeled through agencies and committees served by the Commission in an advisory capacity, including the Milwaukee Urban League, the Sherman Park Community Association, the Metropolitan Milwaukee Fair



# RECOMMENDED PARK AND OPEN SPACE PLAN FOR THE TOWN OF EAGLE: 2000



Housing Council, the Milwaukee County Community Relations-Social Development Commission, the Housing and Transportation Committee of the Milwaukee County Commission on Aging, and the East Side Housing Action Coalition, Inc. (ESHAC). The following are examples of the type of housing assistance services provided under the housing outreach program in 1979:

- Assistance to the Housing Task Force of the Milwaukee Urban League, with the Commission outreach planner serving as the Task Force Chairman and taking an active part in the task force study of existing housing services in the Milwaukee metropolitan area and of ways to improve coordination of housing services.
- Assistance to the Northwest Action Council in establishing a housing rehabilitation program, including assistance in identifying sources of financing for the acquisition and rehabilitation of existing homes for resale to low- and moderate-income families in the northwest side of the City of Milwaukee.
- Assistance to the Walworth County Planning and Zoning Department consisting of training in the Commission's exterior housing condition survey methodology to facilitate the analysis of housing conditions in the Honey Lake Neighborhood in the Town of Spring Prairie, Walworth County.

### Subsidized Housing Activity

The adopted regional housing plan recommends the provision of about 17,800 publicly assisted housing units during the six-year period 1975 through 1980. An integral part of the adopted regional housing plan is the subsidized housing allocation strategy, which recommends the geographic distribution of the 17,800 housing units to 49 allocation areas in the Region, each consisting of a community or group of communities (see the accompanying map). Included in the allocation system are measures relating to each area's need, suitability, and past performance in the provision of low-cost housing. The Commission staff monitors the provision of federally assisted housing in southeastern Wisconsin to measure progress toward meeting goals of the housing allocation strategy for housing assistance.

To monitor progress toward meeting the recommended goals, information concerning the use of

housing assistance programs is collected from those state and federal agencies that are instrumental in administering housing assistance programs—namely, the U. S. Department of Housing and Urban Development (HUD); the U. S. Department of Agriculture, Farmers Home Administration (FmHA); and the Wisconsin Housing Finance Authority. Included in the inventory of assisted housing shown on the accompanying map are housing units authorized since adoption of the regional housing plan under the HUD Section 8, HUD Section 235, HUD Section 236, HUD Section 221(d) (3), FmHA Section 515, and FmHA Section 502 housing assistance programs.

Between the time of adoption of the regional land use plan and the end of 1979, a total of 12,733 units of publicly assisted housing had been provided in the Region. These 12,733 units represent about 71 percent of the total number of units recommended in the plan to be provided in the Region through 1980. As indicated on the accompanying map, 38 of the 49 allocation areas have shown some progress toward meeting the allocation and 21 areas have met more than half of their goals, with 8 having met or surpassed their recommended allocations.

It is important to recognize that the regional housing allocation strategy is intended to address only a portion of the total housing need identified under the regional housing study. The regional housing study found that approximately 96,100 households, representing about 18 percent of all households in the Region, were in housing need in 1970, indicating that they experienced some type of housing problem. Of this total, 26,500 households, or 28 percent, experienced serious housing problems as reflected by substandard or overcrowded living conditions. Many of the remaining 72 percent were in economic need; i.e., they occupied uncrowded standard housing but paid a disproportionate share of their income to do so.

The regional housing allocation strategy seeks to provide subsidized housing units so as to eliminate physical housing problems as evidenced by substandard and overcrowded living conditions. It was determined that the proper use of 17,800 subsidized units could substantially achieve this objective. The regional housing plan gave lower priority to the subsidization of those households that occupy uncrowded standard housing but pay a disproportionate share of their income to do so. It is apparent, however, that a significant portion



# **PROGRESS TOWARD MEETING PUBLICLY SUBSIDIZED HOUSING UNIT ALLOCATION**

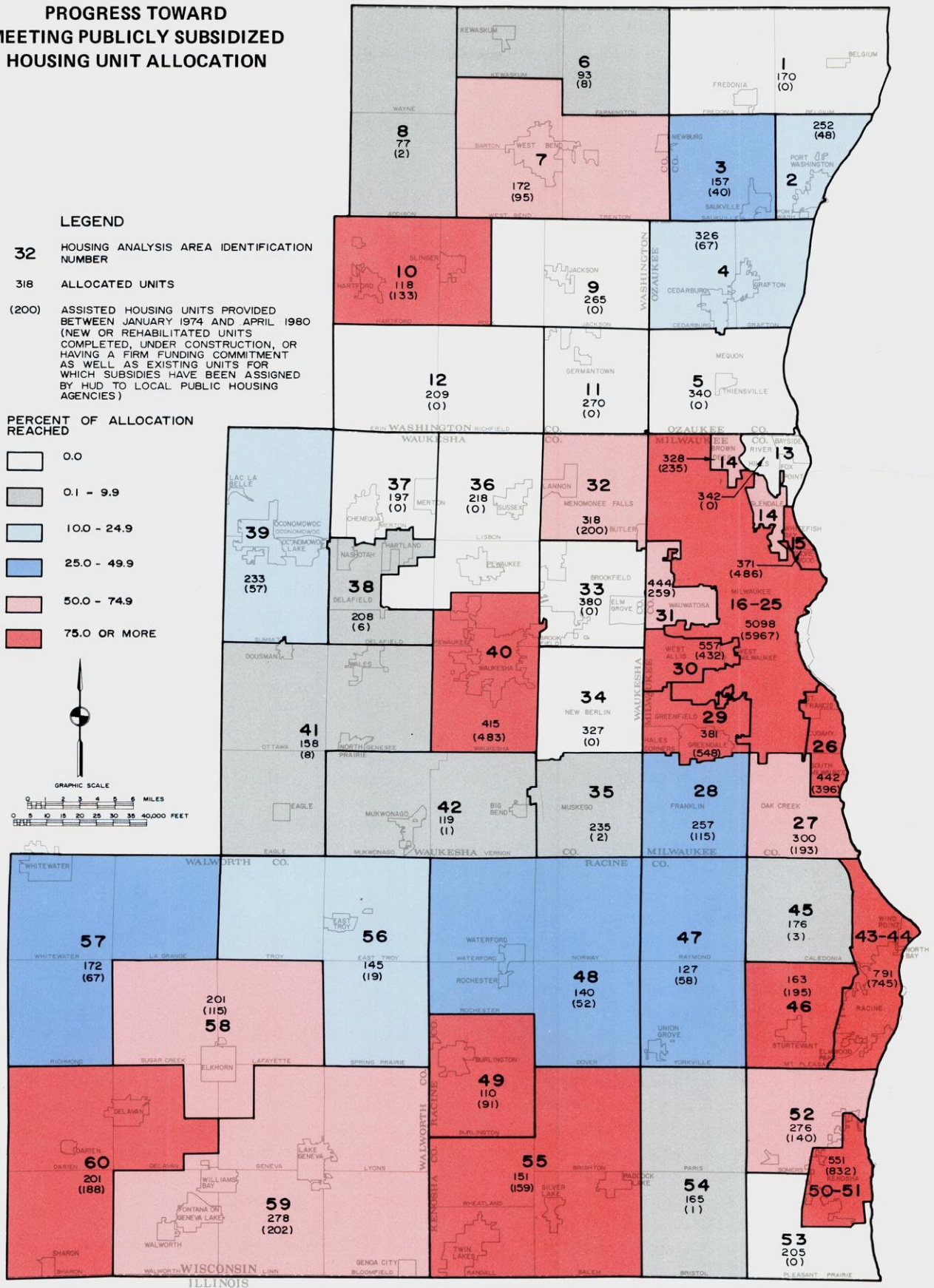
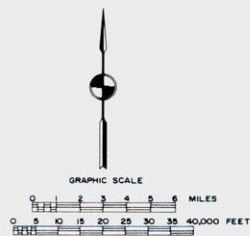
**LEGEND**

**32** HOUSING ANALYSIS AREA IDENTIFICATION NUMBER

**318** ALLOCATED UNITS

**(200)** ASSISTED HOUSING UNITS PROVIDED BETWEEN JANUARY 1974 AND APRIL 1980 (NEW OR REHABILITATED UNITS COMPLETED, UNDER CONSTRUCTION, OR HAVING A FIRM FUNDING COMMITMENT AS WELL AS EXISTING UNITS FOR WHICH SUBSIDIES HAVE BEEN ASSIGNED BY HUD TO LOCAL PUBLIC HOUSING AGENCIES)

## **PERCENT OF ALLOCATION REACHED**



of the subsidized housing provided in the Region since the adoption of the regional housing plan has gone to households that are in economic need rather than to households occupying substandard and overcrowded units. For example, since the adoption of the regional housing plan, about 65 percent of the subsidized housing units have been units for the elderly, even though the housing problem of the elderly was found in the regional housing study to be largely economic in nature. The provision of subsidized housing units for the elderly may "free up" some sound housing units formerly occupied by the elderly for families that currently live in substandard or overcrowded units. However, the continued subsidization of households whose housing problems are primarily economic may necessitate the provision of more than the 17,800 subsidized housing units specified in the regional plan if substandard and overcrowded housing conditions in the Region are to be eventually eliminated.

#### **Areawide Housing Opportunity Plan Prospectus**

At the request of the Chairman of the Racine County Board of Supervisors, the Land Use and Housing Planning Division staff during 1979 prepared a memorandum-prospectus describing the major work elements, time schedule, estimated costs, and potential funding for the preparation of an areawide housing opportunity plan for the Southeastern Wisconsin Region. The basic objective of such a plan is to provide for a broader geographical choice of housing opportunities for lower income households, i.e., opportunities outside areas and jurisdictions that now contain concentrations of low-income and minority households. The key elements of an areawide housing opportunity plan are: an assessment of housing needs together with a procedure for distributing public housing assistance funds; a program of plan implementation activities to implement the housing opportunity plan; and evidence of agreement among local units of government to support the plan.

There are two major potential uses for an areawide housing opportunity plan. First, an areawide housing opportunity plan, when approved by HUD, would be the basis for distributing the Section 8 housing assistance funds allocated annually to a metropolitan area. Section 8 funds are those which are available from HUD for the purpose of subsidizing rents of elderly persons and low- and moderate-income families. Second, areas with a HUD-approved areawide housing opportunity plan are eligible to compete on a nationwide basis

for supplemental allocations of Section 8 funds made available annually by HUD. Moreover, local units of government in areas selected for supplemental Section 8 funds may apply for supplemental community development block grant funds. Area-wide planning agencies may also apply for supplemental comprehensive planning assistance funds.

The preparation of an areawide housing opportunity plan would require that the adopted regional housing plan be revised, extended, and amended to conform to HUD housing opportunity plan regulations and, further, that the Commission housing plan implementation activities be expanded and strengthened. The memorandum-prospectus describing the scope and content of an areawide housing opportunity plan was transmitted to the SEWRPC Intergovernmental and Public Relations Committee in October 1979. In December 1979 the Committee directed that the prospectus be transmitted to the seven county boards in the Region for their review and consideration.

#### **COASTAL MANAGEMENT PLANNING**

During 1979 the Division staff continued to provide assistance to the Wisconsin Department of Administration's Office of Coastal Management in the conduct of the Wisconsin coastal management program. This program is intended to coordinate governmental activities in order to achieve the objective of better management of the resources of Wisconsin's Lake Michigan and Lake Superior coastal zones. 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. The SEWRPC chairman serves as a member of that Council.

Under an agreement with the Wisconsin Department of Administration, Office of Coastal Management, the Commission has formed and staffed a Technical and Citizens Advisory Committee on Coastal Management in Southeastern Wisconsin. This 29-member 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 to review and comment on state coastal studies and reports as they are proposed and produced.

One of the continuing functions of the Division under the coastal management program is the designation of geographic areas of management concern. In 1979 two additional areas in the



Region were formally designated as geographic areas of management concern—the Milwaukee County submerged lands and the Kenosha Harbor. These two areas, along with other previously certified Lake Michigan shoreline geographic areas of management concern, are shown on the accompanying map.

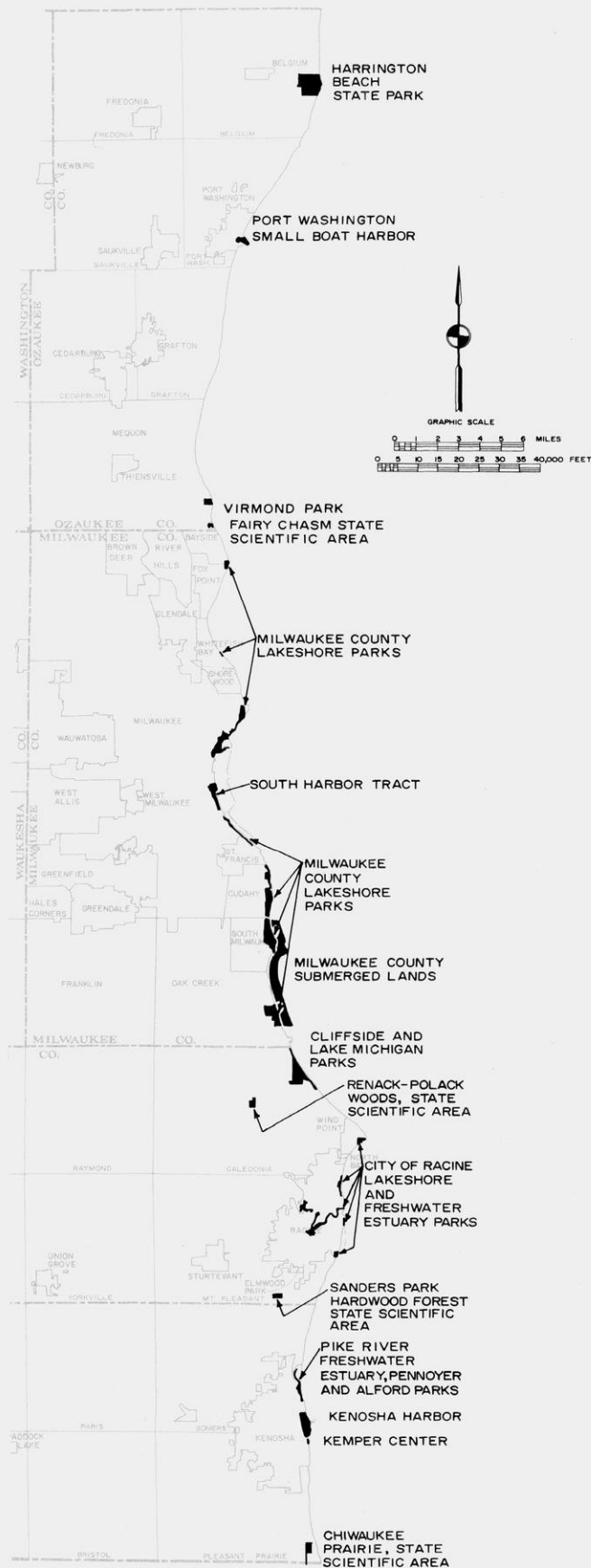
As part of the coastal management efforts in the Region, the Commission staff assists local units of government along the Lake Michigan shoreline in developing and submitting coastal management-related projects for funding under the coastal management program. In 1979, 17 such projects were submitted from the four coastal counties in the Region. Of those, seven projects were approved and funded by the Wisconsin Coastal Management Council in 1979: the preparation of a harbor facilities master plan for the City of Kenosha; the staffing of the Kemper Center County Park in the City of Kenosha to conduct cultural, recreational, and educational activities relating to the coastal area; the conduct of a shoreline topographic mapping program in Kenosha County—a program being administered by the Commission and resulting in large-scale topographic maps prepared to Commission specifications; the continuation of the activities of the “coast watch” program in Racine County, a citizen involvement effort involving data collection and shoreline erosion observation activities; the preparation of a management plan for the Port of Racine; the conduct of a feasibility study for shore protection and development along Milwaukee County lands extending from Grant Park in the City of South Milwaukee to Bender Park in the City of Oak Creek; and the conduct of an economic marketing and facility development study for the Port of Milwaukee. In addition, in December 1979 the Commission staff assisted in the conduct of a coastal management contract seminar in the City of Milwaukee. The seminar was to familiarize local governmental officials in the coastal communities with the grant application procedures for securing Wisconsin coastal management funds beginning in 1980.

#### DATA PROVISION AND ASSISTANCE

The land use, park and open space, and housing data files are extensively used by local governmental units and agencies and by private interests. Examples of the provision of land use, park and open space, and housing-related data during 1979 include the following:

- The provision of land use data pertaining to the LAWRAAN (Lawrence and Ann Maurin) conservation area at the request of the Park,

#### COASTAL GEOGRAPHIC AREAS OF MANAGEMENT CONCERN IN SOUTHEASTERN WISCONSIN: 1979

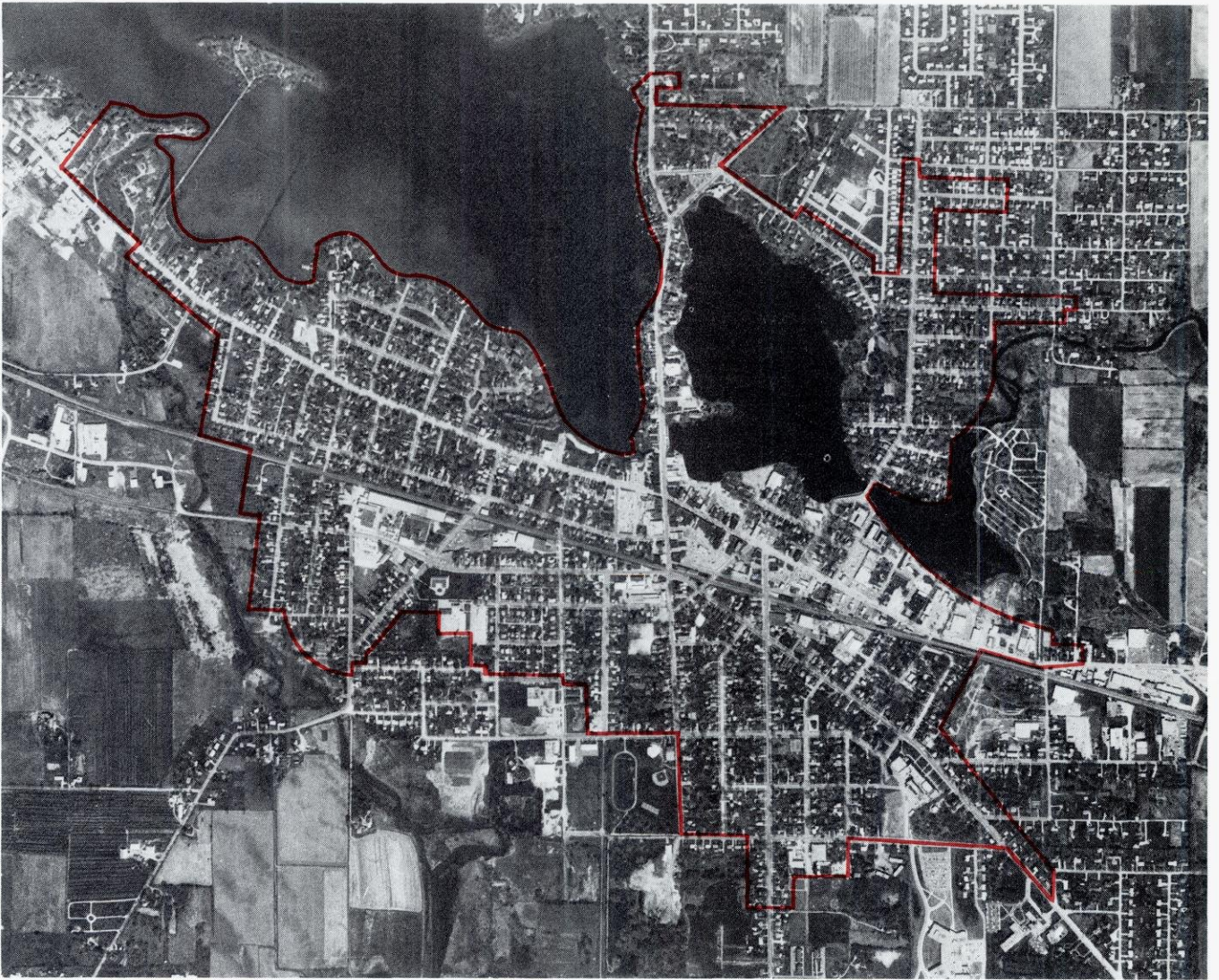


Recreation and Forestry Commission of the City of West Bend. Data provided included a plant inventory and a quality rating of the plant and animal communities at the nature conservancy site. The City of West Bend used the data provided to evaluate whether or not to accept the conservancy area as a nature center. The conservancy area was acquired by the City on December 1, 1979.

- The provision of data on wetlands in the Lake Denoon area at the request of the City of Muskego. The data included a plant inventory and a quality rating of the plant and animal communities in the Lake Denoon area. The data were used by the City of Muskego to determine the areal extent of the Lake Denoon wetland complex in conjunction with the development of a neighborhood park project.
- The provision of plant inventory and wildlife habitat data to the Wisconsin Department of Natural Resources for its use in evaluating the alignment of a proposed trunk sewer in the City of Brookfield. The data provided by the Commission were needed by the Department for use in determining the environmental impacts of the trunk sewer construction.
- The provision of data pertaining to public swimming and picnicking facilities in the vicinity of the Pike Lake State Park to the Wisconsin Department of Natural Resources for use in evaluating the need for additional facilities at the Pike Lake State Park.
- The provision of natural resource and soils data to the Riverbend Nature Center in Racine County for use in evaluating land for educational purposes.
- The provision of specific site resource data and an analysis of the recreation use potential of an existing, underutilized public park site in the Village of Williams Bay to the Village Park Commission.
- The provision of plant community inventory data, including the delineation of the areal extent of wetland and wildlife habitat areas and the identification of rare, endangered, and threatened species, on the Kenosha Sand Dunes area located in the Town of Pleasant Prairie, Kenosha County, to the U. S. Fish and Wildlife Service.
- The provision of information regarding housing needs and the supply of publicly assisted housing to the Walworth County Board of Supervisors for its use in considering the desirability of establishing a county housing authority.
- The provision of assistance to the Cities of Elkhorn and Oconomowoc and the Villages of East Troy and Mukwonago in the designation of local reinvestment areas for the purpose of operating the community investment fund program administered by the Federal Home Loan Bank of Chicago. Participating savings and loan associations are able to provide below-market interest rate loans to individuals in designated reinvestment areas. The reinvestment area designated in the City of Oconomowoc is shown on the accompanying map.



REINVESTMENT AREA IN THE CITY OF OCONOMOWOC





# TRANSPORTATION PLANNING DIVISION

## DIVISION FUNCTIONS

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

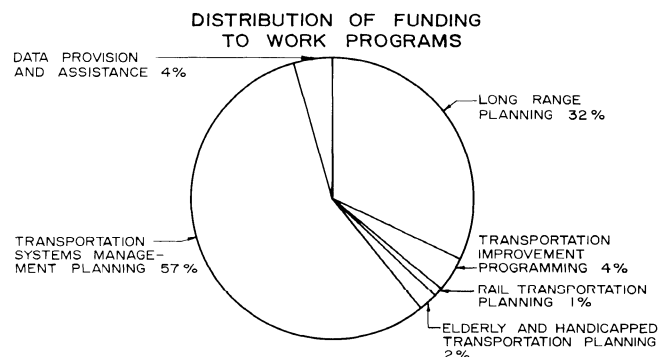
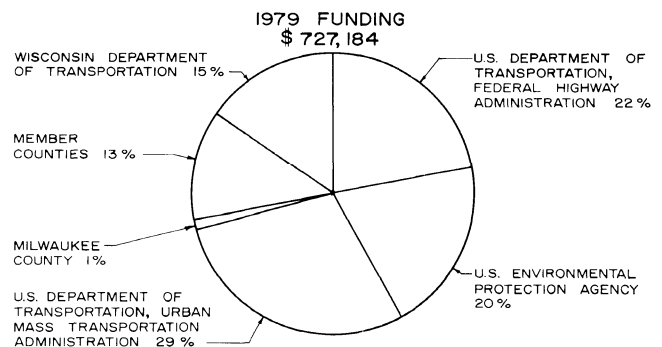
- What are the travel habits and patterns in the Region? How are these changing over time?
- What is the existing supply of transportation facilities?
- How much travel in the future will likely be accommodated by the various travel modes, particularly the private automobile and public transit?
- How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

In attempting to find sound answers to these and other questions, to make plans containing recommendations concerning these questions, and to monitor transportation system development activities in the Region, the Transportation Planning Division during 1979 conducted a number of activities in eight identifiable areas: data collection, collation, and development; long-range planning; transportation systems management planning; elderly and handicapped transportation planning;

transportation improvement programming; rail transportation planning; air transportation planning; and data provision and assistance. It should be noted that during 1979 the efforts of the Commission's Special Projects Planning Division were also totally devoted to carrying out work projects in these various transportation planning areas. Accordingly, for reporting purposes the work efforts of the Special Projects Division are discussed within this section of the annual report.

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 many cases federal funds for the conduct of these subregional

## TRANSPORTATION PLANNING DIVISION





planning efforts “pass through” the Commission to other agencies. Through monitoring of work progress and service on task forces and advisory committees, the Commission is ultimately responsible for all of this transportation-related planning work. Accordingly, all transportation planning activities bearing upon the Commission’s overall work program are reported herein irrespective of whether they are directly conducted by the Commission.

#### DATA COLLECTION, COLLATION, AND DEVELOPMENT

During 1979 the Division staff continued to monitor secondary data sources for changes in automobile and truck availability, mass transit ridership, carpool parking facilities, and traffic volumes.

#### Automobile and Truck Availability

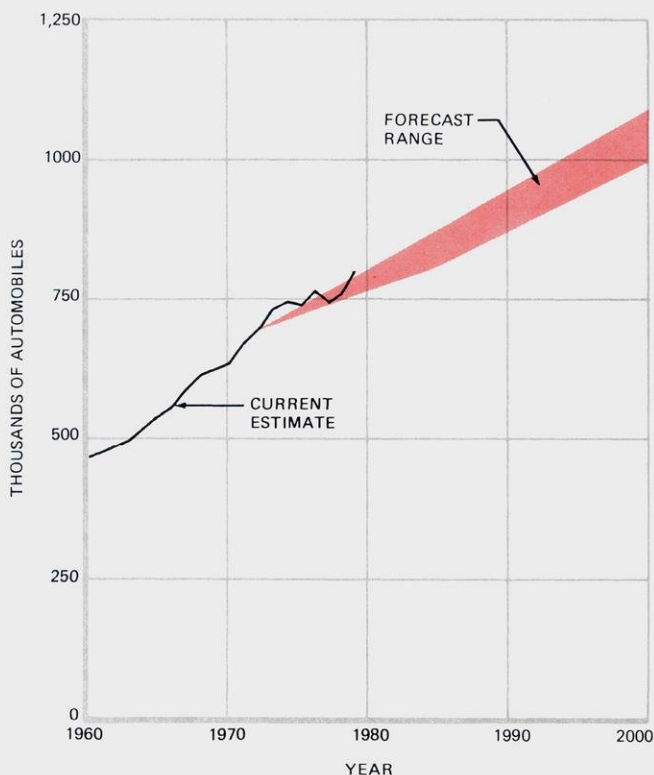
The number of automobiles available to residents in the Region in 1979 totaled 802,100. This represents an increase of about 43,200, or about 5.7 percent, over the 1978 level of 758,900. It also represents a departure from the recent trend observed over the period 1974 through 1978 of nearly constant automobile availability in the Region, with growth in such availability during that period averaging only about 0.4 percent per year. The growth rate of 5.7 percent annually may also be compared against the average annual rate of growth observed between 1963 and 1974, which was about 3.7 percent. As shown in the accompanying table, all counties registered gains in automobile availability during the year, with Milwaukee and Ozaukee Counties having the lowest percentage rate increases of 4.7 percent each, and Racine County having the highest percentage increase of 7.6 percent. The number of persons per automobile is estimated to be 2.22 in 1979, down considerably from the estimate of 2.33 in 1978.

The estimated number of automobiles available in 1979 can be compared to the forecast range of automobile availability as prepared under the long-range regional transportation system plan, and as shown in the accompanying figure depicting the historical growth in automobile availability. The forecast range of availability is 763,400 to 798,400 automobiles for the adopted transportation plan alternative and the “no build” alternative, respectively. The 1979 regional automobile availability level of 802,100 is slightly higher than the “no

#### AUTOMOBILE AVAILABILITY

County	1963	1978	1979
Kenosha . . . .	35,162	53,437	56,669
Milwaukee . . .	304,123	407,088	426,334
Ozaukee . . . .	14,319	31,476	32,968
Racine. . . . .	47,583	73,967	79,556
Walworth. . . .	19,437	29,989	31,927
Washington . .	16,235	34,511	36,914
Waukesha. . . .	61,899	128,428	137,702
Total	498,758	758,896	802,070

#### AUTOMOBILE AVAILABILITY



build” forecast of 0.5 percent, and is 5.1 percent higher than the adopted transportation plan alternative.

The number of trucks available in the Region increased during the year to a total of about 125,600, an increase of about 12,600 trucks, or about 11 percent, over the 1978 level of 113,000 trucks. As shown in the accompanying figure, the

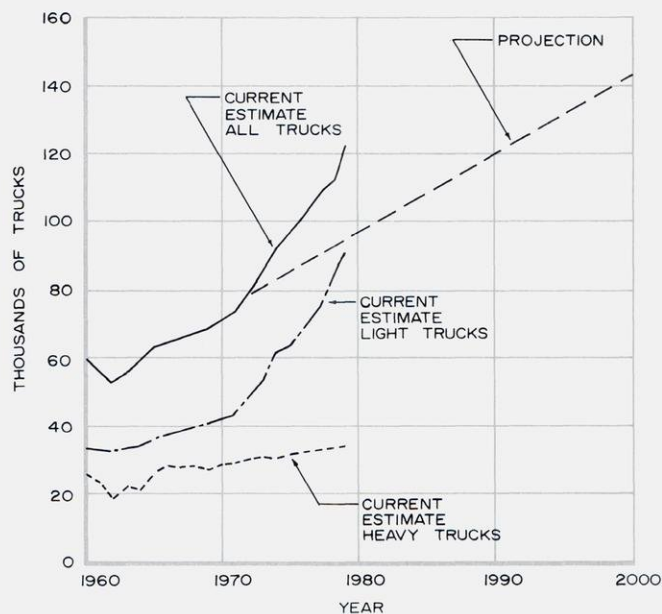


## TRUCK AVAILABILITY

County	1963	1978	1979
Kenosha . . . .	4,855	10,222	11,499
Milwaukee . . .	25,867	43,440	47,803
Ozaukee . . . .	2,286	4,944	5,481
Racine . . . . .	6,201	13,383	15,080
Walworth . . . .	4,490	8,952	9,823
Washington . . .	3,413	8,500	9,516
Waukesha . . . .	8,283	23,586	26,431
Total	55,395	113,027	125,633

increase in trucks over time is almost entirely due to an increase in light-duty trucks, which now comprise about 72 percent of total trucks available. The proportion of light trucks to total trucks declined from 76 percent in 1978 to 72 percent in 1979. This was due to the increase in the number of heavy trucks from about 26,900 in 1978 to about 34,700 in 1979, an increase of about 29 percent. In contrast, the number of light trucks increased from about 86,100 in 1978 to about 90,900 in 1979, or by 5.5 percent—a rate of increase similar to the 5.7 percent rate of increase in automobile availability. Light trucks accounted for about 60 percent of all trucks in 1970, and for about 57 percent of all trucks in 1960.

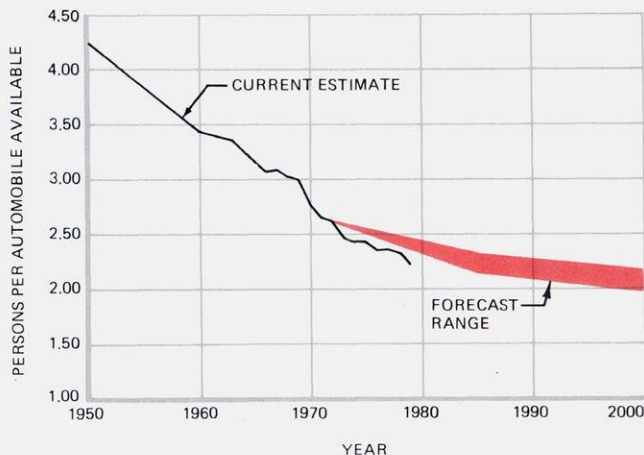
## TRUCK AVAILABILITY



## Public Transit Ridership

In 1979 there were significant increases in the utilization of the publicly owned fixed-route transit services provided in the Kenosha, Milwaukee, and Racine urbanized areas of the Region. In the Kenosha urbanized area, ridership on the public transit system serving the City of Kenosha continued to grow during 1979, maintaining a trend which began in September 1971 with the reestablishment of the Kenosha transit system under public ownership. No significant changes in transit routes, service area, or level of service were made during 1979. However, in January 1979, the adult base transit fare was increased from \$0.25 to \$0.30 per ride in order to offset the increasing operating deficit requiring subsidy. Despite this fare increase, total transit ridership increased by about 16 percent—from the 1978 ridership level of 1,152,300 revenue passengers to 1,332,300 revenue passengers in 1979. The number of bus miles operated in revenue service during the year totaled 706,200, an increase of about 12 percent over the 630,100 bus miles operated during 1978. Revenue bus miles operated is an important indicator of the level of transit service provided.

## PERSONS PER AUTOMOBILE AVAILABLE



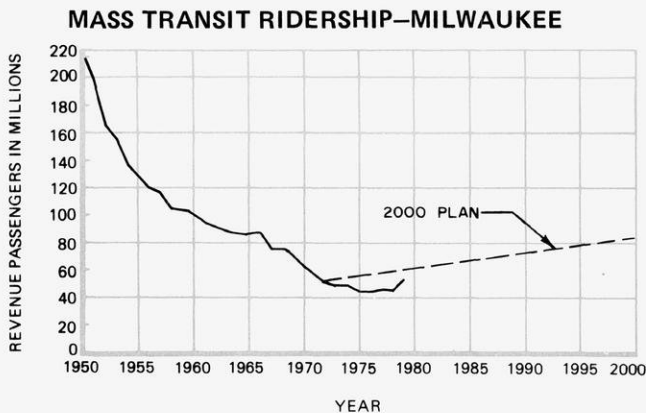
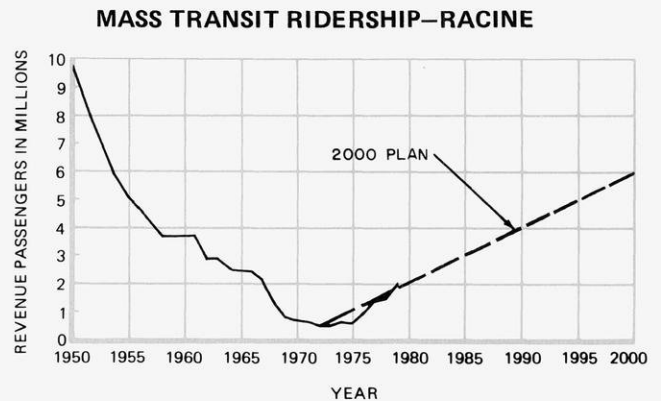
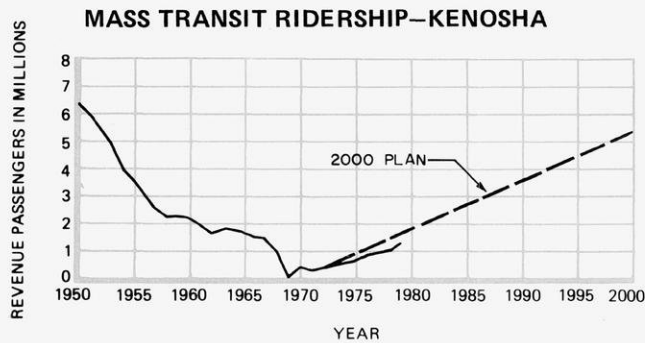
In the Racine urbanized area, ridership levels on the public transit system serving the City of Racine increased substantially over 1978 ridership levels. Public transit ridership increased during 1979 to approximately 2,072,700 revenue passengers—an increase of about 530,700 revenue passengers, or 34 percent, over the 1978 level of 1,542,000 passengers. This large increase in total transit ridership may be attributed in part to increased student ridership resulting from a new contract between the Racine Unified School District and the Racine transit system for providing student transportation services. No significant changes in transit routes,

# PUBLIC TRANSIT RIDERSHIP

Urbanized Area	1978	1979	Percent Change
Kenosha . . . . .	1,152,300	1,332,300	16
Milwaukee			
Milwaukee County . . . . .	45,417,000 <sup>a</sup>	55,435,000 <sup>a</sup>	22
Ozaukee County . . . . .	20,600 <sup>b</sup>	--	--
Waukesha County . . . . .	182,400	206,200	13
Wisconsin Coach Lines, Inc. . . . .	134,000	146,900	10
Subtotal	45,542,000	55,788,100	22
Racine. . . . .	1,542,300	2,072,700	34
Total	48,449,200	59,193,100	22

<sup>a</sup> Using the State's definition of revenue passengers, Milwaukee County reported total system ridership figures for 1978 and 1979 of 52,544,700 passengers and 65,060,800 passengers, respectively. The difference between the reported ridership figures and the figures presented in the above table are due to the inclusion of transfers made by patrons using passes as separate rides in the higher ridership figures. The lower figure more accurately represents total trips made by transit.

<sup>b</sup> Ozaukee County terminated mass transit service on June 10, 1978.

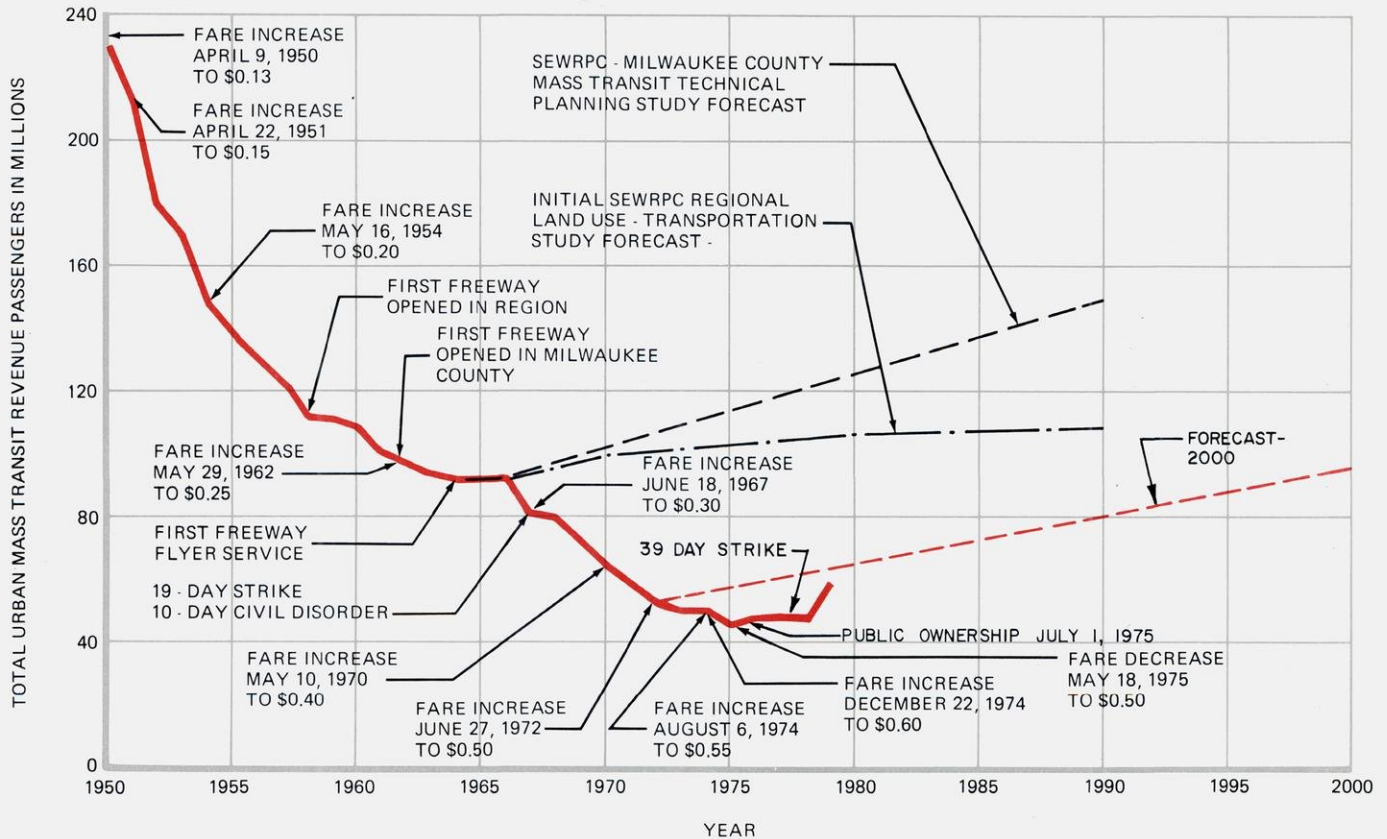


service areas, or service levels were made during 1979. The number of bus revenue miles operated during 1979 totaled 978,200—a decrease of less than 1 percent from the 984,100 bus miles operated during 1978.

During 1979 public transit service in the Milwaukee urbanized area was provided primarily by the Milwaukee County Transit System, with commuter-oriented transit service from Oconomowoc and Waukesha to the Milwaukee central business district provided by Waukesha County. In addition, transit service was provided by Wisconsin Coach



## HISTORICAL TREND IN MASS TRANSIT RIDERSHIP IN THE REGION

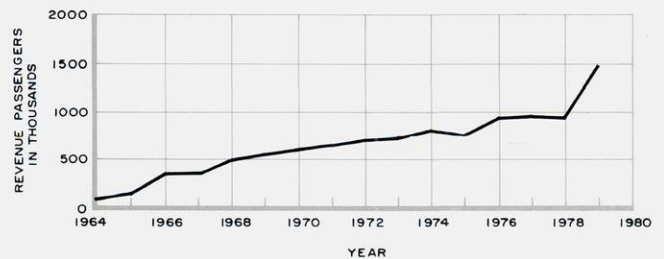


NOTE: FARE INCREASES AND DECREASES SHOWN IN THIS FIGURE REFER ONLY TO THE MILWAUKEE COUNTY TRANSIT SYSTEM AND TO THE SINGLE-RIDE ADULT CASH FARE.

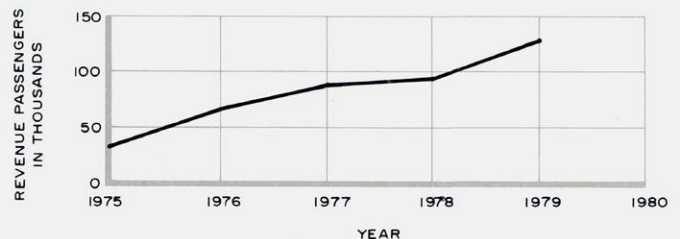
Lines, Inc., a private transit operator, between the Milwaukee central business district and the Cities of Racine and Kenosha. Transit ridership on these three services increased by about 22 percent during the year—from a 1978 level of about 45.7 million to a 1979 level of about 55.8 million. A portion of this increase may be attributed to the recovery made by the Milwaukee County Transit System from the effects of a transit operator strike which disrupted service for a 39-day period during 1978 and resulted in reduced transit ridership for that year. The number of bus miles operated in revenue service during 1979 totaled about 20.2 million, representing an increase of about 16 percent over the 17.4 million miles operated during 1978.

During 1979 primary transit service in the Milwaukee urbanized area was provided by Freeway Flyer bus service from 14 outlying parking terminals to the Milwaukee central business district, and by UBUS flyer bus service from three outlying parking terminals to the University of Wisconsin-Milwaukee. Ridership on the Freeway Flyer bus

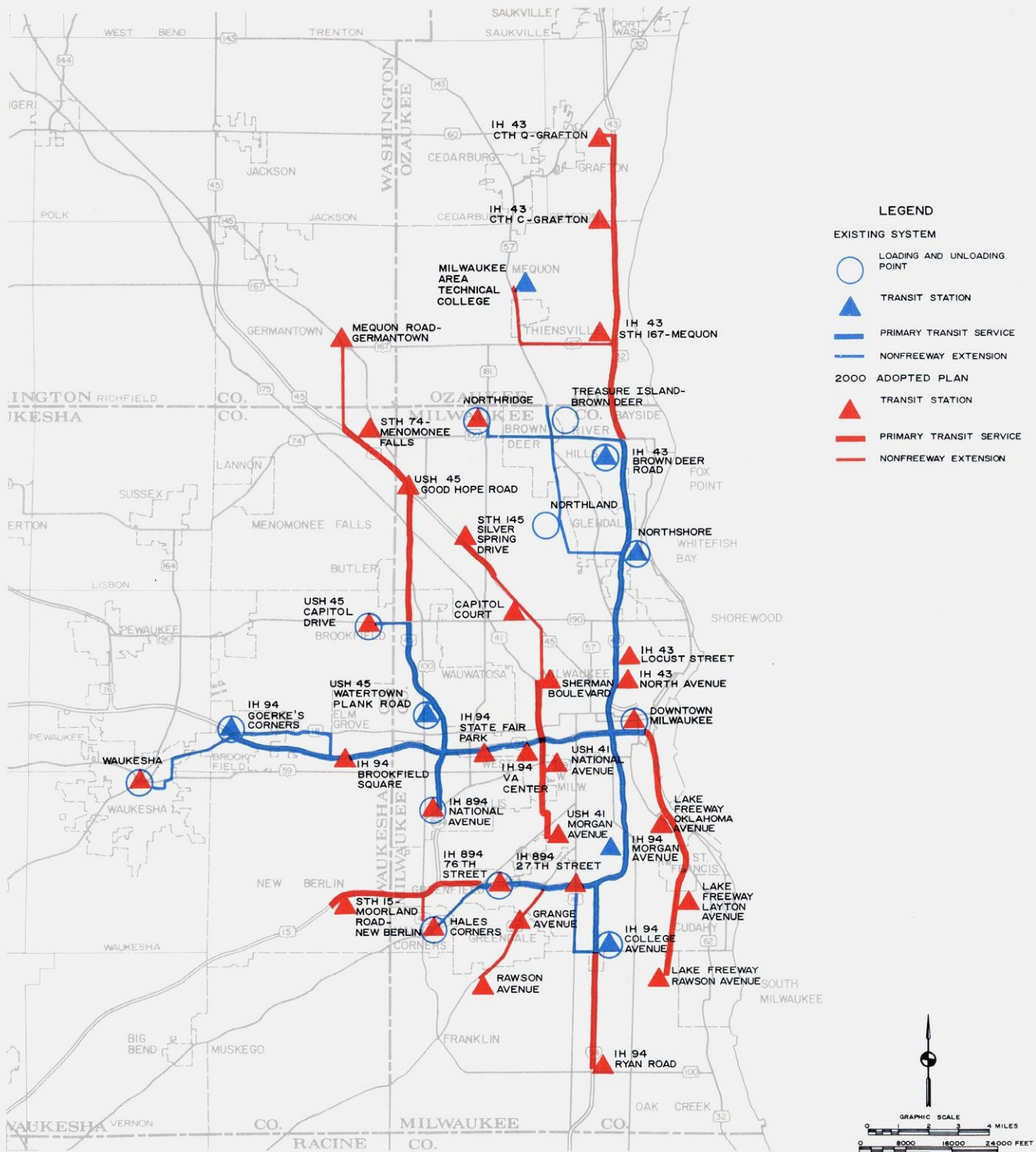
### MILWAUKEE AREA FREEWAY FLYER RIDERSHIP



### UBUS FLYER RIDERSHIP



# PRIMARY TRANSIT SYSTEM PLAN FOR THE MILWAUKEE URBANIZED AREA



service totaled about 1,524,600 passengers in 1979, representing an increase of 57 percent over the 969,600 passengers carried in 1978. Growth in ridership on the UBUS flyer transit service was also experienced, with ridership increasing by about 35 percent—from the 1978 total of 99,000 passengers to 133,300 passengers in 1979.

Progress in providing the public transit stations recommended in the adopted year 2000 transportation plan is summarized on the accompanying map. During 1979, progress in this area included the initiation of Freeway Flyer bus service from a new public transit station located at the Holt Avenue interchange on the North-South Freeway

# USE OF PARKING AT FREEWAY FLYER TERMINALS

Location	Available Parking Spaces	Autos Parked on an Average Weekday— Fourth Quarter: 1979	Percent of Spaces Used <sup>a</sup>
<b>Public Transit Stations</b>			
W. College Avenue (Milwaukee) . . . . .	300	414	138
W. Watertown Plank Road (Wauwatosa) . . . . .	200	180	90
North Shore (Glendale) . . . . .	190	184	97
Brown Deer (River Hills) . . . . .	250	170	68
Goerkes Corners (Brookfield) . . . . .	250	129	52
Milwaukee Area Technical College (Mequon) <sup>b</sup> . . . . .	150	2	1
W. Holt Avenue (Milwaukee) . . . . .	240	78	33
Subtotal	1,580	1,157	73
<b>Shopping Center Lots</b>			
Northland (Milwaukee) . . . . .	100	36	36
K-Mart (Hales Corners) . . . . .	200	184	92
Treasure Island (West Allis) . . . . .	425	426	100
Treasure Island (Brookfield) . . . . .	250	250	100
Spring Mall (Greenfield) . . . . .	300	297	99
Northridge (Milwaukee) . . . . .	100	69	69
Treasure Island (Brown Deer) . . . . .	125	101	81
Subtotal	1,500	1,363	91
<b>Total</b>	<b>3,080</b>	<b>2,520</b>	<b>82</b>

<sup>a</sup> In some cases the number of autos parked on an average weekday exceeds the available parking spaces. At public transit stations, this indicates that cars are being parked in aisles and on adjacent grass areas. At shopping center lots, this means that autos are being parked in areas not designated for all-day commuter parking.

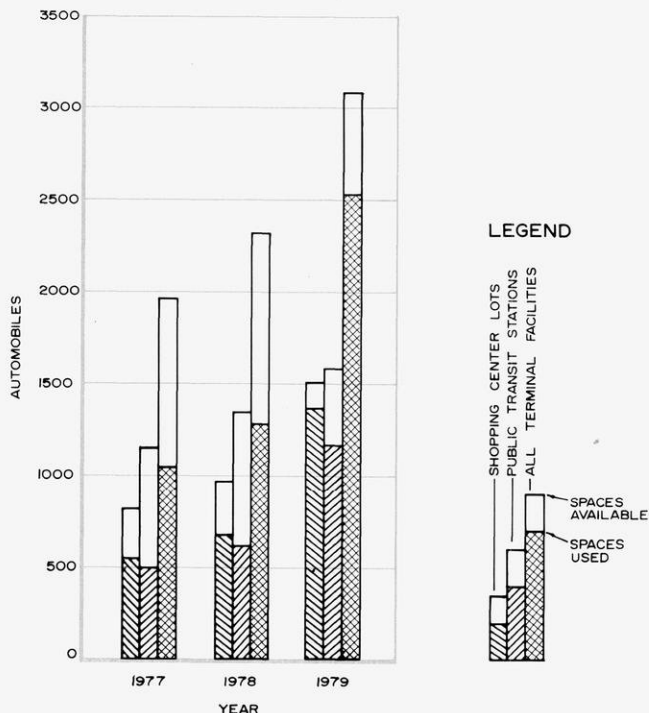
<sup>b</sup> Public transit service to this station was terminated by the Ozaukee County Board of Supervisors on June 10, 1978.

in the City of Milwaukee. As shown in the accompanying table, off-street parking for patrons of Freeway Flyer bus service and carpoolers was provided at seven public transit/park-ride stations and at seven shopping center lots. The use of an eighth shopping center lot to provide off-street parking—S. 27th Street/Target (Milwaukee)—was terminated in August 1979 at the request of the shopping center management. The number of parking spaces available in 1979 at public transit/park-ride stations increased to a total of 1,580 spaces with the addition of 240 spaces at the new Holt Avenue transit station. The number of spaces allocated at four of the shopping center lots—K-Mart (Hales Corners), Treasure Island (West Allis), Treasure Island (Brookfield), and Spring Mall (Greenfield)—was increased by a total of

635 spaces to reduce the overflow of parked vehicles into the customer parking area of each shopping center. Of the 1,580 available parking spaces at the seven public transit stations, 1,157 spaces were used on an average weekday during the fourth quarter of 1979, representing a utilization rate of 73 percent. Of the 1,500 available parking spaces at the seven shopping center lots, 1,363 were utilized on an average weekday during the last quarter of 1979, representing a utilization rate of 91 percent. Use of designated parking areas at two public transit stations—the West College Avenue lot in Milwaukee and the North Shore lot in Glendale—and at three shopping center lots—the Treasure Island lots in both West Allis and Brookfield and the Spring Mall lot in Greenfield—nearly equaled or exceeded the available parking supply.



## FREEWAY FLYER PARKING LOT USE



In all, about 82 percent of all available parking spaces at Freeway Flyer terminals were used on an average weekday during the last quarter of 1979.

Transit operating subsidies during 1979 totaled more than \$20 million, as compared to about \$14.4 million in 1978. The operating subsidies were distributed by urbanized area as shown in the accompanying table. The overall public operating subsidy per ride in the Kenosha and Milwaukee urbanized areas increased from about \$0.55 in 1978 to about \$0.56 in 1979, and from about \$0.28 in 1978 to about \$0.33 in 1979, respectively. The change in Kenosha reflects the net effect of both an increase in fare and an increase in the level of service. In the Racine urbanized area, the operating subsidy per ride decreased from about \$0.51 in 1978 to about \$0.43 in 1979, reflecting the significant increase in utilization experienced on this system during the year.

### Carpool Parking Facilities

During 1979 the Commission collected data on the use of available parking supply at carpool parking facilities within the Region. As shown in the accompanying table, 10 publicly owned carpool parking facilities were in operation at key

freeway interchanges in the outlying areas of the Region in 1979. Of the 10 lots in operation, four represent new carpool facilities completed and put into service during 1979—IH 43 and CTH C (Grafton), STH 16 and CTH C (Nashotah), STH 16 and STH 83 (Chenequa), and IH 94 and CTH CC (Delafield). The completion of these four carpool lots added an additional 195 parking spaces to the available parking supply. Approximately 291 of the 582 total parking spaces available at the existing carpool lots were used on an average weekday during the fourth quarter of 1979, representing a utilization rate of 50 percent and, more importantly, an increase of 116 percent in parked vehicles from 1978 to 1979. Progress in providing the carpool parking lots recommended in the adopted year 2000 regional transportation plan is summarized on the accompanying map.

### Traffic Count Data

The Commission collated traffic count data collected by other state, county, and local agencies during the year. These data are essential to monitoring changes in travel occurring in the Region and to calculating estimates of levels of, and trends in, vehicle miles of travel. During 1979 traffic volume data were collected from the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, and the City of Milwaukee, all of which operate regular traffic counting programs. These data will be used in 1980 to develop estimates of vehicle miles of travel and to measure the level of congestion occurring on the arterial street and highway system.

### LONG-RANGE PLAN

#### Long-Range Transportation System Plan

As reported in the Commission 1978 Annual Report, on June 1, 1978 the Commission adopted a new 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, which extends and amends the regional transportation system plan for the design year 1990, adopted in 1966. The newly adopted plan is graphically summarized on the accompanying map. The new long-range regional transportation system plan was prepared to accommodate the existing and probable future travel demand in the Region,

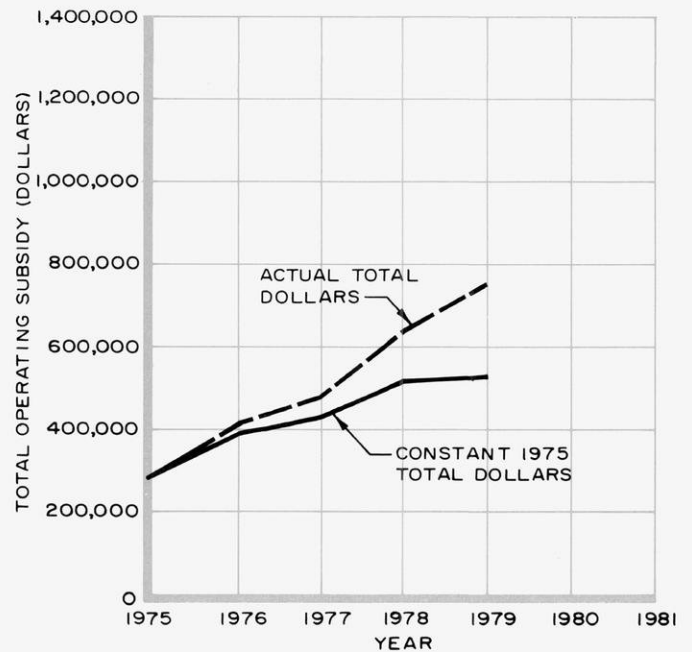
# PUBLIC TRANSIT OPERATING SUBSIDIES

Urbanized Area	Public Operating Assistance (dollars)							
	1978				1979			
	Federal	State	Local	Total	Federal	State	Local	Total
Kenosha . . . .	383,094	144,438	110,363	637,895	443,674	209,753	97,121	750,548
Milwaukee . . .	7,308,225	3,748,834	1,870,236	12,927,295	10,168,989	6,023,054	2,354,676	18,546,719
Racine . . . . .	412,964	262,635	116,236	791,835	490,196	290,222	103,951	884,369
Total	8,104,283	4,155,907	2,096,835	14,357,025	11,102,859	6,523,029	2,555,748	20,181,636

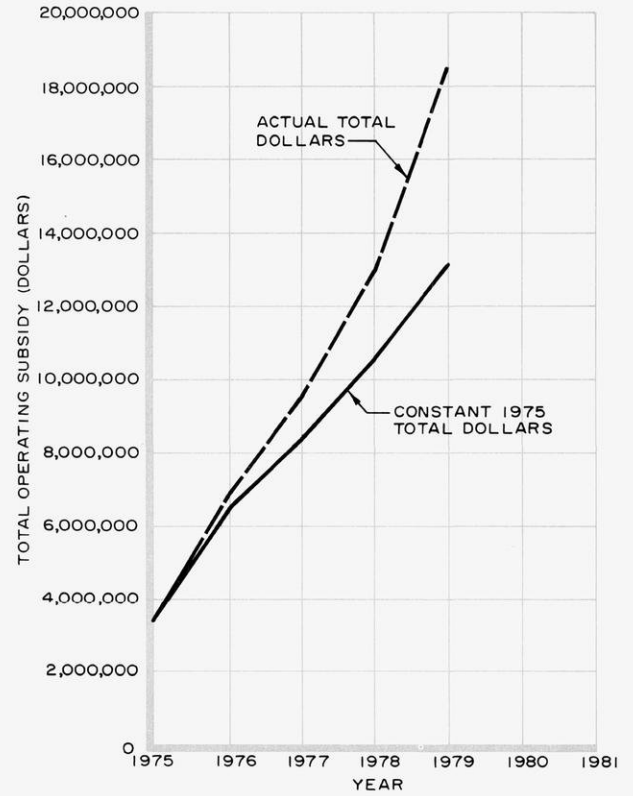
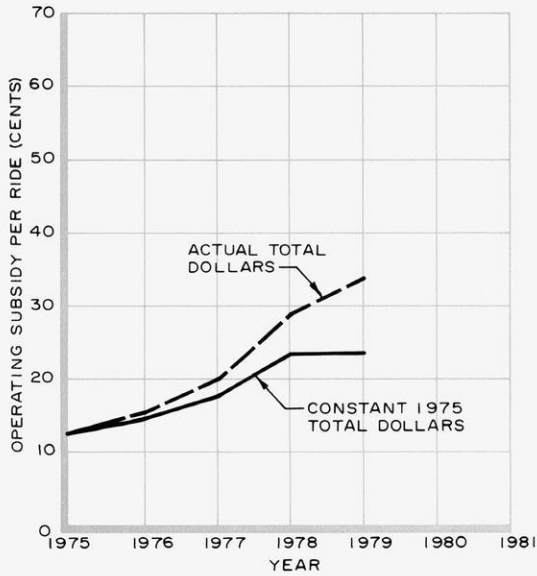
Urbanized Area	Operating Subsidy per Ride (cents)							
	1978				1979			
	Federal	State	Local	Total	Federal	State	Local	Total
Kenosha . . . .	33.2	12.5	9.6	55.3	33.3	15.7	7.3	56.3
Milwaukee . . .	16.0	8.2	4.1	28.3	18.3	10.8	4.2	33.3
Racine . . . . .	26.8	17.0	7.5	51.3	23.7	14.0	5.0	42.7

NOTE: 1978 figures are post audit; 1979 figures are pre-audit.

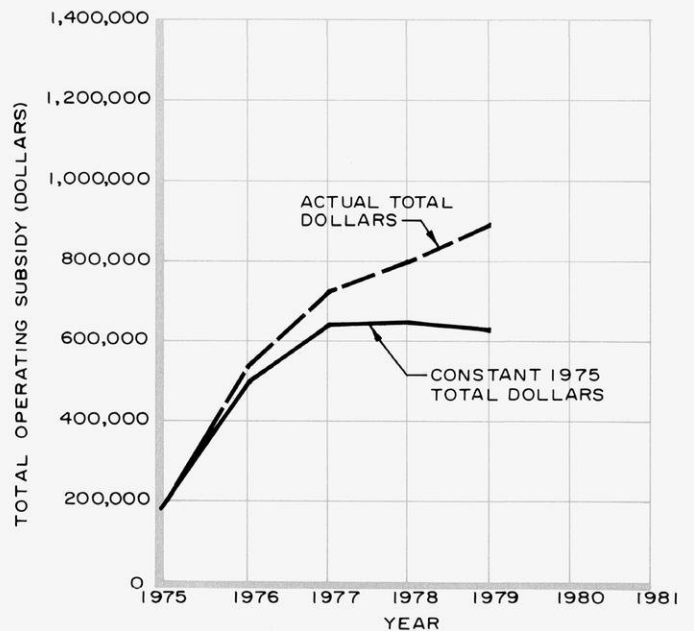
## MASS TRANSIT OPERATING SUBSIDIES IN THE KENOSHA URBANIZED AREA: 1975-1979



### MASS TRANSIT OPERATING SUBSIDIES IN THE MILWAUKEE URBANIZED AREA: 1975-1979

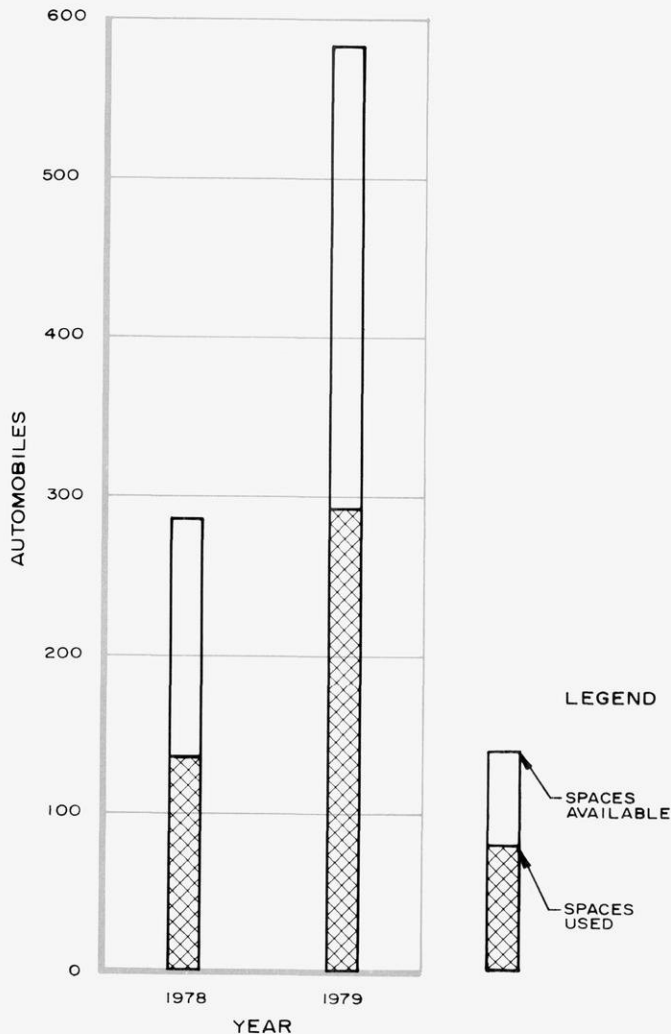


### MASS TRANSIT OPERATING SUBSIDIES IN THE RACINE URBANIZED AREA: 1975-1979





### CARPOOL PARKING LOT USE



which is expected to increase by about 28 percent—from a total of about 4.5 million person trips per average weekday in 1972 to about 5.7 million such trips by the year 2000. Total vehicle miles of travel on an average weekday is anticipated to increase by more than 49 percent—from about 20.1 million to about 30.1 million. The new year 2000 regional transportation system plan seeks to provide the Region with a safe, efficient, and economical transportation system which can effectively serve the existing and probable future travel demand within the Region, which will meet the recommended regional transportation system development objectives, and which will serve and promote implementation of the adopted regional land use plan.

With respect to freeways, the plan does not include a number of previously planned freeways, including the Metropolitan Belt Freeway, the Bay Freeway from Pewaukee to Whitefish Bay, the Stadium Freeway-North, the Park Freeway-West, and the Racine Loop Freeway. The remaining previously proposed freeways were included in the new plan in one of two tiers. In the lower tier are the following freeways recommended for construction in the relatively near-term future: the Stadium Freeway-South to W. Lincoln Avenue, the Lake Freeway-South to E. Layton Avenue, the West Bend Freeway (USH 45), the USH 41 Freeway conversion in Washington County, the USH 16 Freeway in Waukesha County, and the USH 12 Freeway in Walworth County. The remaining proposed freeways in Milwaukee County, including the Stadium Freeway-South from W. Lincoln Avenue to the Airport Freeway (IH 894), the Downtown Loop Freeway, and the Lake Freeway-South from E. Layton Avenue to the Illinois state line were placed in the upper tier of the plan. These proposed freeways represent facilities which Commission studies indicate will be needed if regional population, employment, urban development, and travel demand increase in accordance with the forecasts on which the long-range system plan is, in part, based. In the meantime, the plan recommends that attempts be made to reduce vehicular travel demand through transportation system management actions, including the institution of auto use disincentives, particularly in terms of the parking rate structure in downtown Milwaukee, extensive freeway ramp metering, increased carpooling and vanpooling, work time rescheduling, and improved mass transit service. The plan envisions that if such management measures encourage a sufficient shift from the automobile mode to transit and other high-occupancy vehicle modes of travel, it may never be necessary to construct those freeway segments placed in the upper tier of the plan. Along with these recommendations, the adopted regional transportation plan recommends that minor freeway modifications and ramp improvements be made to effect better transitions between existing “stub ends” of the freeway system and the surface arterial system.

The adopted regional transportation plan also contains extensive recommendations relative to the maintenance and improvement of the standard surface arterial streets and highways in the Region, as well as recommendations directed at improving public transit facilities and services. The adopted plan envisions undertaking a series of extensive transportation system management actions, includ-

# USE OF PARKING SUPPLY AT CARPOOL PARKING LOTS

Location	Available Parking Spaces	Autos Parked on an Average Weekday— Fourth Quarter: 1979	Percent of Spaces Used <sup>a</sup>
Ozaukee County			
IH 43 and STH 57 . . . . .	100	15	15
IH 43 and CTH C. . . . .	50	27	54
Waukesha County			
Nashotah			
STH 16 and CTH C. . . . .	50	11	22
Chenequa			
STH 16 and STH 83 . . . . .	65	11	17
Oconomowoc			
IH 94 and STH 67 . . . . .	35	33	94
Delafield			
IH 94 and CTH CC . . . . .	30	7	23
Pewaukee			
IH 94 and STH 164. . . . .	77	44	57
Mukwonago			
STH 15 and STH 83 . . . . .	45	54	120
Big Bend			
STH 15 and CTH F. . . . .	70	51	73
New Berlin			
STH 15 and CTH Y. . . . .	60	38	63
Total	582	291	50

<sup>a</sup> In some cases the number of autos parked on an average weekday exceeds the number of available parking spaces. This indicates that autos are being parked in aisles and on adjacent grass areas.

ing the institution of a freeway traffic management system, work time rescheduling, the elimination of curb parking facilities, changing the parking rate structure in downtown Milwaukee, and the promotion of ride sharing. These management recommendations would be designed to accomplish five objectives: to ensure that maximum use is made of existing transportation facilities before commitments are made to new capital investment; to encourage the use of high-occupancy vehicles, including buses, vans, and carpools; to reduce vehicle use in congested areas; to effect motor fuel savings; and to reduce air pollutant emissions.

A more complete description of the adopted year 2000 regional transportation plan is set forth in the Commission 1978 Annual Report. By the end of 1979, this new plan had been adopted by the Kenosha, Ozaukee, Racine, and Waukesha Boards of Supervisors; by the Common Councils of the

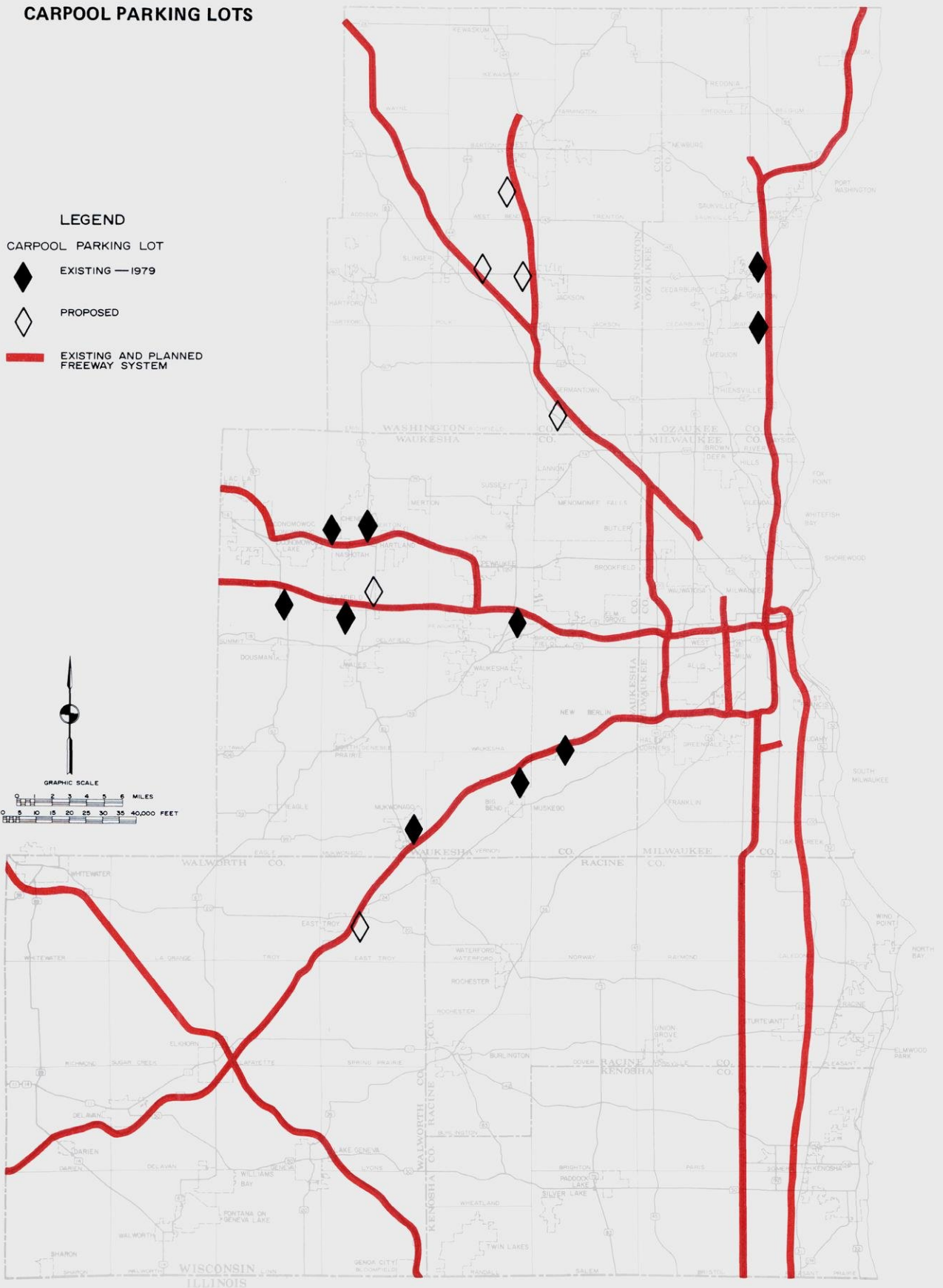
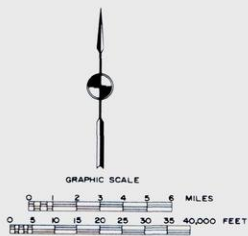
Cities of Burlington and Milwaukee; by the Village Board of the Village of River Hills; and by the Plan Commissions of the City of Oconomowoc and the Town of Dover. In addition, the new plan had been accepted and/or endorsed by the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration, and by the Wisconsin Department of Transportation, with the latter agency indicating that funding constraints will likely preclude construction of the Lake Freeway-South for at least the next decade.

## Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study

When the Commission deleted the Park Freeway-West and the Stadium Freeway-North from the regional transportation system plan, it also directed that a special study be undertaken in cooperation

# CARPOOL PARKING LOTS

- LEGEND**
- CARPOOL PARKING LOT
- ◆ EXISTING — 1979
  - ◇ PROPOSED
  - EXISTING AND PLANNED FREEWAY SYSTEM





# REGIONAL TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN REGION: 2000

## LEGEND

### ARTERIAL STREET AND HIGHWAY SYSTEM

#### JURISDICTIONAL CLASSIFICATION

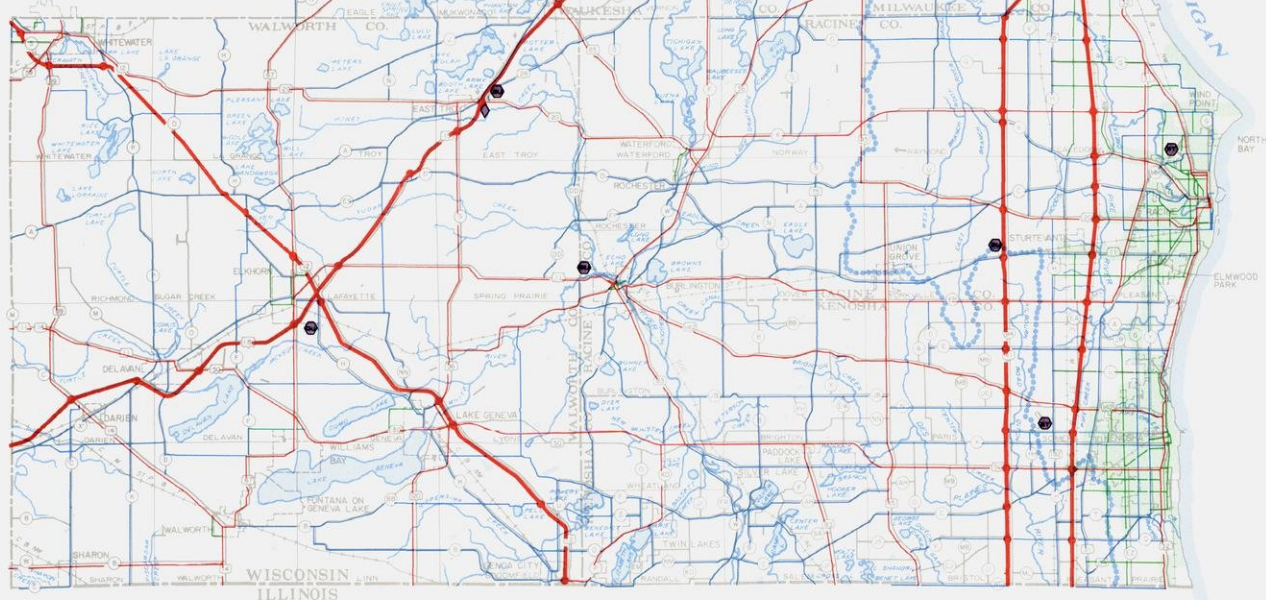
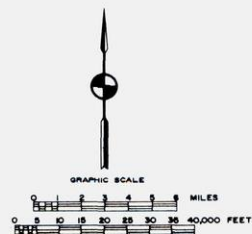
- STATE TRUNK - FREEWAY
- STATE TRUNK - NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY - NONFREEWAY INTERCHANGE

### URBAN MASS TRANSIT SYSTEM

- SERVICE AREA
- ▲ TRANSIT STATION
- ▲ P - WITH PARKING
- ◆ PARK AND POOL LOT

### AIRPORT SYSTEM CLASSIFICATION

- ST-SCHEDULED AIR TRANSPORT
- BT-BASIC TRANSPORT
- GU-GENERAL UTILITY
- BU-BASIC UTILITY





with the Wisconsin Department of Transportation, Ozaukee County, Milwaukee County, and the concerned local units of government within those two counties and concerned citizens of the best way to meet the existing and probable future transportation needs of the subarea of the Region proposed to have been served by these two freeways in the absence of those freeways. Such a study would have two distinct and related purposes: first, to identify in a definitive manner the effect of the removal of the two freeways from the long-range plan on the northwestern quadrant of the Milwaukee urbanized areas of Ozaukee and Milwaukee Counties; and second, to explore alternative means, including low-capital intensive systems management measures and more capital-intensive surface arterial improvements, of providing an improved level of transportation service to the affected area within acceptable limits of cost and negative social, economic, and environmental impacts.

The Milwaukee Northwest Side/Ozaukee County transportation improvement study undertaken pursuant to this Commission direction began during 1979. With the help of an 18-member technical and citizens advisory committee, whose membership is set forth in full in Appendix B, a study area was defined—as shown on the accompanying map—and problems and deficiencies in the existing transportation system were identified. These problems and deficiencies were set forth in detail in the Vol. 19, No. 4, issue of the SEWRPC newsletter published in August 1979 and widely distributed to the general public in the study area as part of a public information program that culminated in three public hearings on the identified deficiencies and problems.

Seven basic transportation system development and management objectives were used to formally define the basic transportation needs of the study area: land use accessibility; economic and energy efficiency; safety; quick and convenient travel; minimum disruption of the community and natural resource base; provision of an appropriate level of transportation services; and aesthetics. The extent to which each of these objectives is currently being met in the study area was quantitatively determined by measuring the performance of the system against standards supporting each of the seven objectives. Based upon this analysis, the existing transportation system problems of the study area were defined in terms of specific arterial streets and highways exhibiting particularly severe safety and congestion problems. As shown in the accompanying table, 14 arterial reaches in the study area

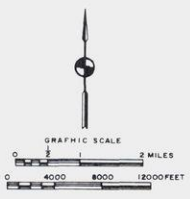
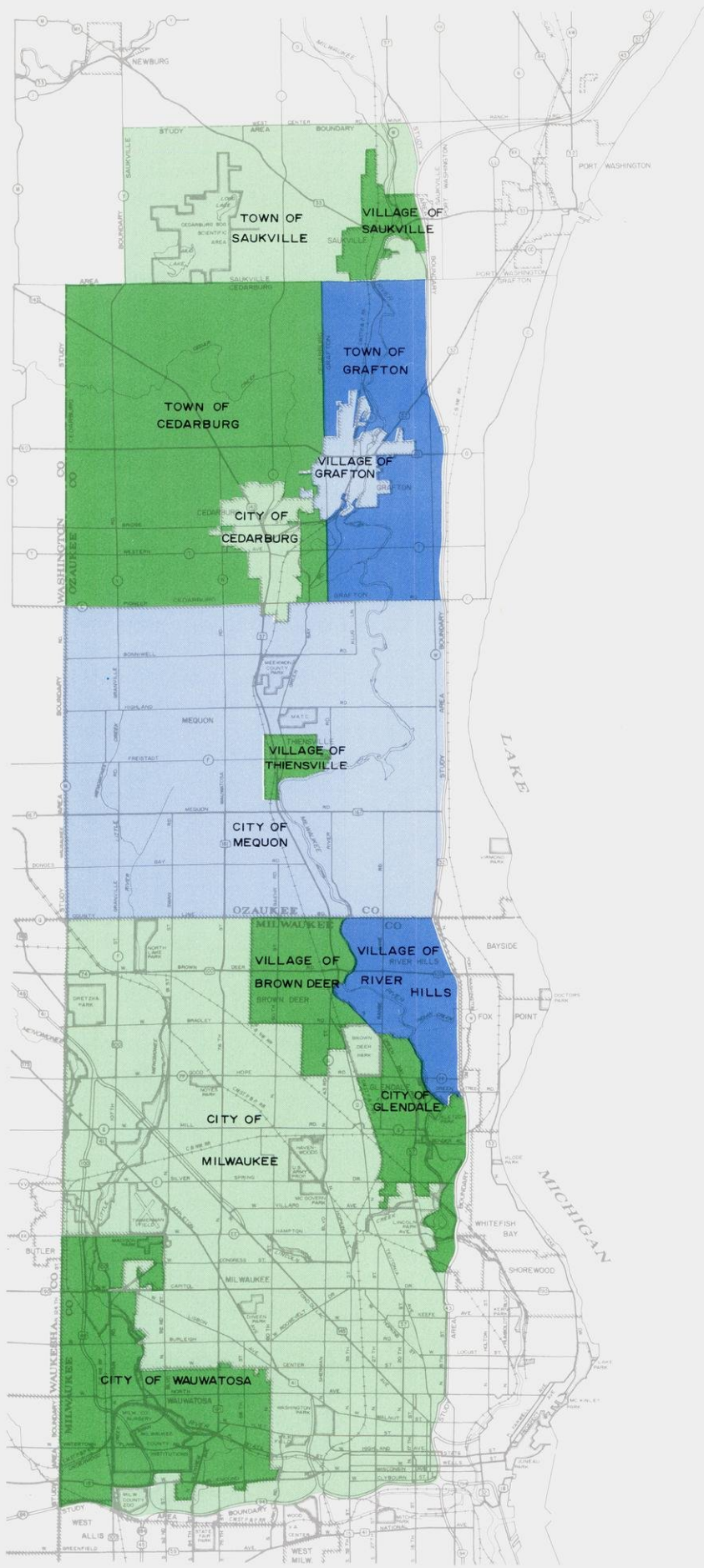
were identified as having traffic problems. These 14 arterial reaches exhibit along their length at least one or more of the following traffic congestion symptoms: operation over design capacity during either the morning or evening peak hour, or both; substandard operating speeds—that is, operating speeds below 25 miles per hour on divided facilities and below 20 miles an hour on undivided facilities; and the presence of high accident locations—that is, intersections experiencing 10 or more accidents in 1978.

Within the 14 arterial reaches, five arterial segments were identified as having the most severe traffic problems. As shown on the accompanying map, these segments consist of that portion of N. 76th Street between W. Good Hope Road and W. Bradley Road; N. 76th Street between W. Appleton Avenue and W. Capitol Drive; N. Mayfair Road from the East-West Freeway to Watertown Plank Road; W. Capitol Drive between Sherman Boulevard and N. 35th Street; and W. Sherman Boulevard between Congress Street and W. Capitol Drive. These five arterial segments were found to be operating over design capacity during both the morning and evening peak hours; to exhibit substandard operating speeds; and to include at least one intersection that experienced 25 or more accidents during 1978.

In addition, four freeway segments with particularly severe transportation problems were identified. These segments were found to exhibit severe congestion during both morning and evening peak hours and experienced at least 200 accidents in 1978. These freeways include the Zoo Freeway from N. North Avenue to W. Wisconsin Avenue; the East-West Freeway from the Zoo Interchange to the Stadium Interchange; the East-West Freeway from N. 35th Street to the Marquette Interchange; and the North-South Freeway from W. North Avenue to W. Hampton Avenue.

The existing transportation system problems and deficiencies so identified were presented at a series of three public hearings held in Ozaukee County on September 19, 1979, and in Milwaukee County on November 13 and November 15, 1979. The comments made at these hearings essentially supported the findings of the Commission regarding the study area's transportation system problems and deficiencies, but also served to cite additional problems as perceived by residents and public officials of the study area. The additional existing problems pertain to eight arterial street segments identified by the City of Milwaukee Department of

THE MILWAUKEE NORTHWEST SIDE/  
OZAUKEE COUNTY STUDY AREA



Public Works as warranting consideration for short-range improvement under the study principally based on the traffic accident rate and frequency on these segments. These eight arterial segments are:

1. W. North Avenue from N. 27th Street to the North-South Freeway (IH 43);
2. W. Lisbon Avenue from N. Sherman Boulevard to W. Walnut Street;
3. W. Wisconsin Avenue from N. 35th Street to N. 16th Street;
4. W. Fond du Lac Avenue from W. Capitol Drive to N. 60th Street;
5. N. 20th Street from W. Hopkins Street to W. North Avenue;
6. N. 107th Street from W. Good Hope Road to W. Brown Deer Road;
7. W. Brown Deer Road from N. 91st Street to N. 76th Street; and
8. W. Good Hope Road from N. Sherman Boulevard to N. 76th Street.

Comments were also made at both the Milwaukee and Ozaukee County public hearings regarding the need to provide public transit facilities and services to developing parts of the study area, and to provide for long-range major facility improvement in the N. 76th Street corridor in both counties.

At year's end, the study had progressed to the point where the potential future transportation system problems in the study area were being assessed, and alternative plans with respect to both short-range transportation system management recommendations and long-range transportation system improvement recommendations were being prepared.

#### **Milwaukee Area Primary Transit System Alternatives Analysis**

An important component of the public mass transportation system of any urbanized area is the primary transit system—that is, that system which provides the highest operating speeds and serves the longer trips within the urbanized area. In the Milwaukee urbanized area, such service is presently provided by buses operating in mixed traffic over freeways. In some urbanized areas buses are

also used, but operate over exclusive busways. Yet other urbanized areas use various forms of rail transit to provide primary service, including light rail transit, heavy rail rapid transit, and commuter rail. The consideration of which of these modes can best serve the transportation needs of an urbanized area rightly deserves periodic reexamination and reconsideration.

Within this context, Milwaukee County Executive William F. O'Donnell requested the Commission in 1978 to reexamine the feasibility of reestablishing a light rail system in the Milwaukee area. In order to meet federal planning requirements, a study was designed that would provide for the reexamination of all possible modes of providing primary transit service in accordance with a set of requirements specified by the U. S. Department of Transportation, Urban Mass Transportation Administration, for such studies. The Urban Mass Transportation Administration term for such studies is "alternatives analysis." In 1978 the Commission published a prospectus that identified five factors which contribute to the need to conduct such an alternatives analysis in the Milwaukee urbanized area:

1. The need to reconsider the best means of providing primary transit service in certain subareas of the Milwaukee urbanized area as a result of the elimination of certain previously planned freeway segments which would have carried the primary transit service for those subareas;
2. The potential availability of active and abandoned railroad rights-of-way and electric power transmission, and of cleared freeway rights-of-way through certain subareas of the Milwaukee urbanized area, suitable for the location of fixed guideway transit facilities;
3. The need to reconsider the potential serviceability and financial feasibility of the existing and planned future motor bus transit system in the Milwaukee urbanized area in light of the rising cost and potential shortages of petroleum-based motor fuels;
4. Public interest in light rail transit as an alternative primary transit mode in Milwaukee; and
5. The attractiveness of the potential benefits of any fixed guideway primary transit system.

**STANDARD ARTERIAL STREETS AND HIGHWAYS WITHIN  
THE STUDY AREA EXHIBITING SEVERE TRAFFIC PROBLEMS**

Study Area Standard Arterial Streets and Highways	Length (miles)	Percent of Study Area Portion Arterial System	Percent of Total Study Area Arterial System
<b>Milwaukee County Portion</b>			
N. 76th Street from W. Harwood Avenue to W. Bradley Road . . . .	8.0	3.0	1.8
W. Capitol Drive from N. 76th Street to the North-South Freeway (IH 43). . . . .	4.4	1.6	1.0
N. Mayfair Road (STH 100) from the East-West Freeway (IH 94) to W. Capitol Drive . . . . .	4.3	1.6	1.0
N. Sherman Boulevard from W. Lisbon Avenue to W. Silver Spring Drive. . . . .	4.4	1.6	1.0
W. Silver Spring Drive from W. Appleton Avenue to N. Teutonia Avenue. . . . .	4.1	1.5	1.0
N. 35th Street from the East-West Freeway (IH 94) to W. Capitol Drive. . . . .	4.0	1.5	1.0
N. 27th Street from the East-West Freeway (IH 94) to N. Teutonia Avenue. . . . .	4.8	1.8	1.0
W. Vliet Street and Milwaukee Avenue from N. 20th Street to Harwood Avenue . . . . .	3.4	1.2	0.8
Related street segments proceeding from the terminus of the Stadium Freeway-North "stub end" including W. Lisbon Avenue from N. Sherman Boulevard to its intersection with N. 60th Street, W. Center Street from its intersection with W. Lisbon Avenue to N. 76th Street, N. 60th Street from its intersection with W. Center Street to W. Capitol Drive, and W. Appleton Avenue from its intersection with W. Lisbon Avenue to N. 76th Street. . . . .	5.9	2.2	1.4
W. Hampton Avenue from N. 92nd Street to the North-South Freeway (IH 43) . . . . .	5.6	2.0	1.2
W. Fond du Lac Avenue from N. 20th Street to W. Capitol Drive. . . . .	2.8	1.0	0.6
W. North Avenue from N. 124th Street to N. 76th Street . . . . .	3.0	1.0	0.6
Subtotal	54.7	20.0	12.4
<b>Ozaukee County Portion</b>			
STH 57 from Donges Bay Road to Highland Road . . . . .	3.2	2.0	0.8
STH 57 from Pioneer Road (CTH C) to the intersection of Washington Street (STH 60) and Grafton Avenue (STH 57) . . . .	4.0	2.4	0.8
Subtotal	7.2	4.4	1.6
<b>Total</b>	<b>61.9</b>	<b>--</b>	<b>14.0</b>

The Milwaukee area alternatives analysis study began during 1979. It was determined that the findings and recommendations from this major transportation study would be documented in four Commission technical reports and one Commission planning report. The series of technical reports will fully document all aspects of the work, and the planning report will provide the essential summaries of the work and its principal findings, including, importantly, the recommended primary transit system plan for the Milwaukee area. Two of the technical reports will document the inventory

findings of the study. One of these two reports will present the existing level and characteristics of factors in the Milwaukee area and Region which affect the need for, and use of, primary transit in the Milwaukee area, including population, economic activity, land use, and travel habits and patterns. Data on the trends in these factors will also be presented in this report, as will an inventory of the characteristics of the existing transportation system of the area and of the rights-of-way in the area which may have the potential to readily accommodate primary transit

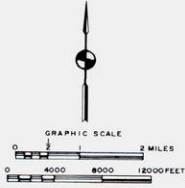


**ARTERIAL STREETS AND HIGHWAYS WITHIN  
THE MILWAUKEE NORTHWEST SIDE/  
OZAUKEE COUNTY TRANSPORTATION  
IMPROVEMENT STUDY AREA WITH  
TRANSPORTATION PROBLEMS: 1978**

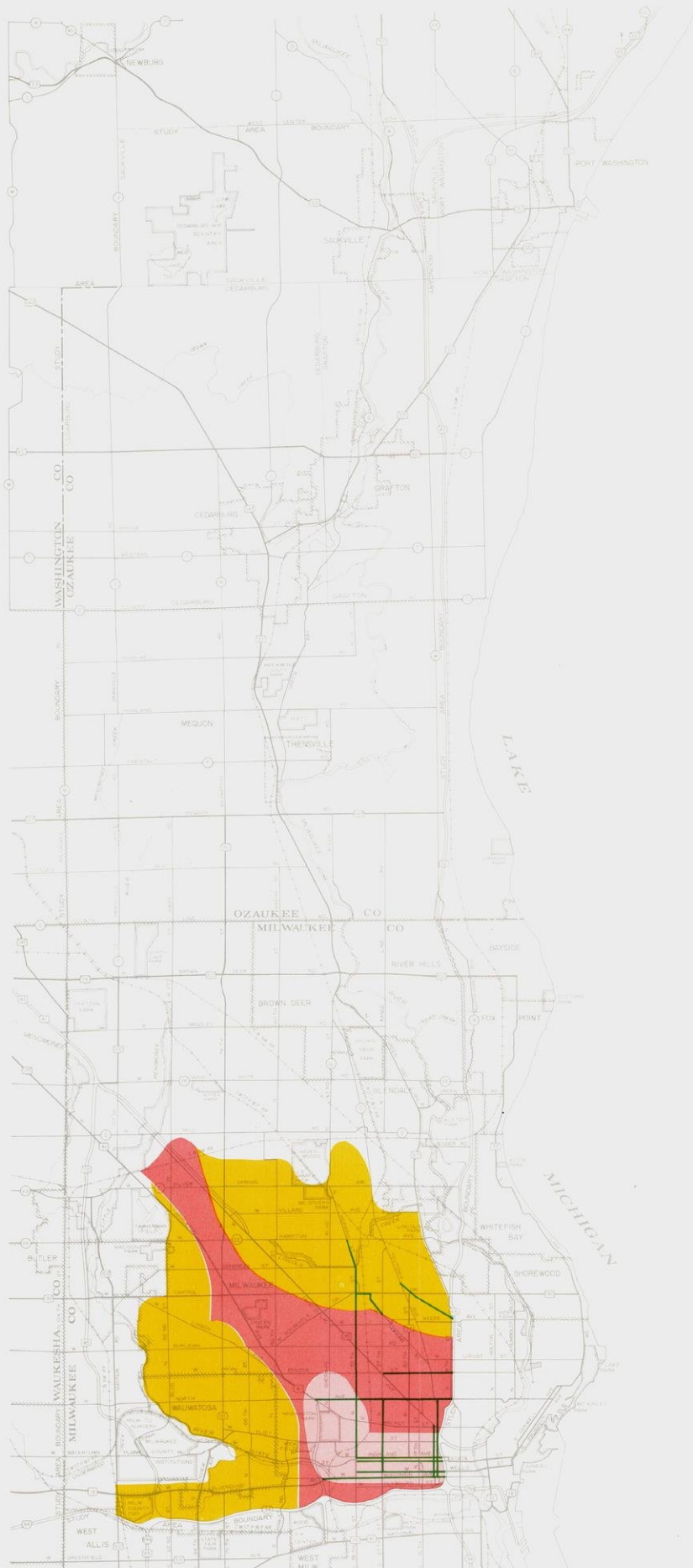


**LEGEND**

- FREEWAY SYSTEM**
- PROBLEM REACH
- STANDARD ARTERIAL STREET SYSTEM**
- SEVERE SEGMENT WITHIN PROBLEM REACH
  - PROBLEM REACH

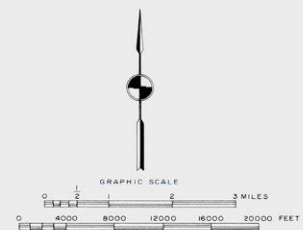


**PORTIONS OF THE MILWAUKEE  
NORTHWEST SIDE/OZAUKEE COUNTY  
TRANSPORTATION IMPROVEMENT STUDY  
AREA WITH PUBLIC TRANSIT PROBLEMS: 1978**



**LEGEND**

- HIGH DENSITY URBAN AREA NOT SERVED BY PRIMARY TRANSIT
- HIGH DENSITY URBAN AREA NOT SERVED BY SECONDARY TRANSIT
- HIGH DENSITY URBAN AREA NOT SERVED BY EITHER PRIMARY OR SECONDARY TRANSIT
- TERTIARY PUBLIC TRANSIT ROUTE WITHIN THE STUDY AREA OPERATING BELOW MINIMUM SUGGESTED OVERALL SPEEDS ON AN AVERAGE WEEKDAY



facilities at a minimum of cost and disruption. The other technical report on inventory findings will document the physical, operational, and economic characteristics of state-of-the-art primary transit system technology, including vehicles, guideways, and stations and other attendant support facilities. A third technical report will document a range of four "alternative futures" of motor fuel price and availability, population lifestyles, population and employment levels, and land use patterns under which primary transit plans will be tested. The fourth technical report will document the development of alternative primary transit system plans, the testing of the plans under the range of alternative futures, and the comparison and evaluation of alternative plan performance under the range of futures, and will recommend from among the alternatives a primary transit system plan which performs well under the full range of varying future conditions. Work proceeded during 1979 on the preparation of all of these documents. The complexity of this planning effort is such that the recommendations from the study are not expected to be ready for public review prior to the end of 1980.

## TRANSPORTATION SYSTEMS MANAGEMENT PLANNING

The Commission devoted considerable staff resources during 1979 to a number of planning efforts designed to result in recommendations to better manage the Region's transportation system. The short-term planning and management efforts were carried out not only by the Commission but by other agencies with funds that are granted to the Commission and "passed through" to others.

### 1980 Transportation Systems Management Plan

During 1979 the Commission completed the preparation of an updated 1980 transportation systems management (TSM) plan for the Southeastern Wisconsin Region. This five-year plan covering the period 1980 through 1984 examines the current operations and management of the existing transportation systems and proposes projects and studies to improve the efficiency of these systems. The plan also reports on the status of progress made in implementing transportation projects contained in the Region's previous TSM plans.

The 1980 TSM plan was adopted by the Southeastern Wisconsin Regional Planning Commission on December 6, 1979, such action being taken on

the recommendation of the Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming for the Kenosha, Milwaukee, and Racine Urbanized Areas. The 1980 TSM plan is documented in SEWRPC Community Assistance Planning Report No. 34, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980.

The 1980 TSM plan reports that significant progress has been made in implementing the TSM projects and in undertaking the TSM planning studies recommended in the initial plans. About 56 percent of the 190 TSM projects recommended for full or partial implementation during 1979 were completed or underway. Of the remaining projects recommended for implementation during 1979 about 83 percent were deferred for later implementation, with the remaining 17 percent consisting of 14 projects being dropped from further consideration. Of the 29 improved transit service projects recommended for implementation during 1979, 21 were completed or underway. Significant progress was made during 1979 toward the implementation of improved UBUS and UPARK service at the University of Wisconsin-Milwaukee with the addition of a new UBUS lot and a new UBUS route, as well as the extension of UBUS service into the evening hours. Importantly, in the late fall of 1979, Milwaukee County reconstituted its carpool program with an advertising campaign and with direct contact with large employers in the Milwaukee area. All eight park-ride or park-and-pool projects scheduled to be completed during 1979 were either completed or underway, as was the transit shelter project in Milwaukee County consisting of the installation of 80 shelters.

Progress was also made on studies recommended in the early TSM plans. During 1979, Milwaukee County completed the Milwaukee transit facilities requirement study, the management information system study, and the bus stop location study. In addition, significant progress was made on the Milwaukee County transit system service improvement and expansion study. The City of Milwaukee continued its taxicab fare and regulation study, and work began on a Milwaukee downtown parking rate structure study. More detailed information on these and related studies is provided below.

The 1980 TSM plan recommends the implementation of 277 projects and 14 studies at an estimated total cost of \$453.8 million over the five-year

period 1980-1984. The 1980 plan represents an increase of about \$148 million over the total cost of the 1979 TSM plan for a comparable five-year time period. The increase in the 1980 plan costs occurs largely in the Milwaukee and Kenosha urbanized areas, where substantial increases in costs—nearly \$81 million, up from \$44 million—for improved transit service actions is included in the 1980 plan. In addition in the Milwaukee urbanized area, the freeway traffic management system, consisting of an expanded system of freeway ramp meters and a central controller, has increased in cost from \$2.3 million to \$6.4 million. Park-ride and park-and-pool lot projects are up from \$4.9 million in 1979 to \$10.7 million in the 1980 plan. It is estimated that \$107.8 million of the total plan cost will be spent on 219 of the 277 recommended projects and on 14 studies during the annual element of the 1980-1984 transportation improvement program for the Region, which is, in general, 21 months for all federal highway projects and 24 months for all other projects and studies.

In the 1980 TSM plan, the individual TSM projects are grouped into 23 categories of TSM actions which are presented in approximate order of priority. The accompanying table presents in summary form the 1980 TSM plan recommendations, including implementing agency responsibility, sources of funding, and implementation schedule.

While the costs of the 1980 TSM plan may seem large, it must be realized that much of the TSM plan is a catalogue of actions that currently are being, and for many years have continuously been, implemented in the Region. There are, however, a number of new initiatives that have grown partially or wholly out of the TSM planning process, some of the more important of which include a recommendation for a detailed planning study of a freeway traffic management system, a recommendation for examining alternatives to improve the efficiency of the “stub end” freeways in Milwaukee County, and a recommendation for studies of the Milwaukee downtown parking rate structure and work time rescheduling.

The 1980 TSM plan recommendations include a wide variety of operations, management, construction, design, and planning activities that will require the continued close cooperation and involvement of all large and many small transportation system operating and implementing agencies in southeastern Wisconsin.

## **Work Time Rescheduling Study**

Work time rescheduling—flexible work hours, staggered work hours, shifted work hours, and shortened work hours—represents one way to reduce peak travel demands on the transportation system. Accordingly, a study of the potential of work time rescheduling to reduce peak travel demands, including the development of a plan for its most effective implementation, is recommended in the regional transportation systems management plan.

In accordance with a prospectus published in 1978, the Commission began preparation of a Milwaukee area work time rescheduling study late in 1979. The advisory committee for the study, comprised of representatives of Milwaukee area industries and labor, as well as city, state, and federal transportation agency representatives, met for the first time on November 5, 1979. (See Appendix B for committee membership.) By year's end, the committee had approved a set of objectives, principles, and standards to be used in the design and evaluation of alternative work time rescheduling plans. These objectives and standards relate to relief of transportation system congestion, improvement in air quality, and reduction in energy use. The development of a survey questionnaire was also underway for use in assessing the extent of the existing use of rescheduling programs, and the interest in, and ability to implement or expand, work time rescheduling programs.

## **Freeway Traffic Management Study**

During 1979 the Commission, in cooperation with the Wisconsin Department of Transportation, completed a prospectus for a proposed Milwaukee area freeway traffic management planning and preliminary engineering study. The study was recommended in both the new design year 2000 regional transportation system plan and the regional transportation systems management plan. A freeway traffic management system would control access to the freeway system in the Milwaukee urbanized area in order to maximize and smooth traffic flow and thereby avoid the inefficiencies attendant to breakdowns in flow. Controlled access would also be beneficial in that it would provide reasonable operating speeds for buses providing modified transit service and other high-occupancy vehicles that would be accorded preferential access to the freeway system.



**SUMMARY OF 1980 TRANSPORTATION SYSTEM IMPROVEMENT  
RECOMMENDATIONS FOR THE SOUTHEASTERN WISCONSIN REGION**

TSM Action (listed in approximate order of priority)	Total Projects and Studies in Region in TSM	Lead Agency	Source of Federal Funds if Required	Estimated Total Project Costs/1980 Annual Element Costs in TIP if Different from Total (in \$1000)	Recommended Implementation
Freeway Traffic Management System	6 Projects	Wisconsin Department of Transportation (WisDOT)/SEWRPC	Federal Aid Interstate and Federal Primary Highway Funds (FAI/FAP)	\$ 5,650.0/0.0	Continued implementation
"Stub End" Freeway Treatments	1 Study	(WisDOT)/SEWRPC	FAI/FAP	728.8/532.0	Undertake study
Improved Transit Service	4 Projects	WisDOT/Milwaukee County/City of Milwaukee	FAI/FAP	26,055.0/565.0	Continued implementation and design studies
	35 Projects	Various	Urban Mass Transportation Administration (UMTA) Section 3, Section 5	379,127.1/84,352.9	Continued implementation
Traffic Signing, Pavement Marking, and Signalization	125 Projects	Various	Various—Identified in TIP	10,281.5/4,972.6	Continued implementation
Park-Ride Lots with Express Transit Service and Park-and-Pool Lots	19 Projects	WisDOT/Milwaukee County/Ozaukee County	FAI/FAP	10,709.0/4,429.0	Continued implementation
Transit Route Evaluation	6 Studies	Milwaukee County/ SEWRPC	UMTA Section 8	350.2	Updated Milwaukee Transit System Planning Program (TSPP) by 12/31/80; Kenosha TSPP by 6/30/80; Racine TSPP by 12/31/80; Waukesha TSPP by 2/28/80
Spot Street and Highway Improvements	66 Projects	Various	Various—Identified in TIP	10,572.2/5,087.5	Continued implementation
UBUS/UPARK	Included under Action 3 Above	Milwaukee County/University of Wisconsin-Milwaukee (UWM)	Included under Action 3 Above	Included under Action 3 Above	Continued implementation
Arterial Studies	1 Study	WisDOT/SEWRPC	UMTA Section 8/Federal Highway Administration, Urban Planning (FHWA PL)	20.0	Prospectus completion by 3/31/80; proceed with study as recommended in prospectus
Downtown Shuttle Services	1 Project	Milwaukee County	UMTA Section 3	6,300.0/250.0	Continued implementation
Transit Shelters	3 Projects	City of Kenosha/ Milwaukee County/ Village of Shorewood	UMTA Section 3, Section 5	2,912.0/645.0	Continued implementation
Carpool and Vanpool Promotion	2 Projects	WisDOT/Milwaukee County	Federal Aid Urban System (FAU) and Vanpool	265.0/190.0	Continued implementation
Pedestrian and Bicycle Provisions	11 Projects	Various	Various—Identified in TIP	540.0/451.0	Continued implementation
Miscellaneous Low- Capital Actions	2 Projects	City of Milwaukee	Various—Identified in TIP	219.7/92.6	Continued implementation
Bus Stop Location Projects	1 Project	Milwaukee County/ City of Milwaukee	FHWA, Safer Off System (SOS), UMTA Section 3, Section 8	460.0/460.0	Continued implementation
Downtown Parking Rate Structure Study	1 Study	City of Milwaukee	Local Funds	15.0	Completion by 12/31/79
Taxi Fare and Regulation Study	1 Project	City of Milwaukee	UMTA Section 8		Continued implementation
Exclusive Bus Lanes	Included under Actions 6 and 9 Above	Milwaukee County	Included under Actions 6 and 9 Above	Included under Actions 6 and 9 Above	Implementation as part of downtown transportation center and arterials study
Commuter-Impacted Permit Parking	1 Project	City of Milwaukee	Local Funds	10.0	Continued implementation
Community Assistance, Traffic Engineering, and Transit Planning	2 Studies	City of Milwaukee/ SEWRPC	UMTA Section 8	138.5	Continued implementation
Work Time Rescheduling Study	1 Study	SEWRPC	UMTA Section 8/FHWA PL/Environmental Protection Agency (EPA) Section 175	180.0/115.3	Completion by 12/1/80
Energy Emergency Contingency Plan	1 Study	SEWRPC	UMTA, Section 8/FHWA PL	Depends on scope of study recommended by prospectus	Completion of prospectus by 5/1/80; study to follow
Weekend and Special Event Traffic Planning	1 Study	SEWRPC	UMTA Section 8/FHWA PL	23.0	Completion of prospectus as funding and staff time become available; study to follow
Total	277 Projects 14 Studies			\$453,837.8/ \$107,784.6	

The advisory committee assisting the Commission in this effort identified five factors which together establish a need for the conduct of a freeway traffic management study:

1. The need to examine all methods which have the potential to alleviate existing and probable future traffic congestion on the freeway system of the Milwaukee urbanized area;
2. The need to consider specifically the potential of a freeway traffic management system to reduce freeway traffic congestion by making more efficient use of existing transportation facility capacity by ensuring reasonable operating speeds and stable traffic flow, redirecting some existing freeway traffic to surface arterial streets and highways, and encouraging mass transit ridership and ride sharing through the provision of high-occupancy vehicle preferential access to freeways;
3. The need to consider the potential of a freeway traffic management system to aid in the provision of high-quality modified rapid mass transit service in the Milwaukee urbanized area by ensuring reasonable operating speeds on freeways, thus obviating the need for capital-intensive exclusive rapid transit rights-of-way;
4. The need to consider the potential of a freeway traffic management system to improve air quality and reduce motor fuel consumption by reducing peak-period traffic congestion; and
5. The need to consider comprehensively the impacts of a freeway traffic management system in the Milwaukee urbanized area because such a traffic management system is based on the provision of freeway use disincentives, which may interfere somewhat with personal mobility and accessibility in the Milwaukee urbanized area and which may adversely impact surface arterial street utilization.

It was proposed in the prospectus that the study prepare, test, and evaluate alternative plans for the six major elements of a freeway traffic management system. These six elements are: 1) the freeway operational control strategy specifying the degree to which freeway volumes are to be maintained below capacity on all parts of the

freeway system through ramp metering; 2) the number and location of freeway ramp meters and high-occupancy vehicle preferential access lanes; 3) the freeway ramp-meter control strategy; 4) the freeway ramp-meter control and intercommunication system, or the physical system to be used to control the ramp meters—in particular, the central operational control system which would utilize a preprogrammed digital computer to establish and continuously assess and, if necessary, modify ramp-meter entry rates; 5) the freeway advisory information systems, including changeable message signs, special highway advisory radio frequencies, or information provision to existing commercial radio stations; and 6) the freeway incident management and surveillance strategy.

At year's end, negotiations were underway with the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; the U. S. Environmental Protection Agency; and the Wisconsin Department of Transportation relative to funding the proposed freeway traffic management study.

#### **Oconomowoc Traffic Management Study**

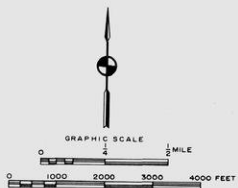
During 1979 the Commission completed a traffic management plan for the City of Oconomowoc. The plan was requested by city officials because of concern by such officials and businessmen and residents of the City about increasing levels of traffic congestion in the Oconomowoc area, particularly during weekday morning and evening peak travel periods and on Friday and Sunday evenings during the summer. A traffic management plan is defined by the Commission as a series of recommended traffic engineering actions that are intended to improve the safety and efficiency of a community's existing transportation system. As such, a traffic management plan proposes short-range solutions to existing traffic problems through the application of operational traffic engineering techniques, such as traffic signalization, traffic channelization, and traffic regulation. Traffic management plans would not normally contain recommendations requiring major capital investments in new traffic facilities, or even major improvements to existing facilities.

The recommended traffic management plan for Oconomowoc is set forth in SEWRPC Community Assistance Planning Report No. 28, Oconomowoc Area Traffic Management Plan, published in December 1979. The report was prepared with the

guidance and advice of a local advisory committee, the membership of which is set forth in Appendix B. The following is a summary of the findings and recommendations of the management study:

- On an average weekday in 1979 about 108,800 person trips and about 56,900 vehicle trips were made in the Oconomowoc study area, as defined on the accompanying map. Approximately 20,900, or 37 percent, of these vehicle trips were internal trips—that is, trips having both origin and destination inside the study area; about 29,300, or 51 percent, were internal/external trips; and about 6,700, or 12 percent, were through trips—that is, trips having both origin and destination outside the study area. Nearly one-half of the vehicle trips generated in the study area on an average weekday must pass through the Oconomowoc central business district (CBD) because of the limited number of direct arterial routes traversing the study area outside the CBD.
- The highest traffic volumes in the Oconomowoc study area are carried by two primary arterials—STH 16 (Wisconsin Avenue) and STH 67 (E. Summit Avenue and Main Street). On an average weekday in 1979, volumes on these arterials ranged from 13,000 to 16,000 vehicles on STH 16, and from 4,500 to 14,000 vehicles on STH 67. These volumes vary seasonally, increasing in July to a maximum of 111 percent of the annual average weekday volumes and decreasing in January to a minimum of 81 percent of such volumes. Daily fluctuations in traffic volumes also occur, with Saturday volumes being about 108 percent of the average weekday volumes, and Sunday volumes being about 95 percent of such volumes. The morning and evening peak-hour traffic volumes comprise 6.7 percent and 8.6 percent, respectively, of the average annual weekday volumes.
- Two roadway segments having a total length of 0.68 mile were found to be operating over design capacity: the eastbound approach of E. Wisconsin Avenue at Main Street and the westbound approach of E. Summit Avenue at S. Silver Lake Street. Two other roadway segments having a total length of 0.24 mile were found to be operating at design capacity: the westbound approach of W. Wisconsin Avenue at Main Street and the eastbound approach of E. Summit Avenue at S. Silver Lake Street. Together, these four roadway segments represent about 4 percent of the arterial streets in the study area and about 11 percent of the arterial streets in the City of Oconomowoc.
- During the morning peak hour, vehicle delay was found to exceed 15 seconds at three of the signalized intersection approaches in the study area: eastbound W. Wisconsin Avenue at Main Street, southbound S. Silver Lake Street at E. Summit Avenue, and northbound S. Silver Lake Street at E. Wisconsin Avenue. During the evening peak hour, vehicle delays were found to exceed 15 seconds at four of the signalized intersection approaches in the study area: northbound Main Street at Wisconsin Avenue, eastbound W. Wisconsin Avenue at Main Street, westbound E. Summit Avenue at S. Silver Lake Street, and southbound N. Walnut Street at E. Wisconsin Avenue.
- Within the Oconomowoc study area, 377 on-street traffic accidents, with one involving a fatality, occurred during 1978. About 80 percent of the traffic accidents resulted in property damage only. The highest traffic accident locations in the study area were found to be the intersection of Main Street and Wisconsin Avenue and those segments of E. Wisconsin Avenue between Main Street and N. St. Paul Street and between N. Fowler Street and N. Thompson Street.
- There are 200 on-street parking spaces and 422 off-street public parking spaces in the Oconomowoc central business district. During the peak hours of public parking facility demand, from 10:00 a.m. to 12:00 p.m. and from 1:00 p.m. to 3:00 p.m., on-street spaces exhibited a 40 percent average occupancy rate and off-street spaces exhibited a 76 percent average occupancy rate in 1979. However, the on-street occupancy rates are much higher in the heart of the central business district, averaging about 83 percent.
- Trackage of the Chicago, Milwaukee, St. Paul & Pacific Railroad traverses the study area from east to west, passing through the Oconomowoc central business district,

# OCONOMOWOC TRAFFIC MANAGEMENT STUDY AREA





and carries an average of 13 to 18 trains daily between the hours of 7:00 a.m. and 7:00 p.m. As a result of these railroad operations, vehicular traffic experiences delays ranging from 30 seconds to 3.50 minutes, with an average delay of 1.25 minutes, at the 11 at-grade arterial street/railroad crossings. Interruptions to vehicular traffic were also found to be caused by malfunctioning railroad crossing gate control equipment.

Based upon the inventory data and upon the application of agreed-upon objectives and standards to the transportation system in the Oconomowoc study area, the following basic traffic problems were identified:

- High traffic accident locations on STH 16 were found at its intersections with N. Walnut Street, S. Silver Lake Street, and Main Street, and on the segments extending from S. Wood Street to N. Fowler Street and from N. St. Paul Street to Main Street. These locations accounted for a total of 141 accidents in the two-year period between 1977 and 1979. Additional traffic accident problems were found at the intersection of STH 16 with CTH P, with a two-year total of 17 accidents, and on the segments of STH 16 between Plank Road and CTH P, with a two-year total of 18 accidents.
- Excessive traffic congestion was found to occur at the intersection of STH 16 with STH 66, and insufficient on-street parking was found to exist on STH 16 between N. St. Paul Street and Main Street. In addition, vehicular traffic on STH 16 experiences an inherent conflict between local and through traffic, a problem exacerbated by the lack of a continuous east-west arterial facility through the southern portion of the study area.
- On STH 67, high traffic accident locations were found at its intersection with CTH B (11 accidents between 1977 and 1979); at its intersection with E. Forest Street and E. Armour Road (23 accidents between 1977 and 1979); and at its intersection with S. Main Street (10 accidents between 1977 and 1979). In addition, the following roadway segments on STH 67 were found to be high traffic accident problem areas: E. Thackery Trail to E. Maple Lane (31 acci-

dents); S. Westover Street to S. Silver Lake Street (23 accidents); and Wisconsin Avenue to E. Rockwell Street (67 accidents). Traffic congestion occurs on the segment of STH 67 between E. Armour Road and S. Main Street, and there is an inadequate supply of on-street, short-term parking on Main Street between W. South Street and E. Rockwell Street. In addition, STH 67 between Wisconsin Avenue and E. Lisbon Road experiences a traffic circulation problem due to its location with respect to the Oconomowoc central business district.

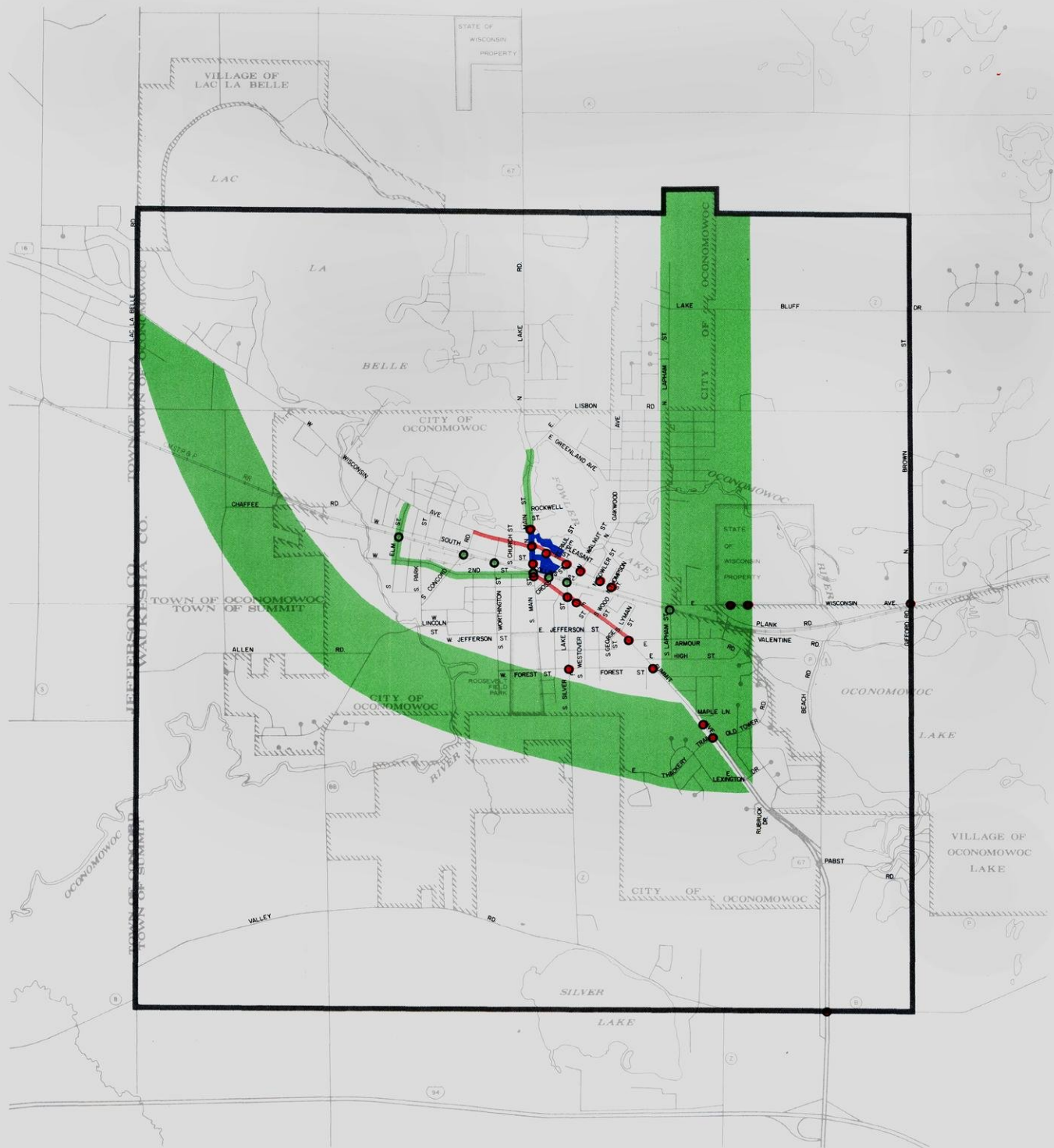
- While the two principal arterials (STH 16 and STH 67) experienced the majority of the traffic problems identified in the Oconomowoc study area, additional transportation problems were also identified. These problems consist of a lack of adequate arterial service on S. Elm Street; vehicular delay caused by railroad operations at railroad track/arterial street grade crossings; and a traffic accident problem at the intersection of S. Silver Lake Street with E. Forest Street. Finally, the South and Fowler off-street public parking facilities were found to lack sufficient short- and long-term capacity to serve the existing parking demand in the Oconomowoc central business district.

These traffic management problems are summarized on the accompanying table and map.

After consideration of alternative solutions to these transportation system management problems, a total of 60 traffic management actions were recommended to alleviate the existing problems identified at 29 locations in the Oconomowoc study area. These actions are summarized on the accompanying table and map.

The majority of the traffic management actions recommended in the study are of a low-capital, short-range operational nature. The total capital investment in 1979 dollars required to implement the low-cost short-range actions is estimated at \$294,900, with the cost of individual actions ranging from \$100 for relocation of an advanced warning sign to \$50,000 for the construction of an exclusive right-turn lane. In addition to the low-capital short-range actions, the report recommends certain high-capital investment actions as long-term solutions to certain of the traffic problems now found in the Oconomowoc area. Four

# TRAFFIC PROBLEMS ON THE TRANSPORTATION SYSTEM OF THE OCONOMOWOC TRAFFIC MANAGEMENT STUDY AREA: 1979



## LEGEND

CONGESTION OR TRAVEL DELAY  
RELATED TRAFFIC PROBLEM



TRAFFIC ACCIDENT PROBLEM



ARTERIAL SERVICE TRAFFIC  
PROBLEM



TRAVEL CORRIDOR RELATED

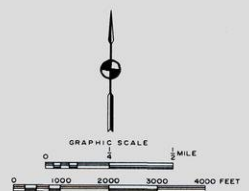


SITE RELATED

PARKING PROBLEM



STUDY AREA BOUNDARY



**SUMMARY OF TRAFFIC MANAGEMENT ACTIONS RECOMMENDED TO MITIGATE OR SOLVE THE  
TRANSPORTATION SYSTEM PROBLEMS IN THE OCONOMOWOC TRAFFIC MANAGEMENT STUDY AREA**

Traffic Problem	Number on Map	Problem Location	Recommended Traffic Management Actions	Capital Cost (1979 dollars)	Implementation	
					Agency	Priority
Accidents/ Congestion	1	Intersection STH 16 with CTH P	● Improve street lighting	\$ 12,000	Wisconsin Department of Transportation Waukesha County	7
			● Relocate advance warning sign	100		
			Subtotal	\$ 12,100		
	2	STH 16—CTH P to Plank Road	● Install channelization	\$ 20,000	Wisconsin Department of Transportation Wisconsin Department of Transportation	8
			● Skidproof roadway surface	2,400		
			Subtotal	\$ 22,400		
	3	STH 16—N. Thompson Street to S. Wood Street	● Strictly enforce speed limit	\$ --	City of Oconomowoc City of Oconomowoc City of Oconomowoc	18
			● Maintain pavement marking	--		
			● Skidproof roadway surface	8,300		
			Subtotal	\$ 8,300		
	4	STH 16—N. Fowler Street to N. Thompson Street	● Strictly enforce speed limit	\$ --	City of Oconomowoc City of Oconomowoc City of Oconomowoc	11
			● Maintain pavement marking	--		
			● Skidproof roadway surface	12,000 <sup>a</sup>		
			Subtotal	\$ 12,000		
	5	Intersection STH 16 with Walnut Street	● Modify existing traffic signals	\$ 800	City of Oconomowoc City of Oconomowoc City of Oconomowoc City of Oconomowoc	6
			● Revise traffic signal sequence	--		
			● Improve street lighting	3,500		
			● Interconnect traffic signals	-- <sup>b</sup>		
			Subtotal	\$ 4,300		
	6	Intersection STH 16 with S. Silver Lake Street	● Modify existing traffic signals	\$ 600	City of Oconomowoc City of Oconomowoc City of Oconomowoc	12
			● Retime traffic signal sequence	--		
			● Interconnect traffic signals	-- <sup>b</sup>		
			Subtotal	\$ 600		
	7	STH 16—Main Street to St. Paul Street	● Install advance warning signs	\$ 100	City of Oconomowoc City of Oconomowoc City of Oconomowoc	3
			● Eliminate one parking space	100		
			● Restrict driveway operations	400		
			Subtotal	\$ 600		
	8	Intersection STH 16 with STH 67	● Improve street lighting	\$ 3,500	City of Oconomowoc City of Oconomowoc City of Oconomowoc City of Oconomowoc City of Oconomowoc City of Oconomowoc	1
			● Install turning guidelines	100		
			● Modify existing traffic signals	800		
			● Retime traffic signal sequence	--		
			● Interconnect traffic signals	10,500		
			● Delineate a downtown bypass route on W. 2nd Street and S. Concord Road	600		
			● Install and interconnect traffic signals at intersection of STH 16 and S. Concord Road	32,000	City of Oconomowoc	
			● Officially map and construct east-west arterial bypass in southern portion of study area	-- <sup>c</sup>	City of Oconomowoc/ Waukesha County	19
			● Officially map and construct north-south STH 16 freeway bypass in eastern portion of study area	-- <sup>c</sup>	City of Oconomowoc/ Wisconsin Department of Transportation	20
			● Implement work time rescheduling	--	City of Oconomowoc	21
			Subtotal	\$ 47,500		
	9	Intersection STH 67 with CTH B	● Install signal beacons	\$ 2,000	Wisconsin Department of Transportation Wisconsin Department of Transportation	10
			● Install advance warning signs	200		
			Subtotal	\$ 2,200		
	10	Intersection STH 67 with E. Thackery Trail	● Install traffic signals	\$ 31,100 <sup>d</sup>	Wisconsin Department of Transportation City of Oconomowoc Wisconsin Department of Transportation Wisconsin Department of Transportation	5
			● Improve street lighting	9,000		
			● Reduce speed limit	400		
			● Install advance warning signs	200		
			Subtotal	\$ 40,700		

Table (continued)

Traffic Problem	Number on Map	Problem Location	Recommended Traffic Management Actions	Capital Cost (1979 dollars)	Implementation		
					Agency	Priority	
Accidents/ Congestion	11	STH 67—E. Thackery Trail Trail to E. Maple Lane	<ul style="list-style-type: none"><li>● Improve street lighting</li></ul>	\$ 15,000	City of Oconomowoc	16	
	12	Intersection STH 16 with E. Forest Street	<ul style="list-style-type: none"><li>● Strictly enforce 15-mph school-zone speed limit</li><li>● Skidproof roadway surface</li></ul>	\$ -- 9,000 <sup>a</sup>	City of Oconomowoc City of Oconomowoc	15	
			Subtotal	\$ 9,000			
			13	Intersection STH 67 with E. Armour Road	<ul style="list-style-type: none"><li>● Reconstruct roadway curb</li><li>● Install pavement marking</li></ul>	\$ 15,000 700	City of Oconomowoc City of Oconomowoc
	Subtotal	\$ 15,700					
	14	STH 67—S. Silver Lake Street to S. Westover Street			<ul style="list-style-type: none"><li>● Install advance warning signs</li><li>● Skidproof roadway surface</li></ul>	\$ 200 15,000 <sup>a</sup>	City of Oconomowoc City of Oconomowoc
			Subtotal	\$ 15,200			
			15	Intersection STH 67 with S. Silver Lake Street	<ul style="list-style-type: none"><li>● Retime traffic signal sequence</li><li>● Reconstruct westbound approach to provide an exclusive right-turn lane</li><li>● Interconnect traffic signals</li><li>● Modify existing signals</li><li>● Install pavement markings</li></ul>	\$ -- 50,000 <sup>e</sup> -- <sup>b</sup> 5,000 100	City of Oconomowoc City of Oconomowoc City of Oconomowoc City of Oconomowoc City of Oconomowoc
	Subtotal	\$ 55,100					
	16	Intersection STH 67 with W. 2nd Avenue			<ul style="list-style-type: none"><li>● Install advance warning sign</li></ul>	\$ 100	City of Oconomowoc
17	Intersection STH 16 with W. South Street	<ul style="list-style-type: none"><li>● Install pavement markings</li></ul>			\$ 150	City of Oconomowoc	9
18	Intersection E. Forest Street with S. Silver Lake Street	<ul style="list-style-type: none"><li>● Install pavement markings</li></ul>			\$ 100	City of Oconomowoc	17
Arterial Service	19	East-west arterial street spacing deficiency problem in the southern portion of the study area	<ul style="list-style-type: none"><li>● Officially map proposed east-west arterial bypass</li><li>● Construct east-west arterial bypass</li></ul>	\$ -- 2.4 to 3.1 million	City of Oconomowoc/ Waukesha County Waukesha County	1 5	
			Subtotal	2.4 to 3.1 million			
	20	North-south arterial street spacing deficiency problem in the eastern portion of the study area	<ul style="list-style-type: none"><li>● Officially map proposed north-south STH 16 Freeway bypass</li><li>● Construct north-south STH 16 Freeway bypass</li></ul>	\$ -- 23 million	City of Oconomowoc Wisconsin Department of Transportation	1 7	
			Subtotal	\$ 23 million			
			21	Truck traffic on local access road problem on S. Elm Road between W. Wisconsin Avenue (STH 16) and W. 2nd Street	<ul style="list-style-type: none"><li>● Restrict trucking on S. Elm Street, divert truck traffic to S. Concord Road, and restrict parking on S. Concord Road from W. Wisconsin Avenue to W. 2nd Street between 8:00 a.m. and 4:30 p.m.</li><li>● Construct a new land access street from the Oconomowoc industrial park to proposed east-west bypass</li></ul>	\$ 1,100 120,000	City of Oconomowoc City of Oconomowoc
	Subtotal	\$ 121,100					
	22	Conflict between through and local traffic problems on arterial streets and highways in the study area			<ul style="list-style-type: none"><li>● Officially map proposed east-west and north-south bypasses</li><li>● Construct east-west and north-south bypasses</li></ul>	\$ -- <sup>c</sup>	City of Oconomowoc/ Waukesha County Waukesha County/ Wisconsin Department of Transportation
	23	Traffic delay problems at the at-grade railroad track and arterial street and highway crossings	<ul style="list-style-type: none"><li>● Officially map proposed east-west and north-south bypasses</li><li>● Construct east-west and north-south bypasses</li></ul>	\$ -- <sup>c</sup>	City of Oconomowoc/ Waukesha County Waukesha County/ Wisconsin Department of Transportation	1 5/7	
			<ul style="list-style-type: none"><li>● Install constant time warning devices at S. Main Street (STH 67) and S. Silver Lake Street crossings of the Milwaukee Road tracks</li></ul>	30,000	City of Oconomowoc	3	
			<ul style="list-style-type: none"><li>● Remove stop signs at crossing gate-protected at-grade crossings</li></ul>	650	City of Oconomowoc	2	
Subtotal			\$ 30,650				



Table (continued)

Traffic Problem	Number on Map	Problem Location	Recommended Traffic Management Actions	Capital Cost (1979 dollars)	Implementation	
					Agency	Priority
Parking Supply	24	East Side of N. St. Paul Street from the Fowler public parking facility entrance to E. Wisconsin Avenue (STH 16)	● Change parking restriction from 15 minutes to one hour and install three parking meters	\$ 600	City of Oconomowoc	3
	25	South Side of E. Collins Street from S. Cross Street to S. Silver Lake Street	● Remove two-hour parking restriction and parking meters to allow all-day unrestricted parking	\$ 500	City of Oconomowoc	4
	26	North Side of W. South Street immediately west of S. Main Street (STH 67)	● Change all-day parking restriction to allow three metered, 8:00 a.m. to 3:30 p.m., 15-minute restricted parking spaces	\$ 600	City of Oconomowoc	1
	27	West Side of S. Cross Street from E. Collins Street to E. Wisconsin Avenue (STH 16)	● Remove all-day parking restriction to allow all-day unrestricted parking south of South parking facility entrance	\$ 100	City of Oconomowoc	2
	28	Fowler public parking facility	● Change 10 of the eight-hour parking stall restrictions to two-hour restrictions	\$ 300	City of Oconomowoc	5
	29	South or Fowler public parking facility	● Construct a parking structure	\$ 1,200,000	City of Oconomowoc	6
Total				\$27,014,900 to \$27,714,900	--	

<sup>a</sup> Implementation of this traffic management action should occur only if the other recommendations for this location do not effectively mitigate or solve the problem.

<sup>b</sup> Interconnection of traffic signals in the Oconomowoc central business district area has a total capital cost of approximately \$10,500 for all five signalized intersections.

<sup>c</sup> The capital cost of constructing the proposed east-west arterial bypass and the north-south STH 16 freeway bypass—which would be approximately \$2.4 million to \$3.1 million and \$23 million, respectively—has been included in the arterial street spacing deficiency problem costs.

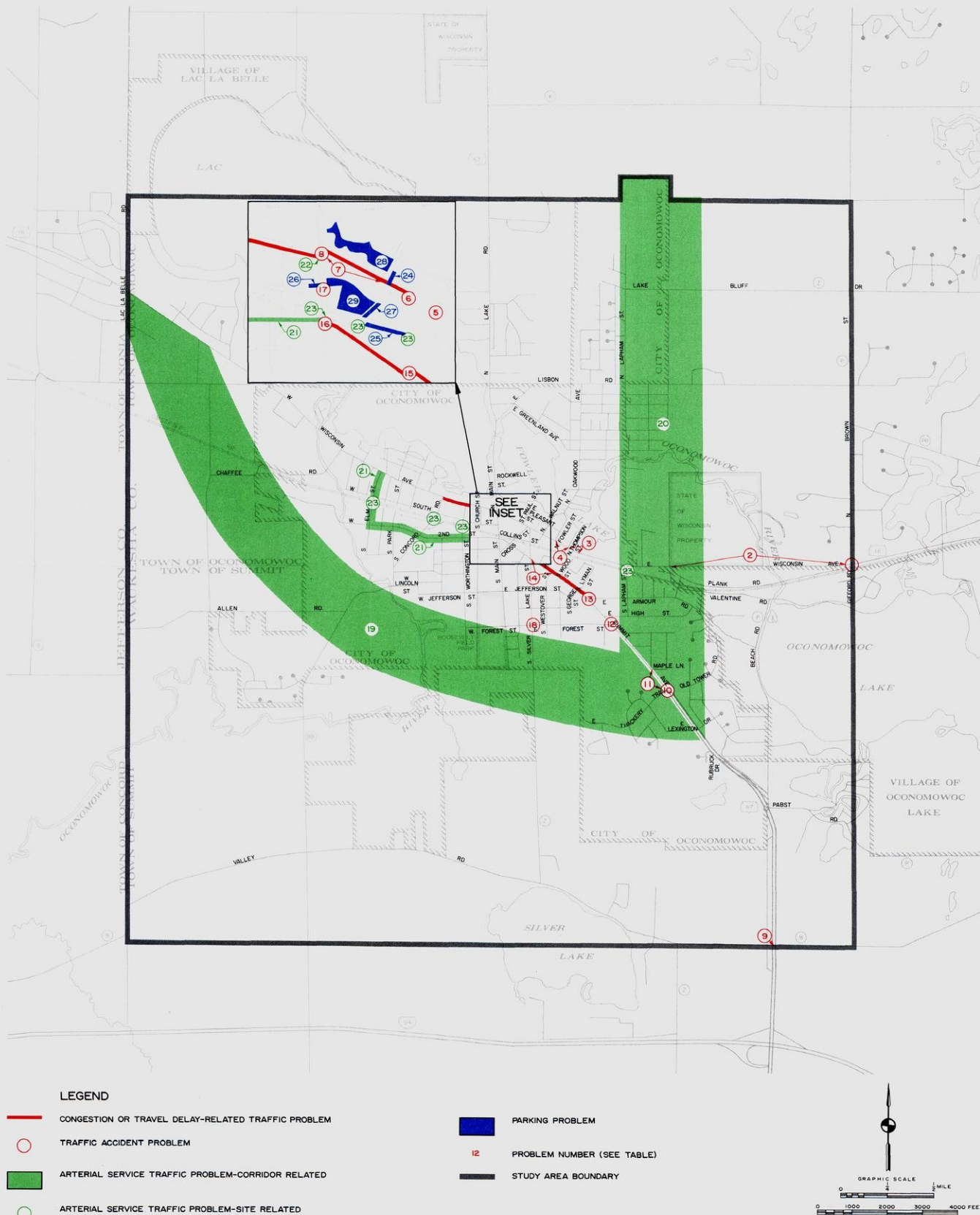
<sup>d</sup> A contract in the amount of \$31,100 was signed by the State of Wisconsin for the installation of traffic signals at this intersection prior to completion of this study.

<sup>e</sup> The westbound approach to this intersection was reconstructed with an exclusive right-turn lane and opened to traffic prior to completion of this study.

long-range high-capital investment recommendations were made in the study. These recommendations, which would have a total cost of about \$27.4 million, include: the construction of a local access street connecting the Oconomowoc industrial park to a proposed east-west arterial bypass at a cost of \$120,000; the construction of a 300-stall parking structure in the Oconomowoc central business district at the South or Fowler parking facility at a cost of \$1.2 million; the official mapping and construction of an east-west arterial bypass through the southern portion of the study area at a cost of \$2.4 million if a four-lane, undivided facility is constructed, or of \$3.1 million if a four-lane, divided facility is constructed; and the official mapping and construction of the north-south STH 16 freeway bypass through the eastern portion of the study area at a cost of \$23 million.

In keeping with the regional objectives of improving ambient air quality and reducing motor fuel consumption, each recommended traffic management action was evaluated to determine what impact it would have on carbon monoxide and hydrocarbon pollutant emissions from motor vehicles and on motor fuel consumption. Of the 60 recommended traffic management actions, 12 actions should have a favorable impact on air quality and motor fuel consumption. As shown in the accompanying table, the one action which would effect an increase in both vehicular emissions and motor fuel consumption is the installation of traffic signals at the intersection of E. Summit Avenue and E. Thackery Trail. An additional action, a reduction of the speed limit on the segment of E. Summit Avenue from E. Thackery Trail to E. Lexington Avenue, would also serve to

**LOCATION OF TRAFFIC MANAGEMENT ACTIONS RECOMMENDED TO MITIGATE OR SOLVE THE TRANSPORTATION SYSTEM PROBLEMS IN THE OCONOMOWOC TRAFFIC MANAGEMENT STUDY AREA: 1979**



**IMPACT OF RECOMMENDED TRAFFIC MANAGEMENT ACTIONS ON AIR  
QUALITY AND MOTOR FUEL CONSUMPTION IN THE OCONOMOWOC AREA**

Problem or Problem Location	Recommended Traffic Management Actions	Effect on Vehicular		
		Emissions (tons per year)		Fuel Consumption (gallons per year)
		Carbon Monoxide	Hydrocarbons	
Main Street and Wisconsin Avenue	● Retime traffic signal sequence	- 0.65	- 0.32	- 120
E. Summit Avenue and E. Thackery Trail	● Install traffic signals ● Reduce speed limit	9.93 11.05	1.07 1.02	13,470 - 6,570
E. Wisconsin Avenue and S. Silver Lake Street	● Retime traffic signal sequence	- 0.48	- 0.05	- 290
E. Summit Avenue and S. Silver Lake Street	● Retime traffic signal sequence ● Reconstruct westbound approach to intersection to provide for an exclusive right-turn lane	- 0.82 - 1.90	- 0.09 - 0.20	- 320 - 670
E. Wisconsin Avenue— Plank Road to CTH P	● Install channelization	- 1.96	- 0.17	- 1,450
East-West Arterial Street Spacing Deficiency	● Construct east-west arterial bypass	- 131.30	- 9.69	- 27,600
North-South Arterial Street Spacing Deficiency	● Construct north-south STH 16 freeway bypass	- 172.70	- 15.46	- 4,930
Truck Traffic on Land Access Streets	● Construct a new land access street from Oconomowoc industrial park to proposed east-west arterial bypass	- 1.07	- 0.09	- 840
Railroad Crossing Vehicle Delays	● Install constant time warning devices at S. Main Street and S. Silver Lake Street crossings of the Milwaukee Road tracks	- 1.13	- 0.12	- 100
	● Remove stop signs at selected Milwaukee Road at-grade street crossings	- 6.06	- 0.93	- 21,890
Arterial Streets and Highways in the Oconomowoc CBD	● Interconnect traffic signals	- 32.50	- 2.73	- 9,370
All Arterial Streets and Highways in the Oconomowoc Study Area	● Reschedule the work time starting and quitting times of approximately 250 employees of the major public and private employers in the study area	- 1.41	- 0.08	- 360
Total		- 331.00	- 27.84	- 61,040

increase vehicular air pollutant emissions. The net impact of the traffic management actions recommended in the plan on air quality and motor fuel consumption would be a reduction of about 331 tons per year in carbon monoxide emissions, a reduction of about 28 tons per year in hydrocarbon emissions, and a reduction of about 41,000 gallons per year in motor fuel consumption.

At year's end, the Oconomowoc traffic management plan was pending adoption by the Common Council of the City of Oconomowoc.

#### **Waukesha Transit Development Program**

In mid-1979 the Mayor and Common Council of the City of Waukesha decided to reactivate the

Waukesha Mass Transit Citizens and Technical Coordinating and Advisory Committee for the purpose of examining once again the possibility of establishing a public transportation system in the Waukesha area. The Commission had worked with that Advisory Committee during 1975 and 1976 in preparing a transit development program. Those recommendations which would have led to the reestablishment of a public transit system in Waukesha were rejected by the Waukesha City electorate in a citywide referendum in 1977. Upon its reactivation in 1979, the Advisory Committee again requested the assistance of the Regional Planning Commission in reviewing and updating as necessary the transit development program initially approved by the Committee. The Committee requested that a report be prepared that would serve as the basis for a new citywide referendum to be held in the spring of 1980. At year's end, the Commission was working with the Advisory Committee on the preparation of a new SEWRPC community assistance planning report that would document the Committee's recommendations.

### Ride-Sharing Programs

As noted earlier in this report, one of the fundamental recommendations of the regional transportation plan is the continued promotion of ride-sharing. A formal Milwaukee area carpooling program had been conducted by Milwaukee County over a three-year period in the mid-1970's. The Commission assisted in that effort, including 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 published in SEWRPC Technical Report No. 20, Carpooling in the Metropolitan Milwaukee Area. That initial carpooling effort indicated a significant latent demand for carpooling, and concluded that a continued carpooling promotion program would be effective in reducing motor fuel consumption and car trip vehicle traffic. During the latter portion of 1979, Milwaukee County received approval of a funding request for federal urban aid funds to conduct a three-year continuing carpooling promotion program. This program will include media promotion of ride-sharing 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 is assisting in this effort by providing the computer facilities necessary to conduct the matching program. By the end of 1979, about 1,200 individuals

had completed and submitted the form required to enable them to participate in the computerized program, thus forming the basis of a growing pool of interested parties being used in the matching effort. Toward the end of the three-year effort, the Commission will again conduct a survey to determine the extent to which such ride-sharing efforts have been effective and the extent of carpooling in the Milwaukee area.

Also during 1979, the University of Wisconsin-Milwaukee and the University of Wisconsin-Extension—through the Division of Urban Outreach, Office of Statewide Transportation Programs—continued a program of custom designing ride-sharing programs for employers. This effort is being funded by a grant from the Wisconsin Department of Transportation. The emphasis in this program is on the promotion of carpools and vanpools at individual firms.

### Milwaukee County Transit Facilities Study

Soon after Milwaukee County assumed the assets of the former Milwaukee and Suburban Transport Corporation in 1975, the County embarked upon a special study of the utilization of the fixed facilities that supported the provision of transit service. The purpose of the study was to identify any excess property that had been acquired as part of the acquisition of the entire Corporation, as well as to identify transit facility needs over the next two decades. During 1979 Milwaukee County completed work on this study. The study recommendations are documented in a report entitled Milwaukee Transit Facility Requirements, prepared for Milwaukee County by W. C. Gilman & Co., a division of Barton-Aschman Associates, Inc., and dated June 1979.

The report notes that the existing plant and facilities of the Milwaukee County transit system are basically adaptations of, and additions to, facilities built for the former streetcar system. Conversion of the system to bus operation has made many of the structures obsolete, with a majority of the buildings containing large areas of vacant and abandoned space. The study found that the basic structural shells of the existing buildings are generally sound but that such items as windows, skylights, doors, interior partitions, and mechanical systems are deficient in all of the older structures. The study also found that all of the facilities waste energy, with most of the waste being attributable to heat loss through roof areas.



The study indicated that Milwaukee County can expect to operate a bus fleet of about 1,000 vehicles over the next 20 to 25 years, nearly double the existing fleet. Industry standards indicate that for the most cost-effective operation, bus garage facilities should be built to accommodate from 200 to 300 buses. Accordingly, the study concludes that Milwaukee County should be planning for from four to five operating base facilities over the long run.

After consideration of alternatives, the study recommends that the following facility improvements and changes be made:

- The construction of a new transportation office and light maintenance/service facility, together with the expansion of bus storage facilities at the S. Kinnickinnic Avenue operating facility site. Selected buildings on that site would be retained, renovated, and rehabilitated for energy conservation purposes.
- The construction of a new transportation office and new maintenance building at the W. Fond du Lac Avenue operating facility, together with the general renovation and rehabilitation for energy conservation purposes of most of the existing structures.
- Construction of a new heavy maintenance operation facility, general office/headquarters building, and bus operating facility on county-owned lands along Watertown Plank Road west of the USH 45 freeway. Completion of this improvement would enable the abandonment of the Cold Spring heavy maintenance and general office facility. The abandonment of this facility would make these lands available for sale and redevelopment for industrial use.
- The construction of a new bus operating facility on county-owned lands along Whittall Avenue near General Mitchell Field.
- The construction of a new transportation office building at the bus operating facility on W. Fiebrantz Avenue, together with any necessary renovation and rehabilitation of existing structures at that site.

The entire program would require a capital expenditure of about \$3.08 million, with such costs recommended to be staged over the next 20 years

to coincide with planned increases in bus fleet size. This transit facilities report is intended to be used by Milwaukee County as the basis for making capital investment decisions concerning the Milwaukee County transit system in the coming years.

### **Milwaukee County Transit System Management Study**

Work was completed during 1979 on a management information system study for the Milwaukee County Transit System. This study was conducted by the firm of Peat Marwick Mitchell and Company, and the study results are set forth in a report entitled Milwaukee County Transit Systems Study Report, dated May 1979.

The report sets forth a series of recommendations for improving the internal management of the Milwaukee County Transit System. Recommendations are made in the areas of payroll/personnel; purchasing/stores; accounting, equipment, and plant; scheduling/checking; dispatching; claims; budget; and planning. The report recommends in most subsystem areas the establishment of automated systems in order to save labor costs, provide more timely information, and furnish previously unavailable information. The automated systems would emphasize user involvement accomplished by the placement of remote computer terminals at selected locations in transit system facilities in order that data can be entered at the source. The report has been submitted to Milwaukee County for its consideration and implementation.

### **Milwaukee County Transit System Service Study**

Work continued during 1979 on the conduct of a Milwaukee County Transit System service study. This study constitutes a major continuing appraisal and evaluation of existing and proposed transit service provided by the Milwaukee County Transit System. In 1979 a detailed work program and final report outline were developed and approved by the Technical Task Force responsible for monitoring the progress of the study. Detailed route design guidelines and a methodology for route performance analysis were also developed for use in the review of the performance of existing transit system routes, and in the design of route modifications, extensions, and additions. At year's end, an analysis of the existing routes and future transit service needs had been completed and the results used to develop four transit service alternatives for

the Milwaukee County Transit System for the year 1985. These alternatives included a "do nothing" alternative representing the 1980 level of service provided by the transit system; a 1980 augmented alternative representing improvements in the level of service provided by the 1980 route system needed to meet expected 1985 travel demand; an extended-grid alternative representing proposed transit service modifications, extensions, and additions based upon the present grid system of transit routes; and a timed-transfer alternative representing proposed transit service modifications, extensions, and additions utilizing a series of transit centers where timed-transfers could be made between two or more routes. The Commission provided technical support to Milwaukee County in that it quantitatively analyzed the alternative transit service proposals and served as staff advisors to the Technical Task Force.

The four transit service alternatives were presented to citizens and public officials at a public informational meeting held in December 1979. The recommended five-year plan and program for transit service modifications, extensions, and additions is expected to be published in mid-1980.

#### **Milwaukee County Bus Stop Location Study**

Work was completed during 1979 on the Milwaukee County bus stop location study. This study had three objectives: to conduct a comprehensive inventory of bus stop locations currently used in the Milwaukee County Transit System; to evaluate each bus stop location for proper identification and for correction of any deficiencies; and to plan for the implementation of the placement of new bus stop signs. The recommendation to replace and upgrade all bus stop signs in the Milwaukee County Transit System was made in a bus stop informational sign demonstration project funded by a Wisconsin Department of Transportation demonstration grant in 1976.

Under the inventory phase of the study, data were collected on the location of each bus stop by either intersecting street or street address; the number of routes using each stop by route number; the position of each bus stop in relation to the nearest intersection; the type of mounting standard used; the location of operator information signs; and the location and type of attendant shelters and benches. In addition, data were collected on the distance between bus stops, the length of each bus stop zone and pull-out zone, the type and composition of both the front and rear landing pads, and the type of front and rear parking restrictions.

The inventory revealed a total of 5,635 bus stop locations, of which a great majority, 4,166, are located in a near site position relative to the street intersection. A total of 4,561 stops served just one bus route, with some stops, however, serving multiple routes up to a total of 14 routes. Nearly half of the bus stops have paved areas at both the front and rear landings.

As a part of the study, detailed plans were laid for implementing the placement of new bus stop signs on a systemwide basis. Using the information developed under the bus stop sign demonstration project noted above, a final sign design was selected and special messages attendant to each of the signs were prepared. All work necessary to facilitate the actual fabrication and installation of the signs was completed. It is anticipated that Milwaukee County will proceed with implementation of the bus stop sign replacement program in the coming years.

#### **Milwaukee County Transit Development Planning**

Work continued during 1979 on the preparation of a new five-year transit development program for Milwaukee County. This program is intended to document annual recommendations for service improvements, fleet and equipment acquisition, and operating facility rehabilitation and construction. As such, the report is heavily dependent upon the recommendations emanating from the Milwaukee County transit facilities study, the Milwaukee County Transit System management study, the Milwaukee County Transit System service study, and the Milwaukee County bus stop location study discussed above. It is currently anticipated that this transit development program document will be completed in 1980 upon conclusion of the Milwaukee County Transit System service study, and will be periodically updated thereafter.

#### **City of Milwaukee Taxi Fare and Regulation Study**

During 1979 the City of Milwaukee, Department of City Development, continued work on a study of the taxicab industry in the City of Milwaukee. The purpose of this study is to review the present operation and regulation of the taxi industry in the City and make recommendations for any revisions to such regulations that would serve to improve taxicab service.

At the close of the year, the advisory committee assisting the City of Milwaukee in this study was in the process of formulating its recommendations

regarding free entry versus limited entry into the taxi business, taxicab inspection procedures, taxi service to General Mitchell Field, taxi licensing procedures, problems relating to taxi stands and signs, and the possibility of establishing shared-ride zone-fare taxi service. The study is now scheduled to be concluded in 1980, with the recommendations for improved taxicab operations and services to be set forth in a final report.

### **City of Milwaukee Traffic Engineering and Transit Planning**

In 1979 the City of Milwaukee, Department of Public Works, completed the first phase of a traffic engineering and transit planning project designed to result in the application of transportation system management measures to traffic problems throughout the City. The first phase involved the identification of traffic corridors exhibiting high traffic accident and congestion deficiencies. The streets and highways so identified were ranked in descending order of problem severity, thus providing a priority list of facilities for proposed improvements.

This work effort is being coordinated with the Commission's Milwaukee Northwest Side/Ozaukee County transportation improvement study. The traffic accident and congestion problems identified as part of the City's work effort were used in part as the basis for the identification of arterial travel problems and deficiencies in the Milwaukee northwest side area as discussed earlier in this annual report. The second phase of the City's study will be conducted in 1980 and will result in the design of traffic engineering improvements to solve or ameliorate the traffic and congestion problems found throughout the City. Like the first phase, the second phase will be coordinated with the Commission's Milwaukee northwest side study so that the recommendations coming out of that study will be consistent with the recommendations of the broader citywide study being conducted by the Department of Public Works.

### **Southeastern Wisconsin Commuter Study**

In 1979 the Wisconsin Department of Transportation, using in part federal transit planning monies made available through the Commission, completed the southeastern Wisconsin commuter study. The purpose of this study was to examine alternative means of meeting the transportation needs of Chicago-oriented commuters in Kenosha and Wal-

worth Counties. At the present time, commuter rail service is provided over trackage of the Chicago & North Western Transportation Company from Kenosha to Chicago, service that is supported with public funds provided by the Regional Transportation Authority operating in the northeastern Illinois region. In addition, commuter rail service is provided over the trackage of the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (the Milwaukee Road) from the Village of Walworth to Chicago, service that is also supported in part by monies provided by the Regional Transportation Authority. Commuter rail service on the Chicago & North Western Railway trackage to the City of Lake Geneva was terminated in 1975, precipitating the need to conduct the southeastern Wisconsin commuter study. At the present time, the Geneva Lake Area Joint Transit Commission (GLAJTC) provides bus service from the Lake Geneva area to the current commuter rail head on the Chicago & North Western trackage in Illinois at Richmond.

The southeastern Wisconsin commuter study considered a "do nothing" alternative, an all-bus-service alternative, an all-rail service alternative, and a combination bus/rail service alternative. The findings and recommendations of the study are summarized in a final report issued by the Wisconsin Department of Transportation during 1979 entitled, Southeastern Wisconsin Commuter Study, Supplemental Report to Complete Phase I. The study concludes that, with respect to the Kenosha commuter rail service, no public action should be taken at the present time since abandonment of the service has not been proposed and therefore is not imminent. The study recommends that every effort be made to retain the commuter rail service to Kenosha through the regulatory process. If at such time commuter rail service to Kenosha is considered for abandonment, then the study recommends that the alternatives available at that time be examined.

With respect to the Walworth County communities of Lake Geneva and Walworth the study concludes that, given the current fiscal situation of the Milwaukee Road and the recommendations made in a McHenry County transportation study conducted by the Regional Transportation Authority, continued rail service on a Milwaukee Road line to Walworth is unlikely and cannot be supported. Similarly, the report recommends against attempts to reestablish commuter rail service on the Chicago & North Western trackage to Lake Geneva, the cost of rehabilitating that line for

commuter rail purposes being prohibitive. The study notes that the recommendations made by the Regional Transportation Authority in northeastern Illinois involved service cutbacks along both the Milwaukee Road and Chicago & North Western lines, with replacement feeder bus service to serve the outermost reaches of McHenry County. Accordingly, the southeastern Wisconsin commuter study concludes that of all the alternatives considered, the alternative of providing bus service from Wisconsin communities to rail terminals in northeastern Illinois would be the most feasible, as well as the most cost-effective. The Wisconsin Department of Transportation concluded the study by recommending that a phase II effort be conducted that would detail the means by which an all-bus alternative would be implemented if a local public sponsor could be found to complete the study and proceed with implementation of the recommendations.

## **ELDERLY AND HANDICAPPED TRANSPORTATION PLANNING**

As reported in the Commission's 1978 Annual Report, the Commission adopted during that year a transportation plan for transportation handicapped people in the Region. The plan is documented in SEWRPC Planning Report No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982. The plan is designed to reduce, and sometimes to eliminate, the existing physical and/or economic barriers to independent travel by transportation handicapped individuals. The plan recommends 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 will be fully accessible to wheelchair users and semiambulatory persons. For those transportation handicapped in the three urbanized areas who would continue to be unable to use public bus systems, the institution of a user-side subsidy program is recommended. Such a program would enable eligible transportation handicapped persons to arrange for their own transportation by taxi or private chair car carrier, with the local transit operator subsidizing the cost of the trip. For transportation handicapped persons living outside of the three major urban areas, the plan recommends 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 service provider. The plan also recommends that the transportation services of existing social service agency transportation providers operating 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.

Progress made during 1979 in implementing the recommendations of the adopted regional plan for the transportation handicapped includes:

- In the Kenosha area, a joint city coordinating committee was established in the fall of 1979. This committee is to coordinate the activities of various transportation service providers in the County and to establish a specialized transportation system that will provide the types of transportation service to elderly and handicapped persons envisioned in the adopted plan. At the present time, such services are provided in Kenosha County by the Kenosha Achievement Center (KAC). The KAC currently provides specialized transportation service to any transportation handicapped person in the County regardless of age and to elderly people 60 years of age and older. The services operated by the KAC provided over 12,000 rides during 1979. Funding for the KAC service is provided by a variety of state, federal, and local sources.
- In Milwaukee County, the Milwaukee County Transit System awarded a contract in 1979 to the General Motors Corporation for the purchase of 150 advanced-design wheelchair lift-equipped buses to be delivered in 1980. In addition, the County continued to use its user-side subsidy for specialized programs that enabled any Milwaukee County resident who is confined to a wheelchair, who uses a walker or crutches, or who is legally blind to call a participating taxicab or chair car carrier of his choice for transportation to and from any destination in Milwaukee County for any trip purpose. Nearly 68,000 trips were made under the user-side subsidy program in Milwaukee County during 1979. In addition, the Milwaukee County Executive Task Force on Transportation for the Elderly and Handicapped continued its efforts during 1979. During the year, the Task Force con-



sidered various ways in which a coordinated system of transportation services for the elderly and handicapped could be effected within the County. The Task Force also scheduled the completion of its report and the presentation of its recommendations to the Milwaukee County Executive and the County Board for 1980.

- Service continued to be provided in Ozaukee County during 1979 through Catholic Social Services. These specialized services are on an advance-reservation basis and provide volunteer driver services for transportation handicapped persons regardless of age and for elderly persons 60 years of age or older. Under this program, eligible participants may request service once a week for any trip service. During the year about 3,100 trips were made in Ozaukee County under this program. Also during 1979, a county consulting committee was coordinated to advise Catholic Social Services in the operation of this program.
- Specialized transportation services for the elderly and handicapped in Racine County continued to be provided in 1979 by Lincoln Lutheran Specialized Transportation (LLST). In the rural areas of the County, service was provided on an advance-reservation basis, and in the Racine urban areas service was provided on a demand responsive basis with a one-hour response time. During 1979 LLST made over 56,500 trips throughout Racine County. These specialized efforts in Racine County are overseen by a program review and evaluation committee.
- In Walworth County, the Walworth County Department of Aging continued to operate an advance-reservation specialized transportation program for elderly persons 60 years of age or older and handicapped residents of Walworth County. No fares for this service are charged under this program. However, donations are encouraged and accepted. During the year about 17,500 trips were made in Walworth County under this program.
- In Washington County, specialized transportation services continued to be provided through the Older Adult Transportation Program sponsored by the City of Hartford

Department of Recreation. The program provides specialized transportation service to elderly and handicapped persons in Washington County on an advance-reservation basis, serving different communities within the County on different days of the week. No fares are charged to eligible users of this service. During the year, about 10,800 trips were made in Washington County using this service.

- In Waukesha County, three new transportation projects for the elderly and handicapped were implemented during 1979 by the Waukesha County Department of Aging. The first project was a parallel accessible transportation service offered on a 24-hour advance-reservation basis to elderly and handicapped people, including wheelchair users and people with semiambulatory capabilities who are unable to use the vehicles of the subsidized, commuter-oriented bus service provided by Wisconsin Coach Lines, Inc. The service was offered to eligible handicapped persons for point-to-point travel between bus stops of the existing, subsidized, commuter-oriented bus routes operated between the City of Waukesha and the Milwaukee central business district for the same fare charged for the commuter-oriented bus service. An estimated 40 trips were made using this service during 1979. The second project was a user-ride subsidy program in three Waukesha County communities with taxi service available: the Cities of Oconomowoc and Waukesha and the Village of Menomonee Falls. The program enables eligible able-bodied persons 60 years of age or older and transportation handicapped persons of any age to call any participating taxi company for local transportation within the service area of the taxi company and receive a \$1.50 discount on the regular taxi fare. Eligible users of the program, which at the end of 1979 numbered about 485, are restricted to 16 reduced-fare trips per month. The third project was a fixed-route, fixed-stop "hail-a-ride" bus service for residents of the City of Waukesha 60 years of age or older. This special bus service was initiated in October 1979 as a demonstration project and was continued by the Department of Aging through the end of 1979. These new projects were in addition to the countywide advance-reservation transportation service which the

Department has been providing to elderly and elderly-handicapped county residents since 1975. In addition to these three projects, the Waukesha County Board of Supervisors created a special committee to study the need and potential for coordinating the specialized transportation services provided by various Waukesha County departments and agencies. The Waukesha County Transportation Coordinating Committee is scheduled to complete the study and make recommendations to the Waukesha County Board of Supervisors during 1980.

In 1979 the Secretary of the U. S. Department of Transportation issued new rules concerning non-discrimination on the basis of handicap in connection with public transit systems. These new rules seek to implement the nondiscrimination on the basis of handicap intent as set forth in Section 504 of the federal Rehabilitation Act of 1973, and require that the Commission, together with the public transit operators, prepare a plan that will indicate how each public transit operator will make all of its facilities and services available to the handicapped on a nondiscrimination basis. In particular, these new rules require that by July 1, 1982, or as soon thereafter as is possible, one-half of the peak-period bus fleet be equipped with wheelchair lifts or ramps and other devices to accommodate the handicapped. If that deadline cannot be met, then the public transit operator may request an extension up to July 2, 1989, provided that a substitute interim accessible transportation service is offered. The new rules also require that by July 1, 1980, each public transit operator in cooperation with the Commission submit to the federal government a planning document that describes how each of the requirements of the new rules is to be met in each urbanized area. At year's end, the Commission had created four new advisory committees to assist in this effort, and had begun preparing in cooperation with the local transit operators the necessary documentation to be submitted to the federal transit officials by mid-1980. These documents are envisioned as amending the previously adopted regional transportation plan for the transportation handicapped.

## TRANSPORTATION IMPROVEMENT PROGRAM

In December 1979 the Commission completed an updated five-year transportation improvement program (TIP) for the Kenosha, Milwaukee, and Racine

urbanized areas of the Region as required by the U. S. Department of Transportation. This program is set forth in a document entitled A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in South-eastern Wisconsin: 1980-1984. The program was developed with the assistance of Wisconsin Department of Transportation staff and through the cooperation of the various local units and agencies of government in the three urbanized areas of the Region, and of the Cities of Kenosha and Racine and of the Counties of Milwaukee and Waukesha as the operators of special mass transportation systems in these urbanized areas. The 1980-1984 TIP document identifies all planned highway and mass transportation projects in the three urbanized areas programmed for implementation during this five-year period with the aid of U. S. Department of Transportation funds administered through the Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA). Following approval of the 1980 through 1984 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 6, 1979.

The program contains 566 projects for the five-year programming period, representing a total potential investment in transportation improvements and services of about \$864 million. Of this total, \$474 million, or about 55 percent, is proposed to be provided in federal funds; \$97 million, or about 11 percent, in state funds; and \$293 million, or about 34 percent, in local funds.

While the entire five-year program is an important planning tool, it is the annual element which is of primary interest for it represents those projects that are intended to be implemented over the 12- to 21-month period beginning January 1, 1980 (the shorter period is used for federally assisted transit problems, the longer period for federally assisted highway projects). A cost summary of these projects is shown in the accompanying table. Cost data presented in this table represent the proposed annual element expenditures on a total of 369 projects.

In order to provide a basis for a better understanding of the types of transportation improvements proposed to be undertaken in the three urbanized areas, projects have been gathered into

# COST SUMMARY OF PROJECTS WITHIN ANNUAL ELEMENT BY URBANIZED AREA

Funding	Urbanized Area			Total
	Kenosha	Milwaukee	Racine	
Federal . . . .	\$2,949,200	\$133,789,700	\$5,284,700	\$142,023,600
State . . . . .	548,200	18,777,700	1,029,000	20,354,900
Local . . . . .	998,600	67,490,700	1,602,700	70,092,000
Total	\$4,496,000	\$220,058,100	\$7,916,400	\$232,470,500

nine categories: 1) highway preservation—that is, reconstruction of existing facilities to maintain existing capacities; 2) highway improvement—that is, reconstruction of existing facilities to expand existing capacities; 3) highway expansion—that is, the construction of new facilities; 4) highway safety; 5) highway-related environmental enhancement projects; 6) off-federal aid system highway improvements; 7) transit preservation; 8) transit improvement; and 9) transit expansion projects. The accompanying figures graphically reflect the proposed expenditures in the annual element of these nine project categories for each of the three urbanized areas. At least three of the expenditure patterns apparent in the figures deserve some comment:

- A substantial share of the investment proposed in the 1980 annual element is to be devoted to the preservation of transportation facilities, with 44.4 percent of the total investment in the Milwaukee urbanized area, 35.0 percent in the Racine urbanized area, and 45.0 percent in the Kenosha urbanized area being used for this purpose. This level of effort is especially notable when it is realized that virtually none of the funding for routine highway maintenance activities—snowplowing, ice control, grass cutting, power for street lighting, and litter pickup—is included in the TIP.
- A substantial share of the investment proposed in the 1980 annual element is for public transit facilities and services, with 46.6 percent of the total investment in the Kenosha urbanized area, 39.7 percent in the Milwaukee urbanized area, and 30.8 percent in the Racine urbanized area being used for this purpose. This level of effort is especially notable when it is realized that the transit expenditures are for a 12-month period, and the highway expenditures are for a 21-month period.

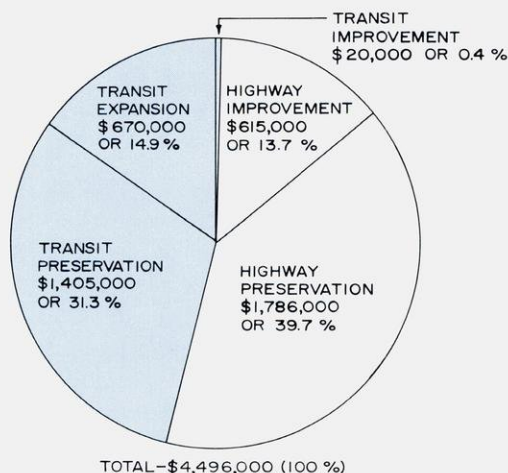
- Highway expansion is nearly nonexistent in the urbanized areas of the Region, with none of the expenditures in the Kenosha urbanized area, 5.2 percent in the Milwaukee urbanized area, and 0.1 percent in the Racine urbanized area being used for this purpose. Nearly 50 percent of the expenditures proposed in the Milwaukee urbanized area are for a “stub end” connection from the Hillside Interchange on the North-South Freeway (IH 43) northwest to the surface arterial system.

A comparison of the 1980 annual element of the TIP with the 1979 annual element of the 1979-1983 TIP as reported in the Commission’s 1978 Annual Report indicates the following:

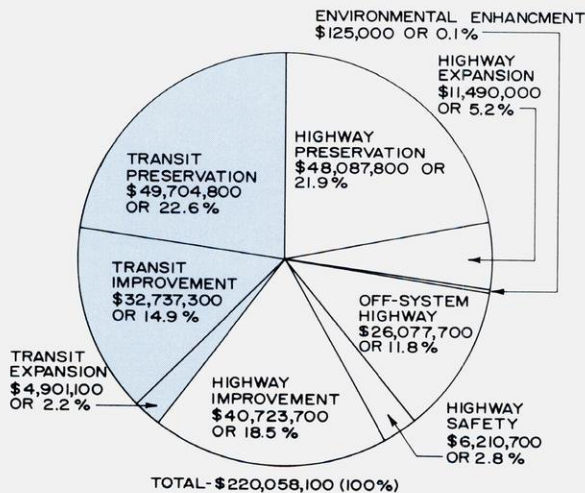
- In the Kenosha urbanized area, total expenditures are proposed to increase by about 4 percent—from about \$4.34 million to about \$4.50 million. Expenditures for highways, which comprised about 69 percent of total expenditures in 1979, are proposed to comprise about 53 percent of total expenditures in 1980. Expenditures for transit comprised about 31 percent of total expenditures in 1979, and are proposed to account for about 47 percent of expenditures in 1980.
- In the Milwaukee urbanized area, total expenditures are proposed to increase by about 45 percent—from about \$151.5 million to about \$220.1 million. Expenditures for highways, which comprised about 69 percent of total expenditures in 1979, are proposed to comprise about 60 percent of total expenditures in 1980. Expenditures for transit comprised about 31 percent of total expenditures in 1979, and are proposed to account for about 40 percent of expenditures in 1980.

**DISTRIBUTION OF EXPENDITURES IN ANNUAL  
ELEMENT OF 1980-1984 TRANSPORTATION  
IMPROVEMENT PROGRAM BY PROJECT CATEGORY**

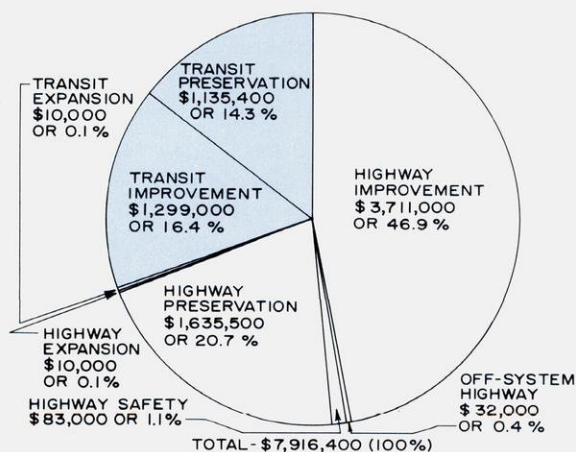
**KENOSHA URBANIZED AREA**



**MILWAUKEE URBANIZED AREA**



**RACINE URBANIZED AREA**



- In the Racine urbanized area, total expenditures are proposed to decrease by about 22 percent—from about \$10.1 million to about \$7.9 million. Expenditures for highways, which comprised about 87 percent of total expenditures in 1979, are proposed to comprise about 69 percent of total expenditures in 1980. Expenditures for transit comprised about 13 percent of total expenditures in 1979, and are proposed to account for about 31 percent of expenditures in 1980.

**RAIL TRANSPORTATION PLANNING**

During 1979 the Commission continued to participate in rail freight transportation planning under an agreement with the Wisconsin Department of Transportation. In addition to monitoring the status of railway lines in the Region, in particular proposed railway line abandonments, and to reviewing state rail plan documentation, the Commission conducted a special rail freight-service planning study during 1979 for the Whitewater area and continued to provide technical assistance to the Village of East Troy in implementing a track rehabilitation project previously recommended by the Commission to be carried out by the Village.

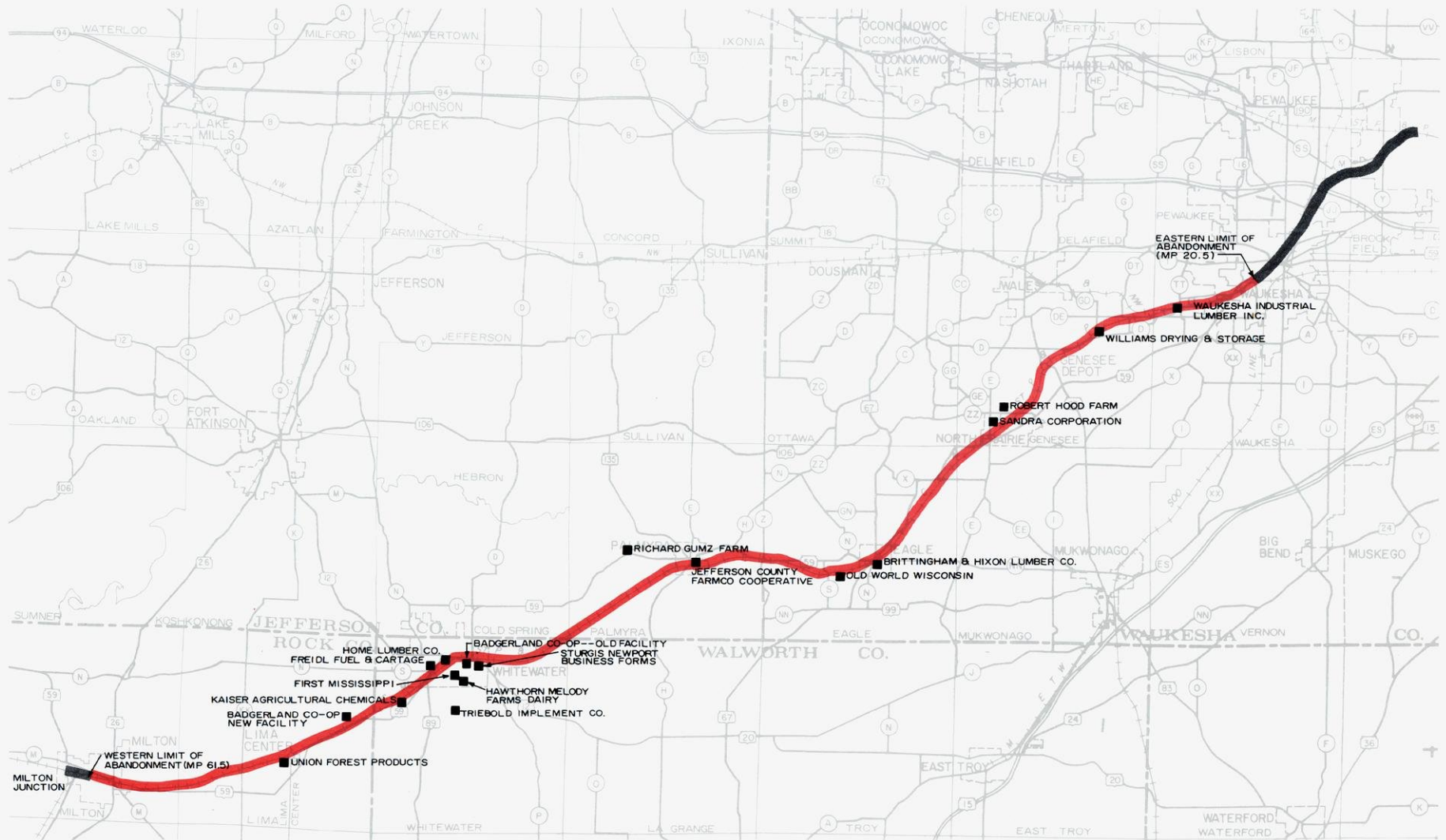
**Whitewater Area Rail Service Plan**

In response to a November 1978 request from the City of Whitewater, the Commission completed during 1979 a study to determine the best means of providing freight transportation service in a corridor from Waukesha through Whitewater to Milton Junction served by a branch line of the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (The Milwaukee Road) in the event of the abandonment of that line (see accompanying map). With financial assistance provided by the Wisconsin Department of Transportation, the study was completed in August 1979 with the publication of SEWRPC Community Assistance Planning Report No. 30, Whitewater Area Rail Service Plan.

The report documents the physical condition of the Waukesha to Milton Junction railway line, presents an operational analysis of present and probable future rail freight service in the corridor served by the railway, identifies characteristics of the shippers using the railway, presents data on the traffic generated by commodity type, sets forth the effect of potential rail service abandonment on the communities and businesses located in the

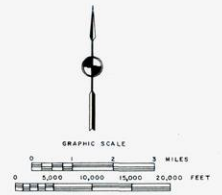


# LOCATION AND CONFIGURATION OF THE WAUKESHA-MILTON JUNCTION LINE



## LEGEND

- WAUKESHA - MILTON JUNCTION RAILROAD LINE
- REMAINDER OF BROOKFIELD - MILTON-JUNCTION BRANCH LINE



corridor, explores alternative means of providing transportation for those goods and materials that are currently moved or are projected by shippers to be moved by the railway line, and outlines the best course of action from among the alternatives for providing freight transportation service in the corridor. Although costs were developed for all services considered, particular attention was given in the study to the operation, expenses, and revenues of a shortline railroad operation in the corridor.

The results of the study indicate that potential economic losses attendant to abandonment of the railroad may be expected to exceed \$1 million per year. The results of the study further indicate that the alternative that best meets the freight transportation needs of the corridor is a shortline railroad; however, a shortline railroad in this corridor may be expected to incur an annual deficit of approximately \$287,000. Such a deficit would have to be financed over the long term by the shippers who benefit from retention of rail service in the corridor. Based on per car surcharges, the total individual carload rate may be expected to increase from 10 to 138 percent of the current rate, depending on the commodity to be carried and the total traffic generated. Although the study concluded that no action should be taken to operate a shortline railroad under public ownership or long-term public subsidy, the study explicitly recognized the possibility that there may be a private concern willing to operate a shortline railroad without guaranteed public subsidies. The plan does recommend public assistance toward the initiation of such operation provided that any such public investments are recoverable over time. Should efforts to establish a shortline railroad fail, the plan recommends that the right-of-way be publicly acquired and used for trail-oriented outdoor recreation purposes.

On May 30, 1979, the federal Interstate Commerce Commission granted an initial decision supporting abandonment of this railway line. The decision was based on the Interstate Commerce Commission Review Board finding that the line may be expected to operate at a deficit in the future and that abandonment of the line would not have a serious adverse impact on rural or community development in Waukesha, Rock, Jefferson, and Walworth Counties. Subsequently, the Wisconsin Department of Transportation appealed the decision. Simultaneously, the Wisconsin Department of Transportation and the City of Whitewater, as the primary channels of public support for rail freight

service continuation in the corridor, initiated action toward acquisition of the trackage and other property improvements, and began to solicit proposals from potential shortline railroad operators. At the end of 1979 these actions were still underway, with the Milwaukee Road continuing to provide service over this segment of railway line.

### **East Troy Rail Rehabilitation Project**

As reported in the Commission 1978 Annual Report, the Commission has been providing technical assistance to the Village of East Troy in implementing the recommendations set forth in SEWRPC Community Assistance Planning Report No. 20, A Rail Transportation Service Plan for the East Troy Area. By the end of 1978 the Commission had provided to the Village a set of contract and specification documents for the proposed rehabilitation of the Municipality of East Troy Wisconsin Railroad between the Villages of East Troy and Mukwonago. The Commission had assisted the Village in the preparation of a federal grant application for funds from the U. S. Department of Commerce, Economic Development Administration, an application which resulted in the appropriation of \$324,000 in support of the proposed improvement project. A supplemental state grant in the amount of \$151,000 was also obtained by the Village. The Village early in 1979 solicited bids from prospective contractors based upon the project specifications provided by the Commission. In June 1979 bids were received and a contract was awarded to the low bidder, the firm of Midwest Railroad Construction & Maintenance Corporation. The contract for the rail rehabilitation project as awarded was \$675,191. The final total cost of the project will depend upon exact quantities of materials utilized as well as contingencies encountered during the project.

Following the award of the contract, the Village requested Commission and Wisconsin Department of Transportation (WisDOT) assistance in conducting preconstruction meetings and providing support to the village officials charged with project administration and inspection. During the summer of 1979, the Commission and WisDOT staffs prepared a plan and profile for the railway within the project limits showing existing and proposed grades and alignments. The construction project commenced in September 1979. Work continued through the end of November, when the weather caused work to be suspended. At that time, essentially all tie replacement work had been completed and a signi-

ficant portion of the new ballast had been placed. In addition, the surfacing and aligning of the track had been partially completed, as had brush cutting and ditching, with some of the rail replacement required also having been completed. By mutual agreement between the contractor and the Village of East Troy, work on the project was to commence again in the spring of 1980 and the work was to be completed by late summer or early fall depending upon the completion of a project to remove and replace bridges over the railway in the Town of East Troy.

#### Other Rail Planning Activities

During 1979 abandonment proceedings continued for other railway segments in the Region's railway network. An application for abandonment of the segment of the Milwaukee Road's railway line between the Village of Walworth and Avalon (Rock County), which came under abandonment proceedings in 1978, received an initial decision from the federal Interstate Commerce Commission on October 5, 1979, in favor of abandonment. This decision, appealed by the Wisconsin Department of Transportation and others, was upheld on December 26, 1979. Financially responsible persons were permitted to submit an offer for subsidization or acquisition of the line until January 21, 1980.

In November 1979, the Chicago & North Western Transportation Company gave notice that it intended to file an application for abandonment of its line between Lake Geneva, Wisconsin, and Ringwood, Illinois. This was followed by the filing with the Interstate Commerce Commission of the application on December 26, 1979. Passenger train service consisting of commuter trains to and from Chicago was discontinued between Richmond, Illinois, and Lake Geneva in August 1975.

The accompanying map and table illustrate the status of railway lines in southeastern Wisconsin as of December 31, 1979.

#### AIR TRANSPORTATION PLANNING

During 1979, Commission activities in air transportation planning included continued monitoring through secondary data sources of aviation activities in the Region and assisting in the preparation of airport master plans. Such plans are prepared as a step toward implementation of the regional airport system plan adopted by the Commission in 1976. This plan is documented in SEWRPC Plan-

ning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin, and is graphically summarized on the accompanying map.

#### Airport Master Planning

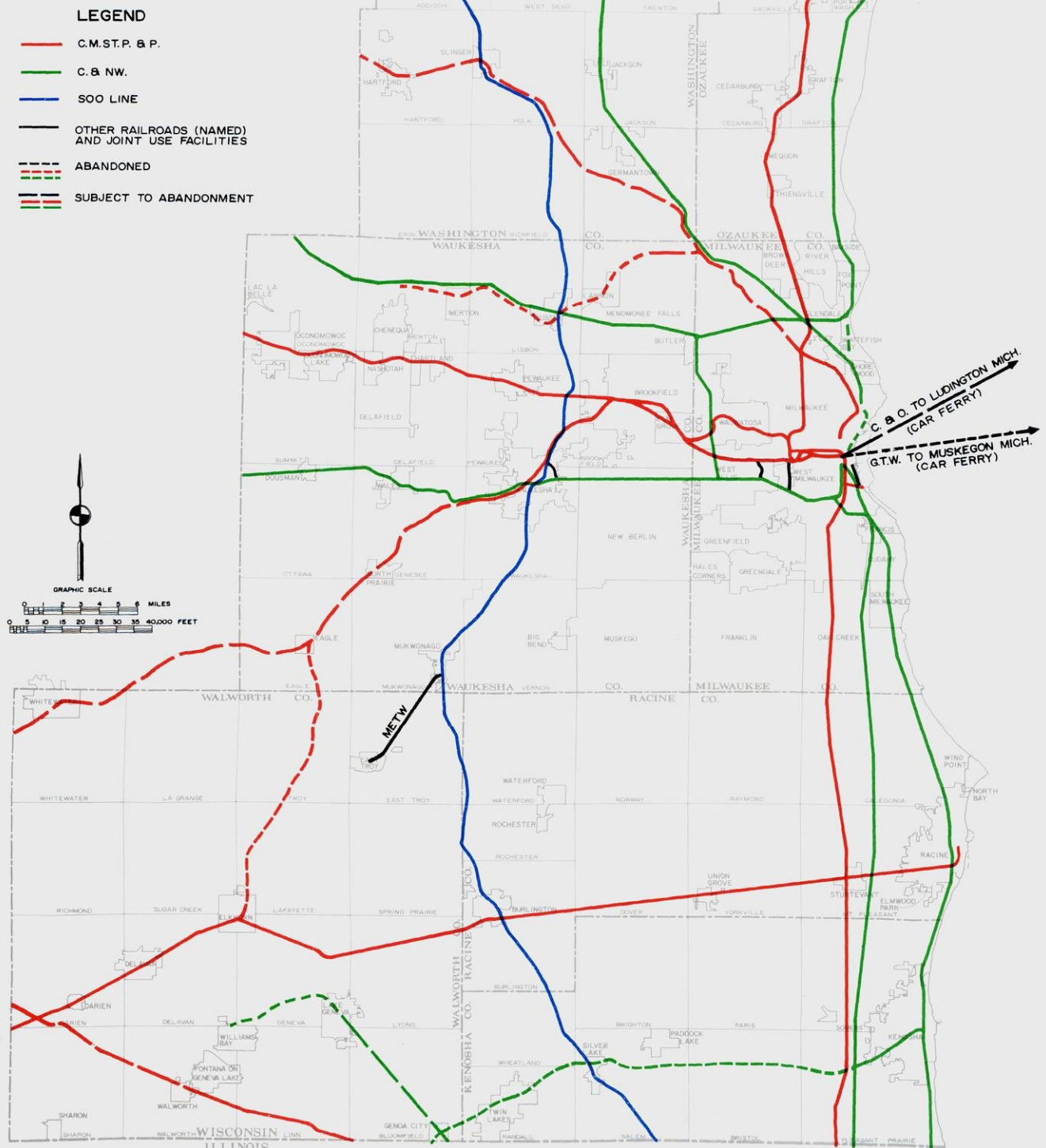
As noted in previous annual reports, airport master plans have been completed and adopted for the Kenosha (1977) and West Bend (1977) Municipal Airports. Both of these plans refine and detail the systems level recommendations contained in the regional airport system plan. Master plans have been completed but have not yet been adopted for General Mitchell Field and for the Waukesha County Airport, with the latter master plan currently at variance with the regional airport system plan recommendations with respect to the runway configuration.

During 1979, work began on the preparation of a master plan for the Hartford Municipal Airport. The plan is being prepared by a consultant retained for the City of Hartford by the Wisconsin Department of Transportation. The Commission is participating in this effort through service on an advisory committee. During the year, the work had proceeded to the point where a final alternative runway configuration was selected for development under the final phases of the master planning effort. The master plan is scheduled to be completed and published in 1980.

#### Aviation Activity

The Commission continued to monitor aviation activity in 1979 in order to compare such activity with the forecasts of based aircraft, aircraft operations, and passenger enplanements as set forth in the adopted regional airport system plan. One set of forecasts deals with anticipated total annual aircraft operations at General Mitchell Field in Milwaukee, the Region's only scheduled air carrier airport. As shown in the accompanying graph, aircraft operations at General Mitchell Field totaled about 261,000 in 1979, or almost precisely identical to the forecast operation set forth in the regional airport system plan for that year of 260,000. Total aircraft operations at the airport are comprised of air carrier, general aviation, and military operations. Air carrier operations totaled about 83,000, an increase of about 10,000 operations from the 1978 level of about 73,000. Air carrier operations in 1978 were significantly affected by a 105-day strike against Northwest Orient Airlines. Strikes also affected air carrier ser-

**STATUS OF RAILWAY LINES IN  
SOUTHEASTERN WISCONSIN:  
DECEMBER 31, 1979  
(NOT INCLUDING ELECTRIC  
INTERURBAN RAILWAYS)**





# RAILWAY ROUTE MILEAGE IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1979

County	Railroad								Total		Subject to Abandonment	
	Chicago, Milwaukee, St. Paul & Pacific		Chicago and North Western		Soo Line		Municipality of East Troy, Wisconsin					
	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 . . . .	12.5	2.2	29.1	5.0	10.6	1.8	--	--	52.2	9.0	--	--
Milwaukee . . .	52.7	9.1	67.1	11.6	--	--	--	--	119.8	20.6	8.6 <sup>a</sup>	1.5
Ozaukee . . . .	25.0	4.3	25.0	4.3	--	--	--	--	50.0	8.6	--	--
Racine . . . . .	40.5	7.0	24.6	4.2	14.0	2.4	--	--	79.1	13.6	--	--
Walworth . . . .	51.8	8.9	13.4	2.3	3.8	0.7	6.0 <sup>a</sup>	1.0	75.0	12.9	25.9 <sup>a</sup>	4.5
Washington . . .	22.7	3.9	27.2	4.7	25.0	4.3	--	--	74.9	12.9	22.7 <sup>a</sup>	3.3
Waukesha . . . .	54.0	9.3	47.7	8.2	26.9	4.6	1.2 <sup>a</sup>	0.2	129.8	22.3	18.9 <sup>a</sup>	13.1
Region	259.2	44.6	234.1	40.3	80.3	13.8	7.2	1.2	580.8	100.0	83.3 <sup>a</sup>	14.3
Subject to Abandonment	66.2 <sup>a</sup>	11.4	9.9 <sup>a</sup>	1.7	--	--	--	--	76.1 <sup>a</sup>	13.1	76.1 <sup>a</sup>	--

NOTE: Percentage figures may not sum exactly due to rounding.

<sup>a</sup> Approximation.

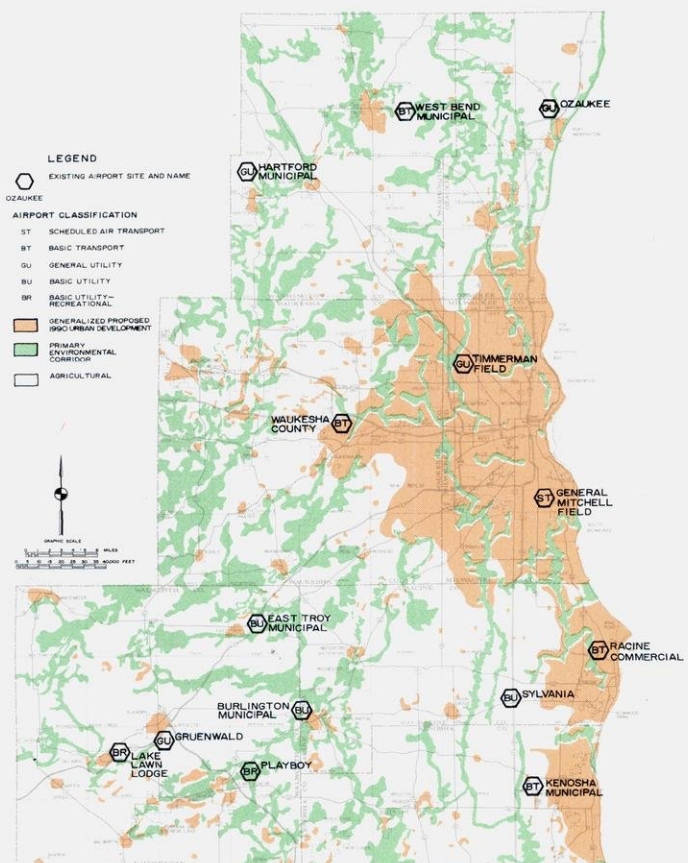
vice at Mitchell Field in 1979, with strikes causing a halt in air carrier service at that field by United Airlines between March 30, 1979 and May 27, 1979; by Hughes Airwest between September 10, 1979 and November 10, 1979; and by Ozark Airlines between September 14, 1979 and November 5, 1979. It should also be noted that Western Airlines began air carrier operations at General Mitchell Field on July 1, 1979.

General aviation operations at General Mitchell Field totaled about 171,000 in 1979, a 4,000, or nearly 3 percent, increase over the 1978 level. As in 1978, military aircraft operations at the field decreased in 1979, to a level of about 6,800—nearly a 4 percent decrease from the 1978 level of about 7,000 operations.

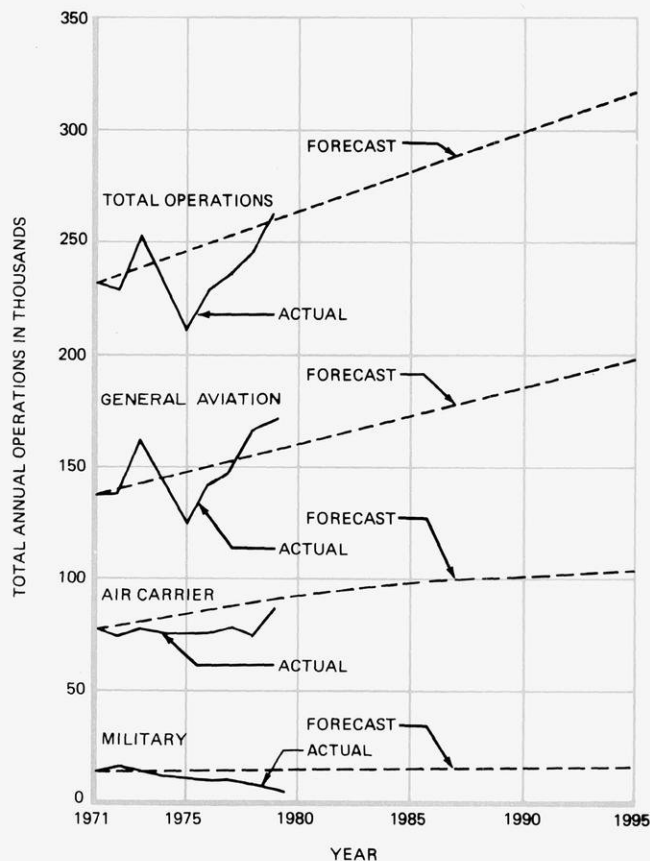
Air carrier and commuter enplaning and deplaning of passengers at General Mitchell Field, as shown in the accompanying graph, totaled about 3.5 million in 1979, an increase of nearly 0.5 million, or about 16 percent, over the 1978 level. The 1979 level of passenger activity was nearly 0.5 million, or about 13 percent, more than the 3.0 million passengers forecast for the year 1979 in the adopted regional airport system plan.

Aircraft based in the Region during 1979 totaled about 1,490, an increase of nearly 1 percent over the 1978 registrations. The number of based aircraft in 1979 exceeded the forecast registrations of about 1,480 aircraft by less than 1 percent.

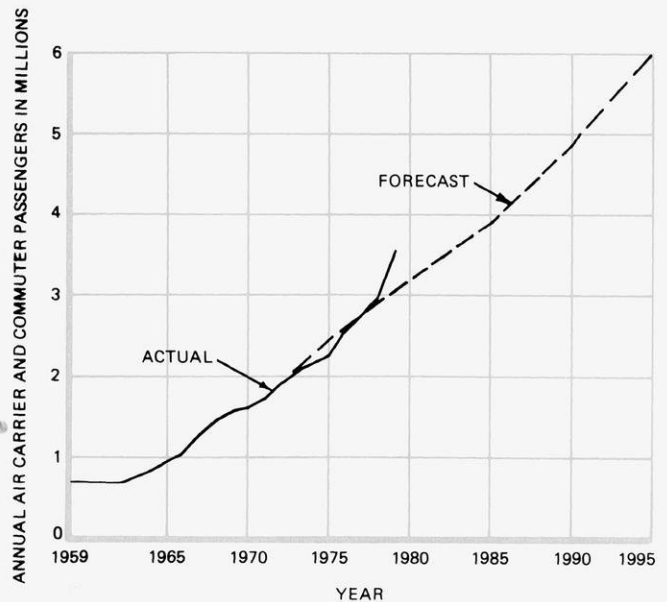
## REGIONAL AIRPORT SYSTEM PLAN: 1995



### ANNUAL AIRCRAFT OPERATIONS: GENERAL MITCHELL FIELD—MILWAUKEE



### ANNUAL AIR CARRIER AND COMMUTER ENPLANING AND DEPLANING PASSENGERS: GENERAL MITCHELL FIELD—MILWAUKEE

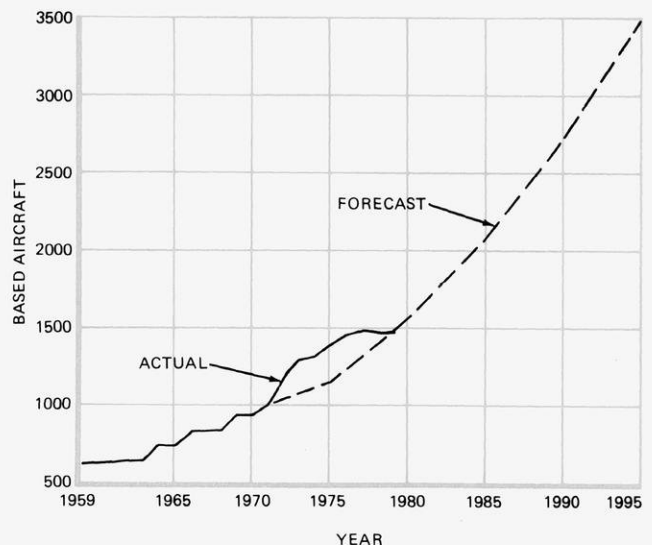


### DATA PROVISION AND ASSISTANCE

The Commission spends a considerable amount of time and effort each year in answering requests for transportation data. The following list is indicative of the types of requests responded to in 1979:

- Provision of technical assistance to the Milwaukee Urban League in the design and processing of a survey of transportation and social service needs of people residing in the City of Milwaukee.
- Provision of technical assistance to the University of Wisconsin-Milwaukee and the University of Wisconsin-Extension through the Division of Outreach, Office of State-wide Transportation Programs, in the design and processing of a survey of Milwaukee County Institution Grounds employees for use in promoting ride-sharing of employed persons at the institution grounds.

### AIRCRAFT BASED IN THE REGION



- Provision of transportation system supply and utilization data to the Town of Pleasant Prairie for the incorporation process undertaken by the Town.
- Provision of travel time information to the Walworth County Planner to be used

# AIRCRAFT BASED IN THE REGION

County	1960	1965	1970	1975	1976	1977	1978	1979
Kenosha . . . .	28	60	76	111	120	143	142	150
Milwaukee . . .	338	362	356	516	535	546	519	513
Ozaukee . . . .	19	13	32	39	37	43	40	41
Racine. . . . .	65	89	108	177	177	184	191	195
Walworth. . . .	23	31	48	96	97	100	97	120
Washington . .	45	63	118	160	190	189	185	178
Waukesha. . . .	118	163	243	301	298	294	295	295
Total	636	781	981	1,400	1,454	1,499	1,479	1,492

in evaluating the service areas designated for fire protection service and medical rescue service.

- Provision of person and vehicle trip rates by land use category to the City of Milwaukee for use in local traffic engineering studies.
- Provision of estimates of annual fuel consumption in the Region to a research team

at Pennsylvania State University conducting a study relating energy consumption and availability to changes in population.

- Provision of transportation system data to a consulting firm retained by the federal Nuclear Regulatory Commission to prepare an evacuation plan for the Zion (Illinois) nuclear generating facility just south of the Region.





# ENVIRONMENTAL PLANNING DIVISION

## DIVISION FUNCTIONS

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

- What is the existing quality of the lakes, streams, and groundwaters of the Region? Is water quality getting better or worse over time?
- What are the sources of water pollution? How can these sources best be controlled to abate water pollution and meet water quality objectives?
- What is the extent of the natural floodlands along lakes and streams?
- What are the best ways to resolve existing flooding problems and to ensure that new flooding problems are not created?
- What is the existing air quality in the Region? Is air quality getting better or worse over time?
- What are the sources of air contaminants? What can be done to control the emissions of these contaminants?
- Will future emissions of air contaminants result in air clean enough to meet the air quality standards? If not, what strategies can be employed to ensure that the standards are met?
- 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?

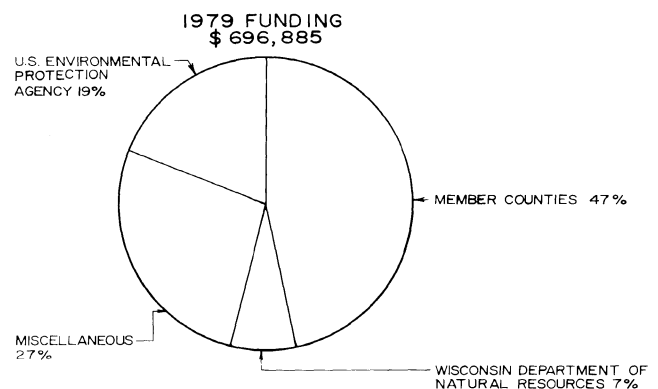
In attempting to find sound answers to these and related questions, develop recommendations concerning environmental protection and enhancement, monitor levels of environmental quality in

the Region, and respond to requests for data and technical assistance, activities were conducted in 1979 in four identifiable program areas: water quality planning, watershed and floodland management planning, air quality planning, and solid waste planning.

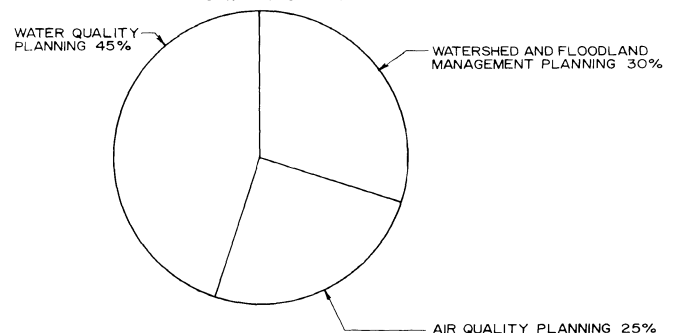
## WATER QUALITY PLANNING

During 1979 the water quality planning efforts of the Division were largely focused on the completion of an areawide water quality management plan intended to meet the requirements of Section 208 of the federal Clean Water Act. In addition, work activities included the review of locally proposed sanitary sewer extensions, the initiation of a study designed to refine and detail nonpoint source pollution abatement plan recommendations for the Root River watershed, the provision of assistance to lake protection and rehabilitation districts, the provision of assistance in support of

### ENVIRONMENTAL PLANNING DIVISION



### DISTRIBUTION OF FUNDING TO WORK PROGRAMS



detailed local sewerage facilities planning, and the conduct of a public participation program in support of the wide range of water quality management planning efforts.

### 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 requirements of Section 208 of the federal Clean Water Act, the Congressional mandate that the waters of the United States be made “fishable and swimmable” wherever practical, is set forth in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative Plans; and Volume Three, Recommended Plan. The plan provides recommendations for the control of water pollution from point sources—such as sewage treatment plants, points of separate and combined sewer overflow, and industrial waste outfalls—and from nonpoint sources, such as urban and rural storm water runoff. The plan was adopted by the Commission on July 12, 1979, following a series of subregional public informational meetings, a regional planning conference devoted to the plan, and a formal public hearing on the plan.

This regional plan element is one of the more important plan elements adopted by the Commission for, in addition to providing clear and concise recommendations for the control of water pollution, it provides the basis for the continued eligibility of local units of government for federal grants in partial support of sewerage system development and redevelopment, provides the basis for the issuance of all waste discharge permits by the Wisconsin Department of Natural Resources, provides the basis for the review and approval of all sanitary sewer extensions by the Wisconsin Department of Natural Resources, and provides the basis for state and federal 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 non-point source pollution abatement element, a sludge management element, and a water quality monitoring element.

#### *Land Use Plan Element*

The most fundamental and basic element of the regional water quality management plan is the land

use element. The type, intensity, and distribution of urban and rural land uses within the Region will determine to a large degree the character, magnitude, and distribution of point and nonpoint sources of pollution; the location and size of wastewater treatment facilities and attendant collection and conveyance facilities; the kind and level of wastewater treatment required, and the need for and practicality of various forms of wastewater sludge disposal; and ultimately, the quality of the surface waters of the Region.

The land use element of the regional water quality management plan is the regional land use plan for the design year 2000 prepared by the Commission in a concurrent work effort and adopted by the Commission on December 19, 1977. This plan is briefly discussed earlier in this report (see the map on page 17). This plan element seeks to centralize land use development to the greatest degree practicable; to encourage new urban development to occur at densities consistent with the provision of public centralized sanitary sewer, water supply, and mass transit facilities and services; to encourage new urban development to occur only in areas covered by soils well suited to urban use and not subject to special hazards, such as flooding; and to encourage new urban development and redevelopment to occur in areas in which essential urban facilities and services are available—particularly the existing urban centers of the Region—or into which such facilities and services can be readily and economically extended.

The land use plan element envisions converting about 113 square miles of land from rural to urban use within the Region between 1970 and the year 2000, substantially less than the approximately 235 square miles which would be converted under a continuation of existing trends toward decentralization of urban development in the Region. More than 60 percent of all new urban residential land, and about half of the incremental population growth within the Region, would, under the plan, be located within 20 miles of the central business district of the City of Milwaukee. The plan envisions that new urban development will occur primarily in planned neighborhood units at medium-density levels; that is, at about four dwelling units per net residential acre, or about 5,000 persons per gross square mile.

The regional land use plan seeks to discourage development of subdivisions served by septic tanks and private wells with lot sizes ranging from less than one to up to about three acres per dwelling unit. Such growth represents neither sound rural

nor sound urban development. The plan recommends that that portion of the housing market demanding rural living be satisfied through very low-density estate-type developments, with lot sizes averaging at least five acres per dwelling unit. With proper attention to soil and other natural resource base limitations, such truly rural residential development can be sustained without public sanitary sewer, water supply, or urban storm water drainage facilities; high-value woodland and wetland areas can be preserved; and wildlife can continue to sustain itself in the area.

The plan proposes that the primary environmental corridors shown on the map on page 17 be preserved in essentially natural, open uses. Such preservation is considered essential to the protection and wise use of the natural resource base; to the preservation of the Region's cultural heritage and natural beauty; and to the enrichment of the physical, intellectual, and spiritual development of the resident population, as well as to the prevention of new and the intensification of existing environmental problems, such as flooding and water pollution. The topography, soils, and flood hazard existing in these corridors, moreover, make them particularly ill suited to intensive urban development of any kind, but well suited to recreational and conservancy uses. The regional park and open space plan, adopted by the Commission in 1977, includes definitive recommendations for the protection and preservation of these lands, and identifies which areas of the corridors should be publicly acquired and which should be preserved through private ownership and appropriate land use regulation. About 72 square miles, or 16 percent of the net corridor area, are already publicly owned. The adopted regional park and open space plan calls for public acquisition of an additional 113 square miles of net corridor, or an additional 26 percent. The remaining 252 square miles of net corridor land are recommended to be protected through appropriate local use controls.

The plan proposes to maintain in agricultural use to the greatest extent practicable those areas of the Region identified on the map on page 17 as prime agricultural lands. The plan proposes to convert to urban use only those prime agricultural lands which have already been committed to urban development due to the proximity to existing and expanding concentrations of urban uses. Only about 8,000 acres, or about 2 percent, of the prime agricultural lands would be converted to urban use under the plan.

The preservation of the prime agricultural lands, like the preservation of the primary environmental corridors, has important implications for water quality management planning. Prime agricultural land preservation will assist in the promotion of sound soil and water conservation practices and in the implementation of rural diffuse source water pollution abatement measures. Well-managed agricultural land contributes a lower pollutant loading to surface waters than does urban land uses. Landowners are willing to invest in such practices, however, only on lands located in what are perceived to be "permanent" agricultural areas. Investments in such practices will not likely be made on lands proposed to be converted to other uses. Accordingly, implementation of the prime agricultural land component of the regional land use plan element will be particularly important to the implementation of the rural nonpoint source pollution abatement plan element and, thereby, to the achievement of the recommended water use objectives and supporting water quality standards.

#### *Point Source Pollution Abatement Element*

The point source pollution abatement plan element includes recommendations on the location and extent of sanitary sewer service areas; the location, type, and capacity of sewage treatment facilities and the level of treatment required to meet the recommended water use objectives; the location, configuration, and size of trunk sewers; the abatement of pollution from separate and combined sewer overflows; and the abatement of pollution from industrial waste discharges.

The point source pollution abatement plan element represents the second generation system plan for point source water pollution abatement in the Region, the first generation plan consisting of the regional sanitary sewerage system plan adopted by the Commission in 1974. This second generation system plan has been designed to take into account the decisions made in the first generation system plan, as well as in the local facilities planning that has taken place in implementation of the first generation system plan.

#### *Sewer Service Areas*

Recommended sanitary sewer service areas are based upon the urban land use pattern envisioned in the adopted regional land use plan. In 1975 centralized sanitary sewer service in the Region was provided to a total area of about 353 square miles,

or about 13 percent of the area of the Region. The extension of sewer service to all of the areas designed for such service in the plan, shown on the accompanying map, would result in service being provided to a total area of about 648 square miles, or about 24 percent of the area of the Region. Of the 295 square miles of incremental sewer service area proposed in the plan, about 125 square miles, or 42 percent, consist of land already developed for urban purposes.

#### Public Sewage Treatment Facilities

In 1975 there were a total of 61 public sewage treatment facilities within the Region, having a combined capacity of about 293 million gallons per day (mgd). A total of 49 public sewage treatment facilities, having a combined capacity of 470 mgd, are recommended to serve the Region in the year 2000. The 49 public sewage treatment facilities recommended for the year 2000 represent a net reduction of 12 such facilities, with 20 existing facilities proposed to be abandoned and 8 new facilities proposed to be constructed. Of these 49 facilities, 17, having a combined capacity of 7 mgd, are recommended to discharge sewage effluent to land through irrigation, with the remaining 32 plants, having a combined capacity of 463 mgd, recommended to discharge sewage effluent to surface waters. About 3,000 acres of land, or less than 0.5 percent of the total agricultural land in the Region, would be required for the application of wastewater from the 17 facilities recommended to discharge effluent to land. All 32 public sewage treatment plants recommended to discharge sewage effluent either to streams or to Lake Michigan would be required to provide an advanced level of waste treatment.

Implementation of the plan would permit the abandonment of the following 20 public sewage treatment facilities: Caddy Vista, Elkhorn, Fontana, Germantown, Hales Corners, Hartland, Menomonee Falls—Lilly Road, Menomonee Falls—Pilgrim Road, Muskego—Big Muskego Lake, Muskego—Northeast District, New Berlin—Regal Manor, Somers, Sturtevant, Sussex, and Williams Bay. A total of 8 new public sewage treatment plants would be provided: Delafield-Hartland, Eagle Lake, Lyons, North Prairie, Salem, Wales, Wind Lake, and Yorkville. All of the other public sewage treatment plants in the Region would be renovated, expanded, and/or replaced. The location and names of all existing and proposed sewage treatment plants are shown on the accompanying map.

The most significant issue raised at the public hearings on the water quality management plan was the level of phosphorus removal to be provided at selected sewage treatment plants in the Region, primarily those treatment plants that discharge sewage effluent to streams having a relatively low flow. The preliminary plan that was presented at the public hearings proposed that the effluent discharged into the receiving streams contain no more than 0.1 milligram per liter (mg/l) of phosphorus, measured as total phosphorus on a monthly average basis. This preliminary recommendation was based upon analyses of alternative means of attaining a proposed instream phosphorus standard of 0.1 mg/l measured as total phosphorus. This proposed level of phosphorus control was significantly more stringent than the currently accepted practice within much of the Region of providing a treatment plant effluent with a phosphorus level of 1.0 mg/l.

There was both significant opposition to and significant support for the preliminary plan recommendation to provide for a very high level of phosphorus removal. Opposition to the proposal centered on three major points: 1) the added cost burden to the local taxpayer of providing the required additional capital facilities and supporting the attendant additional operation and maintenance; 2) uncertainties concerning the technical feasibility of achieving an effluent discharge of 0.1 mg/l phosphorus on a continuing basis; and 3) the increased energy use that would be required to operate sewage treatment plants providing a high level of phosphorus removal. Support for the recommendation came primarily from individuals and interest groups who believe that more than a conventional level of phosphorus removal will be required if the recommended water use objectives are to be attained. There was no opposition to the proposed instream phosphorus standard of 0.1 mg/l.

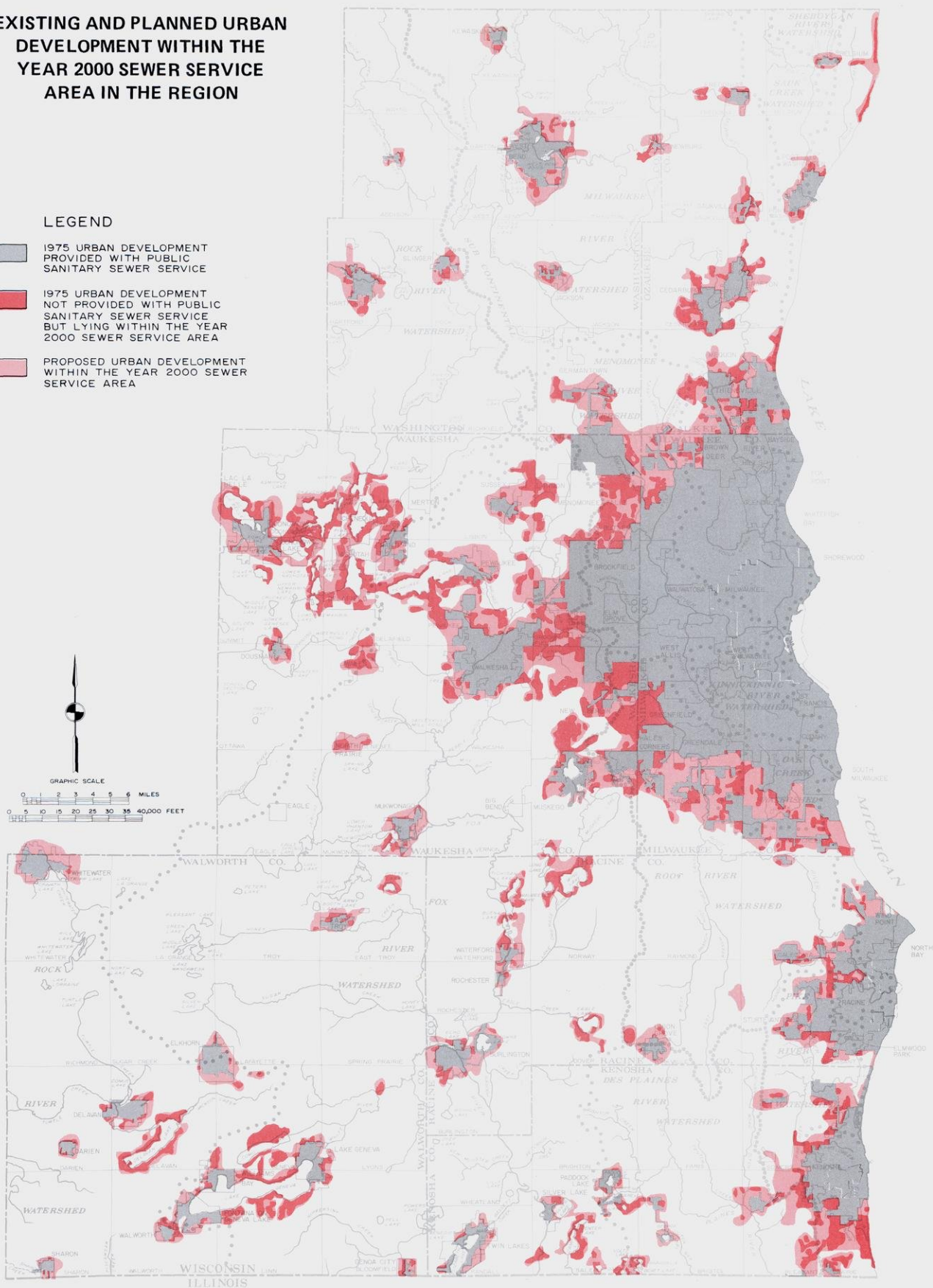
The Commission and its advisory committee concerned with the areawide water quality management plan deliberated the phosphorus removal issue at great length before arriving at a conclusion that the final plan should recommend that the subject sewage treatment facilities initially provide a level of phosphorus removal adequate to obtain a treated effluent with a phosphorus content of 1.0 mg/l. It was determined, however, to retain the recommended phosphorus concentration of 0.1 mg/l for streams, subject to redetermination on a stream reach-by-stream reach basis upon the con-



# **EXISTING AND PLANNED URBAN DEVELOPMENT WITHIN THE YEAR 2000 SEWER SERVICE AREA IN THE REGION**

## **LEGEND**

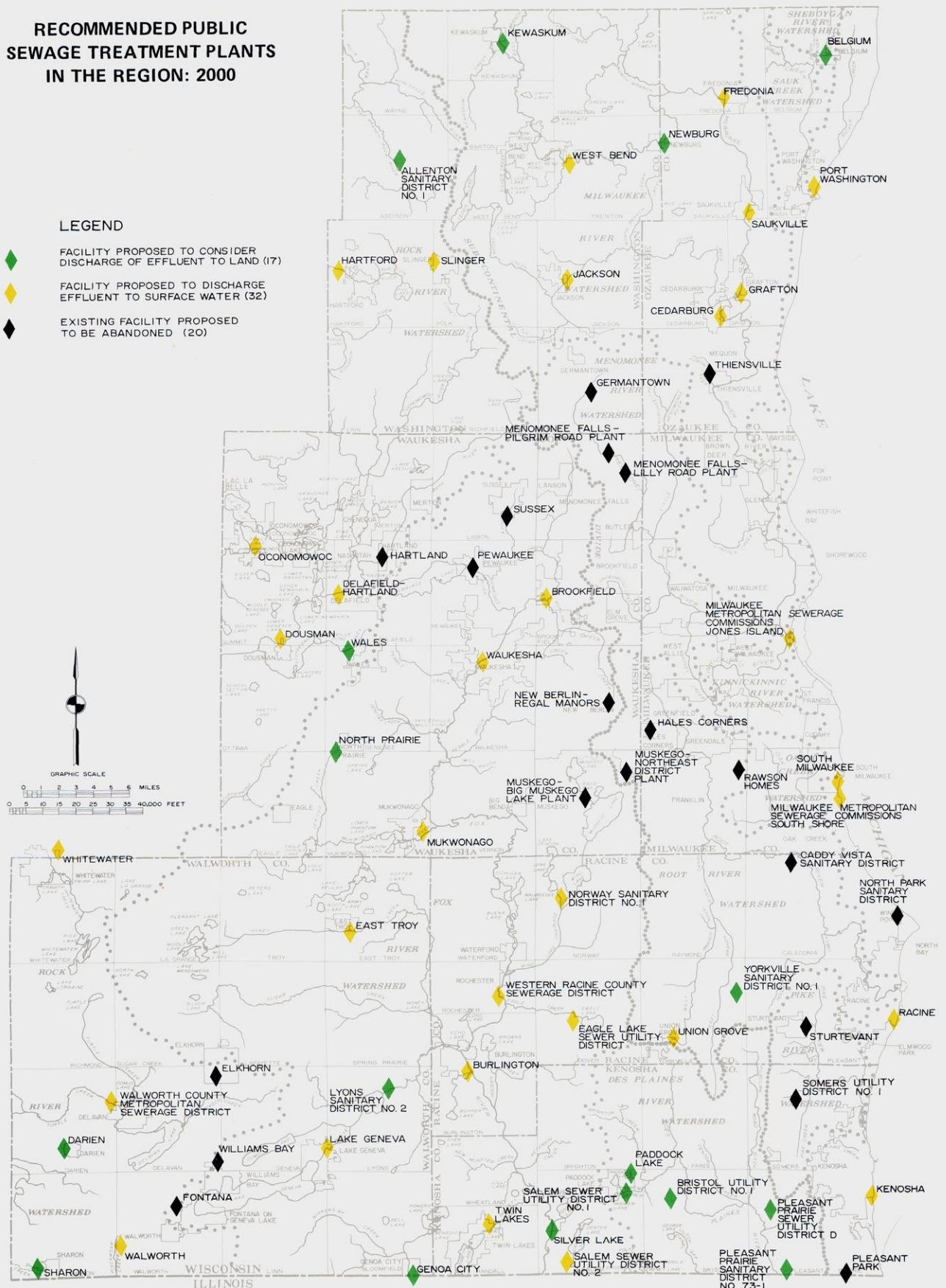
- 1975 URBAN DEVELOPMENT  
PROVIDED WITH PUBLIC  
SANITARY SEWER SERVICE
- 1975 URBAN DEVELOPMENT  
NOT PROVIDED WITH PUBLIC  
SANITARY SEWER SERVICE  
BUT LYING WITHIN THE YEAR  
2000 SEWER SERVICE AREA
- PROPOSED URBAN DEVELOPMENT  
WITHIN THE YEAR 2000 SEWER  
SERVICE AREA



# **RECOMMENDED PUBLIC SEWAGE TREATMENT PLANTS IN THE REGION: 2000**

## **LEGEND**

- ◆ FACILITY PROPOSED TO CONSIDER  
DISCHARGE OF EFFLUENT TO LAND (17)
- ◆ FACILITY PROPOSED TO DISCHARGE  
EFFLUENT TO SURFACE WATER (32)
- ◆ EXISTING FACILITY PROPOSED  
TO BE ABANDONED (20)





duct of more detailed water quality studies. The plan recommends that if first, such studies conclude that contributing sewage treatment facilities must provide an effluent discharge having a phosphorus concentration more stringent than 1.0 mg/l in order to meet the appropriate instream phosphorus standard; second, there exists at that time a proven, reliable treatment technology capable of institution in small as well as large communities to provide for such stringent phosphorus removal; and third, the incremental cost of the sewage treatment needed to effect such additional phosphorus removal is found to lie within the ability to pay of those communities directly affected, then the institution of more stringent phosphorus effluent discharge limitations should be required for implementation after 1990.

#### Private Sewage Treatment Plants

In 1975 there were a total of 67 private sewage treatment facilities in the Region generally serving isolated enclaves of urban land uses, including public and private recreational facilities, institutional facilities, commercial service facilities, isolated residential areas such as mobile home parks, and industries. These 67 facilities had a combined capacity of about 8.1 mgd. Since 1975 one additional private sewage treatment facility, having a capacity of 0.1 mgd, has been constructed to serve the Alpine Valley Music Center in Walworth County, and the Wisconsin Department of Natural Resources has proposed the construction of a new private sewage treatment facility, having a capacity of 0.01 mgd, to serve the Bong Recreation Area in Kenosha County.

Under the recommended plan, 35 of the 68 existing private sewage treatment facilities, having a combined capacity of 1.8 mgd, would be abandoned and the land uses they serve connected to public sanitary sewerage systems. Abandonment of these 35 facilities would eliminate effluent discharge from such facilities to the streams and groundwaters of the Region and would ensure that the wastes from such facilities would be adequately treated through the public sanitary sewerage systems.

The remaining 33 existing private sewage treatment facilities, and the new facility proposed to serve the Bong Recreation Area, are recommended to remain in operation, with their treatment levels improved as necessary to meet the recommended water use objectives and supporting water quality standards. Definitive recommendations concerning

the type and level of treatment to be provided at these 34 facilities, having a combined capacity of 6.4 mgd, are to be formulated on a case-by-case basis during plan implementation. The regional plan recommends, however, that careful consideration be given in most instances to the disposal of treated effluent through land irrigation or soil absorption sewage lagoons, thus avoiding discharge of sewage effluent to surface waters.

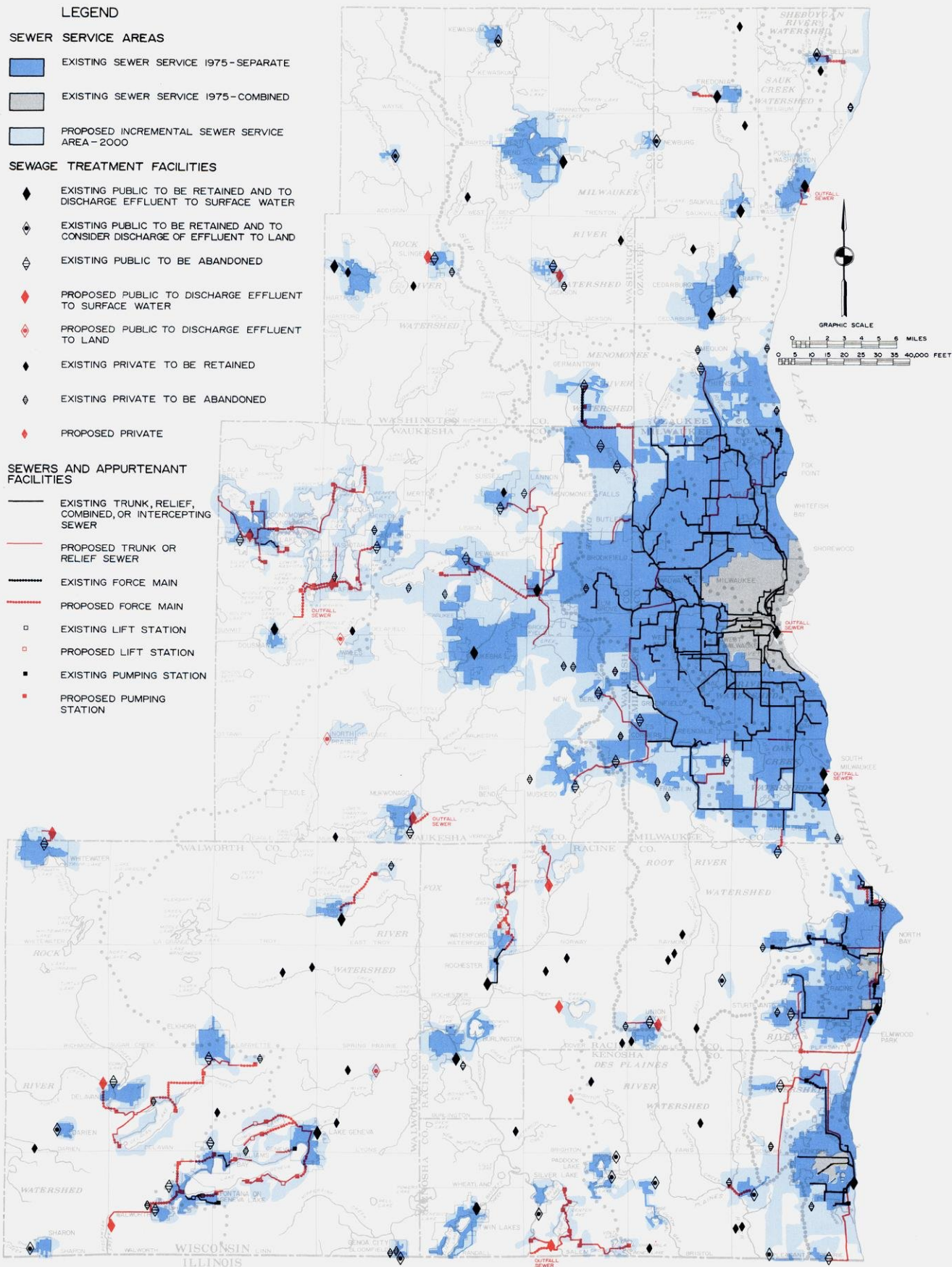
#### Intercommunity Trunk Sewers

In order to extend centralized sanitary sewer service throughout the proposed sewer service areas and to enable the abandonment of certain public sewage treatment plants, the plan recommends the construction of 64 intercommunity trunk sewers, the locations of which are shown on the accompanying map. Twenty-two of these sewers are located in the Milwaukee metropolitan subregional area. It was recognized in the plan that a major sewerage facilities planning effort of the Milwaukee Metropolitan Sewerage District that is now nearing completion will reopen certain system level decisions that have been made in past years, including decisions relating to trunk sewer construction and retention of existing satellite sewage plants. Accordingly, the trunk sewer and treatment plant recommendations set forth in the plan are intended to serve as guidelines for decision-making until such time as the sewerage facilities plan for the District is completed and adopted by all parties concerned as an amendment to the areawide water quality management plan.

#### Combined Sewer Overflow Abatement

Combined sewer overflows constitute a water pollution and environmental health problem in the older central portions of the Kenosha, Milwaukee, and Racine urbanized areas. In the Kenosha and Racine urbanized areas, the point source pollution abatement element recommends completion of a program of partial separation of combined sewers through the construction of a new system of storm sewers to convey storm water flow from street inlets and catch basins while using the existing combined sewers as partially separated sanitary sewers. In the Milwaukee area, a detailed local study on this matter is nearing completion. Several basic alternatives or combinations of alternatives remain under consideration for the Milwaukee area. These include partial separation of combined sewers in much the same manner as in Kenosha and Racine, and the construction of deep tunnel storage sewers and caverns for the collection and

# RECOMMENDED SEWER SERVICE AREAS, SEWAGE TREATMENT FACILITIES, AND INTERCOMMUNITY TRUNK SEWERS IN THE REGION: 2000





storage of combined sewer overflows with subsequent treatment and disposal. It is intended that the final recommendation coming out of the Milwaukee combined sewer overflow study be incorporated into the regional water quality management plan as an amendment upon adoption by all parties concerned.

#### Miscellaneous Point Source Discharges

In 1975 there were 277 known sources of wastewater other than public and private sewage treatment plants and combined and separate sanitary sewerage system flow relief devices. These 277 sources discharge wastewater through 435 outfalls to surface waters and 17 outfalls to land disposal systems. These sources consist primarily of discharges of industrial cooling, process, rinse, and wash waters, but also include wash water and cooling water discharges from commercial, institutional, and recreational land uses, which are discharged directly, sometimes following treatment, to land disposal systems, to the streams and watercourses of the Region, or to storm sewers tributary to such streams and watercourses. The plan recommends that the concentration of pollutants in the discharges from these sources be reduced to levels which are, at a minimum, consistent with the effluent characteristics recommended for public and private sewage treatment facilities discharging to the same or similar surface watercourses. Furthermore, the plan recommends that these point sources reduce the discharge of other pollutants, such as grease, heavy metals, organics, and heat, to levels attainable by application of the Best Practicable Control Technology and Best Available Technology as identified on a case-by-case basis under the Wisconsin Pollutant Discharge Elimination System permit process.

#### Auxiliary Point Source-Related Recommendations

The point source pollution abatement plan element contains a series of auxiliary recommendations designed to improve the operation and maintenance of the sanitary sewerage systems and to achieve the recommended water use objectives. These auxiliary recommendations include the conduct as necessary of infiltration and inflow studies, the undertaking of public education efforts to encourage voluntary reduction of both domestic and industrial water use, the undertaking of steps to ensure that all sewage flows are metered at appropriate points in the system, the undertaking of steps designed to eliminate the 493 known points of sewage flow relief in the sanitary sewer-

age systems of the Region, and the undertaking of steps to ensure the proper operation and maintenance of sewage treatment plants.

#### *Nonpoint Source Pollution Abatement Element*

The nonpoint source pollution abatement plan element includes recommendations relating to diffuse sources of water pollution. These sources include urban sources, such as runoff from residential, commercial, industrial, transportation, and recreational land uses, construction activities, and onsite septic tank sewage disposal systems; and rural sources, such as runoff from cropland, pasture, and woodland, atmospheric contributions, and livestock wastes. These nonpoint, or diffuse, sources of pollutants discharge to surface waters by direct land drainage, by drainage through natural channels, by drainage through engineered storm water drainage systems, and by deep percolation into the ground and return flow to the surface waters.

For planning purposes, measures for nonpoint source water pollution control were grouped into two categories: minimum and additional. Application of the minimum practices can generally be expected to achieve up to a 25 percent reduction in pollutants contained in runoff. The category of additional nonpoint source control measures was subdivided into three subcategories based upon the estimated cost and effectiveness of the measures. The first subcategory of additional practices can be expected to generally result in up to a 50 percent reduction in the pollutants contained in runoff. The second subcategory of additional practices can be expected to generally result in up to a 75 percent reduction in pollutants contained in the runoff. The third subcategory can be expected to achieve a reduction in pollutants in the runoff of more than 75 percent.

Minimum urban and rural nonpoint source control practices, designed to provide about a 25 percent reduction in the pollutants contained in runoff, are recommended in the plan to be implemented throughout the entire urban and rural area of the Region except in the combined sewer area in Milwaukee. Such minimum practices include, with respect to urban land uses, a septic tank system management program, a construction erosion control program, and improved timing and efficiency of street sweeping, leaf collection, and catch basin cleaning and in rural areas, a livestock waste control program, better management of fertilizer and pesticide application, contour plowing, and conser-

vation tillage. In the Milwaukee combined sewer area, the plan recommends no urban nonpoint source control in areas where a deep tunnel conveyance, storage, and treatment alternative is selected, since storm water runoff would be treated under this type of alternative. In areas where partial sewer separation is selected, the Section 201 facilities planning effort in Milwaukee should determine the level of nonpoint source control required.

Additional urban nonpoint source controls designed to provide about a 50 percent reduction in pollutant runoff are recommended to be applied to a total of 109 square miles of urban area as identified on the accompanying map. These areas lie largely in the Oak Creek and Root River watersheds, in the Barnes Creek subwatershed portion of the drainage area directly tributary to Lake Michigan, and in the direct drainage area tributary to Pewaukee Lake, Big and Little Muskego Lakes, Lake Denoon, Waubeesee Lake, Wind Lake, and Hooker Lake. Rural nonpoint source pollution abatement measures designed to achieve about a 50 percent reduction in pollutant runoff are recommended in the plan to be applied to about 118 square miles of rural land. These lands lie largely in the Root River Canal drainage area, in the Oak Creek watershed, and in the direct drainage areas tributary to George Lake, Benedict/Tombeau Lake, Waubeesee Lake, Long Lake, Dyer Lake, Pell Lake, North Lake (Walworth County), Lulu Lake, and the Saylesville Millpond. In addition, rural nonpoint source pollution abatement measures designed to achieve about a 75 percent reduction in pollutant runoff are recommended to be applied to about 58 square miles of rural lands in the direct drainage areas tributary to Lake Twelve, Bark Lake, Pewaukee Lake, Big and Little Muskego Lakes, Eagle Spring Lake, Lake Denoon, Center Lake, Wind Lake, and Hooker Lake.

The plan recommends that the practices indicated as needed for nonpoint source pollution control be refined and detailed by local level diffuse source control practices planning. This recommendation is made because the design of nonpoint source pollution abatement practices should be a highly localized, detailed, and individualized effort, requiring, as it does, highly specific knowledge of the physical, managerial, social, and fiscal considerations which affect the landowners concerned.

#### *Sludge Management Plan Element*

In 1975 there were 225 known sources generating about 390 dry tons of sludge per day within the Region. These sources include public and private

sewage treatment plants, industrial wastewater treatment facilities, and water supply treatment plants. The 61 public sewage treatment plants in the Region generated about 90 percent of the total sludge. A total of 46 of the 61 public sewage treatment plants, generating about 50 dry tons of sludge per day, relied exclusively on land application for sludge disposal.

Analyses conducted under the program indicated that there was about three times the amount of agricultural land in the Region needed to accommodate land disposal of the sewage sludges expected to be generated in the Region by the year 2000. The analyses further indicated that there were no substantial economies to be gained in considering any significant degree of centralization of sludge management for public sewage and treatment facilities. Accordingly, the plan recommends the provision of individual sludge management facilities at each public sewage treatment plant.



Specific sludge management processes are recommended in the plan for each individual major public sewage treatment facility. The two large Milwaukee Metropolitan Sewerage District treatment plants will continue to generate the majority of sludge in the Region. At the Jones Island plant, the plan recommends that about one-half of the sludge continue to be dewatered and used in the production of Milorganite fertilizer and that the remaining one-half of the sludge be digested, dewatered, and applied on agricultural land in a partially dried form. At the South Shore plant, the plan recommends that about 20 percent of the sludge be dewatered and used in the production of compost, with the remaining 80 percent being digested, dewatered, and disposed of by landfill. These recommendations are presently being refined by detailed local studies which, when completed and approved by all parties, are to be incorporated into the areawide plan.

With respect to the other major plants in the Region, the plan recommends that a combination of incineration and land application of partially dried sludge be used at the Brookfield plant; that land application of partially dried sludge be used at the Cedarburg, Grafton, Hartford, Kenosha, Lake Geneva, Oconomowoc, Racine, Union Grove, Waukesha, and Whitewater treatment plants; that land application of sludge in a liquid form be used at the Port Washington and Walworth County Metropolitan Sewerage District sewage treatment plants; that land application of sludge in both liquid and partially dried form be used at the Burlington, Delafield-Hartland, Twin Lakes, Walworth, and




# NONPOINT SOURCE POLLUTION ABATEMENT PLAN ELEMENT IN THE REGION: 2000

## LEGEND


### APPLICATION OF URBAN LAND MANAGEMENT PRACTICES

-  MINIMUM - UP TO 25 PERCENT REDUCTION IN POLLUTANT RUNOFF
-  MINIMUM PLUS ADDITIONAL - UP TO 50 PERCENT REDUCTION IN POLLUTANT RUNOFF

### APPLICATION OF RURAL LAND MANAGEMENT PRACTICES

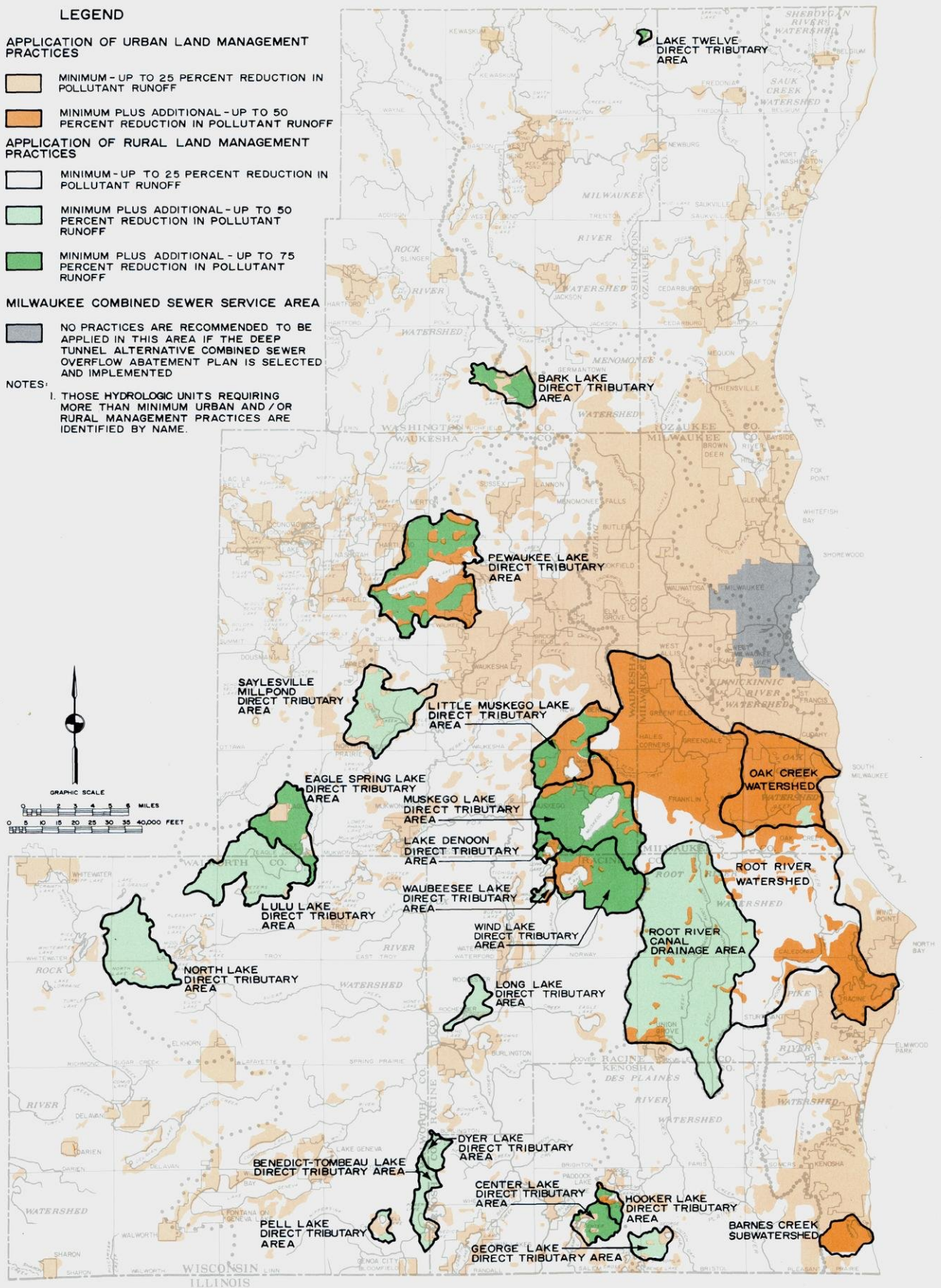
-  MINIMUM - UP TO 25 PERCENT REDUCTION IN POLLUTANT RUNOFF
-  MINIMUM PLUS ADDITIONAL - UP TO 50 PERCENT REDUCTION IN POLLUTANT RUNOFF
-  MINIMUM PLUS ADDITIONAL - UP TO 75 PERCENT REDUCTION IN POLLUTANT RUNOFF

### MILWAUKEE COMBINED SEWER SERVICE AREA

-  NO PRACTICES ARE RECOMMENDED TO BE APPLIED IN THIS AREA IF THE DEEP TUNNEL ALTERNATIVE COMBINED SEWER OVERFLOW ABATEMENT PLAN IS SELECTED AND IMPLEMENTED

### NOTES:

- I. THOSE HYDROLOGIC UNITS REQUIRING MORE THAN MINIMUM URBAN AND/OR RURAL MANAGEMENT PRACTICES ARE IDENTIFIED BY NAME.





Western Racine County Sewerage District treatment plants; and that a combination of land application of sludge in a partially dried form and landfill be used at the West Bend treatment plant. At the remaining smaller public sewage treatment plants and at the private sewage treatment plants, the plan generally recommends the land spreading of sludge, unless more detailed studies show that other options are less costly and more beneficial.

In addition to the foregoing recommendations, the plan recommends that each sewage treatment plant operator secure a landfill capability for sludge disposal in order to avoid sludge disposal problems that may otherwise arise as a result of severe weather conditions or new regulatory requirements that may curtail or prohibit land spreading of sludge. The plan also recommends that plan operators work with local industries to develop a contaminant control program, which would be necessary to control the concentrations of heavy metals and toxic substances in the wastewater and in the sludges. In addition, the plan recommends that an information storage and retrieval system be developed to produce a complete record of where, when, and in what amounts sludge of a known composition has been applied to a given parcel of land. Finally, the plan recommends that the public sewage treatment operators in the Region develop a capability to receive septage and holding tank wastes for treatment.

#### *Water Quality Monitoring Element*

The plan recommends that steps be taken to ensure the establishment of a sound program for continuing water quality monitoring within the Region to determine the extent to which the recommended water use objectives and supporting water quality standards are being met over time. In particular, the plan recommends that the Southeastern Wisconsin Regional Planning Commission and the Wisconsin Department of Natural Resources cooperatively prepare a prospectus for a comprehensive water quality monitoring program, with the prospectus to specify the scope of the program and set forth a budget for the program—including allocation of costs to appropriate agencies. Such a program should serve both the needs of the Commission as an areawide water quality management planning agency and the needs of the Department as a regulatory agency.

#### *Plan Costs and Revenues*

The full capital investment cost of implementing the recommended regional water quality manage-

ment plan is estimated at \$1.19 billion in constant 1976 dollars over a 25-year plan implementation period. Of this total cost, nearly \$805 million, or about 67 percent, is required to implement the point source plan element; about \$209 million, or 18 percent, is required to implement the nonpoint source plan element; and about \$179 million, or about 15 percent, is required to implement the sludge management plan element. Of the total capital cost of about \$1.19 billion, about \$1.02 billion, or 86 percent, would be required for projects in the public sector, with the remaining \$170 million, or 14 percent, required for projects in the private sector.

Public sector capital costs for the point source pollution abatement element are estimated at \$792 million. Of this total, about \$204 million, or 26 percent, would be required for sewage treatment plant construction; about \$186 million, or 23 percent, would be required for intercommunity trunk sewer construction; and about \$402 million, or about 51 percent, would be required for combined sewer overflow abatement.

Total public sector capital costs for nonpoint source pollution abatement are estimated at \$56 million. Of this total, about \$39 million, or 70 percent, would be required for construction erosion control; about \$3 million, or 5 percent, would be required for the institution of urban land practices; about \$11 million, or 20 percent, would be required for livestock waste control projects; and about \$3 million, or 5 percent, would be required for rural land conservation practices.

The total public capital costs for sludge management are estimated at \$174 million. Of this total, about \$163 million, or 94 percent, would be required to accommodate sludge disposal for sludges generated at sewage treatment plants, with the remaining \$11 million, or 6 percent, required to dispose of sludges from combined sewer overflow abatement programs.

The average annual cost in the public sector of implementing the plan, including capital and operation and maintenance costs, is estimated at \$82.8 million. Of this total, about \$40.9 million, or 49 percent, represents the average annual capital investment required, with the remaining \$41.9 million, or 51 percent, representing the average annual public operation and maintenance costs. These two figures may be compared to an actual annual public expenditure for water pollution abatement within the Region during 1975 of \$63.7 million. On a per capita basis, the total public cost of



carrying out the recommended plan is estimated at \$42 per capita, the per capita cost being based upon an estimated 1985 regional population of 1.95 million people. This may be compared with an actual per capita expenditure of about \$36 for point source water pollution abatement within the Region in 1975. Consequently, it may be concluded that full implementation of the plan will require an increase in public outlays, an increase, however, that will be necessary if the national goal of "fishable and swimmable" waters is to be met within the Region to the maximum extent practicable.

The accompanying tables identify the estimated per capita cost of implementing the point source and sludge elements of the plan in each sewerage system area of the Region, as well as the estimated unit costs of the various recommended nonpoint source pollution abatement measures. For urban residents in the Region, plan implementation costs will approximate \$6 per capita for nonpoint source pollution abatement. About half of this cost would be expended in the public sector, with the other half being expended in the private sector. In the rural area of the Region, the average annual cost of implementing the nonpoint source pollution abatement measures is estimated at \$770 per farm, there being about 6,100 farms in the Region. This total may be expected to be shared in part by the public and private sectors in varying proportions, depending upon the findings and recommendations of detailed rural nonpoint source abatement plans.

#### *Plan Implementation*

It is important that the steps required to implement any plan be specified. In addition, federal law requires that specific designations be made of water quality management agencies required to implement the adopted areawide water quality management plan, and that the plan implementation responsibilities of such agencies be identified.

In total, it is proposed that 251 management agencies be designated for plan implementation purposes. All but 33 of these agencies currently exist. The 33 new agencies would be sanitary, utility, and/or lake protection and rehabilitation districts required to carry out a variety of plan implementation responsibilities in direct drainage areas to lakes, or, in a few instances, to isolated enclaves of urban development within unincorporated areas.

#### *Concluding Remarks—Water Quality Planning*

The adopted regional water quality management plan, together with the adopted regional land use

and park and open space plans and the regional air quality maintenance plan scheduled for completion in 1980, is intended by the Commission to provide the Region, its public officials, and its citizens with a sound, coordinated guide to land use development and water pollution abatement. The water quality management analysis conducted under the study indicated that there are no significant substitutes for relatively high levels of control at the major point sources of pollution in the Region. Significant efforts will have to be made to improve the quality of sewage treatment plant effluent if the goal of achieving "fishable and swimmable" waters is to be attained. Such efforts, however, while necessary, will not be sufficient to fully meet this goal. New efforts will have to be mounted in ensuing years to abate water pollution from nonpoint sources in both rural and urban areas. Such pollution control efforts are likely to be more difficult to bring about than point source pollution control measures and will require an enlightened public for implementation. Those surface waters in the Region that would be "fishable and swimmable" by the year 2000 if the plan is fully implemented are shown on the accompanying map. A second accompanying map shows those surface waters which are now considered to be "fishable and swimmable."

#### *Plan Adoption and Endorsement*

After formal adoption of the regional water quality management plan by the Commission on July 12, 1979, the plan was formally certified to all local units of government designated as implementing agencies in the plan, as well as to federal and state agencies concerned with implementation of the plan recommendations. The plan was formally approved by the Wisconsin Natural Resources Board on July 19, 1979, and certified by that Board to the Governor on August 3, 1979. On December 3, 1979, the Governor endorsed the plan and certified it to the Administrator of the U. S. Environmental Protection Agency. At year's end, the Commission was awaiting formal action on the plan by that agency.

At the local governmental level, the regional water quality management plan was formally adopted in 1979 by the Kenosha and Waukesha County Boards of Supervisors; the Common Councils of the Cities of Burlington, Elkhorn, Hartford, and Port Washington; the Village Boards of the Villages of Nashotah and Whitefish Bay; and the governing boards of the Caddy Vista Sanitary District and the Walworth County Metropolitan Sewerage District. The plan was also formally acknowledged by the U. S. Department of Agriculture, Soil Conservation Service; the U. S. Department of the Interior, Geo-

**COMPARISON OF EXISTING AND PLANNED PER CAPITA EXPENDITURES  
FOR PUBLIC SANITARY SEWERAGE SYSTEMS IN SOUTHEASTERN WISCONSIN**

Sewerage System	Sewer Service Areas	Reported per Capita Expenditures <sup>a</sup> (dollars)			Recommended Plan per Capita Expenditures: 1975-2000 <sup>a</sup> (dollars)		
		1970	1975	Average 1970 and 1975	Point Source Element	Sludge Management Element	Total 1975-2000
Milwaukee Metropolitan Subregional Area	Milwaukee Metropolitan Sewerage District						
	Brookfield East, Germantown, Thiensville, Mequon, Butler, Menomonee Falls, Elm Grove, Muskego, Caddy Vista, New Berlin	45	40	43	38	7	45
City of South Milwaukee	South Milwaukee	19	16	18	16	2	18
Upper Milwaukee River Subregional Area							
City of Cedarburg	Cedarburg	12	32	22	27	3	30
City of West Bend	West Bend	27	22	25	34	7	41
Village of Fredonia	Fredonia, Waubeka	N/A	18	18	84	22	106
Village of Grafton	Grafton	30	25	28	32	4	36
Village of Jackson	Jackson	N/A	19	19	76	14	90
Village of Kewaskum	Kewaskum	24	54	39	81	8	89
Village of Newburg	Newburg	68	40	54	130	15	145
Village of Saukville	Saukville	35	35	35	55	10	65
Sauk Creek Subregional Area							
City of Port Washington	Port Washington	30	28	29	38	3	41
Village of Belgium	Belgium-Lake Church	23	10	17	119	13	132
Kenosha-Racine Subregional Area							
City of Kenosha	Kenosha, Somers, Pleasant Park	19	22	21	30	19	49
City of Racine	Racine	53	96	75	22	3	25
Root River Canal Subregional Area							
Village of Union Grove	Union Grove Center for Developmentally Disabled	49	22	36	53	8	61
Town of Yorkville Sanitary District No. 1	Yorkville	0	0	0	441 <sup>b</sup>	86 <sup>b</sup>	527 <sup>b</sup>
Des Plaines River Subregional Area							
Town of Bristol Utility District No. 1	Bristol-George Lake	190	28	109	89	12	101
Town of Pleasant Prairie Sewer Utility District D	Pleasant Prairie-North Bristol IH 94	82	54	68	130	14	144
Town of Pleasant Prairie Sanitary District No. 73-1	Pleasant Prairie-South	0	903	451	142	24	166
Town of Salem Sewer Utility District No. 1	Hooker-Montgomery Lakes	N/A	N/A	N/A	66	12	78
Village of Paddock Lake	Paddock Lake	N/A	60	60	83	15	98
Upper Fox Subregional Area							
City of Brookfield	Brookfield West, Sussex-Lannon, Pewaukee	42	59	51	34	3	37
City of Waukesha	Waukesha	40	17	29	29	4	33

Table (continued)

Sewerage System	Sewer Service Areas	Reported per Capita Expenditures <sup>a</sup> (dollars)			Recommended Plan per Capita Expenditures: 1975-2000 <sup>a</sup> (dollars)		
		1970	1975	Average 1970 and 1975	Point Source Element	Sludge Management Element	Total 1975-2000
Lower Fox River Subregional Area							
Western Racine County Sewerage District	Waterford-Rochester, Tichigan Lake	72	35	54	49	7	56
City of Burlington	Burlington	46	N/A	46	31	5	36
City of Lake Geneva	Lake Geneva-Lake Como	35	69	52	52	13	65
Village of East Troy	East Troy-Potter Lake	30	29	30	60	10	70
Village of Genoa City	Genoa City	55	23	39	88	10	98
Village of Mukwonago	Mukwonago	6	12	9	46	9	55
Village of North Prairie	North Prairie	0	0	0	137	17	154
Village of Silver Lake	Silver Lake	96	81	89	88	10	98
Village of Twin Lakes	Twin Lakes	37	96	67	49	10	59
Town of Dover—Eagle Lake Sewer Utility District No. 1	Eagle Lake	0	0	0	104	17	121
Town of Lyons Sanitary District No. 1	Lyons	0	0	0	183	19	202
Town of Norway Sanitary District No. 1	Wind Lake	0	0	0	79	12	91
Town of Salem Sanitary District No. 2	Camp-Center Lakes, Wilmot, Cross Lake, Rock Lake	0	0	0	83	9	92
Upper Rock River Subregional Area							
Allenton Sanitary District No. 1	Allenton	40	N/A	40	126	13	139
City of Hartford	Hartford	24	42	33	42	7	49
Village of Slinger	Slinger	N/A	31	31	76	14	90
Middle Rock River Subregional Area							
Delafield-Hartland Water Pollution Control Commission	Hartland, Delafield-Nashotah, Nashotah-Nemahbin Lakes	N/A	14	14	71	7	78
City of Oconomowoc	Oconomowoc Lake, Oconomowoc-Lac La Belle, Okauchee Lake, North Lake, Pine Lake, Beaver Lake, Silver Lake	19	16	18	44	4	48
Village of Dousman	Dousman	82	31	57	97	16	113
Village of Wales	Wales	0	0	0	83	9	92
Lower Rock River Subregional Area							
Walworth County Metropolitan Sewerage District	Delavan, Delavan Lake, Elkhorn, Walworth County Institutions	91	46	69	46	5	51
City of Whitewater	Whitewater	16	35	26	34	11	45
Village of Darien	Darien	N/A	N/A	N/A	115	13	128
Village of Sharon	Sharon	32	27	30	81	9	90
Village of Walworth	Fontana, Walworth, Williams Bay	35	N/A	35	60	16	76

NOTE: N/A indicates data not available.

<sup>a</sup> All costs are reported in terms of August 1976 dollars. Recommended plan costs do not assume the receipt of state and federal grants-in-aid. Costs include all sanitary sewer expenditures, including those relating to industrial and commercial users divided by the estimated resident population.

<sup>b</sup> The Town of Yorkville Sanitary District No. 1 has a high percentage of industrial-commercial flow, with a relatively low resident population. Thus, a relatively high per capita cost is indicated.

**ESTIMATED UNIT COSTS FOR APPLICATION OF NONPOINT SOURCE POLLUTION ABATEMENT MEASURES  
USED IN PREPARATION OF THE AREAWIDE WATER QUALITY MANAGEMENT PLAN FOR THE REGION**

Nonpoint Source Pollution Abatement Measure	Unit Cost		
	Public Sector	Private Sector	Total
Construction Erosion Control . . . . .	\$2,600 per acre of public land under construction	\$2,600 per acre of private land under construction	\$2,600 per acre of land under construction
Urban Land Management Practices Minimum—Up to 25 percent reduction in pollutant runoff . . . .	\$8 annually per acre of urban land	\$52 annually per acre of industrial land	\$8 annually per acre of urban land; \$52 annually per acre of industrial land
Additional—Up to 50 percent reduction in pollutant runoff. . . .	\$100 annually per acre of of industrial land \$164 annually per acre of commercial land \$105 annually per acre of residential land	--	\$100 annually per acre of industrial land \$164 annually per acre of commercial land \$105 annually per acre of residential land
Livestock Waste Control Runoff Control Measures . . . . .	\$2 annually per animal unit	\$10 annually per animal unit	\$12 annually per animal unit
Liquid and Slurry Waste Storage Facilities . . . . .	\$10 annually per animal unit	\$40 annually per animal unit	\$50 annually per animal unit
Rural Land Conservation Practices Minimum—Up to 25 percent reduction in pollutant runoff . . . .	--	\$2 annually per acre of rural land	\$2 annually per acre of rural land
Additional—Up to 50 percent reduction in pollutant runoff . . . .	\$1 annually per acre of rural land	\$4 annually per acre of rural land	\$5 annually per acre of rural land
Additional—Up to 75 percent reduction in pollutant runoff . . . .	\$6 annually per acre of rural land	\$18 annually per acre of rural land	\$24 annually per acre of rural land

*NOTE: An animal unit is the weight equivalent of a 1,000-pound cow.*

logical Survey; the Wisconsin Department of Health and Social Services; and the University of Wisconsin-Extension Service.

**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 sanitary sewer extensions. Such review and comment must relate a proposed 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 sanitary sewer extensions unless such extensions are found to be in conformance with adopted plan recommendations.

The regional water quality management plan described above includes recommended sanitary sewer service areas attendant to each recommended sewage treatment facility. There are in the plan a total of 85 such identified sanitary sewer service areas, as shown on the accompanying map. These recommended sanitary sewer service areas are based upon the urban land use configurations identified in the adopted regional land use plan for the year 2000. Thus, the delineations are necessarily general in nature and do not reflect detailed local planning considerations. Accordingly, the Commission directed that, upon adoption of the regional water quality management plan, steps be taken to



refine and detail each of the 85 sanitary sewer service areas delineated in the plan in cooperation with the local units of government concerned. A process for refining and detailing the areas was set forth in the plan consisting primarily of inter-governmental meetings with the affected units of government and culminating in the holding of a public hearing on a refined and detailed sewer service area. Each such area would be documented in a Commission community assistance planning report, which would be formally adopted by the operator of the affected sewage treatment facility and by the Commission, and forwarded to the Wisconsin Natural Resources Board and the U. S. Environmental Protection Agency as an amendment to the regional water quality management plan.

During 1979 the refinement and detailing process was begun for sanitary sewer service areas to be served by the treatment facilities operated by the Cities of Hartford and West Bend and by the Walworth County Metropolitan Sewerage District. Pending the completion of the refinement process, the Commission will use the more general sewer service area recommendations set forth in the adopted plan as a basis for reviewing and commenting on sanitary sewer extensions. During 1979, review comments were provided on 207 such extensions distributed by county as shown in the accompanying table.

#### **Assistance in Local Sewerage Facilities Planning**

During 1979 the Commission continued to work extensively with local engineering staffs and consultants in the preparation of detailed sewerage facilities plans designed to meet the requirements of Section 201 of the federal Clean Water Act, as well as the requirements of the Wisconsin Department of Natural Resources in support of the administration of the Wisconsin Fund established by the State Legislature in 1978. Work activities during 1979 included the provision of basic economic, demographic, land use, and natural resource base data for inclusion in facilities plan reports; the extension of the findings and recommendations of the regional water quality management plan, in particular those regarding sanitary sewer service areas, trunk sewer configurations, and treatment plant capacities and levels of treatment, to those charged with preparing the facilities plan reports; and the review of and comment on draft reports prepared in the facilities planning process.

During 1979, such facilities planning reports were completed for sewage treatment facilities and major sewage conveyance facilities in the Cities of

Brookfield, Cedarburg, Kenosha, and Racine; in the Villages of Belgium, East Troy, Fredonia, Grafton, Nashotah, and Newburg; in the Waubesa Sanitary District in the Town of Fredonia; in the Town of East Troy Sanitary District No. 2; in the Town of Lyons Sanitary District No. 2; in the Caddy Vista Sanitary District in the Town of Caledonia; and in the Western Racine County Sewerage District. All of these facilities planning reports set forth final recommendations for the construction of new or expanded sewage treatment and conveyance facilities in accordance with recommendations set forth in the regional water quality management plan, and all as such were recommended for approval by the Commission.

The sewerage facilities planning effort being conducted by the Milwaukee Metropolitan Sewerage District was particularly large and important, requiring Commission assistance and participation. In addition to serving on several district advisory committees, including the Technical Advisory Committee for the Combined Sewer Overflow Abatement Project, the Technical Coordinating Committee for the Pollution Abatement Program, the Grants Policy Committee, the Technical Advisory Committee on Water Quality Monitoring and the Environmental Impact Assessment Committee, the Commission staff provided direct support to the district facilities planning effort under the terms of an interagency agreement. Major Commission staff activities in 1979 in this regard involved the provision of economic, demographic, land use, air quality, and soils data; the provision of water quality simulation modeling services and related analyses; and technical review of and comment on draft facilities planning efforts. Because the sewerage facilities planning schedule in the District has been accelerated in order to meet orders issued by the U. S. Court of Illinois and the Dane County Circuit Court, the Commission staff has given priority to providing extensive support to this program.

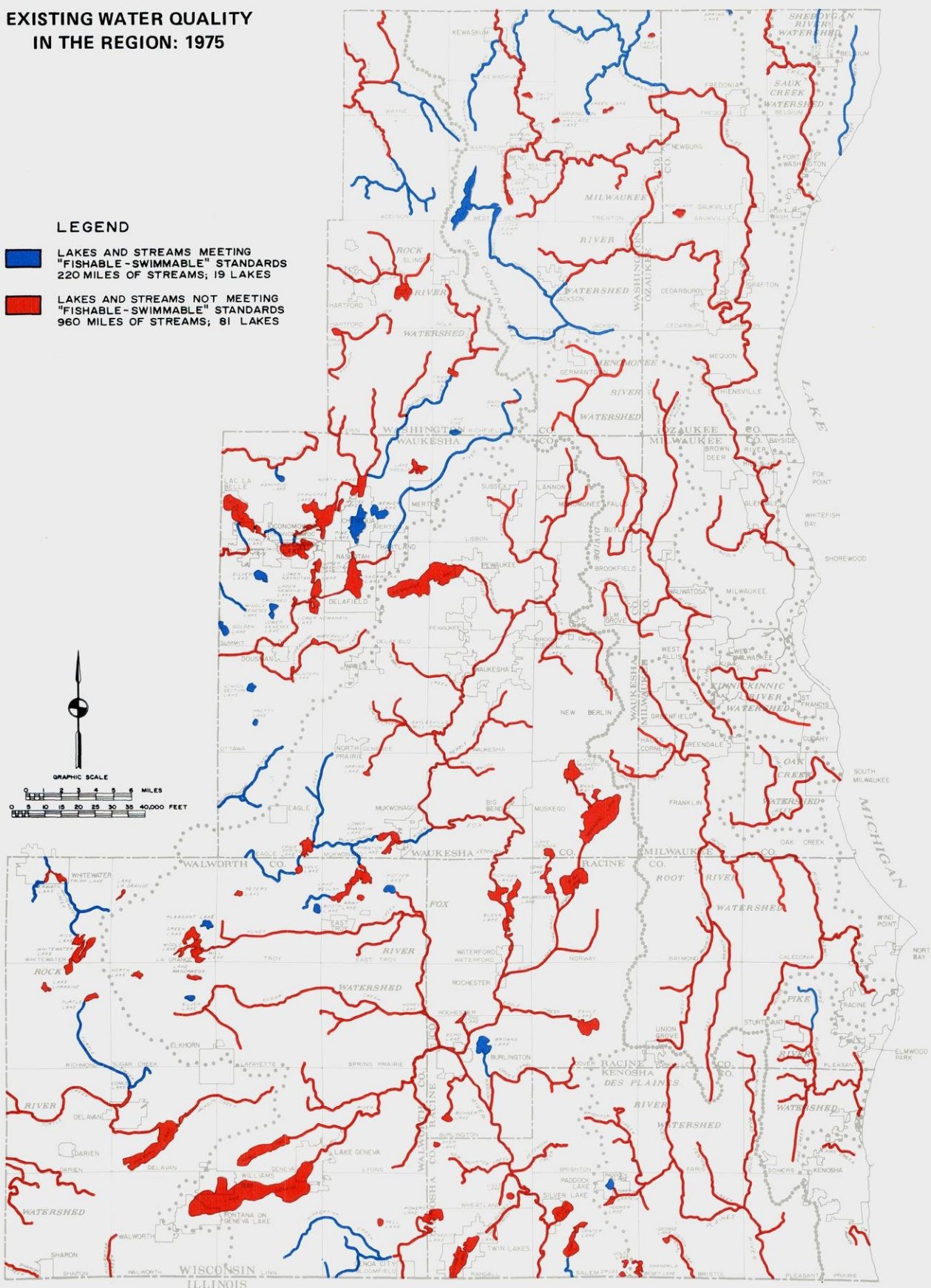
#### **Assistance in Local Nonpoint Source Pollution Abatement Planning**

The adopted regional water quality management plan described earlier in this report 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 would identify the specific nonpoint source pollution control practices that should be applied to specific lands. The recommendation for this more detailed level of planning was made because the design of nonpoint source

# **EXISTING WATER QUALITY IN THE REGION: 1975**

## **LEGEND**

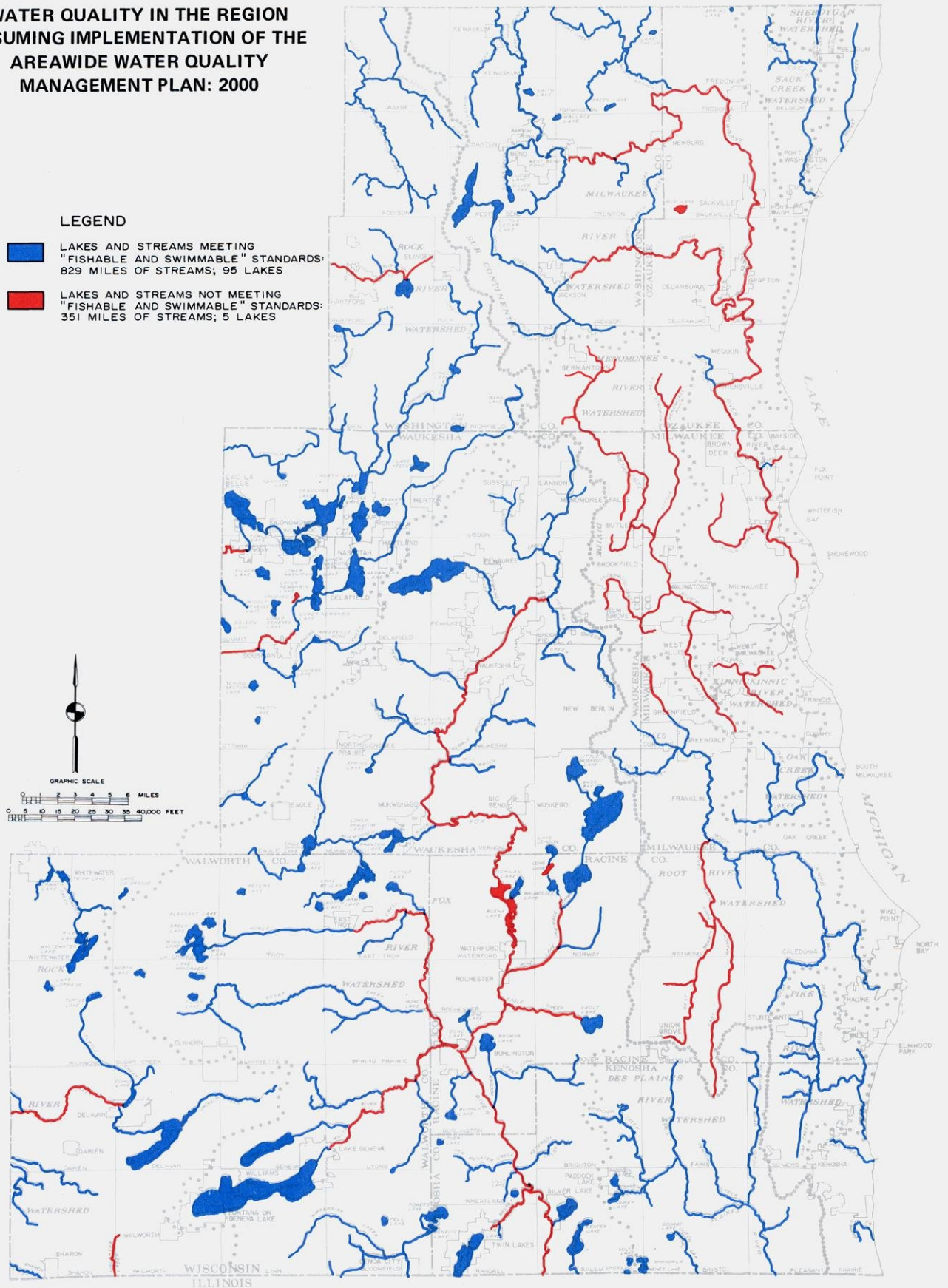
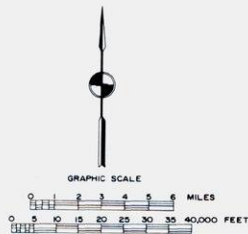
- LAKES AND STREAMS MEETING "FISHABLE-SWIMMABLE" STANDARDS  
220 MILES OF STREAMS; 19 LAKES
- LAKES AND STREAMS NOT MEETING "FISHABLE-SWIMMABLE" STANDARDS  
960 MILES OF STREAMS; 81 LAKES





**WATER QUALITY IN THE REGION  
ASSUMING IMPLEMENTATION OF THE  
AREAWIDE WATER QUALITY  
MANAGEMENT PLAN: 2000**

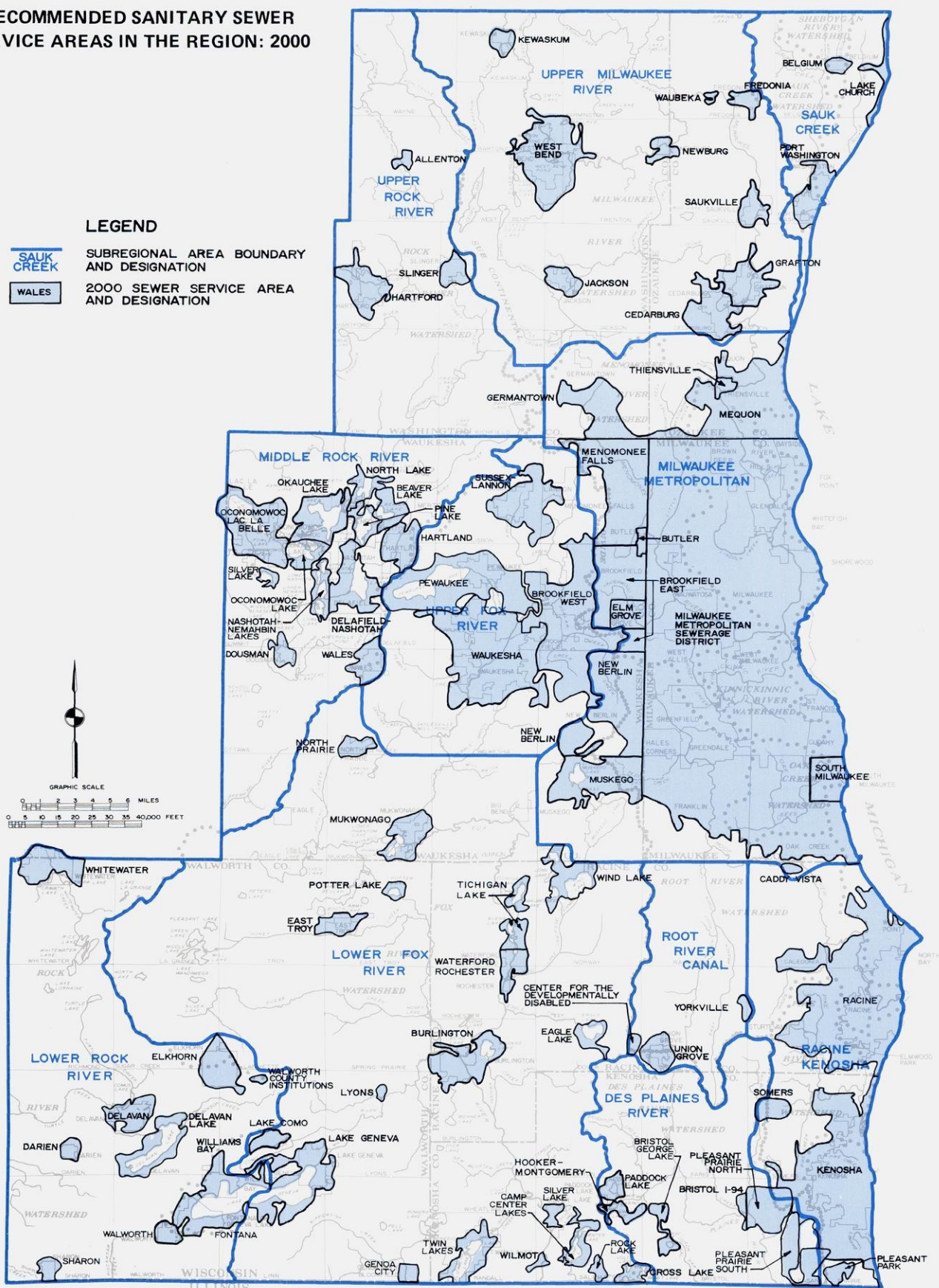
- LEGEND**
- LAKES AND STREAMS MEETING  
"FISHABLE AND SWIMMABLE" STANDARDS:  
829 MILES OF STREAMS; 95 LAKES
  - LAKES AND STREAMS NOT MEETING  
"FISHABLE AND SWIMMABLE" STANDARDS:  
351 MILES OF STREAMS; 5 LAKES





# RECOMMENDED SANITARY SEWER SERVICE AREAS IN THE REGION: 2000

- LEGEND**
- SAUK CREEK** SUBREGIONAL AREA BOUNDARY AND DESIGNATION
  - WALES** 2000 SEWER SERVICE AREA AND DESIGNATION





## SANITARY SEWER EXTENSION REVIEWS: 1979

County	Number
Kenosha . . . . .	11
Milwaukee . . . . .	92
Ozaukee . . . . .	14
Racine. . . . .	18
Walworth. . . . .	6
Washington . . . . .	9
Waukesha. . . . .	57
Total	207

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 which affect the landowners concerned.

The Wisconsin Fund Pollution Abatement Grant Program established by the State Legislature includes state cost-sharing monies to be made available for the implementation of nonpoint source pollution control projects that are identified in detailed plans prepared for what the Wisconsin Department of Natural Resources has termed "priority watersheds." This program is guided by a state nonpoint source coordinating committee. In 1979, the Commission assisted the Wisconsin Department of Natural Resources and the state coordinating committee in the development of the nonpoint source cost-sharing program and in the selection of an initial set of "priority watersheds." With the assistance of the seven county Soil and Water Conservation Districts in the Region, the Commission nominated three areas in the Region as candidates for special studies and funding under the priority watershed program: the Root River watershed, the Cedar Creek subwatershed of the Milwaukee River watershed, and the "Middle Fox" subwatershed of the Fox River watershed. The Root River watershed was ultimately selected by the Secretary of the Wisconsin Department of Natural Resources for priority watershed status along with four other watersheds in the State.

The Commission assisted the local units of government concerned in developing the detailed planning process necessary to prepare a refined and detailed nonpoint source pollution abatement plan

for the Root River watershed. Meetings were held with all of the nonpoint source management agencies so designated in the water quality management plan. From among these 23 management agencies, the Racine County Soil and Water Conservation District was selected as the lead management agency and given the responsibility for preparing the required plan. At year's end, much of the technical work on the plan preparation had been completed. At the request of the Racine County Soil and Water Conservation District, the Commission provided technical assistance in this planning effort, including analysis of the data collected on the location of nonpoint source pollution control problems and assistance in report writing.

### Assistance in Local Lake Management Studies

Work continued during 1979 on studies of 13 major inland lakes in southeastern Wisconsin. These studies, which are intended to result in recommendations for the better management of the lakes and the watersheds tributary to the lakes to achieve water quality objectives, represent a joint effort by the Commission, the Wisconsin Department of Natural Resources, the Geneva Lake Environmental Agency, and several lake protection and rehabilitation districts. The 13 inland lakes for which comprehensive studies are underway are: George Lake and Paddock Lake in Kenosha County; Eagle Lake in Racine County; Lake Geneva and Lake Wandawega in Walworth County; Freiss Lake and Pike Lake in Washington County; and Ashippun Lake, Lac La Belle, North Lake, Oconomowoc Lake, Okauchee Lake, and Pewaukee Lake in Waukesha County.

The Commission has under preparation for each of these 13 lakes a community assistance planning report that will document the results of the study. The report will address the chemical, biological, and physical conditions of the lake, the uses of the lake, the proposed land management and land use measures in the lake watershed, necessary point and nonpoint source pollution control measures, and related implementation actions. It is anticipated that these 13 studies will be completed over the next three-year period.

During 1979, the Commission also provided technical assistance to local, state, and federal units and agencies of government in handling the water quality management problems of other lakes. For example, during 1979 the Commission staff assisted in an analysis of the severe nuisance algae condition at Big Muskego Lake. The Commission participated in numerous meetings concerning this

matter, including a meeting called by the Governor. The Commission also assisted a newly organized Big Muskego Lake Protection and Rehabilitation District and the Wisconsin Department of Natural Resources in the preparation of a design for a study that would result in recommendations for the rehabilitation of the lake. Finally, the Commission presented to the Big Muskego Lake Protection and Rehabilitation District a memorandum outlining the short-term measures that could be used to abate the nuisance problems caused by the algae condition.

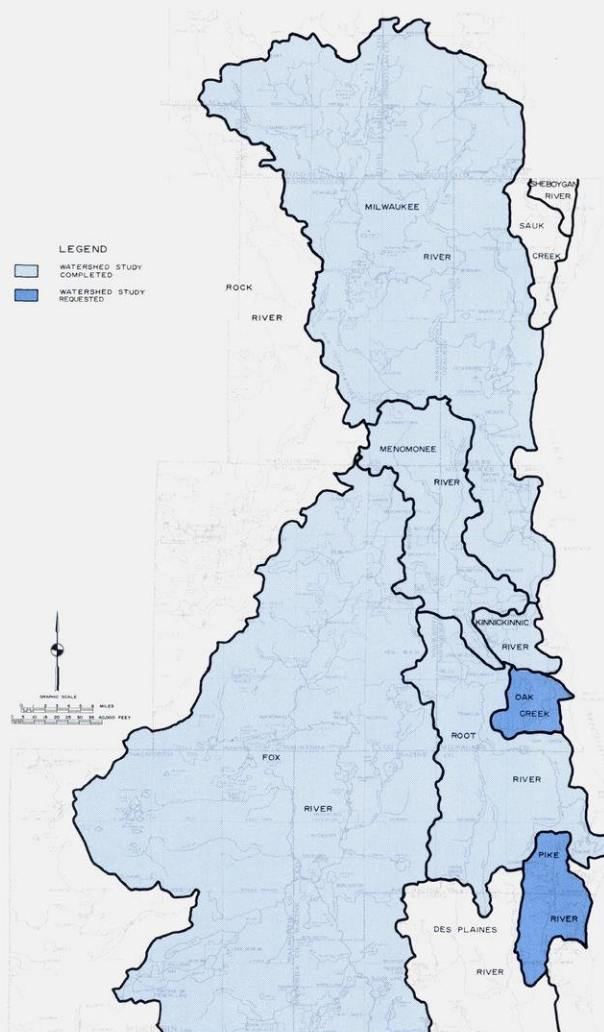
### Public Participation in Water Quality Management Planning

In undertaking the regional water quality management planning program in 1975, the Commission decided to rely upon the services of the University of Wisconsin-Extension in conducting public awareness and involvement activities. During 1979, that relationship with the University of Wisconsin-Extension continued, including the assignment of a full-time extension agent to the Commission. Much of the public involvement effort during 1979 was centered on the conduct of the public informational meetings and hearing that preceded the formal adoption of the regional water quality management plan. The public involvement program included the preparation of two SEWRPC newsletters dealing with water quality management, two fact sheets on water quality problems and solutions, and two news releases; the conduct of a regional conference on water quality management; the conduct of eight field tours to view water quality problems in the Region; the preparation of a slide presentation on water quality management problems and solutions; the development of a natural resources curriculum for use in primary and secondary schools; appearances on radio and television talk shows; and presentations to local units of government and citizen interest groups. Six displays on water quality management problems and solutions were prepared and set up at such events as the Wisconsin State Fair, the Milwaukee Sentinel Sport Show, and the "Small is Beautiful Days" fair held over Labor Day weekend in 1979 under the sponsorship of Congressman Henry S. Reuss.

### WATERSHED AND FLOODLAND MANAGEMENT PLANNING

In 1979 the Commission efforts in watershed and floodland management planning were largely concentrated on completion, adoption, and implementation of the Kinnickinnic River watershed plan,

### SEWRPC WATERSHED STUDY STATUS



and on the preparation of prospectuses for proposed watershed planning efforts in the Pike River and Oak Creek watersheds. Other work included the provision of hydrologic and hydraulic data—including flood flow and stage data—to engineering firms and governmental agencies for use in the conduct of federally required flood insurance rate studies and the conduct of a continuing stream gaging program.

### Kinnickinnic River Watershed Study

On March 1, 1979, the Commission formally concluded the Kinnickinnic River watershed study with the adoption of the watershed plan. This plan, as documented in SEWRPC Planning Report No. 32, A Comprehensive Plan for the Kinnickinnic River Watershed, was summarized in the Commission 1978 Annual Report. Upon adoption, the plan was

formally certified to the local, state, and federal units and agencies of government concerned with development in the Kinnickinnic River watershed.

By the end of 1979, the Kinnickinnic River watershed plan had been formally adopted by the Common Council of the City of Milwaukee and the Milwaukee County Board of Supervisors. In addition, the plan recommendations were endorsed by the U. S. Department of Agriculture, Soil Conservation Service, and by the Wisconsin State Board of Soil and Water Conservation Districts.

The implementing agencies moved quickly during 1979 to carry out certain of the important flood control recommendations contained in the plan for that reach of the Kinnickinnic River extending from S. 76th Street to S. 16th Street. During the year, the City of Milwaukee formally closed river crossings at S. 8th Street, S. 9th Street, S. 9th Place, and S. 13th Street, and let contracts to physically remove the bridge structures. In addition, Milwaukee County physically removed the major obstruction to flood flows presented by the culvert and embankment of the abandoned Chicago, North Shore and Milwaukee Railway Company which crossed the Kinnickinnic River just downstream of S. 6th Street. Finally, during 1979 the Milwaukee Metropolitan Sewerage District began preparing detailed plans and specifications for the channel improvements needed to control overland flooding in this reach of the river.

### **Pike River Watershed Study**

In response to requests from the County Boards of the Counties of Kenosha and Racine, the Commission completed in April 1979 the preparation of a prospectus for a Pike River watershed study. The prospectus was prepared under the guidance of the Pike River Watershed Committee comprised of 24 local, state, and federal officials and concerned citizen leaders from throughout the watershed. (See Appendix B of this report for a list of Committee members.) The work of the Committee resulted in the identification of four serious resource-related problems existing in the watershed: flooding, water pollution, changing land use, and the deterioration and destruction of the natural resource base. The Committee recommended that a comprehensive watershed planning program be undertaken for the Pike River watershed as soon as possible so that the local governments concerned can be provided with a comprehensive plan that will serve as the basis for action programs directed toward resolving these pressing problems.

The prospectus was submitted to the Kenosha and Racine County Boards of Supervisors after approval by the Commission on September 13, 1979. The prospectus was approved by the Racine County Board on September 11, 1979, and by the Kenosha County Board on October 2, 1979. The two county boards agreed to provide the funding required to undertake the study during calendar years 1980 and 1981. In addition, the Kenosha County Board appropriated monies in 1979 specifically for completing the large-scale topographic mapping of the watershed recommended in the prospectus. During 1979, contracts were let with a photogrammetric engineering firm to secure the necessary topographic mapping, which has since become available for use in the watershed study. It is anticipated that the watershed plan recommendations will be ready for public hearing early in 1981.

### **Oak Creek Watershed Study**

On April 6, 1979, the Commission received a formal request from the Milwaukee Metropolitan Sewerage District to prepare a prospectus for a comprehensive study of the Oak Creek watershed. On June 7, 1979, the Commission authorized the creation of the Oak Creek Watershed Committee in response to this request. The Committee is comprised of 12 local and state officials and citizen leaders from the watershed. (See Appendix B of this report for a list of Committee members.) By the end of the year, the Committee had completed its work and the prospectus was published. The Committee identified four serious water resource-related problems that exist within the watershed—flooding, water pollution, changing land use, and deterioration of the natural resource base—and accordingly recommended that a watershed study be undertaken. At year's end the prospectus had been approved by the Commission and transmitted to the Milwaukee Metropolitan Sewerage District and the Milwaukee County Board of Supervisors for their consideration and action.

### **Floodplain Data Availability**

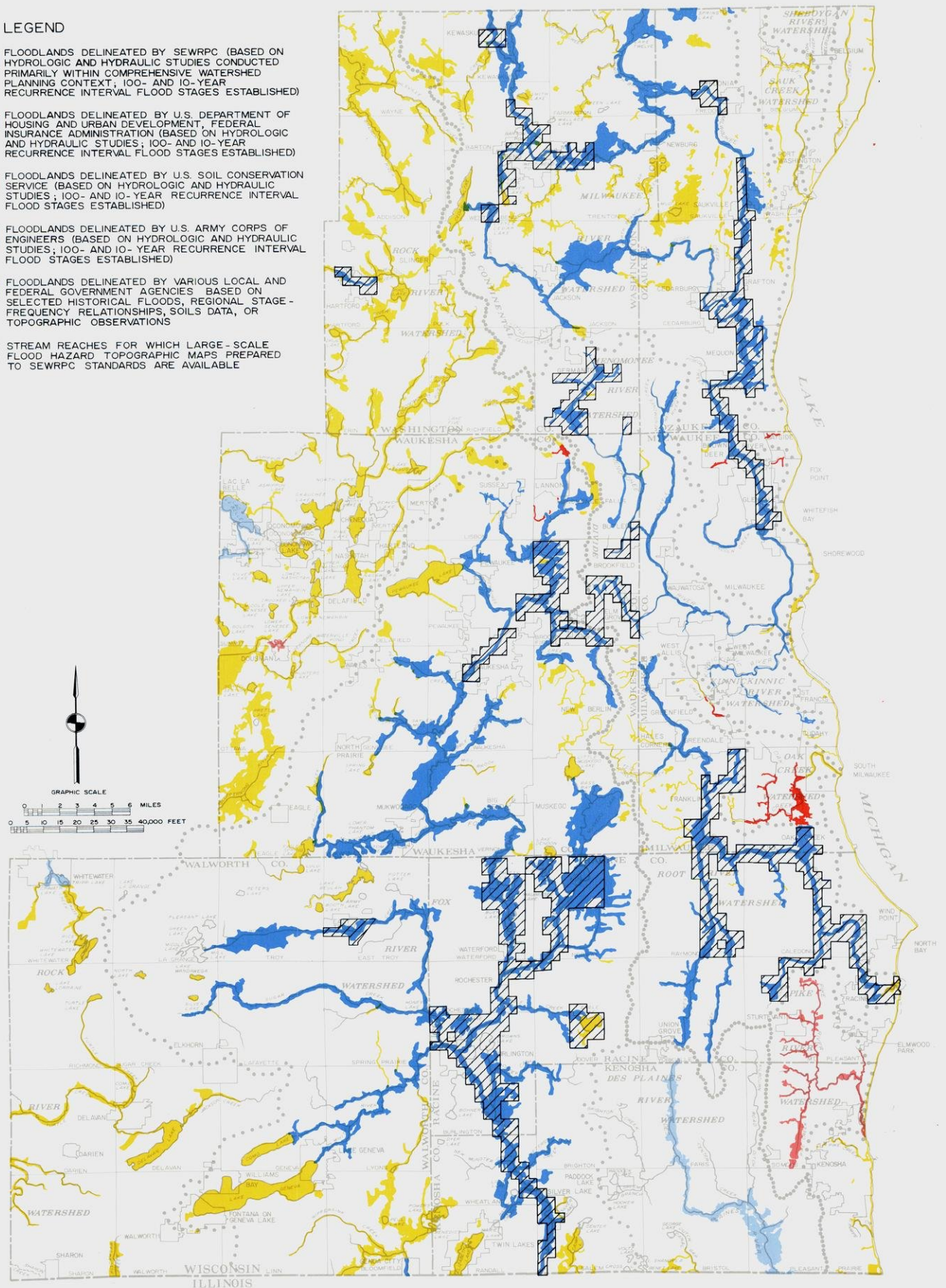
The status of existing flood hazard data in the Region is shown on the accompanying map. The Commission has completed comprehensive watershed studies for the Root, Fox, Milwaukee, Menomonee, and Kinnickinnic River watersheds, resulting in the delineation of floodlands for about 631 miles of major stream channels, not including stream channels in the Milwaukee River watershed



# DELINEATION OF FLOODLANDS: 1979

## LEGEND

- FLOODLANDS DELINEATED BY SEWRPC (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES CONDUCTED PRIMARILY WITHIN COMPREHENSIVE WATERSHED PLANNING CONTEXT; 100- AND 10-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, FEDERAL INSURANCE ADMINISTRATION (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES; 100- AND 10-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. SOIL CONSERVATION SERVICE (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES; 100- AND 10-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY U.S. ARMY CORPS OF ENGINEERS (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES; 100- AND 10-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED)
- FLOODLANDS DELINEATED BY VARIOUS LOCAL AND FEDERAL GOVERNMENT AGENCIES, BASED ON SELECTED HISTORICAL FLOODS, REGIONAL STAGE-FREQUENCY RELATIONSHIPS, SOILS DATA, OR TOPOGRAPHIC OBSERVATIONS
- STREAM REACHES FOR WHICH LARGE-SCALE FLOOD HAZARD TOPOGRAPHIC MAPS PREPARED TO SEWRPC STANDARDS ARE AVAILABLE





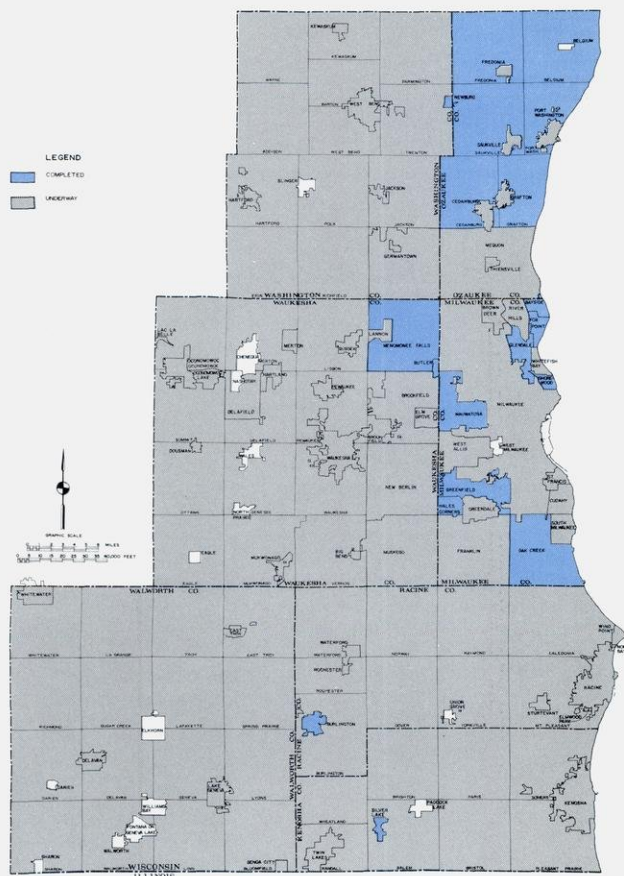
lying outside the Region in Sheboygan and Fond du Lac Counties. In addition, a special Commission floodland management study completed for the City of Hartford has resulted in the delineation of floodlands for another four miles of stream channel. Large-scale flood hazard maps prepared to Commission specifications are available for about 235 miles, or 37 percent, of the 635 miles of major stream channel for which the Commission has developed flood hazard data.

### Flood Insurance Rate Studies

Under the National Flood Insurance Act of 1968, the U. S. Department of Housing and Urban Development has been given broad authority to conduct studies to determine the location and extent of floodlands and the risks related to the insurance of urban development in floodland areas. The Department is proceeding with the conduct of such studies on a community-by-community basis throughout the Region. While the Commission has not directly contracted with the Department for the conduct of such studies, the staff does cooperate with all of the engineering firms and federal 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 but cost-effective manner through the Commission's series of watershed studies. The Commission provides to the contractors all of the detailed hydrologic and hydraulic data developed under the watershed studies for the various streams in the Region and shares with the contractors the results of the analytical phases of such studies. Development by the Commission of such data makes it possible for the Department to carry out the flood insurance rate studies more efficiently and at considerably less cost than if such data had to be developed on an individual community-by-community basis. Commission participation in and review of the study findings, moreover, assures consistency between communities along a given river or stream.

By the end of 1979, federal flood insurance rate studies were completed and underway, respectively, for 14 and 55 civil divisions in the Region, as shown on the accompanying map. Of the 55 studies in progress, 15 studies were in draft form by the end of 1979. The Commission was involved not only in providing available data from the Commission files to the contractors conducting such studies, but in delineating regulatory floodways and attending meetings with local officials to discuss the conduct of, and results of, the flood

### STATUS OF FLOOD INSURANCE RATE STUDIES



insurance rate studies. The Commission stands ready to assist the local communities in the enactment of sound local floodland regulations as required by the federal flood insurance program and State Statute.

### 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, 16 additional continuous recording streamflow gages, which provide the means for obtaining invaluable long-term records of streamflow. All of these gages are maintained by the U. S. Geological Survey, under a contract with the Commission.



# LOCATION OF U.S. GEOLOGICAL SURVEY STREAM GAGING STATIONS: 1979

## LEGEND

1 ▲ CONTINUOUS STAGE RECORDER GAGE - COOPERATIVELY MAINTAINED BY U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF NATURAL RESOURCES (3)

2 ▲ CONTINUOUS STAGE RECORDER GAGE - COOPERATIVELY MAINTAINED BY U.S. GEOLOGICAL SURVEY; FOND DU LAC OZAUKEE, RACINE, WASHINGTON, AND WAUKESHA COUNTY BOARDS; METROPOLITAN SEWERAGE COMMISSION OF MILWAUKEE COUNTY; UNIVERSITY OF WISCONSIN-PARKSIDE; KENOSHA WATER UTILITY; AND SEWRPC (14)

3 ▲ CONTINUOUS STAGE RECORDER GAGE - COOPERATIVELY MAINTAINED BY U.S. GEOLOGICAL SURVEY, THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES, THE U.S. ENVIRONMENTAL PROTECTION AGENCY, AND SEWRPC (7)

4 ▲ CONTINUOUS STAGE RECORDER GAGE - OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE U.S. ARMY, CORPS OF ENGINEERS (2)

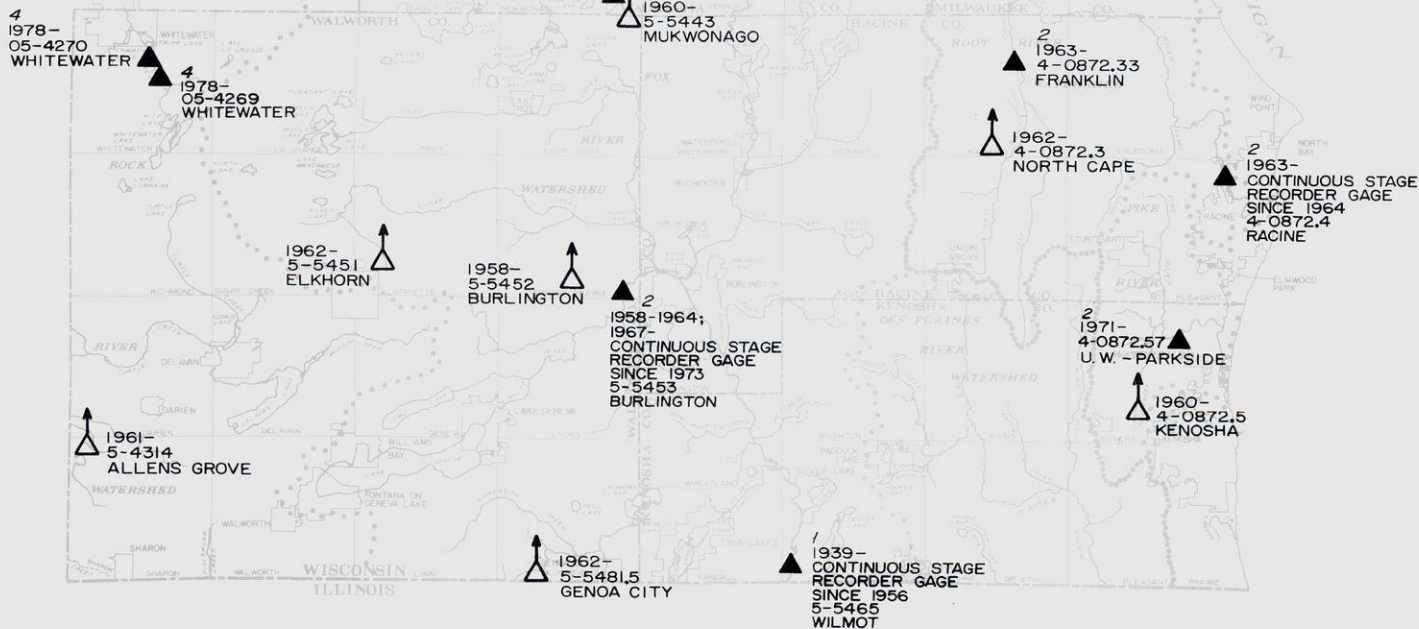
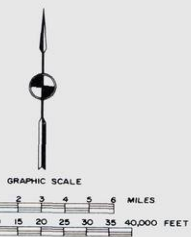
▲ CREST STAGE GAGE - COOPERATIVELY MAINTAINED BY U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF TRANSPORTATION (12)

▲ LOW FLOW GAGE - COOPERATIVELY MAINTAINED BY U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF NATURAL RESOURCES (1)

1914 - PERIOD OF RECORD

4-0870 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 SUB CONTINENTAL DIVIDE, WHEREAS A PREFIX 5 DENOTES A GAGING STATION LOCATED WEST OF THE SUB CONTINENTAL DIVIDE

MILWAUKEE NAME ASSIGNED TO GAGING STATION BY U.S. GEOLOGICAL SURVEY



The U. S. Geological Survey publishes the data obtained. Local funds to support the operation of the gages are provided by the Fond du Lac, Ozaukee, Racine, Washington, and Waukesha County Boards of Supervisors; the Milwaukee Metropolitan Sewerage District; and the Kenosha Water Utility.

## AIR QUALITY

Work continued during 1979 on the preparation of a regional air quality attainment and maintenance plan, this work being done at the request of, and in cooperation with, the Wisconsin Departments of Natural Resources and Transportation. The plan is intended to meet federal requirements that air pollution be adequately considered in transportation planning; that areas either presently exceeding, or having the potential to exceed, the national ambient air quality standards be identified; and that a plan be prepared to attain and maintain those standards. At year's end, the plan had been completed in draft form and was awaiting final review by the Commission's Technical Coordinating and Advisory Committee on Regional Air Quality Planning.

As a part of the 1979 work program, a comprehensive inventory of air pollution emissions in the Region for the year 1978 was completed. This inventory, which includes point, line, and area sources of air pollutant emissions, identifies the number of sources and quantifies the attendant pollutant emissions. Analyzed in conjunction with a similar inventory for 1973 and 1977, the resulting data also provide an indicator of trends in pollutant emissions.

With the acceptance of the designation of lead local agency for air quality/transportation planning in the Southeastern Wisconsin Region, as reported in the 1978 Annual Report, the Commission agreed to undertake an analysis of the air pollution emission reduction benefits that would result from implementing selected transportation systems management actions. The Commission also agreed to establish a public participation program to be incorporated into the air quality/transportation planning process. These activities—which are expected to be ongoing over a three- to five-year period—were initiated by the Commission during 1979.

The analysis of the air pollution implications of potential transportation systems management

actions during 1979 took the form of an assessment of the impact on air pollutant emissions of individual transportation improvement projects either completed during 1978 or proposed for implementation during 1979 and 1980. The results of this assessment, which provides one measure of progress toward the attainment of the ambient air quality standards, were reported in the SEWRPC publication entitled, A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980-1984.

The assessment indicated that 40 transportation management or improvement projects were completed in 1978, of which 20 could be categorized as transportation system management projects and 20 as transportation improvement projects. The 20 management projects provided an estimated annual reduction in hydrocarbon emissions of about 4 tons. The 20 improvement projects provided an estimated reduction in hydrocarbon emissions of about 70 tons. Together, these 40 projects served to reduce hydrocarbon emissions in the Region by about 74 tons, or less than 0.2 percent of the total estimated hydrocarbons emitted from motor vehicles operating within the Region in 1977. That total—about 47,900 tons—was determined through the air quality emissions inventory prepared by the Commission for the base year 1977.

The assessment further indicated that completion of all projects included within the annual element of the 1980-1984 transportation improvement program would provide an estimated additional reduction in hydrocarbon emissions of 166 tons per year—about 106 tons through implementation of 46 proposed transportation systems management projects, and 60 tons through implementation of 23 transportation improvement projects.

During 1979, the Commission, in cooperation with the University of Wisconsin-Extension, began to formulate a mechanism for increasing public participation in the air quality/transportation planning process. The means for increasing such public participation is envisioned to occur in two phases. In the first phase, emphasis is to be placed on public awareness and educational programs. In the second phase, emphasis is to be placed on the direct participation by concerned citizens and environmental groups. Accordingly, during 1979, work was directed principally toward the development of informational materials.

At the request of the Wisconsin Department of Natural Resources and Department of Transportation, the Commission initiated in 1979 a study to determine the number of motor vehicle inspection and emissions test facilities that will be required in the Region to implement an effective motor vehicle inspection program, and the best locations for these facilities. The results of this study are anticipated early in 1980.

In addition, the Commission in 1979 continued to assist the City of Milwaukee, Department of City Development, in the conduct of a program to evaluate sources of, and controls for, fugitive dust emissions in the heavily industrialized area of the Menomonee River Valley. Specifically, during 1979 the Commission completed the statistical analysis of the laboratory data on the chemical composition of selected filter pads in order to obtain the probable origin of monitored particulate matter levels, and completed the air quality simulation modeling effort for fugitive dust sources in the Menomonee River Valley.

## **SOLID WASTE MANAGEMENT PLANNING**

During 1979, the Commission formally considered and rejected the possibility of preparing at this time a comprehensive regional solid waste management plan for southeastern Wisconsin. The Commission's decision was heavily influenced by decisions made at the state level in establishing a solid waste management planning and grant program under Wisconsin Fund legislation. This planning and grant program places great emphasis upon the preparation of solid waste management plans at the county level of government. It should be noted that this approach, while perhaps adequate for use in some areas of the State, is inadequate for use in the heavily urbanized Southeastern Wisconsin Region. The approach does not consider either the generation of solid wastes or the means of disposal on a comprehensive, areawide basis. Consequently, it does not consider the existing

and potential need for disposal sites in one county to handle the wastes generated in another county due to the lack of available suitable sites in the generating county. Particularly with respect to the need to dispose of toxic and other hazardous wastes, this fragmented approach could work to the detriment of the long-term economic development of the Region, could lead to the selection of a less than cost-effective disposal system for the Region as a whole, and could leave the Region short of necessary long-term disposal capacity. In addition, the county-by-county approach could also work against the long-term objectives of recycling as envisioned under the legislation creating the Wisconsin Solid Waste Recycling Authority and of designating the seven-county Region as a priority area for initiating areawide approaches to the recycling of waste materials.

Because of the current emphasis by the State on county planning, the Commission decided to take a position at the present time of providing assistance to individual counties in the preparation of county solid waste management plans, rather than undertaking the preparation of a regional solid waste management plan. In this capacity, the Commission will provide background data and technical staff resources for use in county planning efforts. For example, during 1979 the Commission was asked to provide technical assistance in the conduct of a joint study of solid waste management problems in Washington and Waukesha Counties. The Commission assisted these two counties in selecting engineering consultants to conduct the studies, in preparing a contract agreement between the counties and their respective consultant, and in guiding the conduct of the work programs through service on a technical advisory committee established for that purpose. In addition, during 1979 the Commission provided assistance to Kenosha County in considering alternative approaches to solid waste management planning, preparing and submitting to the Kenosha County Solid Waste Planning Committee a memorandum setting forth recommendations in this respect.



# PLANNING RESEARCH DIVISION

## DIVISION FUNCTIONS

The Commission's Planning Research Division is responsible for developing demographic, economic, and public financial resource data that serve as the basis for the preparation of regional and subregional plans by other Commission divisions. The kind 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 are the characteristics of those who live and work in the Region in such terms as age, sex, race, income, household size, and occupation? How are these characteristics changing over time?
- What is the structure of the Region's economy in terms of employment in major industry groups? How is this structure 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?
- How much is being spent to provide public facilities and services? What are the sources of this money? How are these patterns changing over time?
- Will there likely be sufficient public financial resources to carry out regional plan recommendations?

In an attempt to find sound answers to these and other questions, the Planning Research Division during 1979 conducted a number of activities in three identifiable areas: data collation and development, data provision and assistance, and census coordination.

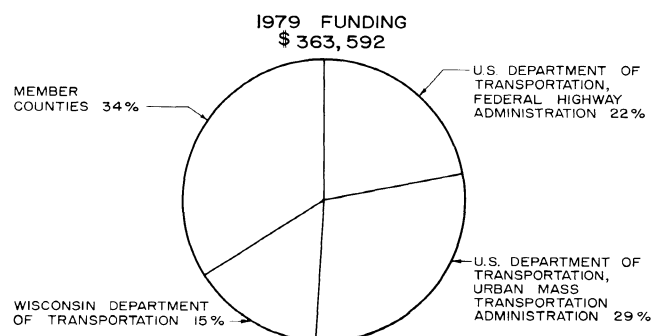
## DATA COLLATION AND DEVELOPMENT

During 1979 the Division staff continued to monitor secondary data sources for changes in population, employment, and school enrollment levels. In addition, the Division staff provided support to the Land Use and Housing, Transportation, Special Projects, and Environmental Planning Division staffs in the conduct of major work programs by those divisions.

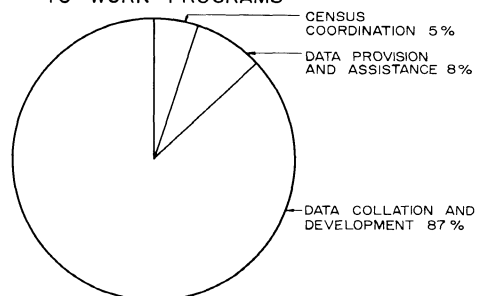
### Population

The division staff monitors changes in the resident population levels of the Region and its seven constituent counties through the yearly acquisition and analysis of current estimates of population prepared by the Wisconsin Department of Admin-

### PLANNING RESEARCH DIVISION



### DISTRIBUTION OF FUNDING TO WORK PROGRAMS



istration (DOA). The DOA has statutory responsibility for preparing current population estimates as a basis for distributing state-shared taxes to local units of government. The estimates are based on symptomatic indicators of population change, including the number of automobiles registered, the number of persons filing income tax returns, and the dollar value of exemptions for dependents on income tax returns.

On the basis of current estimates of population prepared by the DOA, it appears that the regional population has not experienced any significant growth during the last decade. In 1970 the census-enumerated resident population of the Region was 1,756,100. In 1979 the estimated resident population of the Region was 1,782,700, or only 26,600 persons—less than 2 percent—above the 1970 level. This is equivalent to an average annual increase of about 3,000 persons per year since the 1970 Census. This average annual growth rate contrasts sharply with the average annual growth rate during the decade from 1960 to 1970 of about 18,200 per year and even more sharply with the average annual growth rate in the preceding decade of about 33,300 persons per year. The regional population is estimated to have reached a peak of approximately 1,788,000 persons in 1975. After 1975 it experienced slight declines during each successive year to a 1978 level of about 1,773,500 persons. The 1979 population estimate is the first estimate since 1975 indicating an increase in population over the previous year's estimate, a sign that the recent regional population decline may have halted.

While there has been virtually no regional population growth since 1970, the distribution of the population in the Region has continued to change significantly. The populations of Ozaukee, Washington, and Waukesha Counties have each increased by 28 percent or more since 1970. The populations of Kenosha, Racine, and Walworth Counties have also grown since 1970, but at a more moderate rate of 10 percent or less. Milwaukee County's population has declined by about 10 percent, representing an absolute population loss of about 104,000 persons.

A comparison of the forecast and estimated regional population by county in the Region is set forth in the accompanying table. Based on the design year 2000 population forecast used in the preparation of the adopted regional land use and transportation plans, the overall population level of the Region was anticipated to reach about 1.86 million in 1979. The estimated 1979 popula-

## REGIONAL POPULATION

County	1970	1979	Difference 1970-1979	
			Number	Percent
Kenosha . . . .	117,917	127,451	9,534	8.09
Milwaukee . . .	1,054,249	950,197	- 104,052	- 9.87
Ozaukee . . . .	54,461	71,143	16,682	30.63
Racine . . . . .	170,838	180,257	9,419	5.51
Walworth . . . .	63,444	70,030	6,586	10.38
Washington . .	63,839	86,840	23,001	36.03
Waukesha . . .	231,335	296,764	65,429	28.28
Total	1,756,083	1,782,682	26,599	1.51

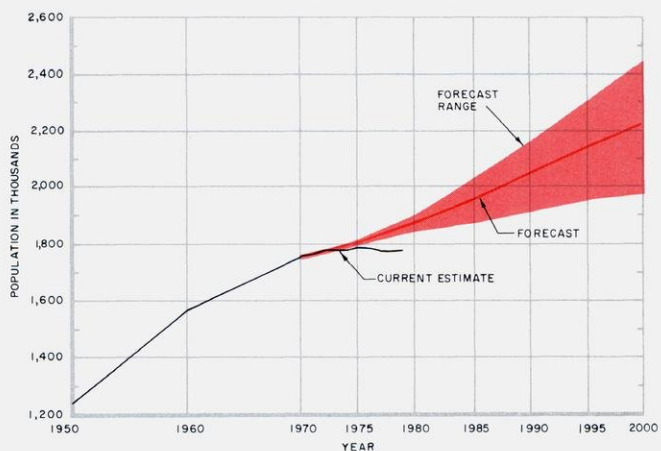
## COMPARISON OF THE FORECAST AND ESTIMATED POPULATION

County	1979 Population		Difference (estimate minus forecast)	
	Forecast	Estimated	Number	Percent
Kenosha . . . .	136,920	127,451	- 9,469	- 6.92
Milwaukee . . .	1,017,260	950,197	- 67,063	- 6.59
Ozaukee . . . .	74,020	71,143	- 2,877	- 3.89
Racine . . . . .	183,960	180,257	- 3,703	- 2.01
Walworth . . . .	73,560	70,030	- 3,530	- 4.80
Washington . .	88,180	86,840	- 1,340	- 1.52
Waukesha . . .	286,280	296,764	10,484	3.66
Total	1,860,180	1,782,682	- 77,498	- 4.17

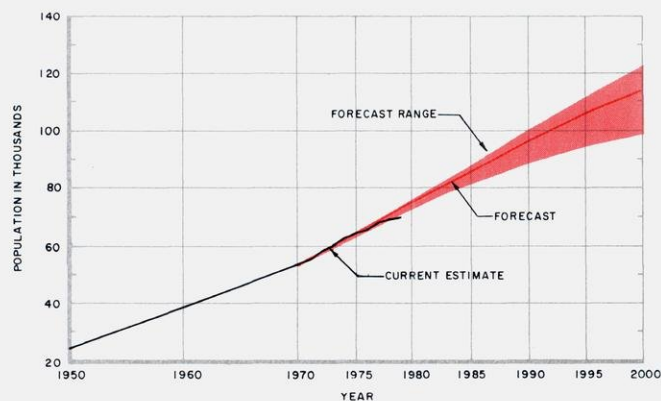
tion level of 1.78 million noted above is about 4 percent below this forecast level. Comparisons of the estimated and forecast population levels by county are shown in the accompanying set of graphs.

During 1979, the Division staff completed a study of changes in the size, distribution, and composition of the Region's resident population since 1970, documented in SEWRPC Technical Report No. 22, Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977. The report is organized around four major topics. The first topic is the historical change in the size, distribution, and composition of the regional population through 1970. The second topic is the anticipated growth and change in the size, distribution, and composition of the regional population over the period 1970 to 2000 as envisioned in the regional popula-

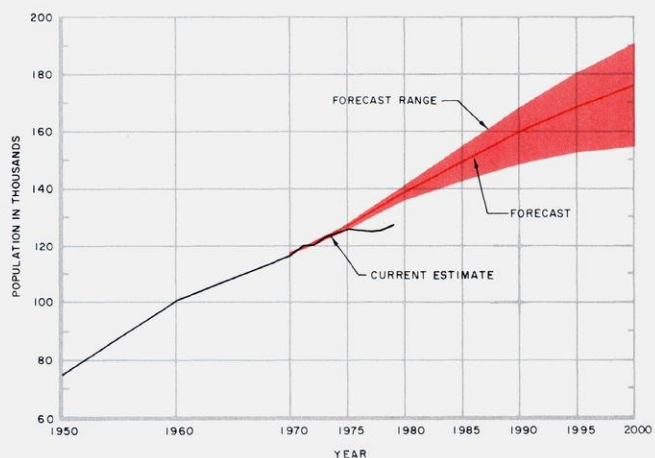
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR THE REGION: 1950-2000**



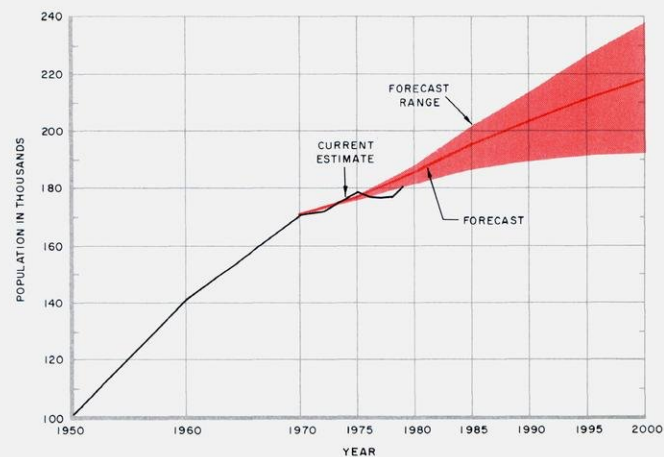
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR OZAUKEE COUNTY: 1950-2000**



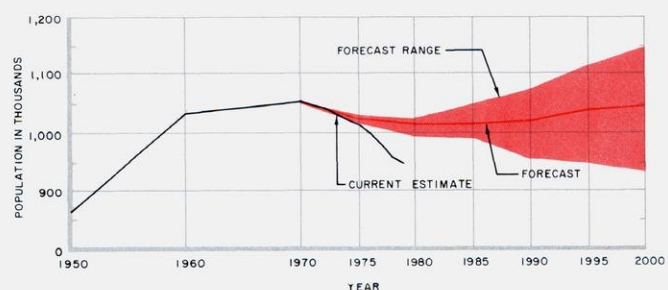
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR KENOSHA COUNTY: 1950-2000**



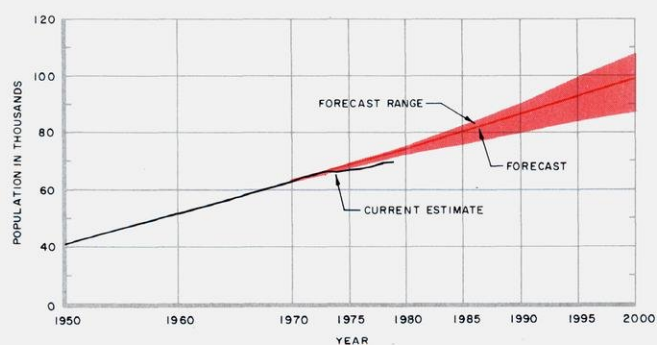
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR RACINE COUNTY: 1950-2000**



**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR MILWAUKEE COUNTY: 1950-2000**

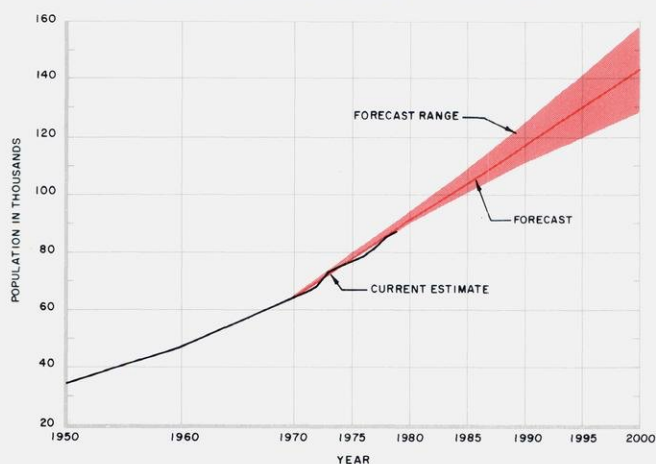


**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR WALWORTH COUNTY: 1950-2000**

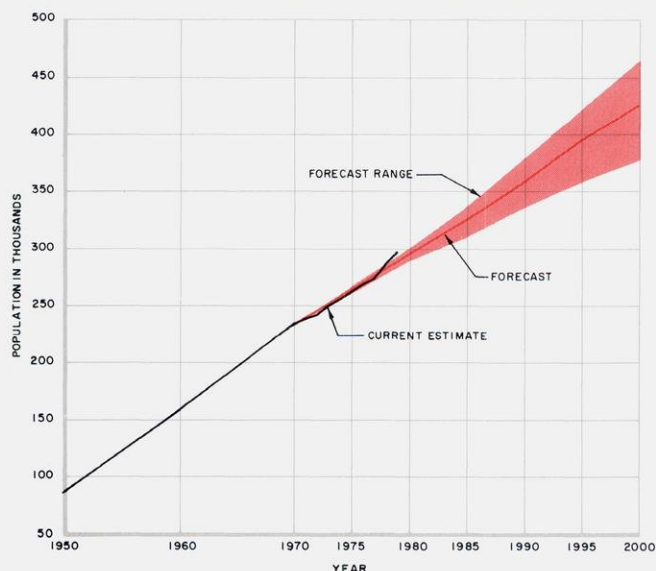




**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR WASHINGTON COUNTY: 1950-2000**



**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR WAUKESHA COUNTY: 1950-2000**



between forecast and estimated population change on the physical development plans prepared by the Commission. Copies of the report may be obtained by contacting the Commission offices. Some of the more significant findings and conclusions of this report—particularly as they relate to the Commission's current population forecasts—are summarized in the following paragraphs.

The Commission's population forecast is based upon anticipated changes in two basic components of population change: natural increase, or the difference between births and deaths, and net migration, or the difference between in-migration and out-migration. A review of the available data on these components of population change since 1970 indicates that the observed rates of natural increase have generally been in conformance with the assumptions underlying the population forecast. For the Region as a whole, the observed change in population due to natural increase is only slightly higher than the change anticipated in the forecast. The opposite is true, however, for the net migration component of population change. The forecast had assumed a slight excess of out-migration over in-migration during the 1970's. Available data indicate, however, that the excess of out-migration over in-migration has been substantially greater than forecast. This has been particularly true in Milwaukee County.

As shown in the accompanying tables and charts, the most significant deviations from the forecast are occurring in Kenosha and Milwaukee Counties, although all of the other counties except Waukesha are also continuing to lag somewhat behind anticipated population growth rates. In Waukesha County, population growth continues to occur in excess of the forecast growth rate. The effect of these deviations from the forecast will have to be taken into account in future planning efforts by the Commission, particularly after the 1980 census, the results of which are required to confirm the annual population estimates and provide additional data upon which to base new and revised forecasts.

tion forecasts selected by the Commission staff and the Commission advisory committees concerned in 1974. The third topic is the estimated growth and change in the size, distribution, and composition of the regional population over the period 1970 through 1977. Finally, the fourth topic is the degree to which the regional population forecasts have correctly anticipated changes to date in the size, distribution, and composition of the regional population, and the potential impact of deviations

The observed changes in population size and distribution in the Region since 1970 could have important implications for future development patterns, the stability of communities in the Region, and the economy of the Region. It is apparent that the 1980 stage of the Commission's design year 2000 population forecast will not be met by 1980. Changes in the total population of the Region are inextricably woven into complex national social and economic changes and are only



partially affected by local public and private policy decisions. The distribution of population within the Region, however, can be influenced by local public and private policy decisions. Policy decisions that support the land use development objectives of the Commission's adopted land use plan can help to bring about a population distribution that will make the most efficient and effective use of the Region's fiscal and natural resources regardless of the size of the resident population of the Region.

The individual design year 2000 county population forecasts, chosen from among the alternative projections considered, were normative ones based upon the Commission's adopted land use development objectives. The chosen forecasts assume that the continued diffusion of urban development into the outlying areas of the Region will ultimately be curtailed in the public interest through the exercise of land use controls and other public policy actions. They further assume that the present trends in population decentralization will be stabilized and reversed in the mid to late 1980's, and that the central areas of the Region will again experience population growth. While at variance with existing trends, this assumption is consistent with current federal policies which seek to discourage urban sprawl and protect critical environmental and prime agricultural lands. Therefore, the land use development objectives on which the present county population forecasts are, in part, based, are supportive of national urban policy.

Population projections based specifically on trends apparent since 1970 would indicate a continued decline in the population of Milwaukee County and continued growth in the population of surrounding counties. A population redistribution of this nature would—over time—result in the partial abandonment of a large and expensive urban infrastructure already in place in Milwaukee County and the re-creation of this infrastructure in the outlying counties. Selection of alternative county population forecasts based exclusively on accommodation of current trends for use in land use plan design would have the effect of encouraging urban sprawl.

### Employment

Employment in the Region during 1979 was estimated at 877,300 jobs, an increase of about 25,700 jobs, or about 3 percent, over the 1978 level of 851,600 jobs. Based upon this estimate,

the Region has shown considerable economic growth and recovery since the economic downturn of 1975. As further evidence of the economic health of the Region, unemployment in the Region during 1979 was estimated at 37,500 persons, a decrease of about 2,700 persons, or about 7 percent, from the 1978 level of about 40,200 persons. The estimated unemployment rate in the Region during 1979 was 4.1 percent. The year 1979 marks the fourth consecutive year in which a sizeable employment increase in the Region has been accompanied by little change in the population level.

Changes in the structure of the regional economy continue to follow a pattern established in recent years. Specifically, manufacturing employment has shown a relative drop in importance—from about 43 percent of all jobs in 1960 to about 34 percent in 1970—and in 1979 represented less than 30 percent of the total number of jobs in the Region. In contrast, the private service employment category has continued to grow in importance, both absolutely and relatively, as a regional employment source. In 1960, private services accounted for about 18 percent of all jobs in the Region. By 1970 private services had increased in relative importance to over 22 percent of all jobs, and by 1979 this percentage had further increased to 24 percent of all jobs in the Region. (See the accompanying table and graph on major industry groups.)

On a county basis, as shown in the accompanying table, all counties registered employment gains between 1978 and 1979. Since 1970 the Region has added about 135,700 jobs, with about 65,600 of these jobs being added in Milwaukee County. The greatest rates of employment increase in the 1970-1979 period have occurred in Ozaukee and Waukesha Counties—36.3 and 44.6 percent, respectively.

The change between 1970 and 1979 in the relative distribution of jobs within the Region by county is shown in the accompanying graph. The proportion of total employment in Milwaukee County has declined despite an increase in absolute employment within the County. In 1960 about 75 percent of the total regional employment was located in Milwaukee County. By 1970 about 69 percent of the total regional employment was located in Milwaukee County. By 1979 the Milwaukee County share of regional employment had decreased approximately 10 percentage points to 65.7 per-

# REGIONAL EMPLOYMENT BY MAJOR CATEGORY: 1970-1979

Employment Category	Employment (in thousands)		Difference	
	1970	1979	Number	Percent
Agriculture. . . . .	10.6	9.4	- 1.2	- 11.3
Construction and Mining. . . . .	24.0	29.4	5.4	22.5
Manufacturing				
Food and Kindred Products. . . . .	18.9	19.2	0.3	1.6
Printing and Publishing. . . . .	14.9	15.0	0.1	0.7
Primary Metals. . . . .	22.5	18.7	- 3.8	- 16.9
Fabricated Metals. . . . .	24.6	32.6	8.0	32.5
Nonelectrical Machinery. . . . .	68.1	78.1	10.0	14.7
Electrical Machinery. . . . .	36.5	40.5	4.0	11.0
Transportation Equipment. . . . .	22.0	22.7	0.7	3.2
Other Manufacturing. . . . .	43.5	43.5	--	--
Manufacturing Subtotal	251.0	270.3	19.3	7.7
Wholesale Trade. . . . .	32.0	42.2	10.2	31.9
Retail Trade. . . . .	111.2	139.4	28.2	25.4
Transportation, Communication, and Utilities. . . . .	36.0	39.2	3.2	8.9
Finance, Insurance, and Real Estate. . . . .	31.2	41.6	10.4	33.3
Private Services, Except Education <sup>a</sup> . . . . .	166.9	211.3	44.4	26.6
Government Services and Education. . . . .	78.7	94.5	15.8	20.1
Total Employment	741.6	877.3	135.7	18.3

<sup>a</sup> Includes the self-employed and domestic household workers.

cent of regional employment. In contrast, the proportion of total regional employment in Waukesha County had increased from about 5 percent in 1960 to about 9 percent in 1970, and to about 11 percent in 1979. In the five remaining counties of the Region the relative share of total regional employment has remained somewhat constant.

Based upon the regional employment forecast of about 1.02 million jobs in the year 2000, the employment level of the Region was anticipated to approximate 823,800 jobs in 1979. As noted, there were an estimated 877,300 jobs in the Region in 1979, or about 53,500, or 6.5 percent, more jobs than forecast. As shown in the accompanying table, most of the difference occurs in Milwaukee County, where the 1979 estimate is 40,900 jobs, or 7.6 percent, greater than forecast.

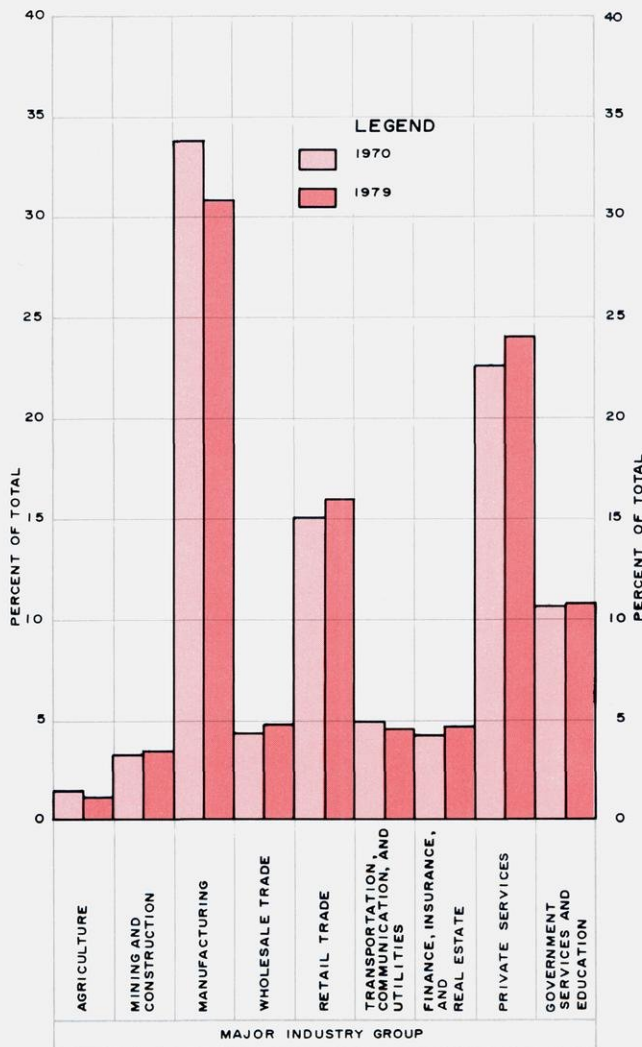
The approximate 18.3 percent increase in the number of jobs in the Region since 1970, coupled with a total regional population increase of less

than 2 percent for the same period, presents an apparent paradox. A relatively healthy and growing national economy is continuing to create new jobs. In the Region these newly created jobs are not resulting in net in-migration—as would have occurred in the past—but are being absorbed by the existing regional population base. Three factors in particular appear to be making this absorption possible: 1) the rapidly increasing numbers of women entering the labor force, 2) the changing age structure of the Region's resident population, and, perhaps, 3) an increasing tendency for one person to hold more than one job.

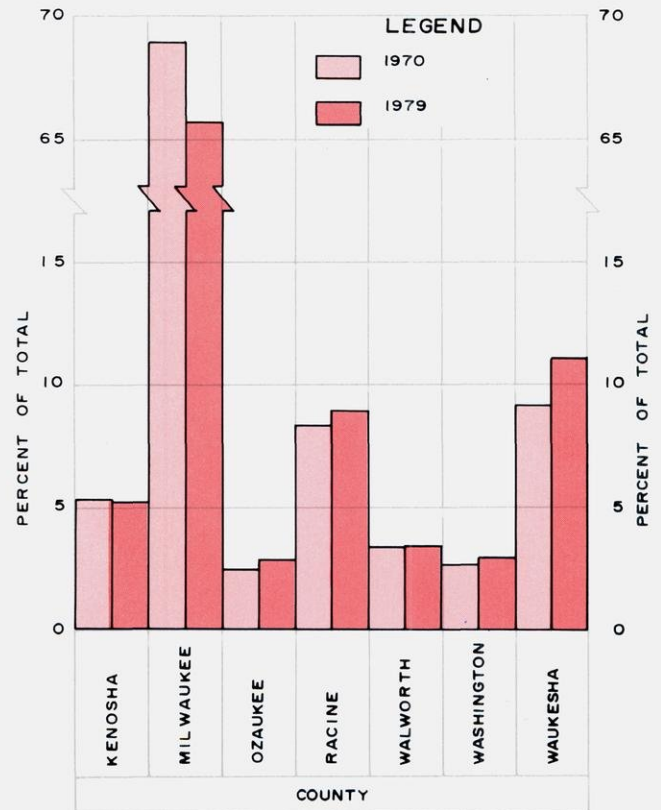
## School Enrollment

Total regional school enrollment continued to decline during 1979, as shown in the accompanying table. The decline of about 13,000 students represents a 3 percent decrease between 1979 and the previous year. Public school enrollment declined by 11,900 students, or almost 4 percent,

PERCENTAGE DISTRIBUTION OF JOBS IN THE REGION BY MAJOR INDUSTRY GROUP: 1970-1979



PERCENTAGE DISTRIBUTION OF JOBS IN THE REGION BY COUNTY: 1970-1979



while nonpublic school enrollment declined by about 1,200 pupils, or about 2 percent. Since 1970, total regional school enrollment has declined by over 19 percent.

The accompanying map shows public school enrollment changes between 1970 and 1979 for high school districts operating wholly or partially within the Region. Union high school districts and their constituent feeder K-8 school districts have been combined into a single "district" for the purpose of preparing this map. About 62 percent of the public K-12 and the combined union high school and K-8 districts have experienced enrollment declines of greater than 5 percent since 1970. Approximately 25 percent of the districts have experienced enrollment gains of 5 percent or more and about 13 percent of the districts have experienced modest or no change—from 5 percent decline to 5 percent gain—in enrollments.

School districts experiencing enrollment increases are concentrated in Washington and Waukesha Counties—those counties with the largest absolute total population growth since 1970. The largest enrollment declines are concentrated in Milwaukee

REGIONAL EMPLOYMENT

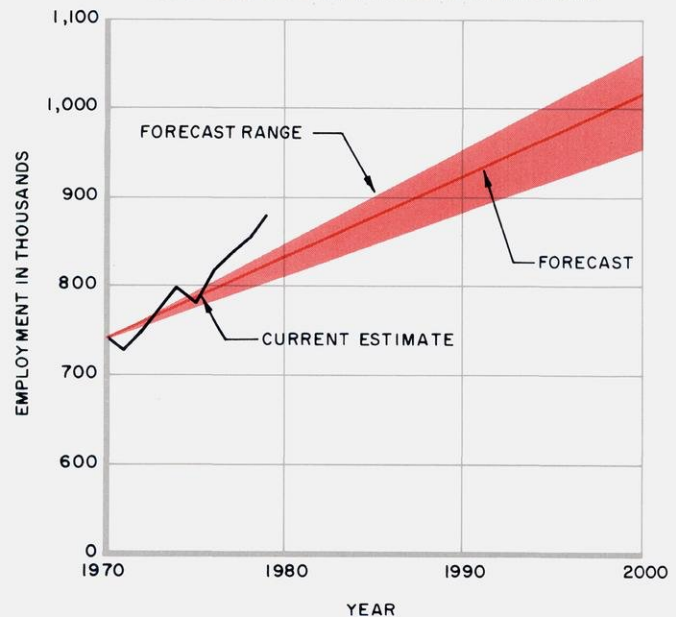
County	1970	1978	1979	Difference 1970-1979	
				Number	Percent
Kenosha . . .	39,200	44,500	45,400	6,200	15.8
Milwaukee . .	510,900	562,200	576,500	65,600	12.8
Ozaukee . . .	17,900	23,800	24,400	6,500	36.3
Racine . . . .	61,900	74,800	78,500	16,600	26.8
Walworth . . .	24,200	28,900	29,700	5,500	22.7
Washington . .	20,300	24,700	25,600	5,300	26.1
Waukesha . . .	67,200	92,900	97,200	30,000	44.6
Region	741,600	851,800	877,300	135,700	18.3



### COMPARISON OF FORECAST AND ESTIMATED REGIONAL EMPLOYMENT

County	1979 Employment		Difference (estimate minus forecast)	
	Forecast	Estimated	Number	Percent
Kenosha . . .	43,700	45,400	1,700	3.9
Milwaukee . .	535,600	576,500	40,900	7.6
Ozaukee . . .	24,000	24,400	400	1.7
Racine . . . .	72,000	78,500	6,500	9.0
Walworth . . .	29,300	29,700	400	1.4
Washington . .	25,000	25,600	600	2.4
Waukesha . . .	94,200	97,200	3,000	3.2
Region	823,800	877,300	53,500	6.5

### ESTIMATED AND FORECAST EMPLOYMENT SOUTHEASTERN WISCONSIN REGION



### REGIONAL SCHOOL ENROLLMENT

County	1970	1978	1979	Difference 1970-1979		Difference 1978-1979	
				Number	Percent	Number	Percent
Kenosha . . . .	32,332	27,780	27,455	- 4,877	- 15.08	- 325	- 1.17
Milwaukee . . .	267,929	198,863	191,224	- 76,705	- 28.63	- 7,639	- 3.84
Ozaukee . . . .	15,876	16,314	15,563	- 313	- 1.97	- 751	- 4.60
Racine . . . . .	48,597	41,492	39,834	- 8,763	- 18.03	- 1,658	- 4.00
Walworth . . . .	15,570	14,643	14,129	- 1,441	- 9.25	- 514	- 3.51
Washington . . .	19,169	22,510	22,210	3,041	15.86	- 300	- 1.33
Waukesha . . . .	73,077	72,709	70,850	- 2,227	- 3.05	- 1,859	- 2.56
Total	472,550	394,311	381,265	- 91,285	- 19.32	- 13,046	- 3.31

County and Racine County, where every K-12 and combined union high school district and K-8 district has experienced an enrollment decline since 1970. The majority of the districts in the southern portion of the Region—Kenosha, Racine, and Walworth Counties—exhibit declining enrollment patterns. A similar pattern of enrollment decline exists in eastern Waukesha County and, to a lesser degree, in Ozaukee County.

The Division staff maintains school district boundary maps for each of the seven counties in the Region. Copies of these maps—last updated during 1978—are available to interested parties from the Commission offices.

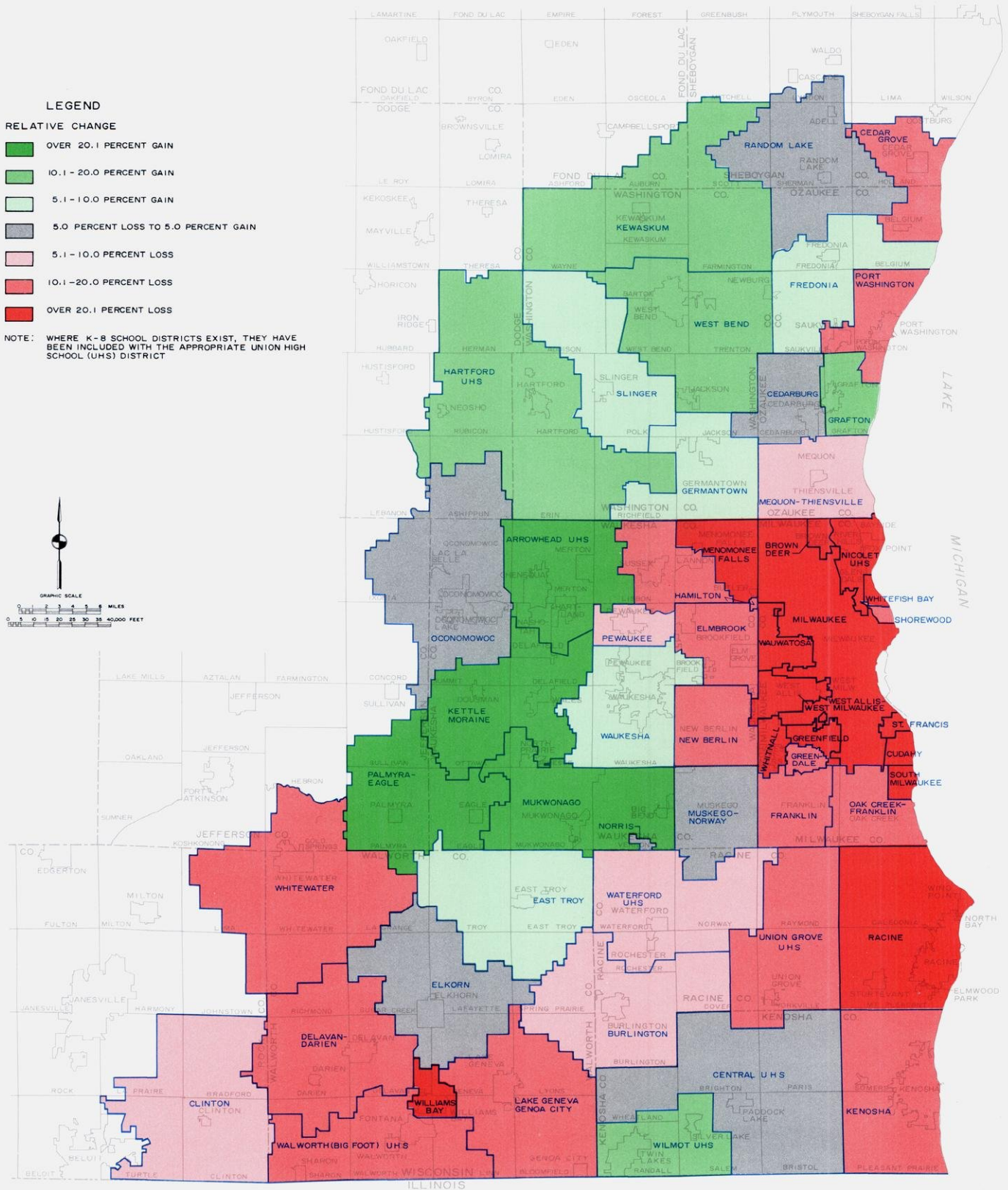
The Division staff maintains school district boundary maps for each of the seven counties in the Region. Copies of these maps—last updated during 1978—are available to interested parties from the Commission offices.

### DATA PROVISION AND ASSISTANCE

Considerable Division staff time is directed each year at answering requests for demographic and 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 activi-



# RELATIVE SCHOOL ENROLLMENT CHANGES IN THE REGION: 1970-1979



ties and in the analysis of data. The following are examples of Division staff activity during 1979 in performing this function:

- Preparation of letter responses to 130 requests for population, employment, and public financial resources and related data contained in the Commission's data bank. An additional 415 requests were handled by telephone. These requests came from local units of government, state and federal agencies, private firms, and individual citizens.
- Provision of technical assistance to the Walworth County Overall Economic Development Planning Committee in its ongoing planning activities. Such assistance included serving as a technical advisor to the committee, attending committee meetings, and providing data from Commission files as requested.
- Provision of technical assistance to the Waukesha School District in conducting its annual school census, including preparation of a list of all household addresses in the district; provision of preprinted school census forms; provision of data entry, verification, and edit services; and preparation of summary reports as requested by school district personnel.
- Provision of technical assistance to the Racine County Emergency Telephone System (9-1-1) Planning Committee. Such assistance included attending committee meetings, and, at the request of the Committee, exploring the availability of planning funds for the preparation of an emergency telephone system plan, providing guidance in the selection of an appropriate planning framework, and preparing a proposal for the actual preparation of an emergency telephone system plan for Racine County.
- Preparation of a special geographic base file for the City of West Allis. The file was used by the City to acquire summary reports for subcity areas of population, housing, and economic data that had been previously collected by a city directory publisher.
- Provision of copies of the Census Bureau Metropolitan Map Series map sheets, as updated by the Commission staff in preparation for the 1980 census, to the Milwaukee Public School System as an aid in its research, information, and school census activities. Copies of these maps were also provided to Milwaukee Transit Services, Inc., for use in transit route planning and evaluation and to the Playground Division of the Bureau of Traffic Engineering of the City of Milwaukee for use as a general reference and resource material.
- Preparation of a proposal calling for the attachment of various small-area geographic codes to emergency medical treatment records for the Institute of Trauma and Emergency Medicine—a joint program of the Medical College of Wisconsin and Milwaukee County General Hospital. The geocoded records will be used as part of an Emergency Medical Information System (EMIS) being established by the Institute and will enable various types of geographic analyses of emergency medical cases to be conducted.
- Preparation of population estimates of selected age-sex-specific subgroups of the 1975 total resident population of all U. S. Postal Service zip code delivery areas in the Region for the Southeastern Wisconsin Health Systems Agency.
- Provision of address matching services using the Milwaukee GBF/DIME file to the Milwaukee County General Hospital research staff for use in studying the geographic distribution of the demand for certain types of patient services within Milwaukee County. Address matching services were also provided to a Milwaukee area savings and loan association for use in studying the geographic distribution of its customers.
- Provision of population, employment, and public financial resource data to the planning consultant conducting the joint solid waste management study for Washington and Waukesha Counties.
- Preparation of street indexes for Milwaukee County and portions of Ozaukee and Washington Counties for a Milwaukee area savings and loan association. These indexes identify the civil division, census tract, and zip code area location of individual street addresses and provide a means whereby these locations can be manually added to existing records containing a street address.

- Provision of a copy of the Milwaukee GBF/DIME file and copies of the Census Bureau Metropolitan Map Series sheets, as updated by the Commission staff in preparation for the 1980 census, to the City of Milwaukee to replace older versions of the file and maps previously supplied to the City by the Commission. The City has inserted various types of local codes, such as aldermanic districts, police districts, and school attendance zones, into the file, and uses the file as a general-purpose program monitoring, evaluation, and reporting device.

## 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 U. S. Bureau of the Census, the Commission provides staff services to Census Statistical Areas Committees in each county. The Commission also provides technical services directly to the Bureau in the form of base map preparation and maintenance, consultation with the Bureau, information provided to Census Bureau staff involved in planning the 1980 decennial Census, and geographic base file development and maintenance. The geographic base file is a computer-readable description of the geographic coordinates of block faces, the street address ranges, and the census statistical tabulating and reporting unit boundaries of an area. Since internal Census Bureau processing schedules require that all local coordinating agencies complete their 1980 census preparation prior to 1979, activity in this area during 1979 was considerably reduced from previous years' activity. The status of map and geographic base file coverage for the 1980 census in the Southeastern Wisconsin Region is shown on the accompanying map.

### Census Statistical Areas Committees

Division staff members serve as the census "key person" for three of the seven counties comprising the Region—Ozaukee, Walworth, and Washington. Division staff members serve on the Census Statistical Areas Committees for each of the remaining four counties, and supply staff support as requested. Having completed the remaining preparations for the 1980 Census of Population and Housing during 1977, the Census Statistical Areas Committees did not meet in 1979.

## Metropolitan Map Series Update and Maintenance

The Division maintains the Metropolitan Map Series (MMS) for the Kenosha, Milwaukee, and Racine urbanized areas. The MMS currently includes the original 36 maps published with the 1970 census reports and seven additional maps for western Waukesha County that were added for the 1980 census. To ensure adequate time for publishing the maps before the 1980 census, the U. S. Census Bureau required the MMS to be updated and completed in 1978. In 1979, Division staff time in this activity was limited to consulting with Census Bureau staff to resolve discrepancies and questions that arose during Census Bureau processing of the maps.

## Geographic Base File Update and Maintenance

The Division staff completed the update of the geographic base files for the Kenosha, Milwaukee, and Racine urbanized areas in 1978 in preparation for the 1980 census. As with the MMS maps, Division staff time in 1979 in this activity was limited largely to consulting with Census Bureau staff to resolve discrepancies and questions that arose during Census Bureau processing of the files. Initial Census Bureau processing of the files indicated that their quality was well within the potential error standard of 5 percent or less established nationally for file quality. The estimated error rates for the Kenosha, Milwaukee, and Racine files are 3.2 percent, 1.4 percent, and 1.4 percent, respectively.

As part of the ongoing cooperative efforts between the Commission and the Census Bureau to extend the file coverage in the Region, the Division staff during 1978 experimented with a Census Bureau-proposed procedure for accommodating coordinate house number systems within the existing file structure. A number of communities in Ozaukee, Washington, and Waukesha Counties utilize the coordinate system, although on a national basis this system is quite rare. It utilizes two base lines as "points of reference" and each house is assigned two numbers. One number relates to its distance from the north-south base line and the other number relates to its distance from the east-west base line. Thus an address of "W140 N15250 Wisconsin Street" would tell a person that the building with this address is located on a north-south street approximately one-half way into the 152nd



# **STATUS OF MAP AND GEOGRAPHIC BASE FILE COVERAGE FOR THE 1980 CENSUS**

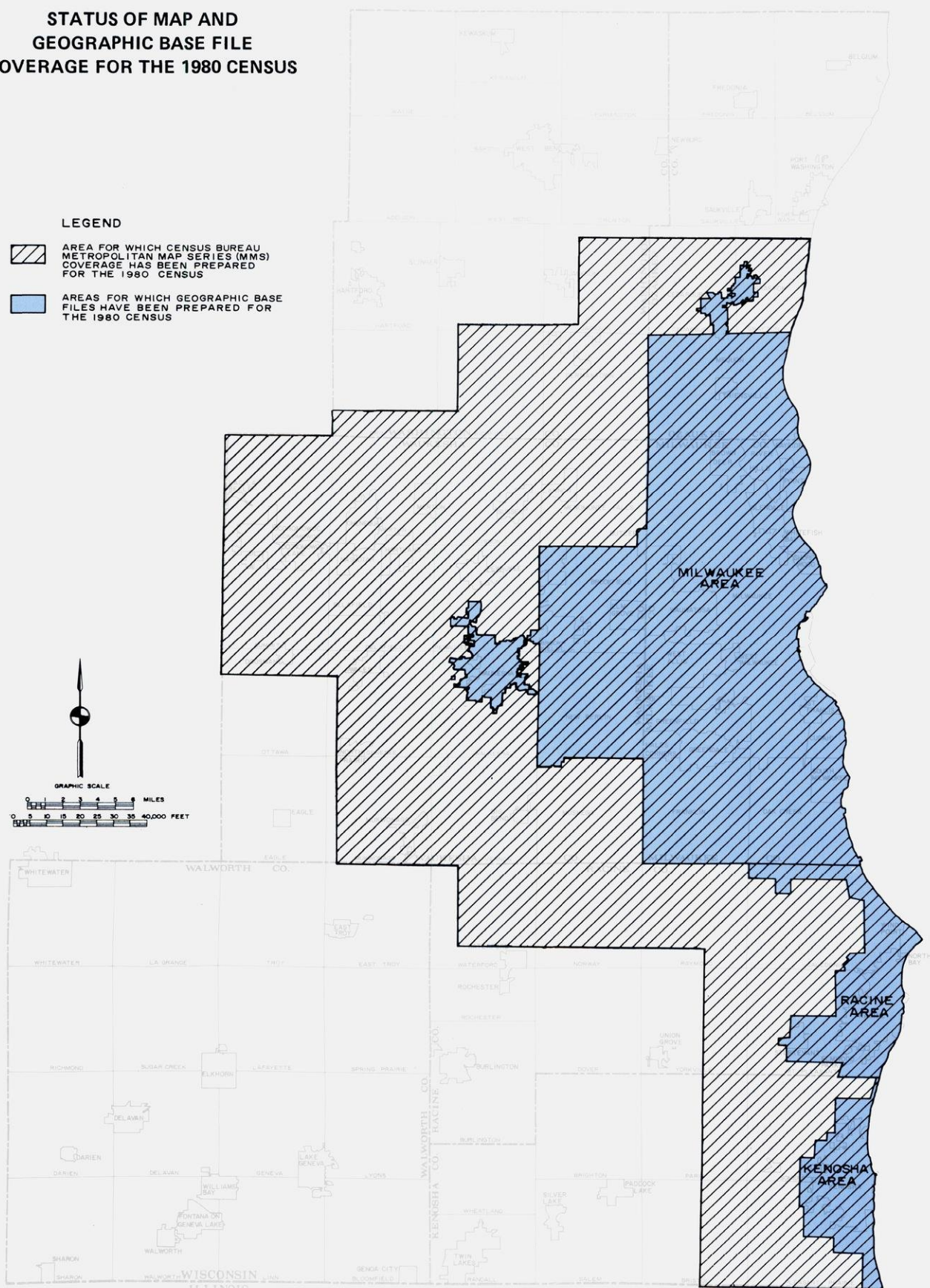
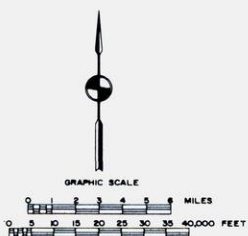
## **LEGEND**



AREA FOR WHICH CENSUS BUREAU  
METROPOLITAN MAP SERIES (MMS)  
COVERAGE HAS BEEN PREPARED  
FOR THE 1980 CENSUS



AREAS FOR WHICH GEOGRAPHIC BASE  
FILES HAVE BEEN PREPARED FOR  
THE 1980 CENSUS





“block” north of the point of reference. Further, Wisconsin Street is 140 “blocks” west of the point of reference. One disadvantage of the system is the fact that a house number can have up to 10 characters. The existing file structure can accommodate a maximum house number size of only six digits, and the Census Bureau has been reluctant to rewrite all of its file processing software to accommodate an addressing system that is quite uncommon nationally. During 1979, the Census Bureau programming staff was successful in implementing a procedure for incorporating coordinate addresses, thereby allowing further extension of the Milwaukee area file.

The geographic base files have a variety of local applications. Since completion of the update and edit operations, a number of address matching applications have been attempted with the files. In most cases, match rates in excess of 90 percent have been obtained. As the address matching software is improved through use and experience and as residual errors in the file are corrected, it is anticipated that the match rates will become even better. In addition to the address matching applications noted, the Division staff has utilized the files to prepare small geographic area estimates of employment utilizing place-of-work data obtained from the Wisconsin Department of Industry, Labor and Human Relations.

## **Journey-to-Work Data from the 1980 Census**

About one of every five households in the United States will receive a 1980 census questionnaire asking questions about the place of work, means of transportation to work, and travel time to work of employed household members. This place-of-work data will be useful to transportation planners in determining home-to-work travel patterns in individual communities. As part of the decennial census processing, clerks will manually assign geographic codes to work place addresses provided in the questionnaires by respondents. However, respondents frequently do not provide the complete place-of-work address information necessary to code the work place correctly to small areas such as census tracts and blocks. The employer name is often the only information given by the respondent.

To assist in ensuring that Census Bureau clerks have supplementary information available to them to correctly code incomplete place-of-work responses, the Division staff—at the request of the Census Bureau—during 1979 compiled and provided to the Census Bureau a list of the street addresses of all employers in the Southeastern Wisconsin Region having 100 or more employees. These lists will be used by Census Bureau clerks in coding the location of employers listed by respondents in answer to the place-of-work questions in the 1980 census questionnaire.



# COMMUNITY ASSISTANCE PLANNING DIVISION

## DIVISION FUNCTIONS

The Community Assistance Planning Division has primary responsibility for assisting local units of government in the Region in local planning efforts, thereby promoting coordination of local and regional plans and plan implementation actions. The Division provides five basic types of services: educational, advisory, review, project planning, and resident planning. The Division staff also is responsible for the conduct, on request, of urban district planning programs.

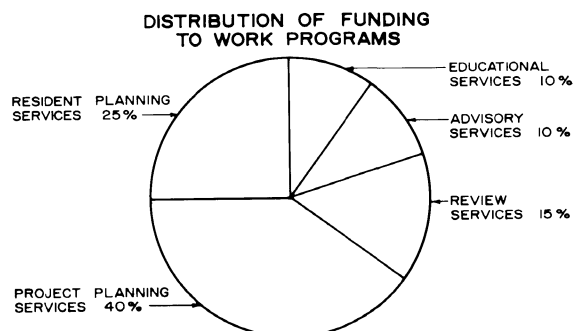
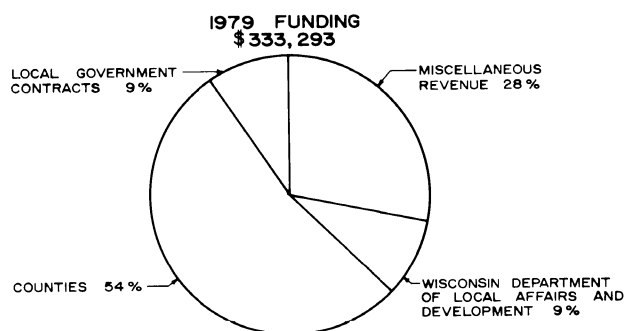
## EDUCATIONAL SERVICES

Educational services are provided to local units of government and citizen groups on request, and are directed at explaining the need for, and purposes of, continuing local, regional, and state planning programs, and the relationships that should exist between these different levels of planning. In addition, these efforts are directed at encouraging

the creation, organization, staffing, and financing of local planning programs. During 1979, educational efforts included the following:

- Presentations on the general scope of work done by the Commission and the details of specific work programs to local governmental, civic, and professional groups, such as the Waukesha County Council on Aging, the Citizens Environmental Assessment Committee of the Milwaukee Metropolitan Sewerage District, and Plan Commissions of the Cities of Elkhorn and New Berlin, the Village of Walworth, and the Towns of Eagle, Somers, and Summit.
- Participation in panel discussions on urban growth management issues at the annual conference of the Wisconsin Chapter of the American Planning Association, and at the annual conference of the Association of Wisconsin Planners.
- Participation in panel discussions on the importance of preserving prime agricultural lands and the details of the Wisconsin Farmland Preservation Program for the "Small is Beautiful" fair in Milwaukee—an effort sponsored by Congressman Henry S. Reuss—and for farmers in Kenosha County.
- Presentation to the Izaak Walton League, Milwaukee Chapter, on land use problems along the Lake Michigan shoreline.
- Conduct of a tour for interested individuals of the Village of Shorewood's nature area located on the Lake Michigan shoreline, including interpretive analyses of the vegetation found in the nature area.
- Conduct of the Commission's 1979 Annual Conference on the findings and recommendations of the regional water quality management plan.
- Preparation of six Commission newsletters discussing Commission planning programs and related activities. The newsletters are

## COMMUNITY ASSISTANCE PLANNING DIVISION



distributed to about 2,500 interested individuals and agencies. Major topics addressed included: the recommended regional water quality management plan, community assistance planning efforts, the proposed Milwaukee area freeway traffic management study, the Milwaukee Northwest Side/Ozaukee County transportation improvement study, a proposed electronic data processing system for criminal justice agencies, and recent trends in population growth and change in the Region.

- Participation and distribution to newspapers and radio and television stations of six news releases during the year pertaining to Commission work activities.
- Preparation of the Commission's 1978 Annual Report.

## ADVISORY SERVICES

Advisory services consist of the provision of basic planning and engineering data available in the Commission files to local units of government and private interests, and the provision on an ad hoc basis of technical planning and engineering assistance to local communities. Representative advisory services performed during 1979 include:

- Provision of technical data to federal flood insurance contractors and provision of assistance to municipal officials in the review of federal flood insurance study proposals for the City of Cedarburg and the Villages of Brown Deer, Fredonia, Germantown, Random Lake, and Saukville.
- Provision of data and advice concerning the interpretation of floodland limits to the City of Waukesha, the Village of Silver Lake, the Town of Salem, and Racine County.
- Participation in a panel of technicians providing guidance to the City of Oconomowoc Extraterritorial Planning Committee at monthly meetings, such guidance consisting of providing assistance in the preparation of an extraterritorial zoning ordinance designed to achieve both regional and local land use development objectives in the Oconomowoc area.
- Preparation of a proposed ward boundary map for the Town of Ottawa.

- Preparation of a memorandum evaluating the existing residential zoning districts in the City of New Berlin and proposing changes in those districts to better accommodate the urban land market and a sewered land development pattern.
- Preparation of a base map for the Village of Nashotah.
- Preparation of a large-scale planning base map for an industrial park area in the City of Kenosha.
- Preparation of proposed zoning text amendments for the Village of Lac La Belle designed to create a special shoreland overlay district.
- Documentation of procedural requirements for issuing conditional use permits in floodland areas compiled for the zoning administrator of the Village of Kewaskum.
- Conduct of a special site analysis and preparation of a special site development plan for a large undeveloped portion of an existing park site in the Village of Williams Bay.
- Provision of technical data and advice to the Walworth County Overall Economic Development Planning Committee through service on the Committee in a nonvoting capacity, assisting that Committee in the preparation of its annual action plan for improving the economic climate of the County.
- Provision of counsel and advice to the Racine County Emergency Telephone System Planning Committee through service on a local committee created to evaluate alternative means of complying with the state requirements governing the establishment of a 911 emergency telephone system.

## REVIEW SERVICES

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



implementation devices, and development proposals; review of federal and state grant applications under the U. S. Office of Management and Budget Circular A-95; review of environmental impact statements, reports, and assessments; review of flood hazards affecting individual properties; and review of applications for state income tax credit eligibility under the Wisconsin Farmland Preservation Act.

The following represent typical review services completed in 1979 by the Commission in the first review category:

- Review of and comment on 34 preliminary subdivision plats at the request of Kenosha, Racine, and Walworth Counties; the Cities of Burlington, Cedarburg, Hartford, and Muskego; the Villages of Butler, Sussex, and Waterford; and the Town of Genesee.
- Review of and comment on eight certified survey maps at the request of the City of Cedarburg and the Village of Sussex.
- Review of and comment on seven proposed zoning district map changes at the request of the Cities of Cedarburg and Franklin and the Village of Germantown.
- Review of and comment on local economic development, land use, recreation, health, and criminal justice plans at the request of Racine and Waukesha Counties, the City of Milwaukee, the Towns of Merton and Raymond, the Southeastern Wisconsin Health Systems Agency, and the Waukesha County Criminal Justice Coordinating Council.
- Review of and comment on proposed review guidelines for the implementation of the Wisconsin Environmental Policy Act (WEPA) at the request of the Wisconsin Department of Administration.

Division activities regarding the review of federal and state grant applications are summarized in the accompanying table. In total, review comments were provided for 496 applications for federal and/or state grants, loans, or mortgage insurance guarantees requesting in the aggregate more than \$866.9 million in federal and state financial assistance. Of the total 496 requests, 169, totaling \$315,650,454, were found to be in conformance with and serving to implement the adopted regional plan elements; 325, totaling \$549,551,363, were

#### A-95 REVIEWS: 1979

Review Category	Number of Reviews	Aggregate Amount of Federal and/or State Grant, Loan, or Mortgage Insurance Requests
Air Quality . . . . .	4	\$ 5,044,669
Community Action— Social Services . . . . .	200	579,647,660
Community Development Block Grants . . . . .	26	39,505,230
Community Facilities . . . . .	3	1,470,000
Natural Resource Conservation . . . . .	30	28,895,622
Historic Preservation . . . . .	5	3,749,757
Housing . . . . .	45	27,197,944
Park and Open Space . . . . .	39	5,989,881
Law Enforcement . . . . .	82	10,384,757
Sanitary Sewerage . . . . .	10	30,905,633
Solid Waste . . . . .	3	3,250,000
Transportation . . . . .	46	127,295,867
Water Supply . . . . .	3	3,644,797
Total	496	\$866,981,817

found to be not in conflict with the adopted regional plan elements; and 2, totaling \$1,780,000, were found to be in conflict with the adopted regional plan elements.

Division activities regarding the review of environmental impact statements, reports, and assessments are summarized in the accompanying table. In reviewing environmental impact statements, comments are provided by the Commission relating the projects and the data contained in the statements to the adopted regional plans.

Flood hazard reviews of residential properties are requested by realtors and lending institutions. During 1979 the Division staff conducted a total of 353 flood hazard reviews, as shown distributed by county in the accompanying table.

The final type of review service performed by the Division is the review of applications for farmland tax credit eligibility. The Division locates each farm proposed to be preserved to determine whether the lands involved have been delineated on the regional land use plan as "prime agricultural lands." During 1979, the reviewed 36 applications for farmland preservation contracts, which would result in the preservation of an additional 6,074 acres of farmland in southeastern Wisconsin. The distribution of farmland preservation applicants is shown in the accompanying table. The total

# ENVIRONMENTAL IMPACT STATEMENT AND PRELIMINARY ENVIRONMENTAL REPORT REVIEWS: 1979

Document Received	Requesting Agency
EIS for Redevelopment of the Village District of the City of Wauwatosa	City of Wauwatosa
EIS for Proposed Demolition of Plankinton House in the Marquette Urban Renewal Area	U. S. Department of Housing and Urban Development
EIS for Proposed Federal Building in Milwaukee	U. S. General Services Administration
EIS on Extension of Electric Service Rules	Wisconsin Public Service Commission
EIS for the Proposed Franklin Landfill and Development Project	City of Franklin
PER on the 10 Sites Being Considered for Correctional Institutions in Southeastern Wisconsin	Wisconsin Department of Administration and Department of Health and Social Services
PER for the Proposed Little Muskego Lake Rehabilitation Project, City of Muskego	Wisconsin Department of Natural Resources
PER for Three Alternative Systems (Mounds) for Onsite Individual Wastewater Disposal in Wisconsin	Wisconsin Department of Health and Social Services

## FLOOD HAZARD REVIEWS: 1979

County	Number of Reviews
Kenosha . . . . .	9
Milwaukee . . . . .	210
Ozaukee . . . . .	9
Racine. . . . .	17
Walworth. . . . .	2
Washington . . . . .	6
Waukesha. . . . .	100
Total	353

## FARMLAND PRESERVATION REVIEWS: 1979

County	Number of Applications
Kenosha . . . . .	12
Milwaukee . . . . .	--
Ozaukee . . . . .	--
Racine. . . . .	9
Walworth. . . . .	-- <sup>a</sup>
Washington . . . . .	6
Waukesha. . . . .	9
Total	36

acreage qualified for participation in the Farmland Preservation Program is shown in the table on page 21 of this report.

## PROJECT PLANNING SERVICES

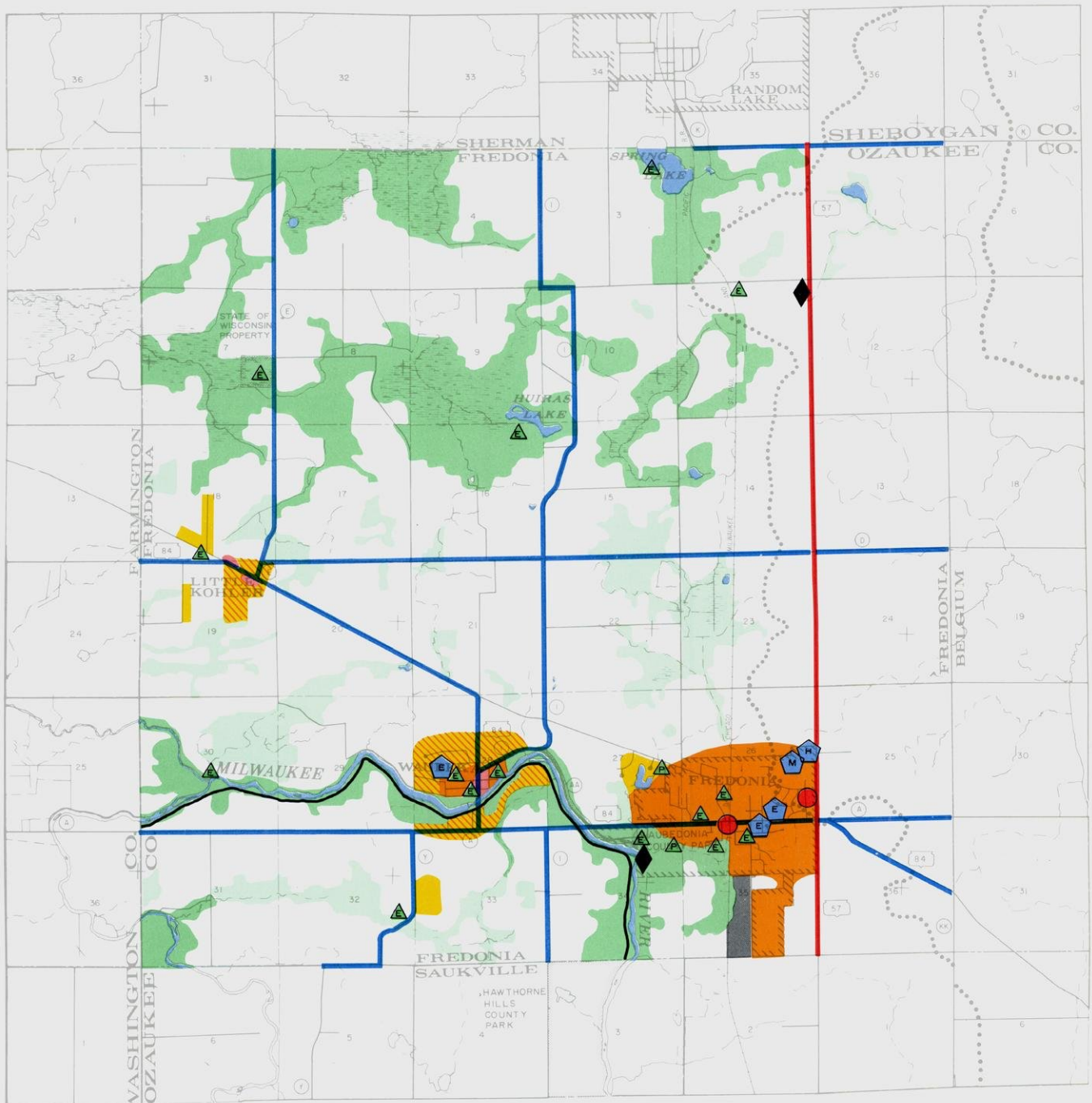
Project planning services involve the conduct, at cost, for local units of government of detailed planning studies resulting in the preparation of local plans and plan implementation devices. The following is a list of examples of project planning efforts conducted during 1979:

- Preparation of a land use plan for the Town of Fredonia, together with accompanying new zoning district maps and zoning ordi-

<sup>a</sup> Walworth County has adopted an "exclusive" agricultural zoning ordinance, which has been approved by the Wisconsin Department of Agriculture, Trade and Consumer Protection. Accordingly, farmers whose land is zoned for agricultural use are automatically eligible for tax credits. A total of 639 farmers in Walworth County have received such credits as of 1979. These farms are not reviewed on a case-by-case basis by SEWRPC.

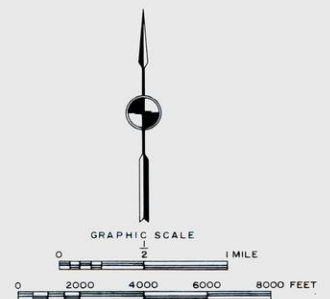
nance. The plan is set forth in SEWRPC Community Assistance Planning Report No. 33, A Land Use Plan for the Town of Fredonia—2000, Ozaukee County, Wisconsin. The plan, which is summarized on the accompanying map, seeks to refine, detail, and implement the adopted regional land use

# RECOMMENDED LAND USE PLAN FOR THE TOWN OF FREDONIA: 2000



## LEGEND

- |   |  |  |
|---|--|--|
| SUBURBAN DEVELOPMENT<br>(0.5-0.6 DWELLING UNITS PER NET RESIDENTIAL ACRE)             | PARKS<br>E EXISTING<br>P PROPOSED                                  | SEWAGE TREATMENT PLANT                       |
| LOW-DENSITY URBAN DEVELOPMENT<br>(0.7-2.2 DWELLING UNITS PER NET RESIDENTIAL ACRE)    | PRIMARY ENVIRONMENTAL CORRIDOR                                     | WATER  |
| MEDIUM-DENSITY URBAN DEVELOPMENT<br>(2.3-6.9 DWELLING UNITS PER NET RESIDENTIAL ACRE) | OTHER ENVIRONMENTALLY SIGNIFICANT LANDS                            | ARTERIAL STREET AND HIGHWAY SYSTEM           |
| COMMUNITY RETAIL AND SERVICE CENTER   | AGRICULTURAL AND OTHER RURAL LAND                                  | STATE TRUNK                                  |
| COMMERCIAL  | SCHOOLS<br>E ELEMENTARY SCHOOL<br>H HIGH SCHOOL<br>M MIDDLE SCHOOL | COUNTY TRUNK                                 |
| INDUSTRIAL  |  | PROPOSED LOCAL RECREATIONAL CORRIDOR (TRAIL) |



plan. The new zoning maps for the Town of Fredonia were prepared using SEWRPC 1" = 400' scale aerial photographs as a base upon which to delineate the zoning district boundaries. By using such aerial photos for basically rural zoning purposes, the zoning administrator can readily identify specific land features, including woodlands and wetlands, that can be used as a reference in the field. The recommended zoning districts for the Town of Fredonia are shown in composite form on the accompanying map.

- Preparation of a detailed neighborhood unit development plan for the Quarry Ridge Neighborhood in the City of Burlington. Such plans are viewed by the Commission as an important means of guiding and shaping urban land use development and redevelopment in the public interest at the local level. The Quarry Ridge plan is documented in SEWRPC Community Assistance Planning Report No. 29, A Development Plan for the Quarry Ridge Neighborhood, City of Burlington, Racine County, Wisconsin, and is graphically summarized on the accompanying map. Neighborhood plans, such as the Quarry Ridge plans, suggest future collector and land access street alignments and attendant block configurations, as well as locations within the neighborhood considered to be best suited for institutional, recreational, and commercial uses and for various kinds of residential uses. Such plans recommend areas that should be protected from intensive development for environmental reasons and indicate the need to reserve major drainage-ways and utility easements.
- Preparation of a detailed neighborhood development plan for the Delrock Neighborhood in the City of Delavan. This plan is documented in SEWRPC Community Assistance Planning Report No. 25, A Plan for the Delrock Neighborhood, City of Delavan, Walworth County, Wisconsin.
- Preparation of a study design for a two-phase planning project to be conducted jointly by the Village and Town of Pewaukee. The study design was prepared by the Commission staff under the guidance of a joint planning committee formed by the Village and the Town. The first phase of the study is to culminate in the preparation of a joint recommended land use plan for the Village

and the Town. The second phase is to involve analysis of alternative governmental organizational arrangements ranging from continuing the operation of two separate units of government to the joint provision of certain facilities and services by the two governments to a complete consolidation of the two governments. The two-phase study is proposed to be conducted over the period 1980-1981.

- Completion and publication of the final zoning ordinance text and maps for the Villages of Butler, Germantown, and Kewaskum. Such ordinances and maps were adopted by the respective governing bodies during 1979 and all seek to carry out the land use and floodland management recommendations contained in adopted Commission plans.
- Completion and publication of a new land division ordinance for the Village of Silver Lake. This ordinance was adopted by the Village Board during 1979.
- Completion of zoning ordinance test amendments and map amendments dealing with floodland management for the Village of Saukville. These amendments were adopted by the Village Board during 1979.

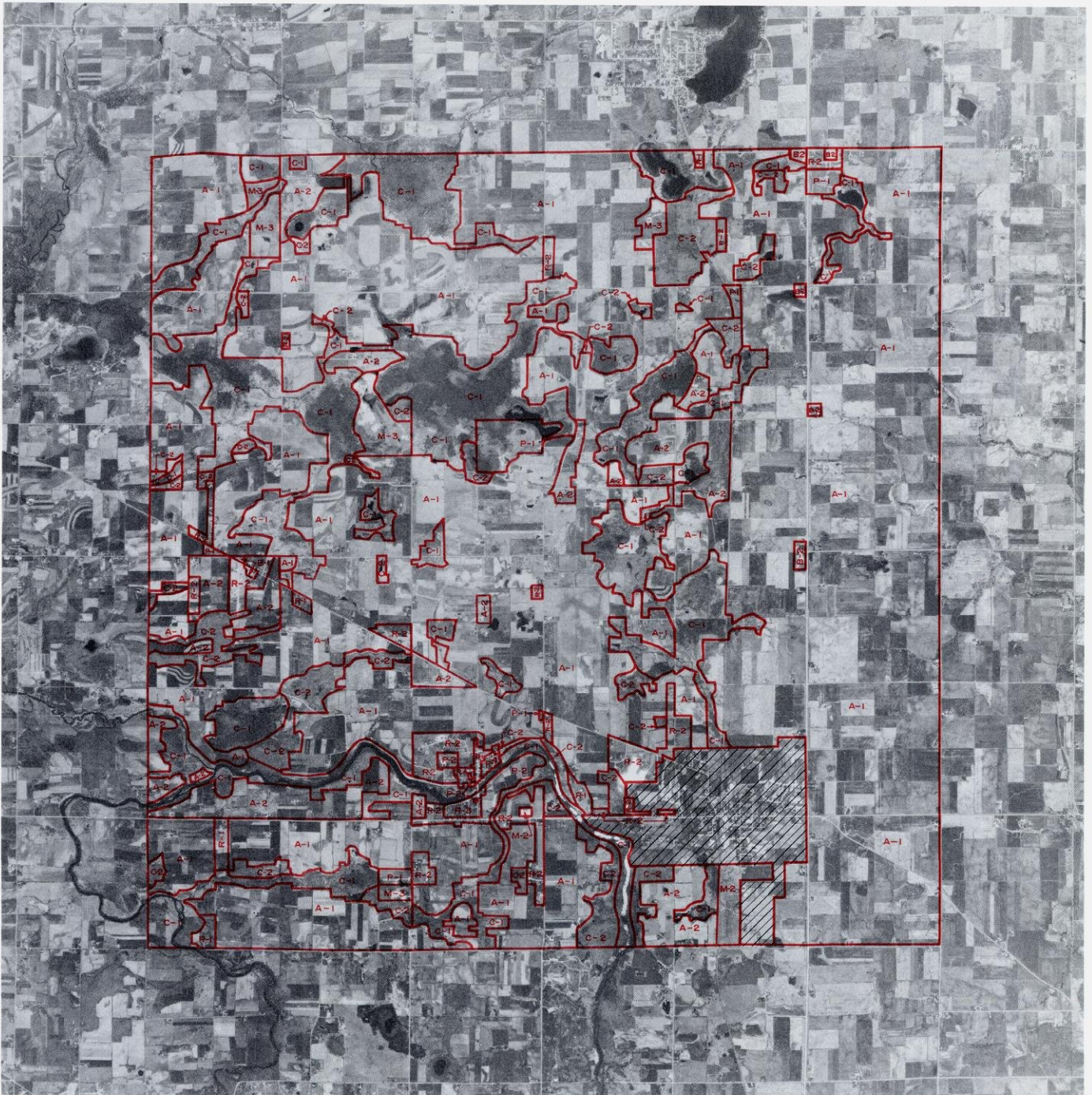
## RESIDENT PLANNING SERVICES

The Commission provides part-time resident staff assistance, on request, to local units of government. This type of assistance involves a commitment by the Commission staff to attend 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 eventual attainment of local full-time planning staffs.

During 1979 resident planning assistance was provided on a contractual basis to the Cities of Burlington, Cedarburg, Franklin, and Hartford, and to the Villages of Germantown and Sussex. Collectively, these services required Division staff attendance and participation at a total of 69 plan commission, village board, and city council meetings. In addition to attending meetings, the Commission staff maintained office hours in the city halls of two cities: the City of Franklin and the City of Hartford. During 1979 the Commission staff maintained such office hours for 53 working days at the City of Franklin City Hall and 48 work-



## RECOMMENDED ZONING MAP FOR THE TOWN OF FREDONIA



### LEGEND

A - 1 AGRICULTURAL

A - 2 AGRICULTURAL

R-1 SINGLE-FAMILY RESIDENTIAL

**R - 2** SINGLE-FAMILY RESIDENTIAL

**R-3** SINGLE-FAMILY RESIDENTIAL

R - 4 SINGLE-FAMILY RESIDENTIAL

B - 1 URBAN BUSINESS

## B-2 HIGHWAY BUSINESS

**M-1**      **URBAN INDUSTRIAL**

M-2 GENERAL INDUSTRIAL

M-3      EXTRACTIVE

P-1 PARK

P-2 URBAN INSTITUTIONAL

P-3 RURAL INSTITUTIONAL

C-1 LOWLAND CONSERVANCY

C-2 UPLAND CONSERVANCY

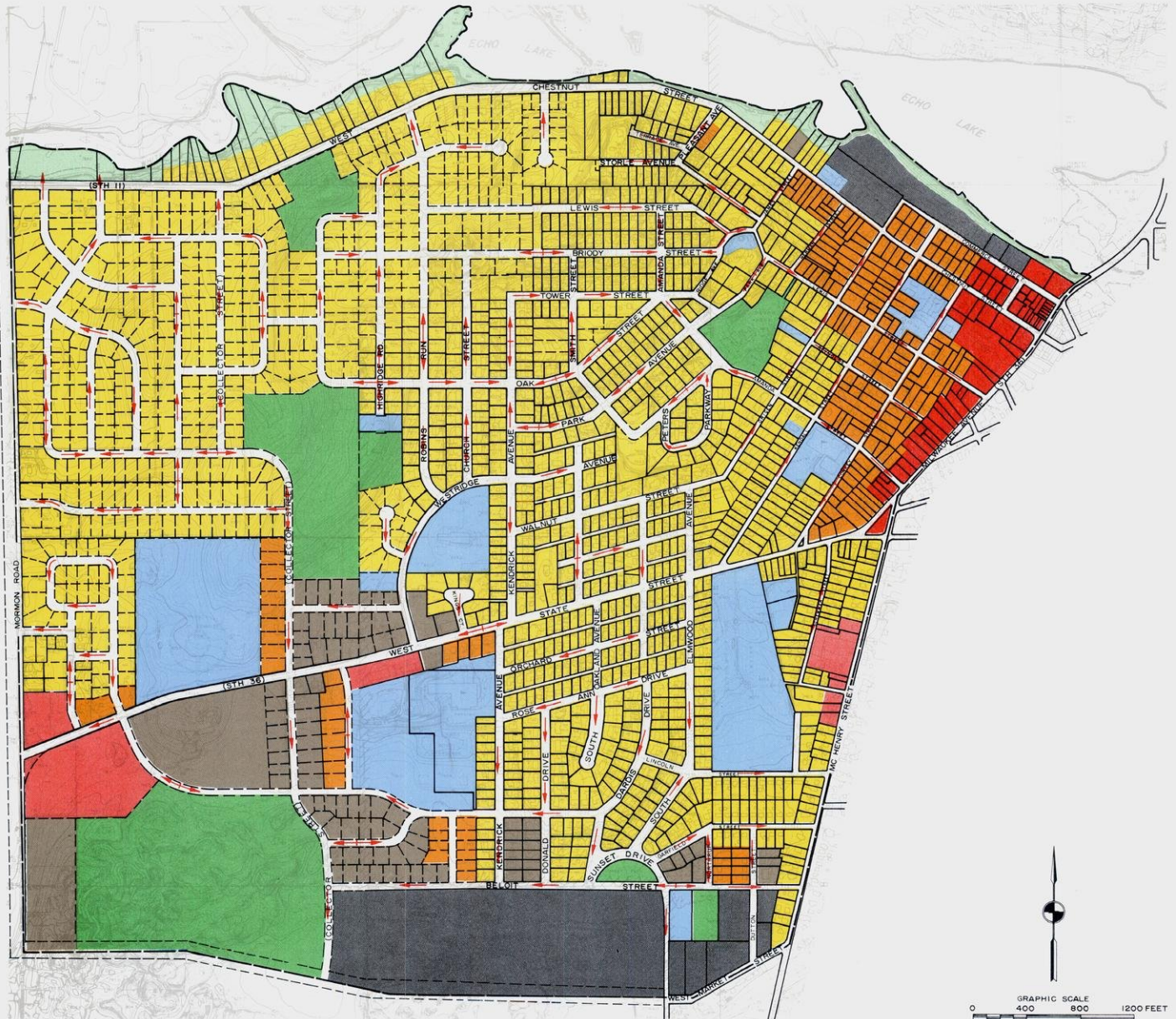
 VILLAGE OF FREDONIA

GRAPHIC SCALE

1 MILE



# RECOMMENDED NEIGHBORHOOD UNIT DEVELOPMENT PLAN FOR THE QUARRY RIDGE NEIGHBORHOOD



## LEGEND

	NEIGHBORHOOD BOUNDARY		COMMUNITY COMMERCIAL		PROPOSED ARTERIAL STREETS AND HIGHWAYS DIVIDED
	EXISTING PROPERTY BOUNDARY: 1974		GOVERNMENTAL AND INSTITUTIONAL		EXISTING ARTERIAL STREETS AND HIGHWAYS
	PROPOSED PROPERTY BOUNDARY LINE		PARK AND OPEN SPACE		PROPOSED COLLECTOR STREETS (66' R.O.W. WIDTH)
	SINGLE-FAMILY RESIDENTIAL		PRIMARY ENVIRONMENTAL CORRIDOR		EXISTING MINOR ACCESS STREETS (66' R.O.W. WIDTH)
	TWO-FAMILY RESIDENTIAL		INDUSTRIAL		PROPOSED MINOR ACCESS STREETS (66' R.O.W. WIDTH)
	MULTIPLE-FAMILY RESIDENTIAL				SURFACE DRAINAGE DIRECTION
	NEIGHBORHOOD COMMERCIAL				SURFACE DRAINAGE DIVIDE

ing days at the City of Hartford City Hall. Where the volume of hours warrants such staff assignment, the placement of Commission staff in municipal buildings provides an effective and convenient way for local public officials and individual citizens to meet with Commission staff members and discuss development problems.

#### **DISTRICT PLANNING SERVICES**

The Commission has encouraged the creation of subregional districts to conduct comprehensive community planning programs. In past years, such programs were completed for two urban development-oriented districts—the Kenosha Planning District, consisting of the City of Kenosha and the Towns of Pleasant Prairie and Somers, and the Racine Urban Planning District, consisting of the City of Racine, the Villages of Elmwood Park, North Bay, Sturtevant, and Wind Point, and the Towns of Caledonia and Mt. Pleasant. Comprehensive community development plans for these districts have been formally adopted by the Commission.

The Kenosha Planning District comprehensive plan was completed in 1967. Late in 1979, the City of Kenosha asked the Commission to assist it in reviewing, updating, and extending the previously adopted plan. At year's end, the Commission had authorized the Commission staff to take steps to reconstitute and reconvene an advisory committee for the Kenosha Planning District that would oversee and guide this new work effort.

Also during 1979, the Commission staff began discussions with officials from the Villages of Fontana on Lake Geneva, Walworth, and Williams Bay concerning the creation of a Geneva Lake West Urban Planning District. These three villages, which are physically contiguous and encompass the western end of Lake Geneva in Walworth County, expressed interest in jointly preparing a comprehensive land use development plan. At the request of officials from these communities, the Commission prepared an outline of a study design for such a joint community plan. This outline was under consideration by these communities at the end of the year.





# CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

## DIVISION FUNCTIONS

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

The Division also serves as a regional coordinating center for the conduct of large-scale topographic and cadastral mapping efforts and the collation of horizontal and vertical survey control data. This function includes the preparation on request of contracts and specifications for large-scale mapping efforts by local units of government. Finally, a major Division function involves final report production, including editing, type composition, proofreading, illustration preparation, offset printing, and binding.

## BASE MAPPING

During 1979, the Division staff updated the Commission county planning base maps in the 1" = 2000' scale series using Wisconsin Department of Transportation state aid mileage summary maps. The updating effort included the making of changes in civil division corporate limit lines to reflect recent annexations and incorporations.

## TOPOGRAPHIC MAPPING AND SURVEY CONTROL

The Commission prepares and encourages local units of government in the Region to prepare 1" = 100' scale and 1" = 200' scale, 2' contour interval topographic maps based on a Commission-recommended monumented control survey net-

work, relating the U. S. Public Land Survey System to the State Plane Coordinate System. The Division assists local communities in the preparation of contracts and specifications for many of these programs. All of the horizontal and vertical control survey data obtained as a part of these mapping efforts are compiled by the Division. The Commission thus serves as a center for the collection, collation, and coordination of such control survey data throughout the Region.

The accompanying map shows those areas of the Region for which large-scale topographic maps have been or are being prepared to Commission-recommended standards. As shown in the accompanying figure and table, this area totals 967 square miles, or nearly 36 percent of the total area of the Region. A total of 5,336 U. S. Public Land Survey corners in the Region have been or are being relocated, monumented, and coordinated, representing over 45 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 nearly 300 inquiries for such data during 1979 alone.

## REPRODUCTION SERVICES



In addition to serving all other Commission divisions through in-house reproduction of draft reports and letters, the Division provided reproduction services for local units of government and private interests. About 3,357 prints of aerial photographs of portions of the Region were reproduced, along with nearly 318 soil map prints and about 1,116 prints of maps in the Commission base map series. Aerial photographs were purchased primarily by local units of government, utilities, realtors, retail businesses, and service and manufacturing companies. Soil photo prints and base maps were purchased primarily by realtors, utilities, surveyors, engineers, and individual property owners.

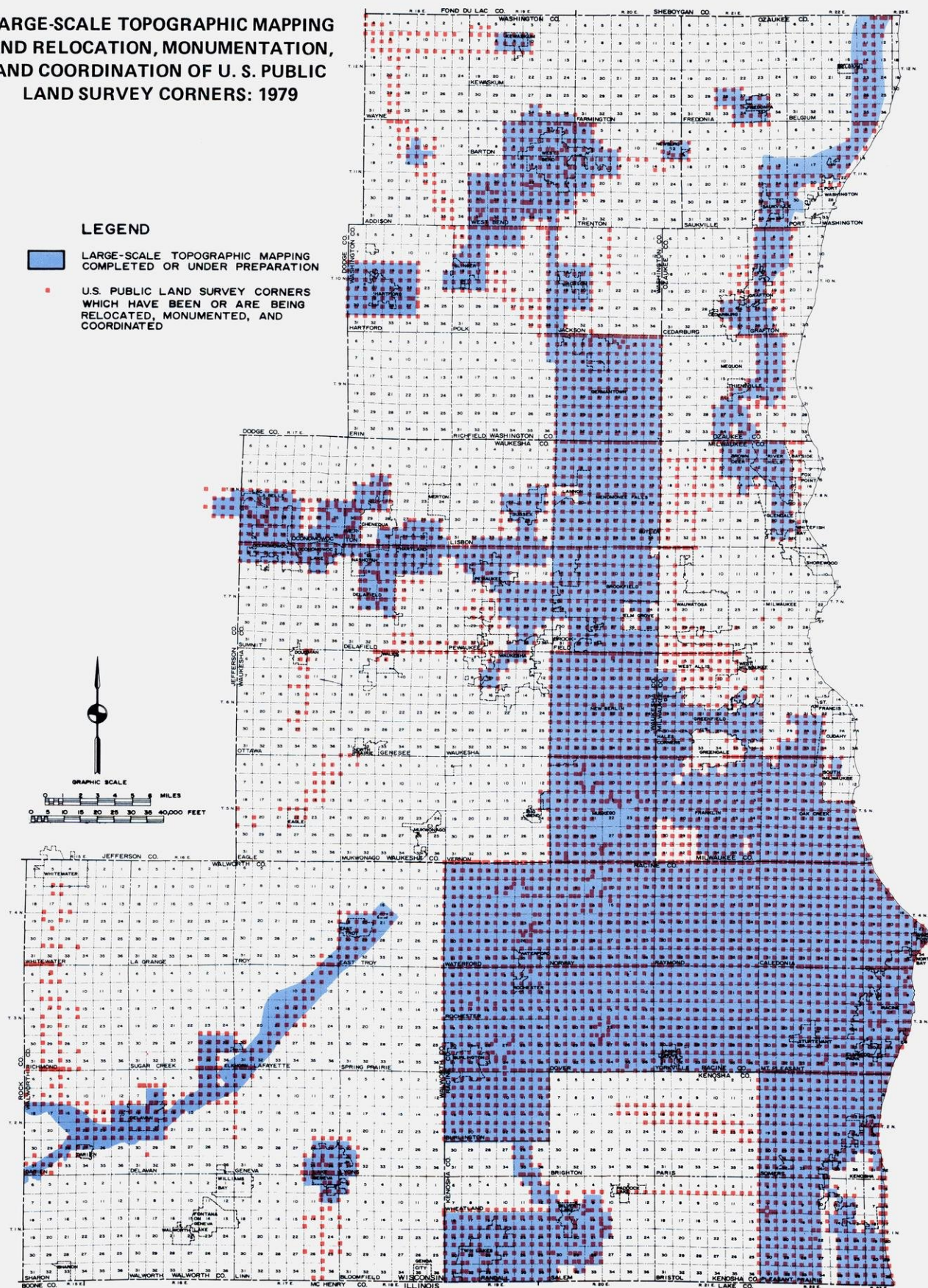
## FINAL REPORT PRODUCTION

During 1979 the Division had responsibility for production of the following Commission publications:

# LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1979

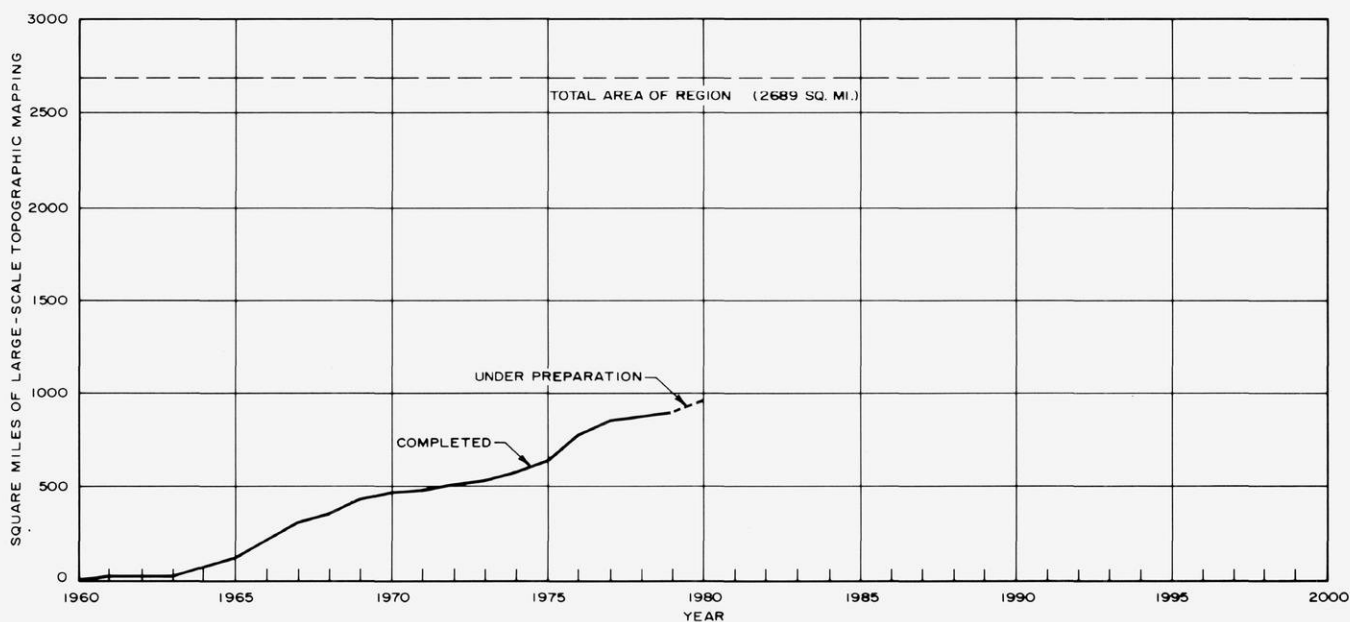
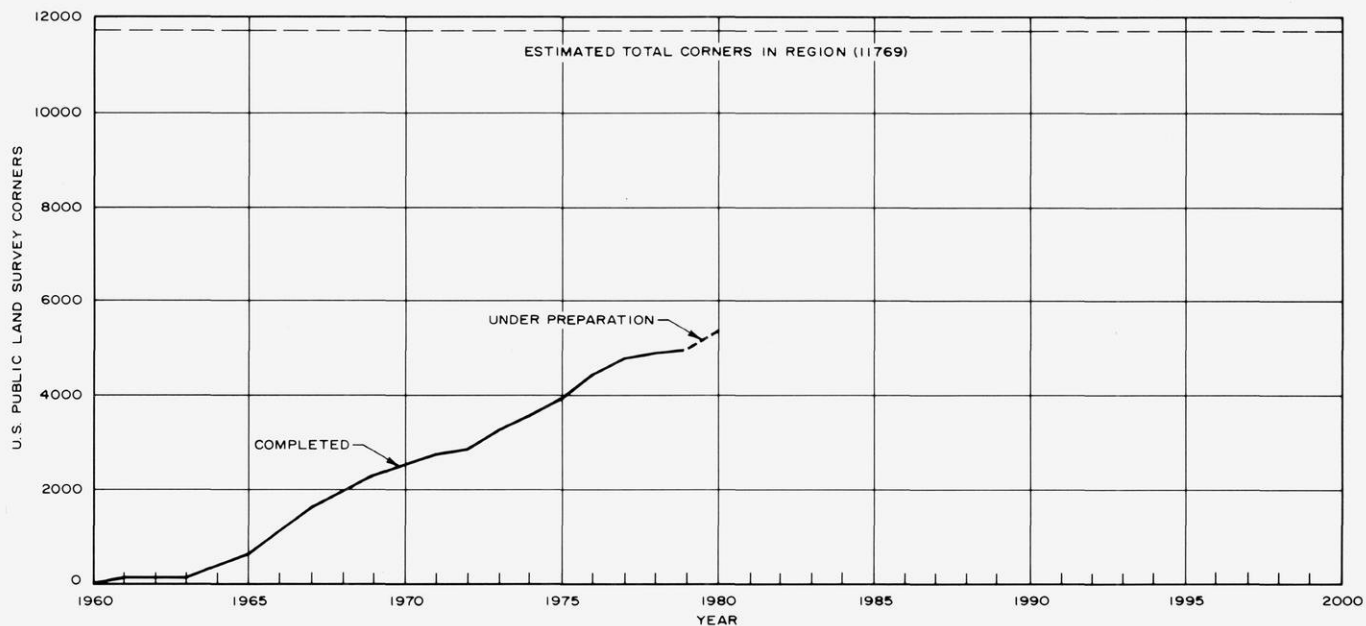
## LEGEND

-  LARGE-SCALE TOPOGRAPHIC MAPPING COMPLETED OR UNDER PREPARATION
-  U. S. PUBLIC LAND SURVEY CORNERS WHICH HAVE BEEN OR ARE BEING RELOCATED, MONUMENTED, AND COORDINATED





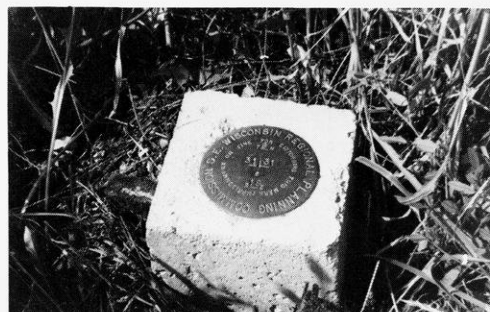
# STATUS OF U. S. PUBLIC LAND SURVEY SECTION AND QUARTER SECTION CORNER RELOCATION, MONUMENTATION, AND COORDINATION AND LARGE-SCALE TOPOGRAPHIC MAPPING IN THE REGION: 1960-1980



## PROSPECTUSES

- Pike River Watershed Planning Program Prospectus, April 1979, 67 pages.
- Milwaukee Area Freeway Traffic Management System Study Prospectus, June 1979, 55 pages.
- Overall Work Program—1980 Southeastern Wisconsin Regional Planning Commission, November 1979, 458 pages.

## TYPICAL SEWRPC MONUMENT



**LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION,  
AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1979**

County	Total Area (square miles)	Area (square miles) of Large-Scale Topographic Mapping Completed or Under Preparation				
		Wisconsin Department of Transportation	SEWRPC	Local	Total	Percent
Kenosha . . . .	278	--	27.75	85.75	113.50	40.83
Milwaukee . . .	242	--	11.00	79.75	90.75	37.50
Ozaukee . . . .	234	26.75	24.25	2.00	53.00	22.65
Racine. . . . .	340	--	25.50	314.50	340.00	100.00
Walworth. . . .	578	30.25	--	22.75	53.00	9.17
Washington . .	436	1.50	22.75	82.50	106.75	24.48
Waukesha. . . .	581	1.25	78.75	130.00	210.00	36.14
Region	2,689	59.75	190.00	717.25	967.00	35.96

County	Estimated Total Corners	Number of U. S. Public Land Survey Corners Which Have Been or Are Being Relocated, Monumented, and Coordinated				
		Wisconsin Department of Transportation	SEWRPC	Local	Total	Percent
Kenosha . . . .	1,183	55	173	413	641	54.18
Milwaukee . . .	1,084	71	46	501	618	57.01
Ozaukee . . . .	1,070	104	175	21	300	28.04
Racine. . . . .	1,523	--	172	1,351	1,523	100.00
Walworth. . . .	2,521	233	--	118	351	13.92
Washington . .	1,811	127	153	437	717	39.59
Waukesha. . . .	2,577	109	485	609	1,203	46.68
Region	11,769	699	1,204	3,450	5,353	45.48

*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.*

- Oak Creek Watershed Planning Program Prospectus, December 1979, 67 pages.

#### PLANNING REPORTS

- No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume Two, February 1979, 617 pages.
- No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume Three, June 1979, 309 pages.

#### ANNUAL REPORTS

- 1978 Annual Report, July 1979, 176 pages.

#### TECHNICAL REPORTS

- No. 22, Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977, September 1979, 71 pages.

#### COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 25, A Plan for the Delrock Neighborhood, City of Delavan, Walworth County, Wisconsin, January 1979, 56 pages.
- No. 27, A Park and Open Space Plan for the Town of Eagle, April 1979, 80 pages.



- No. 28, Oconomowoc Area Traffic Management Plan, City of Oconomowoc, Waukesha County, Wisconsin, December 1979, 214 pages.
- No. 29, A Development Plan for the Quarry Ridge Neighborhood, City of Burlington, Racine County, Wisconsin, July 1979, 60 pages.
- No. 30, Whitewater Area Rail Service Plan, August 1979, 143 pages.
- No. 32, Recommended Electronic Data Processing and Transmittal System for Criminal Justice Agencies in Southeastern Wisconsin, September 1979, 62 pages.
- No. 33, A Land Use Plan for the Town of Fredonia: 2000, September 1979, 55 pages.
- No. 34, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980, December 1979, 93 pages.

## CONFERENCE AND PUBLIC HEARING PROCEEDINGS

- Proceedings of the Eleventh Regional Planning Conference, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, April 19, 1979, 107 pages.
- Minutes of Public Informational Meeting on Transportation System Problem and Deficiency Identification—Ozaukee County, Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study, September 19, 1979, 69 pages.
- Minutes of Public Informational Meetings on Transportation System Problem and Deficiency Identification—Milwaukee County, Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study, November 13, 1979 and November 15, 1979, 83 pages.

## NEWSLETTERS

- Volume 19, Nos. 1-6, 190 pages.

## OTHER

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980-1984, December 1979, 287 pages.



# DATA PROCESSING AND SYSTEMS ENGINEERING DIVISION

## DIVISION FUNCTIONS

The Commission's Data Processing and Systems Engineering Division provides basic support to all other Commission divisions. The Division is responsible for maintaining a regional planning data bank that has been developed over an 18-year period. The Division is responsible for processing requests for retrieval of these data, with such requests coming not only internally from other divisions but externally from local units of government, state and federal agencies, and private interests. The Division also provides support to other Commission Divisions in the development and application of simulation models. Finally, the Division provides special data processing services to member local units of government.

## REGIONAL PLANNING DATA BANK

The Division maintains a master file of regional planning information on more than 6,000 reels of magnetic tape, representing approximately 2,700 active data files. This permits the efficient filing, conversion, and retrieval of planning and engineering data essential to the execution of areawide comprehensive planning. The file's basic unit of geographic reference is the U. S. Public Land Survey quarter section. The file is, however, also organized to permit ready retrieval of data for various other geographic units, such as civil divisions, census tracts, traffic analysis zones, special planning analysis areas, and watersheds.

During 1979 the Commission used an IBM System 370 Model 148 central processing unit. The Model 148 has 2,000,000 bytes of main memory storage and has attached to it five high-speed magnetic tape drives, a 1,200-line-per-minute printer, and 2.5 billion characters of "on-line" high-speed magnetic disk storage. Two IBM 3742 data stations are maintained for entering data into the main computer using magnetic diskettes. Also attached to the system are 25 IBM 3278 display station terminals through which staff engineers, planners, and computer programmers can enter and retrieve

data and use computer programs. In addition to the "in-house" terminal equipment, the System 370 Model 148 has attached to it 26 "remote" display stations and printers for use by the six local communities to which the Commission provides certain community assistance data processing services.

During 1979 about 180 "internal" requests for data retrieval were processed. These requests resulted in the preparation of more than 750 data reports for use in the Commission's planning work and other public and private planning efforts. The 180 requests represented approximately one-third of the Commission's computer usage during 1979. The other two-thirds was made up of simulation model applications and community assistance data processing services.

## SYSTEMS ENGINEERING

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

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

## DATA PROCESSING SERVICES TO LOCAL GOVERNMENTS

Since its inception, the Commission has offered to its member units of government special services, including professional advice on the selection of computer systems and the provision of special data processing services. Direct data processing services have been provided in the traditional "batch" mode of processing where the community delivers data to the Commission to process and the Commission returns appropriate reports and materials to the community. In 1979 the Commission continued to offer interested communities the opportunity to control and process their own data through the "on-line" use of small computer terminals attached to the Commission's Model 148 computer via telephone lines. These terminals give the community the power of a large computer system at the price of a small computer.

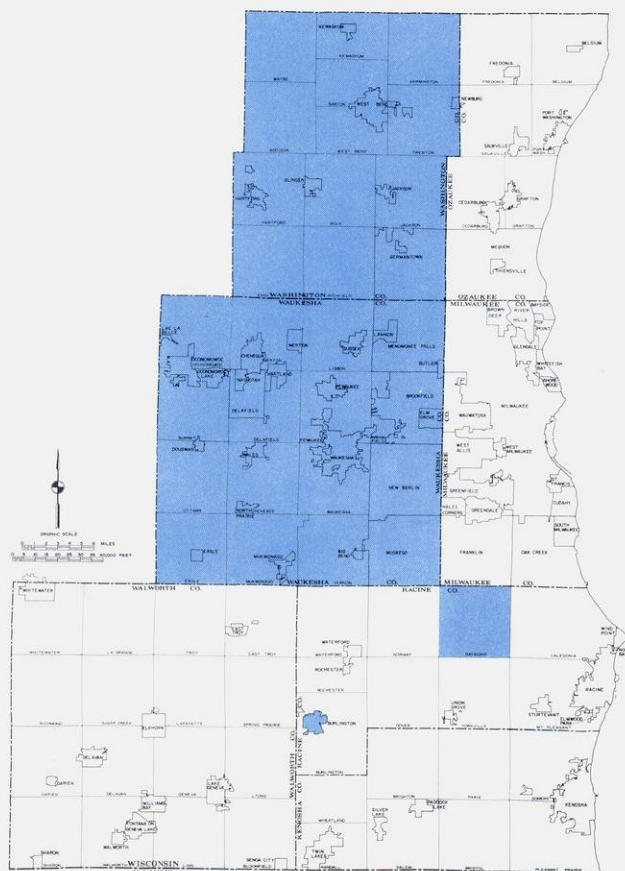
During 1979 services were provided to communities utilizing both methods of processing. Some communities used both methods, doing some data processing in the "batch" mode and some data processing in the "on-line" mode.

One of the services provided in the "batch" mode is the tax bill processing system, which provides communities with property tax assessment rolls and tax bills. Throughout 1979 these property tax-related services were provided at cost to 59 communities in the Region, as shown on the accompanying map. Another service provided in the "batch" mode is the payroll processing system, which was provided to 14 school districts, one county, one city, and one village in the Region, as shown on the accompanying map. Another accompanying map shows those communities to which the Commission provided voter registration and poll list production services in the "batch" mode.

In addition to the above services, the Commission provided "batch" services to one town—the Town of Allenton—and one village—the Village of Kewaskum—in the area of utility billing, services to one school district—Waukesha—in the area of school census, and services to one county—Racine—in the area of welfare check processing.

Also during 1979, the Commission data processing staff completed the conversion of Waukesha County's NCR computer programs to make them usable on the Commission's computer system. During 1979 Waukesha County processed all of its applications in the areas of general account-

## LOCAL COMMUNITIES USING SEWRPC FOR PROPERTY TAX DATA PROCESSING



ing, payroll, register of deeds accounting, sheriff wants and warrants and highway accident frequency processing, personnel management, and other miscellaneous report generators on the Commission computer system.

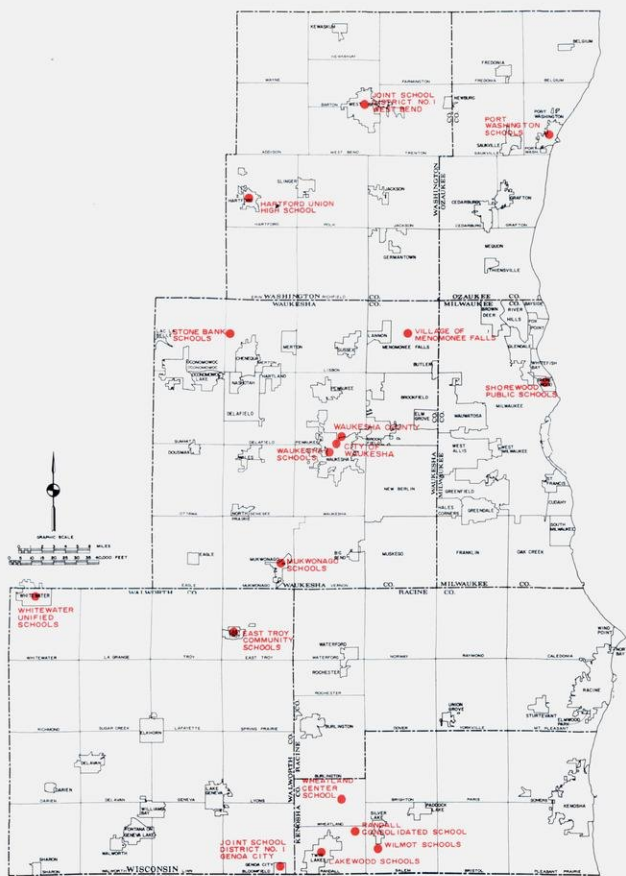
In the "on-line" processing mode, the Commission has installed computer terminals in two counties and four cities. The accompanying maps show the location of the terminals and the applications which were processed from those terminals during 1979.

### Criminal Justice Report

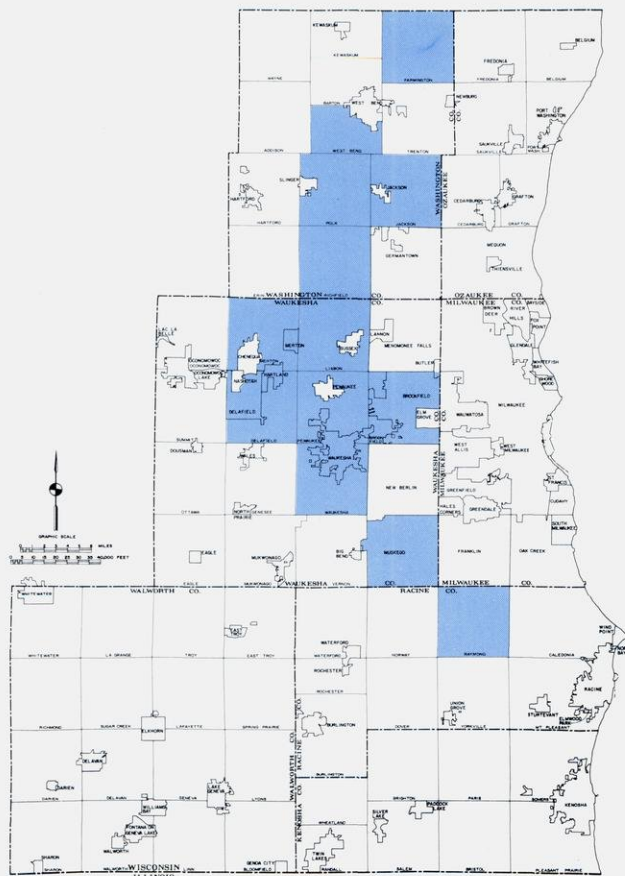
During 1979 the Commission received a request from the Southeast Wisconsin Criminal Justice Planning Council to conduct a study of the need for, and feasibility of, applying electronic data processing and transmittal techniques in the administration of the criminal justice process in



## SCHOOL DISTRICTS AND LOCAL COMMUNITIES USING SEWRPC FOR PAYROLL DATA PROCESSING



## LOCAL COMMUNITIES USING SEWRPC FOR VOTER REGISTRATION AND POLL LIST DATA PROCESSING



the six-county area encompassed within the Council's jurisdiction. The Council's jurisdiction is coincident with the Commission's except for the exclusion of Milwaukee County. In response to this request, the Commission acted to create a technical coordinating and advisory committee to help guide the conduct of the requested study. This committee was comprised of representatives of the courts, sheriff's departments, local police departments, and data processing agencies from throughout the seven-county Region (see Appendix B for a roster of committee membership).

Working with the advisory committee, the Commission staff evaluated several alternative data processing configurations for automating the

criminal justice administrative process throughout the six-county area. These alternatives were documented in SEWRPC Community Assistance Planning Report No. 32, Recommended Electronic Data Processing and Transmittal System for Criminal Justice Agencies in Southeastern Wisconsin. The advisory committee recommended implementation of an alternative under which all six counties under the Council's jurisdiction would contract with Milwaukee County for the necessary data processing hardware and software support to establish, in effect, an areawide, automated criminal justice system. The report, completed in September 1979, was transmitted to the Council and the several county boards for their consideration in October 1979.

## LOCAL GOVERNMENT-SEWRPC TELEPROCESSING CONFIGURATION AND APPLICATIONS

### WAUKESHA COUNTY

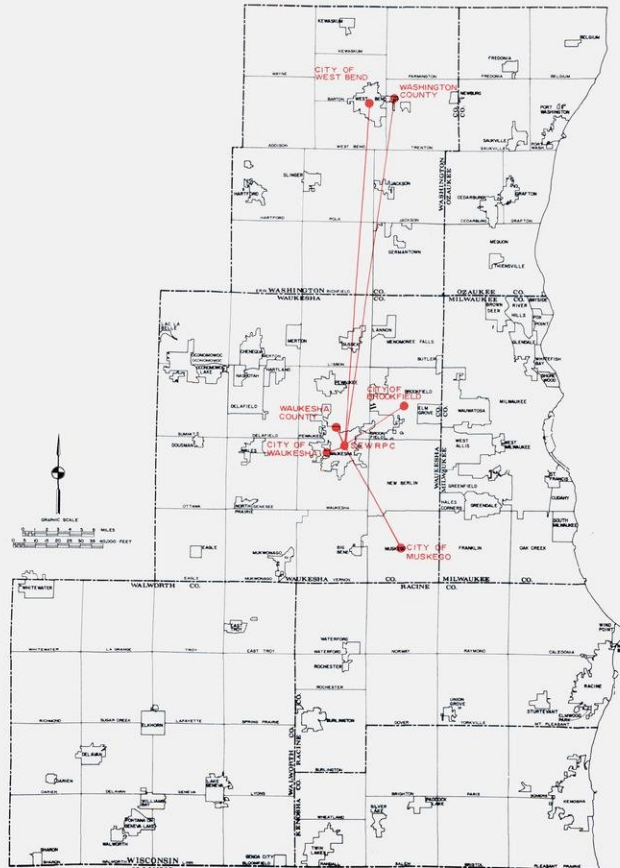
- **CLERK OF COURTS**  
Alimony and Support
- **TAX LISTER**  
Property Tax File Maintenance
- **PERSONNEL DEPARTMENT**  
Employee File Maintenance
- **PAYROLL DEPARTMENT**  
Employee File Maintenance

### CITY OF WAUKESHA

- **CITY COMPTROLLER**  
Accounts Payable  
Receipts  
General Ledger  
Payroll  
Municipal Bonds
- **CITY ASSESSOR**  
Property Tax File Maintenance
- **CITY CLERK**  
Voter Registration

### CITY OF BROOKFIELD

- **CITY COMPTROLLER**  
Utility Billing  
Payroll
- **CITY POLICE DEPARTMENT**  
Uniform Crime Reporting  
Officer Activity
- **CITY ASSESSOR**  
Property Tax File Maintenance
- **CITY CLERK**  
Voter Registration



### WASHINGTON COUNTY

- **COUNTY TAX LISTER**  
Property Tax File Maintenance
- **COUNTY TREASURER**  
Property Tax File Inquiry  
Receipts
- **COUNTY AUDITOR**  
Accounts Payable  
Receipts  
Payroll  
General Ledger  
Nursing Home Billing  
Nursing Home Staff Statistics  
Welfare Payroll  
District Attorney Case Disposition
- **CLERK OF COURTS**  
Alimony and Support  
Paternity

### CITY OF WEST BEND

- **CITY CLERK**  
Special Tax Assessments  
General Ledger  
Accounts Payable
- **CITY ASSESSOR**  
Property Tax File Maintenance

### CITY OF MUSKEGO

- **CITY CLERK**  
Accounts Payable  
Receipts  
General Ledger  
Payroll  
Voter Registration
- **CITY ASSESSOR**  
Property Tax File Maintenance

# ADMINISTRATIVE SERVICES DIVISION

## DIVISION FUNCTIONS

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

## FINANCIAL MANAGEMENT AND PLANNING

One of the most important functions of the Division is managing the Commission financial affairs. This includes maintaining a fund accounting system, preparing an annual Commission budget, preparing Commission payrolls, and processing accounts receivable and payable. During 1979 the Division staff modified adaptation of its accounting system to machine data processing. 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 1979 by maintaining trust accounts with a minority-controlled bank within the Commission's service area. In addition, the Commission has established a minority business enterprise program, commencing with the generation of a list of minority businesses which were contacted as potential Commission vendors.

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

## PERSONNEL ADMINISTRATION

Personnel recruitment, testing, and selection are centered in the Administrative Services Division. During 1979 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 completion of 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 overall 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. In addition, under the overall work program, the Commission serves as a "pass through" agency to provide federal and state planning monies directly to certain local units of government. For example, transportation planning funds are provided in this way to both the City

and County of Milwaukee. The Division administers these "pass through" funds, which in 1979 totaled \$234,400.

#### **PURCHASING AND CLERICAL SUPPORT**

Equipment and supplies for all Divisions of the Commission are purchased through the Division. Through this centralized effort, economies are realized through quantity purchasing and uniformity of procurement efforts are maintained. The Division also provides all other Divisions of the Commission with clerical staff support in the typing of reports, in addition to the typing of routine and specialized correspondence.

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

During 1979, the Division distributed a total of 5,574 copies of Commission reports. These included: 437 prospectuses, 4 study designs, 1,997 planning reports, 26 planning guides, 634 technical reports, 692 community assistance planning reports, 28 technical records, 795 annual reports, 482 conference proceedings, 144 community profiles, 14 lake use reports, 183 public hearing minutes, 128 transportation improvement programs, and 10 overall work programs. In addition, the Division distributed 3,357 aerial photographs, 318 soil maps, and 1,116 maps from the Commission's base map series.



## **APPENDICES**



## Appendix A

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: 1979

#### COMMISSIONERS

Term  
Expires

##### KENOSHA COUNTY

\*\*\* Vacant . . . . . 1982  
\*\* Donald E. Mayew . . . . . 1980  
\* Francis J. Pitts . . . . . 1980

##### MILWAUKEE COUNTY

\*\*\* Richard W. Cutler . . . . . 1984  
\*\* Evelyn L. Petshek, Vice-Chairman . . . . . 1980  
\* Harout O. Sanasarian . . . . . 1978

##### OZAUKEE COUNTY

\*\*\* Thomas H. Buestrin . . . . . 1982  
\* John P. Dries . . . . . 1984  
\*\* Alfred G. Raetz . . . . . 1984

##### RACINE COUNTY

\*\*\* George C. Berteau, Chairman . . . . . 1980  
\* Raymond J. Moyer . . . . . 1984  
\*\* Earl G. Skagen . . . . . 1982

##### WALWORTH COUNTY

\*\* John D. Ames . . . . . 1978  
\*\*\* Anthony F. Balestrieri, Secretary . . . . . 1982  
\* Harold H. Kolb . . . . . 1982

##### WASHINGTON COUNTY

\*\* Paul F. Quick . . . . . 1980  
\* Harold F. Ryan . . . . . 1984  
\*\*\* Frank F. Uttech . . . . . 1982

##### WAUKESHA COUNTY

\*\* Charles J. Davis . . . . . 1980  
\* Robert F. Hamilton . . . . . 1982  
\*\*\* Lyle L. Link, Treasurer . . . . . 1980

\* County Board-Appointed Commissioners.

\*\* Appointed by the Governor from a County Board approved list of candidates.

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

#### COMMITTEES

##### EXECUTIVE COMMITTEE

George C. Berteau, Chairman  
Evelyn L. Petshek, Vice-Chairman  
Anthony F. Balestrieri  
Richard W. Cutler  
Charles J. Davis  
John P. Dries  
Lyle L. Link  
Raymond J. Moyer  
Francis J. Pitts  
Alfred G. Raetz  
Harout O. Sanasarian  
Frank F. Uttech

##### ADMINISTRATIVE COMMITTEE

Alfred G. Raetz, Chairman  
Lyle L. Link, Vice-Chairman  
George C. Berteau  
Francis J. Pitts  
Frank F. Uttech

##### INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE

Francis J. Pitts, Chairman  
Harout O. Sanasarian, Vice-Chairman  
George C. Berteau  
John P. Dries  
Robert F. Hamilton  
Harold H. Kolb  
Raymond J. Moyer  
Harold F. Ryan

##### PLANNING AND RESEARCH COMMITTEE

Anthony F. Balestrieri, Chairman  
Evelyn L. Petshek, Vice-Chairman  
John D. Ames  
George C. Berteau  
Charles J. Davis  
Robert F. Hamilton  
Harold H. Kolb  
Lyle L. Link  
Donald E. Mayew  
Paul F. Quick  
Alfred G. Raetz  
Harold F. Ryan  
Earl G. Skagen





## Appendix B

### COMMISSION ADVISORY COMMITTEES

#### TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL LAND USE-TRANSPORTATION PLANNING

The Technical Coordinating and Advisory Committee on Regional Land Use-Transportation Planning is divided into several functional subcommittees. Members of the Committee often serve on more than one subcommittee. The following key identifies the various functional subcommittees: 1) Land Use Subcommittee; 2) Highway Subcommittee; 3) Socioeconomic Subcommittee; 4) Natural and Recreation-Related Resources Subcommittee; 5) Transit Subcommittee; 6) Utilities Subcommittee; and 7) Traffic Studies, Models, and Operations Subcommittee.

Stanley E. Altenbern (5) . . . . .	President, Wisconsin Coach Lines, Inc., Waukesha	Edward G. Lemmen (6) . . . . .	Water Utility Manager, City of Lake Geneva
Anthony S. Bareta (3) . . . . .	Director, Milwaukee County Planning Commission	James H. Lenz (6) . . . . .	Village Engineer, Village of Hartland
John M. Bennett (1,4) . . . . .	City Engineer, City of Franklin	J. William Little (2,6) . . . . .	Administrator, City of Wauwatosa
James J. Blazek (2) . . . . .	City Engineer, City of Racine	Gilbert R. Loshek (2) . . . . .	Area General Manager, Central Greyhound Lines, Milwaukee
Richard R. Brandt (1) . . . . .	Manager, Energy Requirements, Wisconsin Gas Company, Milwaukee	James J. Lynch (1) . . . . .	Village Planner, Village of Shorewood
Robert W. Brannan (2,5,7) . . . . .	Deputy Director, Department of Public Works, Milwaukee County	John Margis, Jr. (2,4,7) . . . . .	Highway Commissioner, Racine County
Donald M. Cammack (7) . . . . .	Chief Planning Engineer, Wisconsin Department of Transportation	William L. Marvin (2,7) . . . . .	Traffic Engineer, American Automobile Association, Madison
Frederick H. Chlupp (1,4) . . . . .	Land Use and Park Administrator, Washington County	Henry M. Mayer (5) . . . . .	Managing Director, Milwaukee Transport Services, Inc.
Arnold L. Clement (1,2) . . . . .	Planning Director and Zoning Administrator, Racine County	Norman H. McKegney (5) . . . . .	Terminal Superintendent, The Milwaukee Road
Lucian M. Darin (2) . . . . .	Director of Public Works, City of Hartford	George Mead (3) . . . . .	Marketing Research Manager, The Milwaukee Journal
Vencil F. Demshar (2) . . . . .	Highway Commissioner, Waukesha County	Robert J. Mikula (2,4) . . . . .	Director of Parks, Recreation and Culture, Milwaukee County Park Commission
Russell A. Dimick (2) . . . . .	City Engineer, City of Cedarburg	Paul Milewski (3) . . . . .	Director of Planning, City of Oak Creek
Arthur D. Doll (1) . . . . .	Director, Bureau of Planning, Wisconsin Department of Natural Resources	William A. Muth, Jr. (6) . . . . .	Director of Public Works, City of Brookfield
William E. Dow (1,3) . . . . .	District Manager, Network Planning, Wisconsin Telephone Company	Roger M. Nacker (3) . . . . .	Research Director, Wisconsin Department of Business Development
William R. Drew (1,2,3,4,5,6,7) . . . . .	Commissioner, Department of City Development, City of Milwaukee	George J. Novenski (7) . . . . .	Chief, Travel Statistics and Data Coordination Section, Wisconsin Department of Transportation
Raymond T. Dwyer (6) . . . . .	City Engineer, City of Greenfield	William F. O'Donnell (1,5) . . . . .	County Executive, Milwaukee County
James E. Foley (7) . . . . .	Airport Engineer, Department of Public Works, Milwaukee County	Dwayne Partain (1,5) . . . . .	Librarian, MATC, Milwaukee
John M. Fredrickson (1) . . . . .	Village Manager, Village of River Hills	Nick T. Paulos (1,2) . . . . .	Village Engineer, Village of Greendale
Thomas J. Gaffney (2) . . . . .	Traffic Engineer, City of Kenosha	Harry L. Peterson (5,7) . . . . .	Executive Assistant, Wisconsin Department of Transportation
Arne L. Gausmann (1,2) . . . . .	Director, Bureau of Systems Planning, Wisconsin Department of Transportation	Allan P. Pleyte (5,7) . . . . .	Traffic Engineer and Superintendent, Bureau of Traffic Engineering and Electrical Services, City of Milwaukee
Norman N. Gill (1,3) . . . . .	Executive Director, Citizens Governmental Research Bureau, City of Milwaukee	James F. Popp (5,7) . . . . .	Chief of Planning, U. S. Department of Transportation, Federal Aviation Administration
Herbert A. Goetsch (2,4,6) . . . . .	Commissioner of Public Works, City of Milwaukee	Victoria M. Potter (1) . . . . .	Director, Office of State Energy and Planning, Wisconsin Department of Administration
George Gundersen (2,4) . . . . .	Chief of Statewide Planning Section, Division of Planning and Budget, Wisconsin Department of Transportation	John B. Prince (1,3,6) . . . . .	Assistant to Senior Vice-President, Wisconsin Electric Power Company, Milwaukee
Douglas F. Haist . . . . .	Administrator, Wisconsin Department of Transportation	James O. Radke (4) . . . . .	Soil Conservation Director, U. S. Soil Conservation Service
John M. Hartz (5) . . . . .	Director, Bureau of Transit, Wisconsin Department of Transportation	Ronald A. Ramlow (3) . . . . .	Manpower Information Supervisor, Job Service-Milwaukee, Wisconsin Department of Industry, Labor and Human Relations
Frank M. Hedgcock (7) . . . . .	City Planner, City of Waukesha	Richard A. Rechlicz (5) . . . . .	Executive Secretary, Wisconsin School Bus Contractors Association
Sebastian J. Helfer (3) . . . . .	Director, Campus Planning and Construction, Marquette University, Milwaukee	Donald V. Revello (5,7) . . . . .	Chief of Traffic Planning, Wisconsin Department of Transportation
John R. Henthenthaler (5) . . . . .	Town Engineer, Town of Caledonia	W. L. Rodau (1,3) . . . . .	District Accounting Manager, Wisconsin Telephone Company
Donald K. Holland (2,6) . . . . .	Director of Public Works, City of Kenosha	Donald A. Roensch (1,6) . . . . .	Director of Public Works, City of Mequon
Karl B. Holzwarth (2,4) . . . . .	Director, Park Commission, Racine County	William D. Rogan (1,4) . . . . .	Agri-Business Agent, Waukesha County
Ronald Hustedde (1,4) . . . . .	Resource Agent, Walworth County	Gordon Rozmus (1,3) . . . . .	City Planner, City of Wauwatosa
Robert F. Hutter (2) . . . . .	Director of Public Works, Village of Sussex	Joseph P. Sabella (1,3) . . . . .	Area Manager, U. S. Department of Housing and Urban Development
Paul G. Jaeger (1,2,4) . . . . .	Agricultural Agent, Kenosha County	Gene A. Scharfenorth (1,2) . . . . .	Highway Commissioner, Kenosha County
Edward A. Jenkins (5) . . . . .	Transportation Director, City of Kenosha	Franklin B. Scharer (2,7) . . . . .	Highway Commissioner, Washington County
Dr. Leonard C. Johnson (4) . . . . .	Soil and Water Conservation Specialist, Wisconsin Board of Soil and Water Conservation Districts	Dr. Eric Schenker (3,5,7) . . . . .	Dean, School of Business Administration, University of Wisconsin-Milwaukee
Paul Juhnke (3) . . . . .	Vice-President, Urban Affairs, Metropolitan Milwaukee Association of Commerce	John E. Schumacher (2,7) . . . . .	City Engineer, City of West Allis
Russell E. Julian (3) . . . . .	Executive Director, Southeastern Wisconsin Health Systems Agency, Inc., Milwaukee	Gerald Schwerm (2,7) . . . . .	Director of Transportation, Milwaukee County
Bal Kalen (3) . . . . .	Demographer, Wisconsin Department of Administration	Kathy Sellars (3,5) . . . . .	Planner/Programmer Developer, Southeastern Wisconsin Area Agency on Aging, Inc.
Dr. William Katz (3,6) . . . . .	Director, Technical Services, Milwaukee Metropolitan Sewerage District	Harvey Shebesta (2,3,5,7) . . . . .	District Director, Wisconsin Department of Transportation
Richard A. Keyes (2) . . . . .	Environmental Engineer, Milwaukee County Department of Public Works	Leland C. Smith . . . . .	Horticultural Agent, Kenosha County
Robert F. Kolstad (1,2,4,5) . . . . .	Director, Department of Community Development, City of Kenosha	Walter J. Tarmann (1,4) . . . . .	Executive Director, Waukesha County Park and Planning Commission
Henry C. Krebs (3) . . . . .	Chief of Demographic and Special Analysis, Bureau of Health Statistics, Wisconsin Department of Health and Social Services	Jack Taylor (5) . . . . .	President, Flash City Transit Company, Racine
Edwin J. Laszewski, Jr. (2) . . . . .	City Engineer, City of Milwaukee	Herbert R. Teets (2,5,6,7) . . . . .	Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Gerald P. Lee (1) . . . . .	Building Inspector, City of Muskego	Norbert S. Theine (1) . . . . .	Administrator, City of South Milwaukee
Elwin G. Leet (1,3,4) . . . . .	Agricultural Agent, Racine County	Donald J. Tripp (1,4) . . . . .	Agricultural Agent, Ozaukee County
Russell H. Leitch (3) . . . . .	Director, District Office, U. S. Department of Commerce	Floyd W. Usher (2) . . . . .	City Engineer, City of Oconomowoc
		Rodney W. Vanden Noven (6) . . . . .	Director of Public Works, City of Waukesha
		John P. Varda (7) . . . . .	General Manager, Wisconsin Motor Carriers Association, Madison
		Max Vogt (2,6) . . . . .	Director of Public Works, Village of Menomonee Falls
		Lloyd O. Wadleigh (3) . . . . .	Professor, Department of Economics, Carroll College, Waukesha
		Gerald T. Waelti (2,7) . . . . .	Highway Commissioner, Walworth County

## TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL LAND USE-TRANSPORTATION PLANNING

(Continued)

Theodore G. Weigle (5,7) . . . . . Regional Director,  
U. S. Department of Transportation,  
Urban Mass Transportation Administration  
Sylvester N. Weyker (2) . . . . . Highway Commissioner, Ozaukee County  
C. Elgar Williams (1,3) . . . . . City Planner, City of West Allis  
Bruce B. Wilson (1) . . . . . Chief, Urban and Regional Planning Assistance,  
Wisconsin Department of Transportation  
Dan Wilson (4) . . . . . Resource Development Agent,  
UW-Extension, Washington County  
Thomas A. Winkel (2,5,7) . . . . . District Chief Planning Engineer,  
Wisconsin Department of Transportation  
Robert Winnie (1) . . . . . Administrator, Division of Environmental Standards,  
Wisconsin Department of Natural Resources  
Thomas N. Wright (1,3,5) . . . . . Planning Director, City of Racine

## TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIRPORT PLANNING

William D. Rogan . . . . . Agri-Business Agent, Waukesha County  
Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
John H. Batten . . . . . President, Twin Disc, Inc., Racine;  
Member, National Business Aircraft Association  
Robert R. Brackett . . . . . Manager, Kenosha Municipal Airport;  
Member, Wisconsin Aviation Trades Association  
Donald M. Cammack . . . . . Chief Planning Engineer,  
Division of Transportation Assistance,  
Wisconsin Department of Transportation  
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning,  
Wisconsin Department of Transportation  
James F. Popp . . . . . Chief of Planning,  
U. S. Department of Transportation,  
Federal Aviation Administration  
Joseph F. Sanek . . . . . Airport Director, Milwaukee County  
Gerald Schwerm . . . . . Director of Transportation, Milwaukee County  
Earl L. Stier . . . . . Manager, West Bend Airport  
Lt. Col. Fred R. Wylie . . . . . Civil Engineer, 120th Air Refueling Group,  
Wisconsin Air National Guard, Milwaukee

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

Gene A. Scharfenorth . . . . . Highway Commissioner, Kenosha County  
Chairman  
Robert F. Kolstad . . . . . Director, Department of Community  
Secretary Development, City of Kenosha  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Howard E. Blackmon . . . . . Chairman, Town of Somers  
Thomas L. Frank . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
Howard Gehrke . . . . . Chairman, Town of Salem  
Donald K. Holland . . . . . Director of Public Works, City of Kenosha  
Earl W. Hollister . . . . . Supervisor, Kenosha County  
Merlin F. Jahns . . . . . Trustee, Village of Twin Lakes  
Stanley Kerkman . . . . . Chairman, Town of Wheatland  
Maurice Lake . . . . . Citizen Member, Town of Salem  
John J. Maurer . . . . . Citizen Member, Town of Pleasant Prairie  
Glenn L. Miller . . . . . Citizen Member, Town of Brighton  
Roger E. Prange . . . . . Clerk, Town of Pleasant Prairie  
Paul W. Saftig . . . . . Mayor, City of Kenosha  
Harvey Shebesta . . . . . District Director,  
Wisconsin Department of Transportation  
Virginia Taylor . . . . . Citizen Member, City of Kenosha  
Ronald C. Wieland . . . . . President, Village of Silver Lake  
Harvey R. Wunderlich . . . . . Citizen Member, Village of Paddock Lake  
August Zirbel, Jr. . . . . Chairman, Town of Paris

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

Gerald Schwerm . . . . . Director of Transportation,  
Chairman and Secretary Milwaukee County  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Thomas L. Frank . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
Bruno J. Haas . . . . . City Engineer, City of Glendale  
Edwin J. Laszewski, Jr. . . . . City Engineer, City of Milwaukee  
J. William Little . . . . . Administrator, City of Wauwatosa  
Nick T. Paulos . . . . . Village Engineer, Village of Greendale  
John E. Schumacher . . . . . City Engineer, City of West Allis  
Harvey Shebesta . . . . . District Director, Wisconsin  
Department of Transportation  
Herbert R. Teets . . . . . Division Administrator,  
U. S. Department of Transportation,  
Federal Highway Administration

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

Sylvester N. Weyker . . . . . Highway Commissioner,  
Chairman Ozaukee County  
Kurt W. Bauer . . . . . Executive Secretary, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Russell A. Dimick . . . . . City Engineer, City of Cedarburg  
Thomas L. Frank . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning,  
Wisconsin Department of Transportation  
Michael C. Harrigan . . . . . Clerk-Administrator, Village of Saukville  
Quinten W. Laabs . . . . . Administrator, Village of Thiensville  
Raymond Michaud . . . . . Director of Public Works,  
City of Port Washington  
Herbert H. Peters . . . . . Park Commissioner, Ozaukee County  
Kenneth A. Roell . . . . . Administrator and Engineer,  
Town of Cedarburg  
Donald A. Roensch . . . . . Director of Public Works,  
City of Mequon  
Emory R. Sacho . . . . . Administrator, Village of Grafton  
Harvey Shebesta . . . . . District Director,  
Wisconsin Department of Transportation

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

John Margis, Jr. . . . . Highway Commissioner,  
Chairman Racine County  
Cecil F. Mehring . . . . . Highway Engineer,  
Secretary Racine County  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Robert P. Birchler . . . . . City Engineer, City of Burlington  
Arnold L. Clement . . . . . Planning Director and Zoning  
Administrator, Racine County  
Thomas L. Frank . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
George A. Gundersen . . . . . Chief, Statewide Planning Section,  
Wisconsin Department of Transportation  
Fred H. Larson . . . . . Commissioner of Public Works,  
City of Racine  
Sedhartha R. Shah . . . . . Town Engineer, Town of Caledonia  
Harvey Shebesta . . . . . District Director, Wisconsin  
Department of Transportation  
Thomas N. Wright . . . . . Director of Planning, City of Racine

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

Milton R. Reik . . . . . Citizen Member,  
Chairman . . . . . City of Lake Geneva  
Gerald T. Waelti . . . . . Highway Commissioner,  
Secretary . . . . . Walworth County  
Anthony F. Balestrieri . . . . . Consulting Engineer, Elkhorn;  
Commissioner, Southeastern Wisconsin  
Regional Planning Commission  
William E. Barth . . . . . Citizen Member, Town of Walworth  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Schuyler W. Case . . . . . Citizen Member, Town of Sharon  
Theodore W. Casper . . . . . Citizen Member, Village of Williams Bay  
Charles H. Cruse . . . . . Chairman, Town of Whitewater  
Herbert E. Erickson . . . . . President, Village of Williams Bay  
Oliver W. Fleming . . . . . Supervisor, Walworth County  
Richard Folman . . . . . Mayor, City of Lake Geneva  
Thomas L. Frank . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
George Gundersen . . . . . Chief, Statewide Planning Section,  
Wisconsin Department of Transportation  
Harvey Shebasta . . . . . District Director,  
Wisconsin Department of Transportation  
Clement Tracy . . . . . Chairman, Town of East Troy  
Donald E. Zenz . . . . . Planning Commission, Village of Fontana

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

Vencil F. Demshar . . . . . Highway Commissioner,  
Chairman and Secretary . . . . . Waukesha County  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Ralph A. Becker . . . . . Director of Public Works,  
City of New Berlin  
Thomas L. Frank . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning,  
Wisconsin Department of Transportation  
Richard M. Jung, Sr. . . . . Chairman, Town of Lisbon  
Gerald P. Lee . . . . . Building Inspector, City of Muskego  
William A. Muth, Jr. . . . . Director of Public Works,  
City of Brookfield  
Wilbur G. Perren . . . . . Supervisor, Town of Genesee  
Herbert R. Teets . . . . . Division Administrator,  
U. S. Department of Transportation,  
Federal Highway Administration  
Floyd W. Usher . . . . . City Engineer, City of Oconomowoc  
Rodney W. Vanden Noven . . . . . Director of Public Works,  
City of Waukesha  
Max A. Vogt . . . . . Director of Public Works,  
Village of Menomonee Falls

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

Lloyd Jacklin . . . . . Citizen Member,  
Chairman . . . . . Village of Jackson  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Secretary . . . . . Wisconsin Regional Planning Commission  
Frederick H. Chlupp . . . . . Land Use and Park Administrator,  
Washington County  
Jerome P. Faust . . . . . Supervisor, Washington County  
Walter B. Grotelueschen . . . . . President, Village of Newburg  
Carl Hauch . . . . . Supervisor, Town of Farmington  
Joseph Hoffman . . . . . Citizen Member, City of Hartford  
Walter L. Kletti . . . . . Member, City of Hartford Planning Commission  
Reuben Koch . . . . . Chairman, Town of West Bend  
Melvin W. Kowalke . . . . . Chairman, Town of Germantown;  
Supervisor, Washington County  
Howard J. Kruepke . . . . . Citizen Member, Jackson  
Arnold J. Lepien . . . . . Supervisor, Town of Hartford  
John W. Lietzau . . . . . Citizen Member, Village of Germantown  
Adolph Lofy . . . . . Supervisor, Washington County  
Charles F. Miller . . . . . President, Village of Kewaskum  
Thomas Muth . . . . . Citizen Member, Village of Germantown  
John Oelhafen . . . . . Citizen Member, Town of Wayne  
Alois Okruhlica . . . . . Supervisor, Town of Jackson  
John M. Pick . . . . . Mayor, City of West Bend  
Helmuth F. Prah . . . . . Supervisor, Washington County  
William Ripp . . . . . Citizen Member, City of Hartford  
Robert Rosenthal . . . . . Citizen Member, Town of Barton  
Franklin B. Scharer . . . . . Highway Commissioner, Washington County  
Ralph P. Schnorenberg . . . . . Alderman, City of Hartford  
Hugo Schwulst . . . . . Chairman, Town of Erin;  
Supervisor, Washington County  
Roland S. Senner . . . . . Chairman, Town of Trenton  
Harvey Shebasta . . . . . District Director,  
Wisconsin Department of Transportation  
Jerome A. Stautz . . . . . City Clerk, City of West Bend  
Herbert R. Teets . . . . . Division Administrator,  
U. S. Department of Transportation,  
Federal Highway Administration  
Mervin C. Thompson . . . . . EPA Construction Supervisor, Washington County  
Sedimentation and Erosion Control Project  
Carl Vogt . . . . . Town Clerk, Town of Addison

# **MILWAUKEE AREA PRIMARY TRANSIT SYSTEM ALTERNATIVES ANALYSIS CITIZENS INTERGOVERNMENTAL AND TECHNICAL COORDINATING AND ADVISORY COMMITTEE**

Frank P. Zeidler . . . . . Citizen Member, Milwaukee County  
Chairman  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Secretary . . . . . Wisconsin Regional Planning Commission  
F. Thomas Ament . . . . . County Board Chairman, Milwaukee County  
George C. Berteau . . . . . Chairman, Southeastern  
Wisconsin Regional Planning Commission  
Michael J. Brady . . . . . Citizen Member, Staff of Congressman Henry J. Reuss  
Robert W. Brannan . . . . . Deputy Director, Department of  
Public Works, Milwaukee County  
David Carley . . . . . Citizen Member, City of Milwaukee  
Michael Corriveau . . . . . Executive Assistant, Office of the  
Milwaukee County Executive  
William R. Drew . . . . . Commissioner, Department of  
City Development, City of Milwaukee  
James F. Egan . . . . . Assistant Director, Program Research and Development,  
Department of City Development, City of Milwaukee  
Michael H. Elconin . . . . . Citizen Member, City of Milwaukee  
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning,  
Wisconsin Department of Transportation  
P. Douglas Gerleman . . . . . Chief Planner,  
U. S. Department of Transportation,  
Urban Mass Transportation Administration  
John M. Hartz . . . . . Director, Bureau of Transit,  
Wisconsin Department of Transportation  
Thomas P. Kujawa . . . . . Supervisor, Milwaukee County  
Edwin J. Laszewski, Jr. . . . . City Engineer, City of Milwaukee  
J. William Little . . . . . Administrator, City of Wauwatosa  
Henry M. Mayer . . . . . Managing Director, Milwaukee Transport Services, Inc.  
Henry F. Mixer . . . . . President, Village of Whitefish Bay  
John O. Norquist . . . . . Wisconsin State Representative  
Harvey Shebasta . . . . . District Director,  
Wisconsin Department of Transportation  
Herbert R. Teets . . . . . Division Administrator,  
U. S. Department of Transportation,  
Federal Highway Administration

**MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY  
TRANSPORTATION IMPROVEMENT STUDY  
CITIZENS INTERGOVERNMENTAL AND TECHNICAL  
COORDINATING AND ADVISORY COMMITTEE**

George C. Berteau . . . . .Chairman, Southeastern  
Chairman Wisconsin Regional Planning Commission  
Kurt W. Bauer . . . . .Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Robert W. Brannan . . . . .Deputy Director, Department of  
Public Works, Milwaukee County  
Warren D. Braun . . . . .Wisconsin State Senator  
Wayne P. Frank . . . . .Chairman, Utilities and Licenses Committee,  
City of Milwaukee Common Council  
P. Douglas Gerleman . . . . .Chief Planner,  
U. S. Department of Transportation,  
Urban Mass Transportation Administration  
James J. Gosling . . . . .Executive Assistant, Office of the Secretary,  
Wisconsin Department of Transportation  
Paul A. Henningsen . . . . .Supervisor, Milwaukee County  
Edwin J. Laszewski, Jr. . . . .City Engineer, City of Milwaukee  
J. William Little . . . . .Administrator, City of Wauwatosa  
Henry M. Mayer . . . . .Managing Director,  
Milwaukee Transport Services, Inc.  
Paul G. Meyer . . . . .Supervisor, Ozaukee County  
Roy B. Nabors . . . . .Alderman, City of Milwaukee  
Brian O'Connell . . . . .Planner, Department of  
City Development, City of Milwaukee  
Brian Peterson . . . . .Citizen Member, City of Milwaukee  
Harvey Shebesta . . . . .District Director, Wisconsin  
Department of Transportation  
Herbert R. Teets . . . . .Assistant Division Administrator,  
U. S. Department of Transportation,  
Federal Highway Administration  
Sylvester N. Weyker . . . . .Highway Commissioner, Ozaukee County

**MILWAUKEE AREA WORK TIME RESCHEDULING  
STUDY ADVISORY COMMITTEE**

William P. Chapman . . . . .Vice-President, Johnson Controls, Inc.  
Chairman  
Thomas J. Parker . . . . .President, Milwaukee County Labor Council  
Vice-Chairman  
Kurt W. Bauer . . . . .Executive Director, Southeastern  
Secretary Wisconsin Regional Planning Commission  
T. J. Baudhuin . . . . .Materials Manager, Automotive Division,  
A. O. Smith Corporation  
Robert W. Brannan . . . . .Deputy Director, Department of  
Public Works, Milwaukee County  
Vencil F. Demshar . . . . .Highway Commissioner, Waukesha County  
William R. Drew . . . . .Commissioner, Department of  
City Development, City of Milwaukee  
Thomas L. Frank . . . . .Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration  
Arne L. Gausmann . . . . .Director, Bureau of Systems Planning,  
Wisconsin Department of Transportation  
P. Douglas Gerleman . . . . .Chief Planner,  
U. S. Department of Transportation,  
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Glenn H. Evans . . . . . Citizens for Menomonee River Restoration  
Frederick E. Gottlieb . . . . . Manager, Village of Menomonee Falls  
James R. Hanley . . . . . Mayor, City of Mequon  
Frank S. Hartay . . . . . Plant Engineer, Falk Corporation  
Edmund M. Henschel . . . . . Manager, Village of Elm Grove  
George C. Keller . . . . . President, Wauwatosa State Bank  
Raymond J. Kipp . . . . . Dean, College of Engineering, Marquette University  
Thomas M. Lee . . . . . Chief, Floodland-Shoreland Management,  
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John T. MacKinnon . . . . . Director of Public Works, Village of Germantown  
Patrick Marchese . . . . . Manager, Program Planning and Consultant Management,  
Milwaukee Metropolitan Sewerage District  
Robert J. Mikula . . . . . General Manager, Milwaukee County Park Commission  
Dennis E. Nulph . . . . . District Engineer, Wisconsin Department of Natural Resources  
John E. Schumacher . . . . . City Engineer, City of West Allis  
Walter J. Tarmann . . . . . Executive Director, Waukesha County  
Park and Planning Commission  
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## KINNICKINNIC RIVER WATERSHED COMMITTEE

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Ronald J. Rutkowski . . . . . Director of Public Works, City of Cudahy  
Dr. Rodolfo N. Salcedo . . . . . Environmental Scientist, Department of  
City Development, City of Milwaukee  
Frank Schultz . . . . . District Engineer, Southeast District,  
Wisconsin Department of Natural Resources  
John E. Schumacher . . . . . City Engineer, City of West Allis  
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James Foley . . . . . Acting Airport Director, Milwaukee  
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Gerald W. Laudon . . . . . Secretary, Milwaukee County Conservation Alliance  
Edwin J. Laszewski, Jr. . . . . City Engineer, City of Milwaukee  
Patrick Marchese . . . . . Manager, Program Planning and Consultant Management,  
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Fred R. Rehm . . . . . Director, Milwaukee County  
Division of Environmental Service  
Bernard G. Schultz . . . . . Assistant District Director, Southeast District,  
Wisconsin Department of Natural Resources  
David Sharpe . . . . . Community Development Agent, University of  
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Secretary Wisconsin Regional Planning Commission  
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Kurt W. Bauer . . . . . Executive Director, Southeastern  
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Wisconsin Electric Power Company  
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Washington County  
Arnold L. Clement . . . . . Planning Director and Zoning  
Administrator, Racine County  
Norbert H. Dettmann . . . . . Supervisor, Washington County  
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Milwaukee and Waukesha Counties  
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Thomas N. Hentges . . . . . Commissioner, Racine County Farm Drainage Board  
Lester O. Hoganson . . . . . General Manager,  
Racine Water and Wastewater Utility  
Helen M. Jacobs . . . . . League of Women Voters; President,  
Southeast Wisconsin Coalition for Clean Air  
Myron E. Johansen . . . . . Former District Conservationist,  
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Elwin G. Leet . . . . . Agricultural Agent, Racine County  
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O. Fred Nelson . . . . . Manager, Kenosha Water Utility  
Wayne A. Pirsig . . . . . District Director, U. S. Department of  
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Warren K. Porter . . . . . Acting Director, Wisconsin  
Solid Waste Recycling Authority  
Herbert E. Ripley . . . . . Health Officer, Waukesha County Department of Health  
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Bernard G. Schultz . . . . . Assistant District Director, Southeast District,  
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Robert D. Tolpa . . . . . Project Officer, Planning Branch,  
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Rodney W. Vanden Noven . . . . . Director of Public Works, City of Waukesha  
Emmerich P. Wantschik . . . . . County Planner, Walworth County  
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Secretary Wisconsin Regional Planning Commission  
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First Congressional District,  
State of Wisconsin  
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Peter Boscha . . . . . Supervisor, Town of Mt. Pleasant  
Mary M. Carrington . . . . . Supervisor, Town of Mt. Pleasant  
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Karl B. Holzwarth . . . . . Park Director, Racine County  
Paul C. Jaeger . . . . . Agri-Business Agent, Kenosha County  
Abe Kirkorian . . . . . President, Village of Sturtevant  
Leverett F. Laet . . . . . Retired Farmer, Town of Somers  
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Racine County



# CITIZENS ADVISORY PANEL FOR PUBLIC PARTICIPATION ON AREAWIDE WASTEWATER TREATMENT AND WATER QUALITY MANAGEMENT PLANNING

Dr. William G. Murphy . . . . . Professor Soils Mechanics, Marquette University;  
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Miriam G. Dahl . . . . . Representative, Izaak Walton League  
Vice-Chairman . . . . . of America, Wisconsin State Division  
Francis A. Martin . . . . . Representative, Racine-Kenosha  
Secretary . . . . . Citizens for the Environment  
Alice G. Altemeier . . . . . Designee, League of Women  
Voters of Wisconsin, Inc.  
Richard F. Ashley . . . . . Designee, Schlitz Audubon Center  
John Drake . . . . . Chairperson, Equality and Quality of Life (EAQQL)  
Ralph C. Blum . . . . . Wisconsin Division of Highways  
Lucile S. Bonerz . . . . . Designee, Milwaukee Board of Realtors  
Roger Caron . . . . . Executive Director, Kenosha Area  
Chamber of Commerce  
Catherine G. Collins . . . . . Designee, Wisconsin Academy of  
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Delbert J. Cook . . . . . Chairman, Cedar Creek Restoration Council  
John Drake . . . . . Executive Director, Associated Public Works Contractors  
Tom Eisele . . . . . Designee, Lake Michigan Federation  
James L. Filippini . . . . . Project Officer, Planning Branch,  
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Philip J. Fogle . . . . . Director, Geneva Lake  
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Richard M. Franz . . . . . Representative, Ecology Association of New Berlin  
Norman N. Gill . . . . . Executive Director, Citizens Governmental  
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Robert O. Hussa . . . . . President, Menomonee River Restoration Council, Inc.  
Helen M. Jacobs . . . . . League of Women Voters; President, Southeast  
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Mrs. Richard J. Jensen . . . . . Secretary, Root River Restoration Council, Inc.  
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Wayne M. Paulus . . . . . First Wisconsin Mortgage Company  
Lynn Peterson . . . . . President, Racine County Farm Bureau  
Lanis P. Pofsgrof . . . . . Representative, Sierra Club  
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Annabelle Reuter . . . . . Designee, Izaak Walton League  
Karen Rutz . . . . . Representative, Wisconsin Friends of Animals, Inc.  
Phil Sander . . . . . Executive Secretary, Southeastern  
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Peter J. Schultz . . . . . Representative, Racine Chamber of Commerce;  
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Robert J. Thill . . . . . Representative, Ozaukee County Farm Bureau  
Bruce R. Thompson . . . . . Representative, Sierra Club  
Mervin C. Thompson . . . . . EPA Construction Supervisor, Washington County  
Sedimentation and Erosion Control Project  
Howard R. Tietz . . . . . Representative, Friends of Havenswood  
Randall E. Wade . . . . . Planning Analyst,  
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Joseph C. Waters . . . . . President, Wisconsin Association of Campground Owners;  
Proprietor, Lazy Day Campground, Town of Farmington  
Ray Watz . . . . . Representative, Ozaukee County Farm Bureau  
John A. White . . . . . Maintenance Engineer, District 2,  
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# TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIR QUALITY PLANNING

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Barbara J. Becker . . . . . President, Southeastern  
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Secretary . . . . . Southeastern Wisconsin Regional Planning Commission  
Alice G. Altemeier . . . . . League of Women Voters, Ozaukee County  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
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Wesley J. Beaton . . . . . Director of Environmental Health, City of Racine  
Gerald D. Bevington . . . . . Coordinator of Air Programs, Southeast District,  
Wisconsin Department of Natural Resources  
John W. Blakey . . . . . President, Quality Aluminum  
Casting Company, Waukesha  
Edwin J. Hammer . . . . . Environmental Engineer, Bureau of  
Environmental Analysis and Review,  
Wisconsin Department of Transportation  
John C. Hanson . . . . . Director, Department of Air  
Pollution Control, Racine County  
Paul Koziar . . . . . Meteorologist, Bureau of Air Management,  
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Fred R. Rehm . . . . . Director, Division of Environmental  
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Herbert E. Ripley . . . . . Health Officer, Waukesha  
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Rodolfo N. Salcedo . . . . . Environmental Scientist, Department of  
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Harvey Shebesta . . . . . District Director,  
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Mark P. Steinberg . . . . . Senior Meteorologist,  
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Wisconsin Electric Power Company  
Herbert R. Teets . . . . . Division Administrator,  
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Michael S. Treitman . . . . . Chief of Transportation and Planning Unit,  
U. S. Environmental Protection Agency  
Emmerich P. Wantschik . . . . . County Planner, Walworth County  
George A. Zimmer . . . . . Supervisor, Environmental Health,  
City of Kenosha Health Department

# TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON SANDSTONE AQUIFER SIMULATION MODELING

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Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Anthony F. Biba . . . . . Superintendent, Elkhorn Light and Water Commission  
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Glenn W. Frank . . . . . Water Utility Manager, Cedarburg  
Light and Water Commission  
Jerome J. Gottfried . . . . . Mayor, City of Muskego  
John Graber . . . . . Acting Director, Department of  
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Edmund P. Krueger . . . . . Water Utility Manager, Village of  
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Dr. Norman P. Lasca . . . . . Associate Professor,  
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University of Wisconsin-Milwaukee  
Edward G. Lemmen . . . . . Water Utility Manager, City of  
Lake Geneva Water Commission

# TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON SANDSTONE AQUIFER SIMULATION MODELING

(Continued)

William B. Mann . . . . . District Chief, Water Resources Division,  
U. S. Geological Survey  
R. W. Nettin . . . . . Manager, Electric Light and Water  
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M. E. Ostrom . . . . . Geologist and Director, Water Resources Program,  
Wisconsin Geological and Natural History Survey  
O. Fred Struve . . . . . Superintendent, Menomonee Falls Water Department  
Martin J. Valentine . . . . . Water Superintendent, City of Whitewater  
Clark E. Wangerin . . . . . City Engineer, City of Brookfield  
Harley L. Young . . . . . Hydrologist, U. S. Geological Survey

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W. J. Blong . . . . . Manager, Village of Fox Point  
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Regional Planning Commission, Ozaukee County  
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Dr. William Katz . . . . . Director of Technical Services,  
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Anthony L. Luljak . . . . . Alderman, City of Cudahy  
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R. Richard Mett . . . . . Supervisor, Milwaukee County  
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Dr. William G. Murphy . . . . . Professor, Soil Mechanics,  
College of Engineering, Marquette University;  
Engineers and Scientists of Milwaukee  
Mary C. Nelson . . . . . Alderman, City of South Milwaukee;  
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Dr. William T. Painter . . . . . President, Foundation Engineering, Inc., Milwaukee  
Francis J. Pitts . . . . . Commissioner, Southeastern Wisconsin  
Regional Planning Commission, Kenosha County  
Fred R. Rehm . . . . . Director, Environmental Services Division,  
Department of Public Works, Milwaukee County  
Ronald J. Rutkowski . . . . . Director of Public Works, City of Cudahy  
Phil Sander . . . . . Executive Secretary, Southeastern  
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Norbert S. Theine . . . . . Administrator, City of South Milwaukee  
Robert Winnie . . . . . District Director, Wisconsin  
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# TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON REGIONAL PARK AND OPEN SPACE PLANNING

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Corporation, Village of Williams Bay  
Anthony S. Bareta . . . . . Director, Milwaukee County Planning Commission  
Donald B. Brick . . . . . Recreation Agent, Walworth County  
Frederick H. Chlupp . . . . . Land Use and Park Administrator,  
Washington County

# TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON REGIONAL PARK AND OPEN SPACE PLANNING

(Continued)

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Richard W. Cutler . . . . . Attorney, Quarles and Brady, Milwaukee;  
Commissioner, Southeastern Wisconsin  
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Norbert H. Dettmann . . . . . Supervisor, Washington County  
Arthur D. Doll . . . . . Director, Bureau of Planning,  
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David F. Egelhoff . . . . . Supervisor, Ozaukee County  
Booker T. Hamilton . . . . . Production Supervisor, Rexnord Corporation  
Karl B. Holzwarth . . . . . Park Director, Racine County Park Commission  
Charles Q. Kamps . . . . . Attorney, Quarles and Brady, Milwaukee  
Philip H. Lewis, Jr. . . . . Professor, Department of Landscape  
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Richard J. Lindl . . . . . Director of Parks,  
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John Margis, Jr. . . . . Highway Commissioner, Racine County  
Kathleen Pfister . . . . . Cultural Specialist, Department of  
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Robert D. Ross . . . . . General Manager, The Journal Times, Racine  
Phil Sander . . . . . Executive Secretary, Southeastern  
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Frederick G. Schmidt . . . . . Director, Izaak Walton League;  
Member, Sierra Club  
Mrs. John D. Squier . . . . . Member, Riveredge Nature Center, Inc.  
Walter J. Tarmann . . . . . Executive Director, Waukesha County  
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Department of Natural Resources  
Elwood R. Voigt . . . . . Park Manager, Ozaukee County  
Joseph C. Waters . . . . . President, Wisconsin Association of  
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Campground, Town of Farmington  
Dr. Harry J. Wilkins . . . . . Citizen Member, City of Wauwatosa  
Dr. George T. Wilson . . . . . Visiting Lecturer, Department of  
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Thomas N. Wright . . . . . Planning Director, City of Racine

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Delbert C. Blasdel . . . . . Administrative Code Consultant,  
Division of Safety and Buildings, Wisconsin  
Department of Industry, Labor and Human Relations  
Clarence Dittmar . . . . . President, Dittmar Realty, Inc., Menomonee Falls  
The Rev. John D. Fischer . . . . . Executive Director, Greater Milwaukee Conference on  
Religion and Urban Affairs, City of Milwaukee  
Leonard F. Forschner . . . . . Area Economist, U. S. Department of Housing and  
Urban Development, City of Milwaukee Area Office  
Norman N. Gill . . . . . Executive Director, Citizens  
Governmental Research Bureau, Milwaukee  
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Recht-Goldin & Egel, Inc., Milwaukee  
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Kenneth J. Payne . . . . . Housing Coordinator, Milwaukee  
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Glenn Peters . . . . . Secretary-Treasurer, Peters Development  
Corporation, West Bend  
Wesley L. Scott . . . . . Executive Director, Milwaukee Urban League  
Kathy Sellars . . . . . Planner/Programmer Developer,  
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**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
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Chairman . . . . . Kenosha County  
James Moyer . . . . . Farmer, Town of Yorkville,  
Vice-Chairman . . . . . Racine County  
Emil Mravec . . . . . Farmer, Town of Randall,  
Secretary . . . . . Kenosha County  
Dennis Boland . . . . . Manager, Agricultural Stabilization and  
Conservation Service, Racine County  
John M. Braun . . . . . Farmer, Town of Mt. Pleasant, Racine County  
Leon T. Dreger . . . . . Farmer, Town of Somers, Kenosha County  
Claude Epping . . . . . Farmer, Town of Salem, Kenosha County  
Kenneth Gould . . . . . Farmer, Town of Dover, Racine County  
Kenneth Jacobs . . . . . Farmer, Town of Norway, Racine County  
Paul G. Jaeger . . . . . County Agricultural Agent, Kenosha County  
John C. Kevek . . . . . Farmer, Town of Pleasant Prairie, Kenosha County  
Elwin G. Leet . . . . . County Agricultural Agent, Racine County  
Stanley Lois . . . . . Farmer, Town of Wheatland, Kenosha County  
Rolland F. Prochaska . . . . . Farmer, Town of Caledonia, Racine County  
Wendolyn Reiter . . . . . Farmer, Town of Brighton, Kenosha County  
Ralph Rice . . . . . Farmer, Town of Burlington, Racine County  
Earl Stollenwork . . . . . Farmer, Town of Paris, Kenosha County  
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Larry Toney . . . . . District Conservationist,  
U. S. Soil Conservation Service  
Roy E. Weltzien . . . . . Farmer, Town of Waterford, Racine County  
Robert Willard . . . . . Farmer, Town of Rochester, Racine County

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
ELECTRONIC DATA TRANSMITTAL SYSTEMS FOR CRIMINAL  
JUSTICE AGENCIES IN SOUTHEASTERN WISCONSIN**

George C. Berteau . . . . . Chairman, Southeastern Wisconsin  
Chairman . . . . . Regional Planning Commission  
John W. Ernst . . . . . Administrative and Information  
Secretary . . . . . Services Manager, Southeastern Wisconsin  
Regional Planning Commission  
John C. Ahlgrimm . . . . . Chief Judge, First Judicial  
District, Racine County  
LaMarr Q. Billups . . . . . Executive Assistant,  
Wisconsin Council on Criminal Justice  
Warren D. Braun . . . . . State Senator, Eleventh District  
Thomas Buntrock . . . . . Chief, Mequon Police Department  
James Carvino . . . . . Chief, Racine Police Department  
Jerome A. Clements . . . . . Data Processing Manager, City of Kenosha  
Fredrick A. Fink, Jr. . . . . District Attorney, Washington County Courthouse  
Joan T. Kessler . . . . . U. S. Attorney, Eastern District of Wisconsin  
Raymond J. Klink . . . . . Sheriff, Waukesha County  
Karen Knab . . . . . Deputy Director of State Courts,  
Wisconsin Supreme Court  
John Landa . . . . . District Attorney, Kenosha County  
Peggy L. Mackelfresh . . . . . Clerk of Courts, Walworth County  
Louis A. Metz, III . . . . . Judicial Information Systems  
Coordinator, Milwaukee County  
Ferdinand J. Meyer . . . . . Planning Analyst/Coordinator, Metropolitan  
Milwaukee Criminal Justice Council  
Frank Reimer . . . . . Chief, Germantown Police Department  
Harold Wollenzien . . . . . Chief Judge, Third Judicial  
District, Waukesha County





# Appendix C

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 1979

### EXECUTIVE DIVISION

Kurt W. Bauer, P. E.  
Executive Director

Philip C. Evenson  
Assistant Director

Margaret M. Shanley  
Executive Secretary

Elaine I. Andersen  
Secretary II

### PLANNING RESEARCH DIVISION

Thomas D. Patterson  
Chief of Planning Research

J. Michael Gunville  
Senior Specialist

Donald G. Dittmar  
Sandra L. Retert  
Fredrick J. Zimmer  
Specialists

Diane L. Baker  
Loren G. Muehlis  
Jeffrey J. Shannon  
Digitizer Operators

Jean A. Brylow  
Lee Ann Davies  
Steven W. Justinger  
Kay Ann Schmidt  
Research Analysts

### DATA PROCESSING AND SYSTEMS ENGINEERING DIVISION

John W. Ernst  
Data Processing Manager

Robert J. Baier  
Community Services  
Representative

Richard A. Runte  
Senior Data Processing  
Systems Analyst

Paul J. Clavette  
Programming Supervisor

John D. Harasha  
Systems Analyst

Richard L. Henley  
Senior Programmer/Analyst

Gary J. Orlow  
Senior Programmer

Eleanor L. Baldus  
Bruce W. Lecus  
Gwendolyn McClendon  
Jerome W. VonLoh  
Programmers

John C. Stelpflug  
Operations Supervisor

Michael K. Hennig  
Robert W. Perk  
Michael J. Soyck  
Computer Operators

Kristine M. Engelhardt  
Lead Key Entry Operator

Annette M. Rubel  
Rosemary K. Wilcenski  
Key Entry Operators

Melody M. Fohr  
Post Processing Clerk

### ENVIRONMENTAL PLANNING DIVISION

Lyman F. Wible  
Chief Environmental Engineer

Robert P. Biebel  
Richard S. Grant  
Principal Engineers

Richard F. Pierce  
Principal Specialist

Curtis R. Hulterstrum  
Thomas R. Sear  
Senior Engineers

David B. Kendziorski  
Senior Planner

J. Douglas Wilson  
Senior Specialist

Steven N. Krafcheck  
Sharon R. Kraft  
Trace K. Short  
Specialists

Cynthia V. Cartwright  
Yih-Fey Lee  
Joseph E. Stuber  
Engineers

Betty J. Bublitz  
Research Analyst

Irene A. Brown  
Secretary I

### LAND USE AND HOUSING PLANNING DIVISION

Bruce P. Rubin  
Chief Land Use Planner

Gerald H. Emmerich, Jr.  
Edward J. Semrad  
William J. Stauber  
Senior Planners

Emile A. Jarreau, Jr.  
Donald M. Reed  
Senior Specialist

David L. Haselow  
Planner

Kathleen M. Hazen  
Dennis K. Lefevre  
Lon M. Scott  
Research Analysts

Joyce G. Pariseau  
Research Aide

Mary G. Schmittner  
Clerk/Stenographer

### TRANSPORTATION PLANNING DIVISION

Donald R. Martinson  
Chief Transportation Engineer

Kenneth H. Voigt  
Principal Engineer

Robert E. Beglinger  
James A. Marsho  
Senior Engineers

John L. Zastrow  
Senior Specialist

Albert A. Beck  
Senior Planner

Robert W. Bryson  
Engineer

Joan M. Starr  
Secretary I

### SPECIAL PROJECTS PLANNING DIVISION

Kenneth R. Yunker  
Chief Special  
Projects Engineer

Michael J. Conway  
Craig A. Murawski  
Principal Planners

David P. Jukins  
Senior Engineer

Joseph M. Kampschroer  
Senior Planner

Otto P. Dobnick  
Planner

Mark K. Jones  
Research Aide

Ilene A. Bolle  
Secretary I

### ADMINISTRATIVE SERVICES DIVISION

Frederick J. Patrie  
Administrative Officer

Janice M. Galatis  
Administrative Assistant

Joan A. Zenk  
Bookkeeper

Luella M. Fredrickson  
Secretary II

Laura K. Schramke  
Librarian/Clerk

Betty Gargan  
Andrea L. Louis  
Jane E. Pierson  
Clerk/Typists

Lena P. Caracci  
Rita L. Rolfson  
Clerks

### COMMUNITY ASSISTANCE PLANNING DIVISION

Roland O. Tonn  
Chief Community  
Assistance Planner

Richard B. Untch  
Principal Planner

Patrick J. Meehan  
Norbert R. Schappe  
Senior Planners

Ronald H. Heinen  
Principal Planning  
Draftsman

John F. Roth  
Planner

Nancy A. Greer  
Research Aide

Barbara A. Poff  
Secretary I

### CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Leland H. Kreblin  
Chief Planning Draftsman

B. Lynn Nowak  
Robert A. Ristow  
Senior Planning Draftsmen

August R. Kutschenreuter  
Bergetta J. Ruehmer  
Donald P. Simon  
Paula J. Wilkie  
Planning Draftsmen

Donnette M. Dolzall  
Editor

Charlotte S. Vega  
Composer Operator

Debra K. Sommerfeld  
Research Aide

Wendy A. Hoeft  
Theresa N. Renier  
Office Equipment Operators

### INTERAGENCY STAFF ASSIGNMENTS

Marc A. Schultz  
Community Development Agent  
Natural Resources Education  
University of Wisconsin-Extension



## Appendix D

### PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-DECEMBER 1979

#### PROSPECTUSES

Regional Planning Program, April 1962  
Root River Watershed Planning Program, March 1963  
Fox River Watershed Planning Program, October 1964  
Continuing Land Use-Transportation Study, October 1965  
Milwaukee River Watershed Planning Program, September 1966  
Comprehensive Library Planning Program, April 1968  
Community Shelter Planning Program, August 1968  
Racine Urban Planning District Comprehensive Planning Program, November 1968  
Regional Sanitary Sewerage System Planning Program, December 1968  
Menomonee River Watershed Planning Program, November 1969  
Comprehensive Regional Airport Planning Program, December 1969  
Regional Housing Study, December 1969  
Deep Sandstone Aquifer Simulation Modeling Program, October 1972  
Regional Park, Outdoor Recreation, and Related Open Space Planning Program, March 1973  
Preliminary Engineering Study for the Abatement of Pollution from Combined Sewer Overflow  
in the Milwaukee-Metropolitan Area, July 1973  
Kinnickinnic River Watershed Planning Program Prospectus, November 1974  
Regional Air Quality Maintenance Planning Program Prospectus, November 1974  
Preliminary Engineering Study for the Abatement of Water Pollution in the  
Kenosha Urban Area, December 1975  
Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission:  
1976-1980, December 1975  
Overall Work Program of the Southeastern Wisconsin Regional Planning Commission: 1977-1981,  
December 1976  
Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission:  
1978-1982, December 1977  
Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus,  
September 1978  
Overall Work Program—1979 Southeastern Wisconsin Regional Planning Commission, October 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  
Overall Work Program—1980 Southeastern Wisconsin Regional Planning Commission, November 1979

#### 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

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No. 1 - Regional Planning Systems Study, December 1962  
No. 2 - Regional Base Mapping Program, July 1963  
No. 3 - The Economy of Southeastern Wisconsin, June 1963  
No. 4 - The Population of Southeastern Wisconsin, June 1963

- No. 5 - The Natural Resources of Southeastern Wisconsin, June 1963
- No. 6 - The Public Utilities of Southeastern Wisconsin, July 1963
- No. 7 - The Land Use-Transportation Study
  - Volume 1 - Inventory Findings: 1963, May 1965
  - Volume 2 - Forecasts and Alternative Plans: 1990, June 1966
  - Volume 3 - Recommended Regional Land Use and Transportation Plans: 1990, November 1966
- No. 8 - Soils of Southeastern Wisconsin, June 1966
- No. 9 - A Comprehensive Plan for the Root River Watershed, July 1966
- No. 10 - A Comprehensive Plan for the Kenosha Planning District
  - Volume 1 - Inventory Findings, Forecasts, and Recommended Plans, February 1967
  - Volume 2 - Implementation Devices, February 1967
- No. 11 - A Jurisdictional Highway System Plan for Milwaukee County, March 1969
- No. 12 - A Comprehensive Plan for the Fox River Watershed
  - Volume 1 - Inventory Findings and Forecasts, April 1969
  - Volume 2 - Alternative Plans and Recommended Plan, February 1970
- No. 13 - A Comprehensive Plan for the Milwaukee River Watershed
  - Volume 1 - Inventory Findings and Forecasts, December 1970
  - Volume 2 - Alternative Plans and Recommended Plan, October 1971
- No. 14 - A Comprehensive Plan for the Racine Urban Planning District
  - Volume 1 - Inventory Findings and Forecasts, December 1970
  - Volume 2 - The Recommended Comprehensive Plan, October 1972
  - Volume 3 - Model Plan Implementation Ordinances, September 1972
- No. 15 - A Jurisdictional Highway System Plan for Walworth County, October 1972
- No. 16 - A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974
- No. 17 - A Jurisdictional Highway System Plan for Ozaukee County, December 1973
- No. 18 - A Jurisdictional Highway System Plan for Waukesha County, January 1974
- No. 19 - A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974
- No. 20 - A Regional Housing Plan for Southeastern Wisconsin, February 1975
- 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. 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

## PLANNING GUIDES

- No. 1 - Land Development, November 1963
- No. 2 - Official Mapping, February 1964
- No. 3 - Zoning, April 1964
- No. 4 - Organization of Planning Agencies, June 1964
- No. 5 - Floodland and Shoreland Development, November 1968
- No. 6 - Soils Development, August 1969



## TECHNICAL REPORTS

- No. 1 - Potential Parks and Related Open Spaces, September 1965
- No. 2 - Water Law in Southeastern Wisconsin: 2nd Edition, 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, 2nd Edition, April 1977
- No. 7 - Horizontal and Vertical Survey Control in Southeastern Wisconsin, July 1968
- 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. 11 - The Population of Southeastern Wisconsin, December 1972
- 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 the 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. 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

## 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, October 1976
- No. 10 - The Land Use and Arterial Street System Plans, Village of Jackson,  
Washington County, 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, September 1977
- 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, June 1977
- No. 17 - A Plan for the Jefferson Park Neighborhood, Village of Germantown,  
Washington County, Wisconsin, March 1978
- No. 18 - A Land Use Plan for the Town of Erin: 2000, July 1978
- No. 19 - Storm Water Storage Alternatives for the Crossway Bridge and Port Washington-  
Bayfield Drainage Area in the Village of Fox Point, August 1977
- No. 20 - A Rail Transportation Service Plan for the East Troy Area, September 1977
- No. 21 - A Transportation Systems Management Plan for the Kenosha, Milwaukee,  
and Racine Urbanized Areas in Southeastern Wisconsin: 1978, December 1977
- No. 22 - Alternative and Recommended Land Use Plans for the Town of Genesee: 2000,  
February 1978
- No. 23 - A Park and Recreation Plan for Ozaukee County, August 1978
- No. 24 - A Park and Open Space Plan for the Village of Darien, December 1978
- No. 25 - A Plan for the Delrock Neighborhood, City of Delavan, Walworth County,  
Wisconsin, January 1979
- No. 26 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and  
Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 1978
- No. 27 - A Park and Open Space Plan for the Town of Eagle, April 1979
- No. 28 - Oconomowoc Area Traffic Management Plan, City of Oconomowoc,  
Waukesha County, Wisconsin, December 1979
- No. 29 - A Development Plan for the Quarry Ridge Neighborhood, City of Burlington,  
Racine County, Wisconsin, July 1979
- No. 30 - Whitewater Area Rail Service Plan, August 1979
- No. 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

## 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 Harlen 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

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 Estimation

by Donald L. Gehrke, Economics and Population Analyst and

Orlando E. Delogu, Financial Resources and Legal Analyst

O & D Surveys Accuracy Checks

by Eugene E. Muhich, P.E., Transportation Planning Engineer

A Backward Glance: Railroad Transportation in Southeastern Wisconsin

by Patricia J. Tegge, Editor

Volume 2 - No. 3, February-March 1965

Determination of Historical Flood Frequency for the Root River of Wisconsin

by James C. Ringenoldus, P.E., Harza Engineering Company

The Regional Multiplier

by Kenneth J. Schlager, Chief Systems Engineer

A Backward Glance: The Street Railway in Milwaukee

by Henry M. Mayer, Administrative Assistant,

Milwaukee & Suburban Transport Corporation

Volume 2 - No. 4, April-May 1965

Determination of Runoff for Urban Storm Water Drainage System Design

by Kurt W. Bauer, Executive Director

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, Wisconsin

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

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

ANNUAL REPORTS

1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973,  
1974, 1975, 1976, 1977, and 1978

## CONFERENCE PROCEEDINGS

- 1st Regional Planning Conference, December 6, 1961
- 2nd Regional Planning Conference, November 14, 1962
- 3rd Regional Planning Conference, November 20, 1963
- 4th Regional Planning Conference, May 12, 1965
- 5th Regional Planning Conference, October 26, 1965
- 6th Regional Planning Conference, May 6, 1969
- 7th Regional Planning Conference, January 19, 1972
- 8th Regional Planning Conference, October 16, 1974
- Regional Conference on Sanitary Sewerage System User and  
Industrial Waste Treatment Recovery Charges, July 18, 1974
- 9th Regional Planning Conference, April 14, 1976
- 10th Regional Planning Conference, March 15, 1978
- 11th Regional Planning Conference, April 19, 1979

## OTHER

- 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

## Appendix E

BRUCE E. BOETTCHER

CERTIFIED PUBLIC ACCOUNTANT, S.C.

328 WEST SUNSET DRIVE

WAUKESHA, WISCONSIN 53186

TELEPHONE (414) 549-3366

MEMBER  
WISCONSIN INSTITUTE C.P.A.'S  
AMERICAN INSTITUTE OF  
CERTIFIED PUBLIC ACCOUNTANTS

July 15, 1980

To the Commissioners of  
Southeastern Wisconsin Regional Planning Commission  
916 North East Avenue  
Waukesha, Wisconsin 53186

Gentlemen:

I have examined the accompanying Balance Sheets and the related Statements of Revenues, Expenditures, and Changes in Fund Balances for the year 1979 of the following funds of the Southeastern Wisconsin Regional Planning Commission:

- |  |   |
|--|---|
| 1. General Fund  | 13. Data Processing Fund  |
| 2. Continuing Regional Land Use - Transportation Study Fund                  | 14. Continuing Regional Water Quality Management Planning Program Fund - 1978 |
| 3. Milwaukee Area Primary Transit System Alternative Analysis Fund           | 15. Continuing Regional Environmental Engineering Planning Program Fund       |
| 4. Regional Housing Study Fund   | 16. Kinnickinnic River Watershed Study Fund                                   |
| 5. Regional Air Quality Maintenance Planning Program Fund                    | 17. Menomonee River Pilot Watershed Study Fund                                |
| 6. Continuing Community Assistance Planning Program Fund                     | 18. Coastal Zone Management Planning Program Fund                             |
| 7. Stream Gaging Program Trust Fund  | 19. Area-wide Water Quality Management Planning Program Fund                  |
| 8. Kenosha County Topographic Mapping Fund                                   | 20. Equipment Account   |
| 9. Continuing Regional Water Quality Management Planning Program Fund - 1979 | 21. Unemployment Compensation Fund  |
| 10. U.S. Environmental Protection Agency Urban Non-Point Source Study Fund   | 22. Indirect Expense Fund   |
| 11. Milwaukee Metropolitan Pollution Abatement Program Fund                  | 23. Treasury Cash Fund  |
| 12. Washington County Sediment Control Program Fund                          |   |

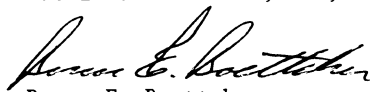
My examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as I considered necessary in the circumstances.

In my opinion, the accompanying financial statements present fairly the financial position of the above funds at December 31, 1979, and the results of its operations for the fiscal year then ended, in conformity with generally accepted accounting procedures applied on a basis consistent with the preceding year and in accordance with standards prescribed by HUD and the Office of Management and Budget.

I have also reviewed compliance and internal control matters in accordance with the provisions of the HUD audit guide for the Comprehensive Planning Assistance Program, and the Office of Management and Budget's Circular A-102, Uniform Requirements for Grants to State and Local Governments, and have included applicable comments on Pages 3 and 4.

Respectfully submitted,

BRUCE E. BOETTCHER, CPA, S.C.



Bruce E. Boettcher  
Certified Public Accountant

## COMMENTS ON COMPLIANCE AND INTERNAL CONTROL

1. Based on my tests of transactions and examination of records, I believe that Southeastern Wisconsin Regional Planning Commission has complied with the following:

- a. The terms and conditions of the grant contracts.
- b. The regulations, policies and procedures prescribed by its governing board, HUD, and the Office of Management and Budget.

2. As a part of my examination, I reviewed and tested the Commission's system of internal accounting control to the extent I considered necessary to evaluate the system as required by generally accepted auditing standards. Under these standards the purpose of such evaluation is to establish a basis for reliance thereon in determining the nature, timing, and extent of other auditing procedures that are necessary for expressing an opinion on the financial statements. Additionally, my examination included procedures necessary in my judgment to determine compliance with contractual terms and conditions and regulations, policies, and procedures prescribed by HUD, as well as the Office of Management and Budget.

The objective of internal accounting control is to provide reasonable, but not absolute, assurance as to the safeguarding of assets against loss from unauthorized use or disposition, and the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that the cost of a system of internal accounting control should not exceed the benefits derived and also recognizes that the evaluation of these factors necessarily requires estimates and judgments by management.

There are inherent limitations that should be recognized in considering the potential effectiveness of any system of internal accounting control. In the performance of most control procedures, errors can result from misunderstanding of instructions, mistakes of judgment, carelessness, or other personal factors. Control procedures whose effectiveness depends upon segregation of duties can be circumvented by collusion. Similarly, control procedures can be circumvented intentionally by management with respect either to the execution and recording of transactions or with respect to the estimates and judgments required in the preparation of financial statements. Further, projection of any evaluation of internal accounting control to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, and that the degree of compliance with the procedures may deteriorate.

My study and evaluation of the Commission's system of internal accounting control and my review of its compliance with contractual terms, regulations, policies, and procedures which was made for the purpose set forth in the first paragraph of this section, revealed no significant weaknesses.

### COST ALLOCATION METHOD

Costs were distributed to the projects and activities pursuant to a cost allocation plan and/or a method of allocation, as applicable, as required by Office of Management and Budget Circular FMC 74-4 and Handbook 6042.1 REV. I reviewed the method used to allocate indirect costs and found it to be consistent and reasonable.

### FINDINGS AND RECOMMENDATIONS

#### Current Audit

During the audit of the Southeastern Wisconsin Regional Planning Commission for the year ended December 31, 1979, no findings were made which would require recommendations.



## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Revenues</u>			
Counties Contribution	\$	\$ 226,852.00	\$
Other Income			
Non Data Processing		10,491.81	
Digitizer Service Agreements		155,383.82	
Interest on Invested Funds		14,668.28	
<u>Total Other Income</u>		<u>180,543.91</u>	
<u>Total Revenues</u>			407,395.91
<u>Expenditures</u>			
<u>Salaries and Fringe Benefits by Divisions</u>			
Transportation		13.20	
Planning Research		63,221.88	
Administrative		.97	
Cartography		1.78	
<u>Total Salaries and Fringe Benefits</u>		<u>63,237.83</u>	
<u>Office and Other Expense</u>			
Digitizer Maintenance		23,792.70	
Other Operating Expense		203.30	
Travel		785.48	
Indirect - Salaries		20,075.88	
- C.O.L.A. Expense		4,287.73	
- Annual Report Publication		601.41	
- Regional Conference		119.84	
- Data Processing Services		3,704.03	
- Outside Salaries & Services		290.94	
- Office, Drafting, & D.P. Supplies		753.85	
- Library Acquisitions and Dues		288.46	
- Reproduction and Publication		674.55	
- Publication of Report		2.37	
- Printing Costs		1,183.70	
- Travel Expense		506.28	
- Postage Expense		433.93	
- Legal Expense		171.49	
- Other Operating Expense		111.60	
- Unemployment Compensation		22.79	
- Auto and Office Equipment			
Maintenance		2,110.52	
- Rent Expense		3,445.91	
<u>Totals Carried Forward</u>	\$	63,566.76 \$ 63,237.83 \$	407,395.91

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

## Comparative Balance Sheet

	Dec. 31, 1979	Dec. 31, 1978
<u>Assets</u>		
Equity in Treasury Fund	\$ 269,790.11	\$ 246,251.57
<u>Total Assets</u>	<u>\$ 269,790.11</u>	<u>\$ 246,251.57</u>
<u>Liabilities</u>		
Payroll Taxes - FICA Tax	53,528.21	35,676.90
Fringe Benefits	1,062.06	988.30
State Sales Tax	94.61	136.90
Accounts Payable	8,434.99	8,063.98
U.S. Savings Bonds	81.50	99.00
Annuity	3,711.57	1,951.64
<u>Total Liabilities</u>	<u>66,912.94</u>	<u>46,916.72</u>
<u>Fund Balance</u>		
Unappropriated Fund Balance	202,877.17	199,334.85
<u>Total Liabilities and Fund Balance</u>	<u>\$ 269,790.11</u>	<u>\$ 246,251.57</u>

The note which follows is an integral part of this statement.

\* \* \* \* \*

EXHIBIT A-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Totals Brought Forward</u>	\$	63,566.76 \$	63,237.83 \$	407,395.91
<u>Expenditures (Continued)</u>				
<u>Office and Other Expense (Continued)</u>				
Indirect - Telephone Expense		1,285.02		
- Insurance Expense		140.33		
- Audit Expense		414.11		
- Depreciation Expense		414.24		
<u>Total Office and Other Expense</u>		<u>65,820.46</u>		
<u>Total Expenditures</u>			<u>129,058.29</u>	
<u>Excess Revenue over Expenditures</u>			<u>278,337.62</u>	
<u>Fund Balance - Beginning of Year</u>			<u>199,334.85</u>	
<u>Add: Transfer of Unused Portion of tax</u>				
levy monies in the Transportation			10,248.43	
Fund				
<u>Less: Contributions to Other Funds (Note 1)</u>		<u>285,043.73</u>	<u>(75,460.45)</u>	
<u>Fund Balance - End of Year</u>			<u>\$ 202,877.17</u>	

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

## Note to Financial Statements

December 31, 1979

## 1. Contributions to Other Funds

The following program funds were reimbursed by the General Fund, fund balance for expenditures that exceeded revenues:

Regional Housing Study Fund	\$ 4,286.67
Continuing Community Assistance Planning	
Program Fund	137,483.12
Data Processing Fund	8,719.94
Continuing Regional Water Quality Management	
Planning Program Fund - 1979	10,156.41
Continuing Regional Environmental Engineering	
Planning Program Fund	62,355.42
Kinnickinnic River Watershed Study Fund	36,441.51
Coastal Zone Management Planning Program Fund	23,661.87
U.S. Environmental Protection Agency Urban	
Non-Point Source Study Fund	1,938.79
	<u>\$ 285,043.73</u>

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Regional Land Use - Transportation Study Fund (Note 1)

## Continuing Regional Land Use - Transportation Study Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

## \* Comparative Balance Sheet

For the Year Ended December 31, 1979

<b>Revenues</b>			
<u>Federal Grants</u>			
Dept. of Housing & Urban Development	\$	\$ 209,383.00	\$
U.S. Environmental Protection Agency		239,016.00	
Dept. of Transportation - Urban			
Mass Transit Authority		393,600.00	
Dept. of Transportation - Federal			
Highway Administration		368,160.00	
<u>State Grants</u>			
Wisconsin Dept. of Transportation		241,489.43	
Wisconsin Dept. of Natural Resources		40,000.00	
Counties Contribution		206,447.57	
<u>Other Income</u>			
Non-Data Processing Receipts		8,043.00	
Community Assistance Agreements		1,150.00	
<u>Total Revenues</u>			1,707,289.00
<b>Expenditures</b>			
<u>Salaries and Fringe Benefits by Divisions</u>			
Executive		8,886.50	
Transportation		163,640.57	
Land Use and Housing		134,289.92	
Administrative		4,717.93	
Cartography		38,872.95	
Planning Research		75,215.69	
Environmental Planning		119,729.28	
Community Assistance		47,672.49	
Special Projects		78,023.53	
<u>Total Salaries and Fringe Benefits</u>			671,048.86
<u>Office and Other Expense</u>			
Technical Consultants		3,505.35	
Data Processing Services		325,305.59	
Newsletter Publication		9,487.00	
Outside Salaries and Services		36,850.54	
Office Drafting & Duplicating Supplies		5,661.49	
Reproduction and Publication		5,303.06	
Publication of Report		18,982.90	
Travel Expense		14,183.58	
Library Acquisitions and Dues		896.19	
Digitizer Services		154,931.43	
Services by Other Public Agencies		17,556.19	
<u>Totals Carried Forward</u>	\$	592,663.32	\$ 671,048.86 \$1,707,289.00

<b>Assets</b>			
Accounts Receivable -			
Net Earned Federal Grants -	\$		\$
HUD		-	21,269.00
U.S. Environmental Protection			
Agency (Note 2)		239,016.00	-
Urban Mass Transit Authority		-	4,833.08
Federal Highway Administration		-	30,488.57
<u>Net Earned Non-Federal Grants -</u>			
Wisconsin Dept. of Natural			
Resources (Note 3)		12,330.00	-
Due from U.S. Bureau of Census		-	8,745.80
Milwaukee Dept. of City Development	5,280.04	-	-
Less: Unearned Milwaukee Dept. of			
City Development	5,280.04	-	-
<u>Grants authorized and</u>			
Unexpended:			
U.S. Environmental Protection			
Agency (Note 2)		60,984.00	-
<u>Total Receivables</u>		312,330.00	65,336.45
<u>Total Assets</u>			
		\$312,330.00	\$65,336.45
<b>Liabilities</b>			
Accounts Payable		14,620.23	6,338.90
Equity in Treasury Fund		227,532.77	58,997.55
<u>Total Liabilities</u>		242,153.00	65,336.45
<u>Fund Balance</u>			
Continuing Appropriations (Note 2)		60,984.00	-
Unappropriated Fund Balance		9,193.00	-
<u>Total Liabilities and Fund Balance</u>		\$312,330.00	\$65,336.45

The notes which follow are an integral part of this statement.

\* \* \* \* \*

EXHIBIT B-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Regional Land Use - Transportation Study Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Totals Brought Forward</u>	\$	592,663.32	\$ 671,048.86	\$1,707,289.00
<b>Expenditures (Continued)</b>				
<u>Office and Other Expense (Continued)</u>				
Other Operating Expense		901.50		
Indirect - Salaries		213,052.14		
- C.O.L.A. Expense		43,465.47		
- Annual Report Publication		6,382.35		
- Regional Conference		1,271.72		
- Data Processing Services		39,308.50		
- Outside Salaries & Services		3,087.58		
- Office, Drafting, and D.P.				
Supplies		8,000.10		
- Library Acquisitions & Dues		3,061.23		
- Reproduction & Publication		7,158.55		
- Publication of Report		25.15		
- Printing Costs		12,561.79		
- Travel Expense		5,372.78		
- Postage Expense		4,605.02		
- Legal Expense		1,819.94		
- Other Operating Expense		1,184.30		
- Unemployment Compensation		241.88		
- Auto and Office Equipment				
Maintenance		22,397.59		
- Rent Expense		36,569.17		
- Telephone Expense		13,637.05		
- Insurance Expense		1,489.26		
- Audit Expense		4,394.69		
- Depreciation Expense		4,396.06		
<u>Total Office and Other Expense</u>			1,027,047.14	
<u>Total Expenditures</u>				1,698,096.00
<u>Excess Revenue over Expenditures</u>				9,193.00
<u>Fund Balance - Beginning of Year</u>				-
<u>Fund Balance - End of Year</u>				\$ 9,193.00

The notes which follow are an integral part of this statement.

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\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Regional Land Use - Transportation Study Fund

## Notes to Financial Statements

December 31, 1979

1. The Continuing Regional Land Use - Transportation Study is a continuing planning program directed towards the monitoring of and recommendation for land use development and supporting transportation facility development within the Region.

## 2. Net Earned Federal Grants - U.S. Environmental Protection Agency

The Continuing Regional Land Use - Transportation Study Fund was awarded a total grant of \$300,000.00 for the 1979 and 1980 calendar years. \$239,016.00 was earned during 1979, therefore, leaving a balance for calendar year 1980 of \$90,984.00.

## 3. Net Earned Federal Grants - Wisconsin Department of Natural Resources

The Continuing Regional Land Use - Transportation Study Fund was awarded a total grant of \$40,000.00 for the 1979 calendar year. The \$40,000.00 was earned during 1979, and therefore, no unearned portion appears in this statement.

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Area Primary Transit System Alternative Analysis Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

## Revenues

Federal Grants			
Department of Transportation -			
Urban Mass Transit Authority	\$	\$ 94,833.15	\$
State Grants			
Wisconsin Dept. of Transportation		7,294.43	
Counties Contribution		7,294.43	
Total Revenues			109,422.01

## Expenditures

Salaries and Fringe Benefits by Divisions			
Executive	811.58		
Transportation	7,085.52		
Land Use and Housing	727.97		
Administrative	628.64		
Cartography	1,053.00		
Planning Research	2,572.95		
Community Assistance	10.68		
Special Projects	45,907.88		
Total Salaries and Fringe Benefits		58,798.22	
Office and Other Expense			
Data Processing Services	11,925.33		
Travel Expense	279.99		
Digitizer Services	305.48		
Other Operating Expense	90.00		
Indirect - Salaries	18,687.91		
- C.O.L.A. Expense	3,812.58		
- Regional Conference	111.55		
- Annual Report Publication	559.83		
- Outside Salaries & Services	270.83		
- Data Processing Services	3,447.95		
- Office, Drafting & D.P. Supplies	701.73		
- Library Acquisitions & Dues	268.52		
Totals Carried Forward	\$ 40,461.70	\$ 58,798.22	\$ 109,422.01

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Area Primary Transit System Alternative Analysis Fund (Note 1)

## Balance Sheet

As at December 31, 1979

## Assets

Equity in Treasury Fund	\$	\$ 77,766.85
Accounts Receivable		
Federal Urban Mass Transit Authority		249,676.00
Less: Unearned Urban Mass Transit Authority (Note 2)		327,442.85
Non-Federal Wisconsin Dept. of Transportation		10,930.57
Less: Unearned Wisconsin Dept. of Transportation (Note 3)		10,930.57
Milwaukee County		24,710.57
Less: Unearned Milwaukee County (Note 4)		24,710.57

## Total Assets

\$ -

## Liabilities

\$ -

## Fund Balance

\$ -

## Fund Balance

\$ -

## Total Liabilities and Fund Balance

\$ -

The notes which follow are an integral part of this statement.

\* \* \* \* \*

EXHIBIT C-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Area Primary Transit System Alternative Analysis Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Totals Brought Forward \$ 40,461.70 \$ 58,798.22 \$ 109,422.01

## Expenditures (Continued)

Office and Other Expense (Continued)			
Indirect - Reproduction & Publication	627.91		
- Publication of Report	2.21		
- Printing Costs	1,101.86		
- Travel Expense	471.27		
- Postage Expense	403.93		
- Legal Expense	159.64		
- Other Operating Expense	103.88		
- Unemployment Compensation	21.22		
- Auto and Office Equipment Maintenance	1,964.61		
- Rent Expense	3,207.67		
- Telephone Expense	1,196.18		
- Insurance Expense	130.63		
- Audit Expense	385.48		
- Depreciation Expense	385.60		
Total Office and Other Expense		50,623.79	
Total Expenditures			109,422.01

## Excess Revenue over Expenditures

-

## Fund Balance - Beginning of Year

-

## Fund Balance - End of Year

\$ -

The notes which follow are an integral part of this statement.

\* \* \* \* \*

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Area Primary Transit System Alternative Analysis Fund

## Notes to Financial Statements

December 31, 1979

- The Alternatives Analysis Study was undertaken by the Regional Planning Commission in response to the U.S. Department of Transportation, Urban Mass Transportation Administration (UMTA) requirement for an alternatives analysis study for urbanized areas proposing a new or extended fixed guideway transit system. The alternatives analysis study consists of two phases, the first of which will be conducted in calendar years 1979 and 1980. The objectives of the first phase are: (1) to identify potential fixed guideway transit corridors, (2) to identify transit modes, and (3) to develop a set of plan evaluation tools. A second phase of the alternatives analysis will commence in calendar year 1981.
- Unearned Urban Mass Transit Authority  
The Alternative Analysis Study was awarded a total grant of \$422,276.00. The \$94,833.15 was earned during 1979. As of December 31, 1979, the unearned balance of \$327,442.85 is the unearned balance of the portion recognized as possible 1980 revenue.
- Unearned Wisconsin Department of Transportation  
The Alternative Analysis Study was awarded a total grant of \$18,225.00. The \$7,294.43 was earned during 1979. As of December 31, 1979, the unearned balance of \$10,930.57 is the unearned balance of the portion recognized as possible 1980 revenue.
- Unearned Milwaukee County  
The Alternative Analysis Study was awarded a total grant of \$32,005.00. The \$7,294.43 was earned during 1979. As of December 31, 1979, the unearned balance of \$24,710.57 is the unearned balance of the portion recognized as possible 1980 revenue.

## EXHIBIT D-A

## EXHIBIT D-B

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Regional Housing Study Fund (Note 1)

## Regional Housing Study Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

## Comparative Balance Sheet

For the Year Ended December 31, 1979

Revenues			
Federal Grants			
Dept. of Housing and Urban Development \$	\$ 15,000.00	\$	
State Grants			
Wisconsin Dept. of Local Affairs & Development	27,758.00		
Contribution from General Fund	4,286.67		
<u>Total Revenues</u>		47,044.67	
Expenditures			
Salaries and Fringe Benefits by Divisions			
Transportation	137.26		
Land Use and Housing	27,092.75		
Administrative	6.65		
Cartography	83.88		
Executive	151.63		
Planning Research	4.60		
<u>Total Salaries and Fringe Benefits</u>		27,476.77	
Office and Other Expense			
Data Processing Services	1,721.32		
Travel Expense	95.80		
Indirect - Salaries	8,724.33		
- C.O.L.A. Expense	1,779.88		
- Annual Report Publication	261.35		
- Regional Conference	52.08		
- Data Processing Services	1,609.65		
- Outside Salaries and Services	126.43		
- Office, Drafting & D.P. Supplies	327.60		
- Library Acquisitions and Dues	125.36		
- Reproduction and Publication	293.14		
- Publication of Report	1.03		
- Printing Costs	514.40		
- Travel Expense	220.01		
<u>Totals Carried Forward</u>	\$ 15,852.38	\$ 27,476.77	\$ 47,044.67

Assets		Dec. 31, 1979	Dec. 31, 1978
Equity in Treasury Fund		\$ 5.70	\$ -
Accounts Receivable			
Net Earned Fed. Grants (HUD)		-	1,846.00
<u>Total Assets</u>		\$ 5.70	\$ 1,846.00
Liabilities			
Equity in Treasury Fund		-	1,846.00
Accounts Payable		5.70	-
<u>Total Liabilities</u>		-	1,846.00
Fund Balance			
Fund Balance		-	-
<u>Total Liabilities and Fund Balance</u>		\$ 5.70	\$ 1,846.00

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Regional Housing Study Fund

## Note to Financial Statements

December 31, 1979

1. The Regional Housing Study is a study being conducted to provide uniform areawide information on the supply of and demand for housing within the region.

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EXHIBIT D-A  
(Continued)

## EXHIBIT E

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Regional Housing Study Fund (Note 1)

## Regional Air Quality Maintenance Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

## Comparative Balance Sheet

For the Year Ended December 31, 1979

<u>Totals Brought Forward</u>	\$ 15,852.38	\$ 27,476.77	\$ 47,044.67
Expenditures (Continued)			
Office and Other Expense (Continued)			
Indirect - Postage Expense	188.57		
- Legal Expense	74.52		
- Other Operating Expense	48.50		
- Unemployment Compensation	9.90		
- Auto and Office Equipment Maintenance	917.16		
- Rent Expense	1,497.48		
- Telephone Expense	558.43		
- Insurance Expense	60.98		
- Audit Expense	179.96		
- Depreciation Expense	180.02		
<u>Total Office and Other Expense</u>		19,567.90	
<u>Total Expenditures</u>			47,044.67
Excess Revenue over Expenditures		-	
<u>Fund Balance - Beginning of Year</u>		-	
<u>Fund Balance - End of Year</u>		\$ -	

Assets		December 31, 1979	December 31, 1978
Federal - U.S. Environmental Protection Agency		\$ -	\$38,742.33
Less: Unearned - U.S. Environmental Protection Agency		-	-
Non-Federal - Wisconsin Dept. of Transportation		-	20,111.34
Less: Unearned Wisconsin Dept. of Transportation		-	-
Non-Federal - Dept. of City Development, City of Milwaukee		-	15,000.00
Less: Unearned - Dept. of City Development, City of Milwaukee		-	5,280.04
<u>Total Assets</u>		\$ -	\$68,573.63
Liabilities			
Accounts Payable		-	13,697.87
Equity in Treasury Fund		-	54,875.76
<u>Total Liabilities</u>		-	68,573.63
Fund Balance			
Fund Balance		-	-
<u>Total Liabilities and Fund Balance</u>		\$ -	\$68,573.63

The note which follows is an integral part of this statement.

The note which follows is an integral part of this statement.

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## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Regional Air Quality Maintenance Planning Program Fund

## Note to Financial Statements

December 31, 1979

1. The Regional Air Quality Maintenance Planning Program is a study being conducted to develop a sound and workable long-range plan for meeting established ambient air quality objectives and supporting standards within the region.

\* \* \* \* \*

## EXHIBIT F-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Community Assistance Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

## Revenues

State Grants			
Wisconsin Dept. of Local Affairs and Development (Note 2)	\$	\$ 84,667.00	\$
Contribution from General Fund		137,483.12	
Other Income			
Community Assistance Agreements	46,108.34		
Non-Data Processing Receipts	3,675.98		
Sale of Publications	5,185.66		
Sale of Aerial Photos	18,783.43		
Floodplain Information Revenue	2,372.00		
University of Wisconsin - Extension	803.91		
Total Other Income		76,929.32	
Total Revenues		299,079.44	

## Expenditures

Salaries and Fringe Benefits by Divisions			
Executive	31,614.54		
Transportation	1,320.67		
Land Use and Housing	4,068.23		
Administrative	3,036.34		
Cartography	20,278.19		
Planning Research	2,034.43		
Environmental Planning	19,390.80		
Community Assistance	81,045.51		
Special Projects	85.02		
Total Salaries and Fringe Benefits		162,873.73	
Office and Other Expense			
Outside Salaries and Services	607.50		
Data Processing Services	6,985.27		
Newsletter Publication	10,364.26		
Office Drafting and Duplicating Supplies	225.06		
Reproduction and Publication	2,050.28		
Publication of Report	7,648.39		
Totals Carried Forward	\$ 27,880.76	\$ 162,873.73	\$ 299,079.44

EXHIBIT F-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Community Assistance Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Totals Brought Forward \$ 27,880.76 \$ 162,873.73 \$ 299,079.44

## Expenditures (Continued)

Office and Other Expense (Continued)			
Travel Expense	2,278.72		
Digitizer Services	48.71		
Indirect - Salaries	51,701.58		
- C.O.L.A. Expense	10,547.81		
- Annual Report Publication	1,548.81		
- Regional Conference	308.61		
- Data Processing Services	9,539.03		
- Outside Salaries and Services	749.27		
- Office, Drafting, & D.P. Supplies	1,941.39		
- Library Acquisitions and Dues	742.87		
- Reproduction and Publication	1,737.18		
- Publication of Report	6.10		
- Printing Costs	3,048.38		
- Travel Expense	1,303.82		
- Postage Expense	1,117.51		
- Legal Expense	441.64		
- Other Operating Expense	287.40		
- Unemployment Compensation	58.69		
- Auto and Office Equipment			
- Maintenance	5,435.24		
- Rent Expense	8,874.28		
- Telephone Expense	3,309.32		
- Insurance Expense	361.40		
- Audit Expense	1,066.47		
- Depreciation Expense	1,066.80		
Total Office and Other Expense		135,401.79	
Total Expenditures		298,275.52	
Excess Revenue over Expenditures		803.92	
Fund Balance - Beginning of Year		-	
Fund Balance - End of Year		\$ 803.92	

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Community Assistance Planning Program Fund (Note 1)

## Comparative Balance Sheet

Assets	Dec. 31, 1979	Dec. 31, 1978
Accounts Receivable		
Federal Grants - HUD	\$ -	\$ 14,908.00
Non-Federal - Community Assistance	40,091.30	41,512.29
- Wisconsin Dept. of Local Affairs and Development	29,056.00	-
Total Assets	\$ 69,147.30	\$ 56,420.29
Liabilities		
Accounts Payable	13,568.06	4,596.40
Equity in Treasury	54,775.32	51,823.89
Total Liabilities	68,343.38	56,420.29
Fund Balance		
Unappropriated Fund Balance	803.92	-
Total Liabilities and Fund Balance	\$ 69,147.30	\$ 56,420.29

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Community Assistance Planning Program Fund

## Notes to Financial Statements

December 31, 1979

- The Continuing Community Assistance Planning Program disseminates data assembled under the regional planning programs toward the implementation of adopted regional and subregional plan elements and assists local officials in the resolution of local planning and development problems through the preparation of local plans and plan implementation devices and the provision of ongoing functional guidance and advice.
- State Grants - Wisconsin Department of Local Affairs and Development  
The Continuing Community Assistance Planning Program Fund 1978 award was \$84,667.00 which represents a portion of the total Southeastern Wisconsin Regional Planning Commission's award of \$112,425.00 from the Wisconsin Department of Local Affairs and Development. The monies received were used to offset expenditures incurred for the printing of the bi-monthly Newsletter, Community Assistance Program, and A-95 Clearing House Review.

\* \* \* \* \*

## EXHIBIT G-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Stream Gaging Program Trust Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Revenues			
Counties Contribution (Note 2)	\$ 36,580.00	\$	
Interest on Invested Funds	1,342.82		
Total Revenues			37,922.82
Expenditures			
Services by Other Public Agencies	42,130.00		
Total Expenditures			42,130.00
Excess Expenditures over Revenue			(4,207.18)
Fund Balance - Beginning of Year			25,009.09
Fund Balance - End of Year			\$ 20,801.91

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Stream Gaging Program Trust Fund (Note 1)

## Comparative Balance Sheet

	Dec. 31, 1979	Dec. 31, 1978
<b>Assets</b>		
Equity in Treasury Fund	\$ 23,626.91	\$ 19,309.09
Accounts Receivable	6,100.00	5,700.00
<b>Total Assets</b>	<b>\$ 29,726.91</b>	<b>\$ 25,009.09</b>
<b>Liabilities</b>		
Accounts Payable	8,925.00	-
<b>Total Liabilities</b>	<b>8,925.00</b>	<b>-</b>
<b>Fund Balance</b>		
Unappropriated Fund Balance	20,801.91	25,009.09
<b>Total Liabilities and Fund Balance</b>	<b>\$ 29,726.91</b>	<b>\$ 25,009.09</b>

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Stream Gaging Program Trust Fund

## Notes to Financial Statements

December 31, 1979

- The Stream Gaging Program Trust Fund is a trust account administered by the Commission for a cooperative program involving the U.S. Geological Survey, which contributed 50 percent of the cost of the program in the form of staff, services, and the Metropolitan Sewerage Commission of the County of Milwaukee, the Fond du Lac, Ozaukee, Racine, Washington, and Waukesha County Boards of Supervisors, and the University of Wisconsin-Parkside to monitor river flows and provide data essential for the management of the water resources of southeastern Wisconsin.

- The 1979 contributions to the Stream Gaging Program were as follows:

Metropolitan Sewerage Commission of the County of Milwaukee	\$ 16,480.00
Fond du Lac County	2,000.00
Waukesha County	4,200.00
Ozaukee County	4,000.00
Washington County	4,000.00
Racine County	4,000.00
Kenosha Water Utility	2,100.00
	<b>\$ 36,780.00</b>

The deviation between the adopted 1979 Commission Budget and the actual local contributions for the continuing stream gaging program is due to the difference in the Commission budget year and the U.S. Geological Survey's fiscal year. At the time of the adoption of the Commission budget in June of 1979, the contract amount for the second half of calendar year 1979, which included the first half of the 1980 federal fiscal year, had not been determined. The contributions by the actual participants therefore may vary by a small amount from the budgeted figures, as the contract amounts for the first half of the new federal fiscal year are determined by the U.S. Geological Survey.

\* \* \* \* \*

## EXHIBIT H-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kenosha County Topographic Mapping Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Revenues</b>	
Counties Contributions	\$ 31,665.00
<b>Expenditures</b>	
Outside Salaries and Services	31,665.00
Excess Revenue over Expenditures	-
<b>Fund Balance - Beginning of Year</b>	<b>-</b>
<b>Fund Balance - End of Year</b>	<b>\$ -</b>

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kenosha County Topographic Mapping Fund (Note 1)

## Balance Sheet

As at December 31, 1979

<b>Assets</b>		
Equity in Treasury Fund		\$ 22,335.00
<b>Total Assets</b>		<b>\$ 22,335.00</b>
<b>Liabilities</b>		
Unearned Grant - Kenosha County		22,335.00
<b>Total Liabilities</b>		<b>22,335.00</b>
<b>Fund Balance</b>		<b>-</b>
<b>Total Liabilities and Fund Balance</b>		<b>\$ 22,335.00</b>

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kenosha County Topographic Mapping Fund

## Note to Financial Statements

December 31, 1979

- The Kenosha County topographic mapping fund is a cooperative agreement between Kenosha County and the Southeastern Wisconsin Regional Planning Commission for the provision of technical services in the conduct of aerial photography and topographic mapping for the Pike River in Kenosha County. This study will support the floodland management and water quality planning activities for the Pike River watershed of Kenosha County.

\* \* \* \* \*

## EXHIBIT I-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Regional Water Quality Management Planning Program Fund - 1979 (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Revenues</b>			
Federal Grants			
U.S. Environmental Protection Agency	\$	\$ 186,400.00	\$
State Grants			
Wisconsin Dept. of Natural Resources		31,403.00	
Counties Contribution		31,451.00	
Contribution from General Fund		10,156.41	
Other Income			
Non-Data Processing Receipts		598.15	
<b>Total Revenues</b>			<b>260,008.56</b>
<b>Expenditures</b>			
Salaries and Fringe Benefits by Divisions			
Executive		6,644.45	
Transportation		360.06	
Land Use and Housing		660.22	
Administrative		2,657.99	
Cartography		38,813.98	
Planning Research		589.95	
Environmental Planning		59,636.25	
Community Assistance		2,392.70	
Special Projects		340.08	
<b>Total Salaries and Fringe Benefits</b>			<b>112,095.68</b>
<b>Office and Other Expense</b>			
Services by Other Public Agencies		12,413.85	
Office, Drafting, & D.P. Supplies		4.36	
Data Processing Services		17,555.81	
Reproduction and Publication		694.81	
Printing Costs		3.80	
Publication of Report		42,981.88	
Travel Expense		1,655.78	
Other Operating Expense		187.45	
Indirect - Salaries		35,591.31	
- C.O.L.A. Expense		7,261.10	
- Annual Report Publication		1,066.20	
- Regional Conference		212.45	
- Data Processing Services		6,566.66	
- Outside Salaries and Services		515.79	
- Office, Drafting & D.P. Supplies		1,336.45	
- Library Acquisitions and Dues		511.39	
- Reproduction and Publication		1,195.87	
<b>Totals Carried Forward</b>	<b>\$</b>	<b>129,754.96</b>	<b>\$ 112,095.68 \$ 260,008.56</b>

EXHIBIT I-A  
(Continued)

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Water Quality Management  
Planning Program Fund - 1979 (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Totals Brought Forward	\$ 129,754.96	\$ 112,095.68	\$ 260,008.56
Expenditures (Continued)			
Office and Other Expense (Continued)			
Indirect - Publication of Report	4.20		
- Printing Costs	2,098.50		
- Travel Expense	897.55		
- Postage Expense	769.29		
- Legal Expense	304.03		
- Other Operating Expense	197.84		
- Unemployment Compensation	40.40		
- Auto and Office Equipment			
Maintenance	3,741.61		
Rent Expense	6,109.04		
Telephone Expense	2,278.13		
Insurance Expense	248.79		
Audit Expense	734.16		
Depreciation Expense	734.38		
Total Office and Other Expense		147,912.88	
Total Expenditures			260,008.56
Excess Revenue over Expenditures			-
Fund Balance - Beginning of Year			-
Fund Balance - End of Year			\$ -

The note which follows is an integral part of this statement.

\* \* \* \* \*

EXHIBIT I-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Water Quality Management Planning Program Fund - 1979 (Note 1)

Balance Sheet

As at December 31, 1979

Assets	
Equity in Treasury Fund	\$ 2,617.79
Total Assets	2,617.79
Liabilities	
Accounts Payable	2,617.79
Total Liabilities	2,617.79
Fund Balance	-
Total Liabilities and Fund Balance	\$ 2,617.79

The note which follows is an integral part of this statement.

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Water Quality  
Management Planning Program Fund - 1979

Note to Financial Statements

December 31, 1979

1. The Continuing Regional Water Quality Management Planning Program identifies actions and costs required in order to achieve water quality standards in lakes and streams through the year 2000.

\* \* \* \* \*

EXHIBIT J-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U.S. Environmental Protection Agency Urban Non - Point Source Study Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Revenues			
Contribution from General	\$	\$ 1,938.79	\$
Total Revenues			1,938.79
Expenditures			
Salaries and Fringe Benefits by Divisions			
Administrative		1.29	
Environmental Planning		1,145.82	
Transportation		15.28	
Total Salaries and Fringe Benefits			1,162.39
Office and Other Expense			
Travel Expense		2.90	
Other Operating Expense		67.50	
Indirect - Salaries		346.99	
- C.O.L.A. Expense		70.79	
- Annual Report Publication		10.39	
- Regional Conference		2.07	
- Data Processing Services		64.02	
- Outside Salaries and Services		5.03	
- Office, Drafting, & D.P. Supplies		13.03	
- Library Acquisitions and Dues		4.99	
- Reproduction and Publication		11.66	
- Publication of Report		.04	
- Printing Costs		20.46	
- Travel Expense		8.75	
- Postage Expense		7.50	
- Legal Expense		2.96	
- Other Operating Expense		1.93	
- Unemployment Compensation		.39	
- Auto and Office Equipment			
Maintenance		36.48	
Rent Expense		59.56	
Telephone Expense		22.21	
Insurance Expense		2.43	
Audit Expense		7.16	
Depreciation Expense		7.16	
Total Office and Other Expense		776.40	
Total Expenditures			1,938.79
Excess Revenue over Expenditures			-
Fund Balance - Beginning of Year			-
Fund Balance - End of Year			\$ -

The note which follows is an integral part of this statement.

EXHIBIT J-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U.S. Environmental Protection Agency  
Urban Non - Point Source Study Fund (Note 1)

Balance Sheet

As at December 31, 1979

Assets	\$ -
Liabilities	-
Fund Balance	-
Total Liabilities and Fund Balance	\$ -

The note which follows is an integral part of this statement.

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U.S. Environmental Protection Agency Urban Non-Point Source Study Fund

Note to Financial Statements

December 31, 1979

1. This study was undertaken by the Southeastern Wisconsin Regional Planning Commission in calendar year 1979 for the purpose of identifying for the U.S. Environmental Protection Agency various non-point sources of water pollution in southeastern Wisconsin.

\* \* \* \* \*

## EXHIBIT K-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Metropolitan Pollution Abatement Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Revenues</b>			
<b>Other Income</b>			
Milwaukee Metropolitan Sewerage Commission	\$	\$ 218,968.56	\$
<b>Total Revenues</b>			218,968.56
<b>Expenditures</b>			
<b>Salaries and Fringe Benefits by Divisions</b>			
Executive	3,653.73		
Transportation	1,039.29		
Land Use and Housing	1,533.32		
Administrative	665.45		
Planning Research	350.39		
Cartography	349.93		
Environmental Planning	27,983.79		
Community Assistance	6.18		
<b>Total Salaries and Fringe Benefits</b>		35,582.08	
<b>Office and Other Expense</b>			
Technical Consultants	3,645.00		
Services by Other Public Agencies	1,698.23		
Outside Salaries and Services	3,172.55		
Reproduction and Publication	2,132.65		
Data Processing Services	148,795.94		
Travel Expense	460.85		
Other Operating Expense	485.95		
Indirect - Salaries	11,301.97		
- C.O.L.A. Expense	2,305.75		
- Annual Report Publication	338.57		
- Regional Conference	67.46		
- Data Processing Services	2,085.23		
- Outside Salaries and Services	163.79		
- Office, Drafting, & D.P. Supplies	424.39		
- Library Acquisitions and Dues	162.39		
- Reproduction and Publication	379.75		
- Publication of Report	1.33		
- Printing Costs	666.38		
- Travel Expense	285.01		
- Postage Expense	244.29		
- Legal Expense	96.54		
<b>Totals Carried Forward</b>	\$ 178,914.02	\$ 35,582.08	\$ 218,968.56

EXHIBIT K-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Metropolitan Pollution Abatement Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Totals Brought Forward</b>	\$	178,914.02	\$	35,582.08	\$	218,968.56
<b>Expenditures (Continued)</b>						
<b>Office and Other Expense (Continued)</b>						
Indirect - Other Operating Expense	62.82					
- Unemployment Compensation	12.83					
- Auto and Office Equipment						
- Maintenance	1,188.14					
- Rent Expense	1,939.92					
- Telephone Expense	723.42					
- Insurance Expense	79.00					
- Audit Expense	233.13					
- Depreciation Expense	233.20					
<b>Total Office and Other Expense</b>		183,386.48				
<b>Total Expenditures</b>				218,968.56		
<b>Excess Revenue over Expenditures</b>				-		
<b>Fund Balance - Beginning of Year</b>				-		
<b>Fund Balance - End of Year</b>				\$ -		

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## EXHIBIT K-B

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Metropolitan Pollution Abatement Program Fund (Note 1)

## Comparative Balance Sheet

	December 31, 1979	December 31, 1978
<b>Assets</b>		
Receivables		
Non-Federal - Milwaukee Metropolitan Sewerage Commission	\$67,500.01	\$96,500.00
Less: Unearned Milwaukee Metropolitan Sewerage Commission (Note 2)	38,607.30	28,982.71
	28,892.71	91,335.86
<b>Total Assets</b>	<b>\$28,892.71</b>	<b>\$ 5,164.14</b>
<b>Liabilities</b>		
Accounts Payable	1,758.48	18.43
Equity in Treasury Fund	27,134.23	5,145.71
<b>Total Liabilities</b>	<b>28,892.71</b>	<b>5,164.14</b>
<b>Fund Balance</b>	<b>-</b>	<b>-</b>
<b>Total Liabilities and Fund Balance</b>	<b>\$28,892.71</b>	<b>\$ 5,164.14</b>

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Milwaukee Metropolitan Pollution Abatement Program Fund

## Notes to Financial Statements

December 31, 1979

- The Milwaukee Metropolitan Pollution Abatement Program Fund is a cooperative agreement for technical services in support of the development of a facilities plan for the Milwaukee Metropolitan Sewerage District.
- Unearned Milwaukee Metropolitan Sewerage Commission  
As of December 31, 1979, the unearned balance of \$38,607.30 is the unearned balance of the portion recognized as possible 1980 revenue.

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## EXHIBIT L

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Washington County Sediment Control Program Fund (Note 1)

## Comparative Balance Sheet

	Dec. 31, 1979	Dec. 31, 1978
<b>Assets</b>		
Receivables		
U.S. Environmental Protection Agency	\$ -	\$ 44,687.29
<b>Total Assets</b>	<b>\$ -</b>	<b>\$ 44,687.29</b>
<b>Liabilities</b>		
Equity in Treasury Fund	-	44,687.29
<b>Total Liabilities</b>	<b>-</b>	<b>44,687.29</b>
<b>Fund Balance</b>	<b>-</b>	<b>-</b>
<b>Total Liabilities and Fund Balance</b>	<b>\$ -</b>	<b>\$ 44,687.29</b>

The note which follows is an integral part of this statement.

\* \* \* \* \*



## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Washington County Sediment Control Program Fund

## Note to Financial Statements

December 31, 1979

1. A grant from the U.S. Environmental Protection Agency for the purpose of demonstrating the effectiveness of land control measures in improving water quality and devising the necessary institutional arrangements for the preparation, acceptance, adoption and implementation of a sediment control ordinance or other regulatory mechanism applicable to incorporated and unincorporated areas on a county-wide basis.

\* \* \* \* \*

## EXHIBIT M-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Data Processing Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Revenues</u>			
Contribution from General Fund	\$	\$ 8,719.94	\$
Other Income (Note 2)		972,691.78	
<u>Total Revenues</u>			981,411.72
<u>Expenditures</u>			
<u>Salaries and Fringe Benefits by Divisions</u>			
Data Processing	324,490.19		
Administrative	14.75		
Cartography	40.23		
<u>Total Salaries and Fringe Benefits</u>		324,545.17	
<u>Office and Other Expense</u>			
Outside Salaries and Services	808.00		
Data Processing Machine Rental	397,795.76		
Office Drafting and Duplicating Supplies	29,396.06		
Travel Expense	5,839.63		
Other Operating Expense	893.80		
Telephone Expense	12,452.13		
Indirect - Salaries	103,056.16		
- C.O.L.A. Expense	21,024.83		
- Annual Report Publication	3,087.23		
- Regional Conference	615.15		
- Data Processing Services	19,014.04		
- Outside Salaries and Services	1,493.50		
- Office, Drafting & D.P. Supplies	3,869.76		
- Library Acquisitions and Dues	1,480.76		
- Reproduction and Publication	3,462.69		
- Publication of Report	12.16		
- Printing Costs	6,076.31		
- Travel Expense	2,598.88		
- Postage Expense	2,227.51		
<u>Totals Carried Forward</u>	\$ 615,204.36	\$ 324,545.17	\$ 981,411.72

EXHIBIT M-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Data Processing Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Totals Brought Forward</u>	\$ 615,204.36	\$ 324,545.17	\$ 981,411.72
<u>Expenditures (Continued)</u>			
<u>Office and Other Expense (Continued)</u>			
Indirect - Legal Expense	880.32		
- Other Operating Expense	572.86		
- Unemployment Compensation	116.99		
- Auto and Office Equipment			
Maintenance	10,834.01		
- Rent Expense	17,689.00		
- Telephone Expense	6,596.43		
- Insurance Expense	720.37		
- Audit Expense	2,125.78		
- Depreciation Expense	2,126.43		
<u>Total Office and Other Expense</u>		656,866.55	
<u>Total Expenditures</u>			981,411.72
<u>Excess Revenue over Expenditures</u>			-
<u>Fund Balance - Beginning of Year</u>			-
<u>Fund Balance - End of Year</u>			\$ -

The notes which follow are an integral part of this statement.

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## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Data Processing Fund (Note 1)

## Comparative Balance Sheet

Assets	Dec. 31, 1979	Dec. 31, 1978
Accounts Receivable		
Due from Service Agreements (Note 3)	\$ 70,325.75	\$ 79,514.08
<u>Total Assets</u>	\$ 70,325.75	\$ 79,514.08
<u>Liabilities</u>		
State Sales Tax	36.19	75.18
Accounts Payable	42,790.63	69,812.23
Equity in Treasury	27,498.93	9,626.67
<u>Total Liabilities</u>	70,325.75	79,514.08
<u>Fund Balance</u>	-	-
<u>Fund Balance</u>	-	-
<u>Total Liabilities and Fund Balance</u>	\$ 70,325.75	\$ 79,514.08

The notes which follow are an integral part of this statement.

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## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Data Processing Fund

## Notes to Financial Statements

December 31, 1979

- The Data Processing Fund is a separate fund established to identify all data processing expenses from which "at cost" data processing invoices are issued to all in-house and out-of-house users of data processing services.
- Other Income

The following are the sources of funds paid to the Data Processing Fund for services rendered:

<u>Project Funds</u>	
Continuing Regional Land Use - Transportation Study Fund	\$ 325,305.59
Milwaukee Area Primary Transit System Alternative Analysis Fund	11,925.33
Regional Housing Study Fund	1,721.32
Continuing Community Assistance Planning Program Fund	6,985.27
Continuing Regional Water Quality Management Planning Program Fund - 1979	17,555.81
Continuing Regional Environmental Engineering Planning Program Fund	51,392.99
Kinnickinnic River Watershed Study Fund	131.91
Coastal Zone Management Planning Program Fund	84.65
Milwaukee Metropolitan Pollution Abatement Program Fund	148,795.94
<u>Total from Projects</u>	563,898.81
<u>Indirect Data Processing Services</u>	91,457.62
<u>Service Agreements</u>	317,335.35
	<u>\$ 972,691.78</u>

3. Due from Service Agreements

The Southeastern Wisconsin Regional Planning Commission leases an IBM 370 computer and offers electronic data processing services to schools, municipalities, and other agencies within the region. As of December 31, 1979, schools, municipalities and other agencies owed \$70,325.75 to Southeastern Wisconsin Regional Planning Commission for data processing services rendered.

\* \* \* \* \*

## EXHIBIT N

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Water Quality Management Planning Program Fund - 1978 (Note 1)

## Comparative Balance Sheet

	Dec. 31, 1979	Dec. 31, 1978
<b>Assets</b>		
Equity in Treasury Fund	\$ -	\$ 104,551.23
Accounts Receivable		
Federal Grants - U.S. Environmental Protection Agency	-	37,419.00
Non - Federal - Wisconsin Dept. of Natural Resources (Note 2)	-	57,117.00
<b>Total Assets</b>	<b>\$ -</b>	<b>\$ 199,087.23</b>
<b>Liabilities</b>		
Accounts Payable	-	89,087.23
State Loan	-	110,000.00
Equity in Treasury Fund	-	-
<b>Total Liabilities</b>	<b>-</b>	<b>199,087.23</b>
<b>Fund Balance</b>		
Unappropriated Fund Balance	-	-
<b>Total Liabilities and Fund Balance</b>	<b>\$ -</b>	<b>\$ 199,087.23</b>

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Water Quality Management Planning Program Fund - 1978

## Note to Financial Statements

December 31, 1979

1. The Continuing Regional Water Quality Management Planning Program identifies actions and costs required in order to achieve water quality standards in lakes and streams through the year 2000.

\* \* \* \* \*

EXHIBIT O-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Environmental Engineering Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Totals Brought Forward</b>	\$ 97,570.79	\$ 65,840.65	\$ 174,083.67
<b>Expenditures (Continued)</b>			
Office and Other Expense (Continued)			
Indirect - Publication of Report	2.47		
- Printing Costs	1,233.38		
- Travel Expense	527.53		
- Postage Expense	452.15		
- Legal Expense	178.69		
- Other Operating Expense	116.29		
- Unemployment Compensation	23.75		
- Auto and Office Equipment Maintenance	2,199.11		
- Rent Expense	3,590.55		
- Telephone Expense	1,338.96		
- Insurance Expense	146.22		
- Audit Expense	431.50		
- Depreciation Expense	431.63		
<b>Total Office and Other Expense</b>	<b>108,243.02</b>		
<b>Total Expenditures</b>			<b>174,083.67</b>
<b>Excess Revenue over Expenditures</b>			<b>-</b>
<b>Fund Balance - Beginning of Year</b>			<b>-</b>
<b>Fund Balance - End of Year</b>			<b>\$ -</b>

The note which follows is an integral part of this statement.

\* \* \* \* \*

## EXHIBIT O-B

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Environmental Engineering Planning Program Fund (Note 1)

## Comparative Balance Sheet

	Dec. 31, 1979	Dec. 31, 1978
<b>Assets</b>		
Equity in Treasury Fund	\$ 7,217.25	\$ 1,704.09
<b>Total Assets</b>	<b>\$ 7,217.25</b>	<b>\$ 1,704.09</b>
<b>Liabilities</b>		
Accounts Payable	7,217.25	1,704.09
<b>Total Liabilities</b>	<b>\$ 7,217.25</b>	<b>\$ 1,704.09</b>
<b>Fund Balance</b>		
Fund Balance	-	-
<b>Total Liabilities and Fund Balance</b>	<b>\$ 7,217.25</b>	<b>\$ 1,704.09</b>

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Environmental Engineering Planning Program Fund

## Note to Financial Statements

December 31, 1979

1. The Continuing Regional Environmental Engineering Planning Program is a continuing program conducted to provide for the protection and enhancement of the environment through the implementation of adopted watershed and regional sanitary sewerage system plans, preparation and compilation of floodland data, and water quality related research efforts.

\* \* \* \* \*

## EXHIBIT O-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Continuing Regional Environmental Engineering Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Revenues</b>			
Counties Contributions	\$	\$ 109,122.00	\$
Contribution from General Fund		62,355.42	
Other Income			
Non-Data Processing Receipts		2,606.25	
<b>Total Revenues</b>			<b>174,083.67</b>
<b>Expenditures</b>			
Salaries and Fringe Benefits by Divisions			
Executive	85.70		
Transportation	217.54		
Land Use and Housing	9,857.05		
Administrative	656.70		
Cartography	3,416.44		
Planning Research	79.67		
Environmental Planning	51,451.75		
Community Assistance	43.82		
Special Projects	31.98		
<b>Total Salaries and Fringe Benefits</b>		<b>65,840.65</b>	
Office and Other Expense			
Technical Consultants	9,460.00		
Outside Salaries and Services	607.50		
Data Processing Services	51,392.99		
Office Drafting and Duplicating Supplies	172.80		
Reproduction and Publication	130.75		
Publication of Report	265.63		
Travel Expense	2,991.63		
Digitizer Services	98.20		
Other Operating Expense	561.94		
Indirect - Salaries	20,918.57		
- C.O.L.A. Expense	4,267.67		
- Annual Report Publication	626.65		
- Regional Conference	124.87		
- Data Processing Services	3,859.51		
- Outside Salaries and Services	303.15		
- Office, Drafting & D.P. Supplies	785.49		
- Library Acquisitions and Dues	300.57		
- Reproduction and Publication	702.87		
<b>Totals Carried Forward</b>	<b>\$ 97,570.79</b>	<b>\$ 65,840.65</b>	<b>\$ 174,083.67</b>

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kinnickinnic River Watershed Study Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Revenues</b>			
Contribution from General Fund	\$	\$ 36,441.51	\$
<b>Total Revenues</b>			36,441.51
<b>Expenditures</b>			
Salaries and Fringe Benefits by Divisions			
Transportation		1.54	
Administrative		112.92	
Cartography		9,182.07	
Environmental Planning		738.77	
Special Projects		21.28	
<b>Total Salaries and Fringe Benefits</b>			10,056.58
Office and Other Expense			
Data Processing Services		131.91	
Publication of Report		19,798.20	
Indirect - Salaries		3,172.48	
- C.O.L.A. Expense		647.23	
- Annual Report Publication		95.04	
- Regional Conference		18.94	
- Data Processing Services		585.33	
- Outside Salaries and Services		45.98	
- Office, Drafting & D.P. Supplies		119.13	
- Library Acquisitions and Dues		45.58	
- Reproduction and Publication		106.60	
- Publication of Report		.37	
- Printing Costs		187.05	
<b>Totals Carried Forward</b>	\$	24,953.84	\$ 10,056.58 \$ 36,441.51

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kinnickinnic River Watershed Study Fund (Note 1)

## Comparative Balance Sheet

	Dec. 31, 1979	Dec. 31, 1978
<b>Assets</b>		
Equity in Treasury Fund	\$ -	\$ 3,167.10
<b>Total Assets</b>	\$ -	\$ 3,167.10
<b>Liabilities</b>		
Accounts Payable	-	3,167.10
<b>Total Liabilities</b>	-	3,167.10
<b>Fund Balance</b>	-	-
<b>Total Liabilities and Fund Balance</b>	\$ -	\$ 3,167.10

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kinnickinnic River Watershed Study Fund

## Note to Financial Statements

December 31, 1979

1. The Kinnickinnic River Watershed Planning Program is a study to develop a workable plan to guide the staged development of multi-purpose water control facilities and related land use and resource conservation and management programs within the Kinnickinnic River watershed.

\* \* \* \* \*

EXHIBIT P-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Kinnickinnic River Watershed Study Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<b>Totals Brought Forward</b>	\$	24,953.84	\$ 10,056.58	\$ 36,441.51
<b>Expenditures (Continued)</b>				
Office and Other Expense (Continued)				
Indirect - Travel Expense		80.00		
- Postage Expense		68.57		
- Legal Expense		27.10		
- Other Operating Expense		17.63		
- Unemployment Compensation		3.60		
- Auto and Office Equipment				
Maintenance		333.51		
- Rent Expense		544.54		
- Telephone Expense		203.06		
- Insurance Expense		22.18		
- Audit Expense		65.44		
- Depreciation Expense		63.46		
<b>Total Office and Other Expense</b>			26,384.93	
<b>Total Expenditures</b>				36,441.51
<b>Excess Revenue over Expenditures</b>				-
<b>Fund Balance - Beginning of Year</b>				-
<b>Fund Balance - End of Year</b>				\$ -

The note which follows is an integral part of this statement.

\* \* \* \* \*

## EXHIBIT Q

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Menomonee River Pilot Watershed Study Fund (Note 1)

## Comparative Balance Sheet

	December 31, 1979	December 31, 1978
<b>Assets</b>		
Receivables		
U.S. Environmental Protection Agency	\$ -	\$27,446.57
Less: Unearned U.S. Environmental Protection Agency	-	-
Non-Federal Wisconsin Dept. of Natural Resources	-	1,444.56
Less: Unearned Wisconsin Dept. of Natural Resources	-	-
<b>Total Assets</b>	\$ -	\$28,891.13
<b>Liabilities</b>		
Equity in Treasury Fund	-	28,891.13
<b>Total Liabilities</b>	-	28,891.13
<b>Fund Balance</b>	-	-
<b>Total Liabilities and Fund Balance</b>	\$ -	\$28,891.13

The note which follows is an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Menomonee River Pilot Watershed Study Fund

## Note to Financial Statements

December 31, 1979

1. The Menomonee River Pilot Watershed Study is a study to determine the level and quantities of pollutants, define the sources and evaluate the impact of urban pollutants, and develop the capability to extend the findings to other settings in the Great Lakes Basin.

\* \* \* \* \*

EXHIBIT R-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Coastal Zone Management Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Revenues			
Wisconsin Dept. of Administration	\$	24,213.97	\$
Contribution from General Fund		23,661.87	
<u>Total Revenues</u>			47,875.84

## Expenditures

## Salaries and Fringe Benefits by Divisions

Executive	148.48
Transportation	22.70
Land Use and Housing	26,533.10
Administrative	589.05
Cartography	103.72
Planning Research	76.88
Environmental Planning	1,125.65
<u>Total Salaries and Fringe Benefits</u>	28,599.58

## Office and Other Expense

Data Processing Services	84.65
Travel Expense	732.85
Other Operating Expense	1.96
Indirect - Salaries	9,071.32
- C.O.L.A. Expense	1,850.67
- Annual Report Publication	271.75
- Regional Conference	54.15
- Data Processing Services	1,673.67
- Outside Salaries and Services	131.46
- Office, Drafting & D.P. Supplies	340.63
- Library Acquisitions and Dues	130.34
- Reproduction and Publications	304.80
- Publication of Report	1.07
- Printing Costs	534.86
- Travel Expense	228.76
- Postage Expense	196.07
- Legal Expense	77.49
- Other Operating Expense	50.43
- Unemployment Compensation	10.30

Totals Carried Forward \$ 15,747.23 \$ 28,599.58 \$ 47,875.84

EXHIBIT R-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Coastal Zone Management Planning Program Fund (Note 1)

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

Totals Brought Forward \$ 15,747.23 \$ 28,599.58 \$ 47,875.84

## Expenditures (Continued)

## Office and Other Expense (Continued)

Indirect - Auto and Office Equipment	
Maintenance	953.64
- Rent Expense	1,557.04
- Telephone Expense	580.64
- Insurance Expense	63.41
- Audit Expense	187.12
- Depreciation Expense	187.18
<u>Total Office and Other Expense</u>	19,276.26
<u>Total Expenditures</u>	47,875.84

## Excess Revenue over Expenditures

-

## Fund Balance - Beginning of Year

-

## Fund Balance - End of Year

\$ -

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Coastal Zone Management Planning Program Fund (Note 1)

## Comparative Balance Sheet

Assets	December 31, 1979	December 31, 1978
Receivables		
Wisconsin Dept. of Administration	\$19,817.89	\$32,069.09
Less: Unearned Wisconsin Dept. of Administration (Note 2)	-	19,817.89
<u>Total Assets</u>	<u>\$19,817.89</u>	<u>\$13,767.12</u>
Liabilities		
Accounts Payable	-	45.15
Equity in Treasury Fund	19,817.89	13,721.97
<u>Total Liabilities</u>	<u>19,817.89</u>	<u>13,767.12</u>
Fund Balance		
Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	<u>\$19,817.89</u>	<u>\$13,767.12</u>

The notes which follow are an integral part of this statement.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Coastal Zone Management Planning Program Fund

## Notes to Financial Statements

December 31, 1979

1. The Coastal Zone Management Planning Program is a program to develop data and provide information relating to controlling shoreline erosion, encroachment on ecologically sensitive areas, waterfront blight and flooding problems, as well as the demand for public access, recreational use and further port development along the southeastern Wisconsin lakeshore.

## 2. Unearned - Wisconsin Department of Administration

The balance at January 1, 1979 of \$18,301.97 was the unearned 1978 balance of the portion recognized in 1978. As of December 31, 1979, the Wisconsin Department of Administration grant to this fund was recognized as earned, and therefore, no unearned portions appears in this statement.

\* \* \* \* \*

EXHIBIT S

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Areawide Water Quality Management Planning Program Fund (Note 1)

## Comparative Balance Sheet

Assets	Dec. 31, 1979	Dec. 31, 1978
Equity in Treasury Fund	\$ 11,240.00	\$ 26,240.00
Receivables		
U.S. Environmental Protection Agency	-	10,000.00
<u>Total Assets</u>	<u>\$ 11,240.00</u>	<u>\$ 36,240.00</u>
Liabilities		
Accounts Payable	11,240.00	36,240.00
<u>Total Liabilities</u>	<u>11,240.00</u>	<u>36,240.00</u>
Fund Balance		
Unappropriated Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	<u>\$ 11,240.00</u>	<u>\$ 36,240.00</u>

The note which follows is an integral part of this statement.

\* \* \* \* \*



## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Areawide Water Quality Management Planning Program Fund

## Note to Financial Statements

December 31, 1979

1. The Areawide Water Quality Management Planning Program is a program to prepare an areawide waste water treatment and water quality plan for southeastern Wisconsin.

\* \* \* \* \*

## EXHIBIT T-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Equipment Account

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Revenues</u>		
Rental Usage Charge	\$ 10,228.16	\$
<u>Total Revenues</u>		10,228.16
<u>Expenditures</u>		
Depreciation Expense	10,228.16	
<u>Total Expenditures</u>		10,228.16
<u>Excess Revenue over Expenditures</u>		-
<u>Fund Balance - Beginning of Year</u>		65,834.48
<u>Fund Balance - End of Year</u>		\$ 65,834.48

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Equipment Account

## Balance Sheet

As at December 31, 1979

<u>Assets</u>			
Desks	\$ 13,136.55	\$	
Less: Allowance for Depreciation	9,511.82		3,624.73
Chairs	8,252.01		
Less: Allowance for Depreciation	5,940.74		2,311.27
Calculator and Adding Machines	11,371.66		
Less: Allowance for Depreciation	7,112.56		4,259.10
Filing Cabinets	22,585.73		
Less: Allowance for Depreciation	13,142.29		9,443.44
Typewriter and Dictating Equipment	14,340.26		
Less: Allowance for Depreciation	7,613.84		6,726.42
Bookcases and Shelves	10,398.67		
Less: Allowance for Depreciation	5,244.15		5,154.52
Tables	6,021.36		
Less: Allowance for Depreciation	4,366.09		1,655.27
Data Processing Equipment	825.60		
Less: Allowance for Depreciation	206.41		619.19
Other Major Equipment	17,165.45		
Less: Allowance for Depreciation	8,406.10		8,759.35
Autos	42,567.10		
Less: Allowance for Depreciation	18,978.67		23,588.43
Miscellaneous	10,701.92		
Less: Allowance for Depreciation	2,694.16		8,007.76
<u>Total Assets</u>		\$ 74,149.48	
<u>Liabilities</u>			
Accounts Payable		1,343.73	
Equity in Treasury Fund		6,971.27	
<u>Total Liabilities</u>		8,315.00	
<u>Fund Balance</u>			
Unappropriated Fund Balance		65,834.48	
<u>Total Liabilities and Fund Balance</u>		\$ 74,149.48	

## Method of Depreciation

Autos are depreciated over five (5) years on the straight-line method with a 10% salvage value used.

Equipment is depreciated over ten (10) years on the straight-line method.

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Unemployment Compensation Fund

## Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1979

<u>Revenues</u>		
Other Income		
Income from Unemployment Compensation Charges to Other Funds	\$	562.74
<u>Total Revenues</u>		562.74
<u>Expenditures</u>		
Unemployment Compensation Expense	1,155.50	
<u>Total Expenditures</u>		1,155.50
<u>Excess Expenditures over Revenue</u>		(592.76)
<u>Fund Balance - Beginning of Year</u>		50,592.76
<u>Fund Balance - End of Year</u>		\$ 50,000.00

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Unemployment Compensation Fund

## Comparative Balance Sheet

<u>Assets</u>	Dec. 31, 1979	Dec. 31, 1978
Equity in Treasury Fund	\$ 50,000.00	\$ 50,592.76
<u>Total Assets</u>	\$ 50,000.00	\$ 50,592.76
<u>Liabilities</u>		
Liabilities	-	-
<u>Fund Balance</u>		
Unappropriated Fund Balance	50,000.00	50,592.76
<u>Total Liabilities and Fund Balance</u>	\$ 50,000.00	\$ 50,592.76

\* \* \* \* \*

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Indirect Expense Fund

## Comparative Balance Sheet

<u>Assets</u>	Dec. 31, 1979	Dec. 31, 1978
Equity in Treasury Fund	\$ 24,581.45	\$ 28,906.75
<u>Total Assets</u>	\$ 24,581.45	\$ 28,906.75
<u>Liabilities</u>		
Accounts Payable	24,581.45	28,906.75
<u>Total Liabilities</u>	24,581.45	28,906.75
<u>Fund Balance</u>		
Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	\$ 24,581.45	\$ 28,906.75

The Indirect Expense Fund is a pool for the accumulation of all Commission "overhead" expenses that benefit all Commission programs and which will therefore be proportionally expensed back to all Commission programs in accordance with the Commission's Cost Allocation Plan.

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONTreasury Cash FundBalance SheetAs at December 31, 1979

<u>Assets</u>			
Treasurer's Cash Account	\$	\$	14,245.13
Treasurer's Savings Account			<u>111,205.32</u>
			125,450.65
Accounts Receivable - Overdrafts			
Due from - Continuing Regional Land Use -			
Transportation Study Fund	227,532.77		
- Continuing Community Assistance			
Planning Program Fund	54,775.32		
- Milwaukee Metropolitan Pollution			
Abatement Program Fund	27,134.23		
- Data Processing Fund	27,498.93		
- Coastal Zone Management Planning			
Program Fund	19,817.89		
- Equipment Fund	<u>6,971.27</u>	<u>363,730.41</u>	
<u>Total Assets</u>			<u>\$ 489,181.06</u>
<u>Liabilities</u>			
Due to - General Fund		269,790.11	
- Milwaukee Area Primary Transit System		77,766.85	
- Alternative Analysis Fund		23,626.91	
- Stream Gaging Program Trust Fund		5.70	
- Regional Housing Study		22,335.00	
- Kenosha County Topographic Mapping Fund			
- Continuing Regional Water Quality			
Management Planning Program Fund - 1979		2,617.79	
- Continuing Regional Environmental Engineering			
Planning Program Fund		7,217.25	
- Areawide Water Quality Management Planning			
Program Fund		11,240.00	
- Unemployment Compensation Fund		50,000.00	
- Indirect Expense Fund		<u>24,581.45</u>	
<u>Total Liabilities</u>			<u>\$ 489,181.06</u>

The note which follows is an integral part of this statement.

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONTreasury Cash FundNote to Financial StatementDecember 31, 1979

1. A contingency fund has been designated to help offset an anticipated cash flow problem in December, 1979 when the Continuing 208 Planning Program will be completed. The Commission Treasurer was authorized to invest the fund in U.S. Treasury Notes held in an escrow account specifying the anticipated use.

\* \* \* \* \*





KURT W. BAUER  
EXECUTIVE DIRECTOR

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