



## Eighteenth annual report. July 1979

[s.l.]: Southeastern Wisconsin Regional Planning Commission, July 1979

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Madison, Wisconsin 53706

# 1978 ANNUAL REPORT



SOUTHEASTERN  
WISCONSIN  
REGIONAL  
PLANNING  
COMMISSION

SOUTHEASTERN  
WISCONSIN  
REGIONAL  
PLANNING  
COMMISSION

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**EIGHTEENTH ANNUAL REPORT,**

*L* SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION 1979  
*(Wis. Regional - S.E.)*

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July 1979

Inside Region	\$2.00
Outside Region	\$4.00



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*Serving the Counties of:* KENOSHA

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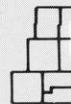
OZAUKEE

RACINE

WALWORTH

WASHINGTON

WAUKESHA



July 31, 1979

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 18th annual report of the Commission, summarizes the accomplishments of the Commission for the calendar year 1978 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.

Again this year, the annual report has been organized to present the report material by each of the major work divisions of the Commission. The Commission has eight such divisions, including four planning divisions—Transportation, Environmental, Land Use and Housing, and Community Assistance—and four support divisions—Planning Research, Administrative Services, Data Processing and Systems Engineering, and Cartographic and Graphic Arts. The Commission hopes that this organization will make the report useful to the intended users.

Significant progress was made during 1978 in both adopting new regional plan elements and updating and extending previously adopted plan elements. In June the Commission adopted a new regional transportation plan for the design year 2000, representing an update and extension of the previously adopted regional surface transportation plan. This action by the Commission was one of the most difficult in its 18-year history, involving, as it did, making major decisions concerning the course of future freeway and rapid transit development in the Region. Other regional plan elements adopted during the year included the transportation plan for the elderly and handicapped and the wastewater sludge management plan. The Commission also adopted the Ozaukee County park and open space plan as an amendment to the regional park and open space plan and the Pewaukee flood control plan as an amendment to the Fox River watershed plan. Progress was also made during the year on moving toward completion of the comprehensive plan for the Kinnickinnic River watershed and the areawide water 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, 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 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

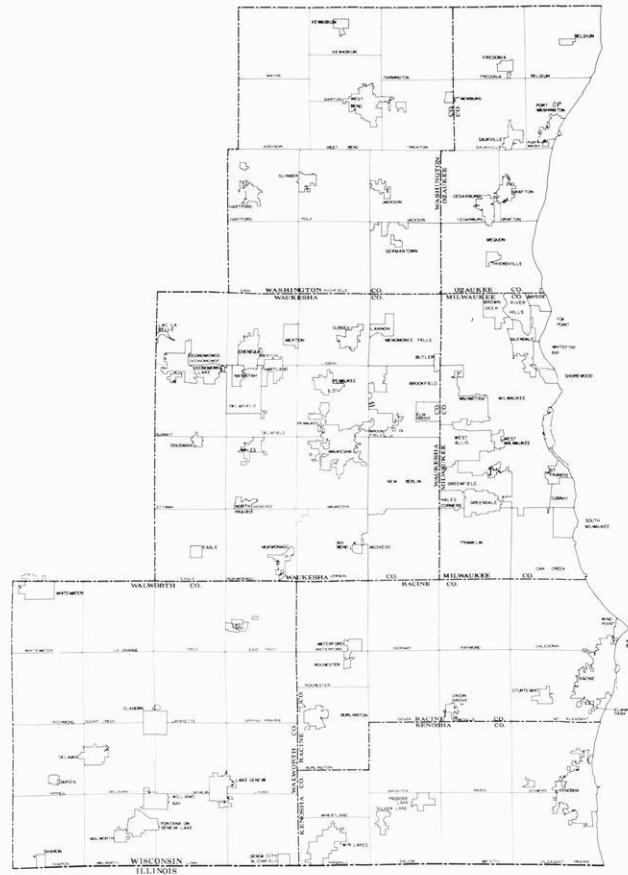
## AUTHORITY

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 1.77 million persons, or about 38 percent of the total population of the State. The seven counties provide about 851,800 jobs, or about 39 percent of the total

THE SOUTHEASTERN WISCONSIN REGION



employment of the State, and contain real property worth about \$32.3 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

## OLD COURTHOUSE COMMISSION OFFICES WAUKESHA COUNTY



a substitute for federal, state, or local public planning or for private planning. Rather, regional planning is a vital supplement to such planning.

The work of the Regional Planning Commission is 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

decisionmaking 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 35 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 more than 775 persons, is set forth in Appendix B.

## STAFFING

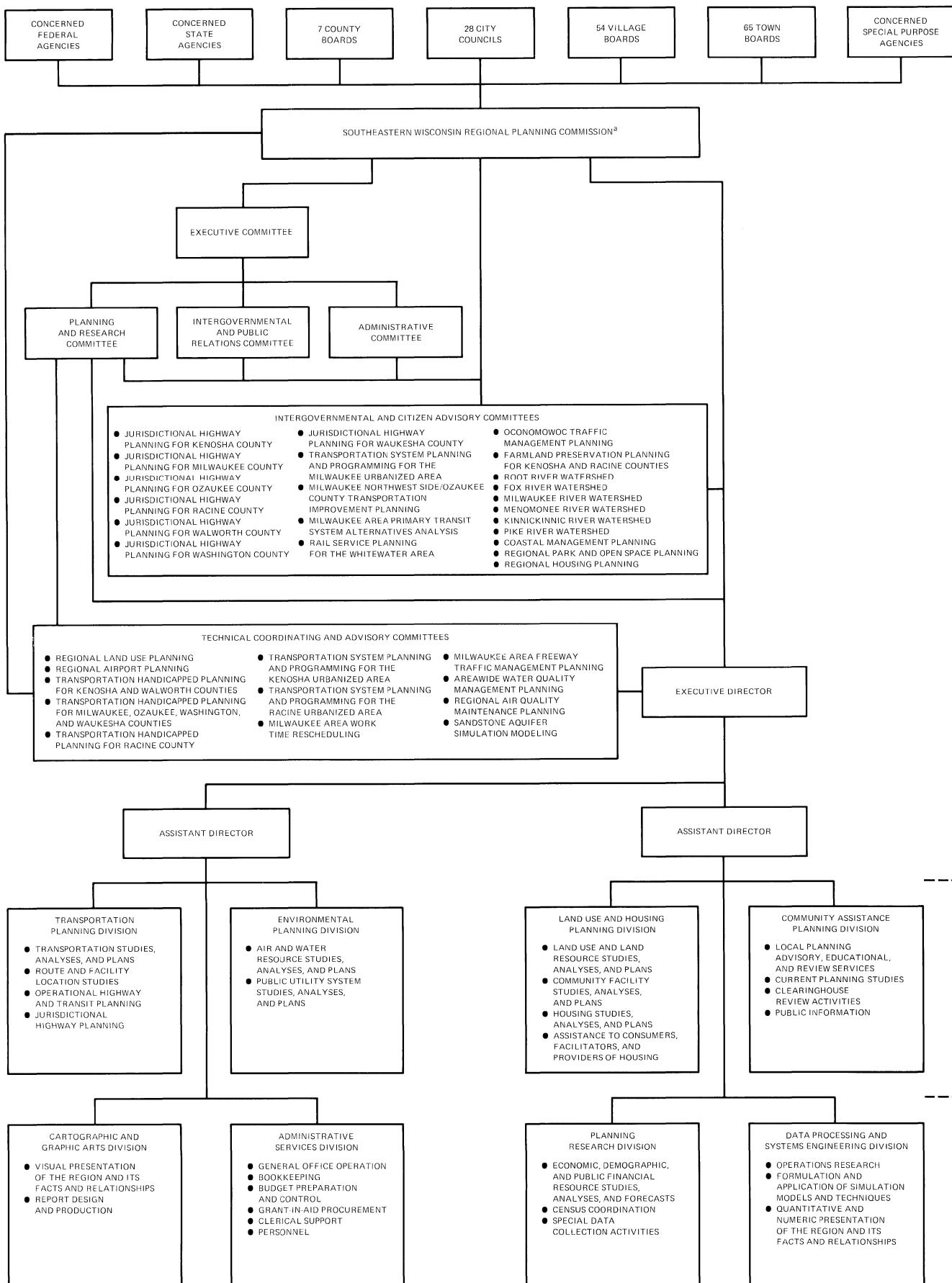
The Commission prepares an annual work program which is reviewed and approved by federal and state funding agencies. This work program is then carried out by a core staff of full-time professional, technical, administrative, and clerical personnel, supplemented by additional temporary staff and consultants as required by the various work programs underway. At the end of 1978, the staff totaled 110, including 91 full-time and 19 part-time employees. Interagency staff assignments during the year involved three professional and technical personnel from the Wisconsin Department of Transportation and the University of Wisconsin-Extension.

As shown in the figure on page 4, the Commission is organized into eight divisions. Four of these divisions—Transportation Planning, Environmental Planning, Land Use and Housing Planning, and Community Assistance 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 four 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 1978 totaled about \$2.79 million. County tax levies in 1978 totaled \$560,325, or about \$0.32 per capita. The sources of this revenue for 1978 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

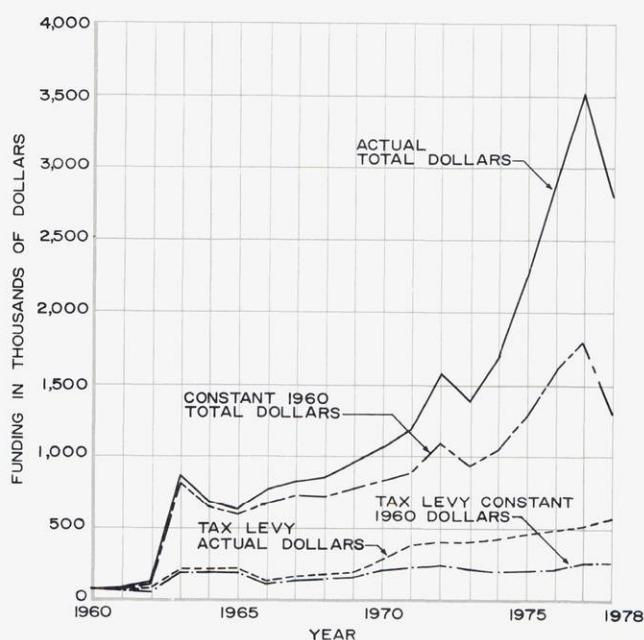
## SEWRPC ORGANIZATIONAL STRUCTURE



<sup>a</sup>THE COMMISSION IS COMPOSED OF 21 CITIZEN MEMBERS, THREE FROM EACH COUNTY, WHO SERVE WITHOUT PAY.

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.

### FUNDING TREND 1960-1978

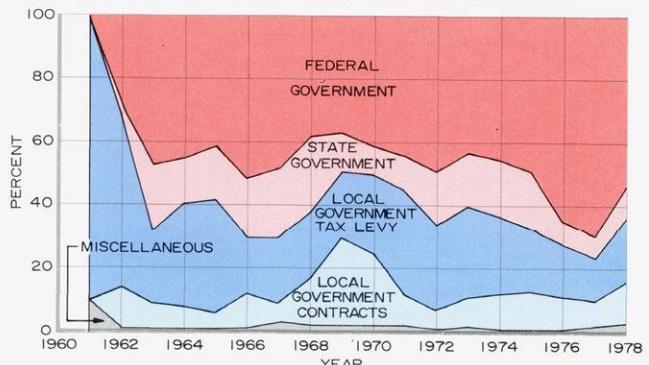


The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1978 is set forth in full in Appendix F. In addition to the Commission's own audit, the federal and state funding agencies perform periodic independent audits of projects to 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

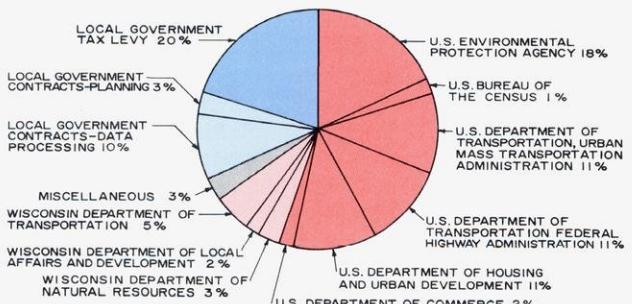
### SOURCE OF REVENUES TREND 1960-1978



### 1978 REVENUES AND EXPENDITURES

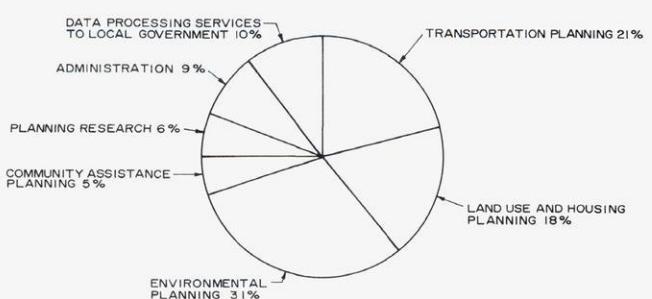
#### REVENUES

Federal Government . . . . .	\$1,498,184	54%	
State Government . . . . .	282,213	10%	
Local Government Tax Levy . .	560,325	20%	
Local Government Contracts . .	358,262	13%	
Miscellaneous . . . . .	91,560	3%	
<b>Total</b>	<b>\$2,790,544</b>	<b>100%</b>	



#### EXPENDITURES

Transportation Planning . . . . .	\$ 590,503	21%	
Land Use and Housing Planning . .	517,803	18%	
Planning Research . . . . .	155,462	6%	
Environmental Planning . . . . .	859,613	31%	
Community Assistance Planning . .	138,683	5%	
Data Processing Services to Local Governments . . . . .	286,933	10%	
Administration . . . . .	241,547	9%	
<b>Total</b>	<b>\$2,790,544</b>	<b>100%</b>	



## 1978 MEETINGS

### COMMISSION AND ADVISORY COMMITTEE MEETINGS

Full Commission .....	4
Executive Committee .....	10
Administrative Committee .....	10
Planning and Research Committee .....	10
Intergovernmental and Public Relations Committee.....	1
Technical Coordinating and Advisory Committee on Regional Land Use-Transportation Planning	
Land Use Subcommittee .....	2
Highway Subcommittee .....	2
Transit Subcommittee.....	2
Socioeconomic Subcommittee .....	0
Utility Subcommittee .....	0
Natural and Recreation-Related Resources Subcommittee .....	0
Sludge Management Planning Subcommittee.....	1
Traffic Studies, Models, and Operations Subcommittee.....	0
Technical Coordinating and Advisory Committee on Regional Airport Planning ..	0
Technical and Intergovernmental Coordinating and Advisory Committees on Jurisdictional Highway System Planning	
Kenosha County .....	2
Milwaukee County .....	2
Ozaukee County .....	1
Racine County .....	3
Walworth County .....	1
Washington County.....	1
Waukesha County .....	2
Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming	
Kenosha Urbanized Area.....	1
Milwaukee Urbanized Area .....	2
Racine Urbanized Area .....	1
Technical Coordinating and Advisory Committees on Transportation Planning for the Elderly and Handicapped	
Kenosha and Walworth Counties.....	0
Milwaukee, Ozaukee, Washington, and Waukesha Counties.....	0
Racine County .....	1
Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Prospectus Steering Committee.....	5
Milwaukee Area Primary Transit System Alternatives Analysis Prospectus Steering Committee.....	2
Milwaukee Area Work Time Rescheduling Study Prospectus Steering Committee.....	1
Milwaukee Area Freeway Traffic Management System Study Prospectus Steering Committee.....	1

Technical Coordinating and Advisory Committee on Rail Service Planning for the Whitewater Area .....	0
Citizens and Technical Advisory Committee for the City of Oconomowoc Traffic Management Study .....	0
Technical Coordinating and Advisory Committee on Farmland Preservation for Kenosha and Racine Counties .....	2
Watershed Committees	
Root River .....	0
Fox River .....	1
Milwaukee River .....	0
Menomonee River .....	0
Kinnickinnic River .....	4
Pike River .....	0
Technical Coordinating and Advisory Committee on Sandstone Aquifer Simulation Modeling .....	0
Technical Coordinating and Advisory Committee on Areawide Water Quality Management Planning.....	1
Citizens Advisory Panel for Public Participation on Areawide Water Quality Management Planning.....	3
Technical Coordinating and Advisory Committee on Regional Air Quality Maintenance Planning.....	4
Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin .....	5
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning .....	0
Technical and Citizen Advisory Committee on Regional Housing Studies.....	0

### STAFF TECHNICAL MEETINGS

Executive Director .....	280
Assistant Directors .....	265
Administrative Services Division .....	15
Cartographic and Graphic Arts Division .....	13
Community Assistance Planning Division .....	188
Environmental Planning Division.....	219
Land Use and Housing Planning Division.....	275
Planning Research Division .....	75
Transportation Planning Division .....	77

### STAFF SPEAKING ENGAGEMENTS

Executive Director .....	36
Assistant Directors .....	56
Administrative Services Division .....	10
Community Assistance Planning Division .....	2
Environmental Planning Division.....	15
Land Use and Housing Planning Division.....	34
Planning Research Division .....	4
Transportation Planning Division .....	3

planning reports represent the best means for disseminating inventory data that has 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 sites 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, including 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 E.

# 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—1978

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 1978, the adopted regional plan consisted of 18 individual plan elements. These plan elements are identified in the accompanying table. Four of these plan elements—dealing with regional land use, regional housing, regional library facilities and services, and regional park and open space—were prepared by the Commission's Land Use and Housing Planning Division. Six of the

## THE ADOPTED REGIONAL PLAN—1978

Functional Area	Plan Element	Plan Document	Date of Adoption
Land Use, Housing, and Community Facility Planning	Regional Land Use Plan <sup>a</sup>  Regional Library Facilities and Services Plan Regional Housing Plan  Regional Park and Open Space Plan  Amendment—Ozaukee County Park and Recreation Plan	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>  Planning Report No. 19, <u>A Library Facilities and Services Plan for Southeastern Wisconsin</u> Planning Report No. 20, <u>A Regional Housing Plan for Southeastern Wisconsin</u>  Planning Report No. 27, <u>A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000</u>  Community Assistance Planning Report No. 23, <u>A Park and Recreation Plan for Ozaukee County</u>	December 19, 1977  September 12, 1974 June 5, 1975  December 1, 1977  September 14, 1978
Transportation Planning	Regional Transportation Plan <sup>b</sup>  Racine Area Transit Development Plan  Regional Airport System Plan  Kenosha Area Transit Development Plan  Transportation Systems Management Plan  Elderly-Handicapped Transportation Plan  Amendment—Racine Area	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>  Community Assistance Planning Report No. 3, <u>Racine Area Transit Development Program: 1975-1979</u> Planning Report No. 21, <u>A Regional Airport System Plan for Southeastern Wisconsin</u> Community Assistance Planning Report No. 7, <u>Kenosha Area Transit Development Program: 1976-1980</u> Community Assistance Planning Report No. 26, <u>A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979</u> Planning Report No. 31, <u>A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982</u> SEWRPC Resolution No. 78-17	June 1, 1978  September 12, 1974 March 4, 1976 June 3, 1976  December 7, 1978  April 13, 1978  December 7, 1978
Environmental Planning	Root River Watershed Plan  Fox River Watershed Plan  Amendment—Water Pollution Control Time Schedule Amendment—Lower Watershed Drainage Plan  Amendment—Pewaukee Flood Control Plan	Planning Report No. 9, <u>A Comprehensive Plan for the Root River Watershed</u>  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>  Amendment to the Comprehensive Plan for the Fox River Watershed 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> Community Assistance Planning Report No. 14, <u>Floodland Management Plan for the Village of Pewaukee</u>	September 22, 1966  June 4, 1970  September 13, 1973 June 5, 1975  June 1, 1978

## THE ADOPTED REGIONAL PLAN—1978

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (Continued)	Milwaukee River Watershed Study	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
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 Kenosha County jurisdictional highway system plan documented in SEWRPC Planning Report No. 24, A Jurisdictional Highway System Plan for Kenosha 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; 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.

plan elements relate to transportation and were prepared by the Commission's Transportation Planning Division. These consist of the regional transportation plan (highways and transit), the regional airport system plan, the transportation systems management plan, the elderly and handicapped transportation plan, and transit development plans for the Kenosha and Racine urbanized areas.

Six of the adopted plan elements fall within the broad functional area of environmental planning and were prepared by the Commission's Environmental Planning Division. These consist of the regional sanitary sewerage system plan, the regional wastewater sludge management plan, and comprehensive watershed development plans for the Root, Fox, Milwaukee, and Menomonee River watersheds.

The final two plan elements were prepared by the Commission's Community Assistance Planning Division and consist of comprehensive community development plans for the Racine and Kenosha 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 attempted to be implemented 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 1978, the land use-transportation planning process for southeastern Wisconsin was into its second cycle, the initial cycle having consisted of the systems level planning completed by the Commission in 1966, and the project level planning carried out by many implementing agencies in the approximate decade that has elapsed since that completion. By June 1978 the Commission had adopted both a regional land use plan and a regional transportation plan for the design year 2000, representing the second generation of these plans.

### **PLAN ELEMENTS UNDER PREPARATION**

At the beginning of 1979, 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 Kinnickinnic River watershed study, with completion and plan adoption scheduled for early 1979; the regional air quality maintenance planning program, with completion and plan adoption scheduled for late 1979, and the areawide water quality management planning program, with completion and plan adoption scheduled for mid-1979. 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; an environmental corridor preservation plan for Kenosha County, also designed to refine and detail the regional land use plan; and the Milwaukee Northwest Side/Ozaukee County transportation improvement study and the Milwaukee area primary transit alternatives study, both designed to refine, detail, and possibly amend the regional transportation plan.

### **POSSIBLE FUTURE WORK PROGRAMS**

Depending upon future funding, the Commission intends to carry out—in addition to a series of continuing planning programs designed to ensure that the already adopted plan elements are kept up to date—planning programs designed to prepare the following additional plan elements: a regional water supply system plan, a regional solid waste management plan, a regional mineral conservation plan, a Lake Michigan direct drainage area and estuary plan, and comprehensive plans for the Pike River and Oak Creek watersheds. In addition, the Commission intends to prepare a local planning guide dealing with urban storm water management. A bar chart summarizing all past, present, and anticipated future work programs is set forth in Appendix D.

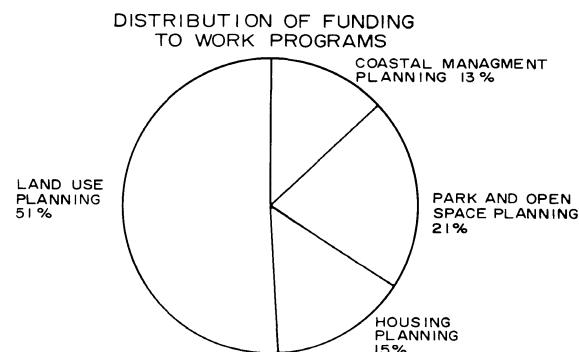
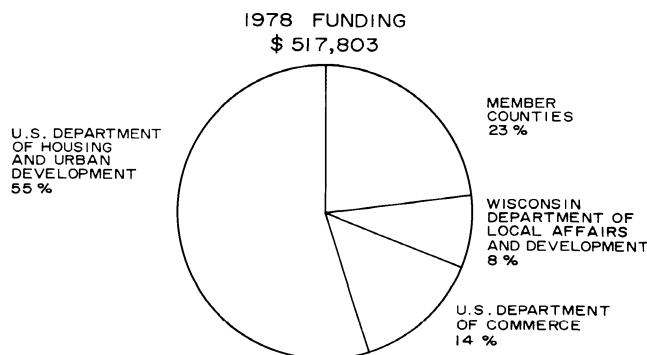
# LAND USE AND HOUSING PLANNING DIVISION

## 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?

## LAND USE AND HOUSING PLANNING DIVISION



- What are the probable future demands within the Region for each of the various 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 both physical and economic terms?
- How much publicly assisted housing is needed in the Region and where should it be located?

In an attempt to help find answers to these and similar questions, the Land Use and Housing Planning Division during 1978 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 1978 Division staff efforts in land use planning were directed toward implementation of the new regional land use plan for the year 2000. In addition, an inventory was conducted of subdivision platting activity during 1978. Finally, the Division staff provided land use data and technical assistance to other Commission divisions for use in major work programs, to local units of government, and to private interests.

## New Regional Land Use Plan

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 new recommended regional land use plan for the design year 2000 is shown in graphic summary form on the accompanying map. The basic concepts underlying the new 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 year 1990 land use plan, the recommended new land use plan for 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 outward from, and generally along, the full periphery of the established urban centers of the Region.

The recommended new land use plan 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. Thus, while the plan continues to recognize the importance of the urban land market in determining the location, intensity, and character of future urban development, it proposes to regulate to a greater degree than in the past the effect of this market on development in order 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 to generally 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 con-

verted if decentralization of urban development were allowed to continue unrestrained. The degree of centralization envisioned in the new plan is indicated by the fact that more than 60 percent of all new urban residential land and about 49 percent of the forecast increase in resident population would be located within 20 miles of the Milwaukee central business district. The plan envisions that new urban development would 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 percent of all urban land and about 93 percent of all the people in the Region would 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 use. 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 new primary environmental corridors encompass about 503 square miles, or about 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.

## REGIONAL LAND USE PLAN: 2000

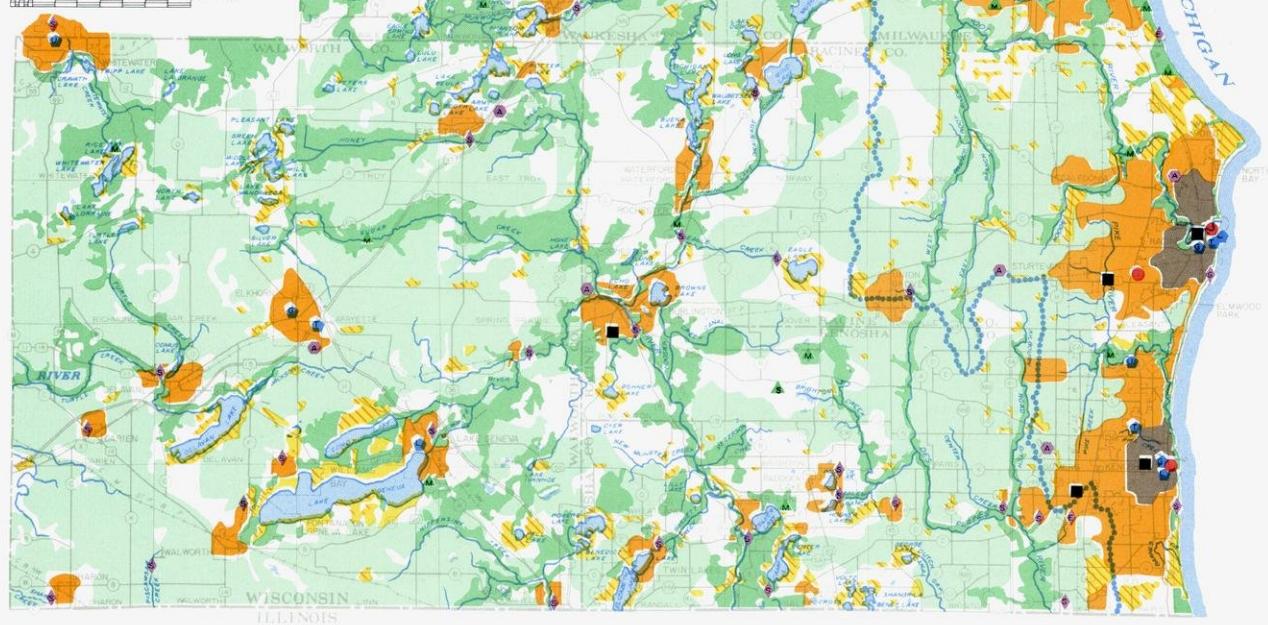
### LEGEND

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



GRAPHIC SCALE

0 2 4 6 MILES  
0 10 20 30 40 40,000 FEET



In 1970 these lands totaled about 746 square miles, or 28 percent of the area of the Region. The year 2000 plan proposes to convert to urban use only those prime agricultural lands that have already been, in effect, committed to urban development due to the proximity to existing and expanding concentrations of urban uses and the prior commitment of heavy capital investments in utility extensions. Only about 13 square miles, or about 2 percent, of the prime agricultural lands would be converted to urban use under the plan.

During 1978 the new year 2000 regional land use plan was adopted by the Kenosha County Board of Supervisors, the Kenosha County Park Commission, and the Plan Commission of the City of Oconomowoc. Those federal and state agencies that have also to date endorsed the regional land use plan include the U. S. Department of Agriculture, Soil Conservation Service; the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; and the Wisconsin Department of Transportation.

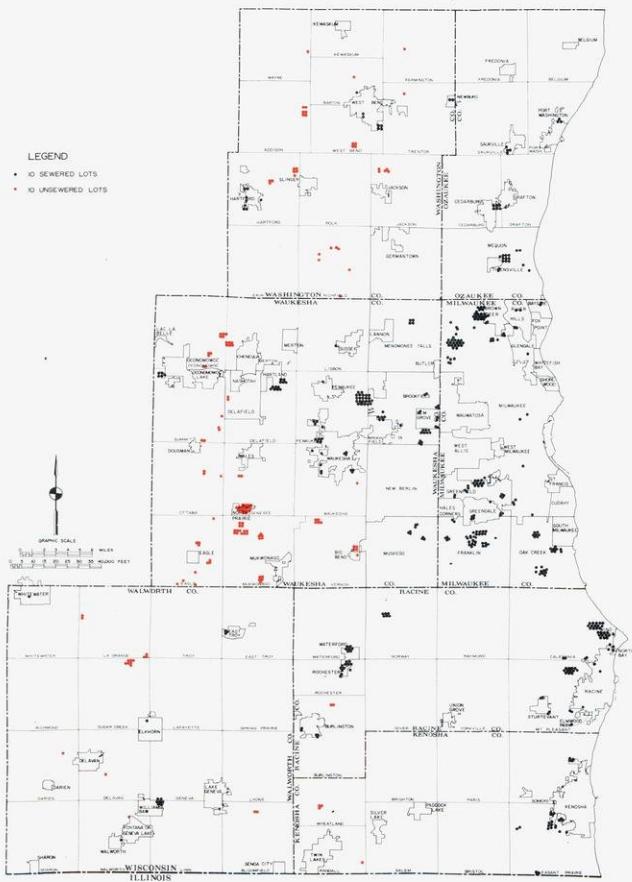
### Residential Subdivision Platting Activity

The Division staff annually monitors land subdivision activity in the Region. A total of 5,845 residential lots were created in the Region during 1978 through subdivision plats. Of this total, 4,394 lots, or about 75 percent, were served by public sanitary sewers, with the remaining 1,451 lots, or 25 percent, designed to be served by onsite septic tank sewage disposal systems. The greatest number of lots platted in 1978 were located in Waukesha County. Of the 1,989 lots created in the County, about 44 percent were designed to be served by septic tanks. The greatest proportion of lots proposed to be served by septic tanks was found in Washington County, where more than 70 percent of the 535 lots created were designed for septic tank use. The historic trend in residential platting activity since 1960 is shown by county on the accompanying graphs.

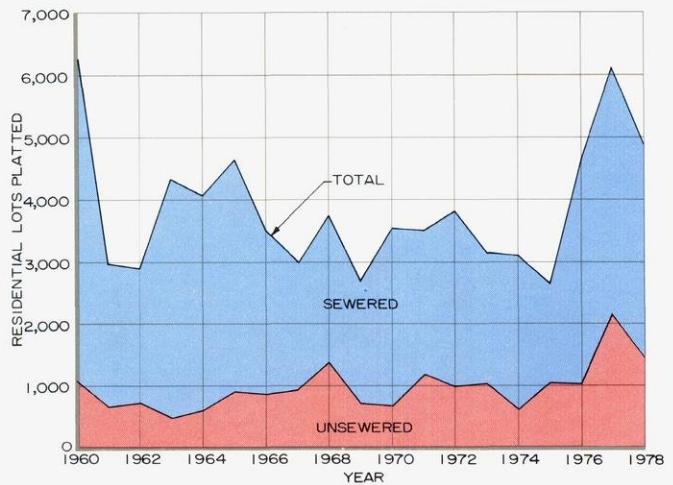
### Preservation of Farmland

In 1978 the Land Use and Housing Division began monitoring applications for tax credit eligibility pursuant to Wisconsin's 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 partici-

### RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1978



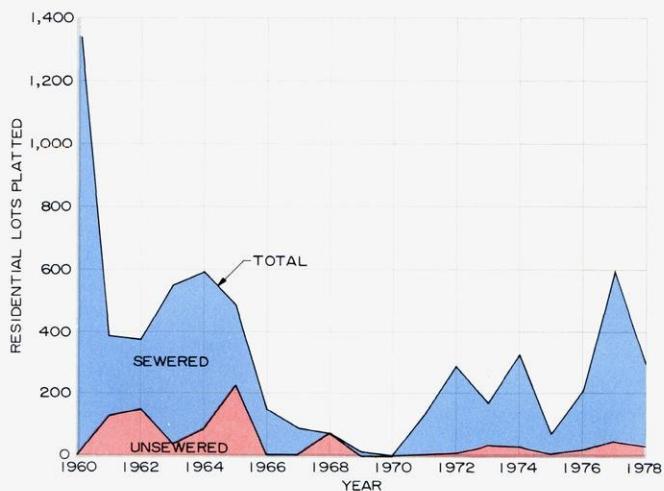
### RESIDENTIAL LOTS PLATTED IN THE REGION: 1960-1978



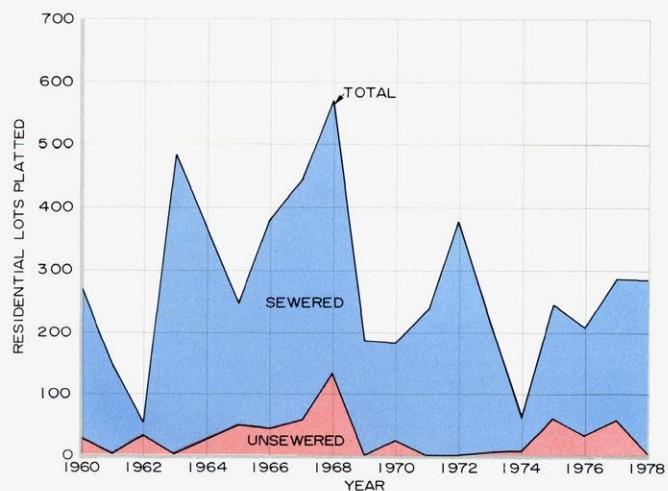
**RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1978**

County	Sewered Lots		Unsewered Lots		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Regional Total
Kenosha . . . . .	259	89.0	32	11.0	291	5.0
Milwaukee . . . . .	1,566	100.0	0	0.0	1,566	26.8
Ozaukee . . . . .	286	100.0	0	0.0	286	4.9
Racine. . . . .	856	97.3	24	2.7	880	15.1
Walworth. . . . .	146	49.0	152	51.0	298	5.1
Washington . . . .	159	29.7	376	70.3	535	9.1
Waukesha. . . . .	1,122	56.4	867	43.6	1,989	34.0
Region	4,394	75.2	1,451	24.8	5,845	100.0

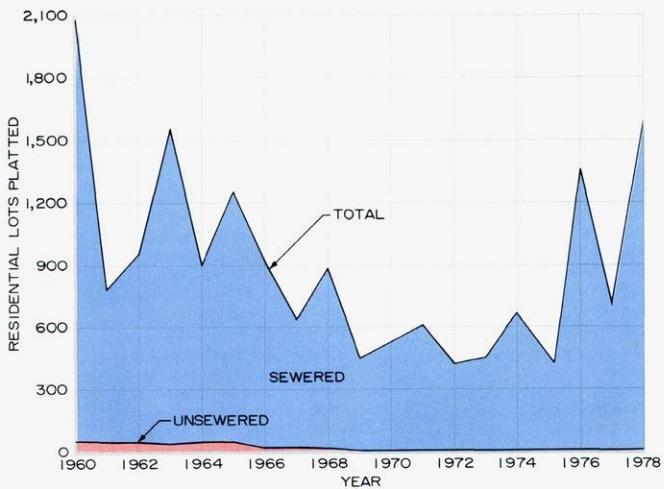
**RESIDENTIAL LOTS PLATTED  
IN KENOSHA COUNTY: 1960-1978**



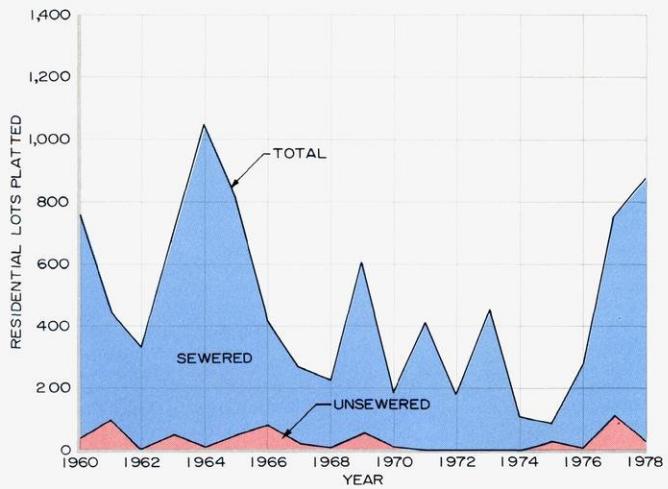
**RESIDENTIAL LOTS PLATTED  
IN OZAUKEE COUNTY: 1960-1978**



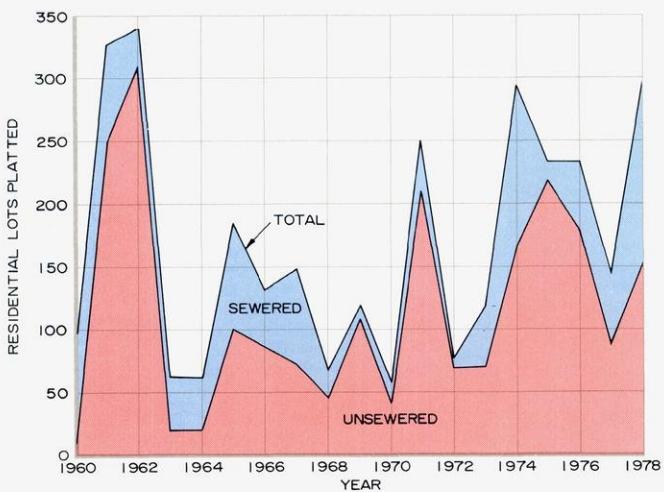
**RESIDENTIAL LOTS PLATTED  
IN MILWAUKEE COUNTY: 1960-1978**



**RESIDENTIAL LOTS PLATTED  
IN RACINE COUNTY: 1960-1978**



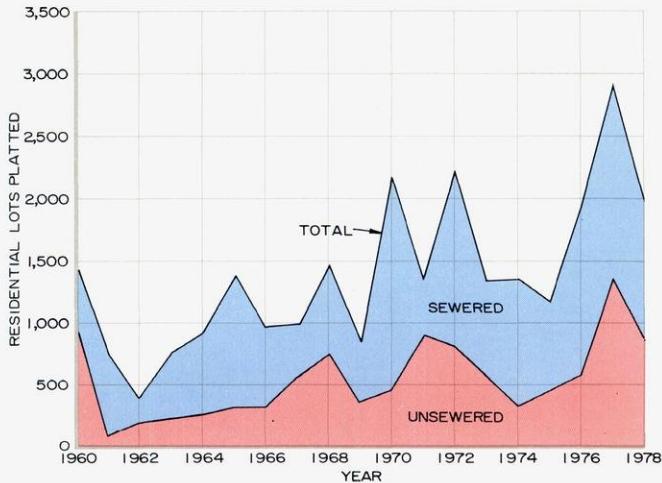
**RESIDENTIAL LOTS PLATTED  
IN WALWORTH COUNTY: 1960-1978**



**RESIDENTIAL LOTS PLATTED  
IN WASHINGTON COUNTY: 1960-1978**



**RESIDENTIAL LOTS PLATTED  
IN WAUKESHA COUNTY: 1960-1978**



pate 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 owner is also exempt from special tax assessments levied to provide sewer, water, or other public facilities and services. In cooperation with the Community Assistance Division, the Land Use and Housing Division reviews applications for farmland preservation contracts submitted by farmland owners in the Region to determine whether such applications are in accordance with the Commission's regional land use plan.

In order for a farmland owner to qualify for the farmland preservation program the following conditions must be met:

1. The owner must have 35 or more contiguous acres of land.
2. The land must have earned \$6,000 in gross farm profit during the previous year or \$18,000 in the past three years.
3. The farm must have a U. S. Soil Conservation Service farm management plan, or have such a plan under preparation.

Wisconsin's farmland preservation program is divided into two parts—an initial program and a permanent program. The duration of the initial program extends from October 1, 1977 to September 30, 1982. Under the initial program, a farmland 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 the contract which provides that the farmland will remain in agricultural use through September 30, 1982. The owner then becomes eligible for an income tax credit. Income tax credit under the initial program is based on a formula which takes into account the household income and the property taxes. Basically, the higher the property tax and/or the lower the household income, the higher the tax credit. The maximum property tax eligible for tax relief is \$6,000, and the maximum tax credit is \$4,200. In order for a farmland owner to receive the maximum tax credit, the county must have adopted an exclusive agricultural zoning

ordinance and an agricultural land preservation plan. To date, 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 the exclusive agricultural zoning ordinance and the agricultural land preservation plan. Farmland owners in the remaining six counties—namely, Kenosha, Milwaukee, Ozaukee, Racine, Washington, and Waukesha Counties—are presently eligible for only 50 percent of the maximum tax credits, or \$2,100.

All contracts under the initial program expire in 1982. If a farmer is not eligible for the permanent program because a county fails to enact and apply an exclusive agricultural zoning ordinance, he must pay back the last two years of tax credits. If the farmer is eligible but chooses not to participate in the program, he must pay back all the tax credits received under the program plus 6 percent interest from the time the contract expires until the land is sold or developed. If a contract is terminated early, the landowner must pay back all the tax credits plus 6 percent interest from the time the credit was received. If the farmer is eligible and chooses to participate in the permanent program, there is no repayment of tax credits.

The second part of the farmland preservation program—the permanent program—begins on October 1, 1982. Farmland owners in Walworth County, which as previously noted has an approved exclusive agricultural zoning ordinance as well as an agricultural preservation plan, would automatically be eligible for tax credits under the permanent program. In order for a farmland owner in the remaining six counties of the Region to be eligible for tax credits, however, such counties must have adopted an exclusive agricultural zoning ordinances by October 1982. Although not required, the farmland owners may sign a contract similar to the contracts under the initial program stipulating that they will not develop their land for a minimum of 10 years. The farmland owner would then be eligible for 70 percent of the maximum tax credit. As in the initial program, if the county has both an exclusive agricultural zoning ordinance and an agricultural land preservation plan, the farmer would be eligible for 100 percent of the minimum tax credits.

When a contract expires or when land is removed from an agricultural zone under the permanent program, the farmer will be liable for some of his

past tax credits. If a farmer continues in a program by signing a new contract, or the land remains in an agricultural zone, no back credits are due. In any case, credits must be paid only when the land is developed or sold. As long as the land remains in farm use, no credits need be paid back. If a farmer's contract expires at the end of the term and he does not renew it, he pays back all tax credits received under the program for the past 10 years, plus 6 percent compound interest from the time the contract expires until the land is sold or developed. If the contract is terminated early, he pays back all credits for the last 10 years, plus 6 percent compound interest from the time the credit was received.

As of December 31, 1978, there were within southeastern Wisconsin 504 approved participants in the initial phase of the farmland preservation program. These participants owned a total of 79,189 acres, or about 124 square miles, of agricultural land, which represent about 8 percent of the 1,557 square miles of agricultural land in the Region in 1978. About 105 square miles, or 85 percent of the 124 square miles of farmland, have been designated as prime agricultural land by the Commission and represent about 14 percent of the total prime agricultural acreage in the Region in 1978. The remaining 12 square miles, or 15 percent of the 124 square miles of farmland preserved, are other agricultural lands and represent about 2 percent of the other agricultural lands in the Region in 1978.

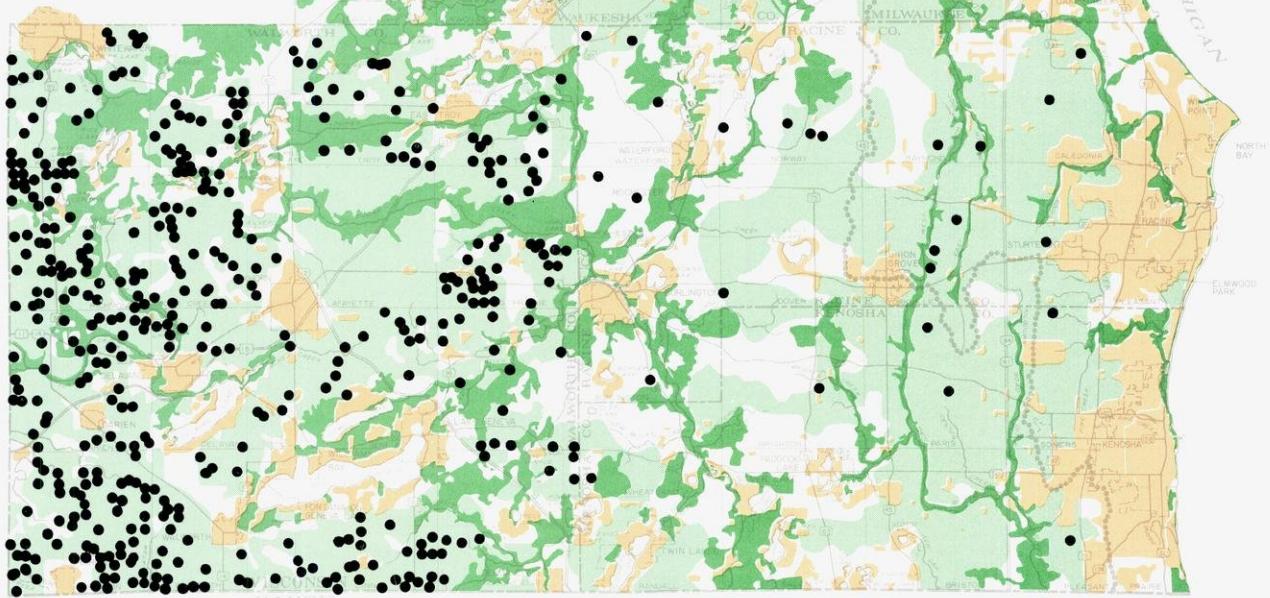
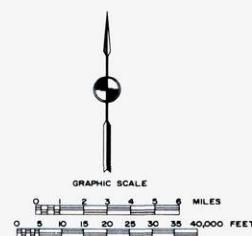
Walworth County accounted for the largest number of participants in the program, with 445 participants, or 88 percent of the total participants, and qualified more than 67,600 acres, or about 106 square miles of land and more than 90 percent of the farmland acres protected (see the accompanying table and map). Excluding Walworth County, other county participation ranged from a low of none in Milwaukee County to a high of 19 participants in Racine County and a low of no acres preserved in Milwaukee County to almost 4,000 acres preserved in Waukesha County.

Participation in Wisconsin's agricultural preservation program should benefit both the farmer and the urban resident while implementing the recommendations contained in the adopted SEWRPC regional land use plan. In addition to the income tax credit, the farmer will benefit because local planning and zoning can protect farm operations from encroachment from urban land uses. When

**PARTICIPANTS IN THE  
INITIAL PHASE OF THE  
WISCONSIN FARMLAND  
PRESERVATION PROGRAM  
IN THE REGION**

**LEGEND**

- PLANNED URBAN DEVELOPMENT - 2000
- PRIMARY ENVIRONMENTAL CORRIDOR
- PRIME AGRICULTURAL LAND
- OTHER AGRICULTURAL AND RURAL LAND
- PARTICIPATING FARM



**NUMBER OF PARTICIPANTS IN THE INITIAL PHASE OF THE WISCONSIN FARMLAND  
PRESERVATION PROGRAM IN THE REGION: OCTOBER 1977 THROUGH DECEMBER 1978**

County	Participants	Percent of Total	Total Farmland Acres Preserved	Percent of Total	Prime Agricultural Acres Preserved	Percent of Total
Kenosha . . . .	6	1.2	877	1.1	722	1.1
Milwaukee . . . .	0	--	0	--	0	--
Ozaukee . . . .	6	1.2	1,100	1.4	911	1.4
Racine. . . . .	19	3.7	3,320	4.2	1,360	2.0
Walworth. . . . .	445	88.3	67,601	85.4	61,154	91.3
Washington . .	14	2.8	2,304	2.9	1,191	1.8
Waukesha. . . . .	14	2.8	3,987	5.0	1,613	2.4
<b>Total</b>	<b>504</b>	<b>100.0</b>	<b>79,189</b>	<b>100.0</b>	<b>66,951</b>	<b>100.0</b>

farm and urban land uses are intermingled, land use conflicts often arise over farm odors and noise or dust, and there are sometimes conflicts over fence maintenance and trespassing. Exclusive agricultural zoning by local governments can help reduce these conflicts by separating farm and urban land uses. Farmers are also protected from special tax assessments for sewer, water, or other urban public services. The farmland preservation act will benefit urban residents by preserving open space, and by helping to control urban sprawl and reduce the cost of extending public services to new developments. In addition, it should help to maintain farming in southeastern Wisconsin as a viable enterprise and to sustain supporting agribusiness. It can also encourage farmers—because of the assurance that farming can remain a long-term viable enterprise—to invest capital in good soil and water conservation practices as well as in such improvements as irrigation and drainage systems. Finally, the act, through the preservation of large blocks of agricultural lands and their associated farm houses and buildings, should help maintain the natural beauty and unique cultural heritage of the Region.

#### **Data Provision and Assistance**

The regional land use data files are extensively used in other Commission planning programs, as well as by local units of government and private interests. Examples of data extension provided by the Division during 1977 include the following:

- Preparation of a special file of existing and planned land use data for use in the conduct by the Commission of the area-wide water quality management planning program.
- Preparation of a series of special files of existing land use, natural resource, demographic, and economic data for Racine and Kenosha Counties for use in preparing county farmland preservation plans.
- Provision of detailed existing land use data to the City of New Berlin for use in local master planning work.
- Preparation of a special file of existing and planned land use data for the Town of Pewaukee for use in an incorporation proposal.
- Preparation of a series of special files of planned land use data for various subareas of the Milwaukee Metropolitan Sewerage District for use in sewerage facilities planning work.
- Provision of demographic, land use, and natural resource data to engineering consultants for use in the preparation of detailed sewerage facilities plans for the Kenosha, Brookfield, and Twin Lakes areas of the Region.

- Provision of demographic, land use, and natural resource data to private real estate consultants for use in the selection of future industrial development sites in the Milwaukee area.
- Provision of base maps and existing land use data to the Wisconsin Department of Natural Resources for use in a mineral extraction inventory.

## PARK AND OPEN SPACE PLANNING

The Commission adopted a regional park and open space plan for southeastern Wisconsin on December 1, 1977. The plan consists of two basic elements—an open space preservation element and an outdoor recreation element. The open space preservation element consists of recommendations for the preservation of primary environmental corridors and prime agricultural lands. The outdoor recreation element consists of 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 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 units and agencies of government 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 modification and refinement of the regional plan as it related specifically to Ozaukee County. This plan, discussed below, was adopted by Ozaukee County in 1978. Thus, all counties in southeastern Wisconsin except Walworth County have adopted the regional park and open space plan or a special refinement of that plan. In addition, four cities—Glendale, Port Washington, Racine, and Wauwatosa—and three villages—River Hills, Saukville, and Whitefish

Bay—acted to adopt the regional park and open space plan. Finally, various local and state agencies—including the Kenosha County Park Commission, the Milwaukee County Park Commission, the Racine County Highway and Parks Committee, the Washington County Park and Planning Commission, and the Waukesha County Park and Planning Commission and the Wisconsin Department of Transportation—adopted the regional park and open space plan in 1978. At year's end, the plan was under consideration for adoption by the Wisconsin Natural Resources Board.

During 1978 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 primarily of assisting local units of government in the preparation of more detailed local park and open space plans consistent with the guidelines provided by the regional plan, including park and open space plans for Ozaukee County and the Village of Darien. In addition, park and open space data were provided to federal, state, and local units and agencies of government and private interests.

### A Park and Recreation Plan for Ozaukee County

As the regional park and open space planning program was nearing completion, the Commission began to receive requests for assistance in the preparation—within the framework of the regional plan—of local park and open space plans. The first such request came from the Ozaukee County Park Commission. During 1978 a park and recreation plan for Ozaukee County was prepared by the Regional Planning Commission staff under the direction of the Ozaukee County Park Commission and with the active participation of all of the 14 local units of government within the County. The Regional Planning Commission staff reviewed and updated inventories of existing park and open space sites and facilities, discussed plan methodology procedures, and received suggestions concerning the local perception of existing and potential needs for park and open space sites and facilities from representatives of each local unit of government within Ozaukee County. Following the review and approval of the plan by the Ozaukee County Park Commission, the plan was formally adopted by the Ozaukee County Board on August 2, 1978, as the official park and open

## REGIONAL PARK AND OPEN SPACE PLAN: 2000

### LEGEND

#### OPEN SPACE PRESERVATION ELEMENT

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

- PROPOSED STATE OWNERSHIP
- PROPOSED LOCAL OWNERSHIP

#### PRIME AGRICULTURAL LAND COMPONENT

- PROPOSED TO BE PROTECTED THROUGH PUBLIC LAND USE REGULATION

#### OUTDOOR RECREATION ELEMENT

##### RESOURCE ORIENTED COMPONENT

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

- EXISTING STATE OWNERSHIP
- EXISTING LOCAL OWNERSHIP
- EXISTING STATE OWNERSHIP
- EXISTING LOCAL OWNERSHIP

- PROPOSED STATE OWNERSHIP
- PROPOSED LOCAL OWNERSHIP
- PROPOSED STATE OWNERSHIP
- PROPOSED LOCAL OWNERSHIP

##### OTHER PUBLIC PARK SITE—TYPE II (100-249 ACRES)

- EXISTING STATE OWNERSHIP
- EXISTING LOCAL OWNERSHIP
- EXISTING STATE OWNERSHIP
- EXISTING LOCAL OWNERSHIP

- PROPOSED LOCAL OWNERSHIP
- PROPOSED LOCAL OWNERSHIP
- PROPOSED LOCAL OWNERSHIP
- PROPOSED LOCAL OWNERSHIP

##### RECREATION CORRIDOR (TRAIL)

- PROPOSED STATE RESPONSIBILITY

- PROPOSED LOCAL RESPONSIBILITY

##### PROPOSED RECREATIONAL BOATING WATER ACCESS POINT

- MAJOR INLAND LAKE OR RIVER

- LAKE MICHIGAN

##### URBAN ORIENTED COMPONENT

- EXISTING OR PLANNED URBAN DEVELOPMENT REQUIRING TYPE III AND TYPE IV PUBLIC PARK SITES

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

- EXISTING
- PROPOSED
- EXISTING
- PROPOSED

- PROPOSED
- EXISTING
- PROPOSED
- EXISTING

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

- EXISTING
- PROPOSED
- EXISTING
- PROPOSED

- PROPOSED
- EXISTING
- PROPOSED
- EXISTING

##### OTHER OUTDOOR RECREATION SITE OR LAND USE

##### EXISTING MAJOR SPECIAL PURPOSE STATE OUTDOOR RECREATION SITE

##### EXISTING MAJOR SPECIAL PURPOSE LOCAL OUTDOOR RECREATION SITE

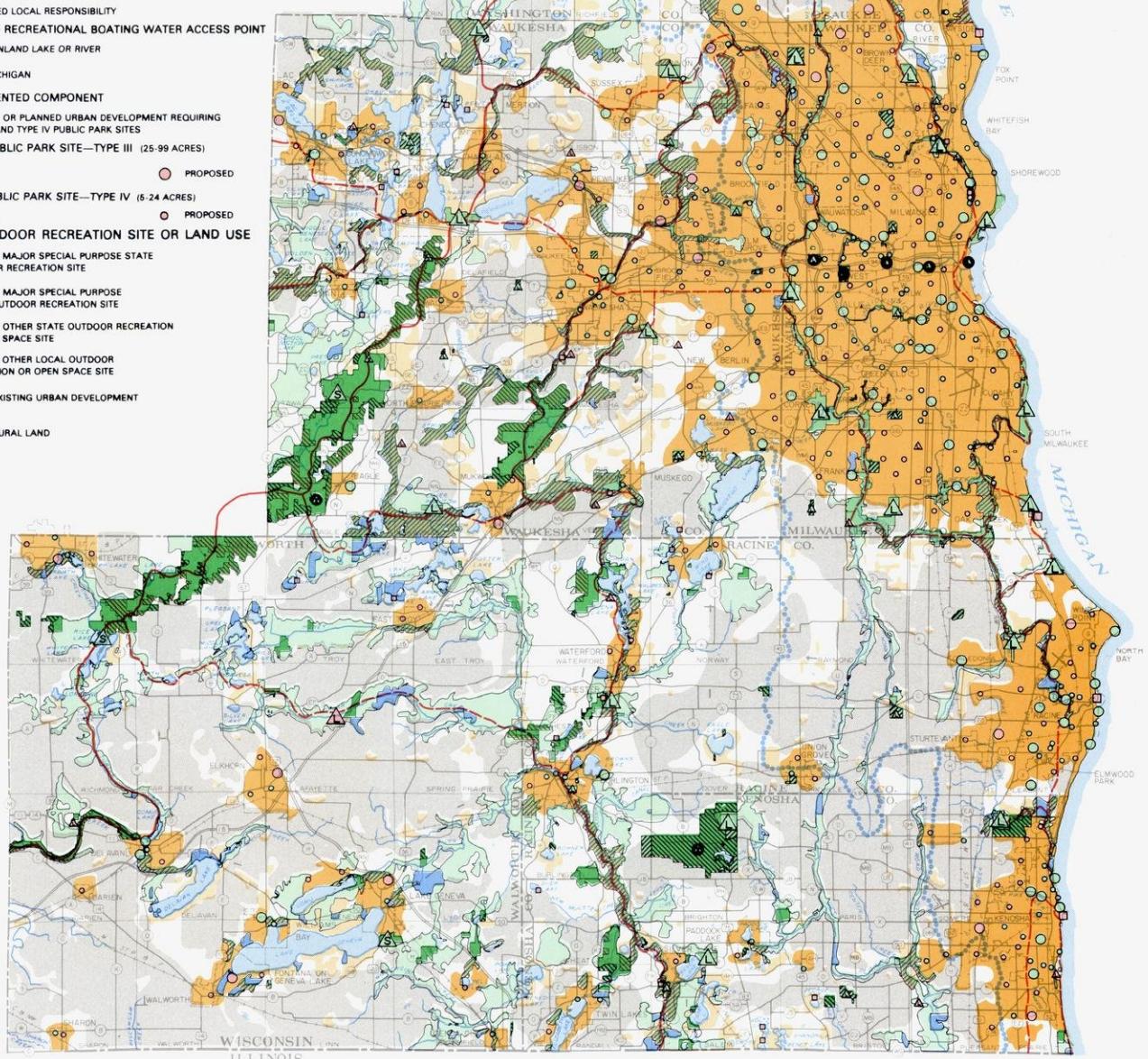
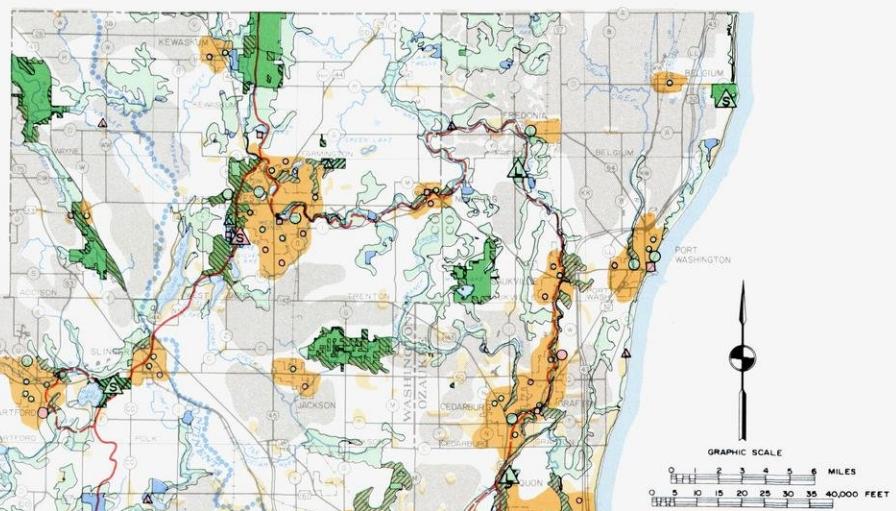
##### EXISTING OTHER STATE OUTDOOR RECREATION OR OPEN SPACE SITE

##### EXISTING OTHER LOCAL OUTDOOR RECREATION OR OPEN SPACE SITE

##### OTHER EXISTING URBAN DEVELOPMENT

##### OTHER RURAL LAND

##### WATER



space plan for Ozaukee County. The plan was also adopted in 1978 by the City of Port Washington and the Village of Saukville. It is important to note that adoption of the plan by the governing body of each unit of government can make these units of government eligible for up to 50 percent funding assistance for the acquisition and development of outdoor recreation sites and related facilities recommended under the plan through Wisconsin's Outdoor Resource Action Plan (ORAP) program and the federal Land and Water Conservation (LAWCON) fund program.

The Ozaukee County park and recreation plan findings and recommendations are set forth in SEWRPC Community Assistance Planning Report No. 23, A Park and Recreation Plan for Ozaukee County. In general, this plan provides 1) a framework of agreed-upon park acquisition and development and open space preservation objectives and supporting standards relevant to the needs and values of the citizens of Ozaukee County; 2) uniform countywide information about the supply of and need for park, recreation, and related open space lands within the County; and 3) recommendations concerning the roles of the County and local units of government in meeting park, recreation, and related open space needs in Ozaukee County in a fully coordinated, cooperative fashion. The park and recreation plan for Ozaukee County is graphically summarized on the accompanying map.

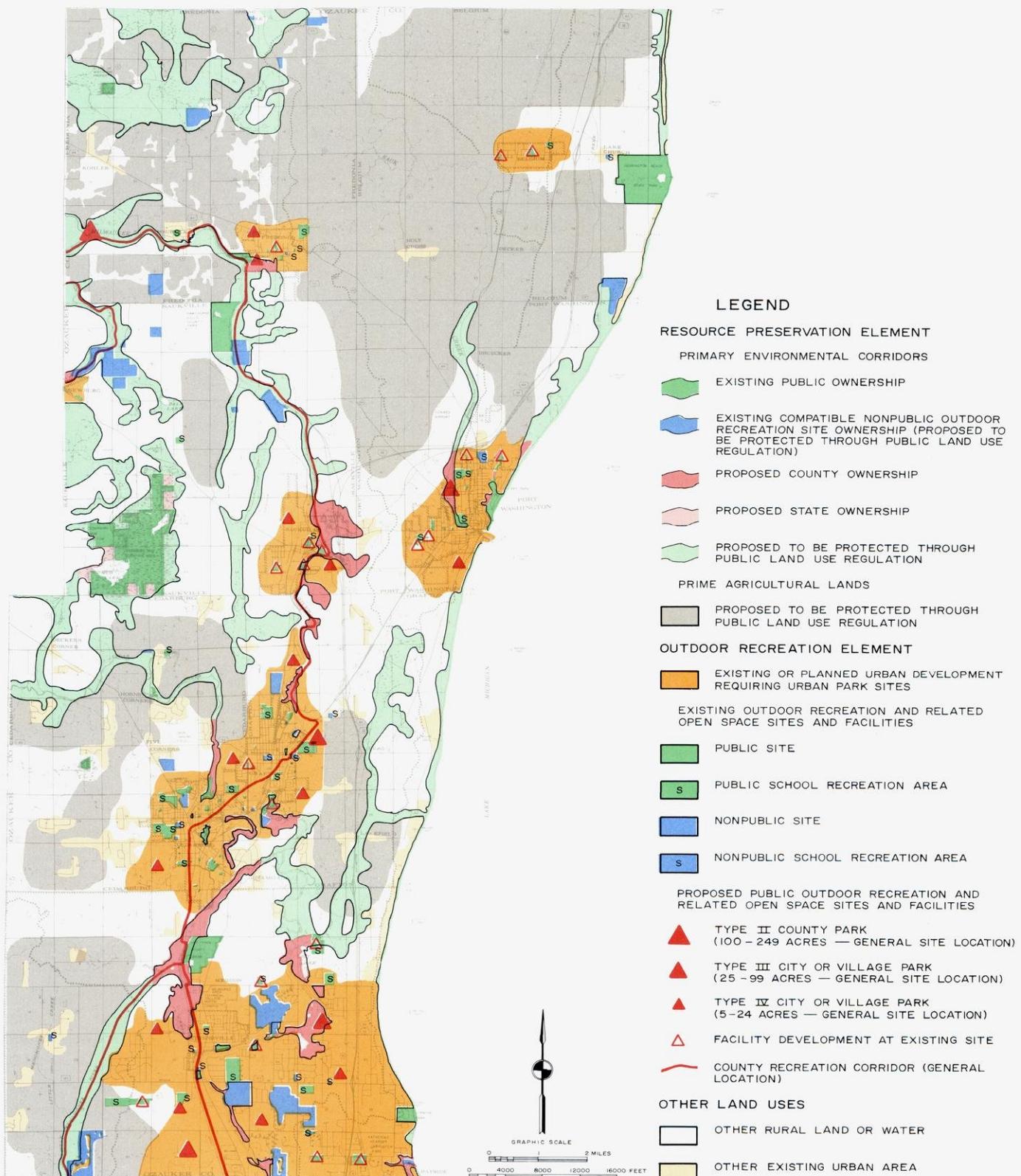
Like the regional park and open space plan, the park and recreation plan for Ozaukee County consists of two basic elements—a resource preservation element and an outdoor recreation element. The resource preservation element deals with the preservation of prime agricultural lands and primary environmental corridor lands. The outdoor recreation element deals with major parks, recreation corridors or trails, water access points, and urban parks. Because of the inclusion of urban parks, the plan provides a sound guide for park and open space preservation, acquisition, and development decisions at the city, village, and town level as well as at the county level, and in effect comprises a plan for each of the 14 municipalities within the County as well as for the County itself.

The resource preservation element of the plan calls for the preservation and protection through local zoning of virtually all of the remaining net prime agricultural lands in Ozaukee County. Prime agricultural lands are those lands which are covered

by the most productive soils; which are held in tracts large enough—both in terms of individual farm sizes and in terms of collective blocks of land—to make farming a viable enterprise and to sustain supporting agribusiness; which have had substantial amounts of capital invested in good soil and water conservation practices as well as in such agricultural facilities as irrigation and drainage systems; and which have consistently displayed higher than average crop yields. Within Ozaukee County in 1977 prime agricultural land encompassed 50,730 acres, or 34 percent of the total area of the County. Of this total it is envisioned that 190 acres, or less than 1 percent of the net prime agricultural lands, would be converted to urban use by the plan year 2000 in order to accommodate forecast population growth in the County. The remaining 50,540 acres are proposed for preservation through exclusive agricultural zoning enacted and administered at the local level primarily by town units of government. In this regard, it should be noted that the Towns of Belgium and Fredonia have made extensive utilization of the exclusive agricultural zoning district to preserve the prime agricultural land within their areas of jurisdiction (see the accompanying map).

The resource preservation element also calls for the preservation and protection of the remaining primary environmental corridors within Ozaukee County through a combination of local zoning and public acquisition. Primary environmental corridors, by definition, are elongated areas in the landscape which encompass the best remaining elements of the natural resource base. These corridors generally lie along the major stream valleys and along the Lake Michigan shoreline and contain almost all of the best remaining woodlands, wetlands, wildlife habitat areas, and bodies of surface water and associated undeveloped floodlands and shorelands. The corridors also encompass areas of rough topography, significant geological formations, and wet or poorly drained soils. In Ozaukee County in 1977, these corridors totaled 20,770 acres, or 14 percent of the total area of the County. Of this total, 2,510 acres, or 12 percent of the total corridor lands, are presently in public ownership. The plan recommends that an additional 3,450 acres, or 17 percent of the corridor lands, be acquired through purchase or dedication by public agencies over the plan design period. Of this total, 450 acres, or 13 percent, would be acquired by the State; and 3,000 acres, or 87 percent, would be acquired by the County. Thus, by the year 2000 public ownership of

## PARK AND RECREATION PLAN FOR OZAUKEE COUNTY: 2000



environmental corridors would total 5,960 acres, or 29 percent of the corridor land and 4 percent of the total area of the County. The remaining 14,810 acres, or 71 percent of the corridor area, are proposed to be protected through appropriate local land use regulations, including floodland, shoreland, conservancy, and low-density residential zoning. Such land use regulations would be enacted and administered at the local level with the exception of floodland and shoreland zoning, which in Ozaukee County is administered in unincorporated areas at the county level (see the accompanying map).

The outdoor recreation element recommendations at the county level are concerned with the provision of major parks, which are large, general use resource-oriented parks 100 acres or more in size that provide opportunities for intensive resource-oriented outdoor recreation activities such as golf, swimming, and picnicking and that contain significant natural resource amenities; the provision of recreation corridors, which provide opportunities for various trail-oriented outdoor recreation activities including hiking, biking, and ski touring; the provision of water access facilities, which provide opportunities for various water-based outdoor recreation activities including fishing, canoeing, and motorboating; and the provision of urban parks, which are less than 100 acres in size and provide opportunities for various intensive nonresource-oriented outdoor recreation activities such as softball, ice-skating, and tennis.

In 1977 there were three existing major parks open to use in Ozaukee County—Harrington Beach State Park, Mee-Kwon County Park, and Hawthorn Hills County Park. These three major parks together occupy about 1,150 acres of land, or less than 1 percent of the total area of the County. Under the outdoor recreation element of the Ozaukee County park and recreation plan, one additional major park located along the main stem of the Milwaukee River in the southwestern portion of the Town of Fredonia would be acquired and developed (see the accompanying map).

Recreation corridors have been defined as publicly owned ribbons of land at least 15 miles in length located through areas of scenic, scientific, historic, or other cultural interest which contain trails marked and maintained for such activities as hiking, biking, horseback riding, and ski touring. Under the outdoor recreation plan element, a total of 35 miles of recreational trails would be provided in Ozaukee County. One recreation

corridor is proposed to be provided along the main stem of the Milwaukee River through environmental corridor lands from the Washington County line to the Village of Grafton. From the Village of Grafton the recreation corridor would continue to the Milwaukee County line over the existing Wisconsin Electric Power Company right-of-way. About seven miles of this right-of-way have already been developed as a bike trail by the Ozaukee County Park Commission. A second recreation corridor would be located through environmental corridor lands along the Little Menominee River, providing a connection to the recreation corridor segment along the Little Menominee River in northwestern Milwaukee County (see the accompanying map).

Water access points provide those individuals who do not own land contiguous to a body of water with an opportunity to participate in extensive water-based recreational activities such as fishing, motorboating, sailing, canoeing, and waterskiing. In 1977 there were six public water access sites in Ozaukee County. Under the outdoor recreation element, one additional water access site—to provide for passive water-related activities such as canoeing and nature study—would be provided at Mud Lake in the Town of Saukville, while additional facilities are also recommended at Port Washington to provide access to Lake Michigan. It should be noted that plans to develop a small boat harbor-of-refuge and associated marina facilities to provide access to Lake Michigan are under preparation by the City of Port Washington in cooperation with the U. S. Army Corps of Engineers.

Urban parks are general use local outdoor recreation sites five to 99 acres in size which provide intensive nonresource-oriented facilities such as softball diamonds, ice-skating rinks, and tennis courts. In 1977 there were a total of 19 urban parks open to use in Ozaukee County. In addition, there were a variety of other general use outdoor recreation sites providing intensive nonresource-oriented outdoor recreation facilities in Ozaukee County in 1977, including 24 public school sites, 12 nonpublic school sites, 23 nonpublic general use sites, and 43 other publicly owned outdoor recreation sites less than five acres in size. Under the outdoor recreation element, 17 additional urban parks would be acquired and developed by the plan design year 2000 (see the accompanying map). In addition, 19 existing parks would be developed further to provide a full range of recreational facilities.

The legal and governmental framework existing within Ozaukee County is such that the existing state, county, and local units of government can readily implement the major recommendations contained in the park and recreation plan for the County. The primary emphasis on implementation of the park and recreation plan is placed upon actions of the Wisconsin Department of Natural Resources, the Ozaukee County Board, and the individual municipal units of government in Ozaukee County. Under the plan, the Wisconsin Department of Natural Resources would acquire 450 acres of primary environmental corridor lands within the existing Department project acquisition boundary of the Cedarburg Bog and provide access to Mud Lake. The Ozaukee County Park Commission would acquire and develop one additional major park of about 130 acres located along the main stem of the Milwaukee River in the southwestern portion of the Town of Fredonia, acquire and develop 35 linear miles of recreation corridor, and acquire 2,940 acres of additional primary environmental corridor land located primarily in existing or plan year 2000 urban areas. Cities and villages in Ozaukee County would acquire 17 additional urban parks ranging in size from five to 99 acres and further develop 19 existing parks. In addition, the City of Port Washington would cooperate with the U. S. Army Corps of Engineers in the provision of access facilities to Lake Michigan. Finally, the town units of government in Ozaukee County would preserve all remaining net primary environmental corridor lands not proposed for public acquisition and all remaining net prime agricultural lands not proposed for conversion to urban use through appropriate public land use regulations. Cities and villages should also protect the remaining environmental corridor land within their boundaries through appropriate land use regulations pending public acquisition.

It should be noted that implementation of the final recommended park and recreation plan for Ozaukee County must proceed in a comprehensive, fully coordinated fashion with the assistance and cooperation of all of the affected levels, units, and agencies of government within the County. For example, cities, villages, and towns may assist the County in the acquisition of primary environmental corridor lands within their area of jurisdiction. Similarly, to provide trail facilities, the cities, villages, and towns may assist the County in the acquisition or development of recreation corridor land. Furthermore, it is important to note that the preservation of primary environmental corridor and prime agricultural lands, particularly those

lands located adjacent to existing urban areas, will require full cooperation among the cities and villages, the surrounding towns, and the County.

The capital costs of fully implementing the recommended park and recreation plan for Ozaukee County are estimated at \$9.3 million over a 23-year plan implementation period. Of this total, \$2.6 million, or 28 percent, would be required for land acquisition, while \$6.7 million, or 72 percent, would be required for facility development. Of the total capital investment costs, \$0.3 million, or 3 percent, would be expended by the Wisconsin Department of Natural Resources; \$3.2 million, or 35 percent, would be expended by Ozaukee County; and \$5.8 million, or 62 percent, would be expended by the local units of government within Ozaukee County. The average annual cost of capital investment required for plan implementation for the County and local units of government in Ozaukee County over the 23-year plan design period would be approximately \$392,000, or about \$4.31 per capita. This compares to current average annual capital investment costs of about \$424,000, or about \$7.01 per capita. Operation and maintenance costs would average \$678,400 per year, or about \$7.46 per capita. This compares to current average annual operation and maintenance costs of about \$541,000, or about \$8.26 per capita. It should be noted that the local costs of plan implementation could be substantially reduced through use of available state and federal grants-in-aid.

#### **A Park and Open Space Plan for the Village of Darien**

During 1978 the Division staff also completed work on a park and open space plan for the Village of Darien. The plan was prepared under the direction of the Village Plan Commission and the Village Public Affairs Committee and is documented in SEWRPC Community Assistance Planning Report No. 24, A Park and Open Space Plan for the Village of Darien. The report contains a set of recommended park and open space preservation, acquisition, and development objectives and supporting standards relevant to the needs and values of the citizens of the Village of Darien; presents pertinent information on the supply of and need for park, recreation, and related open space sites within the Village; and identifies the role that the Village can play in meeting park and related open space needs within the Village.

In the preparation of the park and open space plan for the Village of Darien, it was anticipated that additional resource-oriented sites and facilities—major parks, recreation corridors or trails, and water access facilities—would be provided by state and county agencies of government in accordance with the adopted regional plan, and that additional intensive nonresource-oriented outdoor recreation facilities and urban parks and open space sites would be provided primarily by the Village of Darien. After a consideration of two alternatives, which presented the basic choices practically available to the Village for the provision of the required outdoor recreation sites and facilities, the following major recommendations were incorporated into the adopted park and open space plan for the Village of Darien: 1) the development of the undeveloped village-owned site located in the western portion of the Village; 2) the provision of additional facilities at the Darien Elementary School; and 3) the provision of an additional park site and outdoor recreation facilities in the northern portion of the Village. In addition, it was noted that certain traffic control measures may be necessary to facilitate safe and easy access from all residential areas in the Village to the various park and outdoor recreation facilities recommended in the plan. A graphic summary of the plan is shown on the accompanying map.

Full implementation of the recommended park and open space plan for the Village would require a capital expenditure of about \$206,000 for outdoor recreation site and facility development. Of this total, \$188,000, or 91 percent, would be expended by the Village of Darien, while \$18,000, or 9 percent, would be expended by the school district. It should be noted that these costs are expressed in 1975 dollars and that virtually all acquisition and development costs would be eligible for up to 50 percent state and federal aid.

Upon full implementation of the recommended park and open space plan for the Village of Darien, a wide range of both active and passive outdoor recreation facilities would be provided within the Village on park and open space sites that are geographically well distributed throughout the Village.

#### Data Provision and Assistance

The regional park and open space planning program data files are available for use by federal, state, and local units of government and private

#### A PARK AND OPEN SPACE PLAN FOR THE VILLAGE OF DARIEN: 2000



interests. Examples of data and assistance provided by the Division during 1978 include the following:

- The provision of existing lake use data and information on existing park sites and open space lands located adjacent to lakes to the Wisconsin Department of Natural Resources, Lake Use Task Force.
- Provision of golf course inventory and needs data on golf courses in Waukesha County to the Waukesha County Park and Planning Commission for use in the evaluation of the need to provide additional golf course facilities.
- Provision of outdoor recreation need data to the City of Kenosha for use in the development of a local park and open space plan.
- Provision of existing park and open space site inventory data on Milwaukee and Waukesha Counties to the Milwaukee and

Waukesha County Soil and Water Conservation Districts for use in the preparation of long-range resource conservation programs.

- Provision of existing park and open space site inventory data on various areas in the Southeastern Wisconsin Region to the faculty and students at both the University of Wisconsin-Madison and the University of Wisconsin-Platteville for use in outdoor recreation-related research and studies.
- Provision of existing park and open space site inventory data on Milwaukee and Waukesha Counties to the Continental Map Company for use in the preparation of road maps of southeastern Wisconsin.
- Provision of existing park and open space site inventory data and outdoor recreation need data on various areas in southeastern Wisconsin to private consulting firms for use in the preparation of park and open space plans.

## 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 1978, 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.

### 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 1978, retaining one staff member whose primary responsibility is to work with communities, public housing agencies, and private housing interest groups in initiating activities that

would 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 Human Resources Committee of the Milwaukee Urban League, the Sherman Park Community Association, the Metropolitan Milwaukee Fair 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. Examples of the type of housing assistance services provided under the housing outreach program in 1978 include the following:

- Continued assistance to La Casa de Esperanza, Inc., a nonprofit corporation concerned with improving housing conditions of the Spanish-American population, including assistance in the design of a survey form for its needs assessment survey of the Spanish population in Ozaukee, Washington, and Waukesha Counties and efforts to coordinate this survey with similar surveys of the Spanish population being conducted outside the Region.
- Continued assistance to the Waukesha County Commission on Aging and the University of Wisconsin-Extension in their joint conduct of an exterior housing condition survey in Waukesha County, including the provision of survey forms and data processing services, and assistance in the preparation of a summary report of the survey results.
- Assistance to the Northwest Action Council, a Milwaukee nonprofit corporation that will acquire and rehabilitate residential properties to provide housing for lower income households, including efforts to extend citizen participation in implementation of the City of Milwaukee Community Development Block Grant Program.
- Assistance to the East Side Housing Action Coalition in the development of its home repair service program and in the investigation of the activities of real estate speculators on the east side of the City of Milwaukee.

- Assistance to the Milwaukee County Community Relations-Social Development Commission in the disposition of federal emergency energy relief funds and in the administration of its home weatherization program.

As a special outreach effort in 1978, the Commission responded to a request by the University of Wisconsin-Extension and the Harambee Development Corporation to provide management consulting services to the Corporation. Specifically, the Commission assigned one senior planner for three-fourths of his time as the interim director of the Harambee Development Corporation to provide qualified staff assistance in the resolution of the Corporation's serious fiscal and staff problems. As a result of this effort, the Harambee Development Corporation once again began to deliver housing repair and maintenance services to the Harambee neighborhood in the northeast side of the City of Milwaukee. However, because of fiscal liabilities which had been incurred under previous management and which the Harambee Development Corporation had no way of meeting, the Corporation was necessarily dissolved by the end of the year.

#### **Data Provision and Assistance**

The regional housing planning program data files are available for use by federal, state, and local units of government and private interests. Examples of data and assistance provided by the housing staff during 1978 include the following:

- Provision of information on the existing supply of publicly assisted housing to Milwaukee County and to the City of Oak Creek to assist in their housing planning activities.
- Provision of information on the present status of loans authorized under the federal Section 235 home ownership program to the City of Milwaukee for use in the preparation of its housing assistance plan.
- Preparation of estimates of sewered and unsewered housing units authorized by residential building permits in Milwaukee, Ozaukee, Washington, and Waukesha Counties for the Milwaukee-Metropolitan Sewerage Commissions.

- Provision of information on the existing supply of vacant lots for use by Milwaukee County as it formulates policies for the disposition of county-owned lands.

- Provision of information regarding residential building permit authorizations in response to many requests from government agencies and from private interests.

#### **Subsidized Housing Activity**

The adopted regional housing plan recommends the provision of about 17,800 publicly assisted housing units by 1980 over and above such units provided in the Region as of the end of 1973. An integral part of the adopted regional housing plan is the subsidized housing allocation strategy, which recommends the geographic distribution of the 17,800 assisted 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 for housing assistance recommended under the housing allocation strategy.

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 existing 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 rental units authorized under the HUD Section 8 and FmHA Section 515 programs, as well as rental units authorized under the HUD Section 236 and HUD Section 221(d)(3) programs since January 1974. Also included in this inventory are any single-family homes authorized under the HUD Section 235 and FmHA Section 502 homeownership programs since January 1974.

A total of 11,072 units of publicly assisted housing have been provided in the Region since January 1, 1974. A total of 6,885 units, or

## PROGRESS TOWARD MEETING PUBLICLY SUBSIDIZED HOUSING UNIT ALLOCATION

### LEGEND

**32** HOUSING ANALYSIS AREA IDENTIFICATION NUMBER

**318** ALLOCATED UNITS

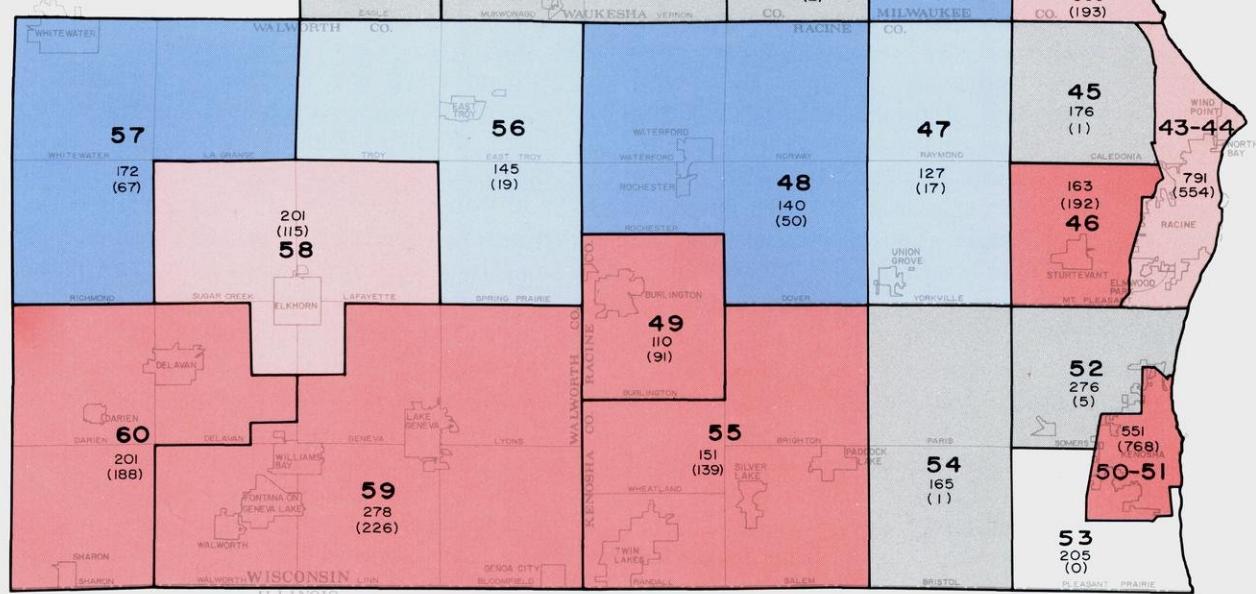
**(200)** ASSISTED HOUSING UNITS PROVIDED BETWEEN JANUARY 1974 AND APRIL 1979 (NEW OR REHABILITATED UNITS COMPLETED, UNDER CONSTRUCTION, OR HAVING A FIRM FUNDING COMMITMENT AS WELL AS EXISTING UNITS FOR WHICH SUBSIDIES HAVE BEEN ASSIGNED BY HUD TO LOCAL PUBLIC HOUSING AGENCIES)

### PERCENT OF ALLOCATION REACHED

- 0.0
- 0.1 - 9.9
- 10.0 - 24.9
- 25.0 - 49.9
- 50.0 - 74.9
- 75.0 OR MORE



GRAPHIC SCALE  
0 1 2 3 4 5 MILES  
0 10 20 30 35 40 40 FEET



62 percent, have been provided through new construction; 486 units, or 4 percent, have been provided through rehabilitation; and 3,701 units, or 34 percent, have been provided through the utilization of the existing stock of sound housing. These 11,072 units represent about 62 percent of the total number of units recommended in the plan to be provided by 1980. As indicated on the accompanying map, 38 of the 49 allocation areas have shown at least some progress toward meeting the allocation. Nineteen areas have met more than half of their goals, and 6 of these have 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. The large balance of households were in economic need; that is, 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 in such a way as to eliminate physical housing problems as evidenced by substandard and overcrowded living conditions. It was determined that the proper use of 17,800 subsidies could substantially achieve this objective. The regional housing plan gave lower priority to the subsidization of those households that occupy crowded standard housing but that must pay a disproportionate share of their income to do so. It is apparent, however, that a significant portion of the housing subsidies provided in the Region since 1973 has gone to households that are in economic need rather than to households occupying substandard and overcrowded units. For example, of the subsidies provided since 1973, about 67 percent has gone to elderly persons, even though the housing problem of elderly persons was found in the regional housing study to be largely economic in nature. Subsidization of needy elderly is in itself desirable, and such activity may "free up" the presumably sound housing units formerly occupied by the elderly for families that

currently live in substandard or overcrowded units. The continued subsidization of households whose housing problems are primarily economic, however, 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.

## COASTAL MANAGEMENT PLANNING

During 1978 the Division staff continued to provide assistance to the Wisconsin Department of Administration in the conduct of the Wisconsin coastal management program. This program is intended to coordinate governmental activities toward achieving 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, 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.

During 1978 the Committee met five times and provided review comments on the Commission's Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus. In addition, the Committee reviewed the draft program documents on the disposal of dredge materials from the Great Lakes harbors.

During 1978 the Division staff also assisted in the preparation of nominations of geographic areas of management concern and project proposals as required under the federal act. Assistance with such nominations was provided in the Cities of Kenosha, Milwaukee, Port Washington, Racine, and St. Francis; the Village of Shorewood; the Towns of Caledonia and Mt. Pleasant; the Kenosha and

Milwaukee County Park Commissions; and the Racine County Planning and Zoning Department. On July 28, 1978, the Commission coordinated a public informational meeting on the 1978 Wisconsin Coastal Management Program Amendments. In addition, the Commission conducted a public informational meeting on December 1, 1978, concerning the geographic area of management concern nominations submitted by the City of Kenosha, the Town of Mt. Pleasant, and the Milwaukee County Park Commission. These nominations are shown on the accompanying map, along with all other geographic areas of management concern designated to date. The 39 project proposals submitted from or affecting southeastern Wisconsin were discussed at the meeting. At year's end, comments on the nominations and project proposals were submitted to the Wisconsin Coastal Management Council for inclusion in the Wisconsin coastal management program.

During 1978 the Division staff completed work on the Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus. This Prospectus is an outgrowth of a formal request by the Common Council of the City of Milwaukee in 1973 that the Commission conduct a comprehensive study of the Milwaukee harbor freshwater estuary. Work began on the Prospectus in October 1977 and was completed in September 1978.

The purpose of the Prospectus was to explore and recommend means by which a comprehensive planning program could be established for the Lake Michigan estuary and direct drainage area subwatersheds in southeastern Wisconsin. The Prospectus is intended to provide sufficient information to permit the Wisconsin Coastal Management Council, county boards concerned, and other affected governmental agencies to consider the costs and benefits of such a program and to determine the desirability of its execution.

The Prospectus recommends a comprehensive planning program for the Lake Michigan coastal system of southeastern Wisconsin to assist in the abatement of the water quality, shoreline erosion, port development, energy facility siting, and public access problems of the coastal area and in the preservation and enhancement of natural areas by developing a workable plan to guide the staged development of multipurpose water control facilities and related land use resource conservation and management programs.

The Prospectus identifies five serious water resource-related problems existing within the estuaries of the Region—water pollution, potential flooding and flood damage, harbor dredging and maintenance, public access and recreational needs, and changing land uses. All these surface water resource problems are closely related to the existing and probable future land uses within the estuary subwatersheds. Therefore, as land use changes continue to occur within the subwatersheds, these problems may be expected to continue to be manifested and even to be intensified.

The Prospectus also identifies six serious water resource-related problems existing within the direct drainage area directly tributary to Lake Michigan—water pollution, bluff failure and shoreline erosion, potential flooding and flood damage, deterioration and destruction of the natural resource base, public access and recreational needs, and changing land use. As with the problems in the estuary subwatersheds, these problems are all closely interrelated and may be expected to be intensified as urbanization continues within the direct drainage area subwatersheds.

Finally, the Prospectus recognizes the problems of the Lake Michigan near-shore subsystem, as well as the fact that the elimination of many of the problems would be best addressed within the context of a comprehensive planning program which recognizes the interrelationships of such problems.

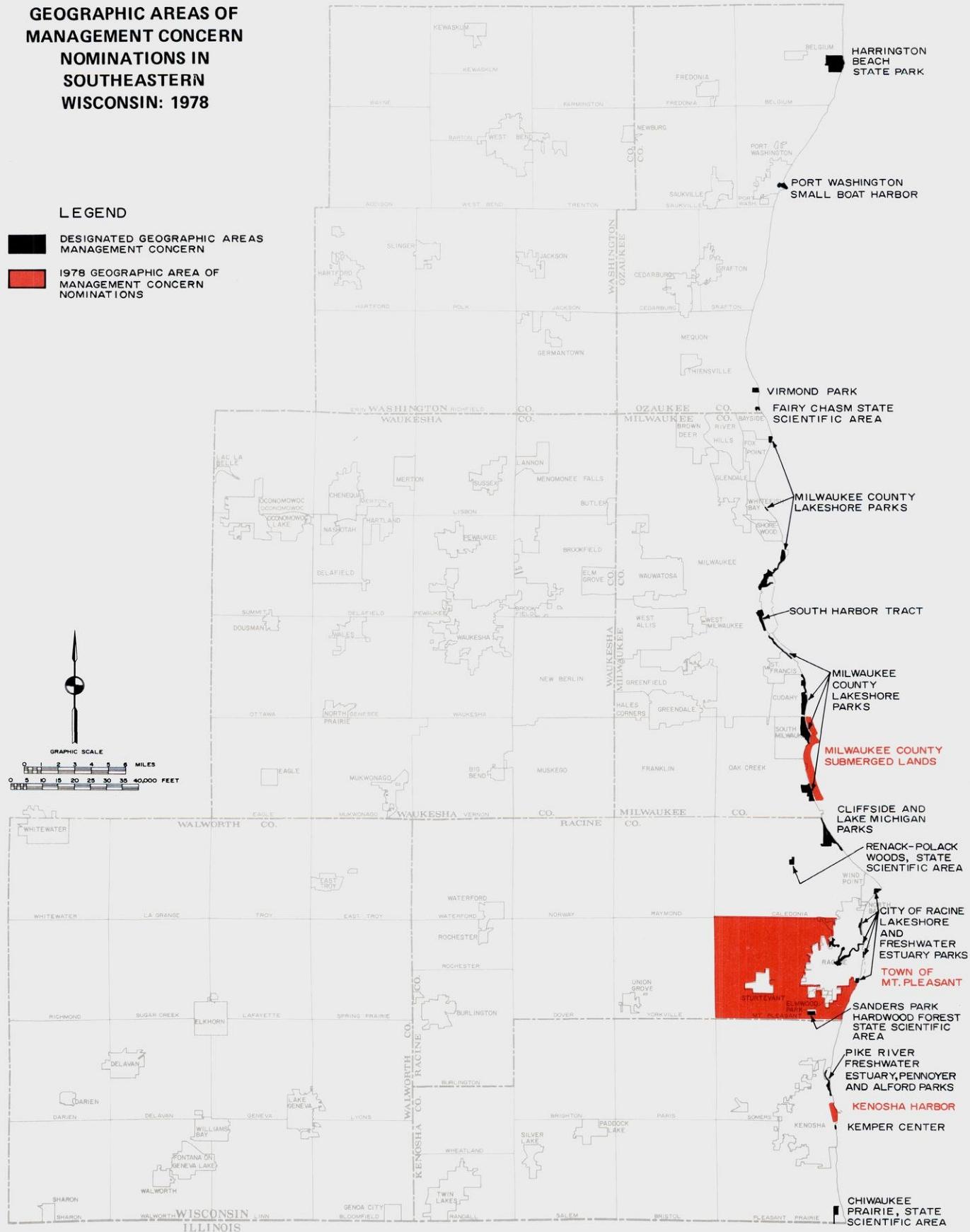
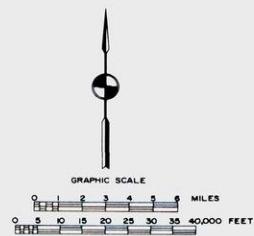
Because of the complexity and magnitude of a comprehensive planning program for the entire Lake Michigan coastal system, the Prospectus recommends that the needed program be subdivided into three separate but coordinated studies—one dealing with the estuary subwatersheds; one with the direct drainage area subwatersheds; and one with the near-shore subsystem. In addition, the Prospectus recommends that, because of the potential lakewide processes and effects involved, the study of the near-shore subsystem be carried out under the direction of an agency with a broader geographical scope than the Regional Planning Commission, such as the International Joint Commission. Thus, in summary, the Prospectus recognizes that effective solutions to the problems of the Lake Michigan coastal system and full realization of its development potential can be achieved only within the framework of a comprehensive planning program that considers all important aspects of the natural resource base,

**GEOGRAPHIC AREAS OF  
MANAGEMENT CONCERN  
NOMINATIONS IN  
SOUTHEASTERN  
WISCONSIN: 1978**

**LEGEND**

**DESIGNATED GEOGRAPHIC AREAS  
MANAGEMENT CONCERN**

**1978 GEOGRAPHIC AREA  
OF  
MANAGEMENT CONCERN  
NOMINATIONS**



together with all significant human modifications and uses thereof. It concludes that the proposed planning studies must fully recognize the interrelationship of the land and water use problems of the entire coastal system, and must contain specific practical recommendations for the abatement of these problems.

In late 1978 intergovernmental meetings were held to discuss possible funding support for the proposed Lake Michigan Coastal system planning program. While such initial efforts to secure funding proved unsuccessful, the Commission at year's end continued to seek funding support for this important planning program.



# TRANSPORTATION PLANNING DIVISION

## DIVISION FUNCTIONS

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

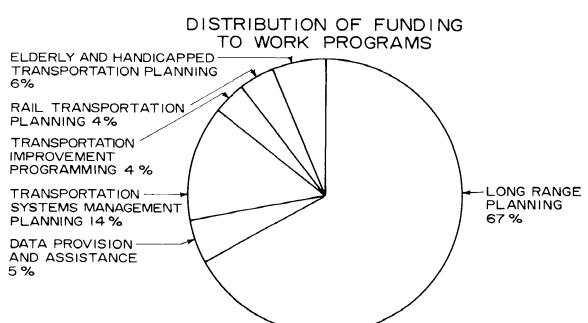
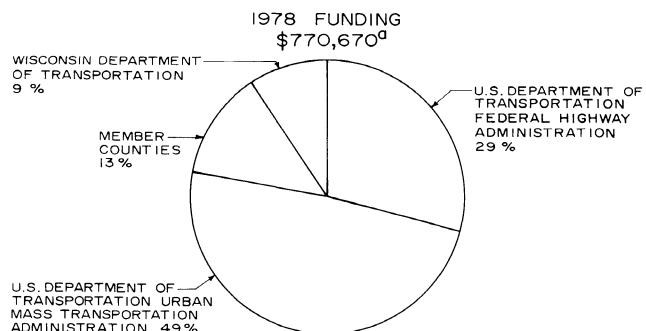
- What are the travel habits and patterns in the Region? How are these changing over time?
- What is the existing supply of transportation facilities?
- How much travel in the future will likely be accommodated by the various travel modes, particularly the private automobile and public transit?
- How 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 the plan recommendations concerning these questions, and to monitor transportation system development activities in the Region, the Transportation Planning Division during 1978 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; transporta-

tion improvement programming; rail transportation planning; air transportation planning; and data provision and assistance.

As the official metropolitan planning organization for transportation planning in the Southeastern Wisconsin Region, the Commission not only conducts transportation planning work programs with its own staff and consultants, but also oversees related subregional transportation planning by other governmental agencies. In many cases federal funds for the conduct of these subregional 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

## TRANSPORTATION PLANNING DIVISION



<sup>a</sup> Includes \$180,167 for agencies other than SEWRPC to conduct subregional transportation planning activities identified in the 1978 SEWRPC Overall Work Program.

activities bearing upon the Commission's overall work program are reported herein irrespective of whether or not they are directly conducted by the Commission.

#### DATA COLLECTION, COLLATION, AND DEVELOPMENT

During 1978 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.

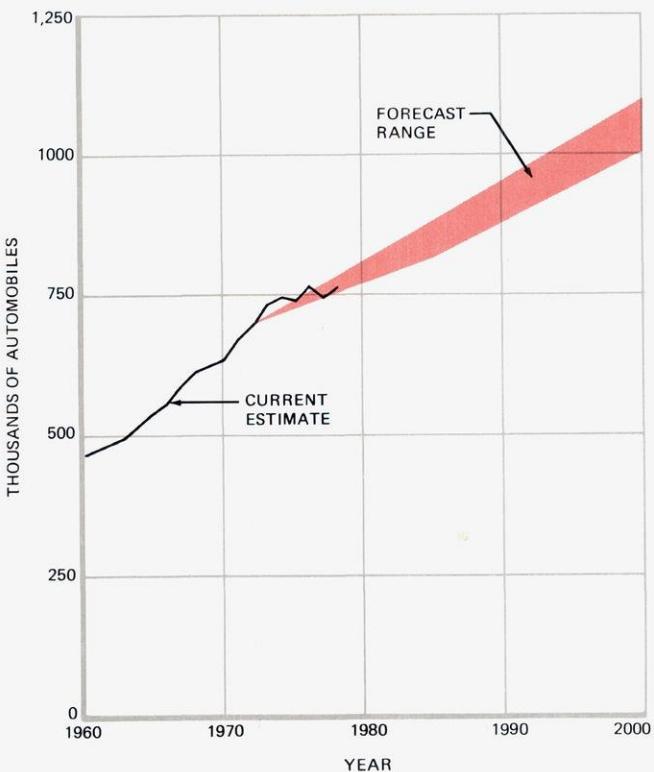
#### Automobile and Truck Availability

The number of automobiles available to residents of the Region during 1978 totaled about 758,900. This represents an increase of about 10,200, or about 1.4 percent, over the 1977 level of 748,700 and a return to the level of automobile availability reported for 1976. The annual rate of growth in automobile availability over the period from 1974 through 1978, about 0.4 percent per year, is substantially lower than the annual rate of growth observed between 1963 and 1974, about 3.7 percent per year. While some of the reduction in growth rate can be attributed to the increased use of light duty trucks, the major cause for the decline in the growth rate is attributable to the continued decline in regional population growth. As shown in the accompanying table, Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties registered gains in automobile availability during the year, while Milwaukee and Racine Counties registered losses. The number of persons per automobile available is estimated to be 2.33 in 1978, down slightly from 2.37 in 1977.

The estimated number of automobiles available in 1978 can be compared to the forecast range of automobile availability as prepared under the long-range regional transportation system plan, as shown in the accompanying figure depicting the historical growth in automobile availability. The forecast range of availability is 755,000 to 785,100 automobiles for the adopted transportation plan alternative and the "no build" alternative, respectively. The estimated 1978 regional automobile availability level of 758,900 lies within the forecast range, being 0.5 percent higher than the lower end of the range and 3.3 percent lower than the high end of the range.

The number of trucks available in the Region increased during the year to a total of about 113,000 trucks, an increase of about 4,700 trucks,

#### AUTOMOBILE AVAILABILITY

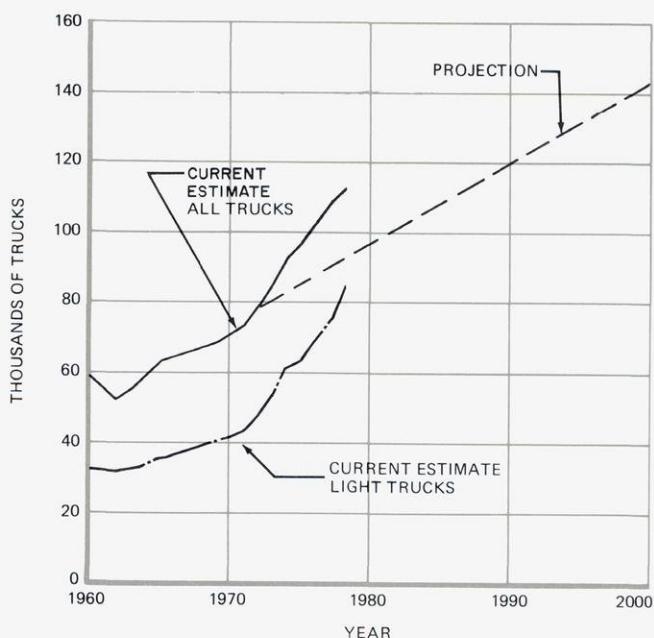


#### AUTOMOBILE AVAILABILITY

County	1963	1977	1978
Kenosha . . . . .	35,162	50,647	53,437
Milwaukee . . . . .	304,123	408,722	407,088
Ozaukee . . . . .	14,319	30,296	31,476
Racine . . . . .	47,583	74,367	73,967
Walworth . . . . .	19,437	29,762	29,989
Washington . . . . .	16,235	33,215	34,511
Waukesha . . . . .	61,899	121,720	128,428
Total	498,758	748,729	758,896

or about 4 percent, over the 1977 level of 108,300 trucks. As shown in the accompanying figure, the increase in trucks is almost entirely due to an increase in light duty trucks, which now comprise about 76 percent of the total trucks available. In comparison, the light trucks accounted for about 60 percent of all trucks in 1970 and about 57 percent of all trucks in 1960.

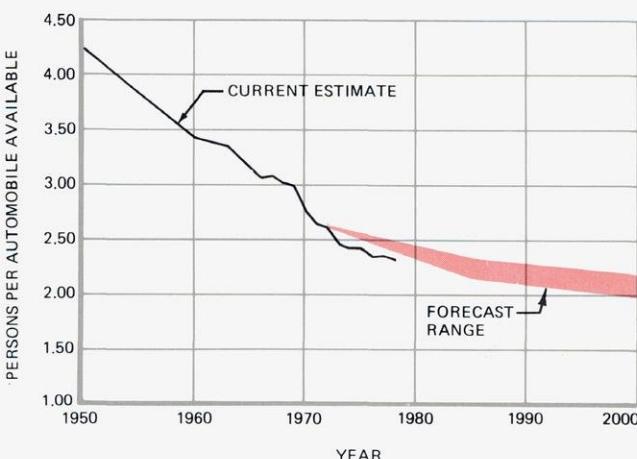
### TRUCK AVAILABILITY



### TRUCK AVAILABILITY

County	1963	1977	1978
Kenosha . . . . .	4,855	10,002	10,222
Milwaukee . . . . .	25,867	42,101	43,440
Ozaukee . . . . .	2,286	4,637	4,944
Racine . . . . .	6,201	12,670	13,383
Walworth. . . . .	4,490	8,708	8,952
Washington . . . . .	3,413	8,067	8,500
Waukesha . . . . .	8,283	22,074	23,586
Total	55,395	108,259	113,027

### PERSONS PER AUTOMOBILE AVAILABLE



### Mass Transit Ridership

Publicly owned fixed route mass transit service is provided in the Region in the Kenosha, Milwaukee, and Racine urbanized areas. In the Kenosha urbanized area, mass transit ridership showed a significant increase in 1978, maintaining a trend which began with the reestablishment of the Kenosha mass transit system as a publicly owned system in September 1971. Improvements to the local transit service during 1978 included the expansion of the existing five-route bus system through the addition of a sixth route serving major outlying shopping areas of the City. Ridership during the year approximated 1,152,000 revenue passengers, an increase of about 8 percent over the 1977 ridership level of about 1,064,000. The number of bus miles provided in revenue service during the year totaled 630,100, an increase of about 4 percent over the 607,000 bus miles provided during 1977. Revenue bus miles provided is an important indicator of the level of transit service provided.

In the Racine urbanized area, mass transit ridership increased during 1978 to approximately 1,542,000 revenue passengers. This represents an increase of 50,000 revenue passengers, or 3 percent, over the 1977 level of 1,492,000 passengers. This increase in ridership represents a stabilization in transit ridership after a two-year period of extremely rapid growth attendant to major changes in the transit system. As was noted in previous annual reports, annual increases in transit use of 54 percent and 48 percent were experienced in the Racine urbanized area during 1976 and 1977, respectively. The number of bus revenue miles provided during 1978 totaled 984,100, representing a decrease of less than 1 percent from the 990,300 revenue bus miles provided during 1977.

Transit ridership decreased slightly in the Milwaukee urbanized area during 1978. Ridership decreased by about 5 percent during the year, from a 1977 level of about 48.3 million to a 1978 level of about 45.7 million. During 1978 transit service in the Milwaukee urbanized area was provided primarily by the Milwaukee County Transit System, with commuter-oriented transit service to downtown Milwaukee provided by Waukesha and Ozaukee Counties. The decline in ridership for the urbanized area may be attributed largely to a 39-day transit operators' strike, which shut down the entire Milwaukee County Transit System for parts of the months of May and June. Also

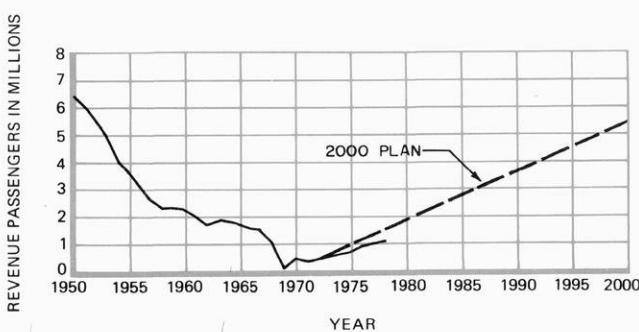
## MASS TRANSIT RIDERSHIP

Urbanized Area	1977	1978	Percent Change
Kenosha . . . . .	1,064,400	1,152,300	8
Milwaukee			
Milwaukee County . . . . .	47,873,100	45,417,000 <sup>a</sup>	- 5
Ozaukee County . . . . .	46,400	20,600 <sup>b</sup>	- 56
Waukesha County . . . . .	182,700	182,400	- -
Wisconsin Coach Lines, Inc. . . . .	241,000	134,600	- 44
Subtotal	48,343,200	45,754,600	- 5
Racine. . . . .	1,491,800	1,542,300	3
Total	50,899,400	48,449,200	- 5

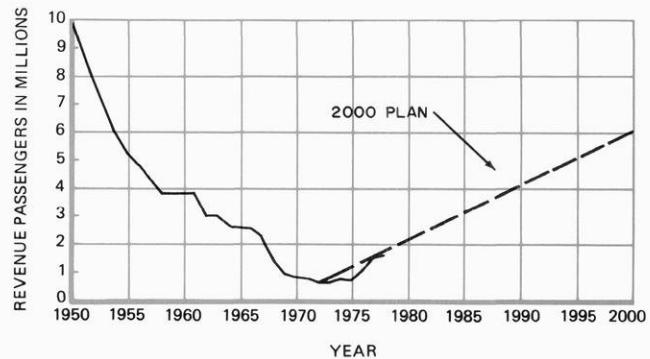
<sup>a</sup> For state funding purposes, Milwaukee County reported a total ridership during 1978 of 52,544,700 passengers. The difference between the two ridership figures can be attributed to the inclusion in the higher figure as separate rides of transfers by patrons using passes. The lower figure represents total trips made by transit.

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

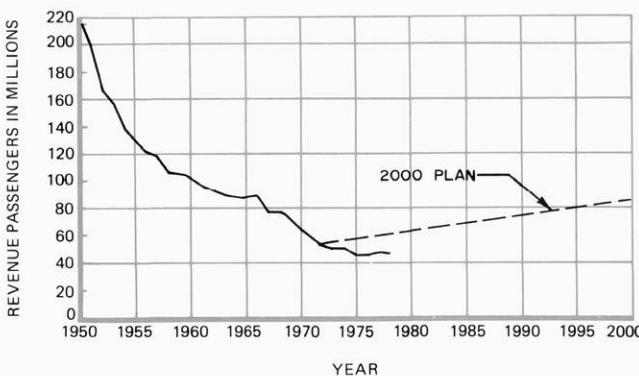
### MASS TRANSIT RIDERSHIP—KENOSHA



### MASS TRANSIT RIDERSHIP—RACINE



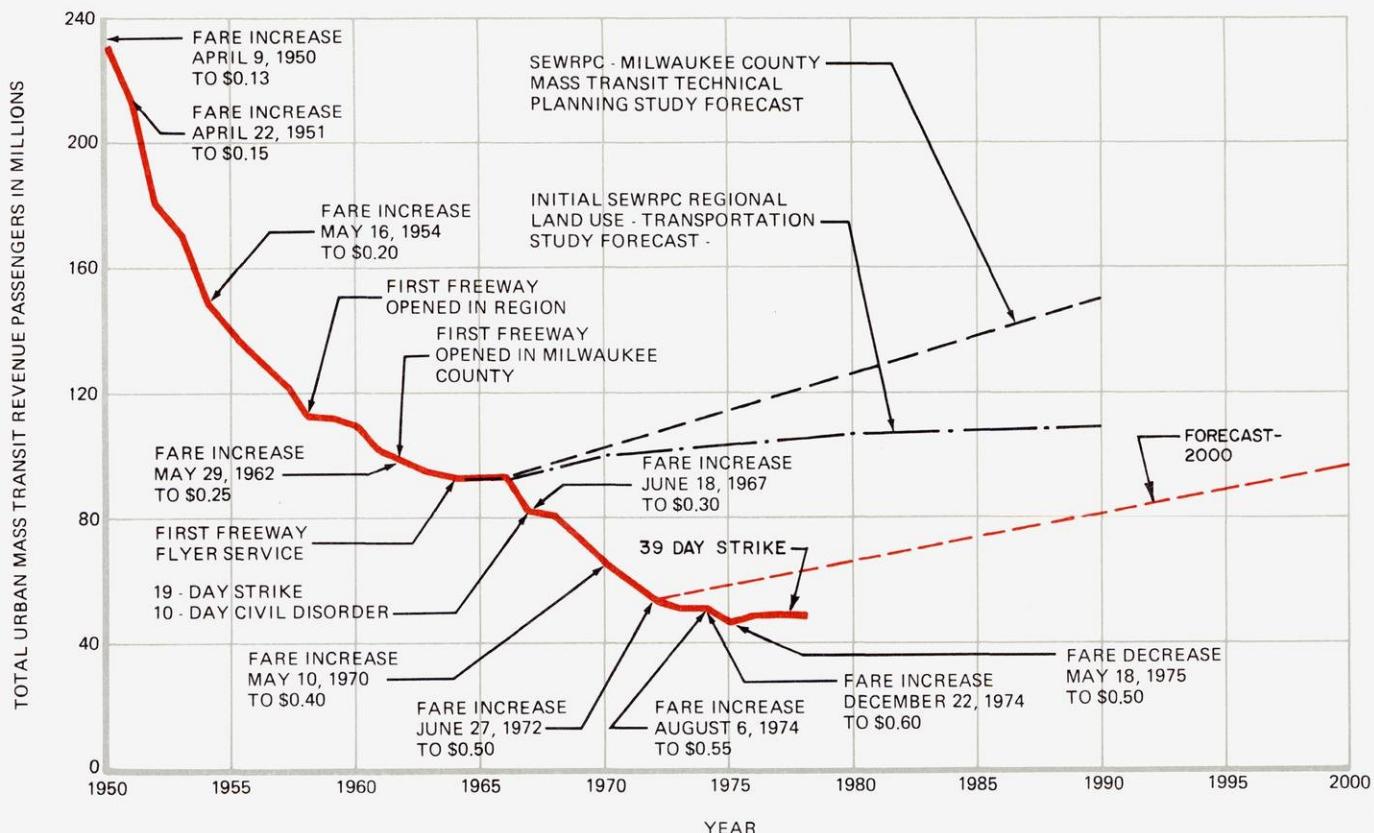
### MASS TRANSIT RIDERSHIP—MILWAUKEE



contributing to the decline in ridership was the discontinuation in June of the commuter-oriented transit service provided by Ozaukee County.

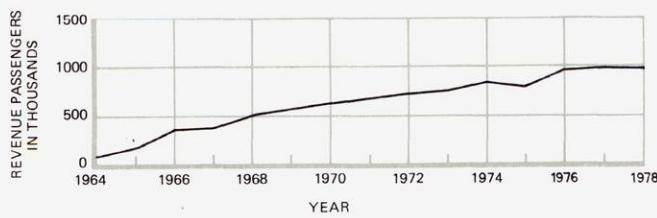
During 1978 primary transit service in the Milwaukee urbanized area was provided from outlying parking terminals by freeway flyer transit service to downtown Milwaukee and by UBUS flyer transit service to the University of Wisconsin-Milwaukee. Ridership on the freeway flyer transit service totaled about 970,000 passengers in 1978, representing a decrease of less than 1 percent from the 975,000 passengers carried in 1977. A growth in ridership on the UBUS flyer

## HISTORICAL TREND IN MASS TRANSIT RIDERSHIP IN THE REGION

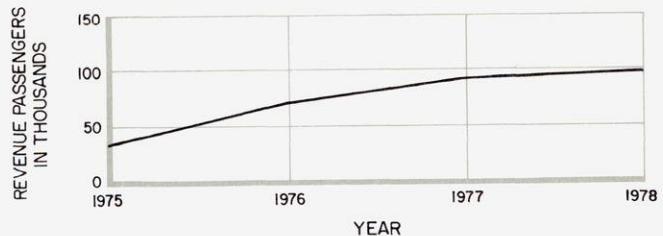


NOTE: FARE INCREASES AND DECREASES SHOWN IN THIS FIGURE REFER ONLY TO THE MILWAUKEE COUNTY TRANSIT SYSTEM AND TO THE SINGLE-RIDE ADULT CASH FARE.

### MILWAUKEE AREA FREEWAY FLYER RIDERSHIP



### UBUS FLYER RIDERSHIP

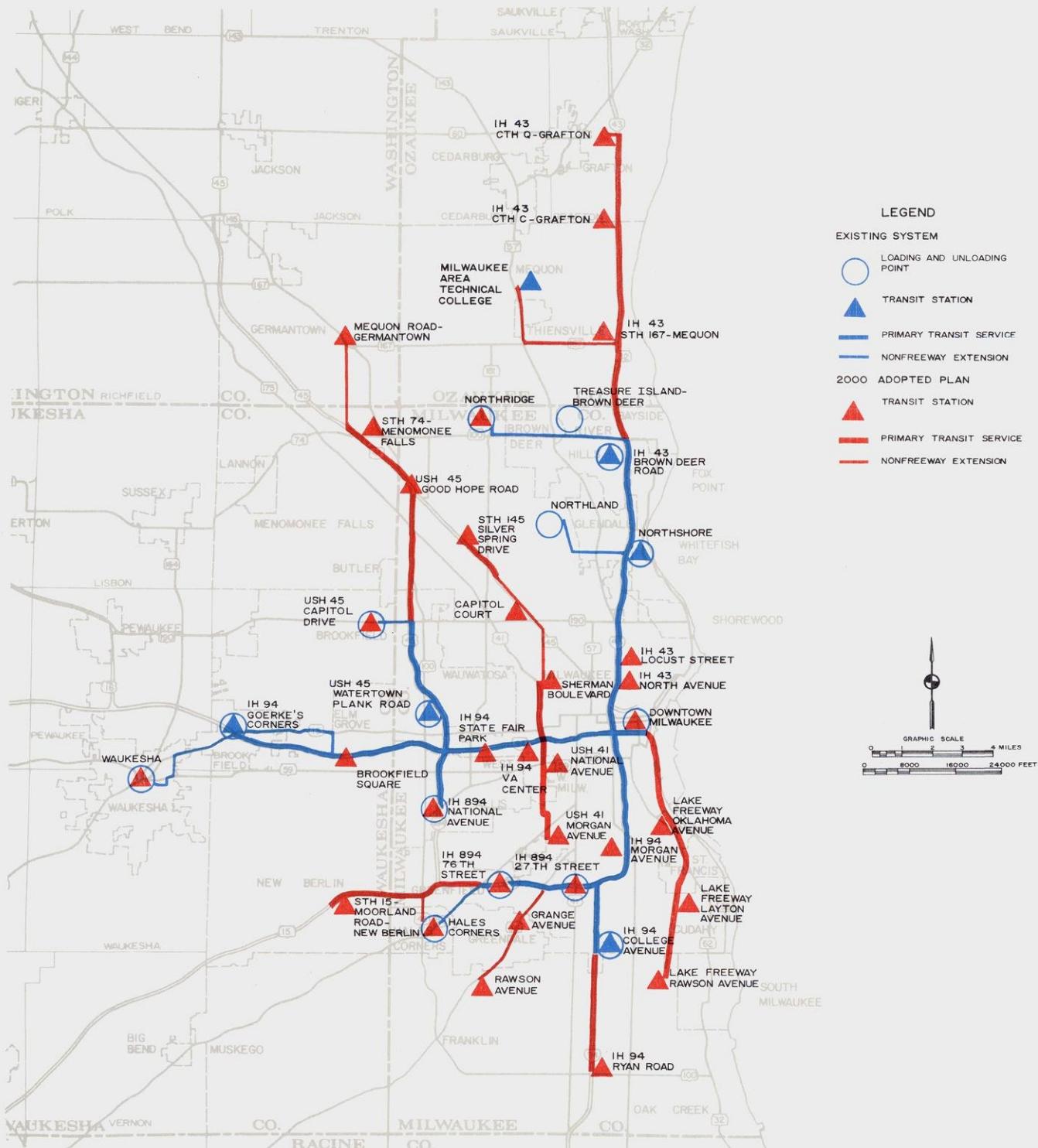


transit service was experienced, with ridership increasing by about 4 percent from the 1977 total of 95,000 passengers to the 99,000 passengers in 1978.

The number of bus miles provided in revenue service during 1978 in the Milwaukee area totaled about 17.1 million. This represents a decrease of about 9 percent from the 1977 level of 18.7 million miles, reflecting the effects of the previously mentioned strike.

Progress in providing the transit stations recommended in the adopted year 2000 regional transportation system plan is summarized on the accompanying map. As shown in the accompanying table, off-street parking is provided at six public transit/park-ride stations, and at eight shopping center lots. During 1978 the number of parking spaces available at the six public transit stations increased to a total of 1,340 spaces, with the provision of 50 additional spaces at the Goerkes Corners station. The number of spaces allocated at three of the shopping center lots—

## ADOPTED PRIMARY TRANSIT SYSTEM PLAN FOR THE MILWAUKEE URBANIZED AREA



K-Mart (Hales Corners), Treasure Island (Brookfield), and Spring Mall (Greenfield)—also was increased by a total of 147 spaces to reduce the overflow of parked vehicles into the shopping centers' customer parking area. Of the 1,340 available parking spaces at the six public transit stations, 603 spaces were used on an average weekday in 1978, representing a utilization rate of

45 percent. Of the 965 available parking spaces in the eight shopping center lots, 668 were used on an average weekday in 1978, representing a utilization rate of 69 percent. At the Treasure Island shopping center lots in both West Allis and Brookfield, and at the K-Mart lot in Hales Corners, use of designated parking spaces nearly equaled or exceeded the available supply. In all, slightly more

### USE OF PARKING AT FREEWAY FLYER TERMINALS

Terminal	Available Parking Spaces	Autos Parked on an Average Weekday—1978	Percent of Spaces Used
<b>Public Transit Stations</b>			
W. College Avenue (Milwaukee) . . . . .	300	203	68
W. Watertown Plank Road (Wauwatosa) . . . . .	200	105	53
North Shore (Glendale) . . . . .	190	118	62
Brown Deer (River Hills) . . . . .	250	68	27
Goerkes Corners (Brookfield) . . . . .	250	107	43
Milwaukee Area Technical College (Mequon) <sup>a</sup> . . . . .	150	2	1
<b>Subtotal</b>	<b>1,340</b>	<b>603</b>	<b>45</b>
<b>Shopping Center Lots</b>			
Northland (Milwaukee) . . . . .	100	14	14
K-Mart (Hales Corners) . . . . .	100	96	96
Treasure Island (West Allis) . . . . .	100	103	103
Treasure Island (Brookfield) . . . . .	140	160	114
Spring Mall (Greenfield) . . . . .	200	153	77
S. 27th Street Target (Milwaukee) . . . . .	100	74	74
Northridge (Milwaukee) . . . . .	100	41	41
Treasure Island (Brown Deer) . . . . .	125	27	22
<b>Subtotal</b>	<b>965</b>	<b>668</b>	<b>69</b>
<b>Total</b>	<b>2,305</b>	<b>1,271</b>	<b>55</b>

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

than one-half of all available off-street parking spaces at freeway flyer terminals were used on an average weekday in 1978.

Transit operating subsidies during 1978 totaled more than \$14.9 million, as compared to about \$10.8 million in 1977. The operating subsidies were distributed by urbanized area as shown in the accompanying table. The overall public operating subsidy per ride in the Kenosha urbanized area increased from about \$0.46 to about \$0.52. In the Racine urbanized area, the per ride operating subsidy increased from about \$0.48 to about \$0.50. In the Milwaukee urbanized area, the operating subsidy per ride increased from about \$0.20 in 1977 to about \$0.30 in 1978.

#### **Carpool Parking Facilities**

During 1978 the Commission collected data concerning the use of available parking supply at carpool parking facilities in the Region. As shown

in the accompanying table, six carpool parking lots were in operation at key freeway interchanges in the outlying areas of the Region in 1978. Of the 286 available parking spaces at the existing carpool lots, 135 spaces were used on an average weekday during 1978, representing a utilization rate of 47 percent. Progress in providing the carpool parking lots recommended in the adopted year 2000 regional transportation system 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 useful in monitoring changes in travel occurring in the Region and in calculating estimates of levels of and trends in vehicle miles of travel. During 1978 traffic volume data were collected from the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, and the City of

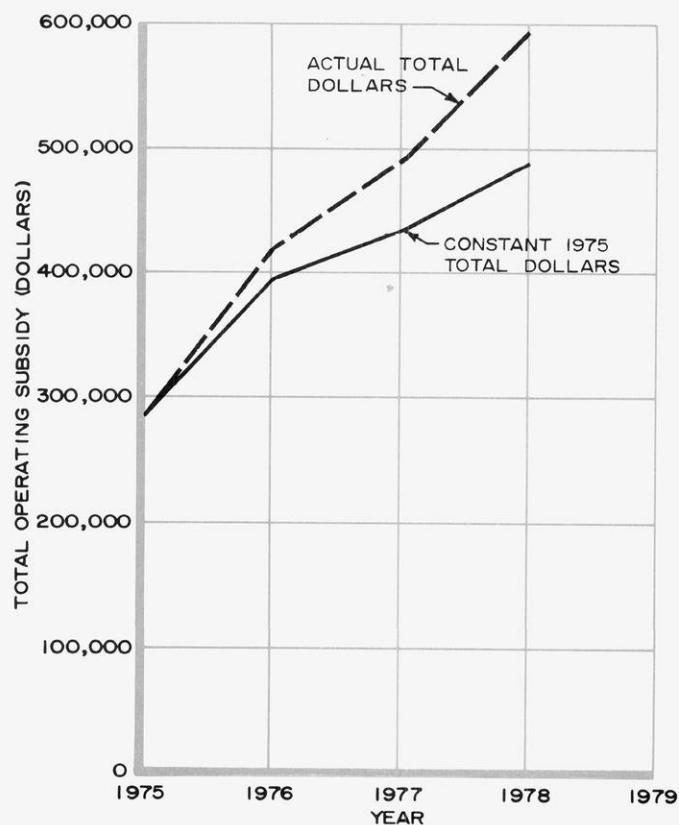
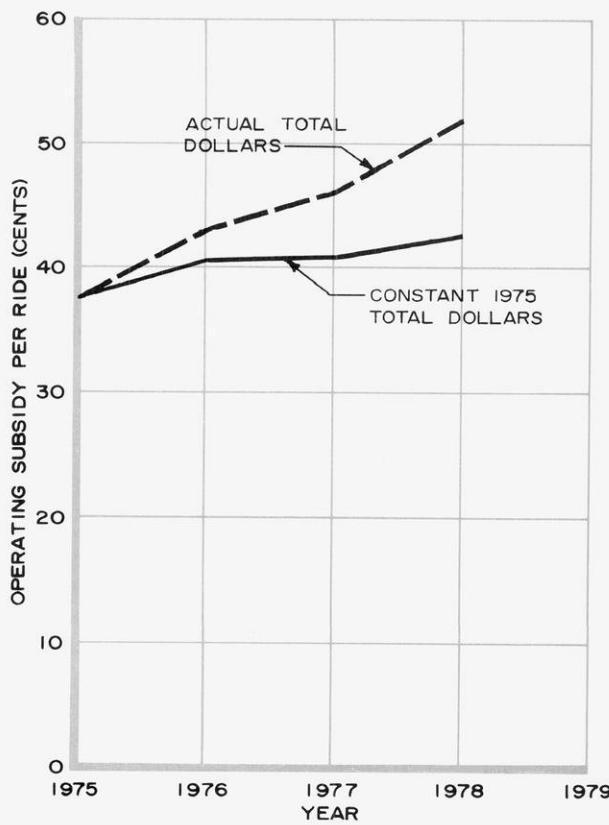
### MASS TRANSIT OPERATING SUBSIDIES

Urbanized Area	Public Operating Assistance (dollars)							
	1977				1978			
	Federal	State	Local	Total	Federal	State	Local	Total
Kenosha . . . .	302,000	92,712	97,305	492,017	341,764	144,438	112,032	598,234
Milwaukee . . . .	5,505,946	2,225,197	1,897,864	9,629,007	7,548,331	3,972,087	1,996,992	13,517,410
Racine . . . . .	359,773	149,550	210,223	719,546	387,104	258,069	129,034	774,207
Total	6,167,719	2,467,459	2,205,392	10,840,570	8,277,199	4,374,594	2,238,058	14,889,851

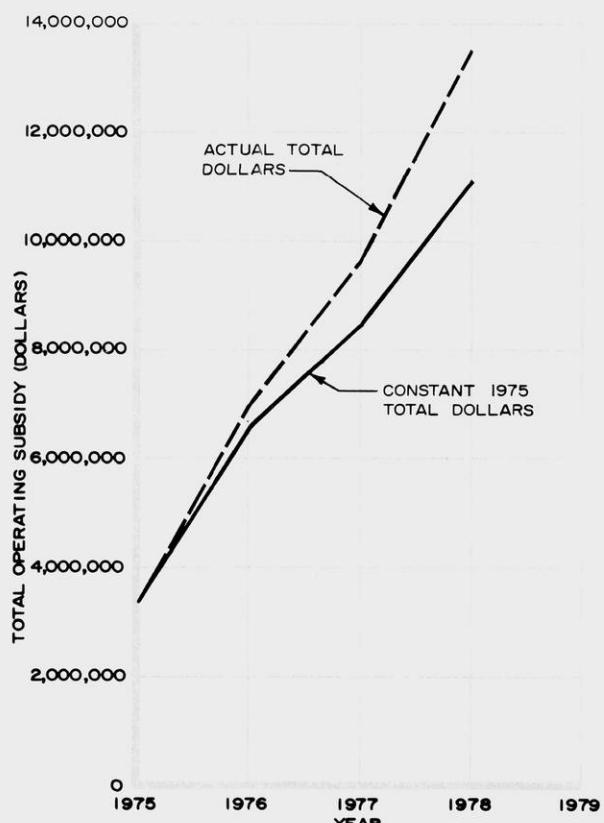
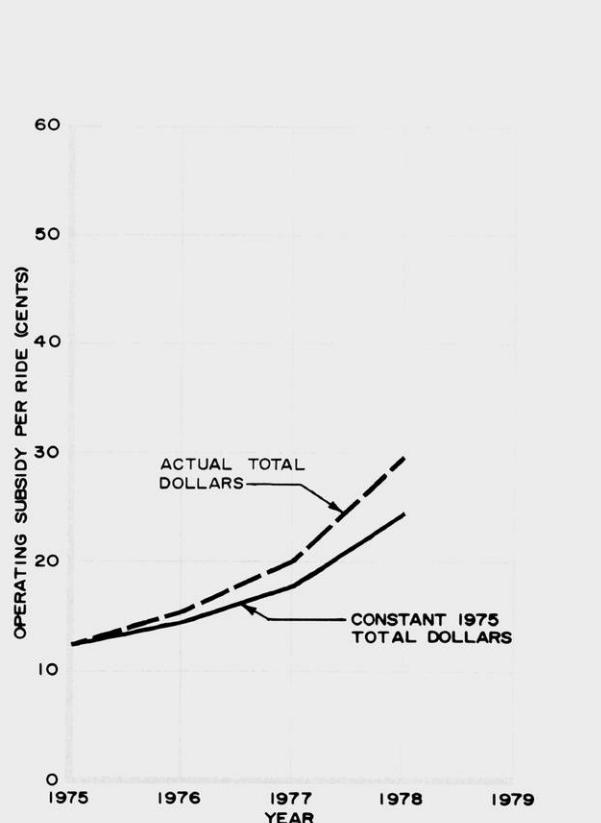
Urbanized Area	Operating Subsidy per Ride (cents)							
	1977				1978			
	Federal	State	Local	Total	Federal	State	Local	Total
Kenosha . . . .	28.4	8.7	9.1	46.2	29.7	12.5	9.7	51.9
Milwaukee . . . .	11.4	4.6	4.0	20.0	16.5	8.7	4.4	29.6
Racine . . . . .	24.1	10.0	14.1	48.2	25.1	16.7	8.4	50.2

NOTE: 1977 figures are post audit; 1978 figures are preaudit.

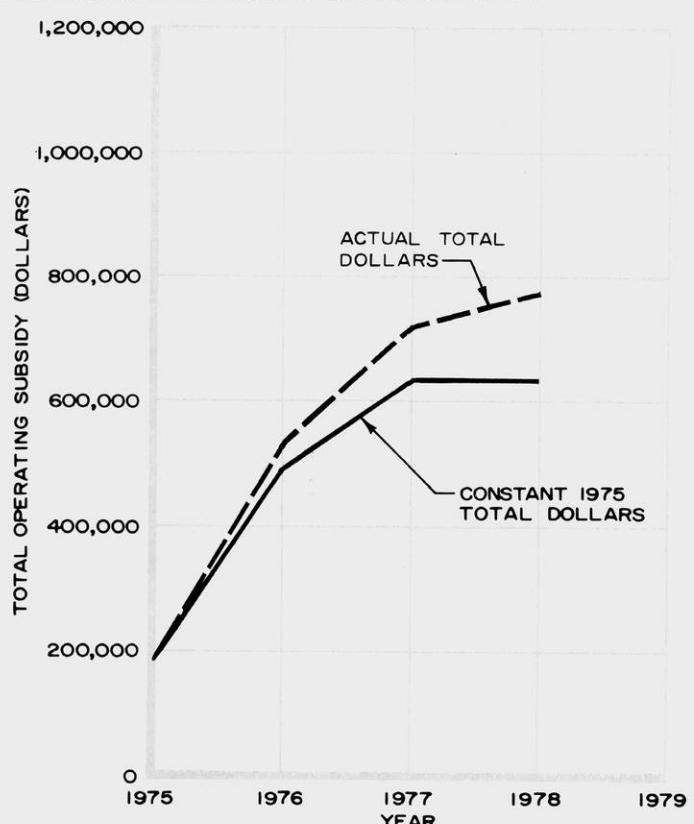
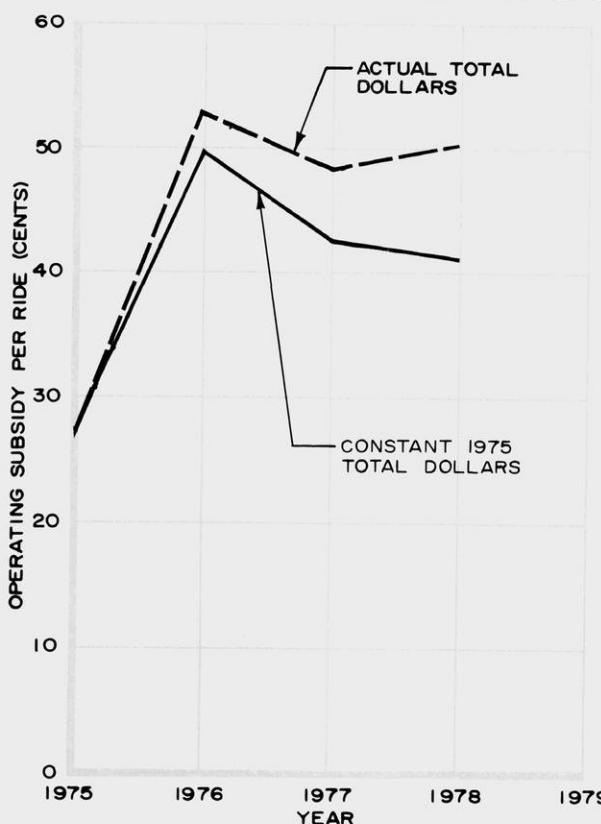
### MASS TRANSIT OPERATING SUBSIDIES IN THE KENOSHA URBANIZED AREA: 1975-1978



### MASS TRANSIT OPERATING SUBSIDIES IN THE MILWAUKEE URBANIZED AREA: 1975-1978



### MASS TRANSIT OPERATING SUBSIDIES IN THE RACINE URBANIZED AREA: 1975-1978



## USE OF PARKING SUPPLY AT CARPOOL PARKING LOTS

Location	Available Parking Spaces	Autos Parked on an Average Weekday—1978	Percent of Spaces Used
Oconomowoc STH 67 and IH 94	50	21	42
Pewaukee STH 164 and IH 94	40	20	50
Mukwonago STH 83 and STH 15	60	35	58
Big Bend CTH F and STH 15	50	28	56
New Berlin CTH Y and STH 15	36	25	69
Grafton STH 57 and IH 43	50	6	12
<b>Total</b>	<b>286</b>	<b>135</b>	<b>47</b>

Milwaukee, all of which operate regular traffic counting programs. These data will be used in 1979 to develop estimates of vehicle miles of travel and to measure the congestion occurring on the arterial street and highway system.

### LONG-RANGE PLANNING

#### New Long-Range Transportation System Plan

During 1978 the Commission completed a new long-range regional transportation system plan for the design year 2000. The plan, adopted by the Commission on June 1, 1978, and documented in SEWRPC Planning Report No. 25, Volume Two, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, provides a framework for the development of the transportation system of the Region. It extends and amends the previously adopted regional transportation system plan for the design year 1990.

The growth and change anticipated to occur within southeastern Wisconsin over the next two decades may be expected to generate demands for additional travel and for improved transportation facilities and services. Total travel demand generated within the Region is anticipated to increase by more than 28 percent, from a total of about 4.5 million person trips per average weekday in 1972 to more than 5.7 million such trips by the year 2000. Total vehicle miles of travel generated is anticipated to increase by more than 49 percent,

from about 20.1 million to 30.1 million miles per average weekday. 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 the recommended land use plan. The new transportation system plan is shown in graphic summary form on the accompanying map.

During preparation of the new plan, the Regional Planning Commission had to grapple with a serious division of public opinion as to whether or not any of the previously proposed Milwaukee County freeways as well as Commission proposed freeways should be constructed in Milwaukee County. This division of opinion reflects many considerations. Certain elected officials and interested citizens expressed concern about the escalating cost of constructing freeways, particularly in urban areas; the number of housing units and businesses that would have to be displaced by the construction of certain freeway segments; uncertainties as to future population and employment levels and motor fuel availability; and a belief that additional freeway construction would contribute to further population loss in the City of Milwaukee. Other elected officials and the business and labor communities stressed the importance of an integrated freeway system to the social and economic well-being of not only the Region as a whole but the

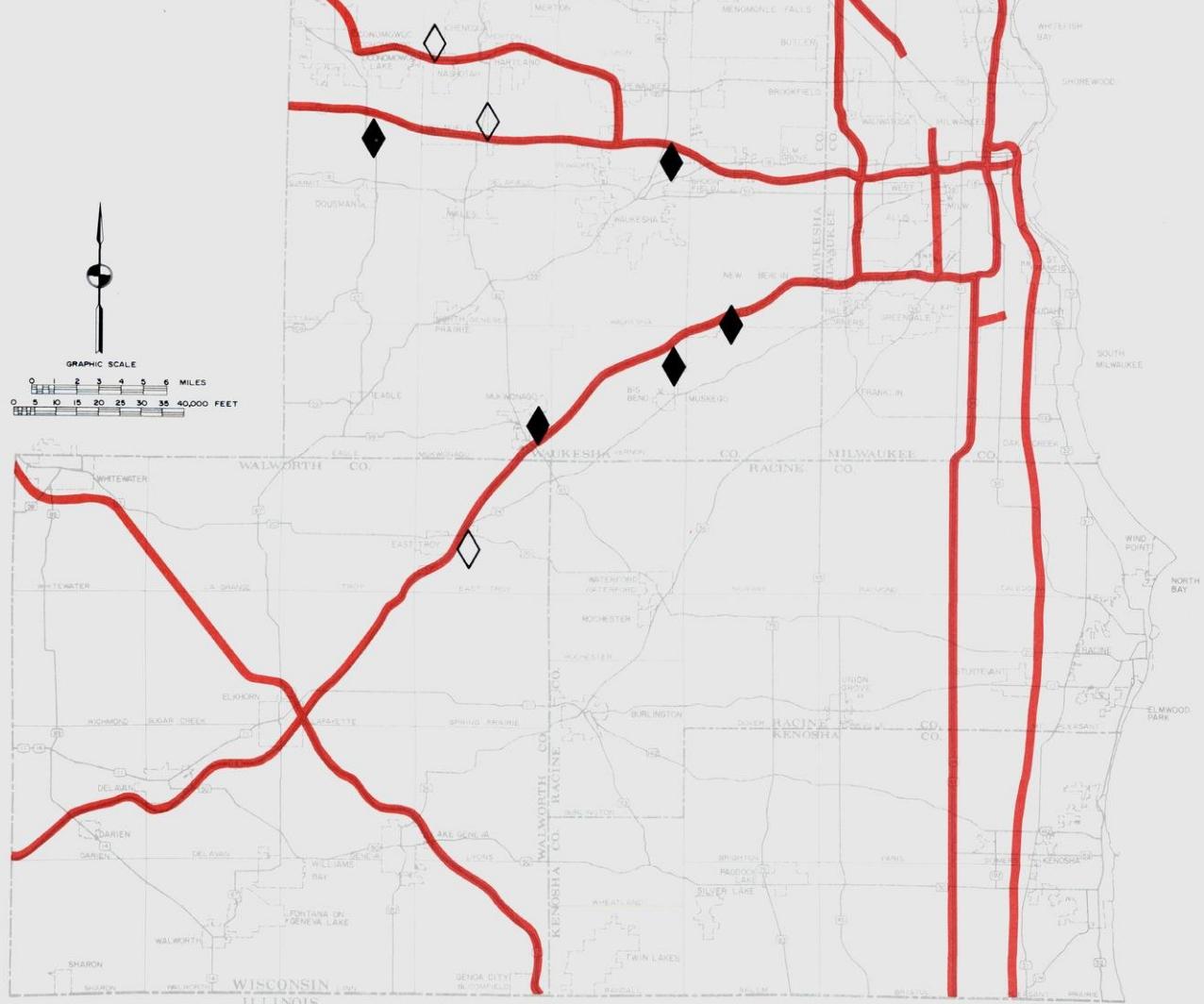
**RECOMMENDED  
CARPOOL  
PARKING LOTS**

## LEGEND

**CARPOOL PARKING LOT**



## EXISTING AND PLANNED FREEWAY SYSTEM



**EXISTING, COMMITTED, AND PLANNED FREEWAYS IN THE REGION: 2000**  
**RECOMMENDED TRANSPORTATION PLAN**

Freeway	Existing January 1, 1978	Number of Miles			Total	
		Committed	Planned			
			Lower Tier	Upper Tier		
Airport . . . . .	5.1	--	--	--	5.1	
Airport Spur. . . . .	--	1.4	--	--	1.4	
East-West. . . . .	33.5	--	--	--	33.5	
Fond du Lac. . . . .	4.5	--	--	--	4.5	
Lake. . . . .	2.6	--	3.1	33.3	39.0	
North-South. . . . .	78.0	--	--	--	78.0	
Park . . . . .	1.2	--	--	0.5	1.7	
Rock. . . . .	48.7	--	--	--	48.7	
Stadium. . . . .	2.7	--	0.8	3.3	6.8	
USH 12. . . . .	19.1	--	17.0	--	36.1	
USH 16. . . . .	8.3	7.0	5.4	--	20.7	
USH 41. . . . .	11.3	--	21.0	--	32.3	
West Bend . . . . .	1.0	--	12.7	--	13.7	
Zoo . . . . .	14.5	--	--	--	14.5	
Total	230.5	8.4	60.0	37.1	336.0	

central city as well. Since the early 1970's, this division of opinion has virtually halted freeway construction in Milwaukee County, with but two notable exceptions, the Daniel Webster Hoan Memorial Bridge over the harbor entrance and the Airport Spur Freeway. In fact, this division of opinion prolonged the process of preparing a new regional transportation plan by two years over the schedule originally anticipated.

As a direct result of changes in the forecasts of probable population and employment growth and attendant traffic demand and in legislative and fiscal constraints and changes in the degree of public support for and acceptance of freeways, the Commission decided to remove a number of previously planned freeways from the new transportation plan, including the Metropolitan Belt Freeway, the Bay Freeway from Pewaukee to Whitefish Bay, the Stadium Freeway-North, including the so-called "gap closure" from the present northerly terminus of the Stadium Freeway-North to the present southerly terminus of the Fond du Lac Freeway, the Park Freeway-West, and the Racine Loop Freeway. In addition, in an attempt to deal with the uncertainties involved the Commission determined that, with respect to the freeway system in Milwaukee County, the new transportation plan would consist of two tiers. Under this two-tier approach, the following uncompleted freeway segments in Milwaukee County would remain on the new long-range system plan: the Stadium Freeway-South from the

East-West Freeway to the Airport Freeway; the Park Freeway-East and Lake Freeway-North from the present terminus of the Park Freeway-East at N. Milwaukee Street to the East-West Freeway (the so-called downtown loop closure); and the Lake Freeway from the south end of the Daniel Webster Hoan Memorial Bridge to the Racine County line. For an indeterminate period of at least a decade, however, no further work would be undertaken to design and construct these proposed freeway segments with but two exceptions: the Stadium Freeway-South from its current terminus at W. National Avenue to a new terminus at W. Lincoln Avenue, a distance of 0.8 mile; and the Lake Freeway-South from its current terminus at Carferry Drive-South to a new terminus at E. Layton Avenue, a distance of 3.1 miles. In all of the other proposed freeway corridors in Milwaukee County and in the Lake Freeway corridor in Kenosha and Racine Counties, the lower, or short-term, tier of the plan would consist of a combination of measures intended to reduce the anticipated peak-hour travel demand while making less capital-intensive improvements in the contested freeway corridors. The proposed freeways included in the lower tier—the Stadium Freeway-South from W. National Avenue to W. Lincoln Avenue and the Lake Freeway-South from the south end of the Daniel Webster Hoan Memorial Bridge to E. Layton Avenue—represent facilities which the Commission studies indicate are needed now and whose construction is warranted to preserve and enhance the quality of life within,

## RECOMMENDED REGIONAL TRANSPORTATION PLAN FOR SOUTHEASTERN WISCONSIN: 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

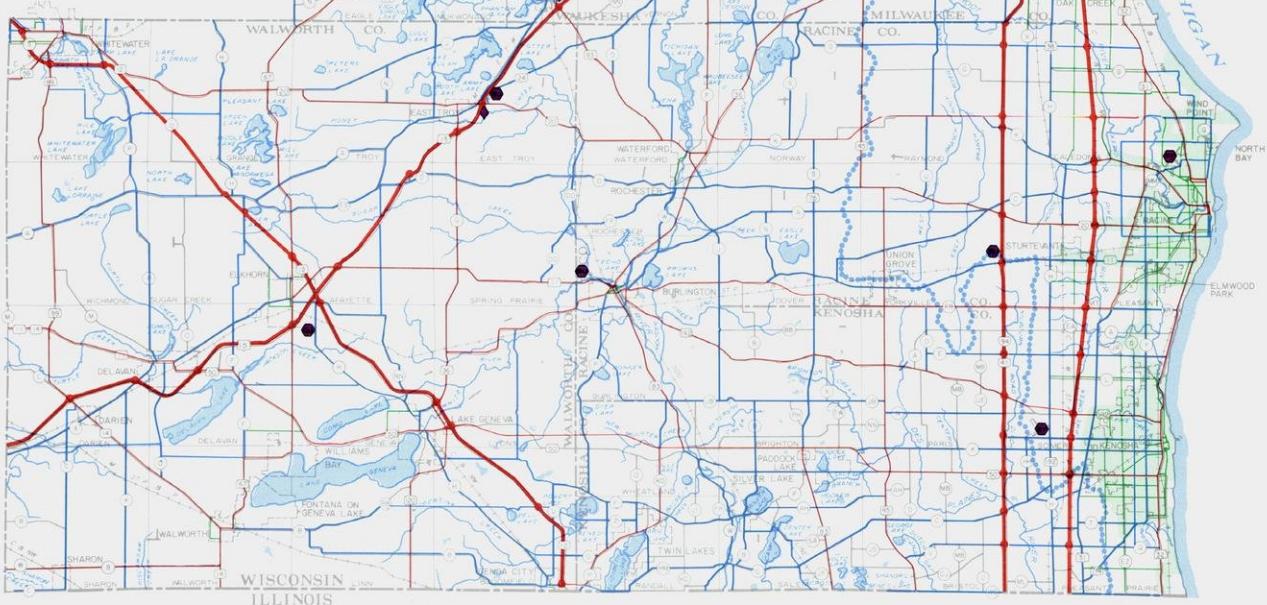
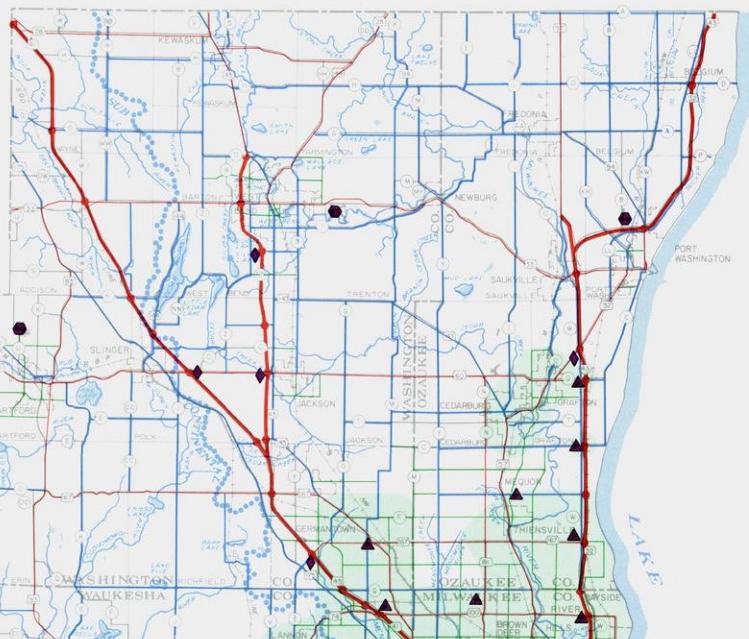
##### PARK AND POOL LOT

#### AIRPORT SYSTEM CLASSIFICATION

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



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



and the economic life of, the Region. The proposed freeways included in the upper tier represent facilities which Commission studies indicate will be needed if actual 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.

The attempts to reduce vehicular travel demand would consist of 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, and improved mass transit service. Such efforts would be designed to encourage a shift from the automobile mode to transit and other high vehicle-occupancy modes of travel. If these efforts are successful, travel demand and mode would be modified and it may not be necessary in the upper, or long-term, tier of the plan to ever construct the remaining uncompleted freeway segments. The suggested steps toward reducing peak-hour travel demand rather than increasing transportation system supply represent an extension and refinement of the Commission's historic approach to transportation planning. The low capital-intensive improvements in the contested freeway corridors would consist largely of minor freeway modifications and ramp improvements to effect better transitions between "stub ends" of the freeway system and the surface arterial system and traffic engineering improvements on existing arterial streets to better manage traffic flow. While all of the remaining contested freeways would be included in the upper, or long-term, tier of the plan, only the two above-described Milwaukee County freeway segments, together with rural freeway segments in Walworth, Washington, and Waukesha Counties, would be included in the lower, or short-term, tier of the plan.

The two-tier plan concept envisions that, if at some future date it is determined that actions to modify travel demand and mode have been effective and that the freeway "stub end" and associated surface arterial improvements are adequately accommodating travel demand, the steps can be taken to formally remove the remaining freeway proposals from the long-range plan. On the other hand, if it is the consensus at such time that travel demand-modification efforts have not worked well and that the freeway "stub end" and associated improvements do not adequately provide the needed transportation service, then work could proceed again toward the design and construction of the freeways. In the meantime, the plan recommends that all right-of-way currently cleared for the remaining freeway segments be held in a transpor-

tation land bank, with appropriate consideration given to the use of the land for park and open space purposes. The plan envisions that the lands involved would be landscaped and well-maintained and made available for play areas and other open space activities that do not involve heavy capital investment. The plan also recommends that any currently undeveloped lands needed to accommodate construction of those freeways included in the upper, or long-term, tier of the plan continue to be held in open use. This would be done through official mapping on the part of the state, county, and local units of government involved and, if such official mapping does not accomplish the objective of holding the land in open space use, through public purchase of the lands involved and the placement of such lands in the transportation land bank.

As adopted, the regional transportation plan consists of four major components: freeways, standard surface arterial streets and highways, mass transit facilities and services, and transportation system management recommendations. Each of these components is briefly discussed in the following sections.

#### Freeways

The recommended regional freeway system for the year 2000 is shown on the accompanying map. As of January 1, 1978, there were nearly 231 miles of freeways in the Region open to traffic. An additional eight miles of freeways were considered to be fully committed, including the Airport Spur Freeway opened to traffic in November 1978, the completion of the conversion of a short section of existing USH 16 to a freeway through the Pewaukee area, and the conversion of USH 16 to a freeway from about STH 83 to Oconomowoc.

The recommended transportation plan proposes a total of 60.0 miles of new freeways in the lower tier, including:

1. Construction of the West Bend Freeway (USH 45) in Washington County from STH 145 northerly to existing USH 45 north of the City of West Bend. The right-of-way for this facility has already been acquired.
2. Completion of the conversion from an expressway to a freeway of existing USH 41 in Washington County from USH 45 northerly to the Washington-Dodge County line.

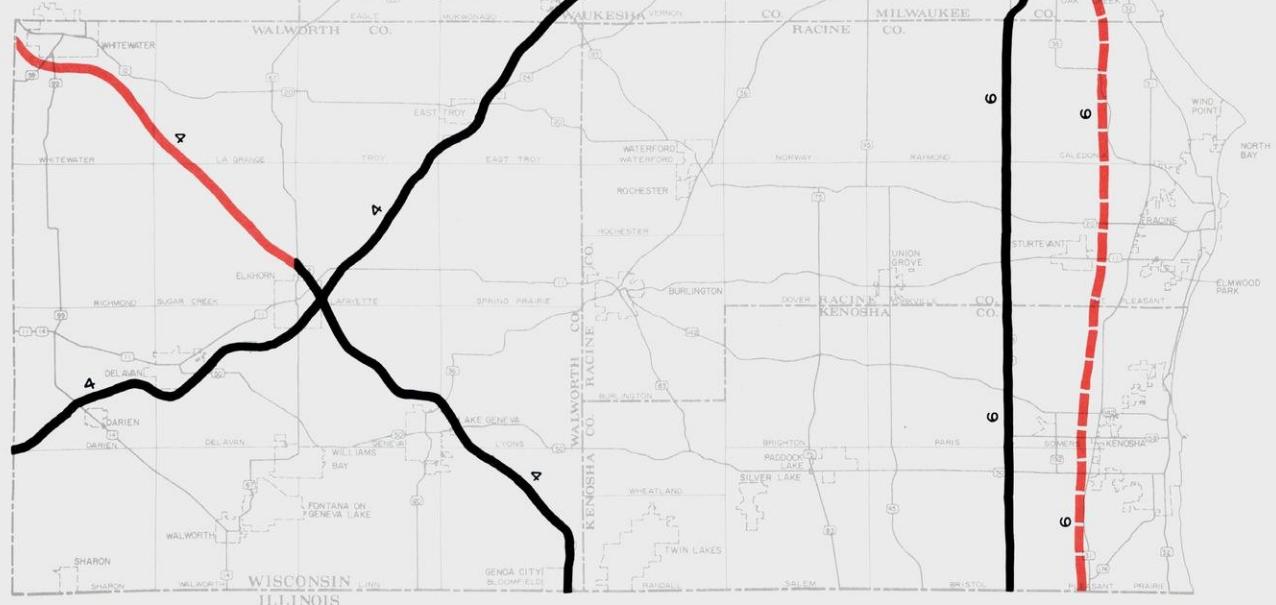
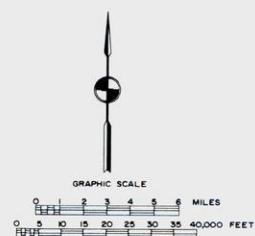
**FREEWAY SYSTEM  
IN THE REGION: 2000  
RECOMMENDED  
TRANSPORTATION  
PLAN**

**LEGEND**

**FREEWAY**

- EXISTING
- COMMITTED
- PLANNED LOWER TIER
- PLANNED UPPER TIER
- 4 DENOTES NUMBER OF LANES
- 4/6 DENOTES CHANGE IN NUMBER OF LANES

■ MILWAUKEE NORTHWEST TRAVEL CORRIDOR STUDY AREA



3. Completion of USH 12 Freeway in Walworth County from the City of Elkhorn northwesterly to the City of Whitewater.
4. Construction of the USH 16 Freeway bypass of the City of Oconomowoc in Waukesha County.
5. Extension of the existing Stadium Freeway-South in Milwaukee County from its current terminus at W. National Avenue southerly to W. Lincoln Avenue.
6. Extension of the existing Lake Freeway-South in Milwaukee County from the south end of the Hoan Memorial Bridge at E. Carferry Drive southerly to E. Layton Avenue.

In addition, 11.6 miles of existing freeways are recommended for significant improvement in the lower tier, including:

1. Construction of two additional travel lanes on IH 43 in Milwaukee and Ozaukee Counties from W. Henry Clay Street northerly to STH 167.
2. Reconstruction of the existing Stadium Freeway-South in Milwaukee County, including the provision of two additional travel lanes from the Stadium Interchange (IH 94) southerly to the present terminus at W. National Avenue.
3. Provision of two additional lanes on existing IH 94 in Waukesha County from the Goerkes Corners Interchange (USH 18) westerly to the USH 16 Interchange near Pewaukee.

It is further recommended in the lower tier of the plan that right-of-way be acquired for the proposed Lake Freeway-South in Kenosha, Milwaukee, and Racine Counties southerly from E. Layton Avenue in the City of St. Francis to the Illinois state line and that a standard surface arterial capable of later ready conversion to a freeway be constructed. In addition, it is recommended that a series of special studies be conducted to deal with traffic at the four existing—the Stadium Freeway-North at W. Lloyd Street, the Hillside Interchange on the North-South Freeway at W. Walnut Street, the Park Freeway-East at N. Milwaukee Street, and the Lake Freeway-North at E. Mason Street—and two proposed—the Stadium Freeway-South at W. Lincoln Avenue and the Lake

Freeway-South at E. Layton Avenue—freeway “stub ends” in Milwaukee, and that a special study be conducted of the transportation needs of northwestern Milwaukee County and southwestern Ozaukee County, which would have been served by the previously planned Park Freeway-West and Stadium Freeway-North.

The recommended transportation plan includes a total of 37.1 miles of proposed freeways in the upper tier, including:

1. Completion of the Park Freeway-East in Milwaukee County easterly from the current terminus at N. Milwaukee Street to the proposed Lake Freeway-North.
2. Completion of the Lake Freeway-North in Milwaukee County northerly from the existing Lake Interchange (IH 794) to the proposed Park Freeway-East.
3. Completion of the Lake Freeway-South in Kenosha, Milwaukee, and Racine Counties southerly from E. Layton Avenue in the City of St. Francis to the Illinois state line.
4. Completion of the Stadium Freeway-South southerly from W. Lincoln Avenue to the existing Airport Freeway (IH 894).

#### Standard Surface Arterial Streets and Highways

In 1972 the surface arterial street and highway system in the Region consisted of about 2,847 miles. By the year 2000, this surface arterial system would be increased under the recommended regional transportation plan by about 343 miles. This additional mileage reflects primarily the addition of existing nonarterial facilities to the arterial system. Construction of new surface arterial facilities would total only about 150 miles.

The accompanying table summarizes by county and by arterial facility type the improvements proposed under the entire arterial street and highway system in the recommended plan. The improvements may be categorized as system preservation, system improvement, and system expansion efforts. System preservation includes all arterial improvement projects required to maintain the structural adequacy and serviceability of the existing arterial system without significantly increasing the capacity of that system. This would include all projects classified as resurfacing and

**ARTERIAL STREET AND HIGHWAY SYSTEM PRESERVATION, IMPROVEMENT, AND EXPANSION BY  
ARTERIAL FACILITY TYPE BY COUNTY: 2000 RECOMMENDED TRANSPORTATION PLAN**

Arterial Facility Type	System Preservation				System Improvement			System Expansion		Total (miles)
	No Work Required (miles)	Resurface (miles)	Reconstruct for Same Capacity (miles)	Percent of Total	Reconstruct for Additional Capacity (miles)	New Construction—Replacement Facility (miles)	Percent of Total	New Construction—New Facility (miles)	Percent of Total	
Kenosha County										
Freeway.....	--	12.1	--	49.8	--	--	--	12.2	50.2	24.3
Standard Arterial..	0.9	128.2	114.2	72.6	70.0	9.7	23.8	12.3	3.7	335.3
Subtotal .....	0.9	140.3	114.2	71.0	70.0	9.7	22.2	24.5	6.8	359.6
Milwaukee County										
Freeway.....	9.8	53.0	--	73.5	5.4	--	6.3	17.6	20.6	85.4
Standard Arterial..	62.5	319.0	72.5	65.9	219.7	3.7	32.4	11.9	1.7	689.3
Subtotal .....	72.3	372.0	72.5	66.7	225.1	3.7	29.5	29.5	3.8	774.7
Ozaukee County										
Freeway.....	16.8	8.8	--	92.8	2.0	--	7.2	--	--	27.6
Standard Arterial..	4.0	145.3	89.8	84.4	38.6	2.0	14.3	3.6	1.3	283.3
Subtotal .....	20.8	154.1	89.8	85.1	40.6	2.0	13.7	3.6	1.2	310.9
Racine County										
Freeway.....	--	12.0	--	49.8	--	--	--	12.1	50.2	24.1
Standard Arterial..	5.7	119.7	182.3	73.6	81.7	5.9	20.9	22.9	5.5	418.2
Subtotal .....	5.7	131.7	182.3	72.3	81.7	5.9	19.8	35.0	7.9	442.3
Walworth County										
Freeway.....	50.3	--	--	74.9	--	--	--	16.9	25.1	67.2
Standard Arterial..	9.3	226.8	133.9	88.9	22.0	10.2	7.8	13.8	3.3	416.0
Subtotal .....	59.6	226.8	133.9	87.0	22.0	10.2	6.6	30.7	6.4	483.2
Washington County										
Freeway.....	2.2	6.4	--	20.3	21.1	--	49.8	12.7	29.9	42.4
Standard Arterial..	1.8	218.7	112.8	84.3	40.2	6.8	11.9	14.9	3.8	395.2
Subtotal .....	4.0	225.1	112.8	78.7	61.3	6.8	15.6	27.6	6.3	437.6
Waukesha County										
Freeway.....	14.1	35.6	--	76.9	8.8	--	13.6	6.1	9.5	64.6
Standard Arterial..	18.5	259.7	174.9	69.4	167.0	6.0	26.5	26.7	4.1	652.8
Subtotal .....	32.6	295.3	174.9	70.1	175.8	6.0	25.3	32.8	4.6	717.4
Southeastern Wisconsin Region										
Freeway.....	93.2	127.9	--	65.8	37.3	--	11.1	77.6	23.5	336.0
Standard Arterial..	102.7	1,417.4	880.4	75.3	639.2	44.3	21.4	106.1	3.3	3,190.1
Total .....	195.9	1,545.3	880.4	74.3	676.5	44.3	20.4	183.7	5.3	3,526.1

reconstruction for the same capacity; that is, without significant widening. System improvement includes all projects which would significantly increase the capacity of the existing system through street widening or relocation. System expansion includes all projects which would significantly increase the capacity of the existing system through construction of new facilities.

Under the recommended plan, about 2,621 miles would fall into the system preservation category, representing about 74 percent of the total arterial system. This includes 196 miles where no work is required, 1,545 miles where only resurfacing is

required, and about 880 miles where reconstruction to the same capacity is required. About 721 miles, or almost 21 percent, would fall into the system improvement category, including 677 miles that would be reconstructed for additional capacity—significant street widening—and 44 miles involving new construction of a replacement facility. The remaining 184 miles, or 5 percent, would fall into the system expansion category, where new construction of new facilities is required.

#### Mass Transit Facilities and Services

The recommended regional transportation plan includes transit system development proposals for

the three urbanized areas of the Region—Milwaukee, Kenosha, and Racine. The base transit fare is recommended to remain at the relative level of \$0.50 in the Milwaukee urbanized area and at the relative level of \$0.25 in the Kenosha and Racine urbanized areas, these fares being expressed in 1975 dollars. If general price inflation continues at current levels, it should be anticipated that increases in the base transit fare would occur in order to offset the effects of such inflation and keep the fare box revenues at the relative levels envisioned in the plan.

In the Milwaukee urbanized area, the plan envisions the provision of three levels of transit service. The primary level of service is intended to link the major activity centers—such as commercial, industrial, institutional, and recreational centers—to each other and to the various residential communities in the area. Primary service is characterized by relatively high operating speeds but relatively low accessibility. The primary service envisioned in the plan would include no true rapid transit; that is, transit service provided over exclusive fully grade-separated rights-of-way. All of the primary service in the plan would be of the modified rapid transit type; that is, provided by the operation of motor buses in mixed traffic on freeways and, in some cases, over surface arterial streets on route extensions. The primary transit service would be supported by the recommended implementation of a comprehensive freeway operational control system for the Milwaukee urbanized area, including freeway mainline and ramp traffic monitoring, ramp metering with traffic signals operating from a centralized control, traffic accident incident detection and management, and driver information systems. Buses and other high-occupancy vehicles, such as carpools and vanpools, would be accorded preferential access to the freeways via exclusive ramps or lanes. The objective of the system would be to enable the provision of a high-quality transit service on free-flowing uncongested freeways.

The primary transit network proposed in the plan is shown in red on the accompanying map. Such primary transit service would be provided over a total of 80 miles of freeway facility, with nonfreeway extensions of such service provided over 27 miles of surface arterial facilities. The vehicles providing primary service would also perform a collection/distribution service for the transit station located at the beginning and end of each primary transit route. A total

of 38 transit stations would be established along the primary transit system, of which six stations are already in existence.

The primary service system is closely related to implementation of the previously described upper tier of freeway facilities. If the upper tier of freeway facilities is not ultimately constructed, then the primary transit network would have to be redesigned, rerouting some service to existing freeways and providing the best level of service possible over surface arterial streets, particularly in the northwest travel corridor of Milwaukee County.

The secondary level of transit service envisioned in the plan would provide express bus service over arterial streets, with stops generally located at intersecting transit routes. Thus, secondary service is distinguished from primary service in that it provides a greater degree of accessibility at somewhat slower operating speeds. Under the recommended plan, secondary service would be provided over 14 individual transit routes with exclusive transit lanes—traffic lanes where only buses would be allowed during specified hours of the day—on six arterial streets. The exclusive transit lanes would total nearly 10 miles. Shared secondary transit service would be provided over a total of about 146 miles of arterial facilities.

The tertiary level of mass transit service envisioned in the plan consists of local transit service provided primarily over arterial and collector streets, with frequent stops for passenger boarding and alighting. Under the recommended plan, extensive additions to the tertiary or local transit service routes would be provided. The plan envisions the ultimate extension of tertiary transit service to all of the Milwaukee urbanized area, including low-density urban residential areas in southern Ozaukee and Washington Counties and eastern Waukesha County. In these areas the tertiary level of service would be either the traditional fixed-route service or some form of nontraditional transit service, such as route deviation, subscription, dial-a-ride, or shared-ride taxi service.

In the Kenosha and Racine urbanized areas, only the tertiary or local level of mass transit service is envisioned in the plan. Significant improvement in mass transit service in these two urbanized areas has taken place in recent years in accordance with the transit development programs previously prepared by the Commission in cooperation with the

**SELECTED CHARACTERISTICS OF PRIMARY TRANSIT STATIONS IN THE  
MILWAUKEE URBANIZED AREA: 2000 RECOMMENDED TRANSPORTATION PLAN**

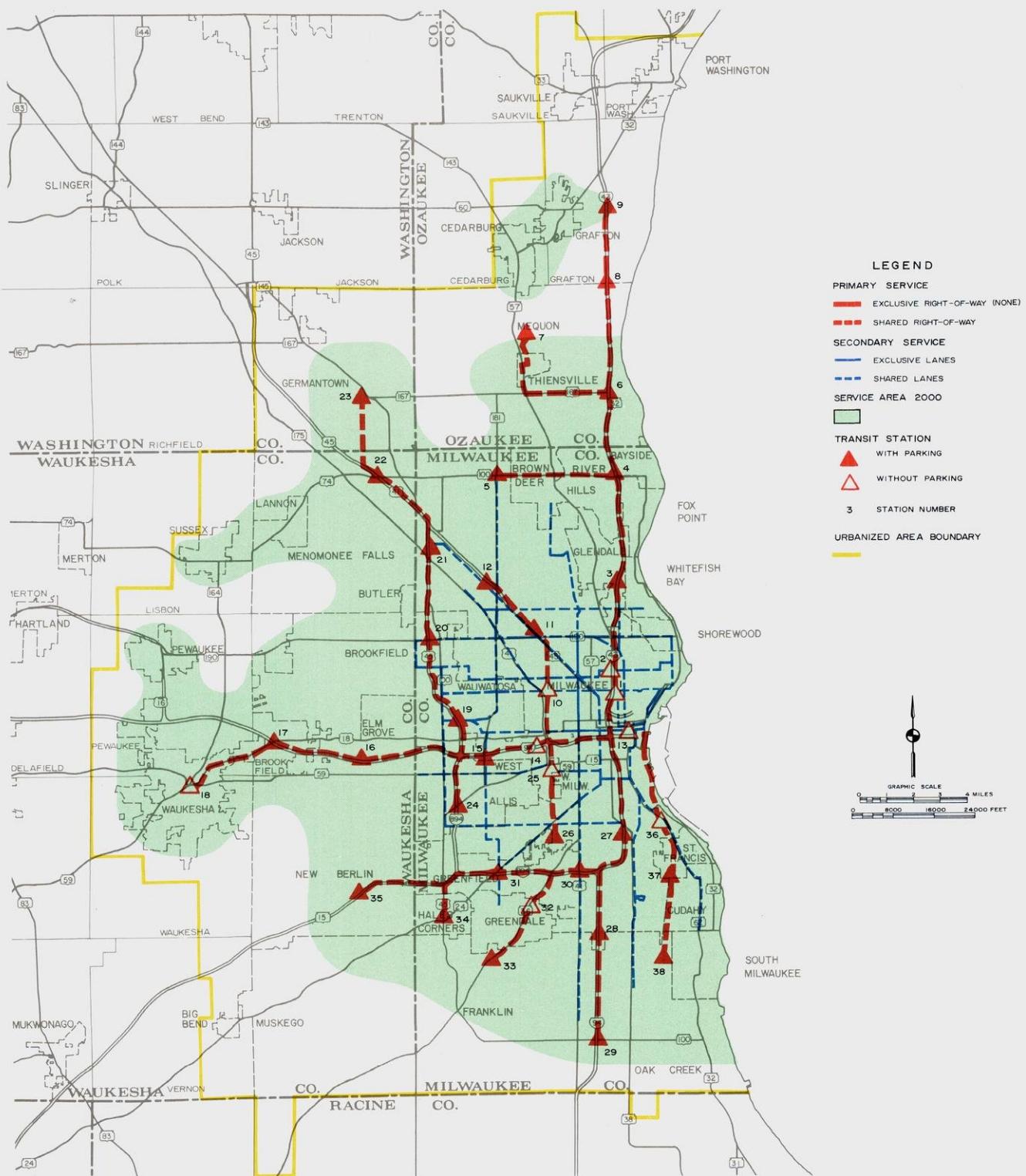
Transit Station Identification					Type of Service				Passenger Facilities		
Primary Service Corridor	Number	Name	Civil Division	Status	Primary	Secondary	Tertiary	Collection-Distribution	Shelter	Number of Parking Spaces	Buses per Peak Hour in Peak Direction
East Side	1	W. North Avenue	City of Milwaukee	Proposed	X	X	X		X	--	24
	2	W. Locust Street	City of Milwaukee	Proposed	X	X	X		X	--	14
	3	Northshore	City of Glendale	Existing	X	X	X	X	X	200	6
	4	W. Brown Deer Road	Village of River Hills	Existing	X	X	X	X	X	325	8
	5	Northridge	City of Milwaukee	Proposed	X	X	X	X	X	150	4
	6	STH 167—Mequon	City of Mequon	Proposed	X	X	X	X	X	300	6
	7	MATC—Mequon	City of Mequon	Existing	X	X	X	X	X	100	6
	8	CTH C—Grafton	Town of Grafton	Proposed	X	X	X	X	X	100	4
	9	CTH Q—Grafton	Town of Grafton	Proposed	X		X	X	X	325	4
Northwest	10	N. Sherman Boulevard	City of Milwaukee	Proposed	X	X	X		X	--	9
	11	Capitol Court	City of Milwaukee	Proposed	X	X	X		X	200	9
	12	W. Silver Spring Drive	City of Milwaukee	Proposed	X	X	X		X	150	5
East-West	13	Downtown Milwaukee	City of Milwaukee	Proposed	X	X	X	X	X	--	159
	14	VA Center	City of Milwaukee	Proposed	X				X	--	7
	15	State Fair Park	City of Milwaukee	Proposed	X	X	X		X	300	14
	16	Brookfield Square	City of Brookfield	Proposed	X	X	X	X	X	100	5
	17	Goerke's Corners	Town of Brookfield	Existing	X	X	X	X	X	300	10
	18	Waukesha	City of Waukesha	Proposed	X		X	X	X	--	10
Zoo Freeway-North	19	Watertown Plank Road	City of Wauwatosa	Existing	X	X	X	X	X	250	12
	20	W. Capitol Drive	City of Wauwatosa	Proposed	X	X	X	X	X	300	8
	21	W. Good Hope Road	City of Milwaukee	Proposed	X		X	X	X	300	3
	22	STH 74—Menomonee Falls	Village of Menomonee Falls	Proposed	X		X	X	X	300	4
	23	Mequon Road—Germantown	Town of Germantown	Proposed	X		X		X	150	2
Zoo Freeway-South	24	W. National Avenue	City of West Allis	Proposed	X		X	X	X	350	14
	25	W. National Avenue	Village of West Milwaukee	Proposed	X	X	X		X	--	6
	26	W. Morgan Avenue	City of Milwaukee	Proposed	X		X	X	X	100	6
IH 94-South	27	W. Morgan Avenue	City of Milwaukee	Proposed	X	X	X	X	X	200	14
	28	W. College Avenue	City of Milwaukee	Existing	X	X	X	X	X	375	9
	29	W. Ryan Road	City of Oak Creek	Proposed	X		X	X	X	375	3
Airport Freeway	30	S. 27th Street	City of Milwaukee	Proposed	X	X	X	X	X	375	8
	31	S. 76th Street	City of Greenfield	Proposed	X	X	X	X	X	300	11
	32	W. Grange Avenue	Village of Greendale	Proposed	X		X		X	--	3
	33	W. Rawson Avenue	City of Franklin	Proposed	X		X		X	200	3
	34	Hales Corners	Village of Hales Corners	Proposed	X		X		X	325	6
	35	Moorland Road—New Berlin	City of New Berlin	Proposed	X		X		X	100	2
Lake Freeway	36	E. Oklahoma Avenue	City of Milwaukee	Proposed	X	X	X		X	--	17
	37	E. Layton Avenue	City of Cudahy	Proposed	X	X	X	X	X	200	8
	38	E. Rawson Avenue	City of Oak Creek	Proposed	X		X	X	X	425	9

Cities of Kenosha and Racine. Consequently, the recommended regional transportation plan for 2000 envisions only relatively minor route extensions and changes to reflect transit needs in the anticipated expansion of these urbanized areas. The accompanying map identifies the proposed transit service areas and suggested route systems for the year 2000 in the Kenosha and Racine areas.

**Transportation System Management Recommendations**

In addition to the arterial street and highway and transit facility and service recommendations described above, the recommended regional transportation plan for 2000 includes four major transportation system management recommenda-

## TRANSIT SYSTEM IN THE MILWAUKEE URBANIZED AREA: 2000 RECOMMENDED TRANSPORTATION PLAN



**EXCLUSIVE TRANSIT LANES ON STANDARD ARTERIAL STREETS IN THE  
MILWAUKEE URBANIZED AREA: 2000 RECOMMENDED TRANSPORTATION PLAN**

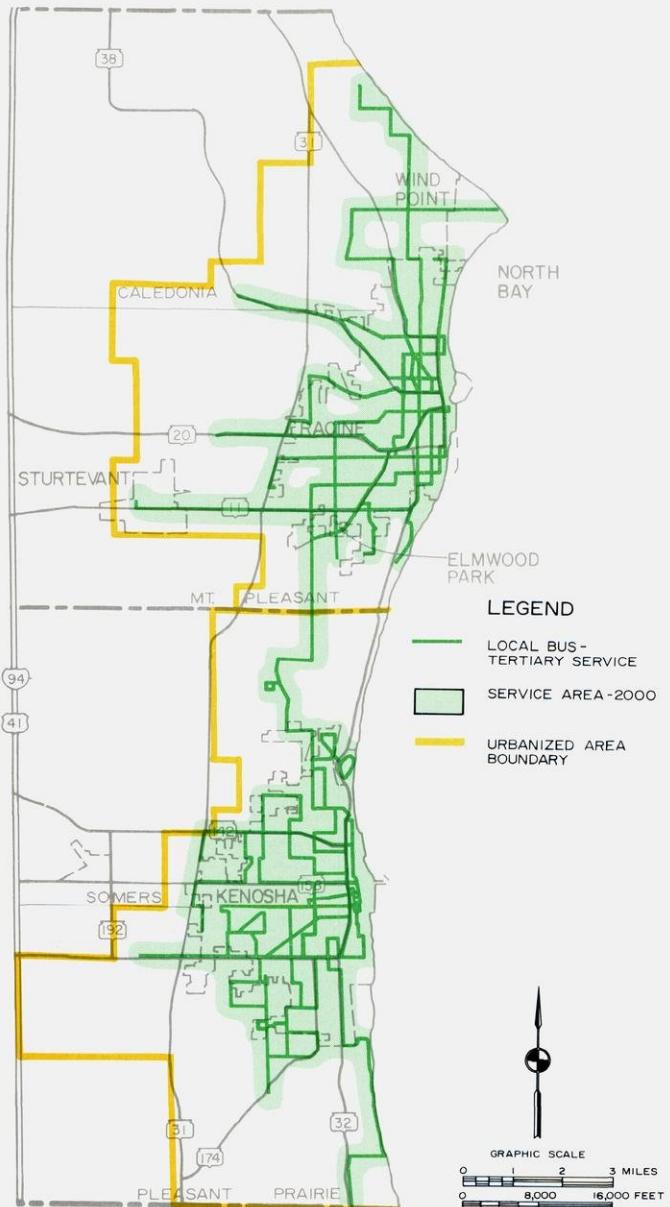
Arterial Street			Exclusive Transit Lane				Remarks	
Name	Limits		Type	Direction	Duration	Number of Buses in Peak Hour		
	From	To						
N. 27th Street	W. St. Paul Avenue	W. Capitol Drive	Curb Lane	Southbound	6:00 a.m.-6:00 p.m.	19	Requires removal of curb parking. Requires removal of curb parking.	
			Curb Lane	Northbound	6:00 a.m.-6:00 p.m.	26		
N. Farwell Avenue	E. Ogden Avenue	E. North Avenue	Curb Lane	Southbound	6:00 a.m.-9:00 a.m.	37	Requires removal of curb parking.	
				Southbound	3:00 p.m.-6:00 p.m.	44		
N. Prospect Avenue	E. Kilbourn Avenue	E. North Avenue	Curb Lane	Northbound	6:00 a.m.-9:00 a.m.	38	Requires removal of curb parking.	
				Northbound	3:00 p.m.-6:00 p.m.	44		
Kenwood Boulevard  E. and W. Wells Street	N. Downer Avenue	N. Oakland Avenue	Curb Lane	Westbound	6:00 a.m.-6:00 p.m.	119	Requires removal of curb parking.  Requires removal of curb parking, median construction, and replacement of Wells Street Bridge over Milwaukee River.	
	N. Prospect Avenue	N. 10th Street	Contra-flow Curb Lane	Westbound	All day	68		
W. Wisconsin Avenue	N. 10th Street	N. 35th Street	Curb Lane	Eastbound	6:00 a.m.-9:00 a.m.	75	Requires removal of curb parking.	
				Westbound	3:00 p.m.-6:00 p.m.	98		

tions: a freeway operational control system, curb parking facilities, parking rate structure changes, and carpool facilities and promotion. These management recommendations are designed to accomplish four objectives: to ensure that maximum use is made of existing transportation facilities before commitments are made to new capital investment; to encourage use of high-occupancy vehicles, including buses, vans, and carpools; to reduce vehicle use in congested areas; and to effect motor fuel savings. Together these actions seek to modify travel demand through reductions in vehicular traffic during the peak period, thereby better adjusting such demand to available transportation system capacity. The Commission has also prepared a short-range transportation systems management plan—a plan fully coordinated with the long-range facilities plan herein described. Additional short-range transportation system management recommendations are accordingly being considered by the Commission. The four system management recommendations briefly described below were derived from the analyses conducted as part of the long-range planning process. The four management recommendations flowing from the long-range plan are as follows:

*Freeway Operational Control System*

In the Milwaukee urbanized area, the plan recommends that a freeway operational control system be expanded to constrain access to the freeway system during peak hours, and thereby to ensure high rates of traffic flow at reasonable operating speeds. Such a system would consist of interconnected, demand responsive ramp meters; priority access for high-occupancy vehicles; improved driver information; and accident incident management procedures. Currently, during certain periods of the day the traffic flow on the freeway system "breaks down" and stop and go conditions are experienced. When that occurs both traffic volumes and average vehicle speeds are substantially reduced. There are several purposes for recommending an extensive freeway operational control system. One is to achieve better driving conditions for the freeway user during peak periods of travel. A second is to ensure that high-occupancy vehicles—buses, vans, and carpools—can travel at reasonable speeds on the freeway system, thus averting the need to provide additional capital-intensive facilities, such as exclusive transit rights-of-way. It is envisioned in the plan that such

**TRANSIT SYSTEM IN THE KENOSHA  
AND RACINE URBANIZED AREAS: 2000  
RECOMMENDED TRANSPORTATION PLAN**



high-occupancy vehicles would have preferential access to the freeway system over low-occupancy automobiles via specifically designed bypasses at freeway entrance ramps. The third purpose is to seek to better utilize the total capacity of the arterial street and highway system. Com-

mission simulation modeling of this system indicates that there is currently unused surface arterial street capacity that can be more effectively utilized through the redirection of some traffic now using freeways.

It is envisioned that the control system would continuously measure traffic volumes on the freeway system through an interconnected series of traffic sensing devices. As traffic volumes approach the level beyond which the operation of express buses on freeways would deteriorate, fewer low-occupancy automobiles and trucks would be permitted on the system. At times some entrance ramps could be closed entirely. To ensure the proper functioning of this system, ramp meters would be provided throughout the metropolitan area. If successful, this management recommendation would prevent the need to give any further consideration to the construction of capital-intensive transitways in the major travel corridors in the Milwaukee area. One such facility—in the east-west travel corridor of Milwaukee County—was included in the 1990 plan but has not been constructed due to opposition within the Milwaukee County Board.

*Curb Parking Restrictions*

The plan recommends that, as necessary, curb parking on arterial streets be prohibited during peak hours of travel in order to ensure that all available arterial street capacity is effectively used before commitments are made for additional capital investment in arterial street facilities. The plan identifies those urban arterial streets where it is envisioned that peak-hour curb parking prohibitions will be necessary. In some cases, such restrictions have already been placed in effect. In other cases, it will be necessary for local municipalities to impose such prohibitions as traffic volumes increase over the years. It will be particularly important to coordinate this management recommendation with the freeway control system management recommendation, since it is anticipated that some traffic may be directed from the freeways to the surface arterial street system by the waiting lines at the freeway on-ramps, and this traffic will in some cases require the institution of curb parking restrictions during the peak hour on affected arterial streets where such parking is now permitted. Additionally, such action would enhance the free movement of local transit buses on those arterials.

## *Carpool Facilities and Promotion*

The plan recommends that a continuing carpooling promotional program be established in the Milwaukee area, and that off-street parking facilities be provided in fringe areas to aid in the promotion of carpooling. There were six carpool parking lots in operation at key freeway interchanges in the outlying areas of the Region in 1978. These are located at the following intersections: IH 43 and STH 57 in Ozaukee County; IH 94 and STH 164 in Waukesha County; IH 94 and STH 67 in Waukesha County; STH 15 and CTH Y in Waukesha County; and STH 15 and CTH F and STH 15 and STH 83 in Waukesha County. The plan recommends that carpool lots continue to be established throughout the metropolitan area as demand may warrant. These include proposed lots at the following interchanges: USH 41-45 and Lannon Road, USH 41 and STH 60, USH 45 and STH 60, and USH 45 and Paradise Road, all in Washington County; USH 16 and CTH C and IH 94 and STH 83 in Waukesha County; and STH 15 and STH 20 in Walworth County. The enumeration of the foregoing additional interchanges as possible locations for carpooling parking lots is not meant to preclude the establishment of such lots at other locations. In this respect, the plan envisions that these lots would be developed wherever needed, preferably on available excess highway right-of-way.

## *Parking Rate Structure*

In addition to the foregoing three areawide transportation system management recommendations, the plan seeks to impose disincentives to the use of the automobile, particularly for work trips made to the Milwaukee central business district, while at the same time providing an incentive for transit use. Transit trips to the downtown Milwaukee area have declined significantly from about 50,500 per day in 1963 to about 29,000 per day in 1972, the base year of the plan. The plan seeks to reverse this decline and encourage increased transit use to this area. The specific automobile disincentive recommended in the plan is the institution of a parking fee structure that would encourage short-term parking for trips made to the downtown Milwaukee for shopping, recreation, and personal business purposes, particularly during the off-peak period, and discourage long-term parking and increase mass transit use for work trip purposes. The plan recommends that the City of Milwaukee conduct a special implementation study to determine the precise mechanism to impose the necessary parking fee structure.

## *Plan Performance and Costs*

Implementation of the recommended transportation plan will provide the Region with an integrated, balanced transportation system providing the appropriate types of transportation service needed by all of the various subareas of the Region at an adequate level of service. It will achieve economy and efficiency in the provision of transportation services while supporting essential economic and social activities. Implementation of the plan will achieve a balance not only between travel demand and the spatial configuration and capacity of highway facilities, but between the utilization of the automobile and mass transit vehicles as modes of transportation, and will result in the alleviation of traffic congestion, in the reduction of travel time between component parts of the Region, in the reduction of accident exposure, and in an increased measure of travel safety.

Selected characteristics of the recommended new year 2000 transportation system plan are set forth in the accompanying table. If the recommended new regional transportation system plan for the year 2000 is implemented, automobile availability may be expected to increase from about 705,000 in 1972, the base year of the plan, to about 1,003,000 in the design year of the plan, an increase of about 42 percent. This represents nearly 165,000 fewer vehicles than forecast under a continuation of existing trends, and indicates the anticipated impact of improved levels of mass transit service and of a more centralized and higher density land use development pattern on automobile ownership patterns. The number of internal person trips generated within the Region on an average weekday may be expected to increase from 4.46 million in 1972 to about 5.75 million in the year 2000, a 29 percent increase. The number of mass transit trips made within the Region on an average weekday may be expected to increase from about 184,000 in 1972, or about 4 percent of the total person trips generated within the Region on an average weekday, to about 335,000 in the design year, or about 6 percent of the total person trips generated, an almost 82 percent increase in transit travel and a reversal of long-standing historic trends within the Region.

Vehicle miles of travel on an average weekday within the Region may be expected to increase from about 20.1 million in 1972 to about 30.1 million in the design year, a 50 percent increase. Of this total, about 42 percent can be expected to be made on freeway facilities, assuming that the upper

**RECOMMENDED REGIONAL TRANSPORTATION PLAN SELECTED SYSTEM  
CHARACTERISTICS FOR THE SOUTHEASTERN WISCONSIN REGION**

Plan Element	1972	Change 1972-2000		2000
		Number	Percent	
<b>Arterial Street and Highway System</b>				
Freeway (miles) . . . . .	163	173	106.1	336
Standard Arterial (miles) . . . . .	2,847	343	12.0	3,190
Total (miles) . . . . .	3,010	516	17.1	3,526
<b>Mass Transit System-Milwaukee</b>				
Round-Trip Route Miles				
Primary . . . . .	150	902	601.3	1,052
Secondary . . . . .	56	305	544.6	361
Tertiary . . . . .	855	805	94.2	1,660
Total . . . . .	1,061	2,012	189.6	3,073
Special Facilities				
Transitway (miles) . . . . .	--	--	--	--
Exclusive Lanes (miles) . . . . .	--	9.5	--	9.5
Stations . . . . .	--	38	--	38
Number of Buses Required . . . . .	442	585	132.4	1,027
Basic Fare . . . . .	\$0.40	\$0.10	25.0	\$0.50
Average Total CBD Work Trip Parking Fee . . . . .	\$0.38	\$0.03	7.9	\$0.41
<b>Mass Transit System-Kenosha</b>				
Round-Trip Route Miles . . . . .	59	83	149.2	147
Number of Buses Required . . . . .	12	21	175.0	33
Basic Fare . . . . .	\$0.25	--	--	\$0.25
<b>Mass Transit System-Racine</b>				
Round-Trip Route Miles . . . . .	81	72	88.9	153
Number of Buses Required . . . . .	10	28	280.0	38
Basic Fare . . . . .	\$0.40	-\$0.15	-37.5	\$0.25
<b>Travel Demand Characteristics</b>				
Automobile Availability (thousands) . . . . .	705	298	42.3	1,003
Average Weekday Internal Person Trips (millions) . . . . .	4.46	1.29	28.9	5.75
Average Weekday Transit Trips . . . . .	184,200	150,800	81.9	335,000
Proportion of Trips Made by Transit (percent) . . . . .	4.1	1.7	--	5.8
Estimated Yearly Transit Revenue Passengers (millions) . . . . .	53.7	43.2	80.4	96.9
Historical Equivalent of Proposed Transit Utilization (year) . . . . .	--	--	--	1963
<b>Vehicle Miles of Travel</b>				
Total (millions) . . . . .	20.12	10.01	49.7	30.13
On Freeway (millions) . . . . .	6.21	6.40	102.9	12.61
Percent of Total on Freeway . . . . .	31	63.9	--	41.9
<b>Arterial Street and Highway Congestion</b>				
Over Capacity (miles) . . . . .	166	- 127	- 77	39
Over Capacity (percent of total system) . . . . .	6	- 5	--	1
At Capacity (miles) . . . . .	152	192	126	344
At Capacity (percent of total system) . . . . .	5	5	--	10
<b>Proportion of Total Person Travel on Safest Facilities</b>				
Freeways (percent) . . . . .	30	10	33.3	40
Mass Transit (percent) . . . . .	4	--	--	4
<b>Motor Fuel Consumption (millions of gallons)</b>				
Average Annual, Assuming Automobile Fleet Efficiency of 19 MPG in Year 2000 . . . . .	576	158	27.4	734
Average Annual, Assuming Automobile Fleet Efficiency of 27 MPG in Year 2000 . . . . .	576	- 50	- 8.7	526
<b>Noise</b>				
Miles of Transportation Facilities Exceeding 70 dba. . . . .	712	557	78.2	1,269
<b>Dislocation</b>				
Number of Residential Units . . . . .	--	777	--	777
Number of Nonresidential Structures . . . . .	--	87	--	87

tier of the plan is fully implemented, as compared to 31 percent in 1972. Arterial street and highway congestion, represented by the number of miles of facilities operating over capacity, may be expected to decrease from about 166 miles, or about 6 percent of the system, in 1972 to about 39 miles, or about 1 percent of the system, in the design year. Concomitantly, the number of miles of facilities operating at design capacity could be expected to increase from about 152 miles, or about 5 percent of the total system, in 1972 to about 344 miles, or about 10 percent of the total system, in the design year. Annual motor fuel consumption in the design year, assuming that federally mandated automobile fleet efficiency requirements are fully carried out, is expected to approximate 526 million gallons, or about 50 million gallons fewer than that consumed in the Region in 1972, a 9 percent reduction.

If the upper tier of the plan is fully carried out, it is estimated that 777 residential units would have to be relocated, together with 87 nonresidential structures. A total of 710 of these residential units and 64 of these nonresidential units lie directly in the path of planned freeways. If the upper tier of the plan is not implemented in Milwaukee County, total dislocation would be reduced to 686 residential units and 73 nonresidential units.

The total costs, in constant 1975 dollars, of fully implementing the highway portion of the recommended new regional transportation system plan would approximate \$136.1 million annually over the approximately 25-year plan implementation period, of which \$92.7 million would be required for construction and \$43.4 million for operation and maintenance. The average annual expenditure for arterial street and highway construction would approximate \$73.8 million, or about 80 percent of the total plan construction costs. Of the arterial system construction costs, about \$24.3 million per year, or 33 percent, would be required to preserve and maintain the existing highway system; an additional \$29.1 million, or 39 percent, would be required for projects which would improve the highway system by providing additional capacity through street widening and relocation; and \$20.4 million per year, or 28 percent, would be required for system expansion projects, including the construction of new freeways and surface arterials.

The total annual cost of fully implementing the transit portion of the recommended new regional transportation system plan is estimated at

\$50.9 million, of which \$7 million would be required for capital costs and \$43.9 million for operating costs. Of the total capital costs, about \$3.9 million, or 56 percent, would be required to preserve and maintain the existing transit system; an additional \$0.5 million, or 7 percent, would be required for projects to improve transit service where such service is already provided; and the remaining \$2.6 million, or 37 percent, would be required for the expansion of transit service, including the provision of new transit stations and the extension of transit service into areas currently not served.

Total annual costs for the complete implementation of all elements of the proposed new plan would thus approximate \$187 million. Public financial studies conducted by the Commission indicate that approximately \$218 million, including transit fare box revenues estimated to average \$26 million per year, should become available annually for highway and transit purposes over the planning period, indicating the plan to be within the financial reach of the Region provided that transportation receipts increase at the historic rates evidenced from 1960 to 1972. An alternate revenue forecast that assumes that the transit fares and tax per gallon on gasoline will not keep pace with inflation and that takes into account the proposed increases in fuel efficiencies for automobiles indicates that there would be an annual revenue shortfall of \$1.8 million.

Thus, to fully implement the recommended plan, it would be essential to ensure that an inflation-resistant revenue structure be created for both transit and highway improvements.

#### Plan Adoption

The new long-range regional transportation system plan was formally certified to the counties, local units of government, and state and federal agencies concerned with transportation system development in June 1978. By year's end, the plan had been adopted by the Kenosha and Waukesha County Boards of Supervisors, the Kenosha County Park Commission, and the City of Oconomowoc Plan Commission. In addition, the new plan has 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 during at least the next decade.

### **Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study**

As noted above, the Commission deleted the Park Freeway-West and the Stadium Freeway-North "gap closure" from the adopted regional transportation system plan. As a part of this action, the Commission resolved to undertake a study to be "conducted in cooperation with the Wisconsin Department of Transportation (WisDOT), Ozaukee County, Milwaukee County, the City of Milwaukee, and concerned citizens of the best way to meet the existing and probable future transportation needs of the area proposed to have been served by these two freeways in the absence of those freeways." As a first step in the study, the Commission, during 1978, prepared a prospectus for the study. The purpose of the prospectus is to establish the need for the study; specify the desirable scope and content of the study; and prepare a recommended time schedule, cost estimate, and budget for the study. To assist it in the preparation of the prospectus, the Commission appointed a 16-member Steering Committee composed of elected and technical officials from concerned agencies and the area to be studied.

The prospectus determined that five factors contribute to the need for the proposed study:

1. The need to consider the transportation problems of the study area as a result of the removal of the two freeways from the new year 2000 regional transportation system plan;
2. The inadequacies of the existing transportation system in the study area;
3. The anticipated growth and change within the study area and the impacts of that growth and change on the area's transportation system, and the need to serve and direct this growth and change through adequate transportation facilities and services in a manner consistent with the public interest and the attainment of a high quality of life;
4. The need to consider permanent facility alternatives to obtain more effective

utilization of the freeway "stub ends" at the Hillside Interchange and the Stadium Freeway-North; and

5. The need to consider the potential transportation facility and service impacts and requirements of alternative uses of the cleared Park Freeway-West corridor.

The prospectus proposed a study built on a number of key assumptions:

1. That the study will be performed generally within the context of the recently adopted design year 2000 regional land use and transportation plans, although the land use, population, and economic activity forecasts underlying those plans will be carefully reviewed with concerned local governments, and the land use and transportation plans may then be refined and detailed under the study.
2. That the study has two distinct but related purposes: 1) to identify the effect on the northwestern quadrant of the Milwaukee urbanized area of the removal of the two freeways; and 2) to explore alternative means—including both arterial street/highway and public transit modes, and considering for both modes systems management, service alteration and improvement, and facility improvement options—of providing an adequate level of transportation service to the affected area within acceptable limits of cost and negative social, economic, and environmental impacts. In meeting these two purposes, an important consideration must be the existing and probable future patterns of land use in the study area.
3. That the study will be conducted in two concurrent and highly coordinated parts. One part of the study will deal with the Milwaukee County portion of the study area, while the other will deal with the Ozaukee County portion. While these two parts of the study will be conducted separately in parallel when considering issues affecting only one county, they will be conducted as a single study when considering issues of intercounty significance.

4. That, because of its urgency, planning and preliminary design for the Hillside Interchange "stub end" will be "fast-tracked," or completed as soon as possible, by WisDOT.

It is estimated that the study will require 15 months to complete after program organization. The study will be accomplished by an interagency study technical team composed of staff from WisDOT, Milwaukee and Ozaukee Counties, the Milwaukee County Transit System, the City of Milwaukee, and the Commission. Work being conducted under a number of concurrent studies would be used to expedite the study and hold down costs. Each agency has definite responsibilities defined in detail in the prospectus, and the Commission would act as the overall lead agency. At year's end, program organization was underway, and the working arrangements with participating agencies were being firmed up.

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

An important component of the public mass transportation system of any large 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 motor coaches operating in mixed traffic over freeways. In some urbanized areas, motor coaches 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 area rightly deserves periodic reexamination and reconsideration.

Currently in the Milwaukee area, there is a specific interest in evaluating the potential of light rail transit to meet the primary transit service needs of the area, as well as a general interest in reconsidering the entire question of the best mode to meet these needs. This interest culminated in a letter request to the Regional Planning Commission on January 26, 1978, from the Milwaukee County Executive, William F. O'Donnell, in which the County Executive requested the Commission to undertake preparation of a prospectus for a light rail feasibility study for the Milwaukee area. The Commission agreed to prepare the prospectus,

and appointed a Prospectus Steering Committee, chaired by the former Mayor of the City of Milwaukee, Mr. Frank P. Zeidler, to assist it in the preparation of a prospectus. During review by the Committee of the draft light rail feasibility study prospectus, the representative on the Committee from the U. S. Department of Transportation, Urban Mass Transportation Administration (UMTA) indicated that the UMTA could not participate in funding either the proposed light rail feasibility study or the implementation of any proposed projects which might be recommended based on such a study. Instead, the UMTA required that any proposed study conform to its requirements for an "alternatives analysis" which would examine all possible modes of providing primary transit service in accordance with a well-specified set of requirements for such studies.

The light rail feasibility study prospectus was accordingly revised and expanded to meet the UMTA requirements for an alternatives analysis. On August 11, 1978, the Prospectus Steering Committee approved the revised prospectus and recommended its adoption by the Regional Planning Commission. The Commission adopted the prospectus on September 14, 1978. The prospectus documents the need for the study; specifies the scope and content of the required work; recommends the most effective method for establishing, organizing, and accomplishing the work; recommends a time sequence and schedule for the work; provides sufficient cost data to permit development of an initial budget; and recommends an allocation of costs among the various levels and units of government concerned.

The prospectus identifies five factors which contribute to the need to conduct 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, potentially 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 motorbus 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.

The study is recommended to follow a six-step planning process of: 1) program organization; 2) formulation of objectives and standards; 3) inventory; 4) analysis, forecasts, and future studies; 5) preparation, testing, and evaluation of alternatives; and 6) feasibility conclusion. It is recommended in the prospectus that the alternatives analysis be based upon consideration of "alternative futures" for the Milwaukee area. More specifically, it is proposed that two sets of alternative regional population and employment forecasts, together with associated forecasts of key factors affecting urban land use development patterns and attendant travel habits and patterns such as the cost and availability of energy and the availability of financing, be made: one reflecting a future of moderate population and employment growth, and the other reflecting a future of relative population and employment stability or decline. For each of these two sets of forecasts, both a centralized land use plan and a decentralized land use plan would be prepared. Each of these four land use plans, together with the associated forecasts, would constitute an alternative future for the Milwaukee urbanized area. Four alternative transportation system plans would be developed, one for each alternative future, based upon analyses of the travel habits and patterns likely to be attendant to each alternative land use plan. These analyses would be conducted using sketch-planning techniques, as opposed to the detailed travel simulation models used in the preparation of the regional transportation system plan. These techniques are used to analyze a number of alternative proposals in a timely and economic manner.

The resulting plans and analyses are intended to indicate which primary transit modes are most promising for the Milwaukee area under a wide

variety of possible future conditions of population and employment growth, land use development, and energy costs. Upon completion of this "alternative futures" analysis, a decision will be reached as to whether the results justify termination or completion of the study. If it is decided to pursue the alternatives analysis to completion, a more detailed corridor-level analysis will be conducted to determine the most suitable primary transit mode, together with detailed studies of system costs, potential financing, and social, economic, and environmental impacts.

It is anticipated that the final result of the study will be a two-tier primary transit system plan for the Milwaukee urbanized area consisting of a lower tier including those corridors, if any, for which fixed guideway transit is recommended for immediate implementation, and those corridors, if any, which are recommended to be held open for possible fixed guideway development, but for which no immediate implementation is recommended. Those corridors that show promise for the application of fixed guideway transit facilities under all or most alternative futures can be included in the lower tier of the plan for immediate implementation. Corridors which "show up" in only one or two alternative futures can be placed in the upper tier of the plan, any available rights-of-way held open, and the option for future development of the facility thereby preserved. If it is concluded that there is no potential for fixed guideway development in any corridor as a result of the alternative futures analyses, the study will be terminated after the alternative futures work and the regional plan will continue to recommend express-bus-on-metered-freeway as the best primary transit mode for the area.

The first phase of the study is estimated to require 12 months for completion following program organization. The prospectus recommends that the total cost of the study be funded primarily by the Urban Mass Transportation Administration, with participation by Milwaukee County and the Wisconsin Department of Transportation. At year's end, preliminary study organization work was underway, together with work on final funding arrangements. The first phase of the study was recommended in the prospectus to be accomplished by the Commission staff, with heavy reliance on a consultant for the second phase, should that be pursued.

The Milwaukee area primary transit system alternatives analysis proposed in the prospectus represents an opportunity for the Milwaukee area to carefully reconsider the direction that it has chosen for primary transit system development. It also presents the area with the opportunity to carefully examine possible alternative directions for land use and transportation development, to refine and detail the transit portion of the adopted regional transportation system plan, and to address certain unanswered questions—particularly, the best manner in which to provide transit service to subareas previously planned to be served by freeways eliminated from the new regional transportation system plan.

## TRANSPORTATION SYSTEMS MANAGEMENT PLANNING

Considerable resources were directed during 1978 at a number of planning efforts designed to result in recommendations to better manage the Region's existing transportation system. These short-term planning and management efforts were carried out not only by the Commission, but by state agencies, local agencies, and universities with funds that are granted to the Commission and "passed through" to others.

### 1979 Transportation Systems Management Plan

During 1978 the Commission staff completed the preparation of an updated 1979 transportation systems management (TSM) plan for the Southeastern Wisconsin Region. This five-year plan, covering the period 1979 through 1983, examines the current operations and management of the existing transportation systems, including street and highway and public mass transportation systems in the Region, 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 first TSM plan for the period 1978-1982 published in December 1977.

The 1979 TSM plan was adopted by the Southeastern Wisconsin Regional Planning Commission on December 7, 1978, 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 1979 TSM plan is documented in SEWRPC Community Assistance Planning Report No. 26, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979.

The 1979 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 1978 plan. More than 50 percent of the 169 TSM projects recommended for full or partial implementation during 1978 have been completed or are now underway. Of the projects not completed as recommended in 1978, more than 90 percent were merely deferred until 1979, while only seven projects were dropped. All eight recommended park-and-ride and park-and-pool lot projects in the Milwaukee urbanized area and both recommended transit shelter projects, including the installation of 80 shelters in Milwaukee County and 14 in the City of Kenosha, were underway or completed in 1978, and more than 60 percent of the 18 recommended improved transit service-oriented projects was completed or underway in Milwaukee County specifically. Substantial progress was also made in 1978 in implementing improved UBUS and UPARK service and in expanding the commuter-impacted permit parking TSM action. One bus route was added to the UBUS system in 1978, bringing the total UBUS system to 10 routes, and UBUS service marketing efforts were increased. Five areas within the City of Milwaukee were designated as commuter-impacted permit parking areas in 1978, bringing the total of such areas in the City to 11. The fee charged for obtaining such permits was dropped during the year.

Significant progress was also made on studies recommended under the 1978 TSM plan. The Milwaukee County Transit System started four major studies in 1978: the transit system service study; the management information system study; the bus stop location study; and an update of the system's short-range plan and program. The City of Milwaukee mounted its taxi fare and regulation study. A prospectus was completed by the Regional Planning Commission for a study of the recommended work time rescheduling TSM action. The Wisconsin Department of Transportation and the Commission began work on a prospectus for a freeway traffic management system planning study. Progress on each of these studies is discussed below.

The 1979 TSM plan recommends the implementation of 242 projects and 15 studies at an estimated total cost of \$305,680,100 over the five-year time period of 1979-1983. This plan represents an increase of approximately \$104 million over the total cost of the 1978 plan for a comparable five-year time period. The increase in the 1979 plan costs occurs largely in the Milwaukee urbanized area, where additional "stub end" freeway treatment projects with costs of nearly \$19 million and additional improved transit service actions—bus acquisition, maintenance/operation facility construction, and system operating assistance—totaling nearly \$85 million are included in the 1979 plan. It is estimated that \$61,874,600 of the total plan cost will be expended on 190 of the 242 recommended projects and on 15 studies during the annual element of the 1979 through 1983 transportation improvement program for the Region, which covers 21 months for all Federal Highway Administration-funded projects and 12 months for all other projects and all studies.

In the 1979 TSM plan, the individual TSM projects are again grouped into 24 categories of TSM actions, which are presented in approximate order of priority. The accompanying table presents, in summary form, the 1979 TSM plan recommendations, including implementing agency responsibilities, sources of funding, and implementation schedule.

While the costs of the 1979 TSM plan recommendations may appear large, it must be remembered that much of the TSM plan is a catalog of actions that currently are being, and for many years have been, continually 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 the recommendation for a detailed planning study of a freeway traffic management system for the Milwaukee area, the recommendation for examining alternatives to improve the efficiency of the "stub end" freeways in Milwaukee County, and the recommendation for a series of other studies including major arterial street and highway studies, a study of the downtown parking rate structure, a taxi fare and regulation study, a study of work time scheduling, and the preparation of a traffic and transit plan to deal with disturbances to the operation of the regional transportation systems during weekends and special events.

The 1979 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 operating and implementing agencies in southeastern Wisconsin. Much was accomplished in TSM implementation and planning in the Region in 1978, and the proposed 1979 TSM plan update represents another ambitious agenda of transportation systems management actions for 1979 and beyond.

### Work Time Rescheduling Study

Work time rescheduling—flexible work hours, staggered starting and quitting times, and the four-day work week—represents one way to reduce peak travel demands on the Region's transportation system. As such, 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 Commission's transportation systems management plan. Following its customary procedure, the Commission directed that a prospectus for the proposed study be prepared, examining the need for the study, identifying the work to be undertaken, determining how the work should be organized and accomplished, developing a time sequence and schedule for the study, and preparing a preliminary study budget.

On September 26, 1978, the Prospectus Steering Committee created by the Commission to assist it in the preparation of this prospectus unanimously approved it and recommended it to the Commission for adoption. The prospectus identifies four factors that contribute to the need for a study of work time rescheduling in the Milwaukee urbanized area at this time: 1) the existing problems of the peak-period transportation congestion within the Milwaukee urbanized area; 2) the potential of work time rescheduling to reduce peak-period transportation system congestion in the Milwaukee area through the spreading of travel demand over the peak hours of travel during the day; 3) the potential of work time rescheduling to improve air quality and reduce motor fuel consumption; and 4) the possibility that implementation of an untested work time rescheduling might disrupt the existing complex travel pattern in the Milwaukee urbanized area and actually interfere with the work and other trip purpose staggering already

**SUMMARY OF RECOMMENDATIONS IN 1979  
TRANSPORTATION SYSTEM MANAGEMENT PLAN**

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/1979 Annual Element Costs in TIP if Different from Total (in \$1000)	Recommended Implementation
Freeway Control System	7 Projects	Wisconsin Department of Transportation (WisDOT)/SEWRPC	Federal Aid Interstate and Federal Primary Highway Funds (FAI/FAP)	\$ 1,822.0/698.0	Continued implementation
	1 Study	WisDOT/SEWRPC	FAI/FAP	500.0	Prospectus by 2/28/79; study to follow
Stud End Freeway Treatments	4 Projects	WisDOT/ Milwaukee County/ City of Milwaukee	FAI/FAP	19,205.0/618.0	Continued implementation and design studies
Improved Transit Service	32 Projects	Various	Urban Mass Transportation Administration (UMTA), Section 3, Section 5	255,102.2/45,475.4	Continued implementation
Traffic Signing, Pavement Marking, and Signalization	100 Projects	Various	Various—Identified in TIP	9,722.0/4,285.5	Continued implementation
Park-and-Ride Lots with Express Transit Service and Park- and-Pool Lots	13 Projects	WisDOT/ Milwaukee County/ Ozaukee County	FAI/FAP	5,014.0/1,439.0	Continued implementation
Transit Route Evaluation	6 Studies	Milwaukee County/ SEWRPC	UMTA, Section 8	362.0	Updated Milwaukee Transit System Planning Program (TSPP) by 3/31/79; Kenosha TSPP by 3/31/80; major Milwaukee County Transit Service Study Report by 12/31/79
Spot Street and Highway Improvements	66 Projects	Various	Various—Identified in TIP	10,196.6/6,647.6	Continued implementation
UBUS/UPARK	Included under Action No. 3 Above	Milwaukee County/ University of Wisconsin- Milwaukee (UWM)	Included under Action No. 3 Above	Included under Action No. 3 Above	Continued implementation
Arterial Studies	1 Study	WisDOT/SEWRPC	UMTA, Section 8/ FHWA PL	20.0	Prospectus completion by 2/28/79; proceed with study as recommended in prospectus
Downtown Shuttle Services	Included under Action No. 3 Above	Milwaukee County	Included under Action No. 3 Above	Included under Action No. 3 Above	Continued implementation
Transit Shelters	3 Projects	City of Kenosha/ Milwaukee County/ Village of Shorewood	UMTA, Section 3, Section 5	1,837.0/300.0	Continued implementation
Carpool and Vanpool Promotion	2 Projects	WisDOT/ Milwaukee County	Federal Aid Urban System (FAU) and Vanpool	265.0/215.0	Continued implementation
Pedestrian and Bicycle Provisions	10 Projects	Various	Various—Identified in TIP	497.0/409.0	Continued implementation
Miscellaneous Low- Capital Actions	2 Projects	City of Milwaukee	Various—Identified in TIP	218.0/50.5	Continued implementation
Major Transit Generator Study	.....	.....	Now included under Action No. 6 above	.....	.....
Bus Stop Location Study	2 Projects	Milwaukee County/ City of Milwaukee	FHWA, SOS; UMTA, Section 3 Section 8	550.0	Completion of planning for new Milwaukee County bus stop signs by 12/31/79
Downtown Parking Rate Structure Study	1 Study	City of Milwaukee	Local Funds	21.0	Completion by 12/31/79
Taxi Fare and Regulation Study	1 Study	City of Milwaukee	UMTA, Section 8	12.0	Completion by 6/30/79
Exclusive Bus Lanes	Included under Actions No. 6 and No. 9 Above	Milwaukee County	Included under Actions No. 6 and No. 9 Above	Included under Actions No. 6 and No. 9 Above	Implementation as part of downtown trans- portation 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	109.6	Continued implementation
Work Time Rescheduling Study	1 Study	SEWRPC	UMTA, Section 8/ Federal Highway Administration Urban Planning/ Environmental Protection Agency (FHWA PL/EPA), Section 175	180.0/115.3	Completion by 6/30/80
Energy Emergency Contingency Plan	.....	.....	.....	.....	.....
Weekend and Special Event Traffic Planning	1 Study	SEWRPC	UMTA, Section 8 FHWA PL	21.7	Completion of prospectus by 8/31/79; study to follow
<b>Total</b>	<b>242 Projects 15 Studies</b>			<b>\$305,680.1/ \$ 61,874.6</b>	

occurring. The primary emphasis of the proposed study as recommended in the prospectus is on the design of alternative work time rescheduling programs and the evaluation of these programs with respect to transportation costs and benefits, impacts on regional air quality, and the feasibility of implementing work time rescheduling.

It is estimated that the study will require 18 months to complete and will begin early in 1979. The study includes an option of termination during its first year if it is determined from the initial analyses that both the potential for additional work time rescheduling and the potential transportation benefits of any work time rescheduling in the Milwaukee area are too low to warrant further study.

#### **Freeway Traffic Management Study**

The Regional Planning Commission, in cooperation with the Wisconsin Department of Transportation, was in the process at year's end of preparing a prospectus for a planning and preliminary engineering study of a freeway traffic management system for the greater Milwaukee area. The study was recommended in both the design year 2000 regional transportation system plan and the regional transportation systems management plan. Such a system would carefully monitor traffic conditions on the area's freeway system, including detecting incidents such as accidents, and would control access to the system to achieve uninterrupted traffic flow by means of centrally activated traffic signals located at freeway on-ramps—the so-called "ramp metering" system. Buses, vanpools, and carpools would be accorded preferential access to the freeway system via special ramps or lanes. Anticipated benefits of the traffic management system include better overall utilization of the freeway and surface arterial street and highway systems and a higher level of service for buses, vanpools, and carpools. Expected costs include possible increased individual vehicle waiting time at freeway on-ramps, although not necessarily increased total travel time.

Because of the sensitive and potentially controversial nature of some facets of the freeway traffic management system, it is the Commission's objective in the prospectus and the study proper to provide the best possible information on costs and benefits of the system, including such effects as

waiting time at ramps and diversion of traffic to surface arterial streets. The application of mathematical simulation models to such a large-scale operational problem is virtually unprecedented, and during the prospectus preparation the Commission staff is investigating alternative means of estimating the potential effects of the proposed system. The prospectus is scheduled to be completed in early 1979, with the study to be initiated as soon after as funding arrangements permit, but probably not before 1980.

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

Over the past several years, local elected officials, businessmen, and residents of the City of Oconomowoc have become increasingly concerned about the level of traffic congestion that frequently occurs in the City, especially during weekday morning and evening peak travel periods, and on Friday and Sunday evenings during the summer recreational travel season. In August 1978 representatives of the City, including the Mayor, met with the Commission staff to discuss the traffic problems affecting the City and to request the Commission's assistance in undertaking a study to improve traffic operations. After considering this request, the Commission agreed to assist the City in such a study leading to the development of a traffic management plan for Oconomowoc and its surrounding environs.

A traffic management plan may be defined as a series of recommended traffic engineering actions that are intended to provide for the safe and efficient operation of a community's existing transportation system. As such, the anticipated plan for the City of Oconomowoc will propose short-range solutions to existing traffic problems through the application of operational traffic engineering techniques such as intersection control devices, traffic routing, and traffic regulation. It is the intent of the traffic management plan to accomplish these solutions without resorting to major capital investments in new transportation facilities or major improvements to existing facilities. The short-range nature of the traffic engineering improvements to be proposed in the traffic management plan will require that the plan be periodically updated to reflect changing traffic conditions so that the safety and efficiency of the existing transportation system will be maintained at the highest possible level.

The development of any traffic management plan should be set within the context of the long-range transportation system plan, which the Regional Planning Commission already has developed and adopted for the entire Region, including the Oconomowoc area. This is considered important because, even if well managed, the capacity of an area's existing transportation system has a definite limit. As increased travel attendant to the continued development of an area approaches these limits, expansion of the capacity of the existing transportation system through capital investment in the construction of new facilities or in the reconstruction of existing facilities will become necessary. For this reason, the improvements set forth in a traffic management plan should serve to facilitate the ultimate implementation of the long-range transportation system plan. Accordingly, the actions recommended in the traffic management plan should not foreclose the implementation of the recommendations contained in the area's long-range transportation system plan when the practical capacity limits of the existing transportation system are reached and such implementation becomes necessary.

The City of Oconomowoc traffic management study is scheduled to begin in January 1979 and to be completed by December 1979. In anticipation of beginning this study, a study prospectus was developed during the fall of 1978 and a 24-member citizens and technical advisory committee was created to assist the Commission's Transportation Division staff in the development of the traffic management plan. The planning process to be used in this study will include: an inventory and description of the existing street and highway system in the City of Oconomowoc; the collation of traffic operation data—traffic origins and destinations, volumes, and vehicle speeds and delays—concerning existing traffic conditions in the City; an identification of the traffic problems affecting the City; and the design of recommended actions to increase the safety and efficiency of the existing transportation system in the City.

### Ride-sharing Programs

During 1978 the Commission completed an application for a continuing Milwaukee area carpooling program pursuant to the 1977 authorization for a new three-year program by the Milwaukee County Board of Supervisors. SEWRPC Technical Report No. 20, Carpooling in the Metropolitan Milwaukee Area, published in 1977,

evaluated a carpooling demonstration project initiated in 1975 by Milwaukee County, the results of which indicated a significant latent demand for carpooling. On this basis it was determined that a continuing program would be effective in reducing motor fuel consumption and work trip-related vehicular traffic. Disposition of the request for Federal Aid Urban funds to support the continuing program had not been received at the close of the year.

Also during 1978, the University of Wisconsin-Milwaukee and the University of Wisconsin-Extension, through the Division of Urban Outreach, Office of Statewide Transportation Programs, received a \$42,000 demonstration grant from the Wisconsin Department of Administration for the express purpose of custom designing ride-sharing programs for employers. Such programs could potentially be comprised of carpools, vanpools, buspools, or combinations thereof.

### Milwaukee County UWM/East Side-North Shore Transit Improvement Study

The UWM/East Side-North Shore Transit Improvement Study was completed in 1978 by Milwaukee County using federal transit planning monies made available through the Commission. This eighteen-month study, which was guided by an active and articulate citizens task force and staffed by an interagency technical team, produced a set of detailed recommendations for transportation improvements in the Milwaukee East Side-North Shore area, including: continuation and expansion of the highly successful UBUS express transit services to UWM and UPARK remote parking/shuttle services to and from the campus; various local street and local transit service improvements; innovative transit demonstrations including bus traffic signal preemption, elderly-oriented transit route circuits, and zone-fare taxicabs; better bicycle riding and parking accommodations; and improvements in the local parking situation. The study recommendations were presented in a detailed final report, which was distributed to the responsible units of government for consideration and implementation.

### Milwaukee County Transit Facilities Study

A draft report for the transit system facilities study being conducted by Milwaukee County was completed in 1978. The report was approved by the Milwaukee County Transit Board during June

of 1978 and forwarded to the federal Urban Mass Transportation Administration for review and approval. Final revision and publication of the report was pending such a review at the end of the year. The purpose of the study is to provide a review of the current and future need for garage and maintenance facilities necessary for the operation of the transit system acquired by the County in 1975. Publication of the final report is anticipated in 1979.

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

Work began in 1978 on a plan for a comprehensive cost management information system for the Milwaukee County Transit System. The study, being conducted by a management consultant, will review the procedures used to monitor the management activities of the transit system such as accounting, budgeting, inventories, scheduling, and planning, and will recommend improvements for such procedures. It is anticipated that this study will be completed and its findings and recommendations published in 1979.

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

This planning study, initiated in 1978, constitutes a major continuing appraisal and evaluation of existing and proposed public transit service provided by the Milwaukee County Transit System. In 1978 a study design was completed, and work was started on a set of revised service objectives and standards, a service planning and evaluation methodology, and an analysis of data needs and data collection procedures. At year's end, complete traffic checking data had been collected and tabulated on 14 transit system routes, and a series of 14 neighborhood meetings had been held to collect information from citizens on transit needs and desires. Work on the study will accelerate in 1979, and the major study product, a five-year plan and program for transit service modifications, improvements, and extensions, will be published in early 1980.

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

Work was initiated in 1978 on an updated five-year transit development plan document that will include annual recommendations for service improvements, fleet and equipment acquisition, and operating facility rehabilitation and con-

struction. It is currently anticipated that this document, which will combine and summarize the results and recommendations of a number of previous and current Milwaukee County transit planning efforts, will be completed in 1979 and updated periodically thereafter.

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

An inventory of all bus stop locations on the Milwaukee County Transit System was completed in 1978, and work was initiated on planning for the replacement of all bus stop signs in 1979 with signs of a new design aimed at providing improved user and operator information and system identification.

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

The City of Milwaukee Department of Public Works began work on a traffic engineering and transit planning project in late fall of 1978. The project involves a systematic approach to the definition of transportation system deficiencies; the analysis of alternative transportation system management actions to mitigate these deficiencies; and the preparation of designs and plans for specific projects. One phase of the project, begun during 1978, was the analysis of signalized intersections in the central business district of the City. The objective of this phase is to evaluate and revise the operations of the traffic signals as a system, thereby reducing traffic congestion, vehicle delay, fuel consumption, and vehicle pollutant emissions. A second phase of the project is the identification of high accident intersections where short-range traffic engineering improvements can serve to reduce accident exposure and, therefore, reduce the number of accidents.

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

During 1978 the City of Milwaukee, Department of City Development, initiated 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 the revision of such regulations to improve taxicab service. At the close of the year, information had been gathered on taxi passengers, city and area-wide regulations, and insurance of taxicabs. It is anticipated that the study will be concluded

in 1979 with a plan document setting forth recommendations that provide for improved taxicab operation and service.

#### **University of Wisconsin Transportation Studies**

Using federal transit planning funds made available through the Commission, work continued in 1978 at the University of Wisconsin-Milwaukee on the monitoring, evaluating, and development of proposals to improve the highly successful UBUS express transit services to UWM and the UPARK remote parking/shuttle services to and from the campus. In addition to routine monitoring, data collection, and analysis, special studies were made during 1978 of the interdependence of parking policy and choice of travel mode, the effects of parking rate structure on transit ridership, the potential for vanpooling at the University, and the historical changes in student travel behavior since introduction of the UBUS/UPARK program.

#### **Southeastern Wisconsin Commuter Study**

During 1978 the Wisconsin Department of Transportation, using federal transit planning monies made available through the Commission, continued work on the southeastern Wisconsin commuter study. The study examined three alternatives—all bus service, all rail service, and a combination of bus and rail service—for meeting the transportation needs of Chicago-oriented commuters in Kenosha and Walworth Counties, and compared them to a base "do nothing" alternative. Staff work on the final report was completed in 1978, with policy endorsement of the study findings, preparation of a study summary report, and publication of both study reports anticipated in 1979.

### **ELDERLY AND HANDICAPPED TRANSPORTATION PLANNING**

In the spring of 1978, work on the development of a transportation plan for transportation handicapped people in the Region was completed and public hearings were held. The plan was adopted by the Regional Planning Commission on April 13, 1978, and published in SEWRPC Planning Report No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982. The study leading to the preparation of this plan was undertaken by the Commission at the request of Milwaukee County. One of the purposes for conducting this study was to ensure that Milwaukee County and the

three other operators of public mass transportation systems in the Region (the Cities of Kenosha and Racine, and Waukesha County) were in compliance with a federal requirement promulgated on April 30, 1976, by the U. S. Department of Transportation, Urban Mass Transportation Administration (UMTA) that all operators of public mass transportation systems receiving federal financial assistance undertake "special efforts" to plan and implement public mass transportation facilities and services that can effectively be utilized by elderly and handicapped people, particularly wheelchair users and those persons with semiambulatory capabilities.

The regional transportation plan for transportation handicapped persons is designed to reduce and, for some transportation handicapped individuals, eliminate the existing physical and/or economic barriers to their independent travel. The plan recommends that the local public bus systems serving the Milwaukee, Racine, and Kenosha urban areas be equipped with wheelchair lifts or ramps and other conveniences to the extent that the base period (nonpeak hour) bus fleets would be fully accessible to wheelchair users and semiambulatory persons. For those transportation handicapped persons in these three urban areas who would continue to be unable to use these accessible public bus systems, the implementation of a user-side subsidy program is recommended. This program would enable eligible transportation handicapped persons to arrange for their own transportation by taxi or private chair car carrier at 50 percent of the regular fare for local taxi service, with a maximum charge of \$2.50 per one-way trip. For transportation handicapped persons living outside of the Milwaukee, Racine, and Kenosha 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 agency transportation 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.

Since publication of the plan in April of 1978, and its certification to the concerned local units of government in the Region shortly thereafter, significant interest in the plan recommendations

has been shown, particularly by the four public transit operators in the Region, and progress has been made in implementing these recommendations during 1978.

- The City of Kenosha applied for and received federal approval of a UMTA Section 5 transit system capital improvement grant of \$166,936, which includes \$88,000 in federal funding to assist the City with the cost of retrofitting 12 buses in the existing City bus fleet with wheelchair lifts. Work on this project is currently underway, and it is expected to be completed early in 1980.
- Milwaukee County applied for and received federal approval of a UMTA Section 3 transit system capital improvement grant of \$18,978,832, which includes \$14,000,000 in federal funding to assist the County in the purchase of 150 new 47-passenger wheelchair lift-equipped buses, and \$1,840,000 toward the cost of purchasing 30 new 25- to 35-passenger wheelchair lift-equipped buses. Work on completing the purchase of these vehicles is currently underway, with delivery expected in 1980.
- Milwaukee County also established a user-side subsidy program, initially for anyone in the County confined to a wheelchair and, since November 17, 1978, for anyone who uses a walker or crutches or who is legally blind as well. This program enables eligible participants to call any participating taxicab or chair car carrier firm of their choice for transportation service to and from any destination in Milwaukee County for any trip purpose for a flat fare of \$1.00 per ride. Over 11,000 one-way rides were taken on this service in 1978. This project was funded entirely with state and local funds.
- Waukesha County, through its Department of Aging, began work on two new transportation projects for the elderly and handicapped which are scheduled to be implemented in 1979. These new projects will be in addition to the transportation service the Department has been providing to elderly and handicapped people in the County. The first project will provide

24-hour advance reservation demand responsive transportation service direct from an eligible handicapped user's trip origin in Waukesha County to certain designated trip destinations in Waukesha and Milwaukee Counties served by Wisconsin Coach Lines, Inc., including downtown Milwaukee. The second project will establish a user-side subsidy program in those Waukesha County communities with available taxicab service. This program will enable eligible able-bodied elderly people 60 years of age or older and transportation handicapped people of any age to call any participating taxicab firm of their choice for transportation service to and from any destination within the service area of the taxicab firm for any trip purpose. Eligible users of this service will receive a \$0.60 discount per ride off the regular taxi fare for their trip.

- The City of Racine Common Council, after officially considering the adopted regional transportation plan for the transportation handicapped, on October 13, 1978, formally requested that the Regional Planning Commission consider amending the adopted transportation handicapped plan element for the City of Racine. The amendment proposed by the City of Racine and eventually adopted by the Commission on December 7, 1978, was to delay, for two years, the implementation of the original plan recommendation to retrofit the 15 buses in the City's existing bus fleet with wheelchair lifts, and in the interim to provide an alternative specialized service for the transportation handicapped.

As a result of this amendment, the City of Racine approved a "special efforts" strategy to spend no less than 5 percent of the Racine urbanized area's UMTA Section 5 allocation in support of a demand responsive transportation service that will guarantee any wheelchair user or person with semiambulatory capabilities in the Racine urbanized area the availability of this service, if requested, for up to 10 round trips per week at fares and service levels comparable to those experienced by persons using the City-owned fixed route transit system.

The "demand responsive" transportation service provided under this strategy is available with an advance call-in notice time of 30 minutes between the approximate hours of 5:30 a.m. and 7:00 p.m. weekdays and 7:00 a.m. and 6:00 p.m. on Saturdays. Fares are \$0.25 per ride—the same as the base fare on the City-owned fixed-route bus system. The service area of this demand responsive service exceeds the service area of the fixed-route bus system since it includes the entire City of Racine. The service is provided by the Lincoln Lutheran Specialized Transportation Program of Racine under contract with the City, and is an extension of Lincoln Lutheran's current advance-reservation service for disabled people.

## TRANSPORTATION IMPROVEMENT PROGRAM

In December 1978 the Commission completed an updated five-year transportation improvement program (TIP) for the Kenosha, Milwaukee, and Racine urbanized areas of the Region, as required by the U. S. Department of Transportation. This program is set forth in a document entitled A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979-1983. 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 Milwaukee and Waukesha Counties as the operators of public mass transportation systems in these urbanized areas. The 1979-1983 TIP document identifies every planned highway and mass transportation project in the Kenosha, Milwaukee, and Racine urbanized areas programmed for implementation during this five-year period with the aid of the U. S. Department of Transportation funds administered by the Federal Highway Administration (FHWA) and Urban Mass Transportation Administration (UMTA). Following approval of the 1979 through 1983 TIP by the Intergovernmental Coordinating and Advisory Committees for Transportation System Planning and Programming in the Kenosha, Milwaukee, and Racine Urbanized Areas, the Regional Planning Commission formally adopted the program on December 7, 1978.

The program contains 627 projects for the five-year programming period, representing a total potential investment in transportation improvements and services of about \$661 million. Of this total under existing regulations, \$397 million, or about 60 percent, is proposed to be provided in federal funds; \$89 million, or 13 percent, in state funds; and \$175 million, or about 27 percent, in local funds.

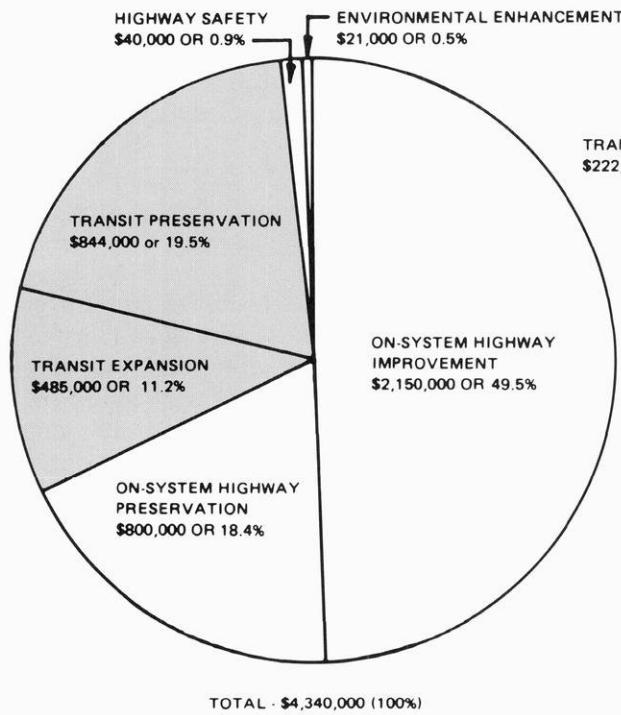
While the entire five-year program is an important planning tool, it is the annual element which is of primary interest, for it represents those projects that are intended to be implemented over the 12- to 21-month period beginning January 1, 1979 (the longer period is used for federally assisted highway 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.

Again this year, in an attempt to provide a basis for a better understanding of the types of transportation improvements proposed to be undertaken in the three urbanized areas, projects were gathered into nine categories: 1) highway preservation—that is, reconstruction of existing facilities to maintain the existing capacity; 2) highway improvement—that is, reconstruction of existing facilities to expand the existing capacity; 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 improvements; 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 brief comment, particularly with respect to the Milwaukee urbanized area, where the number of projects proposed is sufficiently high to prevent a few exceptionally large projects in any given category from distorting the picture:

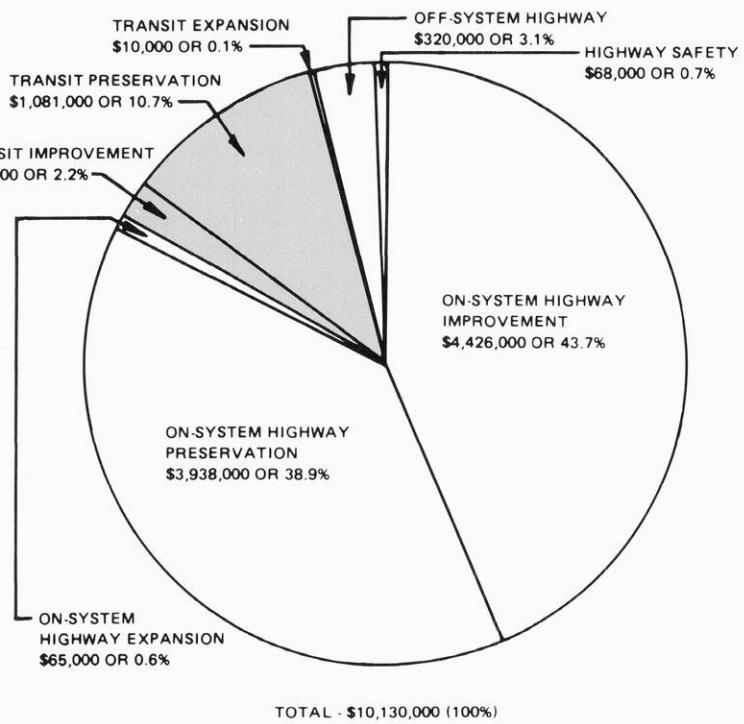
1. Much of the total of available monies is required simply to preserve existing transportation facilities and services—44 percent of expenditures in the annual element of the Milwaukee urbanized area, 50 percent in Racine, and 38 percent in Kenosha. This is especially striking since funding for routine highway maintenance

**DISTRIBUTION OF EXPENDITURES IN ANNUAL ELEMENT OF 1979-1983  
TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY**

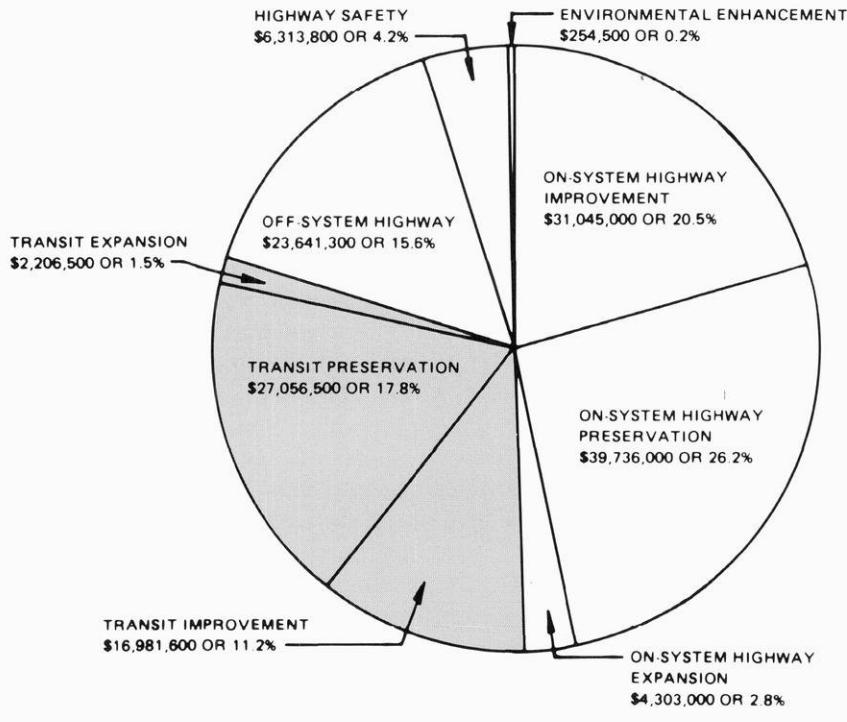
KENOSHA URBANIZED AREA



RACINE URBANIZED AREA



MILWAUKEE URBANIZED AREA



## COST SUMMARY OF PROJECTS WITHIN ANNUAL ELEMENT BY URBANIZED AREA

Funding	Urbanized Area			Total
	Kenosha	Milwaukee	Racine	
Federal . . . . .	\$2,657,700	\$ 83,388,500	\$ 6,568,400	\$ 92,614,600
State. . . . .	313,300	23,248,100	1,194,300	24,755,700
Local . . . . .	1,369,000	44,901,600	2,367,300	48,637,900
Total	\$4,340,000	\$151,538,200	\$10,130,000	\$166,008,200

activities—snowplowing, ice control, grass-cutting, street lighting, litter pickup, and ordinary maintenance—is not included in the subprogram.

2. Transit facilities and services account for a substantial share of the proposed expenditures in the annual element—31 percent in Kenosha, 30 percent in Milwaukee, and 13 percent in Racine. This amount assumes even greater significance when one takes into account the fact that the annual element contains 12 months of transit expenditures but 21 months of highway expenditures.
3. Highway expansion is virtually nonexistent in the Region, accounting for none of the proposed projects in the annual element of the Kenosha urbanized area, 3 percent of the expenditures in Milwaukee, and 6 percent of the expenditures in Racine.

### **RAIL TRANSPORTATION PLANNING**

Rail freight transportation planning took on increased significance in southeastern Wisconsin in 1978. In accordance with its 1977 agreement with the Wisconsin Department of Transportation to cooperate with the Department in the conduct of a continuing statewide rail planning program, the Commission continued to review state rail plan documentation and monitor rail abandonment status and progress in the Region.

On April 17, 1978, the Commission, in cooperation with the Department, conducted a public information session on the Milwaukee Road's proposed abandonment of the branch line from Waukesha to Milton Junction. In October 1978, the Commission was requested by the City of

Whitewater to conduct a planning study of the best manner in which to provide continued freight service to the area served by the Waukesha-Milton Junction branch line should abandonment be allowed by the Interstate Commerce Commission (ICC). After securing partial funding for the study from the Wisconsin Department of Transportation, the Commission agreed to undertake the work, which was underway at year's end. The study will examine subsidization of continued rail service, operation as a shortline railroad, and truck service and plant relocation alternatives.

Abandonment proceedings continued during 1978 for other portions of the Region's rail system. The Milwaukee Road rail freight line from the Village of Walworth to Avalon came under abandonment proceedings in 1978, increasing the total railway mileage subject to abandonment within the Region to 83.3 miles, or more than 14 percent of the Region's total mileage. Also, the Grand Trunk Western Railroad received authorization on June 12, 1978, from the ICC to abandon its carferry service from Milwaukee to Muskegon, Michigan.

During 1978 the Commission provided technical assistance to the Village of East Troy in implementing the recommendations of SEWRPC Community Assistance Planning Report No. 20, A Rail Transportation Service Plan for the East Troy Area. The Commission staff drafted a set of project specifications and contract conditions for the proposed rehabilitation of The Municipality of East Troy, Wisconsin, Railroad, and assisted the village staff in funding negotiations for the rehabilitation project with the Wisconsin Departments of Administration and Transportation and the U. S. Department of Commerce-Economic Development Administration (EDA). The Commission also provided technical

**RAILWAY ROUTE MILEAGE IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1978**

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
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	31.9 <sup>a</sup>
Washington . . .	22.7	3.9	27.2	4.7	25.0	4.3	--	74.9	12.9	22.7 <sup>a</sup>	3.9
Waukesha . . . .	54.0	9.3	47.7	8.2	26.9	4.6	1.2 <sup>a</sup>	0.2	129.8	22.3	20.1 <sup>a</sup>
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>
Subject to Abandonment	66.2 <sup>a</sup>	11.4	9.9 <sup>a</sup>	1.7	--	--	7.2	1.2	83.3 <sup>a</sup>	14.3	--

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

<sup>a</sup>Approximation.

assistance to the Village in the preparation of a grant application to the EDA. At year's end, the rehabilitation project was being let out to bid by the Village, and the EDA was processing the grant application submitted by the Village.

#### AIR TRANSPORTATION PLANNING

During 1978 Division staff activities in air transportation planning included monitoring through secondary data sources aviation activity 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 Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin, published in 1975, 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 and West Bend municipal airports. Each of these plans refines and details the system level recommendations contained in the regional airport plan.

During 1977 the City of Hartford requested that the Wisconsin Department of Transportation prepare a master plan for the Hartford Municipal

Airport. While the necessary local matching monies for the planning effort were provided by the City, a lack of federal planning funds caused the project to be deferred to 1979. It is anticipated that the planning effort will begin about April of 1979 and extend to September of 1980.

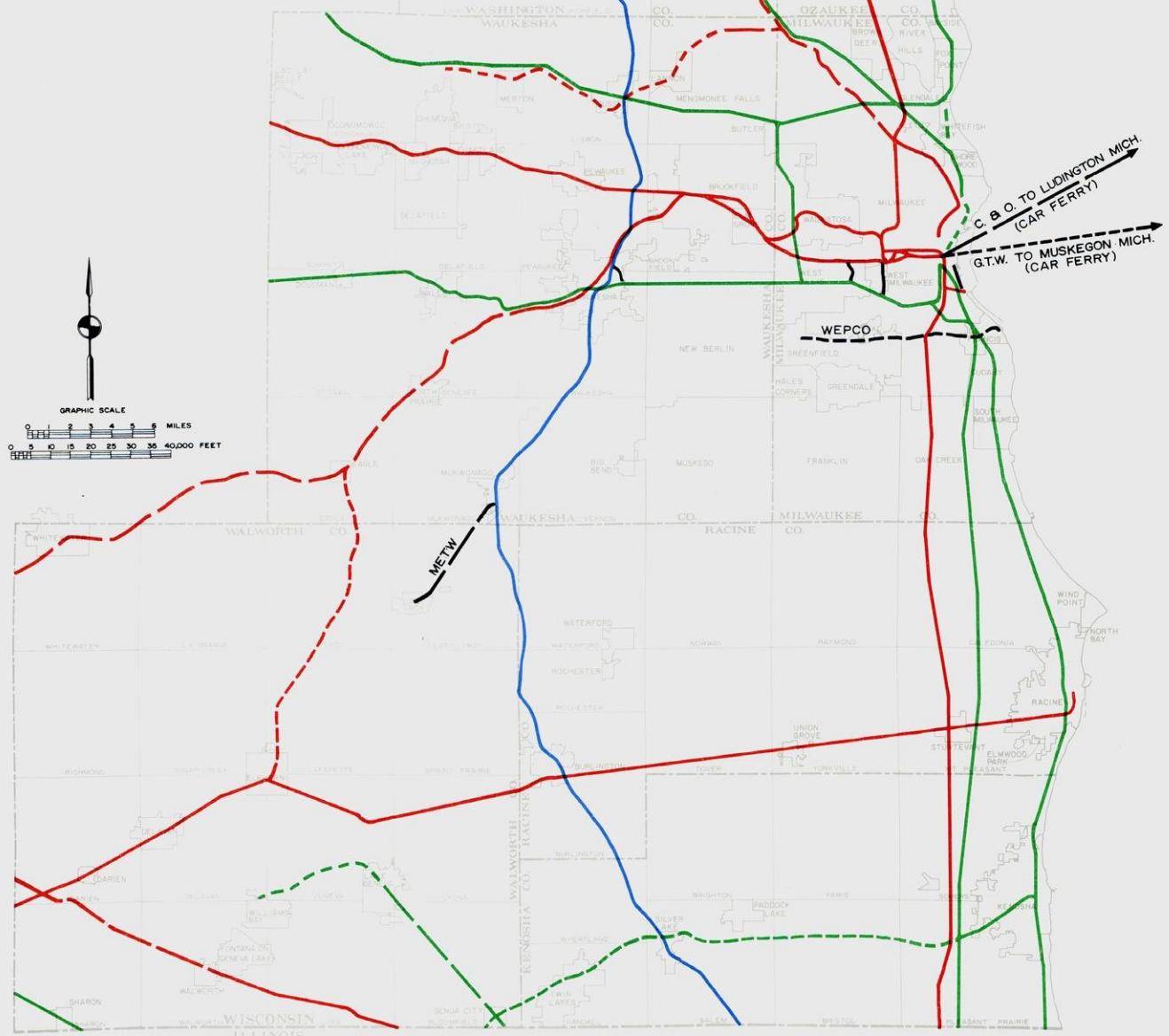
##### Aviation Activity

The Commission staff continued to monitor aviation activity in the Region in 1978 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 on the accompanying graph, aircraft operations at General Mitchell Field totaled about 247,000 in 1978, about 10,000, or 4 percent, less than the forecast operations. Total aircraft operations at the airport are comprised of air carrier, general aviation, and military operations. Air carrier operations totaled about 73,000, a decrease of about 5,000 operations from the 1977 level of 78,000. An important factor affecting this decrease was a 105-day strike by employees of Northwest Orient Airlines which offset the additional air carrier service provided by three new air carriers—Southern Airways, Braniff International, and Hughes Airwest. General aviation operations totaled about 167,000 in 1978, a 21,000, or about

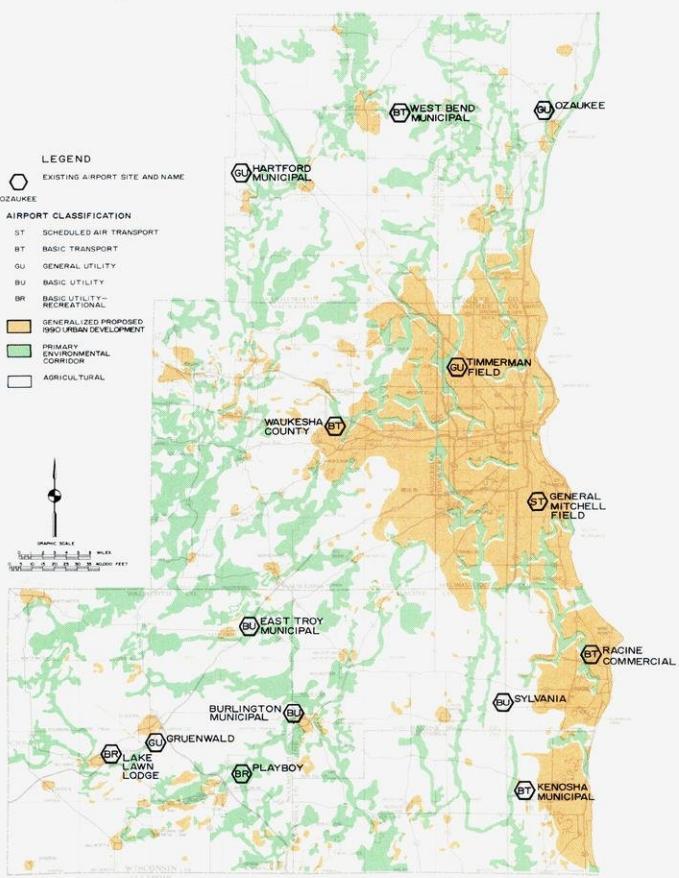
**STATUS OF FREIGHT RAIL LINES  
IN SOUTHEASTERN WISCONSIN  
DECEMBER 31, 1978**

**LEGEND**

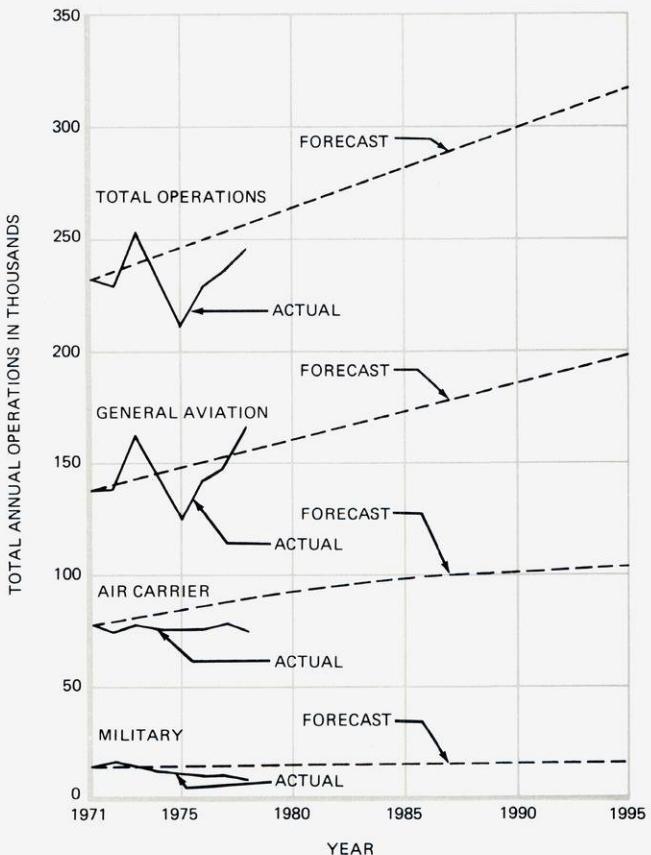
- C.M.S.T.P. & P.
- C. & NW.
- SOO LINE
- OTHER RAILROADS (NAMED)  
AND JOINT USE FACILITIES
- ABANDONED
- SUBJECT TO ABANDONMENT



## RECOMMENDED REGIONAL AIRPORT SYSTEM PLAN: 1995



## ANNUAL AIRCRAFT OPERATIONS GENERAL MITCHELL FIELD—MILWAUKEE

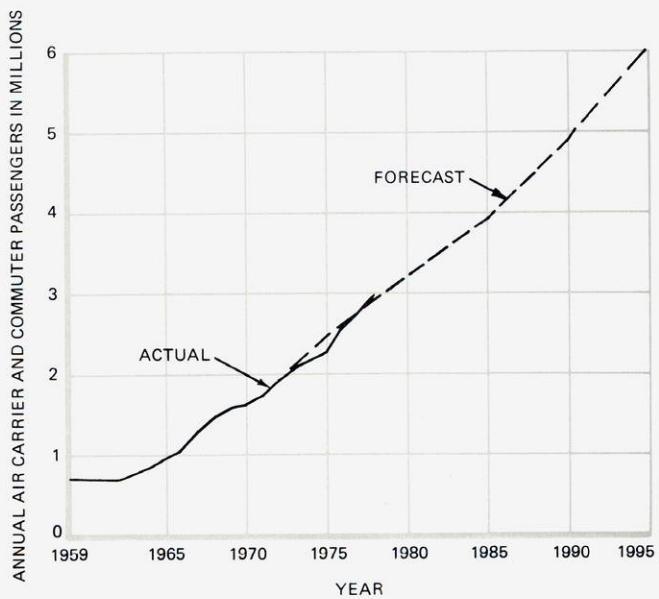


14 percent, increase over the 1977 level. Military aircraft operations decreased to about 7,000 in 1978, a 30 percent decrease from the 1977 level of 10,000 operations.

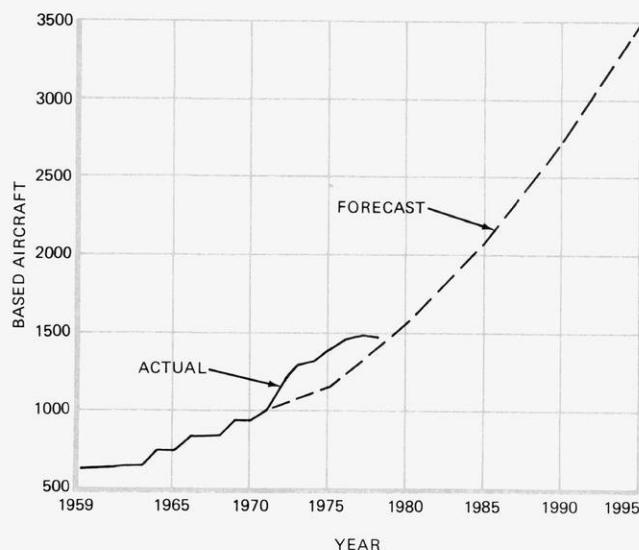
Air carrier and commuter enplaning and deplaning passengers at General Mitchell Field, as shown on the accompanying graph, totaled about 3.0 million in 1978, an increase of 0.2 million, or about 7 percent, over the 1977 level. The 1978 level of passenger activity was 0.1 million, or about 3 percent, more than the 2.9 million passengers forecast in the adopted regional airport system plan.

Aircraft based in the Region during 1978 totaled about 1,480, a decrease of about 1 percent from the 1977 registrations. The number of based aircraft in 1978 exceeded the forecast registrations of 1,400 aircraft by 80, or about 5 percent.

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



## AIRCRAFT BASED IN THE REGION



## AIRCRAFT BASED IN THE REGION

County	1960	1965	1970	1975	1976	1977	1978
Kenosha .....	28	60	76	111	120	143	142
Milwaukee .....	338	362	356	516	535	546	529
Ozaukee .....	19	13	32	39	37	43	40
Racine .....	65	89	108	177	177	184	191
Walworth .....	23	31	48	96	97	100	97
Washington .....	45	63	118	160	190	189	185
Waukesha .....	118	163	243	301	298	294	295
Total	636	781	981	1,400	1,454	1,499	1,479

## DATA PROVISION AND ASSISTANCE

The Commission staff expends a considerable amount of time each year in answering requests for transportation data. The following list is indicative of the types of data requests responded to by the Commission staff during 1978:

- Provision of technical assistance to La Casa de Esperanza, Inc., and Comunidad de Amigos in the conduct and processing of a survey of the transportation and related needs of Spanish speaking people in Wisconsin for use in studies by the two agencies.
- Provision of taxi travel data to the City of Milwaukee Department of City Development for use in a study of taxicab fares and regulations.
- Provision of travel information to the Town of Pleasant Prairie for use in evaluating resident travel growth and patterns.
- Provision of technical assistance and data processing services to Milwaukee County to assist in the preparation of minority group mobility assessment reports.
- Provision of travel time information to the Southeastern Wisconsin Health Systems Agency for use in preparing health facility system plans.
- Provision of 1972 travel time information to the Southeastern Wisconsin Health Systems Agency for use in preparing health facility system plans.
- Provision of arterial street and highway capacities to the Milwaukee Metropolitan Sewerage District for use in environmental impact statement preparation.
- Provision of base maps, transportation system data, and travel data to the McHenry County (Illinois) Planning Commission for use in preparing transportation plans.



# 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:

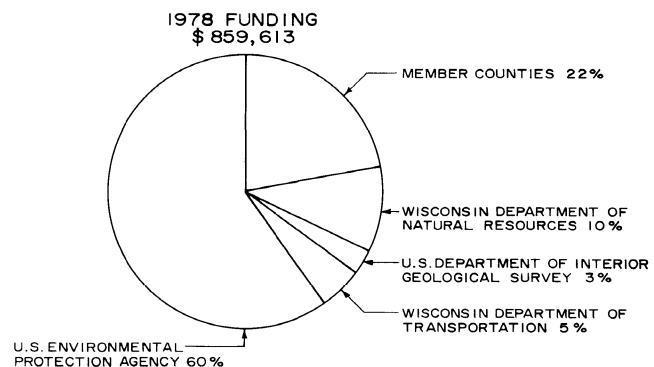
- What is the existing quality of the lakes, streams, and groundwaters of the Region? Is water quality getting better or worse over time?
- What are the sources of water pollution? How can these sources best be controlled to abate water pollution and meet water quality objectives?
- What is the extent 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 similar important 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, a number of activities were conducted in three identifiable areas: water quality planning, watershed and floodland management planning, and air quality planning.

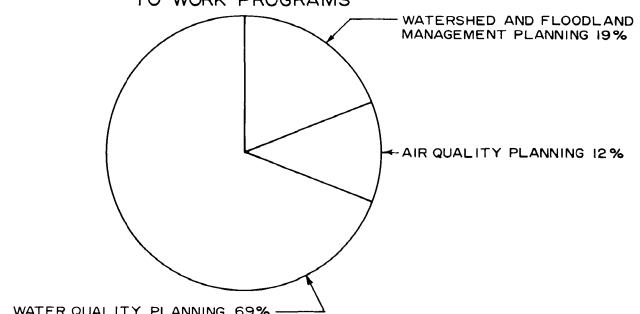
## WATER QUALITY PLANNING

During 1978 the water quality planning efforts of the Division were largely concentrated in the conduct of a planning program designed to meet the requirements of Section 208 of the Federal Water Pollution Control Act. This program has

## ENVIRONMENTAL PLANNING DIVISION



## DISTRIBUTION OF FUNDING TO WORK PROGRAMS



been designed to provide recommendations for the control of water pollution from both point sources—sewage treatment plants, sewer overflows, and industrial waste outfalls—and nonpoint sources—urban and rural storm water runoff. In addition, during 1978 the Division staff contributed to the conduct of two water quality-oriented applied research programs—the International Joint Commission (IJC) Menomonee River pilot watershed study and the Washington County soil erosion and sediment control project.

### **Areawide Water Quality Management Planning**

Any sound water quality management planning effort requires that the existing level of water quality be determined and compared against agreed-upon water quality objectives and supporting water quality standards; that the sources of water pollution be identified, described, and quantified; that the alternative methods of controlling pollution sources so as to abate water pollution and meet the water use objectives and standards be evaluated; that a single recommended plan be selected from among the alternatives considered for joint adoption by the various levels, units, and agencies of government concerned; and that the specific identification of responsibilities of various units of government be set forth so that cooperative plan implementation may proceed.

During 1978 the Commission completed publication of SEWRPC Technical Report No. 17, Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975. A summary of the major findings set forth in this technical report was included in the 1977 Commission Annual Report. In addition, technical work was completed during 1978 on the preparation of SEWRPC Technical Report No. 21, Sources of Water Pollution in Southeastern Wisconsin: 1975. This report was published in September 1978. Work also was completed during 1978 on the preparation of the first volume of the three-volume planning report for the water quality management planning study. This volume, entitled SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, was published in September 1978. The remaining two volumes of the report are scheduled for publication by mid-1979. At year's end all technical work had been completed on a preliminary areawide water quality management plan, and the plan was being readied for public review through Commission Newsletters, public informational meetings, a regional planning conference, and a formal public hearing.

Major work efforts during 1978 were also directed at completion of the wastewater sludge management plan, a subelement of the areawide water quality management plan; at assisting local units of government in the conduct of numerous sewerage facilities planning programs; and at involving the general public in the areawide water quality management planning process. Progress under each of these subelements of the areawide water quality management planning program is discussed below.

### **Wastewater Sludge Management Plan**

The preparation of a wastewater sludge management plan was an important part of the areawide water quality management planning program. This plan subelement was completed during 1978. The plan is documented in SEWRPC Planning Report No. 29, A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin. The sludge management plan was formally adopted by the Commission on September 14, 1978, following a series of subregional sludge management workshops, a regional planning conference, and a formal public hearing on the plan. The following discussion summarizes the findings and recommendations contained in this important plan element.

#### *Conceptual Framework for Sludge Management Planning*

Sludges are a natural and unavoidable by-product of liquid waste treatment. Increases in the quantity and changes in the chemical and physical characteristics of wastewater sludges can be expected, since implementation of water quality management plans results in higher volumes of wastes treated, changed wastewater characteristics, and higher levels of treatment. For example, primary treatment of municipal wastewaters typically produces 2,500 to 3,000 gallons of sludge, with a dry solids content of 2 to 6 percent per million gallons of wastewater treated. Five to eight times as much sludge volume, with a dry solids content of 1 to 3 percent, may result when secondary treatment is used. Use of chemicals for phosphorus removal—an advanced level of waste treatment—may add as much as 50 percent more to this amount and result in a total as high as 33,000 gallons of sludge per million gallons of wastewater treated.

Sludge handling and disposal costs therefore do represent a significant portion of the total cost of wastewater treatment. For example, the capital, operation, and maintenance costs of providing secondary treatment for 10 million gallons per day (mgd) of municipal wastewater may be 20 to

25 cents per 1,000 gallons of wastewater treated, while the cost of treating and disposing of the resultant sludges may be 5 to 10 cents per 1,000 gallons of wastewater treated. Proper management of sludges is important to ensure that the pollutants contained in the sludges do not return to waterways in runoff from agricultural lands or as leachate from landfills to pollute surface water or groundwater.

The regional wastewater sludge management planning effort was based upon seven basic principles:

- Sludge should be treated as a resource which, with proper management and control, can provide a valuable energy source, a valuable nutrient supplement, or a soil conditioner.
- Sludge management system planning must be regional in scope, recognizing, however, as necessary, subregional planning areas related to existing systems' potential management agencies, natural watershed boundaries, and urban concentrations with well-developed sewerage systems and related sludge handling systems.
- Sludge management system planning must be compatible with land use planning.
- Land use, wastewater treatment facility, and sludge management planning must recognize the existence of a limited natural resource base to which rural and urban development must be adjusted to ensure the continuation of a pleasant and habitable environment.
- Sludge management systems must have a minimum negative environmental impact and assist in attaining areawide land use, air quality, and water quality objectives. Accordingly, harmful constituents, such as heavy metals and other toxic substances, should be carefully monitored and controlled.
- Sludge management facilities must be planned as integrated systems, or coordinated subsystems, with the capacity of each facility in the total system or subsystem carefully adjusted to present and probable future sludge loadings.

- Primary emphasis should be placed on in-Region solutions to sludge management system development problems related to the environment, except in the sale of highly refined sludge products of value as fertilizers or soil conditioners in the economic marketplace.

#### *Inventory Findings*

The findings of the sludge management inventories were:

- There were in 1975 within the seven-county Region 61 public sewage treatment plants; 67 private sewage treatment plants using treatment processes similar to those used at the public plants; 80 industrial wastewater treatment facilities generating sludge by providing specialized treatment of industrial wastes; and 17 water supply treatment plants, all of which produced wastewater sludges. Altogether, these 225 sources generated about 390 dry tons of sludge per day. The 61 public sewage treatment plants generate about 350 dry tons per day, or 90 percent of the total sludge generated in the Region daily.
- Burial of sewage sludge in landfills is used exclusively by only 3 of the 61 public sewage treatment plants. One of these 3 plants incinerates the sludge prior to disposal of residue in a landfill. A total of 46 of these 61 public plants rely exclusively on land application or fertilizer and soil conditioner production for sludge disposal. The remaining 12 plants use a combination of the land application, landfill, and/or public pickup options for sludge disposal.
- Land within the Region is undergoing a conversion from rural to urban use at a rate of about 10 square miles per year. Much of this land conversion is occurring in a discontinuous and highly diffuse pattern, consisting largely of scattered low-density residential development. If it continues, this scattered growth will limit the availability of land acceptable for sludge application. Interpretive analyses conducted under the sludge management planning

program indicate that about one-third of the Region is covered by soils that are severely limited for land spreading of sludge.

### *Objectives and Design Standards*

Six regional wastewater treatment sludge management objectives, together with supporting principles and standards, were formulated under the regional wastewater sludge management planning effort. Although these objectives provide a broad framework for plan formulation and evaluation, it was necessary in the program to select engineering design criteria for use in the design of alternative system plans and in the comparison of such plans. These design criteria are set forth in SEWRPC Technical Report No. 18, State of the Art of Water Pollution Control in Southeastern Wisconsin, Volume Two, Sludge Management. That report describes techniques for sludge processing, transportation, utilization, and disposal, and sets forth criteria used in the analysis and screening of alternative system plans leading to the selection of the recommended regional sludge management plan.

### *Alternative Plans*

In preparing the recommended regional wastewater sludge management system plan, a concerted effort was made to prepare and offer for public examination all reasonable and physically feasible alternative plans that might satisfy the stated sludge management objectives. Alternatives were considered for the various types of sludge handling, treatment, and disposal-utilization processes, as were geographic alternatives concerning the degree of centralization of sludge management facilities. The following six geographic alternatives were considered in the study:

- Individual sludge management at each municipal sewage treatment plant.
- Subregional sludge management centers at six major municipal sewage treatment plants.
- Subregional sludge management centers at four major municipal sewage treatment plants.
- A subregional sludge management center serving six major municipal sewage treatment plants, with individual sludge management at all other plants.

- Subregional sludge management centers at seven major municipal sewage treatment plants, with one serving each county in the Region.

- A single centralized sludge management facility for the entire Region.

One sludge processing alternative examined for each alternative geographic sludge management plan involved the land application of wastewater sludges. As already noted, land application is now practiced for disposal of at least part of the sludges generated by 58 of the 61 municipal sewage treatment plants in the Region. An analysis was made to determine whether all the sludge anticipated to be generated in the Region by the year 2000 could be disposed of through land application. The key variables in determining the amount of land necessary for land spreading of sludge in the Region are the amount of heavy metals discharged into municipal sewerage systems by industries, the efficiency of the treatment systems in removing those metals from the waste stream, and the assimilation by crops of nitrogen as determined in part by the soil characteristics and by the selection of the crops grown by farmers whose lands are used for sludge spreading. The amount of land required for the spreading of sludge was estimated to range from 73,000 acres to 111,000 acres, depending upon the amount of heavy metals removed in the treatment process. The Region contains about 358,000 acres of land having only slight to moderate limitations for sludge application. Thus, even under the most limiting assumptions, it would appear that there exists within the seven-county Region at least three times the amount of land needed to accommodate land disposal of the amount of sewage sludges that can be expected to be generated within the Region by the year 2000.

### *Recommended Plan*

The recommended wastewater sludge management element contains proposals for the management and disposal of municipal sewage treatment plant sludges, private sewage treatment plant sludges, industrial facility sludges, water treatment plant sludges, and septage and holding tank wastes.

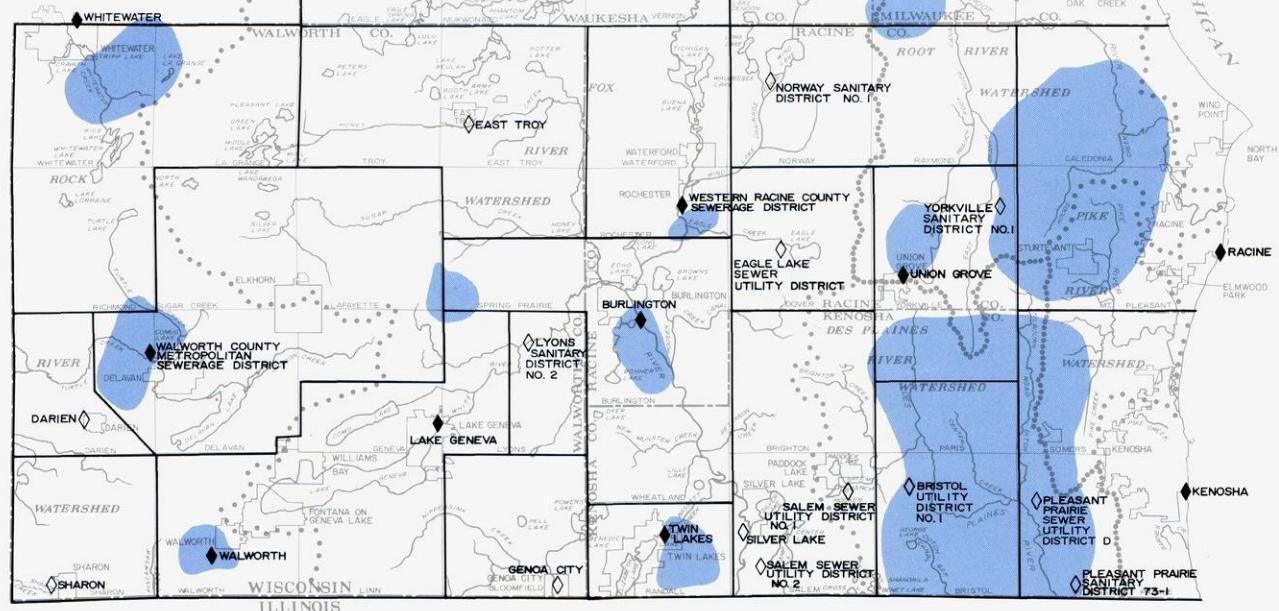
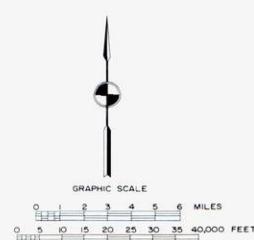
#### *Public and Private Sewage Treatment Plants—Primary Recommendations*

As noted above, six geographic alternatives were considered for sludge management at the public sewage treatment plants. The alternatives differ in

**RECOMMENDED SLUDGE  
MANAGEMENT PLAN ELEMENT  
FOR THE REGION: 2000**

**LEGEND**

- ◆ MAJOR SEWAGE TREATMENT FACILITY
- ◆ OTHER SEWAGE TREATMENT FACILITY
- BOUNDARY OF ALLOCATION AREA FOR SEPTAGE DISPOSAL AT PUBLIC SEWAGE TREATMENT FACILITIES
- GENERAL LAND APPLICATION AREA DESIGNATED FOR MAJOR SEWAGE TREATMENT FACILITY OTHER THAN THE JONES ISLAND AND SOUTH SHORE FACILITIES OPERATED BY THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT
- REMAINING GENERAL LAND APPLICATION AREA DESIGNATED FOR USE BY THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT



the degree of centralization of sludge management. The evaluation of these alternatives included an analysis of the capital and operation and maintenance costs, as well as of noneconomic environmental considerations, associated with each alternative. Based upon these analyses, it was apparent that no substantial economies could be gained by any significant degree of centralization of sludge management. Accordingly, the alternative involving the provision of individual sludge management facilities at each municipal sewage treatment plant was selected to be refined and detailed as the primary element of the final recommended regional sludge management plan.

The primary sludge management process recommendations contained in the plan for each of the 22 major public sewage treatment facilities are summarized in the accompanying table. The following six sludge management processes were selected for use at plants throughout the Region:

1. Sludge dewatering, incineration, and landfill of residue.
2. Sludge digestion and land application in liquid form.
3. Sludge digestion, dewatering, and land application in partially dried form.
4. Sludge digestion, dewatering, and landfill in partially dried form.
5. Sludge dewatering, composting, and marketing of compost.
6. Sludge dewatering and production and marketing of commercial fertilizer.

The majority of the sludge generated in the Region is now and will continue to be generated at the Jones Island and South Shore sewage treatment plants operated by the Milwaukee Metropolitan Sewerage District. The final plan recommends that about one-half of the design year 2000 sludge loading at the Jones Island plant continue to be dewatered and used in the production and marketing 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 design year 2000 sludge loading be dewatered and used in the production and marketing of compost, with the remaining 80 percent being digested, dewatered, and disposed of by landfill.

Of the 20 largest public sewage treatment plants in the Region, excluding the two Milwaukee Metropolitan Sewerage District plants, one—Brookfield—is recommended to continue using a process involving sludge dewatering, incineration, and landfill of ash in combination with digestion, dewatering, and land application in partially dried form. The recommendation to provide for land application of partially dried sludge was included in order to provide flexibility in the sludge management system at this plant and to provide capacity to handle sludge during periods of maintenance on the incineration system. At 11 plants—Cedarburg, Grafton, Hartford, Kenosha, Lake Geneva, Oconomowoc, Racine, South Milwaukee, Union Grove, Waukesha, and Whitewater—the plan recommends that the sludge be digested, dewatered, and applied to land in a partially dried form. At two plants—Port Washington and the Walworth County Metropolitan Sewerage District—the plan recommends that the sludge be digested and applied to land in a liquid form. At five plants—Burlington, Twin Lakes, Walworth, the Delafield-Hartland Water Pollution Control Commission, and the Western Racine County Sewerage District—the plan recommends an appropriate combination of two processes: sludge digestion and land application in liquid form, and sludge digestion, dewatering, and land application in a partially dried form. At the one remaining plant—West Bend—the plan recommends an appropriate combination of two processes: sludge digestion, dewatering, and land application in a partially dried form, and sludge digestion, dewatering, and landfill in a partially dried form.

In addition to the foregoing recommendations for the 22 major sewage treatment facilities, the regional sludge management plan contains generalized recommendations for the remaining 26 public and 34 private plants. These general recommendations are based on the climatologic and soil characteristics of the Region. The plan recommends that each of the small public sewage treatment plants and the private sewage treatment plants examine specific options for the management of sludge in more detailed local studies.

#### Public and Private Sewage Treatment Plants—Auxiliary Recommendations

In addition to the foregoing primary sludge management plan recommendations, the plan contains the following auxiliary sludge management recommendations.

**SUMMARY OF PRIMARY SLUDGE MANAGEMENT PROCESS RECOMMENDATIONS  
AT THE MAJOR PUBLIC SEWAGE TREATMENT PLANTS IN THE REGION**

Major Public Wastewater Treatment Plant	Recommended Primary Sludge Management Process					
	Dewatering, Incineration, and Landfill of Residue	Digestion and Land Application in Liquid Form <sup>a</sup>	Digestion, Dewatering, and Land Application in Partially Dried Form <sup>a</sup>	Digestion, Dewatering, and Landfill in Partially Dried Form	Dewatering, Composting, and Marketing of Compost	Dewatering and Production and Marketing of Commercial Fertilizer
Kenosha County						
City of Kenosha . . . . .	--	--	X	--	--	--
Village of Twin Lakes . . . . .	--	X	X	--	--	--
Milwaukee County						
Milwaukee Metropolitan						
Jones Island . . . . .	--	--	X	--	--	X
Milwaukee Metropolitan						
South Shore . . . . .	--	--	--	X	X	--
City of South Milwaukee . . . . .	--	--	X	--	--	--
Ozaukee County						
City of Cedarburg . . . . .	--	--	X	--	--	--
Village of Grafton . . . . .	--	--	X	--	--	--
City of Port Washington . . . . .	--	X	--	--	--	--
Racine County						
City of Burlington . . . . .	--	X	X	--	--	--
City of Racine . . . . .	--	--	X	--	--	--
Village of Union Grove . . . . .	--	--	X	--	--	--
Western Racine County Sewerage District . . . . .	--	X	X	--	--	--
Walworth County						
Walworth County Metropolitan						
Sewerage District . . . . .	--	X	--	--	--	--
City of Lake Geneva . . . . .	--	--	X	--	--	--
Village of Walworth . . . . .	--	X	X	--	--	--
City of Whitewater . . . . .	--	--	X	--	--	--
Washington County						
City of Hartford . . . . .	--	--	X	--	--	--
City of West Bend . . . . .	--	--	X	X	--	--
Waukesha County						
City of Brookfield . . . . .	X	--	X	--	--	--
Delafield-Hartland . . . . .	--	X	X	--	--	--
City of Oconomowoc . . . . .	--	--	X	--	--	--
City of Waukesha . . . . .	--	--	X	--	--	--

<sup>a</sup> Sludge lagoons generally are included in the recommendations for treatment plant facilities under the category of sludge digestion and land application in liquid form. This allows the option of transporting partially dried sludge from the lagoon as an alternative to liquid sludge transport. Conversely, plants included under the category of transport of partially dried sludge following vacuum filters, filter presses, centrifuges, or sand beds generally will have the option of bypassing the dewatering step and then transporting sludge in liquid form.

- Landfilling is recommended as a standby disposal process in the event land spreading could not be carried on. At present, there is insufficient available landfill capacity in the Region to handle large volumes of sludge, should landfilling be required for extended periods of time. Accordingly, the plan recommends that "backup" landfill sites be identified under county solid waste management planning programs and ultimately be made available for sludge management use, particularly for short-term emergency situations.
- Additional storage capacity for liquid or partially dried sludge should be developed on a case-by-case basis at plant sites or in remote locations near land spreading areas to accommodate problems that may arise as a result of severe weather conditions or special cropping practices.
- Joint use of land spreading sites should be explored on a case-by-case basis by those municipal sludge management operations recommended to use land spreading for sludge management.
- Contaminant control programs for heavy metals and toxic substances should be developed, implemented, and enforced by municipalities where such action will result in an improved sludge quality and thereby assist in long-term land application.
- An information storage and retrieval system should be developed to produce a complete record of where, when, and in what amounts sludge of known composition has been applied to a given parcel of land.

#### Industrial Wastewater Treatment Plant Sludges

General recommendations for the management of industrial pretreatment sludges are set forth in the plan. Industries should be encouraged to recycle materials to reduce the material entering the pretreatment process and the sewerage system, to recover valuable materials wherever practicable, and to reduce the quantities of waste materials entering the environment. With proper pretreatment, source control, or other contaminant control measures, industries presently discharging to a municipal treatment facility generally may continue to do so; however, the operator of

a municipal treatment plant should receive prior notice of any major industrial process change that might affect the existing treatment. Those sludges containing heavy metals or toxic substances in amounts sufficient to preclude land spreading should be landfilled at approved sites with proper measures to safeguard both groundwater and surface water quality.

#### Water Treatment Plant Sludges

Water treatment plant sludges do not at the present time and are not anticipated in the future to constitute a significant problem for disposal. The plan recommends that water treatment plant sludges be discharged to the nearest sewerage system providing that the rates of discharge are controlled to avoid disruption of the sewage treatment process. As of 1975, 11 of the 17 major municipal water treatment plants in the Region discharged sludge to a municipal sanitary sewerage system. Since all of the six remaining plants are located in areas serviced by sanitary sewers, it is recommended that these remaining plants dispose of sludges through the sewer system.

#### Septage and Holding Tank Wastes

Septage constitutes a relatively small part of the total wastewater sludge generated within the Region. In the year 2000, assuming substantial implementation of the regional land use plan and the point source pollution abatement element of the areawide water quality management plan, septage and holding tank wastes will approximate 70 tons of wet solid, or 2.8 tons of dry solids, per day. All of the existing and proposed public treatment plants in the Region are capable of providing capacity to receive controlled quantities of septage and holding tank wastes, although no plant should receive more than 10 percent of its average influent flow from such wastes. It is recommended that the facilities plans developed for each public sewage treatment plant consider the facilities needed to receive septage and holding tank wastes for treatment. The surface spreading of septage as an alternative to discharge of septage into public sewerage systems was rejected in the planning process, since septage can be only partially stabilized and could constitute a public health hazard. Accordingly, the plan recommends that all septage and holding tank wastes be discharged to public sanitary sewerage systems.

### *Local Adoption of Sludge Management Plan*

During 1978 the regional wastewater sludge management plan was formally adopted by the Common Councils of the Cities of Kenosha, Oconomowoc, and Port Washington and the Village Boards of the Villages of Grafton, Hartland, and River Hills. In addition, the plan was endorsed by the Wisconsin Solid Waste Recycling Authority and the Wisconsin Department of Local Affairs and Development.

### Assistance in Local Sewerage Facilities Planning

During 1978 the Division staff 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 Water Pollution Control Act, as well as the requirements of the Wisconsin Department of Natural Resources in support of the administration of the Wisconsin Fund that was established by the State Legislature during 1978. The Division staff activities in this respect included the provision of basic economic, demographic, land use, and natural resource base data; the extension of the preliminary findings and recommendations of the areawide water quality management plan with respect to sewer service areas, cost-effective treatment plant and trunk sewer configurations, and treatment plant capacities and levels of treatment to be provided; and the review and comment on draft reports emanating from the facilities planning efforts. Sewerage facility planning efforts were underway in the Region during 1978 for the following communities: the Cities of Brookfield, Cedarburg, Kenosha, Lake Geneva, Port Washington, Racine, and South Milwaukee; the Villages of Belgium, Darien, Dousman, East Troy, Fontana, Fredonia, Genoa City, Grafton, Nashotah, Newburg, Paddock Lake, Twin Lakes, Walworth, and Williams Bay; the Town of Lyons Sanitary District No. 2; the Town of Salem Sewer Utility District No. 2; the Milwaukee Metropolitan Sewerage District; and the Western Racine County Sewerage District.

The sewerage facilities planning effort being conducted by the Milwaukee Metropolitan Sewerage District constituted a particularly large and important effort requiring Commission staff assistance and participation. In addition to serving as members of several District advisory committees, including the Technical Advisory Committee for the Combined Sewer Overflow

Abatement Project, the Grants Policy Committee, 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 between the Milwaukee Metropolitan Sewerage District and the Regional Planning Commission. Four major Commission staff activities are provided for in the agreement: the provision of technical information, the provision of technical planning assistance services, the provision of water quality simulation modeling services and related analyses, and the provision of air quality simulation modeling services. Because of the accelerated sewerage facilities planning schedule of the Milwaukee Metropolitan Sewerage District in order to meet orders issued by the U. S. District Court of Northern Illinois and the Dane County Circuit Court, the Commission staff was required to give a high priority and extensive level of effort to the support of this program.

The Commission staff also served as members of Technical Advisory Committees on Combined Sewer Overflow Abatement Projects for the Cities of Kenosha and Racine. In addition, the Commission staff provided extensive support to an intergovernmental coordinating committee established to provide policy guidance to the sewerage facilities planning program being conducted by the City of Cedarburg, the Village of Grafton, and the Towns of Cedarburg and Grafton.

### Public Participation in Water Quality Management Planning

Extensive public involvement activities were included in the conduct of the areawide water quality management planning effort during 1978. In a continuing joint effort with the University of Wisconsin-Extension, which included the assignment of a fulltime extension agent to the Commission staff, a public awareness and involvement program was conducted during the year. This program involved the development of SEWRPC Newsletters, fact sheets, educational television/telephone network programs, workshop meetings, television and radio talk shows, local government meetings, and presentations at meetings of various interest groups. Displays on water quality management problems were prepared and set up at such events as the Wisconsin State Fair and the Milwaukee Home Show. In addition, an extensive public information effort was made following the completion of the regional wastewater sludge

management plan, including the conduct of a day-long regional planning conference and a public hearing.

#### IJC Menomonee River Pilot Watershed Study

The Menomonee River pilot watershed study was a cooperative effort of the Wisconsin Department of Natural Resources, the University of Wisconsin Water Resources Center, and the Commission under the direction of the International Joint Commission, a Commission established in 1904 by treaty between the governments of Canada and the United States. The study, completed during 1978, was primarily a research endeavor with emphasis on determining the effects of land use patterns on Great Lakes water quality. A total of seven pilot studies were conducted, one of which was for the Menomonee River watershed in southeastern Wisconsin.

The principal objectives of the Menomonee River pilot watershed study were:

- To determine the levels and quantities of major and trace pollutants, including nutrients, pesticides, and sediments, reaching the stream systems tributary to the Great Lakes.
- To identify the sources and evaluate the behavior of pollutants from an urban complex on stream water quality, with particular emphasis on the potential impact of residential, commercial, and industrial land use development, including supporting utility and transportation facilities, and of construction activities associated with rapid urbanization.
- To develop the predictive capability necessary to facilitate extension of the findings of the Menomonee River pilot watershed study to other urban settings, leading to an eventual goal of accurately estimating pollution inputs from urban sources for the entire Great Lakes basin.

During 1978 the following contributions were made to this study:

- Provision of maps and tabular data concerning drainage area, land use, soil type, slope, percent impervious area,

population, precipitation, temperature, degree of soil erosion, soil permeability, hydrologic soil group, depth to water table, and urban nonpoint sources of water pollution.

- Participation in technical reporting and coordination meetings.
- Development of techniques for estimating quantities of nonpoint source pollutants from urban areas.
- Evaluation of the possible impact of the IJC findings on water quality management in southeastern Wisconsin.

#### Washington County Sediment and Erosion Control Study

During 1978 the Division staff participated in a research and demonstration project conducted by the Wisconsin State Board of Soil and Water Conservation Districts and the University of Wisconsin System dealing with control of diffuse, or nonpoint, water pollution sources, particularly sources of sediment. This study, commonly known as the Washington County project, had the following principal objectives:

- To demonstrate through a monitoring program the effectiveness of land use control techniques in improving surface water quality.
- To develop a model sediment control ordinance for application on a countywide basis.
- To determine the combination of institutional elements required to implement the model sediment control ordinance on a countywide basis.
- To develop a listing of the personnel required and the level of technical assistance needed to implement a countywide sediment control program using a regulatory approach.
- To develop and systematize the educational and information dissemination effort required to implement a sediment control program using a regulatory approach.

- To estimate the water quality benefits to be derived from the implementation of sediment control ordinances throughout the Great Lakes drainage basin, and to develop educational materials useful for implementing sediment control programs.

During 1978 the staff assisted in a resource inventory and nonpoint source problem assessment for Washington County. The analyses conducted by the staff included an identification of subwatersheds within the County that have nonpoint source problems, a ranking of subwatersheds as to the severity of water quality problems, a determination of the information required by local officials to implement effective nonpoint source pollution abatement programs, a comparison of measured and simulated water quality data to recommended water quality standards, and the completion of water quality management plans for all lakes greater than 50 acres in size in the County.

The staff continued to develop a demonstration local nonpoint source implementation program for the Kewaskum Creek subwatershed. Efforts conducted under this program included a comparison of measured and simulated water quality data to recommended water quality standards; the conduct of water quality simulation model applications; an evaluation of the model application results; analyses of the nonpoint source abatement needs; and the collation, assembly, and analysis of hourly precipitation data for use in water quality and pollution sources evaluations.

The staff also assisted in the completion of a nonpoint source pollution abatement plan for the Tri-Lakes area in Washington County, which was extensively studied in cooperation with the Wisconsin Department of Natural Resources. In the Big Cedar Lake drainage area, field inspections were conducted and alternative agricultural nonpoint source control measures were designed in cooperation with Washington County project staff, the County Soil and Water Conservation District, and the Wisconsin Department of Natural Resources.

#### **Water Quality Monitoring Program**

Since 1964 the Commission has maintained a water quality monitoring effort within the Region to assess long-term trends in water quality conditions. Pending the completion of the areawide water quality management plan and the recommen-

dations to be contained therein for continuing planning and water quality sampling, no field sampling effort was conducted during 1978. The Commission staff, however, did meet with the Wisconsin Department of Natural Resources, Southeast District staff, to discuss this matter. It was agreed that the river basin survey as well as waste load allocation study efforts of the Wisconsin Department of Natural Resources should be combined with the Commission's water quality sampling activities in order to ensure the most effective and efficient public water quality sampling effort. In addition, the Commission staff worked with the Milwaukee Metropolitan Sewerage District and the University of Wisconsin-Milwaukee to ensure that the water quality sampling efforts being undertaken as part of the facilities planning by the District itself and by the University through a contract from the District would fully meet the water quality data needs of the estuary study proposed by the Commission.

#### **WATERSHED AND FLOODLAND MANAGEMENT PLANNING**

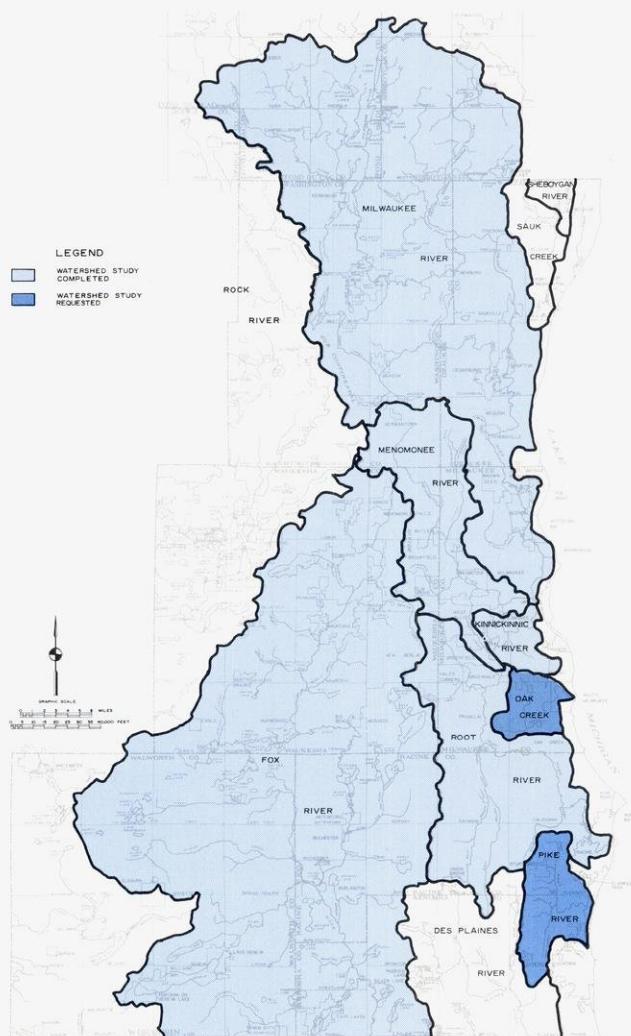
In 1978 Division staff efforts under the watershed and floodland management planning category were largely concentrated on the completion of a comprehensive plan for the Kinnickinnic River watershed and of a floodland management plan for the Village of Pewaukee as an amendment to the previously adopted comprehensive plan for the Fox River watershed. In addition, work was undertaken in response to requests for watershed studies of the Oconomowoc River and the Pike River watersheds. Other work included the provision of data to engineering firms and other governmental agencies for use in federally required flood insurance rate studies and in the conduct of a continuing stream gaging program.

In a related work effort, a prospectus was completed for a Lake Michigan estuary and direct drainage area subwatersheds planning program. This work effort is discussed in another section of this annual report under the heading "Coastal Management Planning."

#### **Kinnickinnic River Watershed Study**

During 1978 all work was completed on a comprehensive plan for the Kinnickinnic River watershed. This work effort was conducted by the Commission in response to a request by the Common Council of the City of Milwaukee to provide

## SEWRPC WATERSHED STUDY STATUS



recommendations for the resolution of the serious and costly flooding and pollution problems that exist in this heavily urbanized watershed. The findings and recommendations of the study are set forth in SEWRPC Planning Report No. 32, A Comprehensive Plan for the Kinnickinnic River Watershed, published in December 1978, following a public hearing on the plan held on October 12, 1978.

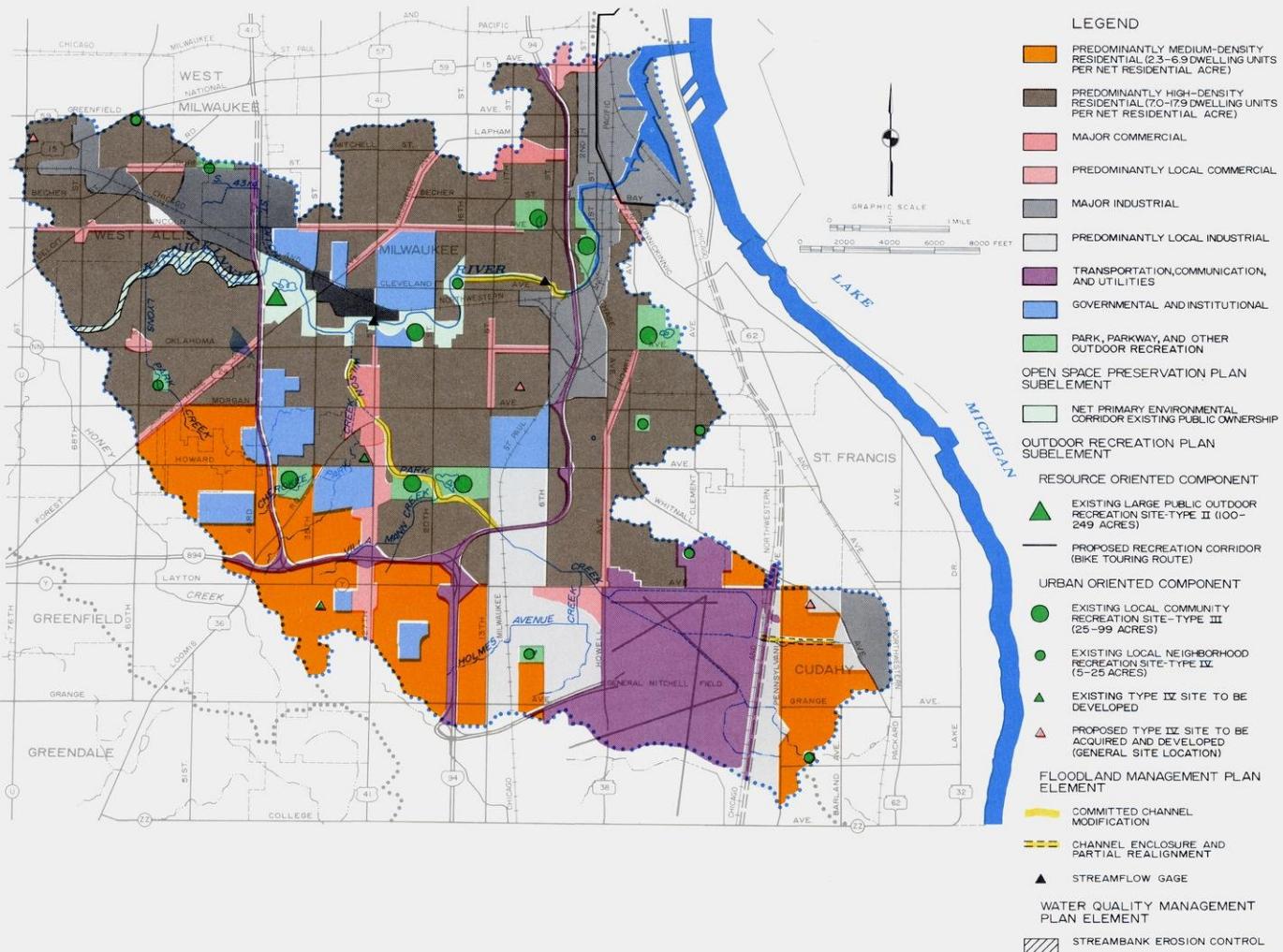
The recommended comprehensive plan for the Kinnickinnic River watershed consists of a land use plan element, a floodland management plan element, and a water quality management plan element. The land use plan element is summarized on the accompanying map and contains the following major proposals:

- Implementation of the recommended regional land use plan for the year 2000 adopted by the Commission in 1977. This land use plan element would efficiently meet future needs for various land uses within the watershed by allocating sufficient land to each of the various major land use categories to satisfy the known and anticipated demand for each use. While the highly urbanized nature of the Kinnickinnic River watershed does not allow for significant additional urban development, sound land use planning is particularly important in the watershed to preserve the positive aspects of the existing land uses and land use patterns and to resolve those negative aspects of the existing conditions, including environmental problems, that detract from the overall quality of life in this urban basin. Under the recommended plan the anticipated demand for urban land uses would be accommodated through the conversion to urban use of about one square mile of existing "unused" open lands and, as necessary and desirable, renewal and redevelopment of existing urban areas.

- Continued maintenance and preservation in park and open space uses of the 325 acres of existing net primary environmental corridor along the Kinnickinnic River from S. 16th Street to S. 69th Street, and protection through public land use regulations of that portion of the primary environmental corridor along the Lake Michigan shoreline, about 232 gross acres, crossing the eastern limits of the watershed.

- The development of the four-mile segment of the recommended recreational corridor across the eastern end of the watershed in a generally north-south direction, continued maintenance of Jackson Park as a large general use outdoor recreation site, continued use of the 16 existing community and neighborhood parks, completion of the development of two existing neighborhood parks, acquisition and development of three new neighborhood parks, and the development of boat launching ramps and mooring facilities in the estuary portion of the watershed.

## RECOMMENDED COMPREHENSIVE PLAN FOR THE KINNICKINNICK RIVER WATERSHED: 2000



The floodland management element of the Kinnickinnic River watershed includes the following major proposals:

- Completion of the committed flood control works on the Kinnickinnic River consisting of the removal without replacement of 10 bridges and the removal and replacement of four bridges, and the construction of earthen berms, concrete floodwalls, and channel improvements as necessary to provide two feet of freeboard in that reach of the Kinnickinnic River between S. 5th Street extended and S. 16th Street.

- Completion of the committed flood control works on Wilson Park Creek consisting of ultimate channel improvements with concrete linings along that portion of Wilson Park Creek from W. Euclid Avenue to S. 6th Street.
- The resolution of flooding problems along the Wilson Park Creek (Edgerton Channel) reach in the City of Cudahy through its partial realignment and enclosure as shown on the accompanying map.
- Establishment of a program of periodic cleaning and maintenance of stream

COMMITTED CHANNEL MODIFICATIONS IN THE KINNICKINNICK RIVER WATERSHED:  
KINNICKINNICK RIVER FROM S. 5TH STREET EXTENDED TO S. 16TH STREET

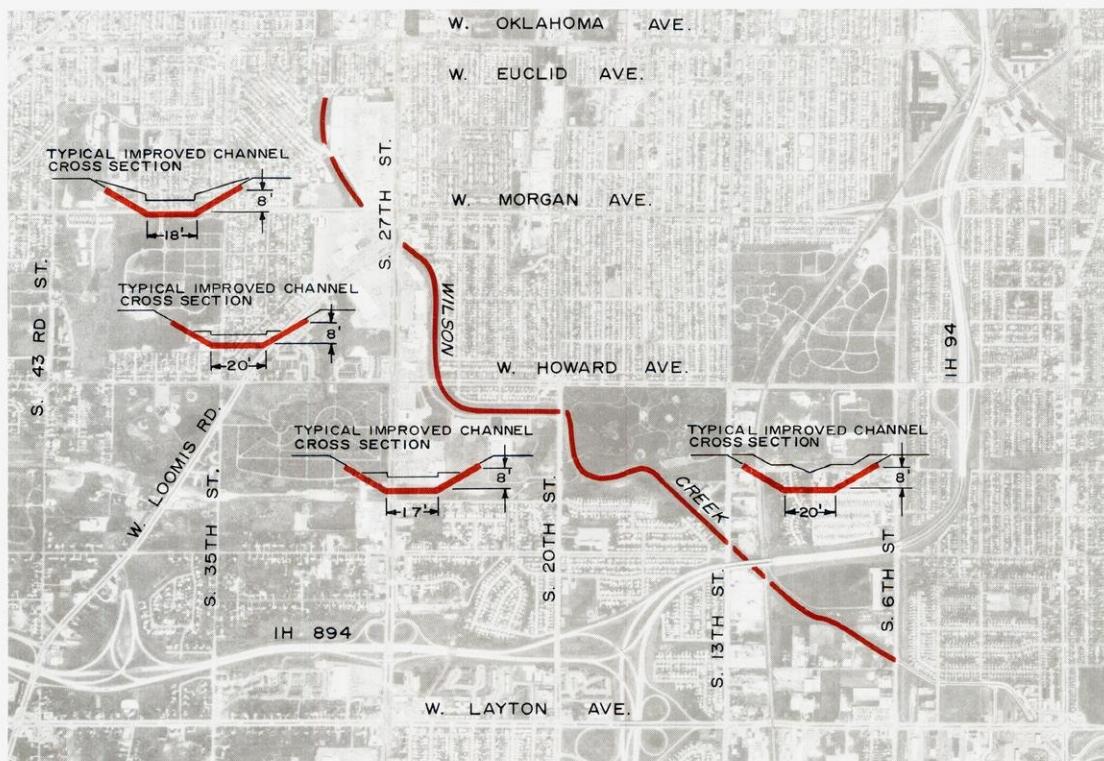


LEGEND

- BRIDGE REMOVAL WITHOUT REPLACEMENT
- BRIDGE REPLACEMENT
- DIKES OR FLOODWALLS AS NECESSARY
- CHANNEL RECONSTRUCTION
- MINOR CHANNEL ALTERATION



COMMITTED CHANNEL MODIFICATIONS IN THE KINNICKINNICK RIVER WATERSHED:  
WILSON PARK CREEK FROM W. EUCLID AVENUE TO S. 6TH STREET

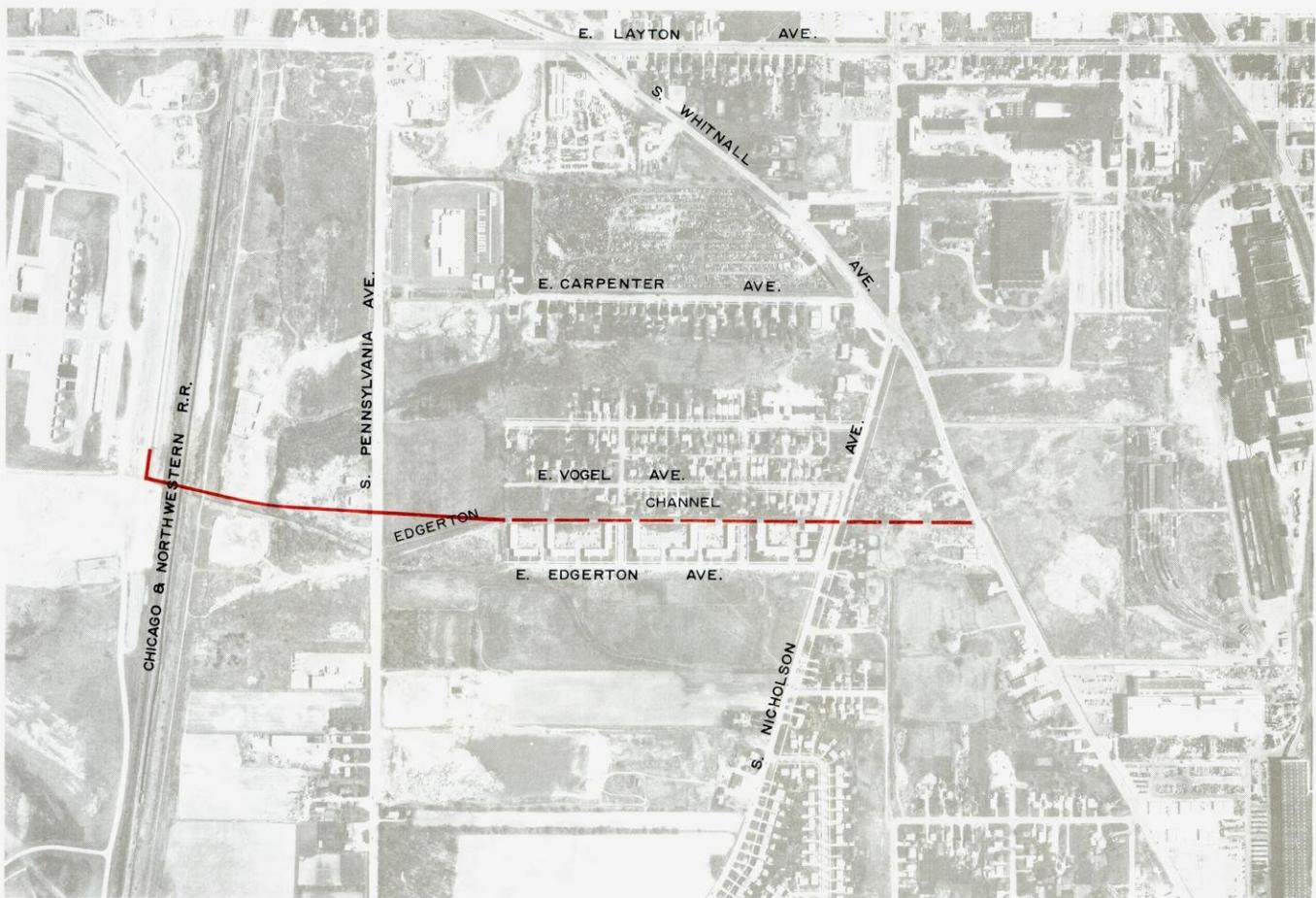


LEGEND

- CHANNEL MODIFICATION WITH CONCRETE LINING

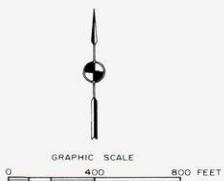


## CHANNEL ENCLOSURE ALONG THE EDGERTON CHANNEL IN THE CITY OF CUDAHY



### LEGEND

- DOUBLE 10 FOOT WIDE BY 6 FOOT HIGH BOX CONDUITS ON 0.0012 FOOT/FOOT SLOPE
- - - 10 FOOT WIDE BY 6 FOOT HIGH BOX CONDUIT ON 0.032 FOOT/FOOT SLOPE



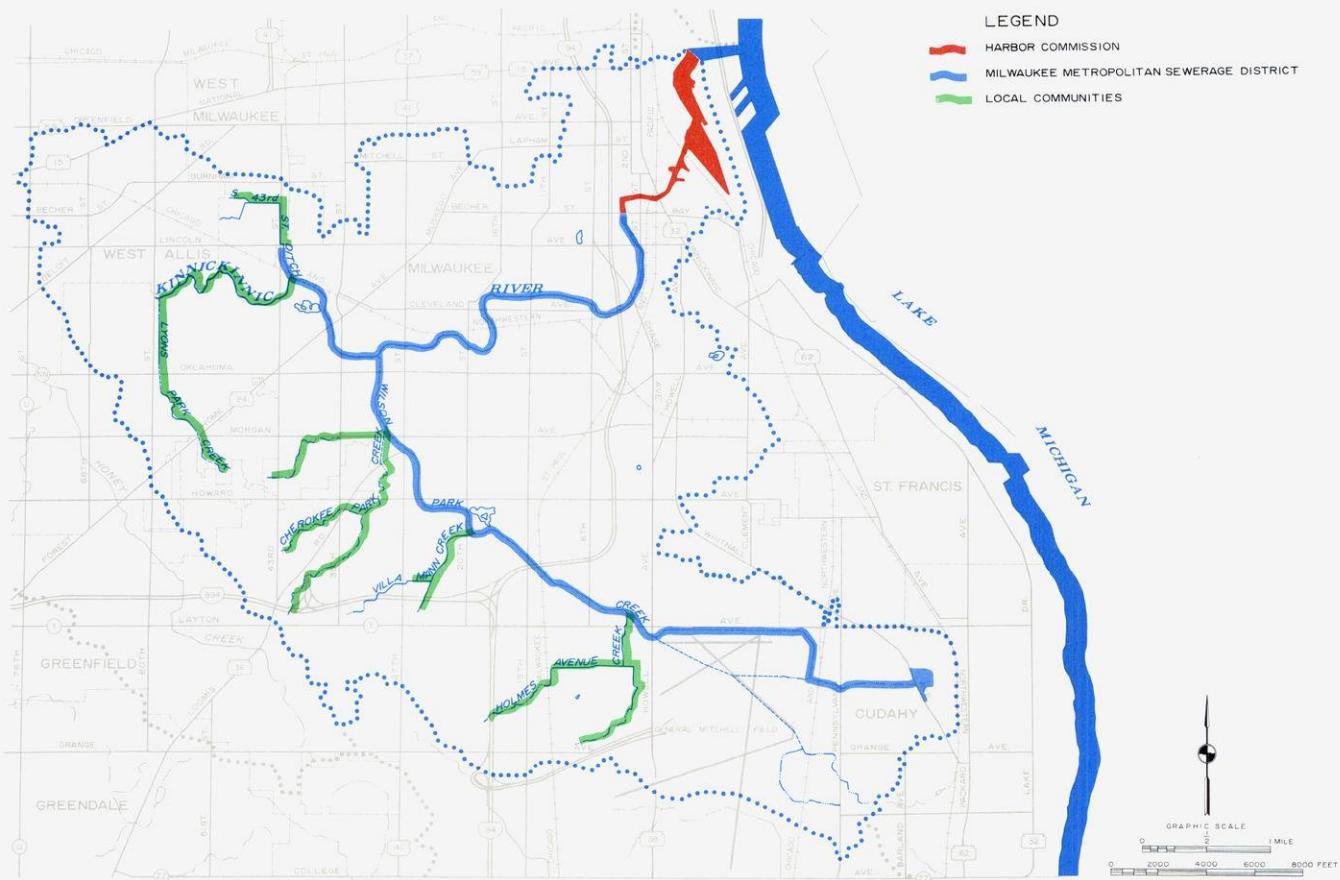
channels and bridge and culvert waterway openings by those civil divisions and governmental units within the watershed having jurisdiction over the watershed stream system. The recommended jurisdictions are indicated on the accompanying map.

- Establishment along the lower Kinnickinnic River of a new flood protection elevation at least two feet above the 100-year recurrence interval peak flood stage profile under the year 2000 land use plan conditions as that profile is set forth in SEWRPC Planning Report No. 32.

The water quality management plan element for the Kinnickinnic River watershed includes the following major proposals:

- The abatement of combined sewer overflows that currently discharge untreated sewage to the Kinnickinnic River through the 22 known outfalls. The watershed plan recommends that upon adoption by all parties concerned, the forthcoming recommendations from the preliminary engineering study on combined sewer overflow abatement being conducted by the Milwaukee Metropolitan Sewerage District be considered an integral part of the comprehensive watershed plan.

## RECOMMENDED CHANNEL MAINTENANCE JURISDICTIONS IN THE KINNICKINNICK RIVER WATERSHED



- The elimination of the 30 known separate sanitary sewer flow relief devices—crossovers, bypasses, and relief pumping stations—that currently discharge directly or indirectly to the Kinnickinnic River and its tributaries. Such sewage flow relief devices would be eliminated through necessary trunk and relief sewer construction.
- The elimination of the direct discharge of industrial wastes to the Kinnickinnic River and its tributaries from the 60 known existing industrial wastewater outfalls.
- An approximate 15 percent reduction in nonpoint source pollution through the implementation of the following land management measures: proper material storage and runoff control on industrial and commercial sites, control of sediment and debris during demolition and con-

struction activities, street deicing material control, public education programs, pet waste and litter control ordinances, proper application of chemical and organic fertilizers and pesticides to lawns, and the application of mineral soil conservation practices to the rural land remaining in the watershed.

- The application of measures designed to control sources of toxic and hazardous substances, including accidental spills and intermittent discharges through surface and flood drains connected to storm sewers and surface waters.

At year's end the Kinnickinnic River watershed plan was completed and being readied for adoption by the Regional Planning Commission and certification thereafter to the units and agencies of government concerned.

## **Pewaukee Floodland Management Study**

At the request of the Village of Pewaukee, the Commission undertook and completed in 1978 a special floodland management study as a refinement and extension of the Fox River watershed plan. The findings and recommendations of the Pewaukee study are documented in SEWRPC Community Assistance Planning Report No. 14, Floodland Management Plan for the Village of Pewaukee, published in February 1978.

The special Pewaukee area study examined alternative floodland management plans, providing a comparative evaluation of the technical, economic, and environmental features of each alternative. Each alternative plan was designed to resolve flooding problems along the Pewaukee River and the Pewaukee Lake outlet in the Village. The alternatives studied included floodwater storage utilizing Pewaukee Lake, structure floodproofing, minor channel modifications, major concrete-lined channel modifications, major turf-lined channel modifications, construction of dikes and floodwalls, and bridge and culvert alteration or replacement.

The structural flood control plan for the Village of Pewaukee consists of the following recommendations:

- Construction of a turf-lined channel, together with low earthen dikes and concrete floodwalls, along that reach of the Pewaukee River bounded at the upstream end by the Chicago, Milwaukee, St. Paul & Pacific Railroad crossing and at the downstream end by CTH SS, with the downstream two-thirds of this reach consisting of only minor channel bottom alterations. Major channel modifications will be required at the upstream portion of this reach of the Pewaukee River.
- Modification of the existing lake level control structure at Pewaukee Lake.
- Enclosure of the Pewaukee Lake outlet.
- Construction of low earthen dikes and concrete floodwalls along the eastern shore of Pewaukee Lake.
- Floodproofing of about 25 residential and commercial structures.

The recommended flood control plan was formally adopted by the Village Board of the Village of Pewaukee after review and recommendation by the Commission's Fox River Watershed Committee. The plan was subsequently adopted by the Commission as an amendment to the comprehensive plan for the Fox River watershed on June 1, 1978.

## **Oconomowoc River Watershed Study**

During 1978 the Commission pursued the possible conduct of a study that would result in a comprehensive plan for the Oconomowoc River watershed. A request for such a study had been previously received by the Commission from the Waukesha County Board of Supervisors. A preliminary draft prospectus for such a study was prepared and served as a focus for discussion by interested parties concerning the need for such a study. In considering this matter during its budget negotiations, the Washington County Board decided not to participate in the conduct of an Oconomowoc River watershed study at this time. Lacking a consensus among the county boards concerned over the conduct of the Oconomowoc River watershed study, the Commission at year's end had terminated all activity in connection with the proposed study.

## **Pike River Watershed Study**

Late in 1978 the Commission received formal requests from the County Boards of Supervisors of both Kenosha and Racine Counties to undertake a comprehensive study of the Pike River watershed. These requests cited in particular a need to resolve the serious and costly flooding and drainage problems that exist in this watershed. At year's end the Commission had authorized the creation of a Pike River Watershed Committee and charged that Committee with the responsibility of preparing a prospectus for the proposed study.

## **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 for major stream channels, not including stream channels in the Milwaukee River watershed

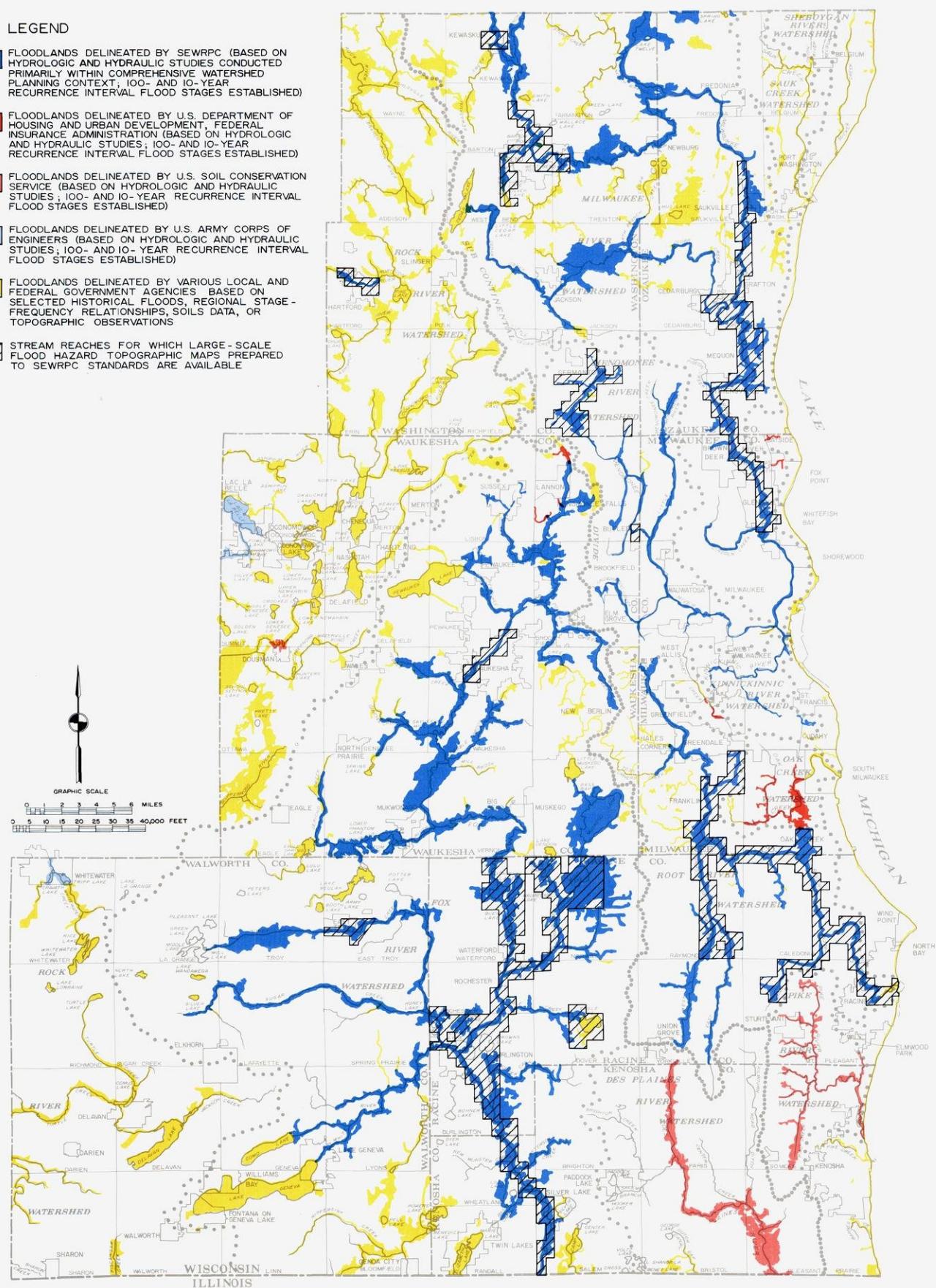
## DELINEATION OF FLOODLANDS: 1978

### LEGEND

- FLOODLANDS DELINEATED BY SEWRPC (BASED ON HYDROLOGIC AND HYDRAULIC STUDIES CONDUCTED PRIMARY 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



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



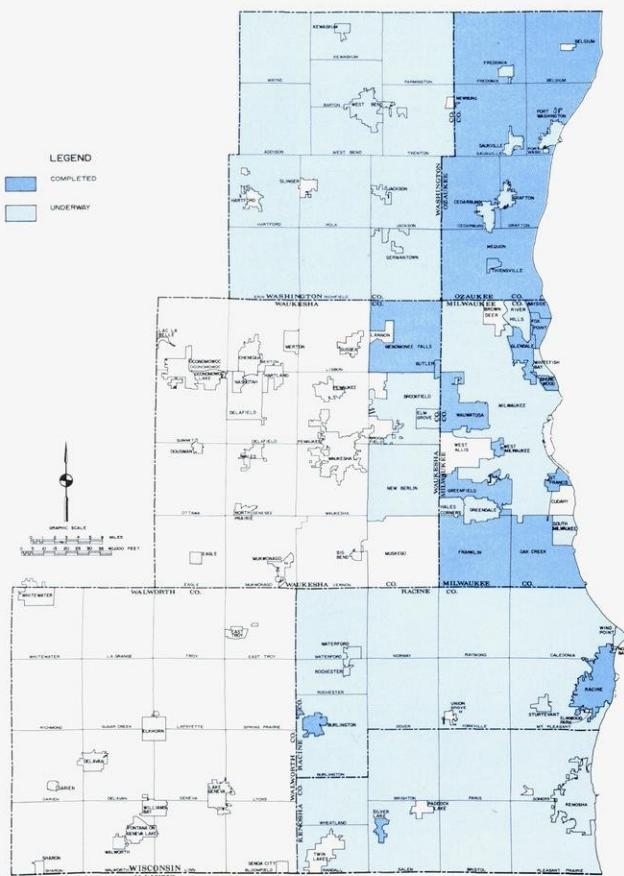
lying outside of the Region in Sheboygan and Fond du Lac Counties. In addition, a special Commission floodland management study completed for the City of Hartford has resulted in the delineation of floodlands for another four miles of stream channel. Large-scale flood hazard maps prepared to Commission specifications are available for about 33 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 was 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 Division 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 of Housing and Urban Development 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.

By the end of 1978, federal flood insurance rate studies were completed and underway for, respectively, 18 and 26 civil divisions in the Region, as shown on the accompanying map. Of the 26 studies in progress, four were completed in draft form by the end of 1978. These included studies for the Cities of Cedarburg and South Milwaukee and the Villages of River Hills and Whitefish Bay. The Division staff was involved not only in providing available data from the Commission files to the contractors conducting such studies, but in delineating floodways and

### STATUS OF FLOOD INSURANCE RATE STUDIES



attending meetings with local officials to discuss the conduct of, and results of, the flood insurance rate studies.

### Stream Gaging Program

Streamflow data are essential to the rational management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous recorder stream 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, 14 additional continuous recorder stream gages, which provide a basis for long-term records of streamflow. The locations of these 16 gages are identified on the accompanying map. All of these gages are maintained under a contract by the Commission with the U. S. Geological Survey, which publishes the data obtained. Local funds to

**LOCATION OF U. S. GEOLOGICAL SURVEY STREAM GAGING STATIONS: 1978**

## 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)

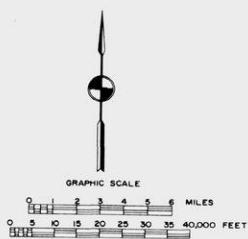
▲ CREST STAGE GAGE - COOPERATIVELY MAINTAINED BY U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF TRANSPORTATION (12)

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

1914 - PERIOD OF RECORD

4-0870 US 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



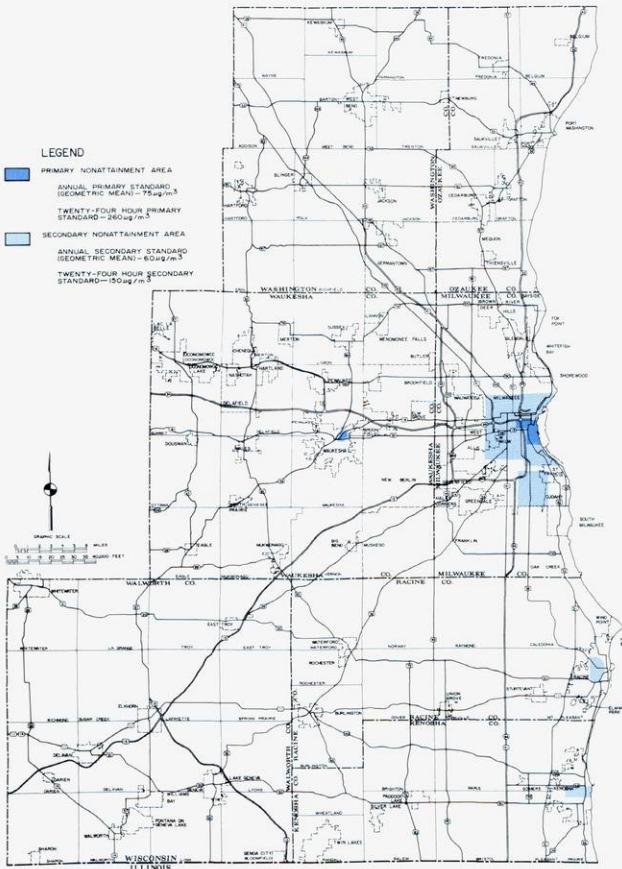
support the operation of the gages are provided by the Fond du Lac, Ozaukee, Racine, Washington, and Waukesha County Boards of Supervisors; the Milwaukee Metropolitan Sewerage District; and the Kenosha Water Utility.

## AIR QUALITY PLANNING

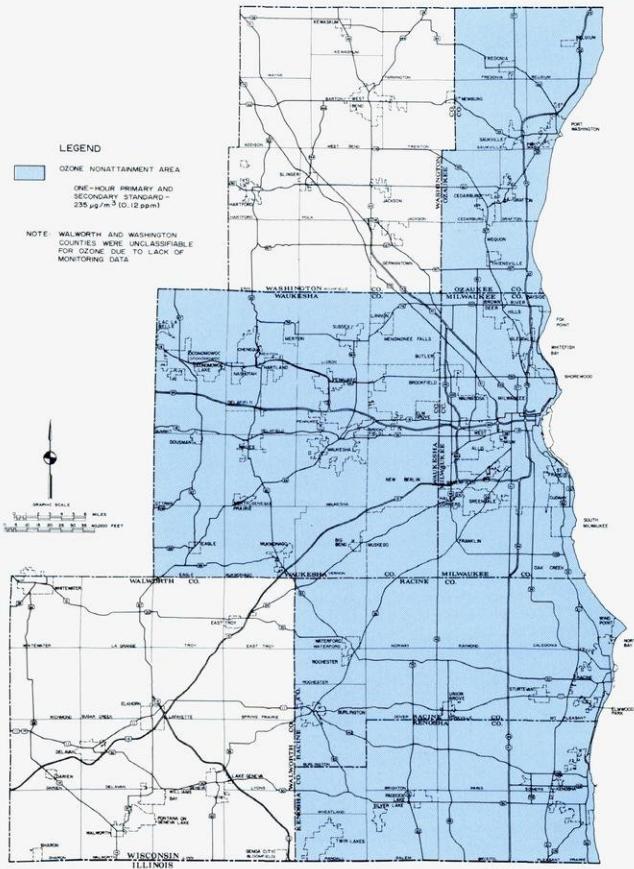
Work continued during 1978 on the preparation of a regional air quality maintenance plan. The plan is being prepared at the request of and in full cooperation with both the Wisconsin Departments of Natural Resources and Transportation. The plan is intended to meet the federal requirements that air pollution standards be adequately considered in transportation planning in urban regions and that areas either presently exceeding national ambient air quality standards, or having the potential to exceed such standards in the foreseeable future, be identified and that a plan be prepared to meet and maintain the air quality standards.

In the Federal Clean Air Act Amendments enacted into law by the U. S. Congress in August 1977, additional emphasis was placed upon the short-term attainment of the ambient air quality standards. The new legislation requires that states prepare implementation plans that provide for the attainment of the primary, or health-related, standards for pollutant species by December 31, 1982. In the case of carbon monoxide and ozone, states may request an extension to December 31, 1987, if attainment by the earlier date is impractical. The new legislation also provides for the designation of lead local agencies for air quality planning within urban areas. In May 1978 the Commission accepted designation by the Governor as the lead local agency for southeastern Wisconsin, agreeing to work cooperatively with both the Wisconsin Departments of Natural Resources and Transportation not only in the air quality maintenance planning effort but in the air quality standards attainment planning effort. Particular

## PRIMARY AND SECONDARY PARTICULATE MATTER NONATTAINMENT AREAS IN THE REGION: 1978



## PRIMARY OZONE NONATTAINMENT AREAS IN THE REGION: 1978

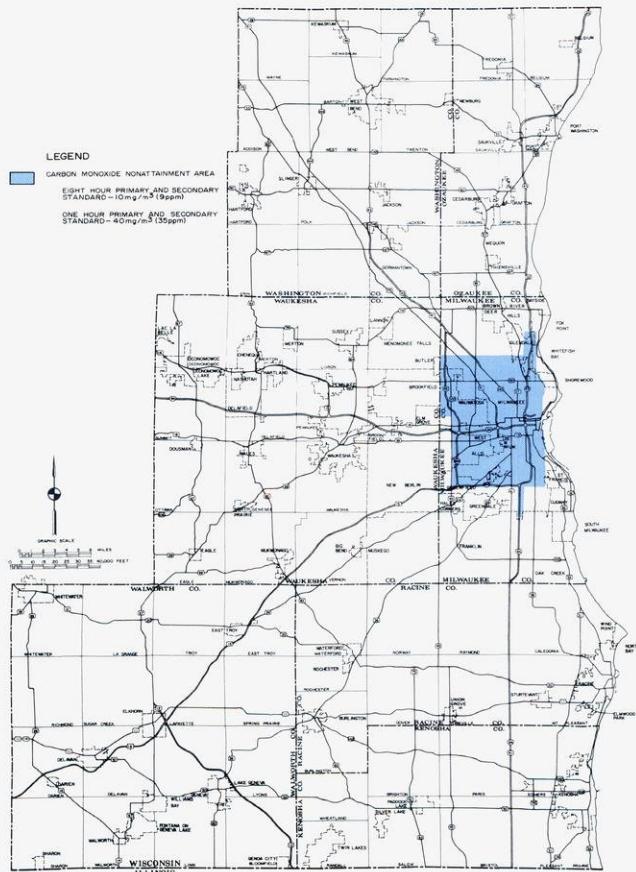


emphasis will be placed upon the evaluation of transportation system management measures for their impact on reducing carbon monoxide and hydrocarbon pollutant emissions.

The current air quality nonattainment areas in the Southeastern Wisconsin Region are shown on the accompanying series of maps. Taken together, the air quality standard attainment and maintenance planning efforts in southeastern Wisconsin are being designed to ensure that the federally mandated air quality planning standards are met as soon as practicable and are maintained once met.

In addition to the regional air quality attainment and maintenance planning efforts, the staff in 1978 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, the staff actively participated in the statistical analysis of air quality monitoring data obtained at eight sampling locations in the Valley during the study period of May 1977 through May 1978. Further technical assistance was also provided by the staff in the preparation and analysis of the data base used in the analysis of meteorological conditions prevailing during the study period. During 1979 the Commission will provide additional support to the City in analyzing the laboratory data on the chemical composition of selected filter pads to ascertain the probable origin of the monitored particulate matter levels, and in evaluating the effectiveness of selected fugitive dust emission controls in air quality simulation modeling.

### PRIMARY CARBON MONOXIDE NONATTAINMENT AREAS IN THE REGION: 1978



# 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 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 1978 conducted a number of activities in three identifiable areas: data collation and development, data provision and assistance, and census coordination.

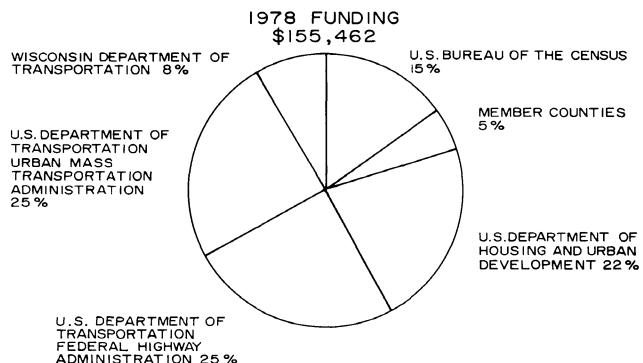
## DATA COLLATION AND DEVELOPMENT

During 1978 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, and Environmental Planning Division staffs in the conduct of major work programs by those divisions.

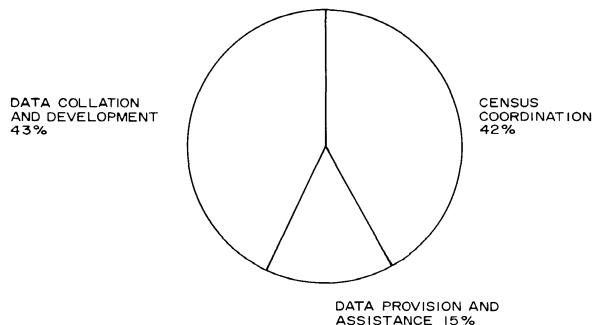
### Population

Based on current estimates of population prepared by the Wisconsin Department of Administration (DOA) it would appear that the regional population is no longer increasing and may be beginning to decline. In 1970 the Census-enumerated resident population of the Region was 1,756,100. In 1978

## PLANNING RESEARCH DIVISION



### DISTRIBUTION OF FUNDING TO WORK PROGRAMS



the estimated resident population of the Region was 1,770,500, or only 14,400 persons—less than 1 percent—above the 1970 level. There is increasing evidence that the Region's resident population peaked in about 1975 at an approximate level of 1,778,300 and has declined slightly since then. The Department of Administration has the responsibility for preparing 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 those income tax returns. The estimated regional population increase since the 1970 census has averaged about 1,800 persons annually. This average annual growth rate contrasts sharply with the average annual growth rate during the 1960 to 1970 decade of about 18,200 persons per year, and even more sharply with the average annual growth rate in the preceding decade of 33,300 persons per year.

While overall regional population growth has thus apparently come to a virtual halt, the distribution of the population within the Region has continued to change significantly. The populations of Ozaukee, Washington, and Waukesha Counties have each increased by 24 percent or more since 1970. The populations of Kenosha, Racine, and Walworth Counties have also grown since 1970 but at moderate rates of less than 10 percent. Milwaukee County's population has declined by about 10 percent, representing an absolute population loss of about 100,000 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 new regional land use and transportation plans, the overall population level of the Region was anticipated to reach about 1.85 million in 1978. The estimated 1978 population level of 1.77 million noted above is about 4 percent below the forecast level for that year. Comparisons of the estimated and forecast population levels by county are shown in the accompanying table and set of graphs.

The Commission's regional population forecast is based upon anticipated changes in the two basic components of population change: natural increase, or the difference between births and

#### REGIONAL POPULATION

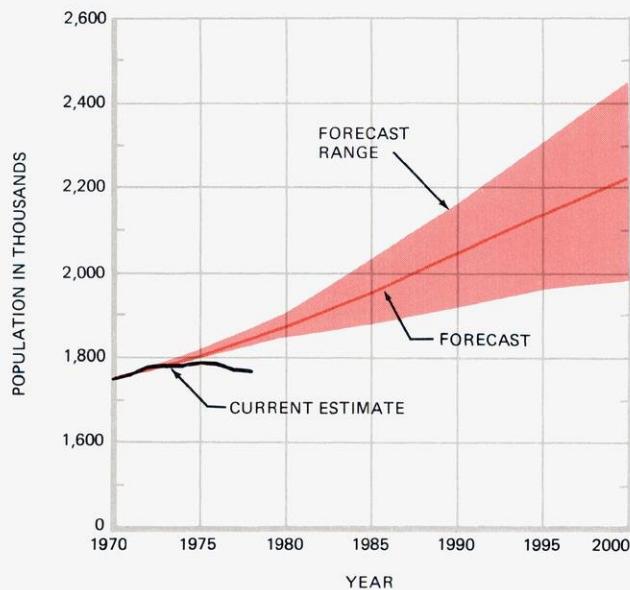
County	1970	1978	Difference 1970-1978	
			Number	Percent
Kenosha . . . .	117,917	126,244	8,327	7.06
Milwaukee . . . .	1,054,249	954,109	- 100,140	- 9.50
Ozaukee . . . .	54,461	70,431	15,970	29.32
Racine . . . . .	170,838	177,452	6,614	3.87
Walworth. . . .	63,444	69,161	5,717	9.01
Washington . . .	63,839	84,114	20,275	31.76
Waukesha . . . .	231,335	288,973	57,638	24.92
Total	1,756,083	1,770,484	14,401	0.82

Source: April 1, 1978 Wisconsin Department of Administration preliminary estimates.

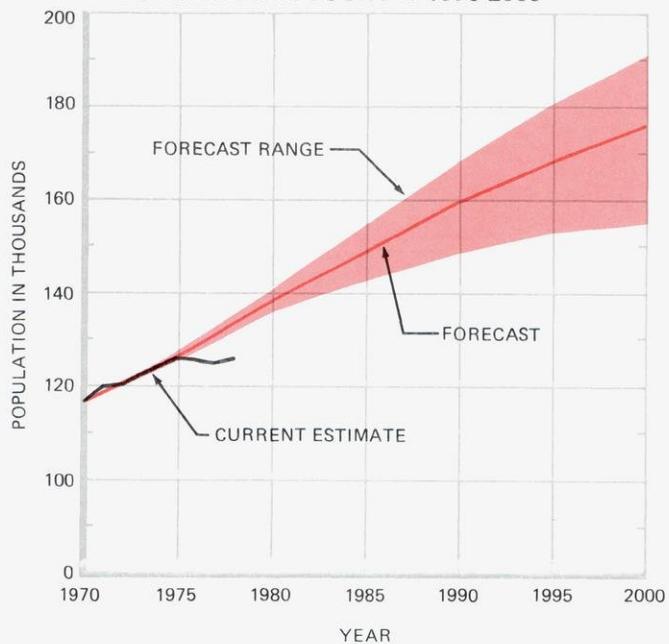
#### COMPARISON OF THE FORECAST AND ESTIMATED POPULATION

County	1978 Population		Difference: Estimate Minus Forecast	
	Forecast	Estimated	Number	Percent
Kenosha . . . .	134,640	126,244	- 8,396	- 6.24
Milwaukee . . . .	1,020,020	954,109	- 65,911	- 6.46
Ozaukee . . . .	71,840	70,431	- 1,409	- 1.96
Racine . . . . .	182,320	177,452	- 4,868	- 2.67
Walworth. . . .	72,420	69,161	- 3,259	- 4.50
Washington . . .	85,460	84,114	- 1,346	- 1.58
Waukesha . . . .	280,260	288,973	8,713	3.11
Total	1,846,960	1,770,484	- 76,476	- 4.14

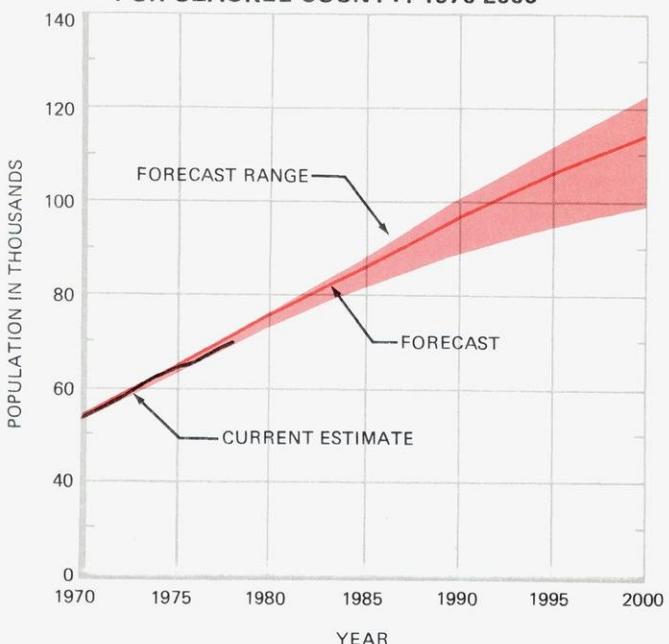
#### POPULATION FORECAST AND CURRENT POPULATION ESTIMATE FOR THE REGION: 1970-2000



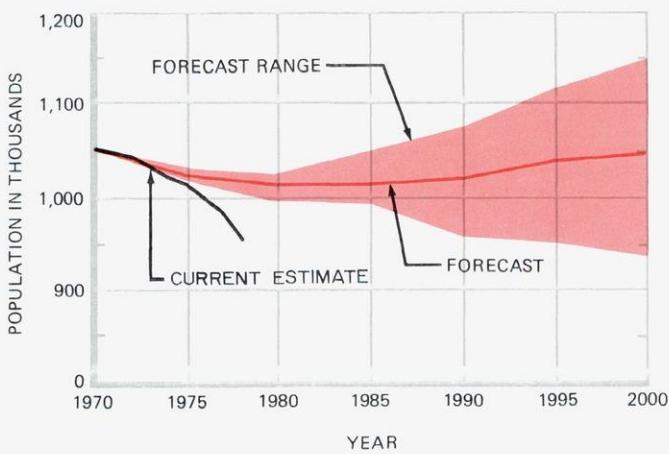
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR KENOSHA COUNTY: 1970-2000**



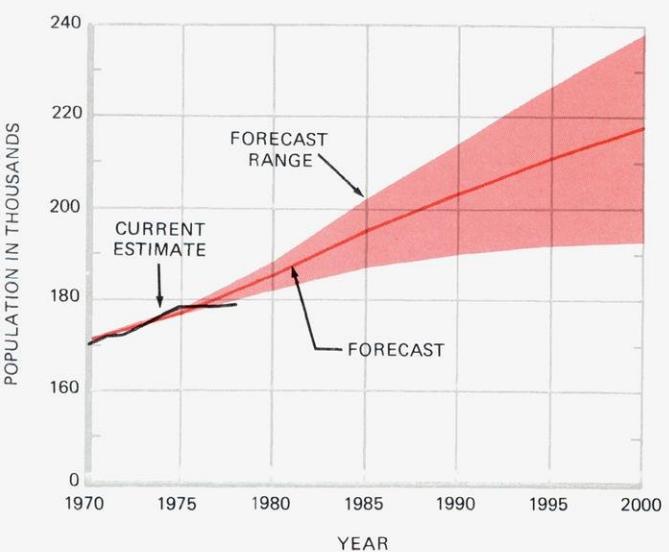
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR OZAUKEE COUNTY: 1970-2000**



**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR MILWAUKEE COUNTY: 1970-2000**



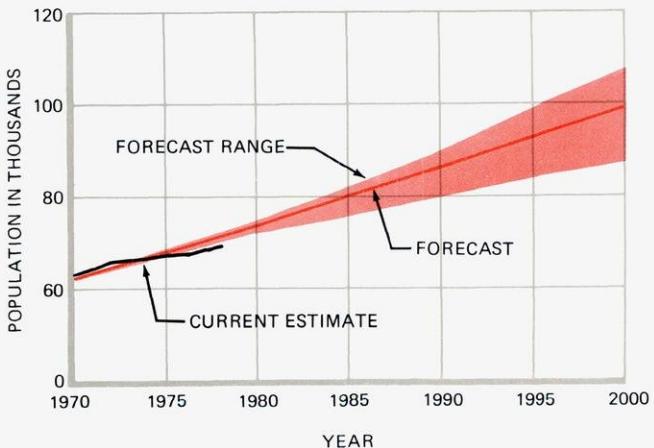
**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR RACINE COUNTY: 1970-2000**



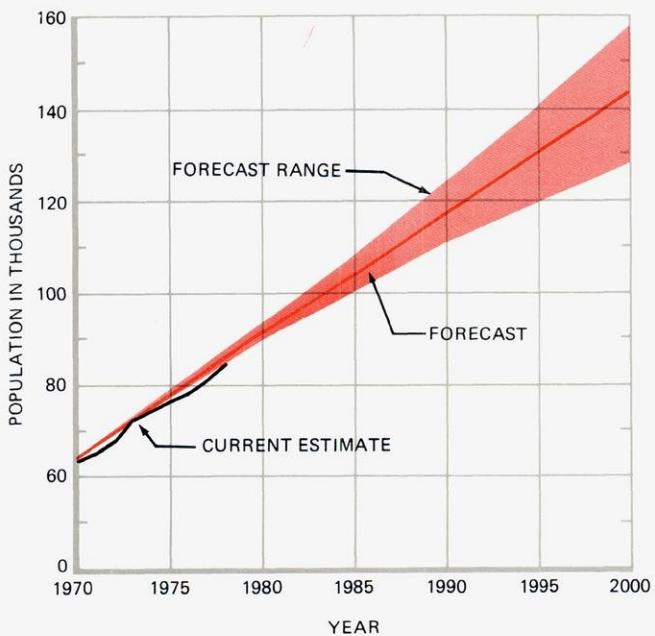
deaths, and net migration, or the difference between in-migration and out-migration. Review of the available data on these two components of population change since 1970 indicates that the observed rates of natural increase have generally been in conformance with the assumptions underlying the population forecast. For the Region as a whole, the observed change in population due to natural increase is 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 for the Region 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.

**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR WALWORTH COUNTY: 1970-2000**

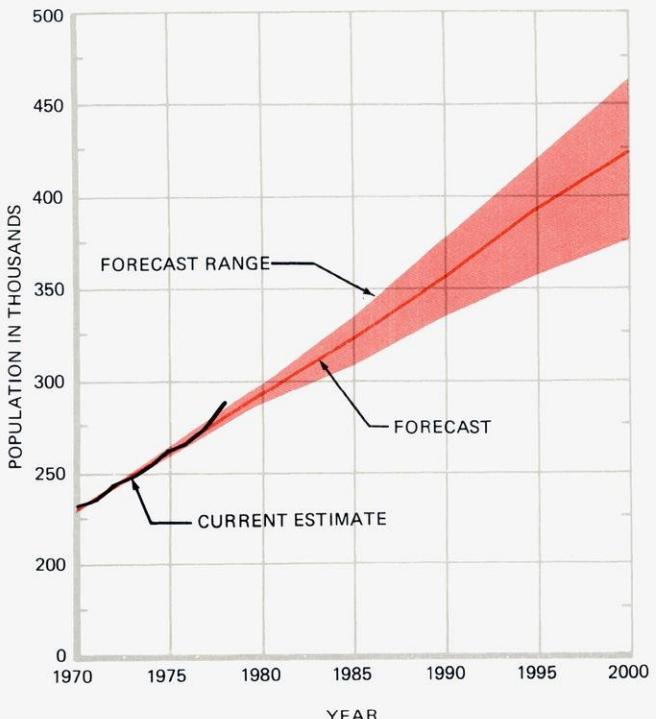


**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR WASHINGTON COUNTY: 1970-2000**



As shown in the accompanying tables and charts, the most significant deviations from the forecast appear to be occurring in Kenosha and Milwaukee Counties, although all of the other counties except Waukesha are also continuing to lag 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 systems planning efforts by the Commission, particularly after the 1980 census, the results of which are required

**POPULATION FORECAST AND  
CURRENT POPULATION ESTIMATE  
FOR WAUKESHA COUNTY: 1970-2000**



to confirm the annual population estimates and provide additional data upon which to base new and revised plans.

The foregoing data concerning population size and distribution in the Region could have important implications relating to 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. It is even conceivable that the Region will evidence an actual decline in population over the 1970 to 1980 decade. Unfortunately, changes in the population level 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 effectively influenced by local public and private policy decisions. Policy decisions which support the land use development objectives contained in the Commission's recently 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. The land use development objectives on which the present county population forecasts are, in part, based, therefore, are supportive of national urban policy.

Population projections based specifically on trends in operation since 1970 would indicate a continued decline in the population in 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 in land use plan design would have the effect of encouraging urban sprawl.

### Employment

Employment in the Region during 1978 was estimated at 851,800 jobs, an increase of about 16,700 jobs, or about 2 percent, over the 1977 level of 835,100 jobs. Unemployment in the Region during 1978 was estimated at 40,200 persons, a decrease of about 8,400 persons, or about 17 percent, from the 1977 level of 48,600 persons unemployed. The estimated unemployment rate in the Region during 1978 was about 4.5 percent, a full percentage point less than the 1977 unemployment rate of 5.5 percent.

As shown in the accompanying table, the largest absolute increase in employment by any major employment group between 1970 and 1978 occurred in the private services group, which increased by 56,500 jobs—from 166,900 to 223,400—or by 34 percent. The next largest

employment increase occurred in the government services category, which increased by 15,900 jobs—from 78,700 to 94,600—or by 20 percent. Retail trade employment increased by 13,400 jobs—from 111,200 to 124,600—or by 12 percent, and wholesale trade employment increased by 7,200 jobs—from 32,000 to 39,200—or by 22 percent, during the same period. Other major employment groups showing sizable increases were construction and mining, and finance, insurance, and real estate—4,600 jobs, or 19 percent, and 5,600 jobs, or 18 percent, respectively. Total manufacturing employment increased by 6,800 jobs—from 251,000 to 257,800—or by 3 percent during the period, with major increases occurring in fabricated metals—8,100 jobs, or 33 percent—in nonelectrical machinery—5,700 jobs, or 8 percent—and in food and kindred products—1,600 jobs, or 8 percent. Significant decreases in manufacturing employment occurred in primary metals and in transportation equipment, - 4,900 jobs, or 22 percent, and - 1,500 jobs, or 7 percent, respectively.

Between 1970 and 1978 two major shifts have occurred in the employment structure of the Region, as shown in the accompanying graph. The relative importance of manufacturing employment has declined from about 34 percent of the 1970 total regional employment to about 30 percent of the 1978 total regional employment; however, manufacturing still remains the largest single industry group in the Region in terms of both relative and absolute employment. Private service employment has gained significantly in terms of relative importance—from about 23 percent of the 1970 total regional employment to about 26 percent of the 1978 total regional employment. The remaining industry groups show only slight shifts in relative importance.

On a county basis, as shown in the accompanying table, all counties registered employment gains between 1977 and 1978; however, the gain registered by Kenosha County was small—about 200 jobs. Since 1970 the Region has added about 110,200 jobs, with about 51,300 of these jobs being added in Milwaukee County. The greatest rates of employment increase in the 1970-1978 period have occurred in Ozaukee and Waukesha Counties—33 and 38 percent, respectively.

The change between 1970 and 1978 in the relative distribution of jobs within the Region by county is shown in the accompanying graph. The proportion of total regional employment in Milwaukee County

**REGIONAL EMPLOYMENT BY MAJOR EMPLOYMENT CATEGORY: 1970-1978**

Employment Category	Employment in Thousands		Difference	
	1970	1978	Absolute	Percent
Agriculture. . . . .	10.6	9.5	- 1.1	- 10.4
Construction and Mining. . . . .	24.0	28.6	4.6	19.2
Manufacturing				
Food and Kindred Products. . . . .	18.9	20.5	1.6	8.5
Printing and Publishing. . . . .	14.9	14.5	- 0.4	- 2.7
Primary Metals. . . . .	22.5	17.6	- 4.9	- 21.8
Fabricated Metals. . . . .	24.6	32.7	8.1	32.9
Nonelectrical Machinery. . . . .	68.1	73.8	5.7	8.4
Electrical Equipment. . . . .	36.5	37.3	0.8	2.2
Transportation Equipment. . . . .	22.0	20.5	- 1.5	- 6.8
Other Manufacturing. . . . .	43.5	40.9	- 2.6	- 6.0
Manufacturing Subtotal	251.0	257.8	6.8	2.7
Wholesale Trade. . . . .	32.0	39.2	7.2	22.5
Retail Trade. . . . .	111.2	124.6	13.4	12.1
Transportation, Communication, and Utilities. . . . .	36.0	37.3	1.3	3.6
Finance, Insurance, and Real Estate. . . . .	31.2	36.8	5.6	17.9
Private Services, Except Education <sup>a</sup> . . . . .	166.9	223.4	56.5	33.8
Government Services and Education. . . . .	78.7	94.6	15.9	20.2
Total Employment	741.6	851.8	110.2	14.9

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

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

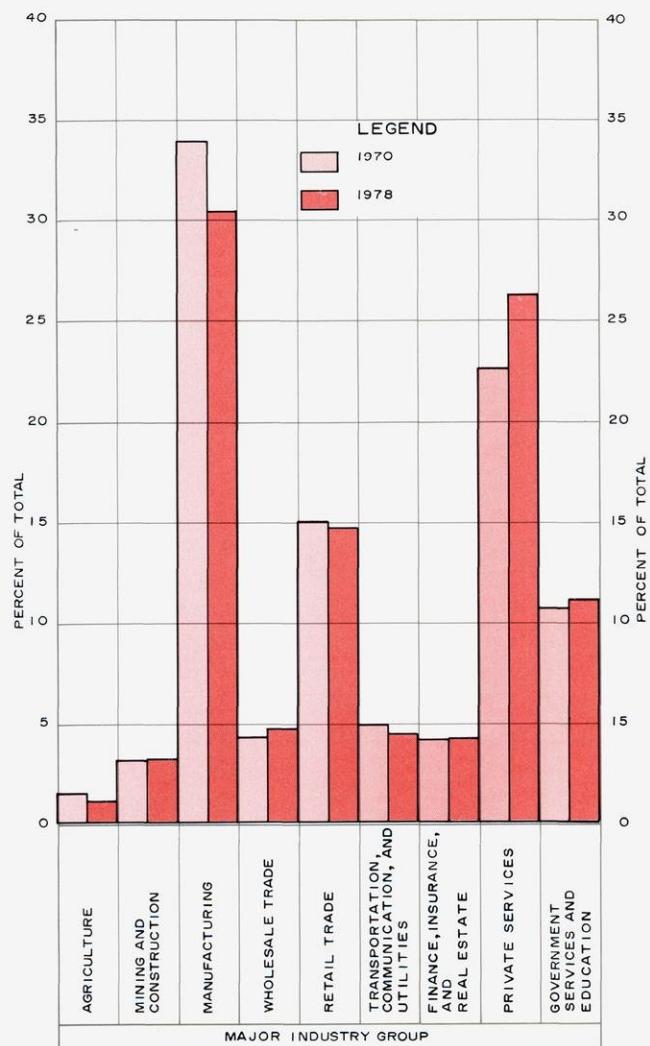
has declined despite an increase in absolute employment within the County. In 1970 about 69 percent of the regional employment occurred in Milwaukee County; however, by 1978 the Milwaukee County share of regional employment had decreased approximately 3 percentage points to 66 percent of regional employment. In contrast, the proportion of total regional employment in Waukesha County has increased from about 9 percent in 1970 to about 11 percent in 1978. The relative share of total regional employment in the five remaining counties in the Region remained relatively stable.

Based upon a regional employment forecast of about 1.02 million jobs in the year 2000, the employment level of the Region was anticipated to approximate 814,700 jobs in 1978. As noted above, the estimated number of jobs in the Region in 1978 was 851,800, or about 37,100 more jobs than forecast. This represents about a 4.4 percent

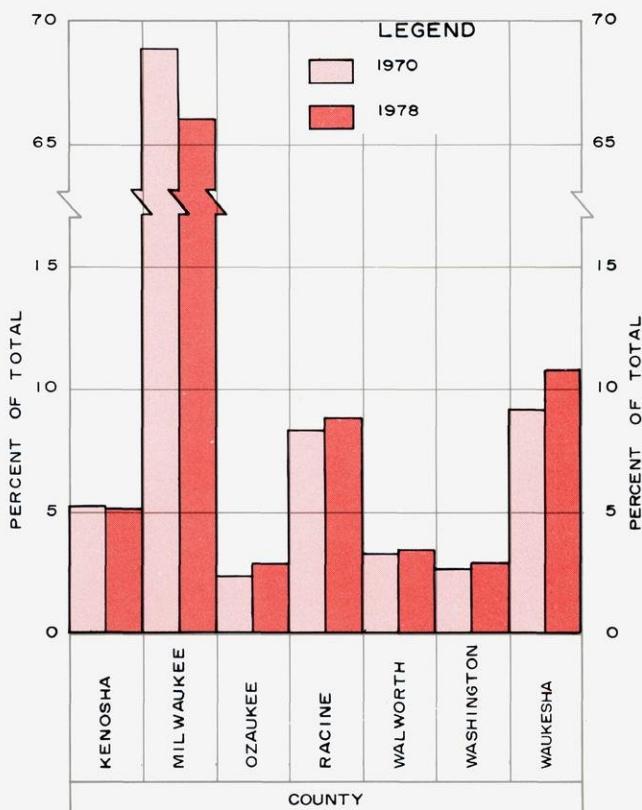
difference. As shown in the accompanying table, most of the difference occurs in Milwaukee County, where the current estimate is more than 29,000 jobs, or 5 percent greater than forecast.

The approximate 15 percent increase in the number of jobs in the Region since 1970, coupled with a total regional population increase of less than 1 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: rapidly increasing labor force participation rates among women, the changing age structure of the Region's resident population, and perhaps an increasing tendency for one person to hold more than one job.

**PERCENTAGE DISTRIBUTION OF JOBS IN THE REGION BY MAJOR INDUSTRY GROUP: 1970-1978**



**PERCENTAGE DISTRIBUTION OF JOBS IN THE REGION BY COUNTY: 1970-1978**



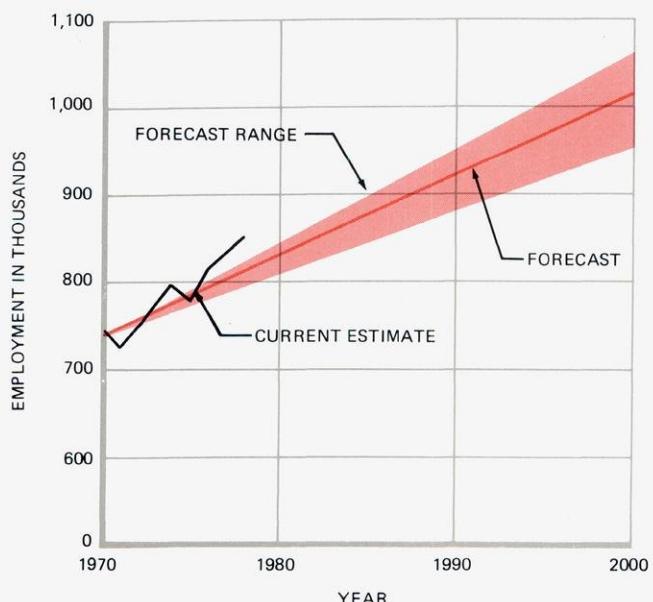
**REGIONAL EMPLOYMENT**

County	1970	1977	1978	Difference 1970-1978	
				Number	Percent
Kenosha . . . . .	39,200	44,300	44,500	5,300	13.5
Milwaukee . . . . .	510,900	552,000	562,200	51,300	10.0
Ozaukee . . . . .	17,900	23,400	23,800	5,900	33.0
Racine. . . . .	61,900	72,600	74,800	12,900	20.8
Walworth. . . . .	24,200	28,400	28,900	4,700	19.4
Washington . . . . .	20,300	24,200	24,700	4,300	21.2
Waukesha. . . . .	67,200	90,200	92,900	25,700	38.2
Total	741,600	835,100	851,800	110,200	14.9

## COMPARISON OF FORECAST AND ESTIMATED REGIONAL EMPLOYMENT

County	1978 Employment		Difference Estimate Minus Forecast	
	Forecast	Estimated	Number	Percent
Kenosha . . . .	43,200	44,500	1,300	2.9
Milwaukee . . . .	532,800	562,200	29,400	5.2
Ozaukee . . . .	23,300	23,800	500	2.1
Racine . . . .	70,900	74,800	3,900	5.2
Walworth. . . .	28,800	28,900	100	0.3
Washington . . .	24,400	24,700	300	1.2
Waukesha . . . .	91,300	92,900	1,600	1.7
Total	814,700	851,800	37,100	4.4

### ESTIMATED AND FORECAST EMPLOYMENT: SOUTHEASTERN WISCONSIN REGION



Although statistics are not available for the Region, most observers agree that women are presently entering the labor force at rates much greater than has previously been the case. Equally important in explaining the Region's ability to accommodate new jobs without a concomitant growth in the resident population is the changing age structure of the Region's population. Special censuses conducted in the Region since the 1970 federal census generally indicate an overall aging of the Region's population since 1970 and a greater proportion of the total resident population in the working age category than in 1970.

## School Enrollment

Total regional school enrollment continued to decline during 1978, as shown in the accompanying table. This decline of about 16,900 students represents a 4 percent decrease between 1978 and the previous year. Public school enrollment declined by 14,500 students, or slightly more than 4 percent, while nonpublic school enrollment declined about 2,400 pupils, or about 3 percent. Since 1970 total regional school enrollment has declined by almost 17 percent.

The accompanying map shows public school enrollment changes between 1970 and 1978 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. Almost 60 percent of the public K-12 and 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 experienced enrollment gains of 5 percent or more, and about 15 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 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 either stable or declining enrollment patterns. A similar pattern exists in eastern Waukesha County and, to a lesser degree, in Ozaukee County. Perhaps the most striking pattern contained on the map is the highly contiguous arrangement of those districts which have experienced enrollment increases of greater than 10 percent. With the exception of a single district in Kenosha County, these districts form an almost unbroken band from northeastern Walworth County to central Ozaukee County, including central Waukesha County and the majority of Washington County.

Also during 1978, the Division staff researched and updated school district boundary maps—originally compiled in 1969—for each of the seven counties

## REGIONAL SCHOOL ENROLLMENT

County	1970	1977	1978	Difference 1970-1978		Difference 1977-1978	
				Number	Percent	Number	Percent
Kenosha . . . .	32,332	29,670	27,780	- 4,552	- 14.08	- 1,890	- 6.37
Milwaukee . . . .	267,929	209,566	198,863	- 69,066	- 25.78	- 10,703	- 5.11
Ozaukee . . . .	15,876	17,020	16,314	438	2.76	- 706	- 4.15
Racine. . . . .	48,597	43,187	41,492	- 7,105	- 14.62	- 1,695	- 3.92
Walworth. . . . .	15,570	15,103	14,643	- 927	- 5.95	- 460	- 3.05
Washington . . .	19,169	22,605	22,510	3,341	17.43	- 95	- 0.42
Waukesha. . . . .	73,077	74,078	72,709	- 368	- 0.50	- 1,369	- 1.85
<b>Total</b>	<b>472,550</b>	<b>411,229</b>	<b>394,311</b>	<b>- 78,239</b>	<b>- 16.56</b>	<b>- 16,918</b>	<b>- 4.11</b>

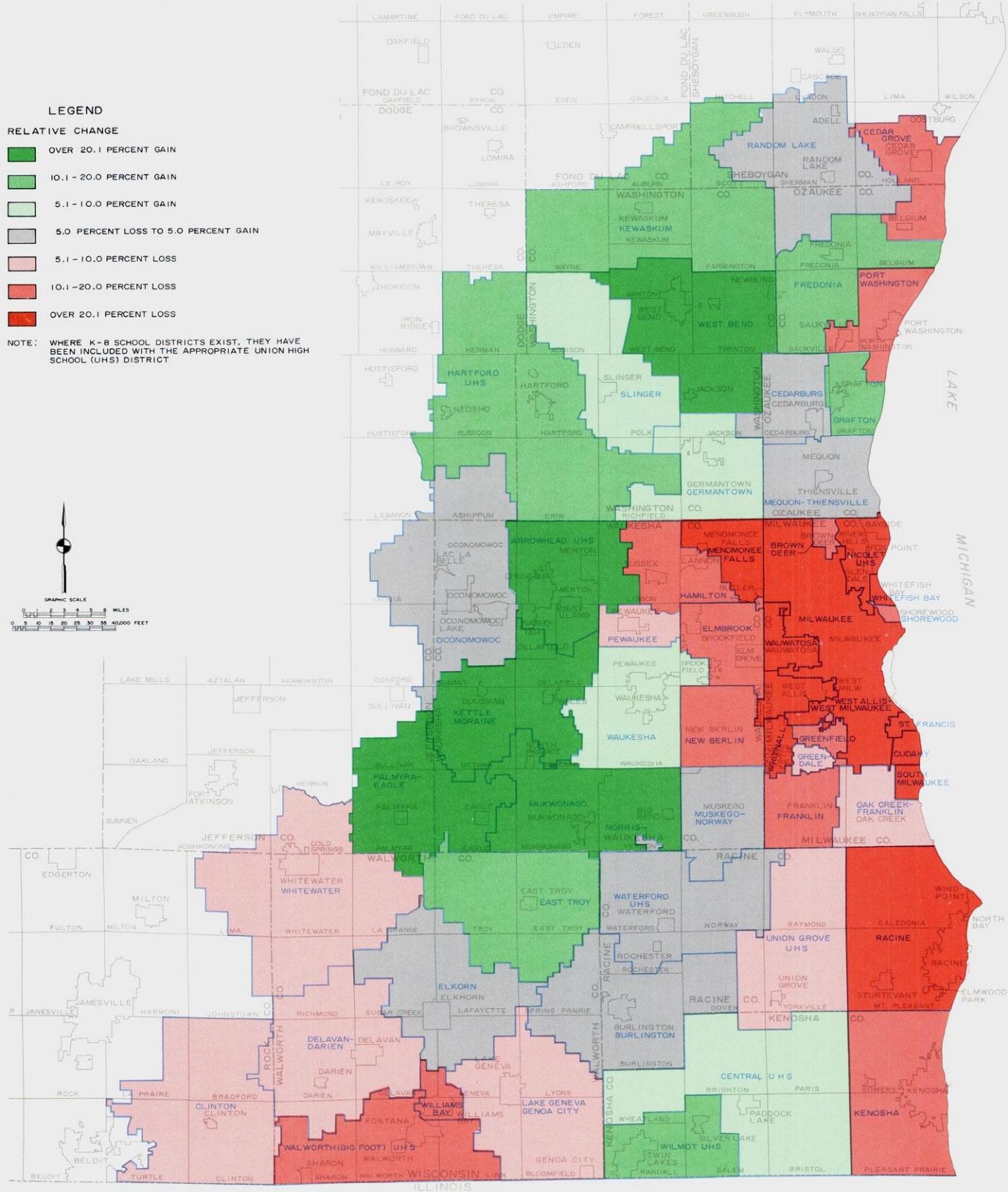
in the Region. Since 1969 there have been sufficient changes in school district boundaries and organization that the maps were no longer current. A reduced copy of the Washington County map is shown here as an example. Copies of these maps are available to interested parties from the Commission offices.

### DATA PROVISION AND ASSISTANCE

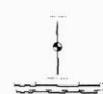
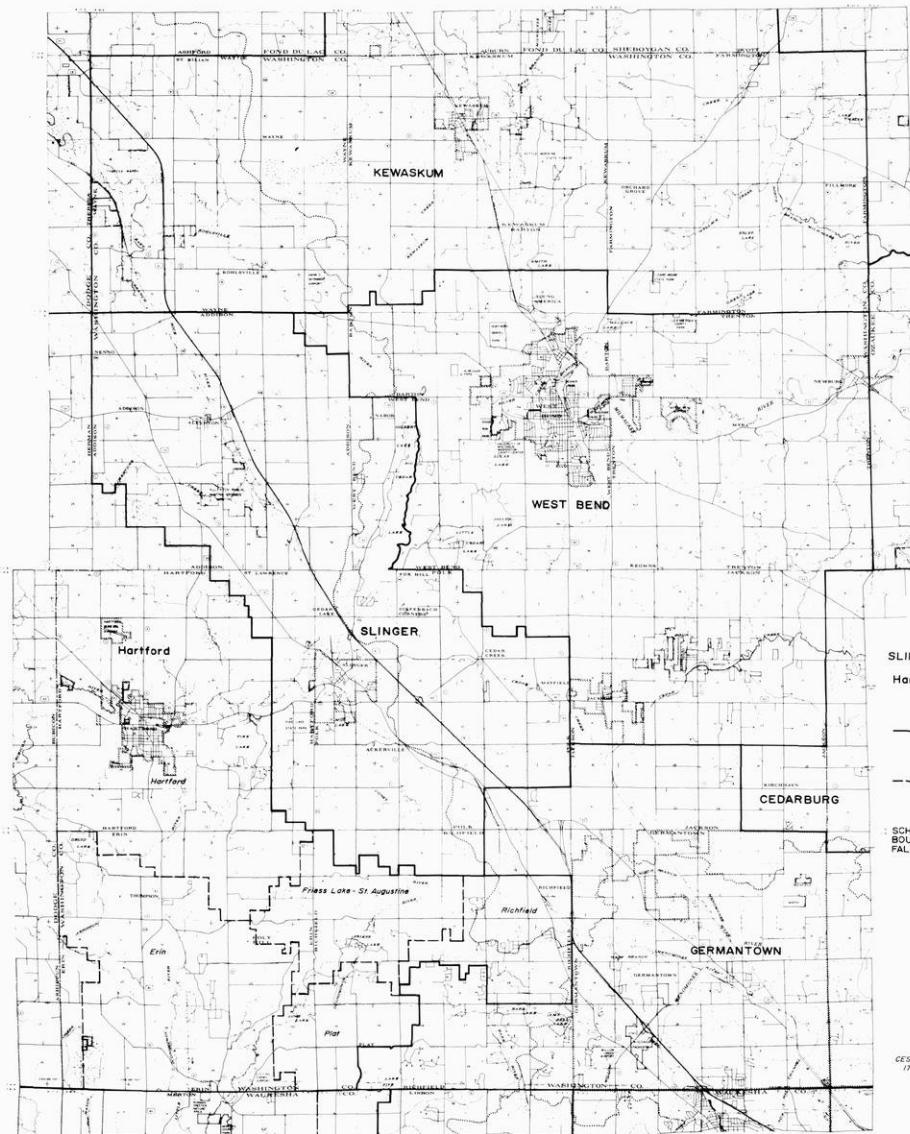
Considerable Division staff time is directed each year at answering requests for demographic and economic and related data. In addition, this function includes the provision of technical assistance to local units of government, public agencies, and school districts in the conduct of special data acquisition activities and in problems of data analysis. The following are examples of Division staff activity during 1978 in performing this function:

- Preparation of letter responses to 145 requests for population, employment, and public financial resources and related data contained in the Commission's data bank. An additional 700 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 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.
- Preparation of estimates of existing and probable future resident population of U. S. Postal Service zip code delivery areas and tables showing the proportion of the 1970 resident population of each zip code area that also resided in each 1970 census tract and 1970 minor civil division for the Southeastern Wisconsin Health Systems Agency.
- Provision of information concerning racial composition of the resident population and income level and automobile availability by family for each of the approximately 300 census tracts in Milwaukee County for the Milwaukee County Department of Public Works for use in transit planning. In addition, summary statistics on racial composition, income, and employment were provided to the County.

RELATIVE SCHOOL  
ENROLLMENT CHANGE BY  
HIGH SCHOOL DISTRICT  
1970-1978



#### SCHOOL DISTRICT BOUNDARY MAP: WASHINGTON COUNTY



- Preparation of a detailed disaggregation of the Commission's design year 2000 employment forecast by two-digit Standard Industrial Classification (SIC) for the Wisconsin Department of Natural Resources for use in air quality planning work.
- Discussion of the GBF/DIME files and their analytic capabilities with staff of the City of Milwaukee, the City of West Allis, the County of Milwaukee, the Milwaukee Public School System, the Bureau of Health Statistics of the Wisconsin Department of Health and Social Services, the Milwaukee Journal newspaper, the Racine County Planning Council, and several Milwaukee area private computer services companies.
- Provision of copies of the Milwaukee GBF/DIME file to the City of Milwaukee and the Bureau of Health Statistics of the Wisconsin Department of Health and Social Services. The City of Milwaukee has inserted various types of local codes, such as aldermanic districts, police districts, and school attendance zones, into the file and plans to use the file as a general-purpose program monitoring, evaluation, and reporting device. The Bureau of Health Statistics used the file to attach census tract codes to addresses of physician office locations to examine the geographic pattern of patient services available in Milwaukee County.
- Provision of extensive information and staff interpretation of Commission data to the Milwaukee Water Pollution Abatement Program Management Office, the office engaged in the sewerage facilities planning program for the Milwaukee Metropolitan Sewerage District.
- Provision of demographic and economic information to a major automobile manufacturer for the conduct of a market research study of the Milwaukee metropolitan area.
- Preparation of Community Profiles for 15 selected communities in southeastern Wisconsin at the request of the Wisconsin Department of Business Development. These profiles contain information pertinent to business and industrial development within each community and will be used as an information and marketing tool by the State and the local communities.
- Preparation of a ward plan for the Town of Ottawa. Wisconsin Statutes require all civil divisions to prepare ward plans as part of the legislative redistricting process following the 1980 federal census.
- 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.
- Provision of selected information on population, employment, housing, and personal income to the financial advisor for the Delavan Lake Sanitary District and the Walworth County Metropolitan Sewerage District for use in preparing official statements in support of the sale of general obligation bonds to finance capital construction projects for these districts.
- Provision of small area population estimates to Mukwonago Area Schools for use in constructing election districts for school board representation.

## CENSUS COORDINATION

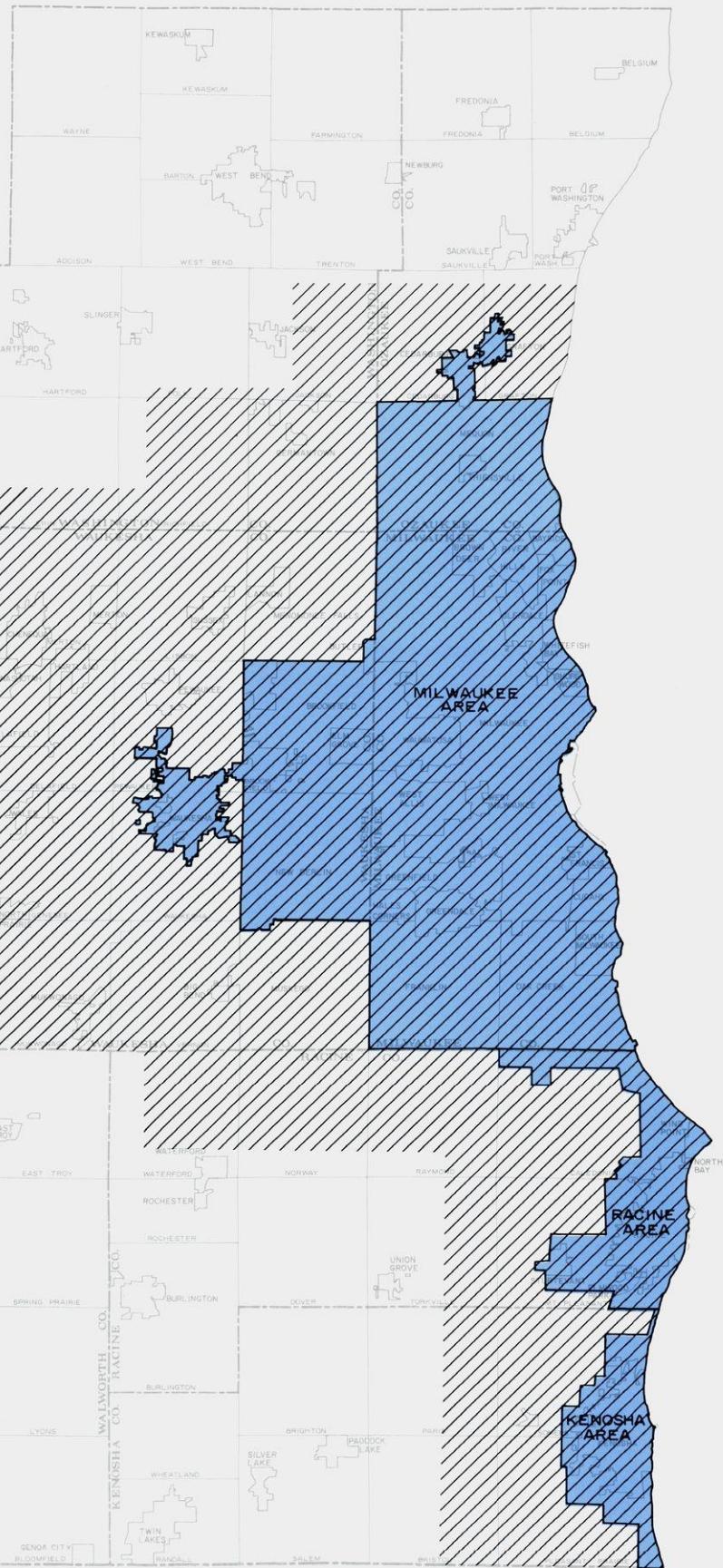
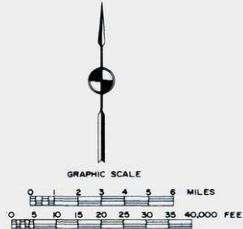
The Commission serves a coordinating function for the U. S. Bureau of the Census in the seven-county Southeastern Wisconsin Region. Under agreements between the Commission and the U. S. Bureau of the Census, the Commission provides staff services to Census Statistical Areas Committees in each county and provides technical services directly to the Bureau in the form of base map preparation and maintenance and in the development and maintenance of a geographic base file—a computer-readable description of the geographic coordinates of block faces and street address ranges and the census statistical tabulating and reporting unit boundaries of an area. Internal Census Bureau processing requirements dictated that all local coordinating agencies complete their 1980 census preparation activities during 1978. The status of activity in the Southeastern Wisconsin Region with respect to map and geographic base file preparation at the conclusion of 1978 is shown on the accompanying map.

## STATUS OF MAP AND GEOGRAPHIC BASE FILE PREPARATION: 1978

## 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



## 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 Committee 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 in 1977, the Census Statistical Areas Committees did not meet in 1978 with the exception of the Milwaukee County Committee, where "city economic areas" for the City of Milwaukee were defined for use by the Census Bureau in reporting the results of the 1977 Census of Retail Trade.

## Metropolitan Map Series Update and Maintenance

Considerable effort was expended during 1978 by the Division staff in continuing to maintain the Census Bureau's Metropolitan Map Series (MMS) for the Kenosha, Milwaukee, and Racine urbanized areas. In addition to continuing to maintain current the 36 maps originally published with the 1970 census reports, seven additional maps in western Waukesha County were prepared and reviewed. This will permit extension of MMS coverage to the Oconomowoc, Dousman, North Prairie, and Mukwonago areas. In 1980, when the Census Bureau will again publish the map series in conjunction with the reports from the 1980 Census of Population and Housing, there will be a total of 43 map sheets in this series in the Southeastern Wisconsin Region.

During the year, under a Joint Statistical Agreement between the Commission and the U. S. Bureau of the Census, all 43 MMS maps were reviewed to correct and verify civil division boundaries, to incorporate certain private roads meeting Census Bureau definitions for inclusion on the maps, and to review and update to their 1980 configuration the existing (1970) census statistical tabulating and reporting unit boundaries presently on the maps in preparation for the 1980 Census of Population and Housing.

## Geographic Base File Update and Maintenance

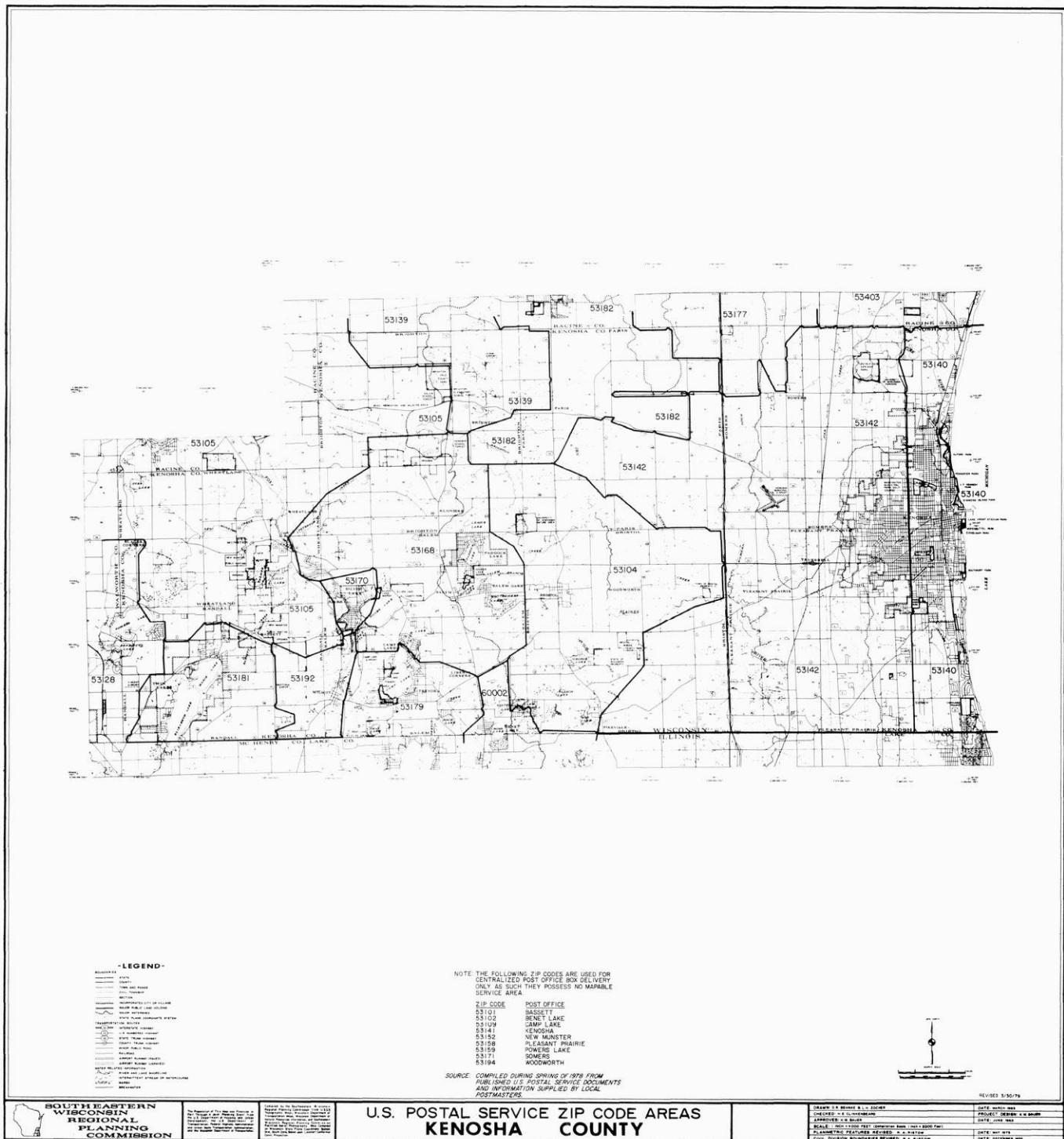
Under the Joint Statistical Agreement noted above, the Division staff performed additional update operations on the geographic base files for the Kenosha, Milwaukee, and Racine urbanized areas. Included in the agreement were provisions for

incorporating 1980 census geography into the file, for making additional corrections to the file as made necessary by map update operations, and for performing a set of quality control and edit procedures on the updated base file. A 10 percent sample of the entire file was reviewed prior to the incorporation of any changes made necessary by the map update to identify areas having unacceptably high error rates. These areas, when identified, were then intensively reviewed on a record-by-record basis and corrected as necessary. After updating the file with the map corrections, extensive file edits were performed prior to returning the files to the Census Bureau for further processing in preparation for the 1980 Census of Population and Housing.

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 experimented with a Census Bureau-proposed procedure for accommodating coordinate number systems within the presently existing file structure. A number of communities in Ozaukee, Washington, and Waukesha Counties currently utilize the coordinate system. 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 this building is located on a north-south street approximately one-half way into the 152nd "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 be up to 10 characters long. The existing file structure can accommodate a maximum house number size of 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. At the conclusion of 1978 this issue had yet to be satisfactorily resolved.

As updated and edited, the geographic base file is usable for a variety of local applications. During 1978 two address matching applications were attempted with the file. In both cases match rates in excess of 90 percent were 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 also improve.

**U. S. POSTAL SERVICE ZIP CODE DELIVERY AREAS: KENOSHA COUNTY**



## Zip Code Delivery Area Maps

During 1978 the Division staff compiled detailed boundary information for U. S. Postal Service Zip Code delivery areas—part of the basic information necessary to perform the update and quality control procedures on the Region's geographic base.

files. Since the Commission has in the past received requests from the general public for such information, a set of maps—one for each county—has been produced at a scale of 1" = 4000' showing zip code boundaries. A reduced copy of the Kenosha County map is shown here as an example. These maps are currently available to interested parties from the Commission offices.



# COMMUNITY ASSISTANCE PLANNING DIVISION

## DIVISION FUNCTIONS

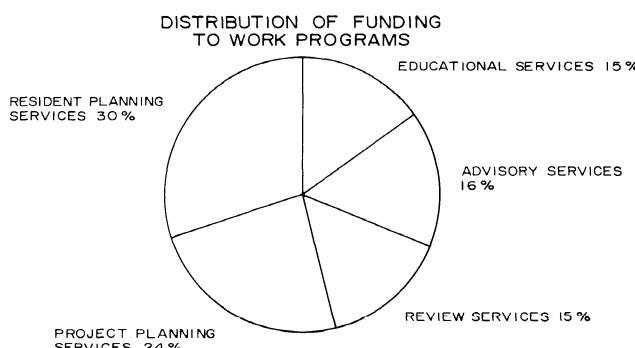
The Community Assistance Planning Division has primary responsibility for assisting local units of government in the Region in local planning efforts, thereby promoting coordination of local and regional plans and plan implementation actions. The Division provides five basic types of services: educational, 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 by the Division staff to local units of government and citizen groups on request and are directed at explaining the need for, and purposes of, continuing local, regional, and state planning programs, and the relationships that should exist between these

different levels of planning. In addition, these efforts are directed at encouraging the creation, organization, staffing, and financing of local planning programs. During 1978 educational efforts included the following:

- Presentations on the Commission work programs to student groups at the University of Wisconsin-Milwaukee, the University of Wisconsin-Parkside, the University of Wisconsin-Waukesha, Waukesha County Technical Institute, Waukesha South High School, Oak Creek High School, Greendale Middle School, and the Hawley Elementary School.
- Numerous presentations to local governmental, civic, and professional groups, such as the Waukesha Commission on Aging, the Wisconsin Society of Land Surveyors, the Izaak Walton League, the Waukesha County Environmental Action League, the Protect Our Environment, Inc., organization, the Snowbird Snowmobile Club, the Village of Belgium Board of Trustees, and Plan Commissions in the Town of Waterford and the Villages of Nashotah and North Prairie.
- Participation in the Ozaukee County Soil and Water Conservation Workshop.
- Presentation of a display on Coastal Management Public Awareness at a booth at the Wisconsin State Fair.
- Conduct of tours of St. Aemilian's Bog for the Kettle Moraine Audubon Society, Yatzek's Fen for the Wisconsin Chapter of Nature Conservancy, and various Planned Unit Development projects for City of Delavan officials.
- Preparation of six Commission newsletters discussing Commission planning programs and related activities. The newsletters are distributed to about 2,500 interested individuals and agencies.



- Preparation and distribution to newspapers and radio and television stations of seven news releases during the year pertaining to Commission work activities.
- Preparation of the 1977 Commission 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 1978 include the following:

- Provision of technical data and advice on the preparation of floodway/flood fringe delineations to the Cities of Kenosha and West Bend; the Villages of Elmwood Park, Germantown, Glendale, Hales Corners, Jackson, and North Bay; and the unincorporated areas of Washington County.
- Provision of technical data to federal flood insurance study contractors and provision of assistance to municipal officials in the review of flood insurance study proposals for the Cities of Delafield, Hartford, and Oconomowoc and the Villages of Dousman, Hartland, and Lac La Belle.
- Provision of data and advice concerning the interpretation of floodland limits to the City of West Bend; the Villages of Elm Grove, Greendale, Newburg, and Waterford; and Kenosha and Racine Counties.
- Participation in a panel of technicians providing guidance to the City of Oconomowoc Plan Commission at regular monthly meetings.
- Provision of Commission data and advice on environmental issues to the Wisconsin Department of Natural Resources and the University of Wisconsin-Milwaukee.
- Participation in various technical committees, citizen advisory committees, and coastal councils related to the work undertaken as part of the Commission's involvement in the coastal management program.

- Provision of Commission demographic data and interpretive advice to Racine County, the Milwaukee County Park Commission, the Wisconsin Department of Transportation, and the Wisconsin Department of Natural Resources.

## REVIEW SERVICES

Review services are designed 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 designed to avoid 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 and assessments; review of flood hazards affecting individual properties; and review of applications for tax credit eligibility under the Wisconsin Farmland Preservation Act.

The following represent typical review services completed in 1978 by the Division staff in the first review category:

- Review of and comment on 49 preliminary subdivision plats at the request of Kenosha and Walworth Counties; the Cities of Cedarburg, Franklin, Hartford, Muskego, and Port Washington; the Villages of Fredonia and Sussex; and the Towns of Mukwonago and Polk.
- Review of and comment on three certified survey maps at the request of the City of Hartford and the Village of Sussex.
- Review of and comment on 10 proposed zoning district map changes at the request of the City of Franklin and the Villages of Germantown, Newburg, and Sussex.
- Review of and comment on local economic, land use, recreation, community action, and health plans at the request of the City of New Berlin, the Villages of Butler and Dousman, the Town of East Troy, the Racine/Kenosha Community Action Agency, and the Southeastern Wisconsin Health Systems Agency.

## ENVIRONMENTAL IMPACT STATEMENT REVIEWS: 1978

Document Reviewed	Requesting Agency
EIS for the Environmental Control Facilities at the Milwaukee Shops	Chicago, Milwaukee, St. Paul & Pacific Railroad Company
EIS for the Bong Recreational Area, Town of Brighton, Kenosha County	Wisconsin Department of Natural Resources
EIS for the Reconstruction of STH 31 from STH 20 to CTH MM, Racine County	U. S. Department of Transportation and Wisconsin Department of Transportation
EIS for the Walter Schroeder Memorial Library, Milwaukee	Kahler, Slater and Fitzhugh Scott, Inc.
EIS for Pollution-Control Facilities, Milwaukee	Chicago, Milwaukee, St. Paul & Pacific Railroad Company

- Review of and comment on air and surface transportation facility improvement proposals at the request of the Cities of Franklin and West Bend, the Towns of LaFayette and Mt. Pleasant, and the Wisconsin Department of Transportation.
- Review of and comment on proposed administrative rules and regulations governing A-95 review procedures, provision of mass transit facilities, and point sources of pollution at the request of the Wisconsin Department of Administration and the Wisconsin Department of Transportation.
- Review of and comment on five environmental impact statements as shown in the accompanying table. Comments are provided by the Commission relating the projects and the data contained in the environmental impact statements to the adopted regional plans.

Division activities regarding the review of federal and state grant applications are summarized in the accompanying table. In total, review comments were provided for 435 applications for federal and/or state grants, loans, or mortgage insurance guarantees requesting in the aggregate more than \$280.5 million in federal and state financial assistance. Of the total 435 requests, 157 were found to be in conformance with and serving to implement the adopted regional plan elements, and 278 were found to be not in conflict with the adopted regional plan elements.

## A-95 REVIEWS: 1978

Review Category	Number of Reviews	Aggregate Amount of Federal and/or State Grant, Loan, or Mortgage Insurance Requests
Air Quality. . . . .	1	\$ 242,732
Community Action. . . . .	155	76,375,086
Community Development. . . . .	31	69,097,063
Community Facilities. . . . .	6	410,800
Conservation. . . . .	20	6,776,392
Historic Preservation. . . . .	2	1,982,307
Housing. . . . .	32	32,576,509
Park and Open Space. . . . .	43	2,839,515
Law Enforcement. . . . .	76	5,842,564
Sanitary Sewerage. . . . .	17	18,592,722
Transportation. . . . .	47	65,066,974
Water Supply. . . . .	5	667,856
<b>Total</b>	<b>435</b>	<b>\$280,470,520</b>

Flood hazard reviews relating to residential properties are requested by realtors and lending institutions. During 1978 the Division staff conducted a total of 863 flood hazard reviews distributed by County, as shown in the accompanying table.

With the passage of Wisconsin's Farmland Preservation Act in June 1977, the Division staff undertook a new review function. The Act became operative in 1978, and under the Act the Regional Planning Commission reviews and comments upon each application for farmland tax credit eligibility.

## FLOOD HAZARD REVIEWS: 1978

County	Number of Reviews
Kenosha . . . . .	5
Milwaukee . . . . .	572
Ozaukee . . . . .	18
Racine. . . . .	43
Walworth. . . . .	15
Washington . . . . .	17
Waukesha. . . . .	193
Total	863

## FARMLAND PRESERVATION REVIEWS: 1978

County	Number of Applications
Kenosha . . . . .	6
Milwaukee . . . . .	0
Ozaukee . . . . .	7
Racine. . . . .	20
Walworth. . . . .	.. <sup>a</sup>
Washington . . . . .	18
Waukesha. . . . .	15
Total	66

<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 445 farmers in Walworth County have received such credits as of 1978. These farms are not reviewed on a case-by-case basis by SEWRPC.

In this, the initial year of the program, the Division staff reviewed 66 applications for farmland preservation contracts, which resulted in the preservation of more than 12,000 acres of farmland in southeastern Wisconsin. The distribution of farmland preservation applicants is shown in the accompanying table.

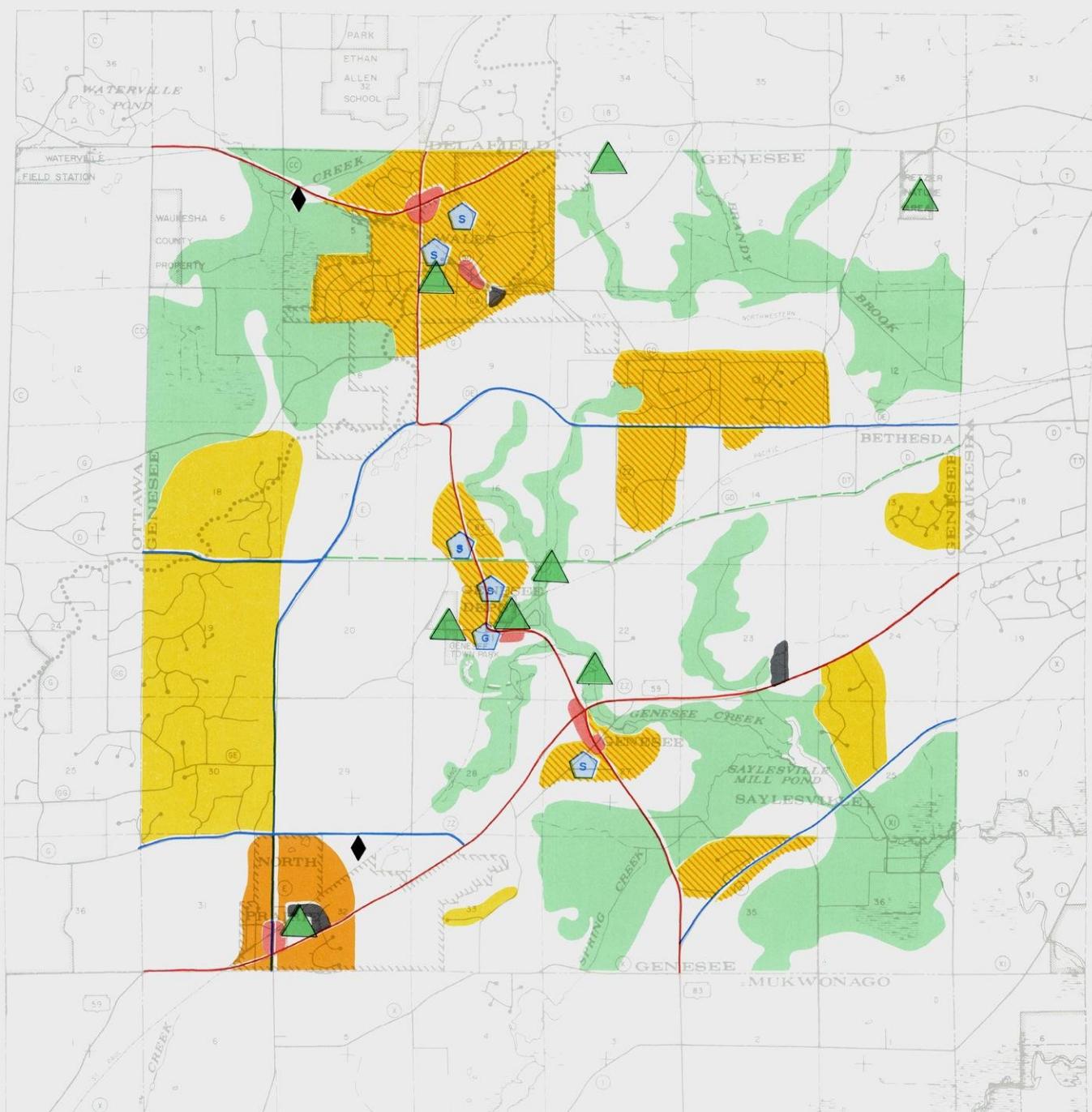
## PROJECT PLANNING SERVICES

Project planning services involve the conduct for local member units of government at their cost of detailed planning studies resulting in the prepara-

tion of local plans and plan implementation devices. During 1978 the following project planning efforts were completed:

- Completion and publication of SEWRPC Community Assistance Planning Report No. 17, A Plan for the Jefferson Park Neighborhood, Village of Germantown, Washington County, Wisconsin.
- Completion and publication of SEWRPC Community Assistance Planning Report No. 18, A Land Use Plan for the Town of Erin—2000, Washington County, Wisconsin.
- Completion and publication of SEWRPC Community Assistance Planning Report No. 22, Alternative and Recommended Land Use Plans for the Town of Genesee—2000, Waukesha County, Wisconsin. The recommended land use plan for the Town is shown on the accompanying map.
- Completion of zoning ordinance texts in the City of Burlington; the Villages of Butler, Germantown, Kewaskum, Newburg, and Sussex; and the Town of Fredonia. These texts will subsequently be adopted by the City, Villages, and Town.
- Completion of zoning maps for the City of Burlington; the Villages of Butler, Germantown, Kewaskum, Newburg, and Sussex; and the Towns of Belgium, Fredonia, and Genesee. Supplementary floodland zoning maps were prepared for the City of Burlington and the Villages of Butler, Germantown, Kewaskum, Newburg, and Sussex. The zoning maps for the Village of Germantown and the Town of Fredonia utilized the Commission's 1975 1" = 400' scale aerial photographs as a base upon which to draw the zoning lines. These zoning base maps aid the local zoning administrator considerably as the administration can identify specific land features that can be used as references in the field. An example of the Germantown zoning map covering Sections 15, 16, 21, and 22 of U. S. Public Land Survey T1N, R20E, is reprinted herein for illustrative purposes. The corresponding supplementary floodland zoning sheet is shown with the general zoning map.

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



### LEGEND

	SUBURBAN DEVELOPMENT (0.2 TO 0.6 DWELLING UNITS PER NET RESIDENTIAL ACRE)		INDUSTRIAL		AGRICULTURE AND RELATED OPEN SPACES
	LOW-DENSITY DEVELOPMENT (0.7 TO 2.2 DWELLING UNITS PER NET RESIDENTIAL ACRE)		SCHOOL		PROPOSED WASTE WATER TREATMENT FACILITY
	MEDIUM-DENSITY DEVELOPMENT (2.3 TO 6.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)		TOWN HALL		TYPE I ARTERIAL HIGHWAY (STATE TRUNK HIGHWAY)
	COMMERCIAL		RECREATIONAL		TYPE II ARTERIAL HIGHWAY (COUNTY TRUNK HIGHWAY)
					PROSPECTIVE TYPE III ARTERIAL HIGHWAY

## VILLAGE OF GERMANTOWN ZONING MAP

GERMANTOWN T 9 N 16 2 1 2 1 5  
R 20 E 27 2 1 2 1 2 2 3 4 3 4

ZONING DISTRICT  
MAP NO. 5

VILLAGE OF  
GERMANTOWN  
WISCONSIN

WISCONSIN  
ENCOMPASSING U.S. PUBLIC LAND  
SURVEY SECTIONS 15, 16, 21 & 22  
INITIALLY ADOPTED ON  
NOVEMBER 6, 1978

NOVEMBER 6, 1978

## LEGEND

#### LEGEND

DISTINCT	NAME OF DISTRICT	MINIMUM ACRES
A-1	AGRICULTURAL	500 ACRES
A-2	SINGLE FAMILY RESIDENTIAL	5.0 ACRES
A-3	SINGLE FAMILY RESIDENTIAL	2.0 ACRES
A-4	SINGLE FAMILY RESIDENTIAL	10,000 SQ FT
A-5	SINGLE FAMILY RESIDENTIAL	2,000 SQ FT
A-6	SINGLE FAMILY RESIDENTIAL	2,000 SQ FT
A-7	TWO FAMILY RESIDENTIAL	8,000 SQ FT
A-8	MULTI-FAMILY RESIDENTIAL	5.0 ACRES
A-9	MULTI-FAMILY RESIDENTIAL	0.0 ACRES
A-10	MULTI-FAMILY RESIDENTIAL	0.0 ACRES
B-1	COMMUNITY BUSINESS	100 ACRES
B-2	PROFESSIONAL OFFICE	10,000 SQ FT
B-3	GENERAL ORIENTED BUSINESS	10,000 SQ FT
M-1	UNLISTED INDUSTRIAL	40,000 SQ FT
M-2	INDUSTRIAL PARK	25.0 ACRES
U-1	URBAN INSTITUTIONAL	7,000 SQ FT
I-1	RURAL INSTITUTIONAL	2.0 ACRES
C-1	CONSERVATION	100 ACRES
C-2	LOWLAND CONSERVATION	5.0 ACRES
C-3	UPLAND CONSERVATION	5.0 ACRES

<sup>1</sup> SEE ZONING ORDINANCE TEXT

MOST RECENT MAP AMMENDMENT<sup>3</sup>

<sup>3</sup> ALSO SEE VILLAGE BOARD MEETING MINUTES

William H. Williams 11-1-78  
VILLAGE PRESIDENT DATE  
Lemon, Keith 11-6-78

The transmission of this material is not in accordance with Transportation Act. Please do not quote from this document or its transmission. It is a violation of transportation regulations to do so. Under the Federal Aid Highway Act of 1956 as amended, the U. S. Department of Transportation, or any of its bureaus, administrative, under the Urban Mass Transportation Act of 1964, as amended.

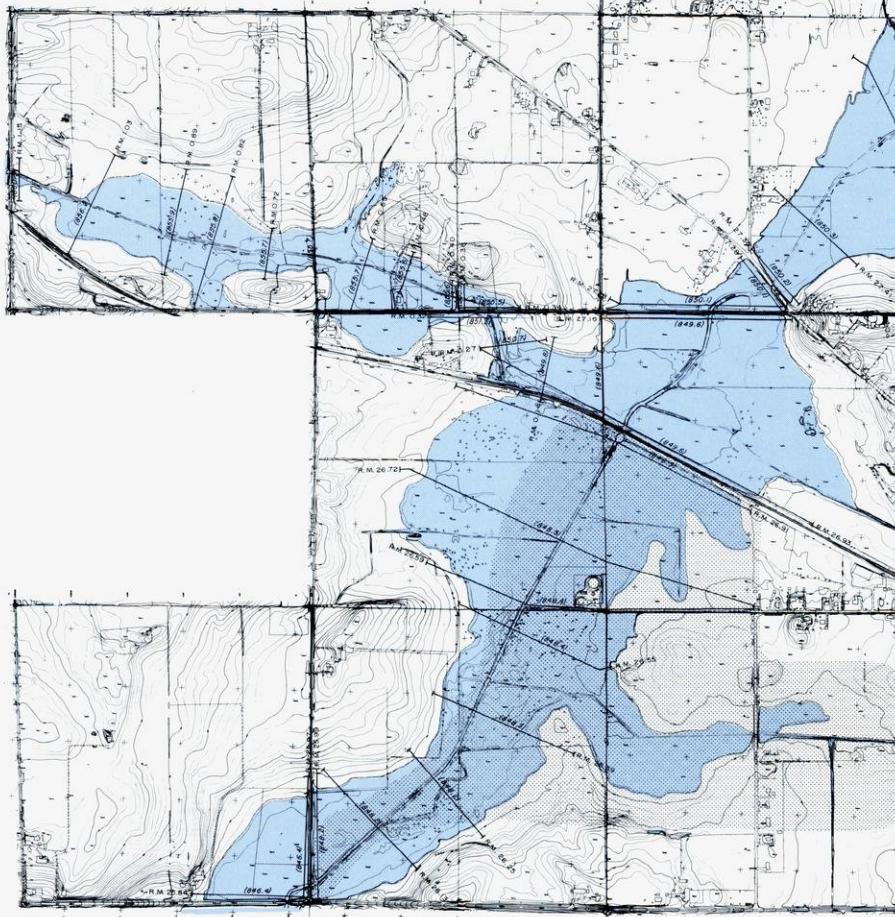
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

DATE OF PHOTOGRAPHY: MAY 197

- Completion of land division ordinances in the Village of Silver Lake and the Town of Trenton. These ordinances were subsequently adopted by the Village and the Town.
- Completion of alternative subneighborhood development plans for an area in the City of Cudahy bounded by Ramsey Avenue, Barland Avenue, College Avenue, and Buckhorn Avenue.
- Completion of alternative development plans for a 40-acre site in the Village of Sussex.
- Completion of 1" = 1000' scale aerial photographs, composited from the Commission's 1" = 400' scale aerial photography, for the Towns of Wheatland and Randall in Kenosha County. Similar composite aerial photographs will be prepared for the remaining six towns in Kenosha County in 1979.

## SUPPLEMENTARY FLOODLAND ZONING MAP: VILLAGE OF GERMANTOWN

### SUPPLEMENT TO ZONING DISTRICT MAP NO. 5 OF THE VILLAGE OF GERMANTOWN, WISCONSIN



#### LEGEND

- 100-YEAR RECURRENCE INTERVAL FLOOD HAZARD LINE
- FLOODLANDS DELINEATED BY SEWRPC BASED ON HYDROLOGIC AND HYDRAULIC STUDIES CONDUCTED WITHIN COMPREHENSIVE WATERSHED PLANNING CONTEXT-10/76
- FLOODLANDS DELINEATED BY U.S. FEDERAL INSURANCE ADMINISTRATION FOR FLOOD INSURANCE PURPOSES-NONE
- AREA WHERE TOPOGRAPHY HAS BEEN ALTERED SINCE DATE OF MAPPING
- ELEVATION IN FEET ABOVE MEAN SEA LEVEL - 100- YEAR RECURRENCE INTERVAL UNDER FLOODWAY CONDITIONS
- RIVER STATION - DISTANCE IN RIVER MILES FROM CONFLUENCE WITH THE MILWAUKEE RIVER
- RIVER STATION - DISTANCE IN RIVER MILES FROM CONFLUENCE WITH THE MENOMONEE RIVER



Prepared by ALSTER & ASSOCIATES, INC. Engineers,  
Madison, Wisconsin, Utilizing Stereophotogrammetric Methods.  
COMBINATION SCALE AND SEA LEVEL  
REDUCTION FACTOR: 5.00  
ELEVATION DATA IS BASED ON THE  
WISCONSIN STATE PLANE COORDINATE  
SYSTEM, VERTICAL DATUM IS 1929 SEA  
LEVEL ADJUSTMENT.

The preparation of this map was financed in part  
through an urban planning grant from the Housing  
and Home Finance Agency under the processes of  
Section 106 of the Housing and Community  
Development Act of 1974, and was executed under a contract with the State  
of Wisconsin, Department of Resource Development.

SCALE IN FEET  
TOPOGRAPHIC MAP  
GERMANTOWN, WISCONSIN  
WASHINGTON COUNTY

I certify that this map complies with specified requirements and  
that its accuracy is in accordance with National Standard.

CONTOUR INTERVAL 5'  
DATE OF PHOTOGRAPHY 16 April and 7 May 1964  
DATE OF MAPPING 1994

- Completion of 1" = 1000' scale enlargements of the regional land use, park and open space, and transportation plans for each of the nine towns in Racine County.

During 1978 Kenosha and Racine Counties requested Commission assistance in the preparation of a grant-in-aid application for funds for farmland preservation planning programs in the preparation of farmland preservation plans. Each county was awarded a state grant in the amount of \$20,000 to prepare a county farmland preservation plan. The Commission assisted the Counties in the conduct of inventories of farmland parcel size, soil suitability for agricultural use, farmland use, farmland improvements, woodlands, wetlands, wildlife habitat areas, existing local land use plans and zoning ordinances, and selected demographic and economic data. The Commission staff also assisted in the preparation of farmland preservation objectives, principles, and standards; alternative and recommended farmland preservation plans; and suggested implementation devices.

An example of a soil delineation map to determine agricultural capability is shown for the Town of Waterford, Racine County. In preparing this delineation the Commission staff utilized a classification system developed by the U. S. Soil Conservation Service in 1976. The map indicates the 13,668 acres, or 60 percent of the soils in the Town of Waterford, that are classified as "national prime farmlands," the 4,075 acres, or 18 percent, that are classified as "farmlands of statewide importance," and the 1,390 acres, or 6 percent, that are classified as "unique" because they are covered by prime soils for the production of certain specialty crops. The remaining 3,812 acres, or 16 percent, of the Town are covered by soils that are marginal for agricultural use and are classified as "other soils," or are covered by water.

#### **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 the eventual attainment of local full-time planning staffs.

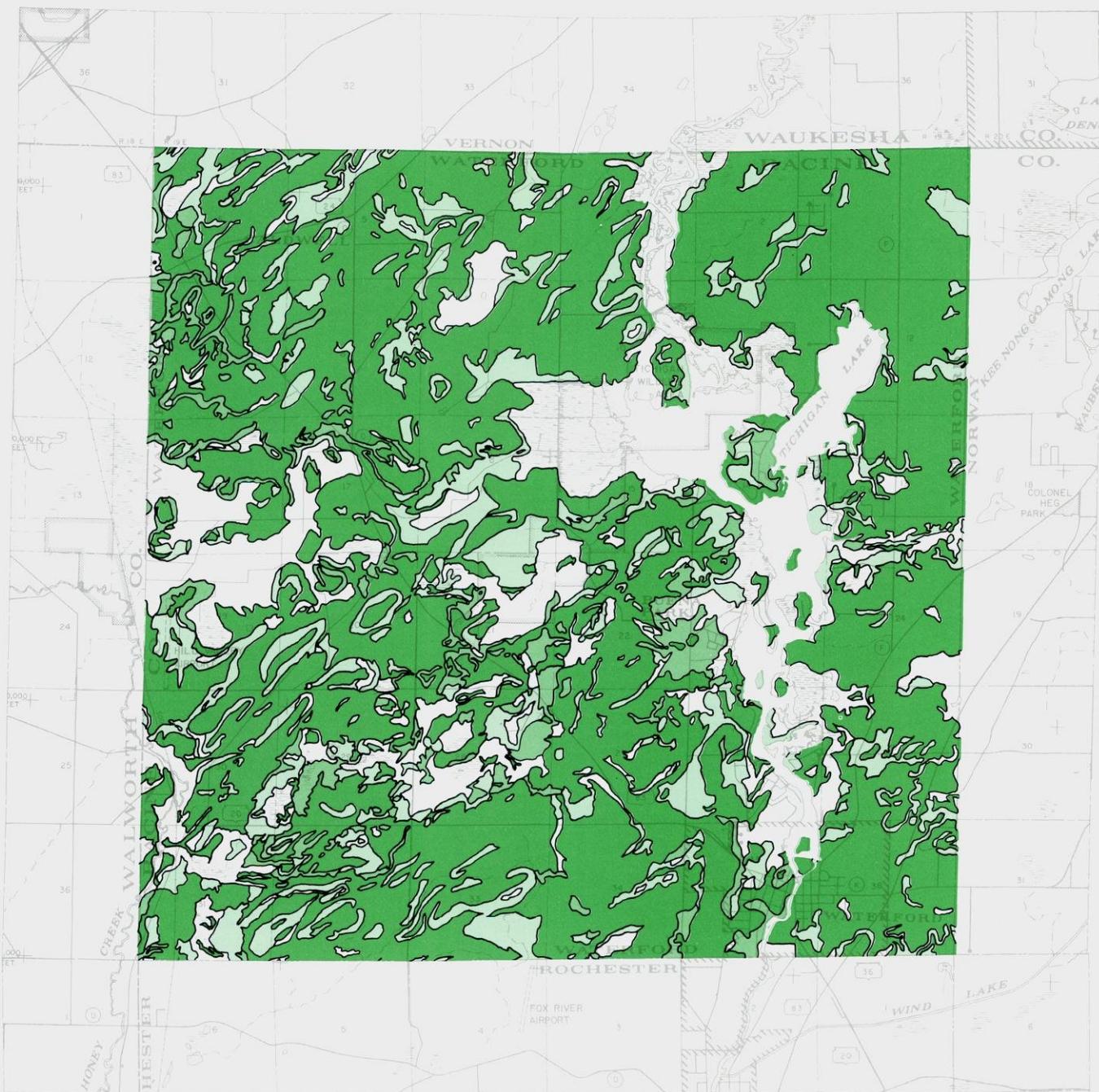
During 1978 resident staff planning assistance was provided on a contractual basis to the Cities of Cedarburg, Franklin, and Hartford and to the Villages of Germantown and Sussex. Collectively, these services required Division staff attendance at and participation in a total of 75 plan commission, village board, or city council meetings.

In addition, since May of 1978 a Commission staff planner has maintained office hours in the Hartford City Hall one day each week. During that day, the staff planner works on neighborhood unit plans, and also is available to advise local officials and citizens who may come to the City Hall seeking advice on planning matters.

#### **DISTRICT PLANNING SERVICES**

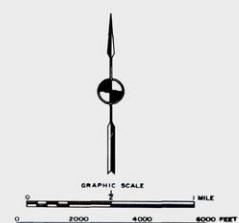
The Commission has encouraged the creation of subregional districts to conduct comprehensive community planning programs. In past years, such programs were completed for two urban development-oriented districts—the Kenosha Planning District, consisting of the City of Kenosha and the Towns of Pleasant 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. During 1978 no formal district planning efforts were carried out, although the Commission staff did continue to discuss with local officials the possible establishment of district programs in the Cedarburg-Grafton area and in the Village of Pewaukee/Town of Pewaukee area. The Pewaukee discussions have advanced to the point that a joint planning program should be mounted in 1979.

## SOIL DELINEATION FOR AGRICULTURAL CAPABILITY: TOWN OF WATERFORD, RACINE COUNTY



### LEGEND

- NATIONAL PRIME FARMLAND
- UNIQUE FARMLAND
- FARMLAND OF STATEWIDE SIGNIFICANCE





# 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, typing, proofreading, illustration preparation, offset printing, and binding.

## BASE MAPPING

During 1978, 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 network, relating the U. S. Public Land Survey System to the State Plane Coordinate System. The Division assists local communities in the preparation of contracts and specifications for 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 or are being prepared to Commission-recommended standards. As shown in the accompanying table, this area totals 885 square miles, or nearly 33 percent of the total area of the Region. A total of 4,891 U. S. Public Land Survey corners in the Region have been or are being relocated, monumented, and coordinated, representing nearly 42 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 250 inquiries for such data during 1978 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 6,300 prints of aerial photographs of portions of the Region were reproduced, along with nearly 520 soil map prints and about 750 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

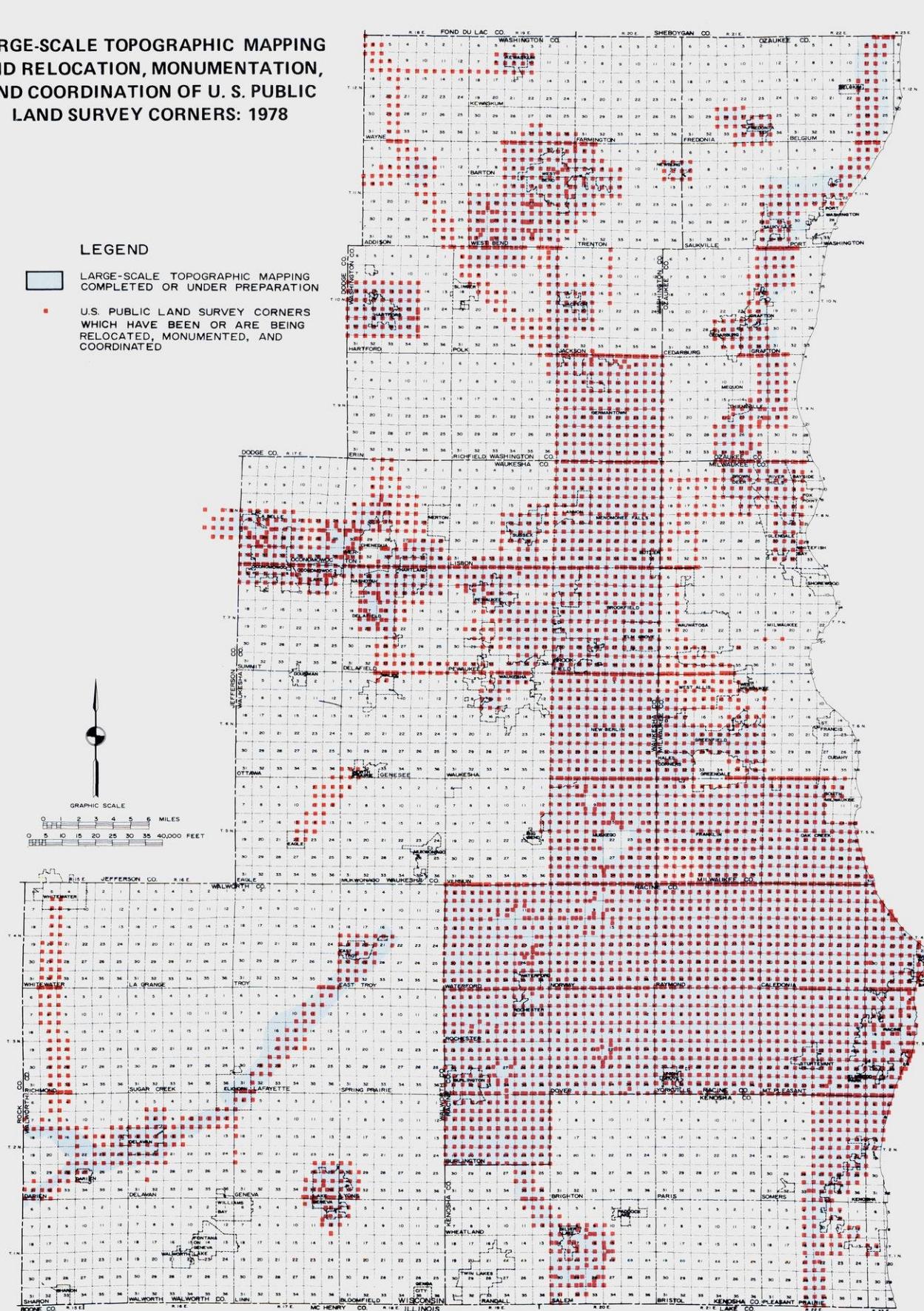
During 1978 the Division had responsibility for production of the following Commission publications:

LARGE-SCALE TOPOGRAPHIC MAPPING  
AND RELOCATION, MONUMENTATION,  
AND COORDINATION OF U. S. PUBLIC  
LAND SURVEY CORNERS: 1978

## 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



**LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION,  
AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1978**

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	14.75	42.50	15.29
Milwaukee . . . .	242	--	11.00	74.75	85.75	35.43
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	--	18.50	48.75	8.43
Washington . . .	436	2.75	22.75	77.25	102.75	23.56
Waukesha. . . . .	581	1.25	78.75	132.25	212.25	36.53
Region	2,689	61.00	190.00	634.00	885.00	32.91

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	--	173	84	257	21.72
Milwaukee . . . .	1,084	71	46	474	591	54.52
Ozaukee . . . . .	1,070	104	174	4	282	26.36
Racine. . . . .	1,523	--	172	1,351	1,523	100.00
Walworth. . . . .	2,521	231	--	87	318	12.61
Washington . . .	1,811	121	153	418	692	38.21
Waukesha. . . . .	2,577	129	485	614	1,228	47.65
Region	11,769	656	1,203	3,032	4,891	41.56

*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.*

## PROSPECTUSES

- Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus, September 11, 1978, 193 pages.
- Overall Work Program—1979 Southeastern Wisconsin Regional Planning Commission, October 1978, 403 pages.
- Milwaukee Area Primary Transit System Alternatives Analysis Prospectus, October 4, 1978, 58 pages.

## TYPICAL SEWRPC MONUMENT



- Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Prospectus, November 11, 1978, 55 pages.
- Milwaukee Area Work Time Rescheduling Study Prospectus, December 7, 1978, 47 pages.

#### PLANNING REPORTS

- No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin—2000, Volume Two, Alternative and Recommended Plans, May 30, 1978, 828 pages.
- No. 29, A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin, July 3, 1978, 403 pages.
- No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings, September 21, 1978, 438 pages.
- No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, April 6, 1978, 573 pages.
- No. 32, A Comprehensive Plan for the Kinnickinnic River Watershed, December 7, 1978, 491 pages.

#### ANNUAL REPORTS

- 1977 Annual Report, August 25, 1978, 149 pages.

#### TECHNICAL REPORTS

- No. 17, Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975, June 6, 1978, 593 pages.
- No. 21, Sources of Water Pollution in Southeastern Wisconsin: 1975, September 11, 1978, 791 pages.

#### COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 14, Floodland Management Plan for the Village of Pewaukee, February 22, 1978, 95 pages.
- No. 17, A Plan for the Jefferson Park Neighborhood, Village of Germantown, Washington County, Wisconsin, March 21, 1978, 41 pages.
- No. 18, A Land Use Plan for the Town of Erin—2000, July 3, 1978, 44 pages.

- No. 22, Alternative and Recommended Land Use Plans for the Town of Genesee—2000, February 22, 1978, 65 pages.
- No. 23, A Park and Recreation Plan for Ozaukee County, August 2, 1978, 232 pages.
- No. 24, A Park and Open Space Plan for the Village of Darien, December 7, 1978, 51 pages.
- No. 26, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 7, 1978.

#### TECHNICAL RECORDS

- Volume 4, No. 1, March 1978, 69 pages.

#### CONFERENCE AND PUBLIC HEARING PROCEEDINGS

- Proceedings of the Tenth Regional Planning Conference, Wastewater Sludge Management in Southeastern Wisconsin, March 15, 1978, 146 pages.
- Minutes of Public Hearings, A Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, January 24, 1978 to April 5, 1978, 143 pages.
- Minutes of Public Hearing, Comprehensive Plan for the Kinnickinnic River Watershed, October 12, 1978, 29 pages.
- Minutes of Public Hearing, Proposed Amendment to a Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1979-1982, November 1978, 26 pages.

#### NEWSLETTERS

- Volume 18, Nos. 1-6, 212 pages.

#### OTHER

- Title VI Documentation Regarding Technical and Planning Assistance, October 1978, 204 pages.
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin, 1979-1983, December 1978, 231 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 a 17-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 5,500 reels of magnetic tape, representing approximately 2,500 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 is based primarily on the U. S. Public Land Survey quarter section as the unit of geographic reference. 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.

In July 1978 the Commission installed a new central processing unit, an IBM System 370 Model 148, to replace an IBM System 370 Model 138. 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 1.8 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 18 IBM 3277 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 20 "remote" display stations and printers for use by the five local communities to which the Commission provides certain community assistance data processing services.

During 1978 about 200 "internal" requests for data retrieval were processed. These requests resulted in the preparation of more than 800 data reports for use in the Commission's planning work and other public and private planning efforts. The 200 requests represented approximately one-third of the Commission's computer usage during 1978. 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 emission model. In the water resources planning field, the Commission uses a water surface profile model developed by the U. S. Army Corps of Engineers; a hydrologic, hydraulic, and water simulation model developed by Hydrocomp, Inc.; and a flood economics model developed by the Commission staff. During early 1978, all of these models were extensively used as part of plan design work conducted by the Transportation Planning Division under the major effort to prepare a new regional

transportation plan and by the Environmental Planning Division under the Kinnickinnic River watershed study and the areawide water quality management planning program.

## DATA PROCESSING SERVICES TO LOCAL GOVERNMENTS

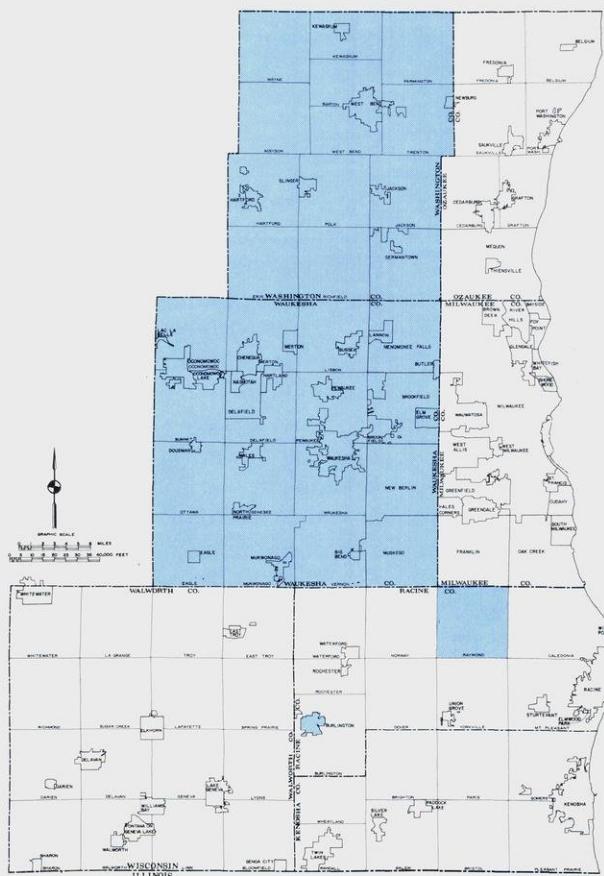
Since its inception, the Commission has offered to its member units of government special services that involve professional advice on the selection of computer systems and the provision of special data processing services. Direct data processing services have been provided since 1967, using excess capacity on the Commission's computer system. Such services were provided in the traditional "batch" mode of processing where the community delivered data to the Commission to process and the Commission returned appropriate reports and materials to the community. Beginning in 1978, the Commission began offering interested communities the ability 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 1978 services were provided to communities utilizing both methods of processing. Some communities actually used both methods, 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 1978 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 in the Region, one county, one city, and one village, 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—

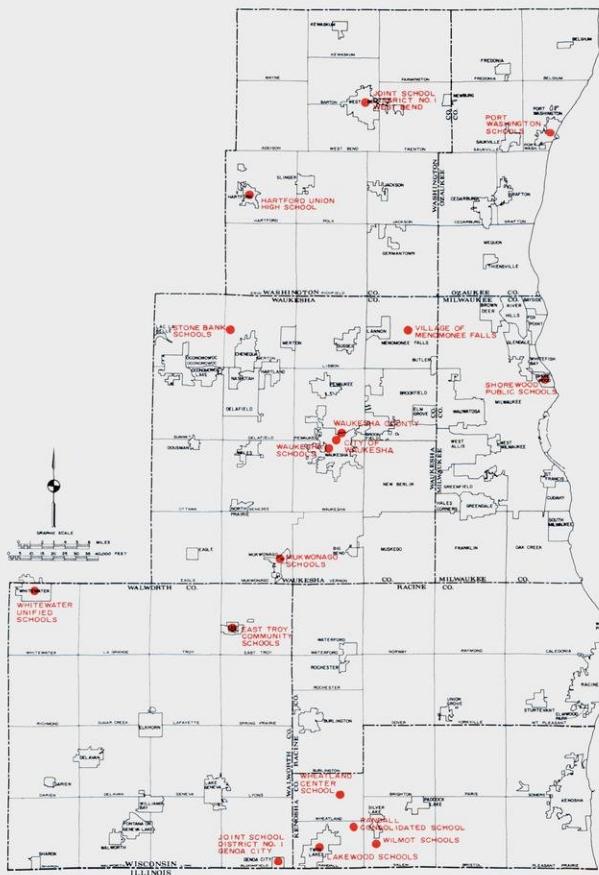
## LOCAL COMMUNITIES USING SEWRPC FOR PROPERTY TAX DATA PROCESSING



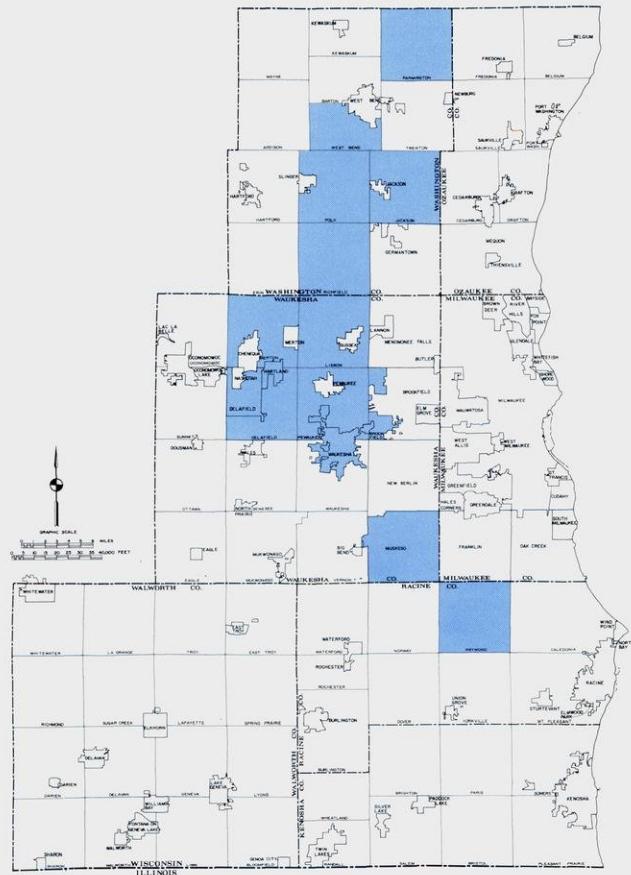
Racine—in the area of welfare check processing. Also, during 1978 the Commission data processing staff converted approximately 80 percent of Waukesha County's NCR computer programs to run on the Commission's computer system. The remaining 20 percent will be completed early in 1979 so that all "batch" programs in the areas of general accounting, payroll, register of deeds accounting, sheriff wants and warrants and high accident frequency processing, personnel management, and other miscellaneous report generators can be processed for the County of Waukesha.

In the "on-line" processing mode, the Commission has installed computer terminals at two counties and three cities. The accompanying maps show the location of the terminals and the applications which were processed from those terminals during 1978.

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



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



## LOCAL GOVERNMENT-SEWRPC TELEPROCESSING CONFIGURATION AND APPLICATIONS

### CITY OF WEST BEND

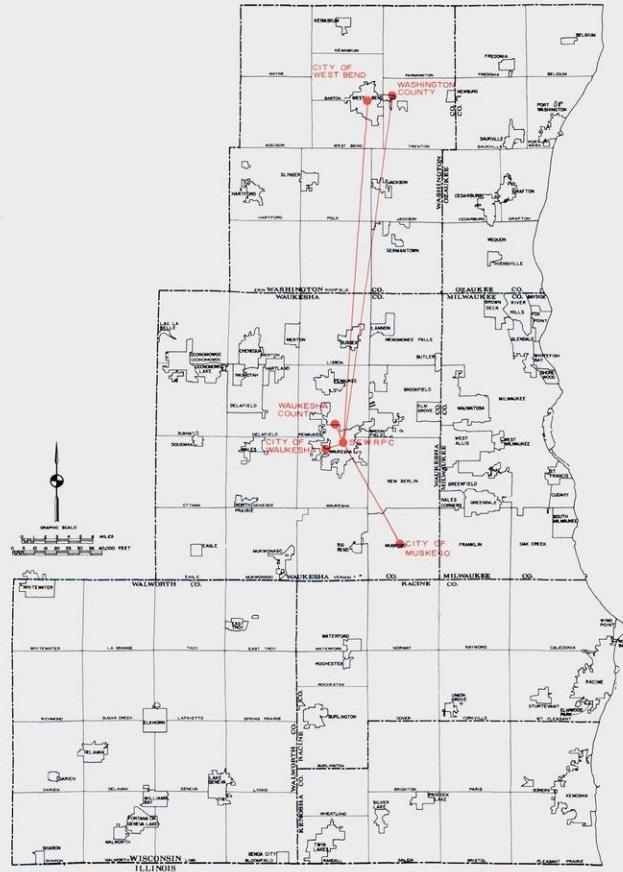
- **CITY CLERK**  
Special Tax Assessments  
General Ledger  
Accounts Payable
- **CITY ASSESSOR**  
Property Tax File Maintenance

### 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
- **CITY ASSESSOR**  
Property Tax File Maintenance



### WASHINGTON COUNTY

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

### CITY OF MUSKEGO

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

# ADMINISTRATIVE SERVICES DIVISION

## DIVISION FUNCTIONS

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

### FINANCIAL MANAGEMENT

One of the major functional areas of the Division is monitoring the Commission's financial status and condition. This includes maintaining a fund accounting system, preparing an annual Commission budget, preparing Commission payrolls, and processing accounts receivable and payable. During 1978 the Division staff completed adaptation of the accounting system to machine data processing. Through the computerized accounting system, monthly financial management reports are prepared, including cash flow reports, and quarterly Treasurer's reports are prepared. These reports are utilized by the Commission, its committees, and the Executive Director to ensure that the financial condition of the Commission is secure.

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 accomplished during 1978 by maintaining trust accounts with a minority-controlled bank within the Commission's service area. In addition, the Commission established a minority business enterprise program, including the generation of a list of minority businesses as potential Commission vendors.

An operating budget for 1979 was prepared. Through this document and an accompanying 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 1978 the Commission continued to make progress in carrying out a comprehensive equal employment opportunity program, including in the areas of recruitment, employment, promotion, transferring, and training. Action was taken to better monitor applicant flow in order to gage progress in attracting minority applicants as required in the affirmative action program. Efforts were continued toward attracting qualified minority and women applicants during the year.

### GRANT-IN-AID PROCUREMENT

Along with accounting for the federal, state, and local funds received to operate the Commission, the Division is involved in grant application preparation. This preparation includes preparing application forms, including detailed narratives covering work projects, preparing tentative budgets to execute the work projects, and assisting in final grant approval. These grants provide a large portion of the overall working capital required to complete the Commission's work projects.

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 required by federal regulation, is also prepared by 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, the Commission serves as a "pass through" agency to provide federal and state planning monies directly to local units of government. For example, transit planning funds are provided through the Commission to both the City and County of Milwaukee. The Division administers these "pass through" funds, which in 1978 totaled \$180,167.

## **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 planning reports, in addition to the typing of routine and specialized correspondence.

## **SALE AND DISTRIBUTION OF PUBLICATIONS**

During 1978, the Division distributed a total of 8,857 copies of Commission reports. These included: 412 prospectuses, 3 study designs, 3,250 planning reports, 9 planning guides, 982 technical reports, 1,356 community assistance planning reports, 760 technical records, 980 annual reports, 414 conference proceedings, 138 community profiles, 42 lake use reports, 344 public hearing minutes, 100 transportation improvement programs, and 67 overall work programs.

## **APPENDICES**



## Appendix A

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: 1978

#### COMMISSIONERS

#### COMMITTEES

	Term Expires	
<b>KENOSHA COUNTY</b>		
Donald L. Klapper . . . . .	1982	
Donald E. Mayew . . . . .	1980	
* Francis J. Pitts . . . . .	1980	
<b>MILWAUKEE COUNTY</b>		
Richard W. Cutler . . . . .	1984	
Evelyn L. Petshek, Vice-Chairman . . . . .	1980	
* Harout O. Sanasarian . . . . .	1978	
<b>OZAUKEE COUNTY</b>		
Thomas H. Buestrin . . . . .	1982	
* John P. Dries . . . . .	1978	
Alfred G. Raetz . . . . .	1984	
<b>RACINE COUNTY</b>		
George C. Berteau, Chairman . . . . .	1980	
* Raymond J. Moyer . . . . .	1978	
Earl G. Skagen . . . . .	1982	
<b>WALWORTH COUNTY</b>		
John D. Ames . . . . .	1978	
Anthony F. Balestrieri, Secretary . . . . .	1982	
* Harold H. Kolb . . . . .	1982	
<b>WASHINGTON COUNTY</b>		
Paul F. Quick . . . . .	1980	
* Joseph A. Schmitz, Treasurer . . . . .	1978	
Frank F. Uttech . . . . .	1982	
<b>WAUKESHA COUNTY</b>		
Charles J. Davis . . . . .	1980	
* Robert F. Hamilton . . . . .	1982	
Lyle L. Link . . . . .	1980	
<b>EXECUTIVE COMMITTEE</b>		
George C. Berteau, Chairman		
Evelyn L. Petshek		
Francis J. Pitts		
Anthony F. Balestrieri		
Richard W. Cutler		
Charles J. Davis		
John P. Dries		
Donald L. Klapper		
Lyle L. Link		
Raymond J. Moyer		
Alfred G. Raetz		
Harout O. Sanasarian		
Joseph A. Schmitz		
<b>ADMINISTRATIVE COMMITTEE</b>		
Alfred G. Raetz, Chairman		
Donald L. Klapper, Vice-Chairman		
George C. Berteau		
Lyle L. Link		
Francis J. Pitts		
Joseph A. Schmitz		
<b>INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE</b>		
Francis J. Pitts, Chairman		
John P. Dries, Vice-Chairman		
George C. Berteau		
Robert F. Hamilton		
Harold H. Kolb		
Raymond J. Moyer		
Harout O. Sanasarian		
Joseph A. Schmitz		
<b>PLANNING AND RESEARCH COMMITTEE</b>		
Anthony F. Balestrieri, Chairman		
Donald E. Mayew, Vice-Chairman		
John D. Ames		
George C. Berteau		
Charles J. Davis		
Robert F. Hamilton		
Harold H. Kolb		
Lyle L. Link		
Evelyn L. Petshek		
Paul F. Quick		
Alfred G. Raetz		
Earl G. Skagen		
Frank J. Uttech		

\*County Board-Appointed Commissioners.



## 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	Dr. William Katz (3,6) . . . . .	Milwaukee Metropolitan Sewerage District
Anthony S. Bareta (3) . . . . .	Director, Milwaukee County Planning Commission	Richard A. Keyes (2) . . . . .	Environmental Engineer, Milwaukee County Department of Public Works
John M. Bennett (1,4) . . . . .	City Engineer, City of Franklin	Robert F. Kolstad (1,2,4,5) . . . . .	Director, Department of Community Development, City of Kenosha
James J. Blazek (2) . . . . .	City Engineer, City of Racine	Edwin J. Laszewski, Jr. (2) . . . . .	City Engineer, City of Milwaukee
Richard R. Brandt (1) . . . . .	Manager, Energy Requirements, Wisconsin Gas Company, Milwaukee	Wilmer F. Lean (1,7) . . . . .	County Highway Commissioner, Walworth County
Robert W. Brannan (2,5,7) . . . . .	Deputy Director, Department of Public Works, Milwaukee County	Gerald P. Lee (1) . . . . .	Building Inspector, City of Muskego
Donald M. Cammack (7) . . . . .	Chief Planning Engineer, Division of Transportation Assistance, Wisconsin Department of Transportation	Elwin G. Leet (1,3,4) . . . . .	County Agricultural Agent, Racine County
Frederick H. Chlup (1,4) . . . . .	Land Use and Park Administrator, Washington County	Russell H. Leitch (3) . . . . .	Director, District Office, U. S. Department of Commerce, Milwaukee
Thomas R. Clark (2,5,7) . . . . .	Chief Planning Engineer, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation	Edward G. Lemmen (6) . . . . .	Water Utility Manager, City of Lake Geneva
Arnold L. Clement (1,2) . . . . .	Planning Director and Zoning Administrator, Racine County	James H. Lenz (6) . . . . .	Village Engineer, Village of Hartland
Lucien M. Darin (2) . . . . .	Director of Public Works, City of Hartford	J. William Little (2,6) . . . . .	City Administrator, City of Wauwatosa
Vencil F. Demshar (2) . . . . .	County Highway Commissioner, Waukesha County	Gilbert R. Loshek (2) . . . . .	Area General Manager, Central Greyhound Lines, Milwaukee
Russell A. Dimick (2) . . . . .	City Engineer, City of Cedarburg	James J. Lynch (1) . . . . .	Village Planner, Village of Shorewood
Arthur D. Doll (1) . . . . .	Director, Bureau of Planning, Wisconsin Department of Natural Resources	John Margis, Jr. (2,4,7) . . . . .	County Highway Commissioner, Racine County
William E. Dow (1,3) . . . . .	District Manager, Network Planning, Wisconsin Telephone Company	William L. Marvin (2,7) . . . . .	Traffic Engineer, American Automobile Association, Madison
William R. Drew (1,2,3,4,5,6,7) . . . . .	Commissioner, Department of City Development, City of Milwaukee	Henry M. Mayer (5) . . . . .	Managing Director, Milwaukee County Transit System
Raymond T. Dwyer (6) . . . . .	City Engineer, City of Greenfield	Norman H. McKegey (5) . . . . .	Terminal Superintendent, The Milwaukee Road, Milwaukee
James E. Foley (7) . . . . .	Airport Engineer, Department of Public Works, Milwaukee County	George Mead (3) . . . . .	Marketing Research Manager, The Milwaukee Journal
John M. Fredrickson (1) . . . . .	Village Manager, Village of River Hills	Robert J. Mikula (2,4) . . . . .	Director of Parks, Recreation and Culture, Milwaukee County Park Commission
Thomas J. Gaffney (2) . . . . .	Traffic Engineer, City of Kenosha	William A. Muth, Jr. (6) . . . . .	Director of Public Works, City of Brookfield
Arne L. Gausmann (1,2) . . . . .	Director, Bureau of Systems Planning, Division of Planning and Budget, Wisconsin Department of Transportation	George J. Novenski (7) . . . . .	Chief, Travel Statistics and Data Coordination Section, Division of Planning and Budget, Wisconsin Department of Transportation
Norman N. Gill (1,3) . . . . .	Executive Director, Citizens Governmental Research Bureau, City of Milwaukee	William F. O'Donnell (1,5) . . . . .	County Executive, Milwaukee County
Herbert A. Goetsch (2,4,6) . . . . .	Commissioner of Public Works, City of Milwaukee	Dwayne Partain (1,5) . . . . .	Librarian, MATC, Milwaukee
George Gundersen (2,4) . . . . .	Chief of Statewide Planning Section, Division of Planning and Budget, Wisconsin Department of Transportation	Nick T. Paulos (1,2) . . . . .	Village Engineer, Village of Greendale
Douglas F. Haist (3,5) . . . . .	Director, Division of Transportation Assistance, Wisconsin Department of Transportation	Harry L. Peterson (5,7) . . . . .	Executive Assistant, Wisconsin Department of Transportation, Madison
John M. Hartz (5) . . . . .	Chief, Urban Transit Assistance Section, Division of Planning and Budget, Wisconsin Department of Transportation	Allan P. Pleyte (5,7) . . . . .	Traffic Engineer and Superintendent, Bureau of Traffic Engineering and Electrical Services, City of Milwaukee
Frank M. Hedcock (7) . . . . .	City Planner, City of Waukesha	James F. Popp (5,7) . . . . .	Chief of Planning, U. S. Department of Transportation, Federal Aviation Administration, Great Lakes Region, Chicago
Sebastian J. Helfer (3) . . . . .	Director, Campus Planning and Construction, Marquette University, Milwaukee	Victoria M. Potter (1) . . . . .	Director, Office of State Energy and Planning, Wisconsin Department of Administration
John R. Hessianhaler (5) . . . . .	Town Engineer, Town of Caledonia	John B. Prince (1,3,6) . . . . .	Assistant to Senior Vice-President, Wisconsin Electric Power Company, Milwaukee
Donald K. Holland (2,6) . . . . .	Director of Public Works, City of Kenosha	James O. Radke (4) . . . . .	Soil Conservation Director, U. S. Soil Conservation Service
Karl B. Holzwarth (2,4) . . . . .	Director, Park Commission, Racine County	Richard A. Rechlicz (5) . . . . .	Executive Secretary, Wisconsin School Bus Contractors Association
Ronald Hustedde (1,4) . . . . .	Resource Agent, Walworth County	Gerald J. Reihsen (2,5,6,7) . . . . .	Division Administrator, Region V, U. S. Department of Transportation, Federal Highway Administration
Robert F. Hutter (2) . . . . .	Director of Public Works, Village of Sussex	Donald V. Revello (5,7) . . . . .	Chief of Traffic Planning, Division of Planning, Wisconsin Department of Transportation
Paul G. Jaeger (1,2,4) . . . . .	County Agricultural Agent, Kenosha County	W. L. Rodau (1,3) . . . . .	District Accounting Manager, Wisconsin Telephone Company
Edward A. Jenkins (5) . . . . .	Transportation Director, City of Kenosha	Donald A. Roensch (1,6) . . . . .	Director of Public Works, City of Mequon
Dr. Leonard C. Johnson (4) . . . . .	Soil and Water Conservation Specialist, Wisconsin Board of Soil and Water Conservation Districts	William D. Rogan (1,4) . . . . .	County Agri-Business Agent, Waukesha County
Paul Juhnke (3) . . . . .	Vice-President, Metropolitan Milwaukee Association of Commerce	Gordon Rozmus (1,3) . . . . .	City Planner, City of Wauwatosa
Russell E. Julian (3) . . . . .	Executive Director, Southeastern Wisconsin Health Systems Agency, Inc., Milwaukee	Joseph P. Sabella (1,3) . . . . .	Area Manager, Milwaukee Area Office, U. S. Department of Housing and Urban Development
		Franklin B. Scharrer (2,7) . . . . .	County Highway Commissioner, Washington County
		Dr. Eric Schenker (3,5,7) . . . . .	Dean, School of Business Administration, University of Wisconsin-Milwaukee

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON REGIONAL LAND USE-TRANSPORTATION PLANNING  
(Continued)**

John E. Schumacher (2,7) . . . . . City Engineer, City of West Allis  
Kathy Sellars (3,5) . . . . . Planner/Programmer Developer, Southeastern Wisconsin Area Agency on Aging, Inc.  
Gerald Schwerk (2,7) . . . . . Director of Transportation, Milwaukee County  
Harvey Shebesta (2,3,5,7) . . . . . District Director, Division of Transportation Facilities, Wisconsin Department of Transportation  
Leland C. Smith (4) . . . . . County Horticultural Agent, Kenosha County  
George A. Swier (1,2) . . . . . County Highway Commissioner, Kenosha County  
Walter J. Tarmann (1,4) . . . . . Executive Director, Waukesha County Park and Planning Commission  
Jack Taylor (5) . . . . . President, Flash City Transit Company, Racine  
Norbert S. Theine (1) . . . . . Administrator, City of South Milwaukee  
Donald J. Tripp (1,4) . . . . . Agricultural Agent, Ozaukee County  
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  
Theodore G. Weigle (5,7) . . . . . Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration  
Sylvester N. Weyker (2) . . . . . County 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  
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 JURISDICTIONAL HIGHWAY PLANNING FOR KENOSHA COUNTY**

George A. Swier . . . . . County Highway Commissioner, Chairman, Kenosha County  
Robert F. Kolstad . . . . . Director, Department of Community Development, City of Kenosha  
Secretary Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
Thomas R. Clark . . . . . Chief Planning Engineer, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation  
Philip Dunek . . . . . Citizen Member, Village of Paddock Lake  
Howard Gehrke . . . . . Town Chairman, Town of Salem  
Richard Harrison . . . . . President, Village of Silver Lake  
Donald K. Holland . . . . . Director of Public Works, City of Kenosha  
Earl W. Hollister . . . . . County Supervisor, Kenosha County  
Merlin F. Jahns . . . . . Trustee, Village of Twin Lakes  
Stanley Kerkman . . . . . Town Chairman, Town of Wheatland  
Richard J. Lindl . . . . . Town Chairman, Town of Somers  
Maurice Lake . . . . . Citizen Member, Town of Salem  
Bruce E. Matzke . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration, Madison  
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  
Virginia Taylor . . . . . Citizen Member, City of Kenosha  
August Zirbel, Jr. . . . . Town Chairman, Town of Paris

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIRPORT PLANNING**

William D. Rogan . . . . . County Agri-Business Agent, Waukesha County  
Chairman Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
Secretary 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, Division of Planning and Budget, Wisconsin Department of Transportation  
James F. Popp . . . . . Chief of Planning, U. S. Department of Transportation, Federal Aviation Administration, Great Lakes Region, Chicago  
Joseph F. Sanek . . . . . Airport Director, Milwaukee County  
Gerald Schwerk . . . . . 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 MILWAUKEE COUNTY**

Gerald Schwerk . . . . . Director of Transportation, Chairman and Secretary, Milwaukee County  
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission  
Bruno J. Haas . . . . . City Engineer, City of Glendale  
Edwin J. Laszewski, Jr. . . . . City Engineer, City of Milwaukee  
J. William Little . . . . . City Administrator, City of Wauwatosa  
Bruce E. Matzke . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration, Madison  
Nick T. Paulos . . . . . Village Engineer, Village of Greendale  
Gerald J. Reihsen . . . . . Division Administrator, Region V, U. S. Department of Transportation, Federal Highway Administration  
John E. Schumacher . . . . . City Engineer, City of West Allis  
Harvey Shebesta . . . . . District Director, Division of Transportation Facilities, Wisconsin Department of Transportation

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

Sylvester N. Weyker . . . . . County 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,  
Division of Planning and Budget,  
Wisconsin Department of Transportation  
Michael C. Harrigan . . . . . Clerk-Administrator,  
Village of Saukville  
Thomas P. Kinsey . . . . . District Engineer, District 2,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation  
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,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation

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

Milton R. Reik . . . . . Citizen Member,  
Chairman City of Lake Geneva  
Wilmer W. Lean . . . . . County 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 . . . . . County Supervisor, Walworth County  
Richard Folman . . . . . Mayor, City of Lake Geneva  
George Gundersen . . . . . Chief of Statewide Planning Section,  
Division of Planning and Budget,  
Wisconsin Department of Transportation  
Bruce E. Matzke . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration, Madison  
Clement Tracy . . . . . Chairman, Town of East Troy  
Gerald T. Waelti . . . . . Highway Commissioner, Walworth County  
Donald E. Zenz . . . . . Planning Commission, Village of Fontana

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

John Margis, Jr. . . . . . County Highway Commissioner,  
Chairman Racine County  
Cecil F. Mehring . . . . . County Highway Engineer,  
Secretary Racine County  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Robert P. Birchler . . . . . City Engineer, City of Burlington  
Thomas R. Clark . . . . . Chief Planning Engineer, District 2,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation  
Arnold L. Clement . . . . . Planning Director and Zoning  
Administrator, Racine County  
George A. Gundersen . . . . . Chief of Statewide Planning Section,  
Division of Planning and Budget,  
Wisconsin Department of Transportation  
John R. Hessianthaler . . . . . Town Engineer, Town of Caledonia  
Fred H. Larson . . . . . Commissioner of Public Works,  
City of Racine  
Bruce E. Matzke . . . . . Planning and Research Engineer,  
U. S. Department of Transportation,  
Federal Highway Administration, Madison  
Thomas N. Wright . . . . . Director of Planning, City of Racine

**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  
George B. Allmann . . . . . Chairman, Town of Kewaskum  
Frederick H. Chlupp . . . . . Land Use and Park Administrator,  
Washington County  
Robert Danielsen . . . . . President, Village of Kewaskum  
Lucian M. Darin . . . . . Director of Public Works, City of Hartford  
Jerome P. Faust . . . . . County Supervisor, Washington County  
Doreen Flemming . . . . . Clerk, Town of Germantown  
Mark Fuge . . . . . Acting City Engineer, City of West Bend  
Peter Gonnering . . . . . Supervisor, Washington County  
Walter B. Grotelueschen . . . . . Village President, Village of Newburg  
Carl Hauch . . . . . Supervisor, Town of Farmington  
Carl Hohlweck . . . . . Chairman, Town of Wayne  
Walter L. Kletti . . . . . Member, City of Hartford Planning Commission  
John B. Kohl . . . . . Chairman, Town of Richfield;  
County Supervisor, Washington County  
Howard J. Kruepke . . . . . Citizen Member, Jackson  
Arnold J. Lepien . . . . . Supervisor, Town of Hartford  
John W. Lietzau . . . . . Citizen Member, Village of Germantown  
John J. Meyer . . . . . City Engineer, City of West Bend  
Alois Okrulhica . . . . . Supervisor, Town of Jackson  
John M. Pick . . . . . Mayor, City of West Bend  
Helmut F. Prahl . . . . . County Supervisor, Washington County  
Gerald J. Reihsen . . . . . Division Administrator, Region V,  
U. S. Department of Transportation,  
Federal Highway Administration  
Ralph P. Schnorenberg . . . . . Alderman, City of Hartford  
Franklin B. Scharrer . . . . . County Highway Commissioner, Washington County  
Hugo Schwulst . . . . . Chairman, Town of Erin;  
County Supervisor, Washington County  
Roland S. Senner . . . . . Chairman, Town of Trenton  
Jerome A. Stautz . . . . . City Clerk, City of West Bend  
Gordon Stowers . . . . . Chairman, Town of West Bend  
Mervin C. Thompson . . . . . EPA Construction Supervisor, Washington County  
Sedimentation and Erosion Control Project  
Carl Vogt . . . . . Town Clerk, Town of Addison

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

Vencil F. Demshar . . . . .	County Highway Commissioner, Chairman and Secretary	Waukesha County
Kurt W. Bauer . . . . .	Executive Director, Southeastern Wisconsin Regional Planning Commission	
Arne L. Gausmann . . . . .	Director, Bureau of Systems Planning, Division of Planning and Budget, Wisconsin Department of Transportation	
John Greber . . . . .	Acting Director, Department of Public Works, City of New Berlin	
Richard M. Jung, Sr. . . . .	Town Chairman, Town of Lisbon	
Gerald P. Lee . . . . .	Building Inspector, City of Muskego	
Bruce E. Matzke. . . . .	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration, Madison	
William A. Muth, Jr. . . . .	Director of Public Works, City of Brookfield	
Wilbur G. Perren . . . . .	Supervisor, Town of Genesee	
Gerald J. Reihsen . . . . .	Division Administrator, Region V, 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	

**MILWAUKEE AREA PRIMARY TRANSIT SYSTEM ALTERNATIVES  
ANALYSIS PROSPECTUS STEERING COMMITTEE**

Frank P. Zeidler. . . . .	Citizen Member, Chairman	City of Milwaukee
Kurt W. Bauer. . . . .	Executive Director, Southeastern Wisconsin Secretary	Regional Planning Commission
Robert W. Brannan . . . . .	Deputy Director, Department of Public Works, Milwaukee County	
Douglas F. Haist. . . . .	Deputy Administrator, Division of Planning, Wisconsin Department of Transportation	
Edwin J. Laszewski, Jr. . . . .	City Engineer, City of Milwaukee	
Henry M. Mayer. . . . .	Managing Director, Milwaukee County Transit System	
Theodore G. Weigle . . . . .	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration	

**MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY  
TRANSPORTATION IMPROVEMENT STUDY PROSPECTUS  
STEERING COMMITTEE**

George C. Berteau. . . . .	Chairman, Southeastern Wisconsin Regional Planning Commission	
Kurt W. Bauer. . . . .	Executive Director, Southeastern Wisconsin Secretary	Regional Planning Commission
Robert W. Brannan . . . . .	Deputy Director, Department of Public Works, Milwaukee County	
Warren D. Braun . . . . .	Wisconsin State Senator	
William R. Drew. . . . .	Commissioner, Department of City Development, City of Milwaukee	
Wayne P. Frank . . . . .	Milwaukee Alderman; Chairman, Utilities and Licenses Committee, City of Milwaukee Common Council	
Paul A. Henningsen. . . . .	Milwaukee County Supervisor	
John O. Hibbs. . . . .	Division Administrator, U. S. Department of Transportation, Federal Highway Administration	
Edwin J. Laszewski, Jr. . . . .	City Engineer, City of Milwaukee	
J. William Little. . . . .	City Administrator, City of Wauwatosa	
Henry M. Mayer. . . . .	Managing Director, Milwaukee County Transit System	
Paul G. Mayer . . . . .	Chairman, Ozaukee County Highway Committee	

**MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY  
TRANSPORTATION IMPROVEMENT STUDY PROSPECTUS  
STEERING COMMITTEE**

(Continued)

Roy Nabors . . . . .	Alderman, City of Milwaukee; Chairman, Park West Redevelopment Task Force
Harvey Shebesta. . . . .	District Director, Division of Transportation Facilities, Wisconsin Department of Transportation
Dennis C. Vierra. . . . .	Planning Representative, U. S. Department of Transportation, Urban Mass Transportation Administration
James J. Gosling. . . . .	Executive Assistant, Office of the Secretary, Wisconsin Department of Transportation
Sylvester N. Weyker . . . . .	Highway Commissioner, Ozaukee County

**WORK TIME RESCHEDULING PROSPECTUS STEERING COMMITTEE**

Kurt W. Bauer. . . . .	Executive Director, Southeastern Wisconsin Regional Planning Commission
Robert W. Brannan . . . . .	Deputy Director, Department of Public Works, Milwaukee County
William P. Chapman . . . . .	Vice-President, Johnson Controls, Inc., Milwaukee
Thomas L. Frank . . . . .	Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Michael S. Treitman . . . . .	Community Planner, Air Planning and Development Section, Region V, U. S. Environmental Protection Agency
Thomas J. Parker . . . . .	President, Milwaukee County Labor Council
Allan P. Pleyte. . . . .	Traffic Engineer and Superintendent, Bureau of Traffic Engineering and Electrical Services, City of Milwaukee
Samuel R. Seward. . . . .	Senior Planner, Department of City Development, City of Milwaukee
Dennis C. Vierra. . . . .	Planning Representative, U. S. Department of Transportation, Urban Mass Transportation Administration
Thomas A. Winkel . . . . .	Chief Planning Engineer, District 9, Division of Transportation Facilities, Wisconsin Department of Transportation

**MILWAUKEE AREA FREEWAY TRAFFIC MANAGEMENT  
SYSTEM STUDY PROSPECTUS STEERING COMMITTEE**

Harvey Shebesta. . . . .	District Director, Division of Transportation Facilities, Wisconsin Department of Transportation
Kurt W. Bauer. . . . .	Executive Director, Southeastern Wisconsin Secretary
Vencil F. Demshar . . . . .	County Highway Commissioner, Waukesha County
William R. Drew. . . . .	Commissioner, Department of City Development, City of Milwaukee
James J. Gosling. . . . .	Executive Assistant, Office of the Secretary, Wisconsin Department of Transportation
John O. Hibbs. . . . .	Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Edwin J. Laszewski, Jr. . . . .	City Engineer, City of Milwaukee
Henry M. Mayer. . . . .	Managing Director, Milwaukee County Transit System
John E. Schumacher . . . . .	City Engineer, City of West Allis
Gerald Schwerm. . . . .	Director of Transportation, Milwaukee County
Ronald C. Sonntag . . . . .	Freeway Operations Supervisor, District 2, Wisconsin Department of Transportation
Sylvester N. Weyker . . . . .	Highway Commissioner, Ozaukee County

**CITIZENS AND TECHNICAL ADVISORY COMMITTEE FOR THE  
CITY OF OCONOMOWOC TRAFFIC MANAGEMENT STUDY**

Richard W. Scheife	Citizen Member, Town of Oconomowoc
Chairman	
Marjorie L. Stemper	Member, City of Oconomowoc Plan Commission
Vice-Chairman	
John M. Albert	Citizen Member, City of Oconomowoc
Nancy M. Baker	Citizen Member, City of Oconomowoc
Grace C. Blaska	Alderman, City of Oconomowoc
Douglas B. Brown	Editor, Oconomowoc Enterprise
J. Thomas Foti	Alderman, City of Oconomowoc
John Foust	Citizen Member, Town of Oconomowoc
Roger J. Heathcote	Citizen Member, City of Oconomowoc
Carlyle Holtan	Administrator, Oconomowoc Public Schools
Walter T. Johnson	Member, City of Oconomowoc Plan Commission
Kay M. Kosma	Citizen Member, Town of Oconomowoc
Patricia Kruger	Member, City of Oconomowoc Plan Commission
Kenton M. Marti	Alderman, City of Oconomowoc
Richard P. Mercier	Administrator-Treasurer, City of Oconomowoc
James J. Pihringier	Citizen Member, City of Oconomowoc
Robert G. Santo	Oconomowoc Transport Company
Leonard L. Schacht	Chief, City of Oconomowoc Police Department
Ronald W. Schneider	Citizen Member, City of Oconomowoc
Russell W. Schumacher	Citizen Member, City of Oconomowoc
Allen R. Sells	Member, City of Oconomowoc Plan Commission
Floyd W. Usher	City Engineer, City of Oconomowoc
Florence G. Whalen	Mayor, City of Oconomowoc
James Zahradka	Associate Administrator, Memorial Hospital, Oconomowoc

**Ex Officio Members**

Harlan E. Clinkenbeard	Assistant Director, Southeastern Wisconsin Regional Planning Commission
Donald H. Jorgensen	Chief Traffic Engineer, District 2, Division of Transportation Districts, Wisconsin Department of Transportation
Joseph F. Mangiamale	Planning Consultant, City of Oconomowoc
James A. Marsho	Senior Engineer, Southeastern Wisconsin Regional Planning Commission
Secretary	

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
TRANSPORTATION PLANNING FOR THE TRANSPORTATION  
HANDICAPPED IN KENOSHA AND WALWORTH COUNTIES**

Gunnar Bergersen	Executive Director, Geneva Lake Area Joint Transit Commission
Chairman	
James C. Van De Loo	Assistant Executive Director, Kenosha Achievement Center
Vice-Chairman	
Harlan E. Clinkenbeard	Assistant Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Terry Aldrich	Lakeland Counseling Center
Robert A. Barbee	Supervisor, Division of Vocational Rehabilitation, Wisconsin Department of Health and Social Services
Richard L. Brown	Brown's Cab Company, Fort Atkinson
Edward Buttera	Governor's Committee for People with Disabilities
Rosemary Gilliland	Citizen Member, City of Kenosha
Carl Hahn	Citizen Member, Village of East Troy
Helen Hahn	Citizen Member, Village of East Troy
James M. Hammelev	Basic Services Supervisor, Kenosha County Social Services Board
John M. Hartz	Chief, Urban Transit Section, Division of Planning and Budget, Wisconsin Department of Transportation
William A. Heimlich	Planning Supervisor, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Edward A. Jenkins	Transportation Director, City of Kenosha
Dale Jensen	Vice-Chairman, Kenosha County Comprehensive Board
John Lawless	Executive Director, American Red Cross
Antoinette Mathews	Planner/Program Developer, Southeastern Wisconsin Area Agency on Aging, District 2B
Margaret Nedry	Citizen Member, City of Kenosha
Bobbie Petrusky	Citizen Member, City of Kenosha

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
TRANSPORTATION PLANNING FOR THE TRANSPORTATION  
HANDICAPPED IN KENOSHA AND WALWORTH COUNTIES**

(Continued)

Mathew J. Reichl, Jr.	President, Jelco Buses, Inc.
Fred C. Schmaifeldt	County Board Supervisor, Kenosha County
John R. Schmaus	Kenosha County Comprehensive Board
Dora E. Schroeter	Walworth County Commission on Aging
Paul C. Stiles	Contract Manager, Jelco Buses, Inc.
Franklin Stoneburner	Adult Services Supervisor, Walworth County Department of Social Services
Harold S. Turkelson	Citizen Member, City of Kenosha
Theodore G. Weigle	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON TRANSPORTATION PLANNING FOR THE  
TRANSPORTATION HANDICAPPED IN MILWAUKEE,  
OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES**

Sarah C. Ettenheim	Chairman, Transportation Committee, Milwaukee County Commission on Aging
Chairman	
John V. Doherty	Governor's Committee for People with Disabilities
Vice-Chairman	
Harlan E. Clinkenbeard	Assistant Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Arthur F. Bendlin	Citizen Member, City of Milwaukee
John P. Boynton	President, Boynton Cab Company, Milwaukee
Paul E. Cook	Citizen Member, City of Milwaukee
Fred J. Dickman, Sr.	Supervisor, Ozaukee County Board
Clarence Farsee, Jr.	Citizen Member, City of Milwaukee
Paul I. Fried	Transportation Coordinator/Planner, Community Relations Social Development Commission, Milwaukee County
August F. Gamalski	Allied Senior Citizens Council of Wisconsin, City of Milwaukee
John M. Hartz	Chief, Urban Transit Section, Division of Planning and Budget, Wisconsin Department of Transportation
William A. Heimlich	Planning Supervisor, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Fred R. Hesselbein	Development Disabilities Coordinator, Ozaukee County Comprehensive Services
Thomas A. Higgins	President, Care Cabs, Inc.
Lawrence M. Koepplin	Executive Director, Portal Programs
Kenneth F. Krumnow	District Supervisor, Division of Vocational Rehabilitation, Wisconsin Department of Health and Social Services
Thomas E. Labs	Research Analyst, Milwaukee Transport Services, Inc.
Evelyn Leach	Citizen Member, Saukville
David Loomans	Citizen Member, West Bend
H. David Mort	Vice-President, Marquardt Transportation
John A. Reddy	Director of Operations, Handicabs of Milwaukee, Inc.
Mathew J. Reichl, Jr.	President, Jelco Buses, Inc.
Harout O. Sanasarian	Milwaukee County Supervisor; Commissioner, Southeastern Wisconsin Regional Planning Commission
Kathy Sellars	Planner/Program Developer, Southeastern Wisconsin Area Agency on Aging, Inc.
Roger A. Sievers	Administrator, Lasata
John D. Steinbach	Supervisor, Waukesha County
Betty L. Voss	Alderman, City of Milwaukee
Alex J. Weinberger	Developmental Disabilities Board, Milwaukee
Theodore G. Weigle	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration
Thomas A. Winkel	Chief Planning Engineer, District 9, Division of Transportation Facilities, Wisconsin Department of Transportation

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON TRANSPORTATION PLANNING FOR THE  
TRANSPORTATION HANDICAPPED IN RACINE COUNTY**

Michael J. Glasheen . . . . .	Transit Planner, Department of Transportation, City of Racine
Chairman	
Catherine P. Mocarski . . . . .	Coordinator of Services for the Elderly, Racine County Planning Council
Vice-Chairman	
Harlan E. Clinkenbeard . . . . .	Assistant Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Mathilda E. Brooks . . . . .	Citizen Member, City of Racine
John R. Doonan . . . . .	Executive Director, Racine County Commission on Aging
Robert O. Graf . . . . .	Graf's Bus Service
John M. Hartz . . . . .	Chief, Urban Transit Section, Division of Planning and Budget, Wisconsin Department of Transportation
William A. Heimlich . . . . .	Planning Supervisor, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Clair W. Jenn . . . . .	Traffic Engineer, Department of Traffic and Lighting, City of Racine
Dan C. Johnson . . . . .	Executive Director, Society's Assets, Inc.
John Lawless . . . . .	Executive Director, American Red Cross
Mathew J. Reichl, Jr. . . . .	President, Jelco Buses, Inc.
Frank B. Miezio . . . . .	Director of Central Services, Lincoln Lutheran Specialized Transportation of Racine
Fred Paulsen . . . . .	Program Director, Community Development Disabilities Board, City of Racine
Marion R. Phillips . . . . .	Citizen Member, City of Racine
Raymond F. Truesdell . . . . .	Supervisor, Division of Vocational Rehabilitation, Wisconsin Department of Health and Social Services
Theodore G. Weigle . . . . .	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration

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

George C. Berteau . . . . .	Chairman, Southeastern Wisconsin Regional Planning Commission
Chairman	
Kurt W. Bauer . . . . .	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Thomas R. Clark . . . . .	Chief Planning Engineer, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Arne L. Gausmann . . . . .	Director, Bureau of System Planning, Division of Planning and Budget, Wisconsin Department of Transportation
Donald K. Holland . . . . .	Director of Public Works, City of Kenosha
Edward A. Jenkins . . . . .	Transportation Director, City of Kenosha
Francis J. Pitts . . . . .	Chairman, Kenosha County Board of Supervisors; Commissioner, Southeastern Wisconsin Regional Planning Commission
Gerald J. Reihsen . . . . .	Division Administrator, Region V, U. S. Department of Transportation, Federal Highway Administration
George A. Swier . . . . .	Highway Commissioner, Kenosha County
Theodore G. Weigle . . . . .	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration

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

George C. Berteau . . . . .	Chairman, Southeastern Wisconsin Regional Planning Commission
Chairman	
Kurt W. Bauer . . . . .	Executive Director, Southeastern Wisconsin Regional Planning Commission
James J. Blazek . . . . .	City Engineer, City of Racine
Thomas R. Clark . . . . .	Chief Planning Engineer, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Jon I. Dederich . . . . .	Plan Commissioner, Village of Elmwood Park
Arne L. Gausmann . . . . .	Director, Bureau of Systems Planning, Division of Planning and Budget, Wisconsin Department of Transportation
Clair W. Jenn . . . . .	Traffic Engineer, Department of Traffic and Lighting, City of Racine
LeRoy H. Jerstad . . . . .	President, Village of North Bay
John Margis, Jr. . . . .	County Highway Commissioner, Racine County
Lloyd C. Meier . . . . .	Village President, Village of Wind Point
Herman V. Nelson . . . . .	Trustee, Village of Sturtevant
Gerald J. Reihsen . . . . .	Division Administrator, Region V, U. S. Department of Transportation, Federal Highway Administration
Theodore G. Weigle . . . . .	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration
Robert F. White . . . . .	Town Supervisor, Town of Mt. Pleasant

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

George C. Berteau . . . . .	Chairman, Southeastern Wisconsin Regional Planning Commission
Chairman	
F. Thomas Ament . . . . .	Chairman, Milwaukee County Board of Supervisors
William C. Carey . . . . .	Department of Fiscal Liaison, City of Milwaukee
Daniel F. Casey . . . . .	County Supervisor, Milwaukee County
Vencil F. Demshar . . . . .	County Highway Commissioner, Waukesha County
William R. Drew . . . . .	Commissioner, Department of City Development, City of Milwaukee
Wayne P. Frank . . . . .	Alderman, City of Milwaukee
Herbert A. Goetsch . . . . .	Commissioner of Public Works, City of Milwaukee
Joseph M. Hutsteiner . . . . .	County Supervisor, Milwaukee County
Joseph C. LaPorte . . . . .	Mayor, City of Waukesha
Edwin J. Laszewski, Jr. . . . .	City Engineer, City of Milwaukee
Thomas P. Leisle . . . . .	Supervisor, Ozaukee County
J. William Little . . . . .	City Administrator, City of Wauwatosa
William E. Meaux . . . . .	County Supervisor, Milwaukee County
Henry F. Mixter . . . . .	President, Village of Whitefish Bay
Nick T. Paulos . . . . .	Village Engineer, Village of Greendale
John E. Schumacher . . . . .	City Engineer, City of West Allis
Emil M. Stanislawski . . . . .	County Supervisor, Milwaukee County
Harry A. Stein . . . . .	Mayor's Office, City of Milwaukee
Betty L. Voss . . . . .	Alderman, City of Milwaukee
Frank A. Wellstein . . . . .	City Engineer, City of Oak Creek
Representative (Vacant) . . . . .	Local Government, Waukesha County

**Ex Officio Members**

Kurt W. Bauer . . . . .	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Robert W. Brannan . . . . .	Deputy Director, Department of Public Works, Milwaukee County
Thomas J. Hart . . . . .	Administrator, Division of Planning and Budget, Wisconsin Department of Transportation
John O. Hibbs . . . . .	Division Administrator, U. S. Department of Transportation, Federal Highway Administration

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

**Ex Officio Members (Continued)**

Thomas R. Kinsey	District Engineer, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Henry M. Mayer	Managing Director, Milwaukee County Transit System
Victoria M. Potter	Director, Office of State Energy and Planning, Wisconsin Department of Administration
Gerald Schwerin	Director of Transportation, Milwaukee County
Harvey Shebesta	District Director, Division of Transportation Facilities, Wisconsin Department of Transportation
Theodore G. Weigle	Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON RAIL SERVICE PLANNING IN THE WHITEWATER AREA**

Anthony F. Balestrieri	Consulting Engineer, Elkhorn; Commissioner, Chairman
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
John A. Carre	Manager, Mid-West Region Warehouse and Transportation Services, Kaiser Aluminum & Chemical Sales, Inc.
Richard B. Eager	County Board Chairman, Rock County
William A. Heimlich	Planning Supervisor, District 2, Division of Transportation Facilities, Wisconsin Department of Transportation
Paul C. Heitmann	Director, Division of Rail Assistance, Wisconsin Department of Transportation
Norman B. Marzahl	General Manager, Badgerland Co-op
Lloyd G. Owens	County Board Chairman, Waukesha County
Stuart M. Rich	Professor, University of Wisconsin- Whitewater, Department of Economics
Quinn C. Smet	City Manager, City of Whitewater
Peter J. Thomsen	Manager, Jefferson County Farmco Cooperative
Milton R. Voss	County Board Chairman, Walworth County
John A. Zerbel	President, John A. Zerbel & Company

**ROOT RIVER WATERSHED COMMITTEE**

Robert J. Mikula	Director of Parks, Recreation and Culture, Chairman
Thomas N. Wright	Planning Director, City of Racine Vice-Chairman
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Anthony A. Alberti	President, Village of Hales Corners
John M. Bennett	City Engineer, City of Franklin
James J. Blazeck	City Engineer, City of Racine
Raymond T. Dwyer	City Engineer, City of Greenfield
Alvin A. Erdman	District Conservationist, U. S. Soil Conservation Service, Milwaukee and Waukesha Counties
Jerome J. Gottfried	Mayor, City of Muskego
Donald W. Hermann	Mayor, City of Oak Creek
Elwin G. Leet	County Agricultural Agent, Racine County
John Margis, Jr.	County Highway Commissioner, Racine County
Stephen F. Olsen	Mayor, City of Racine
Nick T. Paulos	Village Engineer, Village of Greendale
Anthony A. Pitrof	Division Engineer, Planning and Design, Milwaukee Metropolitan Sewerage District
John L. Schultz	District Engineer, Southeast District, Wisconsin Department of Natural Resources
John E. Schumacher	City Engineer, City of West Allis

**FOX RIVER WATERSHED COMMITTEE**

William D. Rogan	County Agri-Business Agent, Chairman
Paul G. Jaeger	County Agri-Business Agent, Secretary
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Edmund M. Brick	Chief, Water Regulation Section, Bureau of Water and Shoreland Management, Wisconsin Department of Natural Resources
Dorothy Bucholtz	Citizen Member, Town of Burlington
Robert Bucholtz	Town Chairman, Town of Waterford
Arnold L. Clement	Planning Director and Zoning Administrator, Racine County
Alvin A. Erdman	District Conservationist, U. S. Soil Conservation Service, Milwaukee and Waukesha Counties
Jerome T. Gottfried	Mayor, City of Muskego
Robert O. Graf	President, Village of Waterford
H. Copeland Greene	Citizen Member, Genesee Depot
Henry F. Halter	Commissioner, Norway-Dover Drainage District
Karl B. Holzworth	Director, Park Commission, Racine County
Ronald Hustedde	Resource Agent, Walworth County
Dr. Leonard C. Johnson	Soil and Water Conservation Specialist, Board of Soil and Water Conservation Districts, University of Wisconsin-Extension
Melvin J. Johnson	Citizen Member, Town of Norway
Stanley Kerkman	Town Chairman, Town of Wheatland
Elwin G. Leet	County Agricultural Agent, Racine County
Walter Maas	Member, Town of Rochester Plan Commission
John H. Mielke	Consulting Engineer, Ruekert and Mielke, Inc., Waukesha
William A. Mitchell, Jr.	Mayor, City of Brookfield
Raymond J. Moyer, Jr.	Supervisor, Racine County; Commissioner, Southeastern Wisconsin Regional Planning Commission
Eistein Pedersen	Citizen Member, Village of Rochester
Clarence O. Peterson	Town Chairman, Town of Vernon
Cloyd A. Porter	Assemblyman, Town of Burlington
Richard C. Rehberg	Town Chairman, Town of Rochester
Herbert E. Ripley	Health Officer, Waukesha County Health Department
Phil Sander	Executive Secretary, Southeastern Wisconsin Sportsmen's Federation
Dr. Bruno E. Schiffleger	Citizen Member, City of Elkhorn
John Schneider	President, Village of Rochester
Bernard G. Schultz	Assistant District Director, Southeast District, Wisconsin Department of Natural Resources
Arthur Stratton	Commissioner, Hoosier Creek Drainage District
Donald Syrjanen	Town Chairman, Town of Norway
Walter J. Tarmann	Executive Director, Waukesha County Park and Planning Commission
Rodney W. Vanden Noven	Director of Public Works, City of Waukesha
Franklin Walsh	Supervisor, Walworth County; Town Chairman, Town of Linn
Stan Wilson	Citizen Member, City of Burlington
John R. Zillmer	Secretary, Ice Age Park and Trail Foundation, Milwaukee

**MILWAUKEE RIVER WATERSHED COMMITTEE**

Richard W. Cutler	Attorney, Quarles and Brady, Milwaukee; Chairman
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Vaughn H. Brown	Vice-President, Tri-County Civic Association
Frederick H. Chlupp	Land Use and Park Administrator, Washington County
Delbert J. Cook	Chairman, Cedar Creek Restoration Council
Arthur G. Dernitz	Supervisor, Washington County
Arthur D. Doll	Director, Bureau of Planning, Wisconsin Department of Natural Resources
Edward Frauenheim	Supervisor, Sheboygan County

**MILWAUKEE RIVER WATERSHED COMMITTEE**  
(Continued)

Herbert A. Goetsch . . . . . Commissioner of Public Works,  
City of Milwaukee  
Lawrence W. Hillman . . . . . Vice-President of Quality Assurance and  
Facilities Planning, West Bend Company  
Mrs. Robert H. Jaskulski . . . . . President, Milwaukee River  
Restoration Council, Inc.  
Ben E. Johnson . . . . . Alderman, City of Milwaukee  
John T. Justen . . . . . President, Pfister & Vogel  
Tanning Company, Milwaukee  
Dorothy Klein . . . . . Former President, Village of Saukville  
Robert L. Konik . . . . . County Planner, Fond du Lac County  
Adolph G. Laubenstein . . . . . President, Laubenstein Roofing Company, Saukville  
Thomas P. Leisle . . . . . Supervisor, Ozaukee County  
Robert J. Mikula . . . . . Director of Parks, Recreation and Culture,  
Milwaukee County Park Commission  
Rudolph Mikulich . . . . . Business Administrator,  
Clerk-Treasurer, City of Glendale  
Dennis E. Nulph . . . . . District Engineer, Wisconsin  
Department of Natural Resources  
Anthony A. Pitrof . . . . . Division Engineer, Planning and Design,  
Milwaukee Metropolitan Sewerage District  
Albert Schroeder . . . . . Former Chairman, Town of Trenton  
John Theusch . . . . . Chairman, Town of Farmington  
George Watts . . . . . President, George Watts & Son, Inc., Milwaukee  
Donald W. Webster . . . . . Supervisor, Town of Fredonia;  
Consulting Civil Engineer, City of Milwaukee  
Richard E. Zarling . . . . . Director of Elementary Education,  
Kewaskum Community Schools

**MENOMONEE RIVER WATERSHED COMMITTEE**

Herbert A. Goetsch . . . . . Commissioner of Public Works,  
Chairman  
City of Milwaukee  
J. William Little . . . . . City Administrator,  
Vice-Chairman  
City of Wauwatosa  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Secretary  
Wisconsin Regional Planning Commission  
Arthur D. Doll . . . . . Director, Bureau of Planning,  
Wisconsin Department of Natural Resources  
Glenn H. Evans . . . . . Member, Menomonee River Restoration Council, Inc.  
Frederick E. Gottlieb . . . . . Village Manager, Village of Menomonee Falls  
Frank S. Hartay . . . . . Plant Engineer, The Falk Corporation, Milwaukee  
George C. Keller . . . . . President, Wauwatosa State Bank  
Raymond J. Kipp . . . . . Dean, College of Engineering,  
Marquette University  
Thomas P. Leisle . . . . . Supervisor, Ozaukee County  
Robert J. Mikula . . . . . Director of Parks, Recreation and Culture,  
Milwaukee County Park Commission  
Dennis E. Nulph . . . . . District Engineer, Wisconsin  
Department of Natural Resources  
Anthony A. Pitrof . . . . . Division Engineer, Planning and Design,  
Milwaukee Metropolitan Sewerage District  
John E. Schumacher . . . . . City Engineer, City of West Allis  
Walter J. Tarmann . . . . . Executive Director, Waukesha County  
Park and Planning Commission  
Clark E. Wangerin . . . . . City Engineer, City of Brookfield

**KINNICKINNICK RIVER WATERSHED COMMITTEE**

Robert J. Mikula . . . . . Director of Parks, Recreation and Culture,  
Chairman  
Milwaukee County Park Commission  
Edwin J. Laszewski, Jr. . . . . City Engineer,  
Vice-Chairman  
City of Milwaukee  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Secretary  
Wisconsin Regional Planning Commission  
Raymond T. Dwyer . . . . . City Engineer, City of Greenfield  
Anthony A. Pitrof . . . . . Division Engineer, Planning and Design,  
Milwaukee Metropolitan Sewerage District

**KINNICKINNICK RIVER WATERSHED COMMITTEE**  
(Continued)

Stanley Polewski . . . . . Proprietor, Polewski Pharmacy, Milwaukee  
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  
Gerald Schwerm . . . . . Director of Transportation, Milwaukee County  
Frank J. Wabiszewski . . . . . Vice-President, Maynard  
Steel Casting Company, Milwaukee

**TECHNICAL ADVISORY COMMITTEE ON  
AREAWIDE WATER QUALITY MANAGEMENT PLANNING**

Joel Wesselman\* . . . . . Executive Director,  
Chairman  
Milwaukee Metropolitan Sewerage District  
Raymond J. Kipp . . . . . Dean, College of Engineering,  
Vice-Chairman  
Marquette University  
Lyman F. Wible . . . . . Chief Environmental Planner, Southeastern  
Secretary  
Wisconsin Regional Planning Commission  
Vinton W. Bacon\* . . . . . Professor, College of Applied Science and Engineering,  
University of Wisconsin-Milwaukee  
Anthony S. Barea . . . . . Director, Milwaukee County Planning Commission  
Kurt W. Bauer\* . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Frank R. Boucher . . . . . Director, Environmental Department,  
Wisconsin Electric Power Company  
J. R. Castner . . . . . Executive Director, Wisconsin  
Solid Waste Recycling Authority  
Frederick H. Chlupp . . . . . Land Use and Park Administrator,  
Washington County  
Arnold L. Clement\* . . . . . Planning Director and Zoning  
Administrator, Racine County  
Norbert H. Dettmann . . . . . County Board Supervisor, Washington County  
Alvin A. Erdman . . . . . District Conservationist,  
U. S. Soil Conservation Service,  
Milwaukee and Waukesha Counties  
James L. Filippini . . . . . Project Officer, Planning Branch,  
U. S. Environmental Protection Agency  
Kent B. Fuller . . . . . Chief, Planning Branch, Region V,  
U. S. Environmental Protection Agency  
Herbert A. Goetsch . . . . . Commissioner of Public Works, City of Milwaukee  
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,  
U. S. Soil Conservation Service,  
Ozaukee and Washington Counties  
Dr. Leonard C. Johnson . . . . . Soil and Water Conservation Specialist,  
Wisconsin Board of Soil and Water Conservation Districts  
Melvin J. Johnson . . . . . Citizen Member, Town of Norway  
Elwin G. Leet\* . . . . . County Agricultural Agent, Racine County  
Dr. William G. Murphy . . . . . Professor, Soils Mechanics,  
College of Engineering, Marquette University;  
Engineers and Scientists of Milwaukee;  
Manager, Kenosha Water Utility  
Wayne A. Pirsig . . . . . District Director, U. S. Department of  
Agriculture, Farmers Home Administration  
Herbert E. Ripley\* . . . . . Health Officer, Waukesha County Department of Health  
Donald A. Roensch . . . . . Director of Public Works, City of Mequon  
Harold F. Ryan . . . . . Washington County Board Supervisor; Commissioner,  
Southeastern Wisconsin Regional Planning Commission  
Marvin E. Schroeter . . . . . Secretary-Treasurer and General Manager,  
United Sewer and Water, Inc.  
Bernard G. Schultz . . . . . Assistant District Director, Southeast District,  
Wisconsin Department of Natural Resources  
Walter J. Tarmann\* . . . . . Executive Director, Waukesha County  
Park and Planning Commission  
Rodney W. Vanden Noven . . . . . Director of Public Works, City of Waukesha  
Emmerich P. Wantschik . . . . . Planner, Walworth County

\*Regional Sludge Management Planning Subcommittee.

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

Dr. William G. Murphy . . . . . Professor Soils Mechanics, Marquette University;  
Chairman Engineers and Scientists of Milwaukee  
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  
Cari C. Backes . . . . . Chairperson, Equality and Quality of Life (EAQOL)  
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  
Sciences, Arts, and Letters  
Delbert J. Cook . . . . . Chairman, Cedar Creek Restoration Council  
John Drake . . . . . Executive Director, Associated Public Works Contractors  
Tom Eisele . . . . . Designee, Lake Michigan Federation  
James L. Filipinetti . . . . . Project Officer, Planning Branch,  
U. S. Environmental Protection Agency  
Philip J. Fogle . . . . . Director, Geneva Lake  
Watershed Environmental Agency  
Richard M. Franz . . . . . Representative, Ecology Association of New Berlin  
Norman N. Gill . . . . . Executive Director, Citizens Governmental  
Research Bureau of Milwaukee  
Allen Goldmann . . . . . Supervisor, Ozaukee County; Ozaukee County  
Air and Water Pollution Study Committee  
James Gramling . . . . . Student, Arrowhead Ecology Club  
Carroll W. Halsted . . . . . Professional Engineer, District 2,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation  
Dr. Kenneth Holtje . . . . . Citizen Member, Village of Dousman  
Robert O. Hussa . . . . . President, Menomonee River Restoration Council, Inc.  
Helen M. Jacobs . . . . . League of Women Voters; President, Southeast  
Wisconsin Coalition for Clean Air  
Mrs. Richard J. Jensen . . . . . Secretary, Root River Restoration Council, Inc.  
Marlin Johnson . . . . . Field Station Manager,  
University of Wisconsin-Waukesha Center  
Paul B. Juhnke . . . . . Vice-President, Metropolitan Milwaukee Association  
of Commerce, Urban Research and Development  
Richard Lansing . . . . . Staff Representative, Plumbers and Gasfitters  
Local 75, Wisconsin State AFL-CIO  
Alfred G. Lustig . . . . . Designee, Milwaukee River Restoration Council, Inc.  
Lawrence R. Olsen . . . . . Chairman, Town of Brighton, Kenosha County  
Charles Opitz . . . . . Representative, Ozaukee County Farm Bureau  
Wayne M. Paulus . . . . . First Wisconsin Mortgage Company  
Lynn Peterson . . . . . President, Racine County Farm Bureau  
Lanis P. Pfohlgrf . . . . . Representative, Sierra Club  
John R. Rampetsreiter . . . . . Designee, District 9,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation  
Allen E. Reininger . . . . . Plumbing and Health Inspector,  
City of Glendale  
Annabelle Reuter . . . . . Designee, Izaak Walton League  
Karen Rutz . . . . . Representative, Wisconsin Friends of Animals, Inc.  
Phil Sander . . . . . Executive Secretary, Southeastern  
Wisconsin Sportsmen's Federation  
Peter J. Schultz . . . . . Representative, Racine Chamber of Commerce;  
J. I. Case Company  
William B. N. Schultz . . . . . Professional Engineer, Wisconsin  
Society of Professional Engineers  
David Sharpe . . . . . Community Development Agent,  
University of Wisconsin-Extension  
Arthur C. Swanson . . . . . Representative, Arrowhead Ecology Club  
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,  
Water Resources Planning Section,  
Wisconsin Department of Natural Resources  
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,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation  
Steven Woll . . . . . Executive Director, Metropolitan  
Builders Association of Greater Milwaukee

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON REGIONAL AIR QUALITY MAINTENANCE PLANNING**

Richard A. Keyes . . . . . Environmental Engineer, City of Milwaukee  
Chairman County Department of Public Works  
Barbara J. Becker . . . . . President, Southeastern Wisconsin  
Vice-Chairman Coalition for Clean Air  
Richard F. Pierce . . . . . Principal Planner, Environmental Planning Division,  
Secretary Southeastern Wisconsin Regional Planning Commission  
Alice G. Altemeier . . . . . League of Women Voters, Ozaukee County  
Norman N. Amrhein . . . . . President, Federal Mailable Company, West Allis  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Wesley J. Beaton . . . . . Director of Environmental Health,  
City of Racine  
Gerald D. Bevington . . . . . Coordinator of Air Programs,  
Wisconsin Department of Natural Resources,  
City of Milwaukee  
Michael B. Gonia . . . . . Project Manager, Wisconsin Department of Transportation  
Edwin J. Hammer . . . . . Facilities Developmental Engineer, Division of Highways,  
Wisconsin Department of Transportation  
John C. Hanson . . . . . Director, Racine County  
Department of Air Pollution Control  
John O. Hibbs . . . . . Division Engineer, U. S. Department of Transportation,  
Federal Highway Administration, Madison  
Elroy C. Jagler . . . . . Meteorologist in Charge, National Weather  
Service Forecast Office, City of Milwaukee  
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Public Works, Milwaukee County  
Paul Koziar . . . . . Meteorologist, Division of Environmental Protection,  
Wisconsin Department of Natural Resources  
John H. Page . . . . . Senior Planning Officer,  
Northeastern Illinois Planning Commission  
Dr. Kenneth W. Ragland . . . . . Associate Professor, Department of Mechanical  
Engineering, University of Wisconsin-Madison  
Fred R. Rehm . . . . . Director, Milwaukee County  
Division of Environmental Service  
Gerald J. Reihsen . . . . . Division Administrator, Region V,  
U. S. Department of Transportation,  
Federal Highway Administration  
Herbert E. Ripley . . . . . Health Officer, Waukesha  
County Health Department  
Dr. Rodolfo N. Salcedo . . . . . Environmental Scientist, Department of  
City Development, City of Milwaukee  
Harvey Shebesta . . . . . District Director,  
Division of Transportation Facilities,  
Wisconsin Department of Transportation  
James M. Sinapoli . . . . . Planning Analyst,  
Office of State Planning and Energy,  
Wisconsin Department of Administration  
Mark Steinberg . . . . . Senior Meteorologist,  
Environmental Planning and Policy Division,  
Wisconsin Electric Power Company  
Michael S. Treitman . . . . . Environmental Protection Agency,  
Region V, Chicago  
Emmerich P. Wantschik . . . . . County Planner, Walworth County  
George A. Zimmer . . . . . Supervisor, Environmental Health,  
Kenosha Health Department

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON SANDSTONE AQUIFER SIMULATION MODELING**

Joseph H. Kuranz . . . . . General Manager and Chief Engineer,  
Chairman Waukesha Water Utility  
Lyman F. Wible . . . . . Chief Environmental Planner, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Kurt W. Bauer . . . . . Executive Director, Southeastern  
Wisconsin Regional Planning Commission  
Anthony F. Biba . . . . . Superintendent, Elkhorn Light  
and Water Commission  
Lucian M. Darin . . . . . Director of Public Works,  
City of Hartford  
Glenn W. Frank . . . . . Water Utility Manager,  
Cedarburg Light and Water Commission  
Jerome J. Gottfried . . . . . Mayor, City of Muskego  
John Graber . . . . . Acting Director, Department of  
Public Works, City of New Berlin

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE  
ON SANDSTONE AQUIFER SIMULATION MODELING  
(Continued)**

Edmund P. Krueger	Water Utility Manager, Village of Grafton Sewer and Water Commission
Dr. Norman P. Lasca	Associate Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee
Edward G. Lemmen	Water Utility Manager, City of Lake Geneva Water Commission
William B. Mann	District Chief, Water Resources Division, U. S. Geological Survey
R. W. Nettin	Manager, Electric Light and Water Department, City of Oconomowoc
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

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

George C. Berteau	Chairman, Southeastern Wisconsin Regional Planning Commission Acting Chairman
Hubert J. Albert	Port Washington Yacht Club
W. J. Blong	Manager, Village of Fox Point
Thomas H. Buestrin	Commissioner, Southeastern Wisconsin Regional Planning Commission, Ozaukee County
Sol Burstein	Executive Vice-President, Wisconsin Electric Power Company
Col. Benjamin C. Chapla	Health Officer, Town of Caledonia
Marcel Dandeneau	Assemblyman, 63rd District, City of Racine
Herbert A. Goetsch	Commissioner of Public Works, City of Milwaukee
James L. Haskell	Port Director, City of Milwaukee Harbor Commission
Roy F. Hoffmann	Municipal Port Director, Board of Harbor Commissioners, City of Milwaukee
Wayne E. Koessl	Chairman, Kenosha County Board of Supervisors; Member, Town of Pleasant Prairie Planning Commission
Dr. William Katz	Milwaukee Metropolitan Sewerage District
George O. Lampert	Mayor, City of Port Washington
Dr. Norman P. Lasca	Associate Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee
Mary LaVelle	Natural Resources Agent, North Shore League of Women Voters
Elwin G. Leet	County Agricultural Agent, Racine County
Thomas P. Leisle	Supervisor, Ozaukee County
Thomas W. Lisota	Alderman, City of Cudahy
Anthony L. Luljak	Alderman, City of Cudahy
R. Richard Mett	Supervisor, Milwaukee County
Dr. Harold M. Meyer	Professor, Department of Geography, University of Wisconsin-Milwaukee
Robert J. Mikula	Director, Parks, Recreation and Culture, Milwaukee County Park Commission
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; Shoreline Property Owner
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 Wisconsin Sportsmen's Federation
Roger Springman	University of Wisconsin-Extension, Wisconsin Geological Survey
Norbert S. Theine	Administrator, City of South Milwaukee
Robert Winnie	Administrator, Division of Environmental Standards, Wisconsin Department of Natural Resources

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

Robert J. Mikula	Director of Parks, Recreation and Culture, Milwaukee County Park Commission Chairman
Loren R. Anderson	President, Geneva Lake Development Corporation, Village of Williams Bay
Anthony S. Baretta	Director, Milwaukee County Planning Commission
Donald B. Brick	Recreation Agent, Walworth County
Frederick H. Chlupp	Land Use and Park Administrator, Washington County
Delbert J. Cook	Chairman, Cedar Creek Restoration Council
Richard W. Cutler	Attorney, Quarles and Brady, Milwaukee; Commissioner, Southeastern Wisconsin Regional Planning Commission
Norbert H. Dettmann	County Board Supervisor, Washington County
Arthur D. Doll	Director, Bureau of Planning, Wisconsin Department of Natural Resources
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 Architecture, University of Wisconsin-Madison; Director, Environmental Awareness Center, Madison
Richard J. Lindl	Director of Parks, Kenosha County Park Commission
John Margis, Jr.	County Highway Commissioner, Racine County
Kathleen Pfister	Cultural Specialist, Department of City Development, City of Milwaukee
Robert D. Ross	General Manager, The Journal Times, Racine
Phil Sander	Executive Secretary, Southeastern Wisconsin Sportsmen's Federation
George L. Schultz	Chairman, Kenosha County Park Commission
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 Park and Planning Commission
Edgar W. Trecker	Supervisor of Forestry, Wildlife, and Recreation, Southeast District, Wisconsin Department of Natural Resources
Elwood R. Voigt	Park Manager, Ozaukee County
Joseph C. Waters	President, Wisconsin Association of Campground Owners; Proprietor, Lazy Day Campground, Town of Farmington
Dr. Harry J. Wilkins	Citizen Member, City of Wauwatosa
Dr. George T. Wilson	Visiting Lecturer, Department of Continuing and Vocational Education, University of Wisconsin-Madison
Thomas N. Wright	Planning Director, City of Racine

**TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON REGIONAL HOUSING STUDIES**

Richard W. Cutler	Attorney, Quarles and Brady, Milwaukee; Member, Village of Fox Point Plan Commission; Commissioner, Southeastern Wisconsin Regional Planning Commission Chairman
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission Secretary
William B. Ardern	President, General Appraisal Company, Milwaukee
Richard Barry	Representative, Metropolitan Milwaukee Association of Commerce; Vice-President-Treasurer, Bruce, Barry & Gleysteen, Inc., Milwaukee
Richard P. Blake	Architect, Blake-Wirth & Associates, Inc., Milwaukee; Board Member, Wisconsin Chapter—Southeast Section, American Institute of Architects

**TECHNICAL AND CITIZEN ADVISORY COMMITTEE  
ON REGIONAL HOUSING STUDIES  
(Continued)**

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  
Melvin Goldin . . . . . Secretary-Treasurer,  
Recht-Goldin-Siegel, Inc., Milwaukee  
William Kelly . . . . . Director, Indian Urban Affairs Council,  
City of Milwaukee  
Bernard N. Nill . . . . . Assistant Planning Director,  
Department of City Development,  
City of Milwaukee  
Kenneth J. Payne . . . . . Housing Coordinator, Milwaukee  
County Expressway Commission  
Glenn Peters . . . . . Secretary-Treasurer, Peters Development  
Corporation, West Bend  
Wesley L. Scott . . . . . Executive Director, Milwaukee Urban League  
Kathy Sellars . . . . . Planner/Programmer Developer,  
Southeastern Wisconsin Area Agency on Aging, Inc.

**TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON  
FARMLAND PRESERVATION FOR KENOSHA AND RACINE COUNTIES**

Louis Fowler . . . . . Farmer, Town of Bristol,  
Chairman  
James Moyer . . . . . Farmer, Town of Yorkville,  
Vice-Chairman  
Emil Mravec . . . . . Farmer, Town of Randall,  
Secretary  
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  
Jerry Griswold . . . . . U. S. Soil Conservation Service  
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 Stollenwerk . . . . . Farmer, Town of Paris, Kenosha County  
Elmer Strassburg . . . . . Manager, Agricultural Stabilization and  
Conservation Service, Kenosha County  
Roy E. Weltzien . . . . . Farmer, Town of Waterford, Racine County  
Robert Willard . . . . . Farmer, Town of Rochester, Racine County



## Appendix C

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF 1978

#### EXECUTIVE DIVISION

Kurt W. Bauer, P. E.  
Executive Director

Harlan E. Clinkenbeard  
Philip C. Evenson  
Assistant Directors

Margaret M. Shanley  
Executive Secretary

David F. Schulz  
Special Assistant

Elaine I. Andersen  
Secretary

#### 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  
Program Supervisor

John D. Harasha  
Systems Analyst

Richard L. Henley  
Senior Programmer/Analyst

Gary J. Orlow  
Senior Programmer

Eleanor L. Baldus  
Gregory T. Kohlmann  
Programmers

John C. Stelpflug  
Operations Supervisor

Michael J. Soyck  
Michael K. Henning  
Computer Operators

Kristine M. Engelhardt  
Lead Key Entry Operator

Rosemary K. Wilcenski  
Diane L. Curtiss  
Key Entry Operators

Patricia A. Massino  
Clerk/Typist

#### PLANNING RESEARCH DIVISION

Thomas D. Patterson  
Chief of Planning Research

J. Michael Gunville  
Fredrick J. Zimmer  
Senior Planners

Donald G. Dittmar  
Sandra L. Retert  
Associate Planners

Diane L. Baker  
Loren G. Muehlius  
Jeffrey J. Shannon  
Research Analysts

#### TRANSPORTATION PLANNING DIVISION

Donald R. Martinson  
Chief Transportation Engineer

Kenneth H. Voight  
Kenneth R. Yunker  
Principal Engineers

Michael J. Conway  
Principal Planner

James A. Marsho  
Senior Engineer

Robert W. Bryson  
Engineer

Albert A. Beck  
John L. Zastrow  
Senior Planners

Otto P. Dobnick  
Planner

Joan M. Starr  
Ilene A. Bolle  
Secretaries

#### CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Leland H. Kreblin  
Chief Planning Draftsman

B. Lynn Nowak  
Robert A. Ristow  
Senior Planning Draftsmen

Bergetta J. Ruehmer  
Patricia L. Wickert  
Donald P. Simon  
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

#### COMMUNITY ASSISTANCE PLANNING DIVISION

Roland O. Tonn  
Chief Community Assistance Planner

Richard B. Untch  
Principal Planner

Norbert R. Schappe  
Patrick J. Meehan  
Senior Planners

Ronald H. Heinen  
Principal Planning Draftsman

Michael W. Kloehn  
Planner

Nancy A. Greer  
Research Aide

Barbara A. Poff  
Secretary

Terri J. Klietz  
Librarian

#### ENVIRONMENTAL PLANNING DIVISION

Lyman F. Wible  
Chief Environmental Engineer

Robert P. Biebel  
Principal Engineer

Richard F. Pierce  
Principal Planner

Thomas R. Sear  
Senior Engineer

Thomas C. Sweet  
David B. Kendziorksi  
Senior Planners

Curtis R. Hulterstrum  
Joseph E. Stuber  
Paul R. Sigelko

Sharon R. Kraft  
J. Douglas Wilson  
Specialists

Irene A. Brown  
Secretary

Pearle D. Zahnzinger  
Clerk/Typist

#### LAND USE AND HOUSING PLANNING DIVISION

Bruce P. Rubin  
Chief Land Use Planner

Gerald H. Emmerich, Jr.  
Edward J. Semrad  
Emile A. Jarreau, Jr.  
William J. Stauber

Donald M. Reed  
Senior Planners

David L. Haselow  
Planner

Lon M. Scott  
Research Analyst

Joyce G. Pariseau  
Research Aide

Mary G. Schmittner  
Clerk/Stenographer

#### ADMINISTRATIVE SERVICES DIVISION

Ralph W. Winnekins  
Administrative Officer

Frederick J. Patrie  
Administrative Assistant

Joan A. Zenk  
Bookkeeper

Luella M. Fredrickson  
Secretary

Betty Gargan  
Jane E. Pierson  
Clerk/Typists

Lena P. Caracci  
Melody M. Fohr  
Clerks

#### INTERAGENCY STAFF ASSIGNMENTS

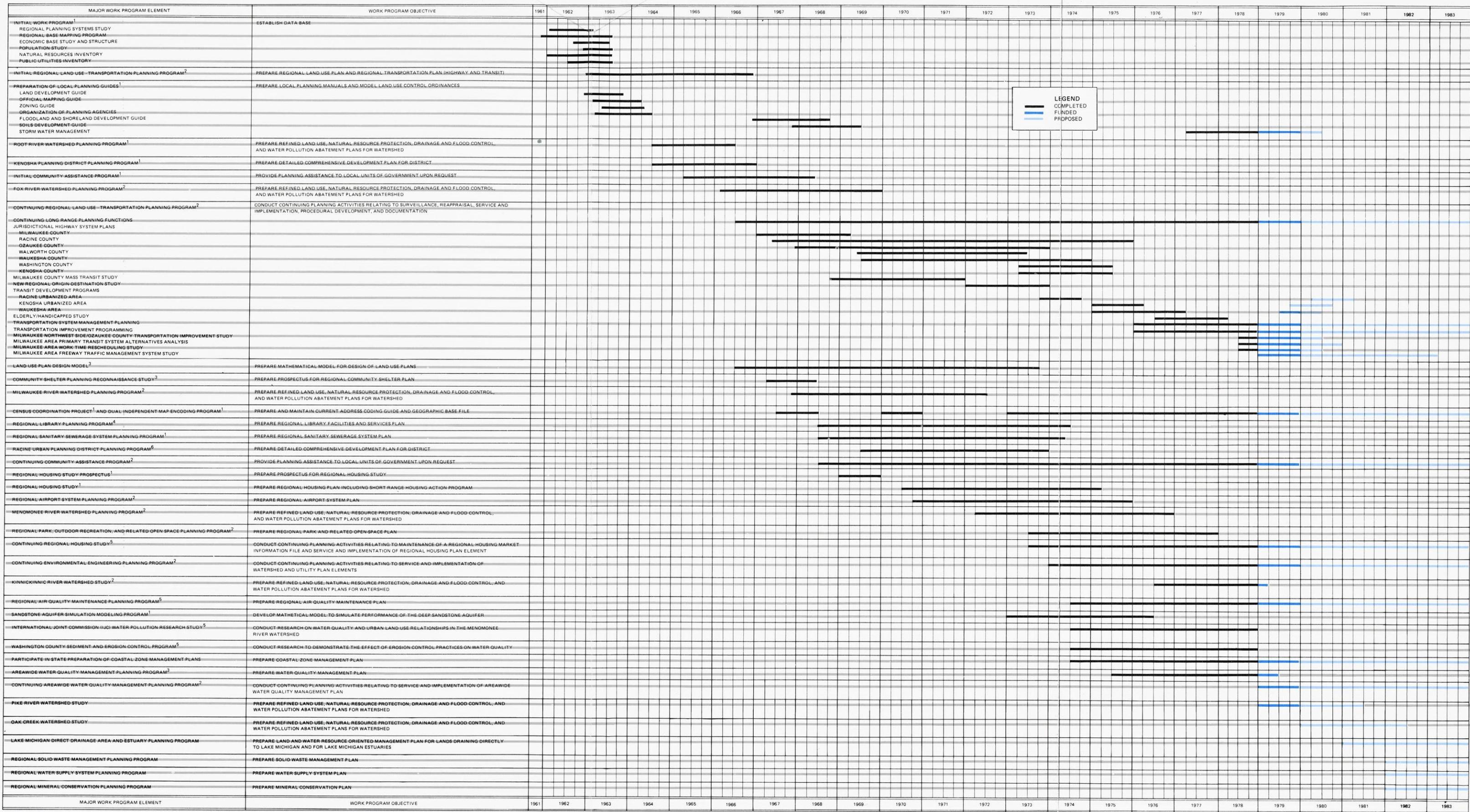
Albert G. Hutter  
Civil Engineer III  
District 9, Division of Highways  
Wisconsin Department of Transportation

A. Charles Wise  
Area Recreation Business Agent  
University of Wisconsin-Extension

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



**TIMING OF MAJOR WORK PROGRAM ELEMENTS**  
**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1961-1983**



<sup>1</sup>PARTIALLY SUPPORTED BY FEDERAL GRANTS. <sup>2</sup>PARTIALLY SUPPORTED BY STATE AND/OR FEDERAL GRANTS.  
<sup>3</sup>WHOLLY SUPPORTED BY STATE AND/OR FEDERAL GRANTS. <sup>4</sup>WHOLLY SUPPORTED BY STATE GRANTS.  
<sup>5</sup>WHOLLY SUPPORTED BY STATE, FEDERAL, AND/OR LOCAL FUNDS.

**NOTE: PROPOSED WORK PROGRAMS ARE SUBJECT TO CHANGE AS PROSPECTUSES AND STUDY DESIGNS ARE APPROVED.**

NOTE: PROPOSED WORK PROGRAMS ARE SUBJECT TO CHANGE AS PROSPECT USES AND STUDY DESIGNS ARE PREPARED AND AS FUNDING IS MADE AVAILABLE.



## Appendix E

### PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-DECEMBER 1978

#### 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

#### 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

#### PLANNING REPORTS

No. 1 - Regional Planning Systems Study, December 1962  
No. 2 - Regional Base Mapping Program, July 1963  
No. 3 - The Economy of Southeastern Wisconsin, June 1963  
No. 4 - The Population of Southeastern Wisconsin, June 1963  
No. 5 - The Natural Resources of Southeastern Wisconsin, June 1963  
No. 6 - The Public Utilities of Southeastern Wisconsin, July 1963  
No. 7 - The Land Use-Transportation Study  
    Volume 1 - Inventory Findings: 1963, May 1965  
    Volume 2 - Forecasts and Alternative Plans: 1990, June 1966  
    Volume 3 - Recommended Regional Land Use and Transportation Plans: 1990, November 1966  
No. 8 - Soils of Southeastern Wisconsin, June 1966  
No. 9 - A Comprehensive Plan for the Root River Watershed, July 1966  
No. 10 - A Comprehensive Plan for the Kenosha Planning District  
    Volume 1 - Inventory Findings, Forecasts, and Recommended Plans, February 1967  
    Volume 2 - Implementation Devices, February 1967  
No. 11 - A Jurisdictional Highway System Plan for Milwaukee County, March 1969  
No. 12 - A Comprehensive Plan for the Fox River Watershed  
    Volume 1 - Inventory Findings and Forecasts, April 1969  
    Volume 2 - Alternative Plans and Recommended Plan, February 1970  
No. 13 - A Comprehensive Plan for the Milwaukee River Watershed  
    Volume 1 - Inventory Findings and Forecasts, December 1970  
    Volume 2 - Alternative Plans and Recommended Plan, October 1971  
No. 14 - A Comprehensive Plan for the Racine Urban Planning District  
    Volume 1 - Inventory Findings and Forecasts, December 1970  
    Volume 2 - The Recommended Comprehensive Plan, October 1972  
    Volume 3 - Model Plan Implementation Ordinances, September 1972  
No. 15 - A Jurisdictional Highway System Plan for Walworth County, October 1972  
No. 16 - A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974  
No. 17 - A Jurisdictional Highway System Plan for Ozaukee County, December 1973  
No. 18 - A Jurisdictional Highway System Plan for Waukesha County, January 1974  
No. 19 - A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974  
No. 20 - A Regional Housing Plan for Southeastern Wisconsin, February 1975  
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  
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-Renture 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

#### 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 Pwaukee 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 Whitter 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 Transit 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. 26 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 1978

#### 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 1  
by Kenneth J. Schlayer, Chief Systems Engineer  
Truck and Taxi Sample Selection  
by Thomas A. Winkel, Urban Planning Supervisor  
A Backward Glance: Early Toll Roads in Southeastern Wisconsin  
by Richard E. Rehberg, Editor

Volume 1 - No. 2, December 1963-January 1964

Arterial Network and Traffic Analysis Zones  
by Richard B. Sheridan, Chief Transportation Planner  
Conducting the Household Postal Questionnaire Survey  
by Wade G. Fox, Cartography and Design Supervisor  
Conducting the Home Interview Survey  
by Sheldon W. Sullivan, Administrative Officer  
Aerial Photographs and Their Use in the Land Use Inventory  
by Harlan E. Clinkenbeard, Land Use Planning Chief  
A Backward Glance: The U. S. Public Land Survey in Southeastern Wisconsin  
by Richard E. Rehberg, Editor

Volume 1 - No. 3, February-March 1964

Conducting the Truck and Taxi Survey  
by Sheldon W. Sullivan, Administrative Officer  
Conducting the Truck and Taxi Postal Questionnaire Survey  
by Wade G. Fox, Cartography and Design Supervisor  
Conducting the External Survey  
by William E. Creger, P.E., Traffic Operations Engineer  
Rail and Transit Inventory and Design of the Transit Network  
by David A. Kuemmel, P.E., Transportation Planning Engineer  
A Backward Glance: The Man-Made Ice Age  
by Richard E. Rehberg, Editor

Volume 1 - No. 4, April-May 1964

The Application of Soil Studies to Regional Planning  
by Kurt W. Bauer, Executive Director  
Coding  
by Wade G. Fox, Cartography and Design Supervisor and  
Robert L. Fisher, Coding Supervisor  
Inventory of Existing Outdoor Recreation Facilities and Historic Sites in Southeastern Wisconsin  
by Theodore F. Lauf, Research Analyst  
Inventory of Potential Park and Related Open Space sites  
by Karl W. Holzwarth, Landscape Architect  
A Backward Glance: The Electric Interurban Railway  
by Richard E. Rehberg, Editor

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. Rylng, 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. Gehrk, Economics and Population Analyst and  
Orlando F. Delogu, Financial Resources and Legal Analyst  
O & D Surveys Accuracy Checks  
by Eugene G. Muhich, P.E., Transportation Planning Engineer  
A Backward Glance: Railroad Transportation in Southeastern Wisconsin  
by Patricia J. Tegge, Editor

Volume 2 - No. 3, February-March 1965

Determination of Historical Flood Frequency for the Root River of Wisconsin  
by James C. Ringenoldus, P.E., Harza Engineering Company  
The Regional Multiplier  
by Kenneth J. Schlager, Chief Systems Engineer  
A Backward Glance: The Street Railway in Milwaukee  
by Henry M. Mayer, Administrative Assistant,  
Milwaukee & Suburban Transport Corporation

Volume 2 - No. 4, April-May 1965

Determination of Runoff for Urban Storm Water Drainage System Design  
by Kurt W. Bauer, Executive Director

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 Yesterday  
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 Soller, 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. Cherkauer and Vinton W. Bacon,  
University of Wisconsin-Milwaukee  
An Overview of the Sources of Water Pollution in Southeastern Wisconsin  
by Kurt W. Bauer, Executive Director, SEWRPC  
The Effect of Sample Rate on Socioeconomic and Travel Data  
Obtained through Standard Home Interview  
by Jean Lusk, SEWRPC Planner

#### ANNUAL REPORTS

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

#### 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

#### 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

## Appendix F

### SCHLEY, BOETTCHER & CO.

*formerly*

**NORMAN E. SCHLEY**

CERTIFIED PUBLIC ACCOUNTANT

P. O. BOX 985

WAUKESHA, WISCONSIN 53186

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MEMBER  
WISCONSIN SOCIETY C.P.A.'S.  
AMERICAN INSTITUTE OF  
CERTIFIED PUBLIC ACCOUNTANTS  
NAT'L ASS'N ACCOUNTANTS

May 7, 1979

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

Gentlemen:

We have examined the accompanying Balance Sheets and the related Statements of Revenues, Expenditures, and Changes in Fund Balances for the year 1978 of the following funds of the Southeastern Wisconsin Regional Planning Commission:

1. General Fund
2. Continuing Regional Land Use - Transportation Study Fund
3. Regional Housing Study Fund
4. Menomonee River Watershed Planning Program Fund
5. Regional Air Quality Maintenance Planning Program Fund
6. Continuing Community Assistance Planning Program Fund
7. Stream Gaging Program Trust Fund
8. Washington County Special Monumetation Trust Fund
9. Milwaukee Metropolitan Pollution Abatement Program Fund
10. Washington County Sediment Control Program Fund
11. Data Processing Fund
12. Continuing Regional Water Quality Management Planning Program Fund
13. Continuing Regional Environmental Engineering Planning Program Fund
14. Kinnickinnic River Watershed Study Fund
15. Menomonee River Pilot Watershed Study Fund
16. Coastal Zone Management Planning Program Fund
17. Areawide Water Quality Management Planning Program Fund
18. Equipment Account
19. Unemployment Compensation Fund
20. Indirect Expense Fund
21. Treasury Cash Fund

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

In our opinion, the accompanying financial statements present fairly the financial position of the above funds at December 31, 1978, 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 other grantor contracts.

We 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 have included applicable comments on Pages 3 and 4.

Respectfully submitted,

*Schley, Boettcher & Co.*

SCHLEY, BOETTCHER & CO.  
Certified Public Accountants

COMMENTS ON COMPLIANCE AND INTERNAL CONTROL

1. Based on our tests of transactions and examination of records, we 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 and HUD.
2. As a part of our examination, we reviewed and tested the Commission's system of internal accounting control to the extent we 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, our examination included procedures necessary in our judgment to determine compliance with contractual terms and conditions and regulations, policies, and procedures prescribed by HUD, insofar as such compliance review was necessary under the provisions listed as "a" through "f" under "Audit Coverage" in the HUD Audit Guide for the Comprehensive Planning Assistance Program.

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.

Our study and evaluation of the Commission's system of internal accounting control and our 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. We 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, 1978, no findings were made which would require recommendations.

## EXHIBIT A-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

Statement of Revenues, Expenditures, and Changes in Fund Balance  
For the Year Ended December 31, 1978

<b>Revenues</b>			
Counties Contribution	\$ 267,288.00	\$	
<b>Other Income</b>			
Digitizer Service Agreements	107,390.92		
Interest on Invested Funds	23,711.49		
<b>Total Other Income</b>	<b>131,102.41</b>		
<b>Total Revenues</b>		398,390.41	
<b>Expenditures</b>			
<b>Salaries and Fringe Benefits by Divisions</b>			
Planning Research	44,265.83		
Environmental Planning	5.57		
<b>Total Salaries and Fringe Benefits</b>	<b>44,271.40</b>		
<b>Office and Other Expense</b>			
Digitizer Machine Rental	8.00		
Other Operating Expense	234.90		
Auto and Office Equipment Maintenance	9,757.20		
Indirect - Salaries	10,025.08		
- Annual Report Publication	355.51		
- Data Processing Services	557.87		
- Outside Salaries and Services	75.73		
- Office, Drafting, & D.P. Supplies	532.46		
- Library Acquisitions and Dues	112.58		
- Reproduction and Publication	531.35		
- Publication of Report	.61		
- Printing Costs	1,061.88		
- Travel Expense	266.18		
- Office Furniture and Fixtures	27.06		
- Postage Expense	444.18		
- Legal Expense	12.08		
- Other Operating Expense	94.13		
- Unemployment Compensation	453.00		
- Auto and Office Equipment Maintenance	1,090.52		
- Rent Expense	2,447.18		
<b>Totals Carried Forward</b>	<b>28,087.50</b>	<b>44,271.40</b>	<b>398,390.41</b>

## EXHIBIT A-B

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

## Comparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<b>Assets</b>		
Equity in Treasury Fund	\$246,251.57	\$376,784.79
Annuities	-	200.25
<b>Total Assets</b>	<b>\$246,251.57</b>	<b>\$376,985.04</b>
<b>Liabilities</b>		
Payroll Taxes - FICA Tax	35,676.90	32,835.37
Fringe Benefits	988.30	-
State Sales Tax	136.90	162.70
Accounts Payable	8,063.98	2,151.77
U. S. Savings Bonds	99.00	231.75
Annuity	1,951.64	-
United Fund	-	221.95
Due to Coastal Zone Management Planning Program Fund	-	7,340.00
<b>Total Liabilities</b>	<b>46,916.72</b>	<b>42,943.54</b>
<b>Fund Balance</b>		
Unappropriated Fund Balance	199,334.85	334,041.50
<b>Total Liabilities and Fund Balance</b>	<b>\$246,251.57</b>	<b>\$376,985.04</b>

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

\* \* \* \* \*

## EXHIBIT A-A

## (Continued)

## General Fund

Statement of Revenues, Expenditures, and Changes in Fund Balance  
For the Year Ended December 31, 1970

<b>Totals Brought Forward</b>	\$ 28,087.50	\$ 44,271.40	\$ 398,390.41
<b>Expenditures (Continued)</b>			
<b>Office and Other Expense (Continued)</b>			
Indirect - Telephone Expense	859.69		
- Insurance Expense	95.52		
- Audit Expense	305.62		
- Depreciation Expense	310.01		
- Staff Conference	.90		
<b>Total Office and Other Expense</b>	<b>29,659.24</b>		
<b>Total Expenditures</b>		<b>73,930.64</b>	
<b>Excess Revenue over Expenditures</b>			<b>324,459.77</b>
<b>Fund Balance - Beginning of Year</b>			<b>334,041.50</b>
Add: Transfer Unappropriated Fund Balance - Washington County Special Monumentation Trust Fund	9,550.00		
Coastal Zone Management Planning Program Fund	7,340.00	12,890.00	(125,124.92)
Less: Contributions to Other Funds (Note 1)		<b>472,056.42</b>	
<b>Fund Balance - End of Year</b>			<b>\$199,334.85</b>

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

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## General Fund

## Note to Financial Statements

December 31, 1978

## 1. Contributions to Other Funds

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

Continuing Regional Land Use - Transportation Study Fund	\$ 1,662.66
Regional Housing Study Fund	404.42
Regional Air Quality Maintenance Planning Program Fund	17,903.84
Continuing Community Assistance Planning Program Fund	117,511.25
Data Processing Fund	23,534.82
Continuing Regional Water Quality Management Planning Program Fund	204,563.35
Continuing Regional Environmental Engineering Planning Program Fund	13,565.23
Kinnickinnic River Watershed Study Fund	63,156.11
Menomonee River Pilot Watershed Study Fund	376.86
Coastal Zone Management Planning Program Fund	23,963.38
Equipment Account	5,414.50
	\$472,056.42

\* \* \* \* \*

\* \* \* \* \*

## EXHIBIT B-A

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, 1978

<u>Revenues</u>		
<u>Federal Grants</u>		
Dept. of Housing & Urban Development	\$ 224,254.00	\$
Dept. of Transportation - Urban	297,000.00	
Mass Transit Authority		
Dept. of Transportation - Federal		
Highway Administration	296,997.00	
<u>State Grants</u>		
Wisc. Dept. of Transportation	87,475.00	
Counties Contribution	155,194.00	
Contribution From General Fund	1,662.66	
<u>Other Income</u>		
Non-Data Processing Receipts	9,459.23	
U. S. Census Bureau	48,008.80	
<u>Total Revenues</u>	1,120,050.69	
<u>Expenditures</u>		
<u>Salaries and Fringe Benefits by Divisions</u>		
Executive	40,745.68	
Transportation	171,900.55	
Land Use and Housing	74,853.84	
Administrative	4,924.00	
Cartography	58,999.99	
Planning Research	98,611.17	
Environmental Planning	23,864.81	
Community Assistance	8,998.34	
<u>Total Salaries and Fringe Benefits</u>	482,928.38	
<u>Office and Other Expense</u>		
Technical Consultants	1,319.82	
Data Processing Services	198,628.51	
Newsletter Publication	2,392.12	
Outside Salaries and Services	7,171.06	
Office Drafting & Duplicating Supplies	764.62	
Reproduction and Publication	1,318.47	
Publication of Report	89,072.31	
Travel Expense	8,427.79	
Library Acquisitions and Dues	680.55	
Digitizer Services	107,390.92	
<u>Totals Carried Forward</u>	417,186.13	482,928.38
		1,120,050.69

## EXHIBIT B-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Continuing Regional Land Use - Transportation Study Fund (Note 1)

## Comparative Balance Sheet

	December 31, 1978	December 31, 1977
<u>Accounts Receivable</u>		
Net Earned Federal Grants -		
HUD (Note 2)	\$ 21,269.00	\$ 20,930.59
Urban Mass Transportation		
Administration (Note 3)	4,833.08	42,696.77
Federal Highway		
Administration (Note 4)	30,488.57	42,732.81
Net Earned Non-Federal Grants -		
Wis. Dept. of Transportation	-	15,549.28
Due from Milwaukee County -		
Elderly and Handicapped	-	7,000.00
Due from U. S. Bureau of Census	8,745.80	817.48
<u>Total Receivables</u>	65,336.45	129,726.93
<u>Total Assets</u>	65,336.45	129,726.93
<u>Liabilities</u>		
Accounts Payable	6,338.90	9,109.57
Equity in Treasury Fund	58,997.52	120,617.36
<u>Total Liabilities</u>	65,336.45	129,726.93
<u>Fund Balance</u>		
Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	65,336.45	129,726.93

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, 1978

<u>Totals Brought Forward</u>	\$ 417,186.13	\$ 482,928.38	\$ 1,120,050.69
<u>Expenditures (Continued)</u>			
<u>Office and Other Expense (Continued)</u>			
Other Operating Expense	3,531.28		
Project Inspection Fee	1,845.00		
Indirect - Salaries	109,348.96		
- Annual Report Publication	3,882.46		
- Data Processing Services	6,092.35		
- Outside Salaries & Services	827.15		
- Office, Drafting, and D. P. Supplies	5,814.84		
- Library Acquisitions & Dues	1,229.56		
- Reproduction & Publication	5,892.69		
- Publication of Report	6.84		
- Printing Costs	11,596.35		
- Travel Expense	2,906.93		
- Office Furniture & Fixtures	295.65		
- Postage Expense	4,850.81		
- Legal Expense	131.92		
- Other Operating Expense	1,028.01		
- Unemployment Compensation	4,947.00		
- Auto and Office Equipment			
- Maintenance	11,909.14		
- Rent Expense	26,724.58		
- Telephone Expense	9,388.35		
- Insurance Expense	1,043.22		
- Audit Expense	3,337.62		
- Depreciation Expense	3,385.53		
- Staff Conference	9.94		
<u>Total Office and Other Expense</u>	637,122.31		1,120,050.69
<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.

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Regional Land Use - Transportation Study Fund

## Notes to Financial Statements

December 31, 1978

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 - Department of Housing and Urban Development
3. Net Earned Federal Grants - Urban Mass Transportation Administration
4. Net Earned Federal Grants - Federal Highway Administration

The Continuing Regional Land Use - Transportation Study Fund was awarded a total grant of \$297,000.00 for the 1978 calendar year. The \$297,000.00 was earned during 1978, and therefore, no unearned portion appears in this statement.

The Continuing Regional Land Use - Transportation Study Fund was awarded a total grant of \$270,340.00 out of a total award to all funds of \$270,340.00 during 1978. As of December 31, 1978, the U. S. Department of Housing and Urban Development grant to this fund was recognized as earned, and therefore, no unearned portion appears in this statement.

The Continuing Regional Land Use - Transportation Study Fund was awarded a total grant of \$295,997.00 for the 1978 calendar year. The \$295,997.00 was earned during 1978, and therefore, no unearned portion appears in this statement.

\* \* \* \* \*

EXHIBIT C-AEXHIBIT C-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONRegional Housing Study Fund (Note 1)Statement of Revenues, Expenditures, and Changes in Fund BalanceFor the Year Ended December 31, 1978

<u>Revenues</u>			
<u>Federal Grants</u>			
Dept. of Housing and Urban Development	\$ 46,086.00	\$	
<u>State Grants</u>			
Wis. Dept. of Local Affairs & Development	30,304.43		
Contribution from General Fund	404.42		
<u>Other Income</u>			
Non-Date Processing Receipts	70.00		
<u>Total Revenues</u>	76,864.85		
<u>Expenditures</u>			
<u>Salaries and Fringe Benefits by Divisions</u>			
Transportation	26.43		
Land Use and Housing	42,932.66		
Administrative	45.58		
Cartography	38.40		
Environmental Planning	3.71		
Community Assistance	8,895.86		
<u>Total Salaries and Fringe Benefits</u>	51,942.64		
<u>Office and Other Expense</u>			
Data Processing Services	1,335.35		
Travel Expenses	111.43		
Project Inspection Fee	380.00		
Indirect - Salaries	11,770.66		
- Annual Report Publication	417.90		
- Data Processing Services	655.77		
- Outside Salaries and Services	89.02		
- Office, Drafting & D.P. Supplies	625.90		
- Library Acquisitions and Dues	132.34		
- Reproduction and Publication	624.60		
- Publication of Report	.72		
- Printing Costs	1,248.23		
- Travel Expense	312.82		
<u>Totals Carried Forward</u>	17,704.81	\$ 51,942.64	\$ 76,864.85

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONRegional Housing Study Fund (Note 1)Comparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<u>Assets</u>		
Accounts Receivable		
Net Earned Fed. Grants (HUD)	\$ 1,846.00	\$ 7,824.69
<u>Total Assets</u>	\$ 1,846.00	\$ 7,824.69
<u>Liabilities</u>		
Equity in Treasury Fund	1,846.00	7,157.26
Unearned Grant - Dept. of Local Affairs and Development	-	667.43
<u>Total Liabilities</u>	1,846.00	7,824.69
<u>Fund Balance</u>		
Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	\$ 1,846.00	\$ 7,824.69

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

\* \* \* \* \*

EXHIBIT C-ASOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONRegional Housing Study FundNote to Financial StatementsDecember 31, 1978

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 C-A(Continued)SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONRegional Housing Study Fund (Note 1)Statement of Revenues, Expenditures, and Changes in Fund BalanceFor the Year Ended December 31, 1978

<u>Totals Brought Forward</u>	\$ 17,704.81	\$ 51,942.64	\$ 76,864.85
<u>Expenditures (Continued)</u>			
<u>Office and Other Expense (Continued)</u>			
Indirect - Office Furniture and Fixtures	31.81		
- Postage Expense	522.13		
- Legal Expense	14.20		
- Other Operating Expense	110.64		
- Unemployment Compensation	532.50		
- Auto and Office Equipment			
Maintenance	1,281.90		
- Rent Expense	2,876.65		
- Telephone Expense	1,010.56		
- Insurance Expense	112.28		
- Audit Expense	359.26		
- Depreciation Expense	364.41		
- Staff Conference	1.06		
Total Office and Other Expense	24,922.21		\$ 76,864.85
<u>Total Expenditures</u>		-	
<u>Excess Revenue over Expenditures</u>		-	
<u>Fund Balance - Beginning of Year</u>		-	
<u>Fund Balance - End of Year</u>		\$ -	

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

EXHIBIT DSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONMenomonee River Watershed Planning Program FundComparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<u>Assets</u>		
Accounts Receivable	\$ -	\$ 10,215.91
Federal - U. S. Environmental Protection Agency	\$ -	\$ 10,215.91
<u>Total Assets</u>	\$ -	\$ 10,215.91
<u>Liabilities</u>		
Equity in Treasury Fund	-	10,215.91
<u>Total Liabilities</u>	-	10,215.91
<u>Fund Balance</u>		
Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	\$ -	\$ 10,215.91

The Menomonee River Watershed Planning Program is a study being conducted 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 Menomonee River Watershed.

\* \* \* \* \*

## EXHIBIT E-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Regional Air Quality Maintenance Planning Program Fund (Note 1)  
Statement of Revenues, Expenditures, and Changes in Fund Balance  
For the Year Ended December 31, 1978

<u>Revenues</u>			
<u>Federal Grants</u>			
U. S. Environmental Protection Agency	\$ 40,000.00	\$	
State Grants			
Wis. Dept. of Transportation	44,155.56		
Wis. Dept. of Natural Resources	20,205.78		
Contribution from General Fund	17,903.84		
<u>Other Income</u>			
Non-Data Processing Receipts	210.00		
Department of City Development, City of Milwaukee	9,719.96		
<u>Total Revenues</u>	132,195.14		
<u>Expenditures</u>			
<u>Salaries and Fringe Benefits by Divisions</u>			
Executive	13.96		
Transportation	4,697.66		
Administrative	507.77		
Cartography	3,664.05		
Planning Research	332.67		
Environmental Planning	34,945.59		
Community Assistance	91.90		
<u>Total Salaries and Fringe Benefits</u>	44,253.60		
<u>Office and Other Expense</u>			
Services by Other Public Agencies	7,937.24		
Outside Salaries and Services	8,193.10		
Data Processing Services	45,808.58		
Library Acquisitions and Dues	.45		
Publication of Report	4,002.03		
Travel Expense	2,352.75		
Indirect - Salaries	10,013.33		
- Annual Report Publication	355.51		
- Data Processing Services	557.87		
- Outside Salaries and Services	75.73		
- Office, Drafting & D.P. Supplies	532.46		
- Library Acquisitions and Dues	112.58		
- Reproduction and Publication	551.35		
<u>Totals Carried Forward</u>	80,472.98	44,253.60	132,195.14

## EXHIBIT E-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Regional Air Quality Maintenance Planning Program Fund (Note 1)  
Comparative Balance Sheet

	December 31, 1978	December 31, 1977
<u>Assets</u>		
Federal - U. S. Environmental Protection Agency	\$ 38,742.33	\$ 15,969.17
Less: Unearned - U. S. Environmental Protection Agency	38,742.33	-
Non-Federal - Wis. Dept. of Transportation	20,111.34	3,759.73
Less: Unearned Wis. Dept. of Transportation (Note 2)	20,111.34	11,155.56
Non-Federal - Wis. Dept. of Natural Resources	-	(7,395.83)
Less: Unearned - Wis. Dept. of Natural Resources (Note 3)	-	15,852.02
Non-Federal - Dept. of City Development, City of Milwaukee	15,000.00	-
Less: Unearned - Dept. of City Development, City of Milwaukee (Note 4)	5,280.04	9,719.96
<u>Total Assets</u>	\$ 68,573.63	\$ 4,219.58
<u>Liabilities</u>		
Accounts Payable	13,697.87	31.42
Equity in Treasury Fund	54,875.76	4,188.15
<u>Total Liabilities</u>	68,573.63	4,219.58
<u>Fund Balance</u>		
Fund Balance	-	-
<u>Total Liabilities and Fund Balance</u>	\$ 68,573.63	\$ 4,219.58

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

\* \* \* \* \*

EXHIBIT E-A  
(Continued)

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Regional Air Quality Maintenance Planning Program Fund (Note 1)  
Statement of Revenues, Expenditures, and Changes in Fund Balance  
For the Year Ended December 31, 1978

<u>Totals Brought Forward</u>	\$ 80,472.98	\$ 44,253.60	\$ 132,195.14
<u>Expenditures (Continued)</u>			
<u>Office and Other Expense (Continued)</u>			
Indirect - Publication of Report			
- Printing Costs			
- Travel Expense			
- Office Furniture and Fixtures			
- Postage Expense			
- Legal Expense			
- Other Operating Expense			
- Unemployment Compensation			
- Auto and Office Equipment			
- Maintenance			
- Rent Expense			
- Telephone Expense			
- Insurance Expense			
- Audit Expense			
- Depreciation Expense			
- Staff Conference			
Total Office and Other Expense			
<u>Total Expenditures</u>			
<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.

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Regional Air Quality Maintenance Planning Program Fund

## Notes to Financial Statements

December 31, 1978

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.
2. Unearned - Wisconsin Department of Transportation  
The balance at January 1, 1978 of \$11,155.56 was the unearned 1977 balance of the portion recognized in 1977. As of December 31, 1978, all Wisconsin Department of Transportation grants to this fund were recognized as earned, and therefore, no unearned portion appears in this statement.
3. Unearned - Wisconsin Department of Natural Resources  
The balance at January 1, 1978 of \$20,205.78 was the unearned 1977 balance of the portion recognized in 1977. As of December 31, 1978, the Wisconsin Department of Natural Resources grant to this fund was recognized as earned, and therefore, no unearned portion appears in this statement.
4. Unearned - Department of City Development, City of Milwaukee  
As of December 31, 1978, the unearned balance of \$5,280.04 is the unearned balance of the portion recognized as possible 1978 revenue.

\* \* \* \* \*

## 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, 1978

Revenues			
<u>Federal Grants</u>			
Dept. of Housing and Urban Development	\$ 31,555.00	\$	
<u>State Grants</u>			
Wis. Dept. of Local Affairs and Development (Note 2)	31,860.00		
Contribution from General Fund	117,511.25		
<u>Other Income</u>			
Community Assistance Agreements	43,834.79		
Non-Data Processing Receipts	973.45		
Sale of Publications	6,297.29		
Sale of Aerial Photos	17,817.55		
Floodplain Information Revenue	6,345.00		
<u>Total Other Income</u>	<u>75,268.08</u>		
<u>Total Revenues</u>	<u>256,194.33</u>		
<u>Expenditures</u>			
<u>Salaries and Fringe Benefits by Divisions</u>			
Executive	18,320.37		
Transportation	2,776.19		
Land Use and Housing	13,588.78		
Administrative	14,687.04		
Cartography	12,304.38		
Planning Research	2,425.52		
Environmental Planning	2,431.33		
Community Assistance	88,201.01		
<u>Total Salaries and Fringe Benefits</u>	<u>154,734.62</u>		
<u>Office and Other Expense</u>			
Outside Salaries and Services	7,986.54		
Data Processing Services	2,293.82		
Newsletter Publication	1,196.10		
Office Drafting and Duplicating Supplies	472.61		
Library Acquisitions and Dues	5.00		
Reproduction and Publication	2,825.65		
Publication of Report	15,154.29		
<u>Totals Carried Forward</u>	<u>29,934.01</u>	<u>154,734.62</u>	<u>256,194.33</u>

## EXHIBIT F-B

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Community Assistance Planning Program Fund (Note 1)

## Comparative Balance Sheet

	Dec. 31, 1978	Dec. 31, 1977
<u>Assets</u>		
Accounts Receivable		
Federal Grants - HUD	\$ 14,908.00	\$ -
Non-Federal - Community Assistance	41,512.29	20,430.69
<u>Total Assets</u>	<u>\$ 56,420.29</u>	<u>\$ 20,430.69</u>
<u>Liabilities</u>		
Accounts Payable	4,596.40	3,641.80
Equity in Treasury	51,823.89	16,788.89
<u>Total Liabilities</u>	<u>56,420.29</u>	<u>20,430.69</u>
<u>Fund Balance</u>	<u>-</u>	<u>-</u>
<u>Total Liabilities and Fund Balance</u>	<u>\$ 56,420.29</u>	<u>\$ 20,430.69</u>

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, 1978

1. 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.

## 2. State Grants - Wisconsin Department of Local Affairs and Development

The Continuing Community Assistance Planning Program Fund 1978 award was \$31,860.00 which represents a portion of the total Southeastern Wisconsin Regional Planning Commission's award of \$61,477.00 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 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, 1978

Totals Brought Forward		
	\$ 29,934.01	\$ 154,734.62
<u>Expenditures (Continued)</u>		
Office and Other Expense (Continued)		
Travel Expense	2,556.26	
Other Operating Expense	203.60	
Indirect	35,046.49	
- Annual Report Publication	1,244.30	
- Data Processing Services	1,952.56	
- Outside Salaries and Services	265.07	
- Office, Drafting, & D.P. Supplies	1,863.61	
- Library Acquisitions and Dues	394.04	
- Reproduction and Publication	1,859.72	
- Publication of Report	2.16	
- Printing Costs	3,716.58	
- Travel Expense	931.64	
- Office Furniture and Fixtures	94.73	
- Postage Expense	1,554.64	
- Legal Expense	42.28	
- Other Operating Expense	329.45	
- Unemployment Compensation	1,535.50	
- Auto and Office Equipment Maintenance	3,816.82	
- Rent Expense	8,565.13	
- Telephone Expense	3,008.92	
- Insurance Expense	334.32	
- Audit Expense	1,069.68	
- Depreciation Expense	1,085.03	
- Staff Conference	3.17	
<u>Total Office and Other Expense</u>	<u>101,459.71</u>	
<u>Total Expenditures</u>	<u>256,194.33</u>	
<u>Excess Revenue over Expenditures</u>	<u>-</u>	
<u>Fund Balance - Beginning of Year</u>	<u>-</u>	
<u>Fund Balance - End of Year</u>	<u>\$ -</u>	

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

\* \* \* \* \*

## 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, 1978

Revenues		
Counties Contribution (Note 2)	\$ 29,800.00	\$
Interest on Invested Funds	1,180.87	
<u>Total Revenues</u>		<u>30,980.87</u>
<u>Expenditures</u>		
Services by Other Public Agencies		
<u>Total Expenditures</u>		<u>18,067.00</u>
<u>Excess Revenue over Expenditures</u>		<u>12,913.87</u>
<u>Fund Balance - Beginning of Year</u>		<u>12,093.22</u>
<u>Fund Balance - End of Year</u>		<u>\$ 25,009.09</u>

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

\* \* \* \* \*

EXHIBIT G-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONStream Gaging Program Trust Fund (Note 1)Comparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<u>Assets</u>		
Equity in Treasury Fund	\$ 19,309.09	\$ 16,328.22
Accounts Receivable	<u>5,700.00</u>	<u>1,700.00</u>
<u>Total Assets</u>	<u>\$ 25,009.09</u>	<u>\$ 18,028.22</u>
<u>Liabilities</u>		
Accounts Payable	-	5,933.00
<u>Total Liabilities</u>	<u>-</u>	<u>5,933.00</u>
<u>Fund Balance</u>		
Unappropriated Fund Balance	25,009.09	12,095.22
<u>Total Liabilities and Fund Balance</u>	<u>\$ 25,009.09</u>	<u>\$ 18,028.22</u>

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

\* \* \* \* \*

EXHIBIT HSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONWashington County Special Monumentation Trust FundComparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<u>Assets</u>		
Equity in Treasury Fund	\$ -	\$ 5,550.00
<u>Total Assets</u>	<u>\$ -</u>	<u>\$ 5,550.00</u>
<u>Liabilities</u>		
Liabilities	-	-
<u>Fund Balance</u>		
Unappropriated Fund Balance	-	5,550.00
<u>Total Liabilities and Fund Balance</u>	<u>\$ -</u>	<u>\$ 5,550.00</u>

The Washington County Special Monumentation Trust Fund is a trust account contributed to by Washington County, and administered by the Commission for the relocation and monumentation of public land survey corners in Washington County in connection with large scale topographic mapping efforts undertaken by the Commission as a part of its areawide water quality management planning program.

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EXHIBIT I-ASOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONMilwaukee Metropolitan Pollution Abatement Program Fund (Note 1)Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1978

<u>Revenues</u>		
<u>Other Income</u>		
Milwaukee Metropolitan Sewerage Commission	\$ 5,164.14	\$ 5,164.14
<u>Total Revenues</u>		
	<u>5,164.14</u>	<u>5,164.14</u>
<u>Expenditures</u>		
<u>Salaries and Fringe Benefits by Divisions</u>		
Executive	333.15	
Transportation	1.32	
Land Use and Housing	139.94	
Planning, Research	115.73	
Environmental Planning	2,129.98	
<u>Total Salaries and Fringe Benefits</u>		2,720.12
<u>Office and Other Expense</u>		
Data Processing Services	1,141.63	
Travel Expense	61.37	
Other Operating Expense	4.93	
Indirect - Salaries	630.09	
- Annual Report Publication	22.36	
- Data Processing Services	35.09	
- Outside Salaries and Services	4.76	
- Office, Drafting, & D. P. Supplies	33.49	
- Library Acquisitions and Dues	7.08	
- Reproduction and Publication	33.42	
- Publication of Report	.03	
- Printing Costs	66.80	
- Travel Expense	16.74	
- Office Furniture and Fixtures	1.70	
- Postage Expense	27.94	
- Legal Expense	.76	
- Other Operating Expense	5.92	
- Unemployment Compensation	28.50	
- Auto and Office Equipment		
Maintenance	68.60	
- Rent Expense	135.96	
- Telephone Expense	54.08	
- Insurance Expense	6.00	
- Audit Expense	19.22	
- Depreciation Expense	19.50	
- Staff Conference	.05	
<u>Total Office and Other Expense</u>		2,444.02
<u>Total Expenditures</u>		<u>5,164.14</u>
<u>Excess Revenue over Expenditures</u>		-
<u>Fund Balance - Beginning of Year</u>		-
<u>Fund Balance - End of Year</u>		<u>\$ -</u>

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

\* \* \* \* \*

## EXHIBIT I-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Milwaukee Metropolitan Pollution Abatement Program Fund (Note 1)

Balance Sheet  
As at December 31, 1978

<u>Assets</u>	
<u>Receivables</u>	
Non-Federal - Milwaukee Metropolitan Sewerage Commission	\$ 96,500.00
Less: Unearned Milwaukee Metropolitan Sewerage Commission (Note 2)	<u>91,335.86</u>
<u>Total Assets</u>	<u>\$ 5,164.14</u>
<u>Liabilities</u>	
Accounts Payable	18.43
Equity in Treasury Fund	<u>5,145.71</u>
<u>Total Liabilities</u>	<u>5,164.14</u>
<u>Fund Balance</u>	
Fund Balance	-
<u>Total Liabilities and Fund Balance</u>	<u>\$ 5,164.14</u>

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, 1978

1. 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.
2. Unearned Milwaukee Metropolitan Sewerage Commission

As of December 31, 1978, the unearned balance of \$91,335.86 is the unearned balance of the portion recognized as possible 1978 revenue.

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<u>EXHIBIT I-A</u>		
<u>SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION</u>		
<u>Washington County Sediment Control Program Fund (Note 1)</u>		
<u>Statement of Revenues, Expenditures, and Changes in Fund Balance</u>		
<u>For the Year Ended December 31, 1978</u>		
<u>Revenues</u>		
U. S. Environmental Protection Agency	\$ 44,687.29	\$ 44,687.29
<u>Total Revenues</u>		
<u>Expenditures</u>		
<u>Salaries and Fringe Benefits by Divisions</u>		
Administrative	44.21	
Environmental Planning	11,718.36	
Community Assistance	1.11	
<u>Total Salaries and Fringe Benefits</u>	<u>11,763.68</u>	
<u>Office and Other Expense</u>		
Data Processing Services	27,543.34	
Travel Expense	13.46	
Other Operating Expense	41.50	
Indirect - Salaries	2,773.29	
- Annual Report Publication	94.17	
- Data Processing Services	147.78	
- Outside Salaries and Services	20.06	
- Office, Drafting, & D. P. Supplies	141.04	
- Library Acquisitions and Dues	29.82	
- Reproduction and Publication	140.75	
- Publication of Report	.16	
- Printing Costs	281.29	
- Travel Expense	70.51	
- Office Furniture and Fixtures	7.16	
- Postage Expense	117.66	
- Legal Expense	3.20	
- Other Operating Expense	24.93	
- Unemployment Compensation	120.00	
- Auto and Office Equipment		
- Maintenance	288.83	
- Rent Expense	648.26	
- Telephone Expense	227.72	
- Insurance Expense	25.30	
- Audit Expense	80.96	
- Depreciation Expense	82.12	
- Staff Conference	.24	
<u>Total Office and Other Expense</u>	<u>32,923.61</u>	<u>\$ 44,687.29</u>
<u>Excess Revenue over Expenditures</u>		
<u>Fund Balance - Beginning of Year</u>		
<u>Fund Balance - End of Year</u>		

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

## EXHIBIT J-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Washington County Sediment Control Program Fund (Note 1)

<u>Assets</u>	
U. S. Environmental Protection Agency	\$ 44,687.29
<u>Total Assets</u>	<u>\$ 44,687.29</u>
<u>Liabilities</u>	
Equity in Treasury Fund	44,687.29
<u>Total Liabilities</u>	<u>44,687.29</u>
<u>Fund Balance</u>	
Fund Balance	-
<u>Total Liabilities and Fund Balance</u>	<u>\$ 44,687.29</u>

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

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Washington County Sediment Control Program Fund

Notes to Financial Statements

December 31, 1978

1. 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.
2. Unearned Milwaukee Metropolitan Sewerage Commission

As of December 31, 1978, the unearned balance of \$91,335.86 is the unearned balance of the portion recognized as possible 1978 revenue.

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Washington County Sediment Control Program Fund

Note to Financial Statements

December 31, 1978

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 J-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
Washington County Sediment Control Program Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance  
For the Year Ended December 31, 1978

## EXHIBIT K-A

<u>EXHIBIT K-A</u>		
<u>SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION</u>		
<u>Data Processing Fund (Note 1)</u>		
<u>Statement of Revenues, Expenditures, and Changes in Fund Balance</u>		
<u>For the Year Ended December 31, 1978</u>		
<u>Revenues</u>		
Contribution from General Fund	\$ 23,534.82	\$
Sale of Equipment	22,663.00	
Other Income (Note 2)	808,297.98	
<u>Total Revenues</u>		<u>854,495.80</u>
<u>Expenditures</u>		
<u>Salaries and Fringe Benefits by Divisions</u>		
Data Processing	300,599.43	
Land Use and Housing	7.42	
Cartography	137.61	
<u>Total Salaries and Fringe Benefits</u>		<u>300,744.46</u>
<u>Office and Other Expense</u>		
Outside Salaries and Services	1,041.00	
Data Processing Machine Rental	370,036.19	
Office Drafting and Duplicating Supplies	24,560.09	
Library Acquisitions and Dues	100.00	
Travel Expense	692.20	
Other Operating Expense	1,266.76	
Auto and Office Equipment Maintenance	12,251.68	
Telephone Expense	5,658.99	
Indirect - Salaries	68,103.43	
- Annual Report Publication	2,417.96	
- Data Processing Services	3,794.23	
- Outside Salaries and Services	515.11	
- Office, Drafting & D.P. Supplies	3,621.45	
- Library Acquisitions and Dues	765.72	
- Reproduction and Publication	3,613.88	
- Publication of Report	4.21	
- Printing Costs	7,222.19	
- Travel Expense	1,810.40	
- Office Furniture and Fixtures	184.08	
- Postage Expense	378.81	
<u>Totals Carried Forward</u>	<u>512,067.48</u>	<u>300,744.46</u>
		<u>854,495.80</u>

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

EXHIBIT K-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, 1978

Totals Brought Forward \$512,067.48 \$300,744.46 \$854,495.80

## Expenditures (Continued)

## Office and Other Expense (Continued)

Indirect - Legal Expense	82.16
- Other Operating Expense	640.21
- Unemployment Compensation	3,081.00
- Auto and Office Equipment	
Maintenance	7,416.99
- Rent Expense	16,644.07
- Telephone Expense	5,847.04
- Insurance Expense	649.68
- Audit Expense	2,078.64
- Depreciation Expense	2,108.48
- Staff Conference	6.16

Total Office and Other Expense

\$50,621.91

851,366.37

Total Expenditures

Excess Revenue over Expenditures

3,129.43

Fund Balance - Beginning of Year

(3,129.43)

Fund Balance - End of Year

\$ -

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

\* \* \* \* \*

1. 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.

## 2. Other Income

The following are the sources of funds paid to the Data Processing Fund for services rendered:

Project Funds	
Continuing Regional Land Use - Transportation Study Fund	\$198,628.51
Regional Housing Study Fund	1,335.35
Regional Air Quality Maintenance Planning Program Fund	45,808.58
Continuing Community Assistance Planning Program Fund	2,293.82
Continuing Regional Water Quality Management Planning Program Fund	217,178.96
Continuing Regional Environmental Engineering Planning Program Fund	33,712.28
Kinnickinnic River Watershed Study Fund	13,204.57
Menomonee River Pilot Watershed Study Fund	23,630.03
Coastal Zone Management Planning Program Fund	144.40
Milwaukee Metropolitan Pollution Abatement Program Fund	1,141.63
Washington County Sediment Control Program Fund	27,543.34
Total from Projects	564,621.47
Indirect Data Processing Services	18,472.66
Service Agreements	225,203.85
	\$808,297.98

## 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, 1978, 86 schools, municipalities and other agencies owed \$79,514.08 to Southeastern Wisconsin Regional Planning Commission for data processing services rendered.

\* \* \* \* \*

## EXHIBIT L-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Continuing Regional Water Quality Management Planning Program Fund (Note 1)

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

For the Year Ended December 31, 1978

## Revenues

Federal Grants		\$	\$
U. S. Environmental Protection Agency	\$371,955.00	\$	
State Grants			
Wis. Dept. of Natural Resources	57,117.00		
Counties Contributions	57,116.00		
Contribution from General Fund	204,563.35		
Other Income			
Non-Data Processing Receipts	745.00		
Total Revenues			691,496.35

## Expenditures

Salaries and Fringe Benefits by Divisions	
Executive	6,003.49
Transportation	269.03
Land Use and Housing	1,035.89
Administrative	3,964.59
Cartography	42,095.65
Planning, Research	1,218.82
Environmental Planning	165,520.57
Community Assistance	501.93
Total Salaries and Fringe Benefits	220,609.97

## Office and Other Expense

Technical Consultants	8,691.26
Services by Other Public Agencies	10,154.81
Outside Salaries and Services	4,264.26
Data Processing Services	217,178.96
Office Drafting & Duplicating Supplies	11.70
Library Acquisitions and Dues	38.00
Reproduction and Publication	1,219.20
Publication of Report	119,348.21
Printing Costs	20.00
Travel Expense	1,192.65
Regional Conference Expense	1,223.53
Other Operating Expense	139.59
Auto and Office Equipment Maintenance	277.15

Totals Carried Forward	363,759.32	220,609.97	691,496.35
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The notes which follow are an integral part of this statement.

\* \* \* \* \*

**EXHIBIT L-A**  
(Continued)

**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**  
**Continuing Regional Water Quality Management Planning Program Fund (Note 1)**

**Statement of Revenues, Expenditures, and Changes in Fund Balance**  
For the Year Ended December 31, 1978

<b>Totals Brought Forward</b>	\$363,759.32	\$220,609.97	\$691,496.35
<b>Expenditures (Continued)</b>			
Office and Other Expense (Continued)			
Indirect - Salaries	49,966.89		
- Annual Report Publication	1,774.04		
- Data Processing Services	2,783.82		
- Outside Salaries and Services	377.93		
- Office, Drafting, & D.P. Supplies	2,657.02		
- Library Acquisitions and Dues	561.80		
- Reproduction and Publication	2,651.47		
- Publication of Report	3.08		
- Printing Costs	5,298.85		
- Travel Expense	1,328.27		
- Office Furniture and Fixtures	135.06		
- Postage Expense	2,216.51		
- Legal Expense	60.28		
- Other Operating Expense	469.71		
- Unemployment Compensation	2,260.50		
- Auto and Office Equipment Maintenance	5,441.78		
- Rent Expense	12,211.60		
- Telephone Expense	4,289.91		
- Insurance Expense	476.66		
- Audit Expense	1,525.08		
- Depreciation Expense	1,546.97		
- Staff Conference	4.52		
Total Office and Other Expense	461,801.07		
Total Expenditures		682,411.04	
Excess Revenue over Expenditures		9,085.31	
Fund Balance - Beginning of Year		(9,085.31)	
Fund Balance - End of Year		\$ -	

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

\* \* \* \* \*

**EXHIBIT L-B**

**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**  
**Continuing Regional Water Quality Management Planning Program Fund (Note 1)**

**Comparative Balance Sheet**

	Dec. 31, 1978	Dec. 31, 1977
<b>Assets</b>		
Equity in Treasury Fund	\$104,551.23	\$ -
Accounts Receivable		
Federal Grants - U. S. Environmental Protection Agency	37,419.00	-
Non-Federal - Wis. Dept. of Natural Resources (Note 2)	57,117.00	-
Total Assets	\$199,087.23	\$ -
<b>Liabilities</b>		
Accounts Payable	89,087.23	-
State Loan	110,000.00	-
Equity in Treasury Fund	-	9,085.31
Total Liabilities	199,087.23	9,085.31
<b>Fund Balance</b>		
Unappropriated Fund Balance	-	(9,085.31)
Total Liabilities and Fund Balance	\$199,087.23	\$ -

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

\* \* \* \* \*

**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**

**Continuing Regional Water Quality Management Planning Program Fund**

**Notes to Financial Statements**

**December 31, 1978**

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.

2. Net Earned Non-Federal Grants - Wisconsin Department of Natural Resources

The Continuing Regional Water Quality Management Planning Program Fund was awarded a total grant of \$57,117.00 for the 1978 calendar year. The \$57,117.00 was earned during 1978 and therefore, no unearned portion appears in this statement.

**EXHIBIT M-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, 1978

<b>Revenues</b>			
Counties Contributions	\$ 94,699.42	\$	
Contribution from General Fund	13,565.23		
Other Income			
Non-Data Processing Receipts	5,775.05		
			114,039.70
<b>Total Revenues</b>			
<b>Expenditures</b>			
<b>Salaries and Fringe Benefits by Divisions</b>			
Executive	18.70		
Transportation	52.28		
Land Use and Housing	2,198.76		
Administrative	1,062.47		
Cartography	2,260.22		
Planning Research	227.23		
Environmental Planning	43,656.30		
Community Assistance	326.49		
			49,802.45
<b>Total Salaries and Fringe Benefits</b>			
<b>Office and Other Expense</b>			
Technical Consultants	1,495.00		
Data Processing Services	33,712.28		
Office Drafting and Duplicating Supplies	358.97		
Reproduction and Publication	39.60		
Publication of Report	4,758.40		
Travel Expenses	1,025.12		
Other Operating Expense	783.97		
			599.96
<b>Indirect - Salaries</b>	11,185.79		
- Annual Report Publication	401.42		
- Data Processing Services	629.91		
- Outside Salaries and Services	85.52		
- Office, Drafting & D.P. Supplies	501.21		
- Library Acquisitions and Dues	127.12		
- Reproduction and Publication	599.96		
			55,804.27
<b>Totals Carried Forward</b>			49,802.45
			114,039.70

**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION**

**EXHIBIT M-A**  
(Continued)

**Continuing Regional Environmental Engineering Planning Program Fund (Note 1)**

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

For the Year Ended December 31, 1978

<b>Totals Brought Forward</b>	\$ 55,804.27	\$ 49,802.45	\$ 114,039.70
<b>Expenditures (Continued)</b>			
<b>Office and Other Expense (Continued)</b>			
Indirect - Publication of Report	.70		
- Printing Costs	1,199.00		
- Travel Expense	300.55		
- Office Furniture and Fixtures	30.55		
- Postage Expense	501.54		
- Legal Expense	13.64		
- Other Operating Expense	106.27		
- Unemployment Compensation	511.50		
- Auto and Office Equipment Maintenance	1,231.34		
- Rent Expense	2,763.20		
- Telephone Expense	970.70		
- Insurance Expense	107.85		
- Audit Expense	345.09		
- Depreciation Expense	350.03		
- Staff Conference	1.02		
			64,237.25
<b>Total Office and Other Expense</b>			114,039.70
<b>Total Expenditures</b>			-
<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 M-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONContinuing Regional Environmental Engineering Planning Program Fund (Note 1)Comparative Balance Sheet

	December 31, 1978	December 31, 1977
<b>Assets</b>		
Equity in Treasury Fund	\$ 1,704.09	\$ -
Receivables		
Milwaukee Sewerage Commission	- 1,000.00	1,000.00
Less: Unearned Milwaukee Sewerage Commission	- -	1,000.00
U. S. Environmental Protection Agency	- 67,863.40	67,863.40
Less: Unearned U. S. Environmental Protection Agency	- -	23,176.11
<b>Total Assets</b>	<b>\$ 1,704.09</b>	<b>\$ 24,176.11</b>
<b>Liabilities</b>		
Accounts Payable	1,704.09 487.36	9,716.33
Equity in Treasury Fund	- -	13,972.42
Unearned Contributions - Counties	- -	- -
<b>Total Liabilities</b>	<b>1,704.09</b>	<b>24,176.11</b>
<b>Fund Balance</b>	<b>- -</b>	<b>- -</b>
<b>Total Liabilities and Fund Balance</b>	<b>\$ 1,704.09</b>	<b>\$ 24,176.11</b>

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

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONContinuing Regional Environmental Engineering Planning Program FundNote to Financial Statements

December 31, 1978

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.

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONKinnickinnic River Watershed Study Fund (Note 1)Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1978

<b>Revenues</b>		
<b>State Grants</b>		
Wis. Dept. of Natural Resources	\$ 8,583.81	\$
Counties Contributions	2,657.07	-
Contribution from General Fund	63,156.11	-
<b>Total Revenues</b>	<b>74,396.99</b>	<b>-</b>
<b>Expenditures</b>		
<b>Salaries and Fringe Benefits by Divisions</b>		
Transportation	57.70	-
Land Use and Housing	172.33	-
Administrative	419.47	-
Cartography	6,748.48	-
Planning Research	122.23	-
Environmental Planning	32,223.41	-
Community Assistance	266.31	-
<b>Total Salaries and Fringe Benefits</b>	<b>40,009.93</b>	<b>-</b>
<b>Office and Other Expense</b>		
Data Processing Services	13,204.57	-
Publication of Report	3,656.55	-
Reproduction and Publication	10.00	-
Travel Expense	132.85	-
Other Operating Expenses	14.17	-
Indirect - Salaries	9,051.81	-
- Annual Report Publication	321.37	-
- Data Processing Services	504.30	-
- Outside Salaries and Services	68.46	-
- Office, Drafting & D.P. Supplies	481.33	-
- Library Acquisitions and Dues	101.77	-
- Reproduction and Publication	480.32	-
- Publication of Report	.55	-
- Printing Costs	959.91	-
<b>Totals Carried Forward</b>	<b>28,987.96</b>	<b>40,009.93</b>
	<b>74,396.99</b>	<b>-</b>

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONKinnickinnic River Watershed Study Fund (Note 1)Statement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1978

<b>Totals Brought Forward</b>	<b>\$ 28,987.96</b>	<b>\$ 40,009.93</b>	<b>\$ 74,396.99</b>
<b>Expenditures (Continued)</b>			
<b>Office and Other Expense (Continued)</b>			
Indirect - Travel Expense	240.62	-	240.62
- Office Furniture and Fixtures	24.46	-	24.46
- Postage Expense	401.53	-	401.53
- Legal Expense	10.92	-	10.92
- Other Operating Expense	85.99	-	85.99
- Unemployment Compensation	409.50	-	409.50
- Auto and Office Equipment Maintenance	985.80	-	985.80
- Rent Expense	2,212.18	-	2,212.18
- Telephone Expense	777.13	-	777.13
- Insurance Expense	86.34	-	86.34
- Audit Expense	276.27	-	276.27
- Depreciation Expense	280.24	-	280.24
- Staff Conference	.81	-	.81
<b>Total Office and Other Expense</b>	<b>34,778.85</b>	<b>74,788.78</b>	<b>-</b>
<b>Total Expenditures</b>	<b>34,778.85</b>	<b>74,788.78</b>	<b>-</b>
<b>Excess Expenditures over Revenue</b>	<b>(391.79)</b>	<b>-</b>	<b>-</b>
<b>Fund Balance - Beginning of Year</b>	<b>391.79</b>	<b>-</b>	<b>-</b>
<b>Fund Balance - End of Year</b>	<b>\$ -</b>	<b>-</b>	<b>-</b>

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

\* \* \* \* \*

EXHIBIT N-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONKinnickinnic River Watershed Study Fund (Note 1)Comparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<b>Assets</b>		
Equity in Treasury Fund	\$ 3,167.10	\$ 11,632.67
<b>Total Assets</b>		
<b>Liabilities</b>		
Accounts Payable	3,167.10	-
Unearned - Milwaukee County	-	2,657.07
- Dept. of Natural Resources	-	8,583.81
<b>Total Liabilities</b>		
<b>Fund Balance</b>	<b>3,167.10</b>	<b>11,240.88</b>
<b>Total Liabilities and Fund Balance</b>	<b>\$ 3,167.10</b>	<b>\$ 11,632.67</b>

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

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONKinnickinnic River Watershed Study FundNote to Financial Statements

December 31, 1978

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 O-A

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Menomonee River Pilot Watershed Study Fund (Note 1)

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

For the Year Ended December 31, 1978

<b>Revenues</b>			
U. S. Environmental Protection Agency	\$ 47,711.88	\$	
Wis. Dept. of Natural Resources	2,511.14		
Contribution from General Fund	376.86		
<b>Total Revenues</b>	<b>50,599.88</b>		
<b>Expenditures</b>			
<b>Salaries and Fringe Benefits by Divisions</b>			
Administrative	90.85		
Cartography	68.83		
Environmental Planning	15,994.16		
Community Assistance	3.15		
<b>Total Salaries and Fringe Benefits</b>	<b>16,156.99</b>		
<b>Office and Other Expense</b>			
Technical Consultants	3,237.65		
Data Processing Services	23,630.03		
Office Drafting and Duplicating Supplies	49.02		
Library Acquisitions and Dues	4.00		
Travel Expense	360.50		
Other Operating Expense	5.36		
Indirect	3,647.31		
- Annual Report Publication	129.49		
- Data Processing Services	203.19		
- Outside Salaries and Services	27.58		
- Office, Drafting, & D.P. Supplies	193.94		
- Library Acquisitions and Dues	11.00		
- Reproduction and Publication	193.53		
- Publication of Report	22		
- Printing Costs	386.77		
- Travel Expense	96.95		
- Office Furniture and Fixtures	9.85		
- Postage Expense	161.78		
- Legal Expense	4.40		
- Other Operating Expense	34.28		
- Unemployment Compensation	165.00		
<b>Totals Carried Forward</b>	<b>32,581.85</b>	<b>16,156.99</b>	<b>50,599.88</b>

## EXHIBIT O-B

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Menomonee River Pilot Watershed Study Fund (Note 1)

## Comparative Balance Sheet

	December 31, 1978	December 31, 1977
<b>Assets</b>		
<b>Receivables</b>		
U. S. Environmental Protection Agency	\$ 27,446.57	\$ 67,029.74
Less: Unearned U. S. Environmental Protection Agency (Note 2)	-	27,446.57
Non-Federal - Wis. Dept. of Natural Resources	1,444.56	3,527.90
Less: Unearned Wis. Dept. of Natural Resources (Note 3)	-	1,444.56
<b>Total Assets</b>	<b>\$ 28,891.13</b>	<b>\$ 7,354.61</b>
<b>Liabilities</b>		
Accounts Payable	-	5.00
Equity in Treasury Fund	28,891.13	7,349.61
<b>Total Liabilities</b>	<b>28,891.13</b>	<b>7,354.61</b>
<b>Fund Balance</b>		
Fund Balance	-	-
<b>Total Liabilities and Fund Balance</b>	<b>\$ 28,891.13</b>	<b>\$ 7,354.61</b>

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

\* \* \* \* \*

EXHIBIT O-A  
(Continued)

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Menomonee River Pilot Watershed Study Fund (Note 1)

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

For the Year Ended December 31, 1978

<b>Totals Brought Forward</b>	\$ 32,581.85	\$ 16,156.99	\$ 50,599.88
<b>Expenditures (Continued)</b>			
<b>Office and Other Expense (Continued)</b>			
Indirect - Auto and Office Equipment			
Maintenance	397.21		
- Rent Expense	891.35		
- Telephone Expense	313.13		
- Insurance Expense	34.79		
- Audit Expense	111.32		
- Depreciation Expense	112.91		
- Staff Conference	.33		
<b>Total Office and Other Expense</b>	<b>34,442.89</b>		
<b>Total Expenditures</b>	<b>50,599.88</b>		
<b>Excess Revenue over Expenditures</b>			
<b>Fund Balance - Beginning of Year</b>	<b>-</b>		
<b>Fund Balance - End of Year</b>	<b>\$ -</b>		

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

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Menomonee River Pilot Watershed Study Fund

## Notes to Financial Statements

December 31, 1978

1. The Menomonee River Pilot Watershed Study is a study to determine the level and quantities of pollutants, defines 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.
2. Unearned - U. S. Environmental Protection Agency.
 

The balance at January 1, 1978 of \$360,042.87 was the unearned 1977 balance of the portion recognized in 1977. As of December 31, 1978, \$47,711.88 was earned, and \$12,330.99 was unearned.
3. Unearned - Wisconsin Department of Natural Resources
 

The balance at January 1, 1978 of \$3,160.16 was the unearned 1977 balance of the portion recognized in 1977. As of December 31, 1978, \$2,511.14 was earned, and \$649.02 was unearned.

\* \* \* \* \*

## EXHIBIT P-A

## EXHIBIT P-B

## 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, 1978

<b>Revenues</b>	
Wis. Dept. of Administration	\$ 49,929.29
Contribution from General Fund	<u>16,623.38</u>
<b>Total Revenues</b>	<b>66,552.67</b>
 <b>Expenditures</b>	
<b>Salaries and Fringe Benefits by Divisions</b>	
Executive	4,573.74
Transportation	77.84
Land Use and Housing	26,270.82
Administrative	967.06
Cartography	6,236.72
Planning Research	862.12
Environmental Planning	5,207.51
Community Assistance	18.97
<b>Total Salaries and Fringe Benefits</b>	<b>44,214.78</b>
<b>Office and Other Expense</b>	
Data Processing Services	144.40
Publication of Report	1,282.38
Reproduction and Publication	231.00
Travel Expense	891.23
Library Acquisitions and Dues	38.00
Other Operating Expense	53.50
Indirect - Salaries	10,013.32
- Annual Report Publication	355.51
- Data Processing Services	557.87
- Outside Salaries and Services	75.73
- Office, Drafting, & D.P. Supplies	532.46
- Library Acquisitions and Dues	112.58
- Reproduction and Publication	531.35
- Publication of Report	61
- Printing Costs	1,061.88
- Travel Expense	266.18
- Office Furniture and Fixtures	27.06
- Postage Expense	444.18
- Legal Expense	12.08
- Other Operating Expense	94.13
- Unemployment Compensation	453.00
<b>Totals Carried Forward</b>	<b>17,228.45</b>
	<b>44,214.78</b>
	<b>66,552.67</b>

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Coastal Zone Management Planning Program Fund (Note 1)

## Comparative Balance Sheet

	December 31, 1978	December 31, 1977
<b>Assets</b>		
<b>Receivables</b>		
Wis. Dept. of Administration	\$ 32,069.09	\$ 32,294.43
Less: Unearned Wis. Dept. of Administration (Note 2)	<u>18,301.97</u>	<u>13,767.12</u>
Due from Contributions - Counties (General Fund)		
<b>Total Assets</b>	<b>\$ 13,767.12</b>	<b>\$ 18,753.17</b>
 <b>Liabilities</b>		
<b>Accounts Payable</b>		
Equity in Treasury Fund	45.15	194.68
	<u>13,721.91</u>	<u>18,558.49</u>
<b>Total Liabilities</b>	<b>13,767.12</b>	<b>18,753.17</b>
 <b>Fund Balance</b>		
<b>Fund Balance</b>		
<b>Total Liabilities and Fund Balance</b>	<b>\$ 13,767.12</b>	<b>\$ 18,753.17</b>

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, 1978

1. The Coastal Zone Management 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. Wisconsin Department of Administration

The Coastal Zone Management Planning Program Fund was awarded a total grant of \$47,350.00, for the 1978 calendar year. As of December 31, 1978, \$49,929.29 was earned, and \$18,301.97 remained to be earned.

\* \* \* \* \*

EXHIBIT P-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, 1978

<b>Totals Brought Forward</b>	\$ 17,228.45	\$ 44,214.78	\$ 66,552.67
<b>Expenditures (Continued)</b>			
<b>Office and Other Expense (Continued)</b>			
Indirect - Auto and Office Equipment			
Maintenance			
- Rent Expense			
- Telephone Expense			
- Insurance Expense			
- Audit Expense			
- Depreciation Expense			
- Staff Conference			
Total Office and Other Expense			
<b>Total Expenditures</b>			
<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.

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## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

## Areawide Water Quality Management Planning Program Fund (Note 1)

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

For the Year Ended December 31, 1978

<b>Revenues</b>	\$	\$	-
<b>Expenditures</b>			
Publication of Report			
<b>Total Expenditures</b>			
<b>Excess Expenditures over Revenue</b>			
<b>Fund Balance - Beginning of Year</b>			
Add: Transfer to Fund Balance from Accounts Payable			
<b>Fund Balance - End of Year</b>			

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

\* \* \* \* \*

EXHIBIT Q-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONAreawide Water Quality Management Planning Program Fund (Note 1)Comparative Balance Sheet

	<u>Dec. 31, 1978</u>	<u>Dec. 31, 1977</u>
<b>Assets</b>		
Equity in Treasury Fund	\$ 26,240.00	\$ -
Receivables		
U. S. Environmental Protection Agency	<u>10,000.00</u>	<u>260,700.00</u>
<b>Total Assets</b>	<u>\$ 36,240.00</u>	<u>\$260,700.00</u>
<b>Liabilities</b>		
Accounts Payable	36,240.00	157,564.72
Equity in Treasury Fund	-	<u>103,135.28</u>
<b>Total Liabilities</b>	<u>36,240.00</u>	260,700.00
<b>Fund Balance</b>		
Unappropriated Fund Balance	-	-
<b>Total Liabilities and Fund Balance</b>	<u>\$ 36,240.00</u>	<u>\$260,700.00</u>

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

\* \* \* \* \*

EXHIBIT R-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONEquipment AccountBalance Sheet

As at December 31, 1978

<b>Assets</b>		
Desks	\$ 12,852.55	\$
Less: Allowance for Depreciation	<u>8,741.59</u>	4,110.96
Chairs	7,275.39	
Less: Allowance for Depreciation	<u>5,612.90</u>	1,662.49
Calculator and Adding Machines	10,229.56	
Less: Allowance for Depreciation	<u>6,397.34</u>	3,832.22
Filing Cabinets	18,932.81	
Less: Allowance for Depreciation	<u>11,931.00</u>	7,001.84
Typewriter and Dictating Equipment	12,273.26	
Less: Allowance for Depreciation	<u>12,273.26</u>	5,787.59
Bookcases and Shelves	6,485.67	
Less: Allowance for Depreciation	<u>6,485.67</u>	5,630.92
Tables	10,041.89	
Less: Allowance for Depreciation	<u>4,410.97</u>	5,630.92
Data Processing Equipment	5,993.99	
Less: Allowance for Depreciation	<u>4,034.23</u>	1,929.76
Other Major Equipment	123.85	
Less: Allowance for Depreciation	<u>123.85</u>	701.75
Autos	17,165.45	
Less: Allowance for Depreciation	<u>17,165.45</u>	10,218.78
Miscellaneous	32,667.10	
Less: Allowance for Depreciation	<u>16,533.37</u>	16,133.73
Less: Allowance for Depreciation	<u>10,701.92</u>	8,930.84
<b>Total Assets</b>	<u>\$ 65,940.88</u>	
<b>Liabilities</b>		
Accounts Payable	106.40	
<b>Total Liabilities</b>	<u>106.40</u>	
<b>Fund Balance</b>		
Unappropriated Fund Balance	65,834.48	
<b>Total Liabilities and Fund Balance</b>	<u>\$ 65,940.88</u>	

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 COMMISSIONAreawide Water Quality Management Planning Program FundNote to Financial Statements

December 31, 1978

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 R-CSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONEquipment AccountStatement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1978

<b>Revenues</b>		
Rental Usage Charge	\$ 10,265.25	\$
Contribution from General Fund	<u>5,414.50</u>	
<b>Total Revenues</b>	<u>15,679.75</u>	
<b>Expenditures</b>		
Depreciation Expense	10,265.25	
<b>Total Expenditures</b>	<u>10,265.25</u>	
<b>Excess Revenue over Expenditures</b>	<u>5,414.50</u>	
<b>Fund Balance - Beginning of Year</b>	60,419.98	
<b>Fund Balance - End of Year</b>	<u>\$ 65,834.48</u>	

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSIONUnemployment Compensation FundStatement of Revenues, Expenditures, and Changes in Fund Balance

For the Year Ended December 31, 1978

<b>Revenues</b>		
Other Income		
Income from Unemployment Compensation Charges to Other Funds	\$	\$ 15,000.00
<b>Total Revenues</b>		15,000.00
<b>Expenditures</b>		
Unemployment Compensation Expense	6,066.00	
<b>Total Expenditures</b>	<u>6,066.00</u>	
<b>Excess Revenue over Expenditures</b>	<u>8,934.00</u>	
<b>Fund Balance - Beginning of Year</b>	41,658.76	
<b>Fund Balance - End of Year</b>	<u>\$ 50,592.76</u>	

\* \* \* \* \*

EXHIBIT S-BSOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

<u>Unemployment Compensation Fund</u>	
<u>Comparative Balance Sheet</u>	
<u>Assets</u>	
Equity in Treasury Fund	<u>Dec. 31, 1978</u> <u>Dec. 31, 1977</u>
	\$ 50,592.76 \$ 41,658.76
<u>Total Assets</u>	<u>\$ 50,592.76</u> <u>\$ 41,658.76</u>
<u>Liabilities</u>	
Liabilities	- -
<u>Fund Balance</u>	
Unappropriated Fund Balance	<u>50,592.76</u> <u>41,658.76</u>
<u>Total Liabilities and Fund Balance</u>	<u>\$ 50,592.76</u> <u>\$ 41,658.76</u>

\* \* \* \* \*

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

<u>Treasury Cash Fund</u>	
<u>Balance Sheet</u>	
<u>As at December 31, 1978</u>	
<u>Assets</u>	
Treasurer's Cash Account	\$ \$ 3,745.65
Treasurer's Savings Account	111,884.30
Treasurer's Investments (Note 1)	95,476.67
	211,106.62
<u>Accounts Receivable - Overdrafts</u>	
Due from - Continuing Regional Land Use -	
Transportation Study Fund	58,997.55
- Regional Housing Study Fund	1,846.00
- Regional Air Quality Maintenance	
Planning Program Fund	54,875.76
- Continuing Community Assistance	
Planning Program Fund	51,823.89
- Milwaukee Metropolitan Pollution	
Abatement Program Fund	5,145.71
- Washington County Sediment Control	
Program Fund	44,687.29
- Data Processing Fund	9,626.67
- Menomonee River Pilot Watershed Study Fund	28,891.13
- Coastal Zone Management Planning	
Program Fund	13,721.97
	269,615.97
<u>Total Assets</u>	<u>\$ 480,722.59</u>
<u>Liabilities</u>	
Due to - General Fund	246,251.57
- Stream Gaging Program Trust Fund	19,309.09
- Continuing Regional Water Quality Management	
Planning Program Fund	104,551.23
- Continuing Regional Environmental Engineering	
Planning Program Fund	1,704.09
- Kinnickinnic River Watershed Study Fund	3,167.10
- Areawide Water Quality Management Planning	
Program Fund	26,240.00
- Unemployment Compensation Fund	50,592.76
- Indirect Expense Fund	28,906.75
<u>Total Liabilities</u>	<u>\$ 480,722.59</u>

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

<u>Indirect Expense Fund</u>	
<u>Comparative Balance Sheet</u>	
<u>Assets</u>	
Equity in Treasury Fund	<u>Dec. 31, 1978</u> <u>Dec. 31, 1977</u>
	\$ 28,906.75 \$ 27,246.59
<u>Total Assets</u>	<u>\$ 28,906.75</u> <u>\$ 27,246.59</u>
<u>Liabilities</u>	
Accounts Payable	<u>28,906.75</u> <u>27,246.59</u>
<u>Total Liabilities</u>	<u>28,906.75</u> <u>27,246.59</u>
<u>Fund Balance</u>	
Fund Balance	- -
<u>Total Liabilities and Fund Balance</u>	<u>\$ 28,906.75</u> <u>\$ 27,246.59</u>

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.

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

<u>Treasury Cash Fund</u>	
<u>Note to Financial Statement</u>	
	<u>December 31, 1978</u>

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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