Twenty-fourth annual report. July 1985

Waukesha, Wisconsin: Southeastern Wisconsin Regional Planning Commission, July 1985

1984 ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

SERVING THE COUNTIES OF
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TWENTY-FOURTH ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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

July 1985

Inside Region $2.00
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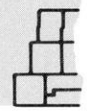

July 31, 1985

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

In accordance with the requirements of Section 66.945(8)(b) of the Wisconsin Statutes, this Commission each calendar year prepares and certifies an annual report to the State Legislature of Wisconsin and to the legislative bodies of the constituent county and local units of government within the Region. This, the 24th annual report of the Commission, summarizes the accomplishments of the Commission in calendar year 1984 and contains a statement of the financial position of the Commission as of the end of that calendar year as certified by an independent auditor.

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

As do past annual reports, this report contains a great deal of useful information on development trends and plans in the Region. In addition, this report summarizes the progress made during 1984 in developing a number of important new plan elements. While no new major plan elements were adopted during the year, the Commission did adopt a number of important amendments to the regional water quality management plan, including detailed sanitary sewer service area plans for the Villages of Butler, East Troy, and Fredonia, and the City of Hartford. In addition, significant progress was made during the year toward the completion of other important plan amendments, including a land use management plan for the environmentally significant Chiwaukee Prairie-Carol Beach area of the Town of Pleasant Prairie; a comprehensive water resources plan for the Milwaukee Harbor estuary; a study of transportation improvements in the Stadium Freeway-South corridor in Milwaukee County; and new, updated five-year transit development plans for the Racine and Kenosha metropolitan areas. In addition, work continued toward the preparation of a drainage and flood control plan for the Oak Creek watershed, and a Milwaukee area freeway traffic management plan. Progress in these and other plan development efforts is summarized within this annual report.

Overall, the Commission is again pleased with the progress made during the year in guiding the development of the Region in the public interest through the voluntary, cooperative, areawide planning effort. As its Silver Anniversary approaches, the Commission looks forward to continuing to serve its constituent local units of government and the state and federal agencies concerned.

Very truly yours,

Anthony F. Balestrieri
Chairman

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ABOUT THE COMMISSION

AUTHORITY

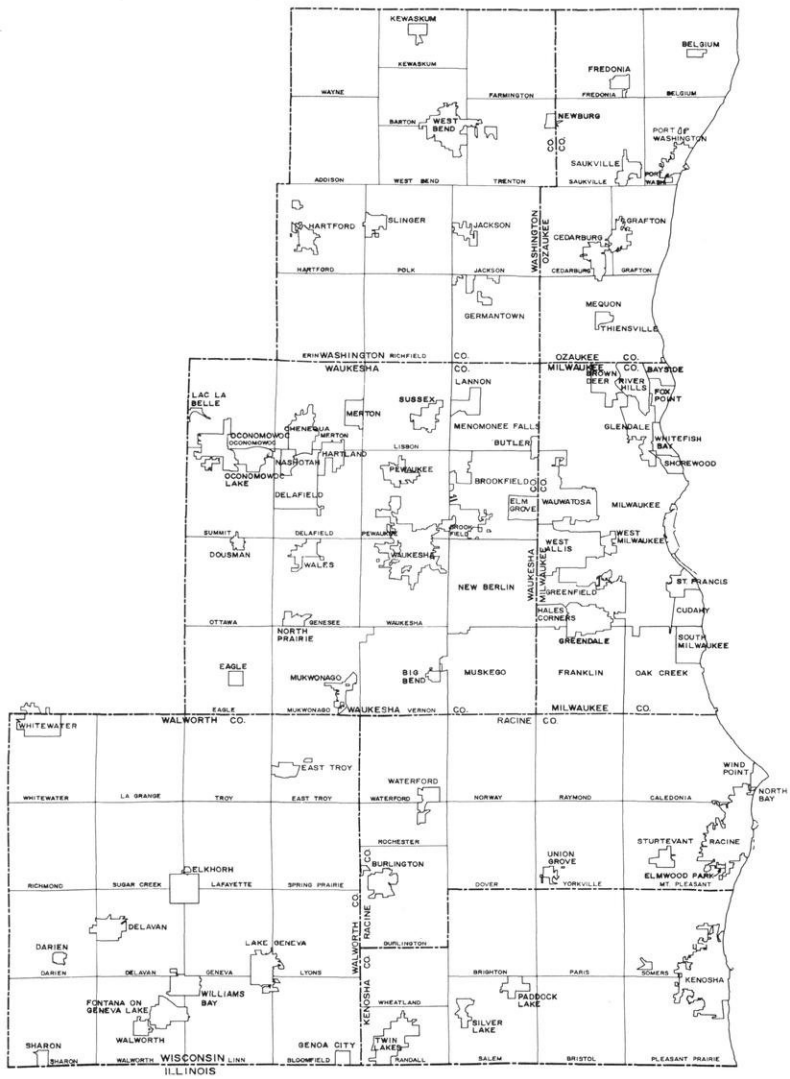
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.945 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning services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

AREA SERVED

The Commission serves a Region consisting of the seven counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha. These seven counties have an area of about 2,689 square miles, or about 5 percent of the total area of the State. These counties, however, have a resident population of 1.74 million persons, or about 37 percent of the total population of the State. The seven counties provide about 868,700 jobs, or about 38 percent of the total employment of

Map 1

THE SOUTHEASTERN WISCONSIN REGION



the State, and contain real property worth about $44.6 billion as measured in equalized valuation, or about 37 percent of all the tangible wealth of the State as measured by such valuation. There are 154 general-purpose local units of government in the seven-county Region, all of which participate in the work of the Commission.

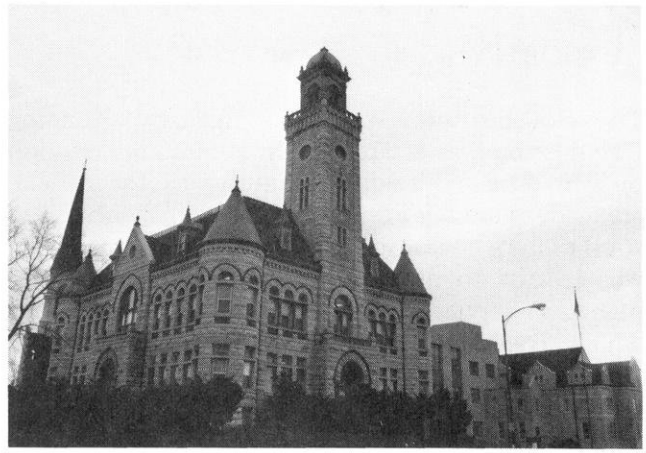
BASIC CONCEPTS

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

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

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

OLD COURTHOUSE
COMMISSION OFFICES
WAUKESHA COUNTY



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

BASIC FUNCTIONS

The Commission conceives regional planning as having three basic functions. The first involves the collection, analysis, and dissemination of basic planning and engineering data on a uniform, areawide basis in order that better development decisions can be made in both the public and private sectors. The Commission believes that the establishment and utilization of such data can in and of itself contribute to better development decision-making within the Region. The second function involves the preparation of a framework of long-range areawide plans for the physical development of the

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

ORGANIZATION

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

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

The Commission is assisted in its work by 30 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 650 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 1984, the staff totaled 100, including 72 full-time and 28 part-time employees. One professional staff member from the University of Wisconsin-Extension was assigned to the Commission during the year.

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

FUNDING

Basic financial support for the Commission's work program is provided by county tax levies apportioned on the basis of equalized valuation. These basic funds are heavily supplemented by state and federal aids. Revenues received by the Commission during 1984 totaled about $5.2 million, of which about 37 percent, or $1.9 million, represents contract revenues for local government data processing services. County tax levies in 1984 totaled $758,360, or about $0.44 per capita. The sources of this revenue for 1984 and the trend in funding since the inception of the Commission in 1960 are shown in Figures 2 through 5. It may be seen in Figure 2 that there has been little change in the tax levy for regional planning since 1963 when that levy is expressed in constant 1960 dollars.

Figure 1

SEWRPC ORGANIZATIONAL STRUCTURE: 1984

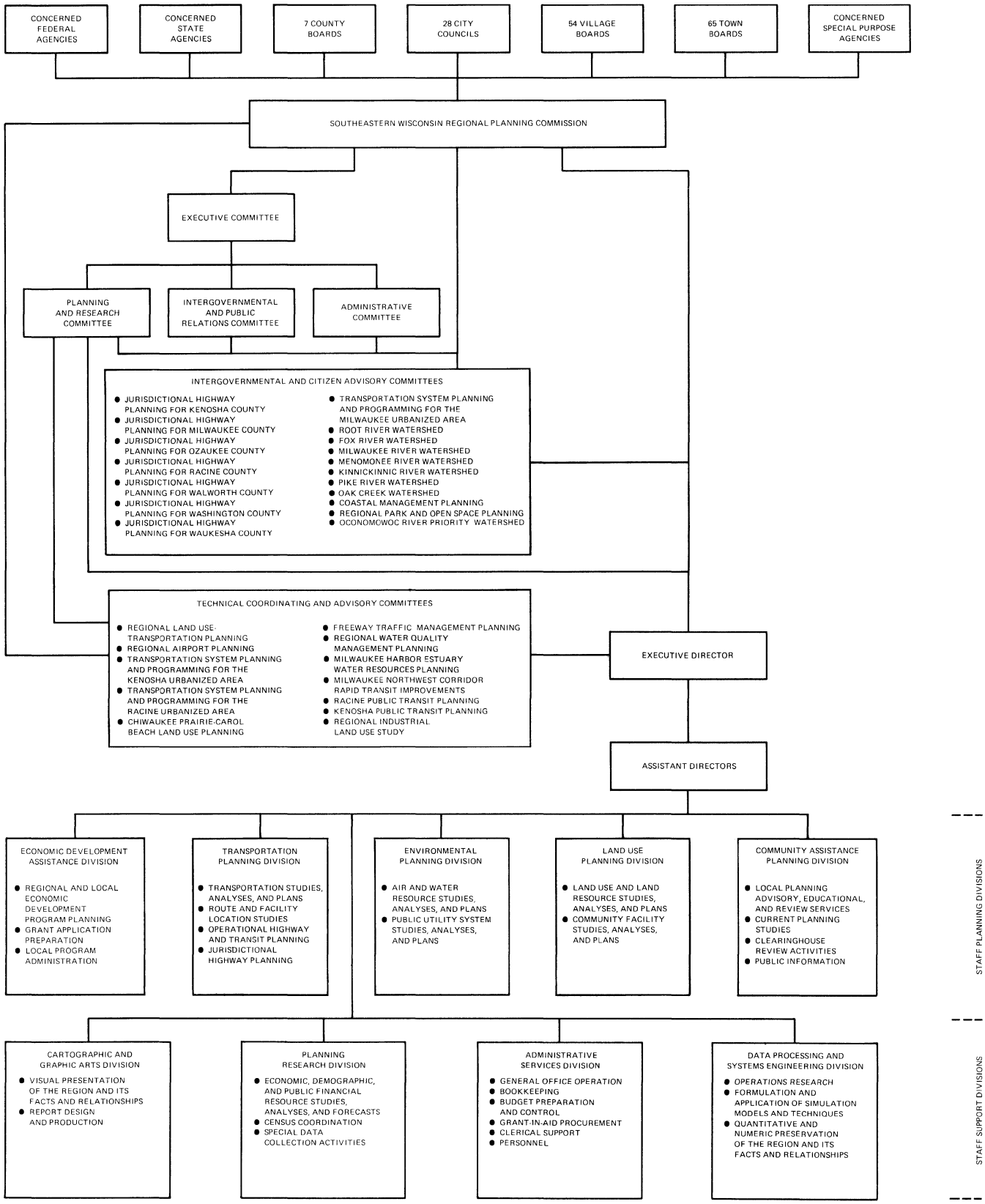


Figure 2

FUNDING TREND: 1961-1984

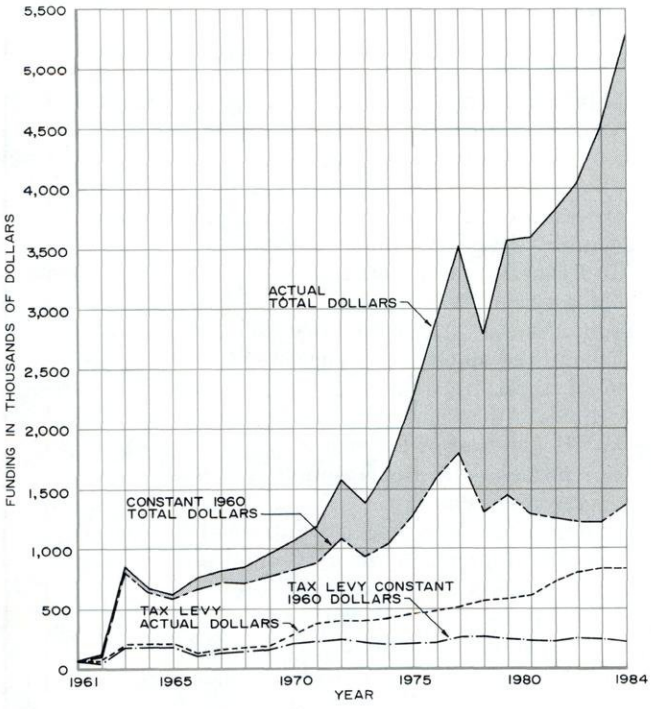


Figure 3

SOURCES OF REVENUES TREND: 1961-1984

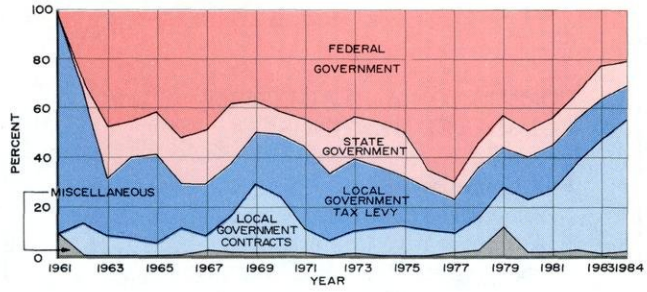


Figure 4

EXPENDITURES TREND: 1961-1984

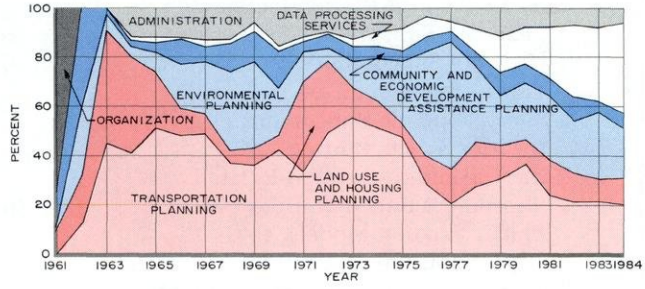
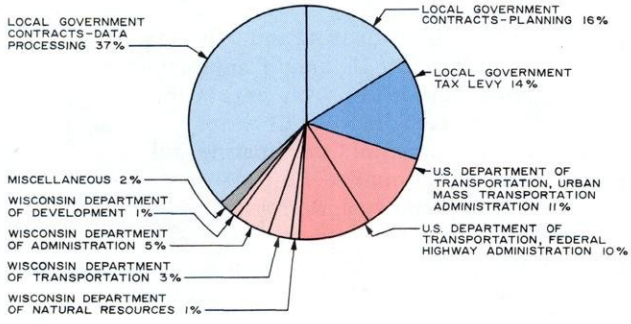


Figure 5

REVENUES AND EXPENDITURES

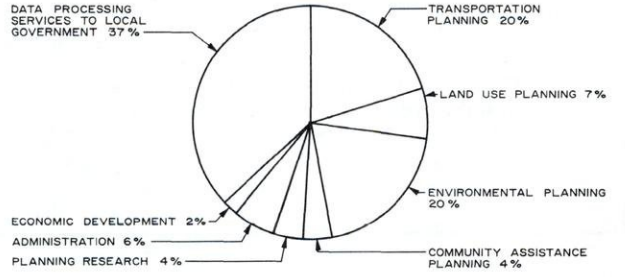
REVENUES

Federal Government	$1,129,231	21%
State Government	506,517	10%
Local Government Tax Levy	758,360	14%
Local Government Contracts	2,762,764	53%
Miscellaneous	95,203	2%
Total	$5,252,075	100%



EXPENDITURES

Transportation Planning	$1,064,526	20%
Land Use Planning	344,450	7%
Planning Research	230,139	4%
Environmental Planning	1,052,862	20%
Community Assistance Planning	232,889	4%
Economic Development Assistance	79,434	2%
Data Processing Services to Local Governments	1,913,964	37%
Administration	333,811	6%
Total	$5,252,075	100%



1984 MEETINGS

COMMISSION AND ADVISORY COMMITTEE MEETINGS

Full Commission	4
Executive Committee	9
Administrative Committee	9
Planning and Research Committee	4
Intergovernmental and Public Relations Committee	1
Technical Coordinating and Advisory Committee on Regional Land Use-Transportation Planning	
Land Use Subcommittee	0
Highway Subcommittee	0
Transit Subcommittee	0
Socioeconomic Subcommittee	2
Utilities Subcommittee	0
Natural and Recreation-Related Resources Subcommittee	0
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	0
Milwaukee County	0
Ozaukee County	0
Racine County	0
Walworth County	0
Washington County	0
Waukesha County	0
Technical Coordinating and Advisory Committee for Detailed Planning and Rapid Transit Improvements in the Milwaukee Northwest Corridor	4
Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming	
Kenosha Urbanized Area	1
Milwaukee Urbanized Area	2
Racine Urbanized Area	1
Public Transit Planning Advisory Committees	
Racine	1
Kenosha	2
Technical Coordinating and Advisory Committee on Freeway Traffic Management	0
Watershed Committees	
Root River	0
Fox River	1
Milwaukee River	0
Menomonee River	0
Kinnickinnic River	0
Pike River	0
Oak Creek	3
Technical Advisory Committee on Regional Water Quality Management Planning	2
Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin	0
Technical Advisory Committee Milwaukee Harbor Estuary Comprehensive Water Resources Management Plan	1
Oconomowoc River Priority Watershed Plan Development Advisory Committee	2
Technical and Citizen Advisory Committee on Regional Park and Open Space Planning	0
Technical Advisory Committee on the Study of Industrial Land Use for Southeastern Wisconsin	2
Technical and Citizen Advisory Committee for the Chiwaukee Prairie-Carol Beach Land Use Management Planning Program	3

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Executive Director	269
Assistant Directors	134
Cartographic and Graphic Arts Division	15
Community Assistance Planning Division	197
Environmental Planning Division	273
Land Use Planning Division	156
Planning Research Division	17
Transportation Planning Division	28
Economic Development Assistance Division	80

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Executive Director	68
Assistant Directors	24
Community Assistance Planning Division	3
Environmental Planning Division	30
Land Use Planning Division	8
Planning Research Division	3
Transportation Planning Division	6
Economic Development Assistance Division	5

The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1984 is set forth in full in Appendix E. 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 planning reports represent the best means for disseminating inventory data that have permanent historic value and for promulgating plan recommendations and alternatives to such recommendations. Published reports are intended to serve as important references for public officials at the federal and state levels, as well as at the local level, when considering important development decisions. Perhaps most importantly, however, published reports are intended to provide a focus for generating enlightened citizen interest in, and action on, plan recommendations. Accordingly, the Commission has established a series of published reports.

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

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

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

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

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

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

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

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

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 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 for the resolution of those problems. A complete publication list is set forth in Appendix D.

THE EVOLVING COMPREHENSIVE PLAN FOR THE REGION

PLAN DESIGN FUNCTION

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

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

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

ADOPTED PLAN ELEMENTS—1984

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 1984, the adopted regional plan consisted of 21 individual plan elements. These plan elements are identified in Table 1. Four of these elements are land use related: the regional land use plan, the regional housing plan, the regional library facilities and services plan, and the regional park and open space plan.

Table 1

THE ADOPTED REGIONAL PLAN—1984

Functional Area	Plan Element	Plan Document	Date of Adoption
Land Use, Housing, and Community Facility Planning	Regional Land Use Plan[a]	Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	December 19, 1977
	Amendment—Kenosha County	Community Assistance Planning Report No. 45, A Farmland Preservation Plan for Kenosha County, Wisconsin	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, A Farmland Preservation Plan for Racine County, Wisconsin	June 17, 1982
	Amendment—Ozaukee County	Community Assistance Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin	June 16, 1983
	Amendment—Pewaukee	Community Assistance Planning Report No. 76, A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin	December 1, 1983
	Regional Library Facilities and Services Plan	Planning Report No. 19, A Library Facilities and Services Plan for Southeastern Wisconsin	September 12, 1974
	Regional Housing Plan	Planning Report No. 20, A Regional Housing Plan for Southeastern Wisconsin	June 5, 1975
	Regional Park and Open Space Plan	Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000	December 1, 1977
	Amendment—Ozaukee County Park and Recreation Plan	Community Assistance Planning Report No. 23, A Park and Recreation Plan for Ozaukee County	September 14, 1978
Transportation Planning	Regional Transportation Plan[b]	Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative and Recommended Plans	June 1, 1978
	Amendment—Lake Freeway South Corridor	Amendment to the Regional Transportation Plan—2000, Lake Freeway South Corridor	June 18, 1981
	Amendment—Milwaukee Area Primary Transit System	Planning Report No. 33, A Primary Transit System Plan for the Milwaukee Area	June 17, 1982
	Amendment—Racine County	Amendment to the Regional Transportation Plan—2000, Racine County	December 2, 1982
	Amendment—Waukesha County	Amendment to the Regional Transportation Plan—2000, Waukesha County	December 2, 1982
	Amendment—Milwaukee Northwest Side/ Ozaukee County	Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area	September 8, 1983
	Amendment—Lake Freeway North/Park Freeway East	Amendment to the Regional Transportation Plan—2000, Lake Freeway North/ Park Freeway East	December 1, 1983
	Racine Area Transit Development Plan	Community Assistance Planning Report No. 3, Racine Area Transit Development Program: 1975-1979	September 12, 1974
	Regional Airport System Plan	Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin	March 4, 1976
	Kenosha Area Transit Development Plan	Community Assistance Planning Report No. 7, Kenosha Area Transit Development Program: 1976-1980	June 3, 1976
	Transportation Systems Management Plan	Community Assistance Planning Report No. 50, A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981	December 4, 1980
	Amendment—Milwaukee Northwest Side/ Ozaukee County	Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area	September 8, 1983

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Transportation Planning (continued)	Elderly-Handicapped Transportation Plan	Planning Report No. 31, A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982	April 13, 1978
	Amendment—Racine Area	SEWRPC Resolution No. 78-17	December 7, 1978
	Amendment—Milwaukee County	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Two, Milwaukee Urbanized Area/ Milwaukee County	June 20, 1980
	Amendment—Kenosha Area	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume One, Kenosha Urbanized Area	September 11, 1980
	Amendment—Racine Area	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Three, Racine Urbanized Area	September 11, 1980
	Amendment—Waukesha County	Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume Four, Milwaukee Urbanized Area/ Waukesha County	September 11, 1980
	Amendment—City of Waukesha	Amendment to the Public Transit Accessibility Plan for the Milwaukee Urbanized Area/ Waukesha County, City of Waukesha Transit System Utility	June 18, 1981
Environmental Planning	Root River Watershed Plan	Planning Report No. 9, A Comprehensive Plan for the Root River Watershed	September 22, 1966
	Fox River Watershed Plan	Planning Report No. 12, A Comprehensive Plan for the Fox River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan	June 4, 1970
	Amendment—Water Pollution Control Time Schedule	Amendment to the Comprehensive Plan for the Fox River Watershed	September 13, 1973
	Amendment—Lower Watershed Drainage Plan	Community Assistance Planning Report No. 5, Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed	June 5, 1975
	Amendment—Pewaukee Flood Control Plan	Community Assistance Planning Report No. 14, Floodland Management Plan for the Village of Pewaukee	June 1, 1978
	Milwaukee River Watershed Plan	Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan	March 2, 1972
	Amendment—Lincoln Creek Flood Control Plan	Community Assistance Planning Report No. 13 (2nd Edition), Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin	December 1, 1983
	Menomonee River Watershed Plan	Planning Report No. 26, A Comprehensive Plan for the Menomonee River Watershed, Volume One, Inventory Findings and Forecasts; Volume Two, Alternative Plans and Recommended Plan	January 20, 1977
	Wastewater Sludge Management Plan	Planning Report No. 29, A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin	September 14, 1978
	Kinnickinnic River Watershed Plan	Planning Report No. 32, A Comprehensive Plan for the Kinnickinnic River Watershed	March 1, 1979
	Regional Water Quality Management Plan[c]	Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin, Volume One, Inventory Findings; Volume Two, Alternative Plans; Volume Three, Recommended Plan	July 12, 1979
	Amendment—Root River Watershed	Community Assistance Planning Report No. 37, A Nonpoint Source Water Pollution Control Plan for the Root River Watershed	March 6, 1980
	Amendment—Walworth County Metropolitan Sewerage District	Community Assistance Planning Report No. 56, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District	December 3, 1981

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Cities of Brookfield and Waukesha	Amendment to the Regional Water Quality Management Plan—2000, Cities of Brookfield and Waukesha	December 3, 1981
	Amendment—Kenosha County	Community Assistance Planning Report No. 45, A Farmland Preservation Plan for Kenosha County, Wisconsin	June 17, 1982
	Amendment—Racine County	Community Assistance Planning Report No. 46, A Farmland Preservation Plan for Racine County, Wisconsin	June 17, 1982
	Amendment—City of Muskego	Community Assistance Planning Report No. 64, Sanitary Sewer Service Area for the City of Muskego	June 17, 1982
	Amendment—Ashippun Lake, Waukesha County	Community Assistance Planning Report No. 48, A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin	September 9, 1982
	Amendment—Okauchee Lake, Waukesha County	Community Assistance Planning Report No. 53, A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin	September 9, 1982
	Amendment—Lac La Belle, Waukesha County	Community Assistance Planning Report No. 47, A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin	September 9, 1982
	Amendment—North Lake, Waukesha County	Community Assistance Planning Report No. 54, A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin	December 2, 1982
	Amendment—City of West Bend	Community Assistance Planning Report No. 35, Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin	December 2, 1982
	Amendment—Village of Grafton	Amendment to the Regional Water Quality Management Plan—2000, Village of Grafton	December 2, 1982
	Amendment—City of Brookfield	Amendment to the Regional Water Quality Management Plan—2000, City of Brookfield	December 2, 1982
	Amendment—Village of Sussex	Community Assistance Planning Report No. 84, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin	June 16, 1983
	Amendment—Ozaukee County	Community Assistance Planning Report No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin	June 16, 1983
	Amendment—Village of Germantown	Community Assistance Planning Report No. 70, Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin	September 8, 1983
	Amendment—Village of Saukville	Community Assistance Planning Report No. 90, Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin	December 1, 1983
	Amendment—City of Port Washington	Community Assistance Planning Report No. 95, Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin	December 1, 1983
	Amendment—Pewaukee	Community Assistance Planning Report No. 76, A Land Use Plan for the Town and Village of Pewaukee: 2000, Waukesha County, Wisconsin	December 1, 1983
	Amendment—Belgium Area	Amendment to the Regional Water Quality Management Plan—2000, Onion River Priority Watershed Plan	December 1, 1983
	Amendment—Geneva Lake Area	Amendment to the Regional Water Quality Management Plan—2000, Geneva Lake Area Communities	December 1, 1983
	Amendment—Village of Butler	Community Assistance Planning Report No. 99, Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin	March 1, 1984
	Amendment—City of Hartford	Community Assistance Planning Report No. 92, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin	June 21, 1984
	Amendment—Mukwonago Area	Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago	June 21, 1984
	Amendment—Village of Fredonia	Community Assistance Planning Report No. 96, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin	September 13, 1984

Table 1 (continued)

Functional Area	Plan Element	Plan Document	Date of Adoption
Environmental Planning (continued)	Amendment—Village of East Troy	Community Assistance Planning Report No. 112, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin	September 13, 1984
	Amendment—City of Milwaukee	Amendment to the Regional Water Quality Management Plan—2000, City of Milwaukee	September 13, 1984
	Regional Air Quality Plan	Planning Report No. 28, A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000	June 20, 1980
	Amendment—Emission Reduction Credit Banking and Trading System	Amendment to the Regional Air Quality Attainment and Maintenance Plan: 2000, Emission Reduction Credit Banking and Trading System	December 1, 1983
	Pike River Watershed Plan	Planning Report No. 35, A Comprehensive Plan for the Pike River Watershed	June 16, 1983
Community Assistance Planning	Kenosha Planning District Comprehensive Plan	Planning Report No. 10, A Comprehensive Plan for the Kenosha Planning District, Volumes One and Two	June 1, 1972
	Racine Urban Planning District Comprehensive Plan	Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume One, Inventory Findings and Forecasts; Volume Two, The Recommended Comprehensive Plan; Volume Three, Model Plan Implementation Ordinances	June 5, 1975

[a] *The regional land use plan 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.*

[b] *The regional transportation plan represents a second generation plan. The initial regional transportation plan was adopted by the Commission on December 1, 1966, and documented in SEWRPC Planning Report No. 7, Regional Land Use-Transportation Study, Volume Three, Recommended Regional Land Use and Transportation Plans—1990, and was subsequently amended by the adoption on June 4, 1970, of the Milwaukee County jurisdictional highway system plan documented in SEWRPC Planning Report No. 11, A Jurisdictional Highway System Plan for Milwaukee County; the adoption on March 2, 1972, of the Milwaukee area transit plan set forth in the document entitled, Milwaukee Area Transit Plan; the adoption on March 4, 1973, of the Walworth County jurisdictional highway system plan documented in SEWRPC Planning Report No. 15, A Jurisdictional Highway System Plan for Walworth County; the adoption on March 7, 1974, of the Ozaukee County jurisdictional highway system plan documented in SEWRPC Planning Report No. 17, A Jurisdictional Highway System Plan for Ozaukee County; the adoption on June 5, 1975, of the Waukesha County jurisdictional highway system plan documented in SEWRPC Planning Report No. 18, A Jurisdictional Highway System Plan for Waukesha County; the adoption on September 11, 1975, of the Washington County jurisdictional highway system plan documented in SEWRPC Planning Report No. 23, A Jurisdictional Highway System Plan for Washington County; the adoption on September 11, 1975, of the Kenosha County jurisdictional highway system plan documented in SEWRPC Planning Report No. 24, A Jurisdictional Highway System Plan for Kenosha County; and the adoption on December 4, 1975, of the Racine County jurisdictional highway system plan documented in SEWRPC Planning Report No. 22, A Jurisdictional Highway System Plan for Racine County.*

[c] *The regional water quality management plan represents a second generation plan. The initial plan was adopted by the Commission on May 13, 1974, and documented in SEWRPC Planning Report No. 16, A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin.*

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

Nine of the adopted plan elements fall within the broad functional area of environmental planning. These consist of the regional water quality management plan, the regional wastewater sludge management plan, the regional air quality attainment and maintenance plan, and comprehensive watershed development plans for the Root, Fox, Milwaukee, Menomonee, Kinnickinnic, and Pike River watersheds.

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

During 1984, the Commission adopted a number of amendments to the regional water quality management plan. These amendments pertained to sewer service area delineations in the Village of Butler, Waukesha County; the City of Hartford, Washington County; the Town of Mukwonago,

Waukesha County; the Village of Fredonia, Ozaukee County; the Village of East Troy, Walworth County; and the City of Milwaukee, Milwaukee County. These plan amendments are discussed in a subsequent section of this Annual Report.

THE CYCLICAL NATURE OF THE PLANNING PROCESS

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

By the end of 1979, the second cycle of areawide systems planning for land use, transportation, and water quality management programs had been completed. The resultant plans represent "second generation" plans for the Region, incorporating the "feedback" from the intensive project and facilities planning efforts completed by local agencies after, and in implementation of, the first generation areawide system plans.

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

The new regional transportation plan differs in some important respects from the first generation regional transportation plan, reflecting decisions made during the project planning phase of the first cycle of planning. For example, planned freeway segments—the Park Freeway-West in its entirety and the Stadium Freeway-North in its entirety, the Bay Freeway from Pewaukee to Whitefish Bay, the Metropolitan Belt Freeway in its entirety, and the Racine Loop Freeway—as well as one major transit proposal—the exclusive freeway in the east-west travel corridor of Milwaukee County—were deleted from the new regional transportation plan. This second generation transportation plan for the design year 2000 was adopted in June 1978.

The initial cycle of water quality management planning consisted of the regional sanitary sewerage system plan adopted by the Commission in 1974 and the project level planning carried out by local water quality management agencies since that time. In July 1979 the Commission adopted a second generation regional water quality management plan, taking into account the results of the project and facility level planning efforts of the first cycle. This second generation plan differed from the first generation plan primarily in scope and complexity, the second generation plan dealing with such areas as regional sludge management and the control of water pollution from nonpoint sources, as well as with the control of water pollution from point sources which was the focus of the first systems level planning effort.

PLAN ELEMENTS UNDER PREPARATION

At the end of 1984, the Commission had underway several programs designed to prepare new plan elements or to refine, detail, or amend existing plan elements. A new regional plan element will be provided on completion of the Oak Creek watershed study. In addition, work will continue during 1985 on a comprehensive water resources study of the Milwaukee Harbor estuary. This study, which had been requested in July 1973 by the City of Milwaukee and which has become increasingly important in light of certain issues raised in the

preparation of a master sewerage facilities plan for the Milwaukee Metropolitan Sewerage District, will address the water quality and flooding conditions and problems of this important estuary. Of particular importance will be an evaluation of the effect of in-place pollutant sources—bottom sediments—on water quality conditions. In addition, the study will formulate water quality objectives and supporting water quality standards for the estuary and determine the extent to which combined sewer overflows must be abated if those objectives and standards are to be met. This particular issue, identified as the "level of protection" issue, is expressed in terms of the frequency with which the combined sewers can be allowed to overflow without causing the agreed-upon water quality standards to be violated. When completed, this study will serve in part to amend the regional water quality management plan.

Other studies were underway in 1984 to refine, detail, and amend the regional water quality management plan. A series of additional community level sanitary sewer service area plans was being prepared in cooperation with local communities. Such localized planning efforts were underway at the end of 1984 for the communities of Allenton, Belgium, Cedarburg, Grafton, Hartland, Jackson, Mequon, Oak Creek, Pewaukee, Pleasant Prairie, Thiensville, Waukesha, and Whitewater.

Two lake management plans were completed during 1984 and transmitted to the local implementing agencies for consideration and adoption prior to formal adoption by the Commission. These two are for Friess Lake in Washington County and Pewaukee Lake in Waukesha County. During 1985 work will continue on plans for Pike Lake in Washington County, Oconomowoc Lake in Waukesha County, and Geneva Lake in Walworth County.

Additional studies were underway in the area of transportation planning at the end of 1984, including a feasibility study of a comprehensive freeway traffic management system in the Milwaukee urbanized area. Under the tentatively proposed system, the presently limited freeway ramp meter system serving central Milwaukee County will be expanded into an areawide system under which all ramps on freeways in the Milwaukee urbanized area will be metered to restrain automobile and truck access to the freeways during peak travel periods. The ramp meters will be operated through a central control system, using an interconnected series of traffic-sensing devices. As freeway traffic volumes approach the levels beyond which freeway operating speeds may be expected to deteriorate, fewer automobiles and trucks will be permitted to enter the freeway system. Buses and other high-occupancy vehicles such as car- and vanpool vehicles, however, will have free access to the system through preferential ramps. Sufficient constraint would be exercised in the operation of the system to ensure uninterrupted traffic flow and operating speeds of at least 40 miles per hour on all freeway segments, thus providing the basis for rapid transit service over the freeways.

Work was also underway at the end of 1984 on a second generation regional airport system plan.

FUTURE WORK PROGRAMS

The Commission is committed to carrying out a series of continuing planning efforts designed to ensure that the already adopted plan elements are kept up-to-date and extended in terms of design year. Thus, the Commission carries on annually a continuing regional land use planning program designed in part to update and extend the regional land use and regional park and open space plans; a continuing regional transportation planning program designed to update and extend the regional highway, transit, and airport system plans; and a continuing regional environmental planning program designed to update, amend, and extend the series of watershed plans and the regional water quality management plan.

In addition to these major continuing planning efforts, the Commission from time-to-time prepares supplemental plan elements as a part of the master plan for the physical development of the Region. In so doing, the Commission follows an established policy of preparing a prospectus and/or study design prior to undertaking any major new planning efforts.

During 1983, a prospectus was completed for an energy emergency contingency planning program for southeastern Wisconsin. Energy contingency planning involves identifying in advance those actions that could be taken to abate the effects of possible severe energy shortages and attendant price increases. U. S. Department of Transportation guidelines encourage the preparation of a motor fuel emergency contingency plan for each major metropolitan area in the United States. Local officials, in particular Milwaukee County Executive

William F. O'Donnell, are also concerned about major social and economic problems which could result from the curtailment of space heating fuel oil and natural gas. The transportation contingency plan element of an energy emergency plan would identify measures that could be taken to respond to different levels and durations of a gasoline or diesel motor fuel emergency. Potential actions for dealing with such an emergency would be specified for governmental agencies, the private sector, and the general public. The transportation contingency plan would be prepared by the Commission as part of its regional transportation planning program provided that the counties in the Region agree that it will be useful to prepare the plan. The prospectus also identifies the potential for preparing contingency plans for essential public services at a county level, as well as contingency plans for the residential, business, and agricultural sectors. Such plans would be prepared by the Commission upon the specific request of a county. During 1984 the prospectus was transmitted to the counties for their consideration. By the end of the year, only Milwaukee County had approved the prospectus and indicated its desire for the Commission to proceed with the program.

During 1984, the Commission worked with the Waukesha and Washington County Boards of Supervisors and Land Conservation Committees and the Wisconsin Department of Natural Resources in preparing a detailed plan for the Oconomowoc River watershed pertaining to the abatement of pollution from nonpoint sources. This plan would be prepared as a part of a series of priority watershed plans under the State Nonpoint Source Pollution Abatement Program. The Oconomowoc River priority watershed plan would serve to amend the regional water quality management plan.

Finally, the Commission began efforts in 1984 to prepare the third generation regional land use and regional transportation plans. These plans will follow the preparation of new regional population and economic activity forecasts and will extend the regional land use and transportation plans to the plan design year 2010. Completion of these new third generation plans is not expected until 1987.

LAND USE PLANNING DIVISION

DIVISION FUNCTIONS

The Land Use Planning Division conducts studies and prepares plan recommendations concerning the physical aspects of land use development. The kinds 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 significant natural resource areas of the Region located, including the wetlands, wildlife habitat areas, and prime agricultural lands? What is happening to these resources over time?
- What are the probable future demands within the Region for each of the land use categories, and what appears to be the best way to accommodate these demands?
- How can new urban development and redevelopment be adjusted to the limitations of the natural resource base?
- What is the demand for outdoor recreation in the Region, and how can this demand best be met through the provision of park and open space facilities?

In an attempt to provide answers to these and similar questions, the Land Use Planning Division, during 1984, conducted a number of activities in three identifiable areas: land use planning, park and open space planning, and coastal management planning.

LAND USE PLANNING

During 1984, the Division staff efforts in land use planning were directed primarily toward implementation of the regional land use plan. Major efforts in this regard involved the completion of an industrial land study for southeastern Wisconsin and continued work on a land use management plan for the Chiwaukee Prairie-Carol Beach area of the Town of Pleasant Prairie. The Division staff also continued to monitor residential subdivision platting and farmland preservation activity within the seven-county Region during 1984.

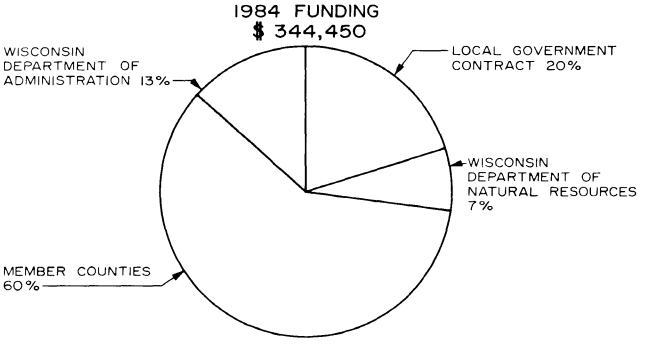
Regional Land Use Plan--An Overview

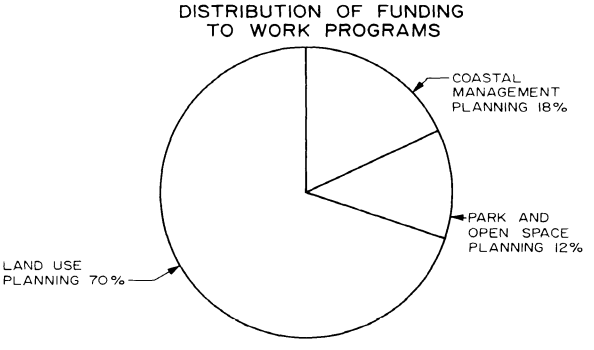
The second generation regional land use plan, documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume Two, Alternative and Recommended Plans, was formally adopted by the Commission in December 1977, published in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

The recommended regional land use plan for the year 2000 is shown in graphic summary form on Map 2. The basic concepts underlying the land use plan are essentially the same as those underlying the first generation regional land use plan for the year 1990. That plan had been adopted by the Commission in 1966. Like the year 1990 plan, the

Figure 6

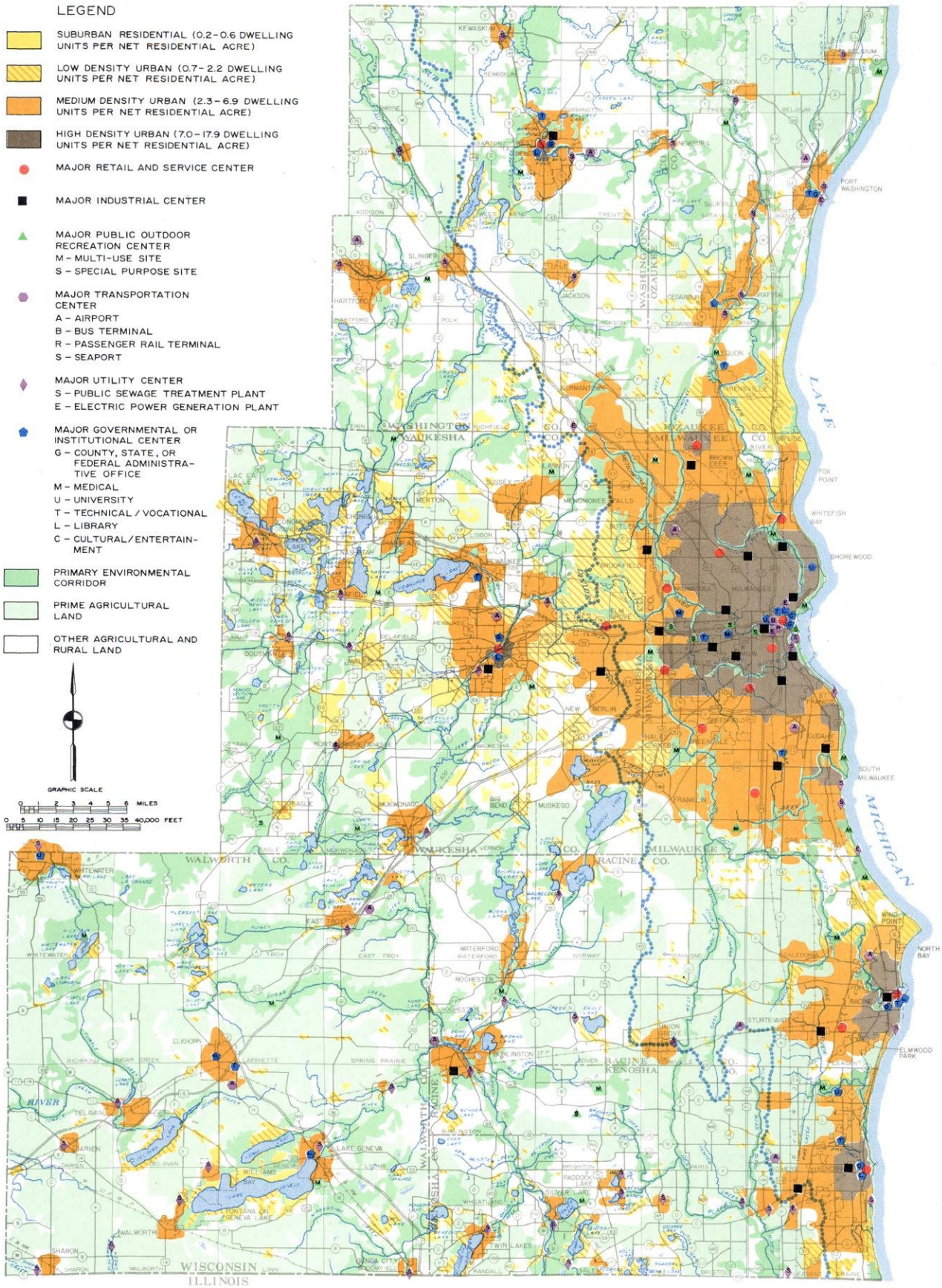
LAND USE PLANNING DIVISION





Map 2

ADOPTED REGIONAL LAND USE PLAN FOR SOUTHEASTERN WISCONSIN: 2000



year 2000 land use plan advocates a return to the historic development trends that were evident within the Region prior to 1950, with new urban development proposed to occur largely in concentric rings along and outward from the full periphery of the established urban centers of the Region.

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

The recommended regional land use plan envisions converting about 113 square miles of land from rural to urban use from 1970 through 2000, less than half of the approximately 235 square miles that would have to be converted if decentralization of urban development were allowed to continue unrestrained; and seeks to encourage new urban development to occur primarily in planned neighborhood development units at medium-density population levels—that is, about four dwelling units per net residential acre, or about 5,000 persons per gross square mile. The plan envisions that by the year 2000, about 92 percent of all urban land and 93 percent of all the people in the Region will be served with public sanitary sewer service.

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

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

By the end of 1984, the year 2000 regional land use plan had been adopted by the Kenosha, Racine and Waukesha County Boards of Supervisors; the Common Councils of the Cities of Burlington and

Milwaukee; the Village Board of the Village of River Hills; the Town Board of the Town of Norway; and the City of Oconomowoc Plan Commission. In addition, the plan had been endorsed by the U. S. Department of Housing and Urban Development; the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; the Wisconsin Department of Transportation; and the Wisconsin State Board of Soil and Water Conservation Districts.

Preservation of Farmland

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

Wisconsin Farmland Preservation Program

The Wisconsin Farmland Preservation Program provides property tax relief in the form of state income tax credit to eligible owners of farmland who decide to participate. In southeastern Wisconsin, owners of farmland are eligible to participate in the program only if their land has been placed in a state-certified exclusive agricultural zoning district and if certain other program eligibility requirements are met. For example, the farm must be at least 35 acres in size and must have produced a value of farm product of at least $6,000 in the last year or $18,000 in the past three years.

The level of income tax credits for which the farmland owner is eligible depends on the personal financial situation of the farmland owner and on the actions taken by county and local units of government to preserve farmland. Under the program, the level of income tax credit for which a farmland owner is eligible is determined in part by a formula which takes into account the owner's household income and the property tax on his farm. In general, the higher the property tax and the lower the household income, the higher the income tax credit.

The level of tax relief for which a farmland owner is eligible is also dependent upon planning and zoning actions taken by county and local units of government to preserve agricultural lands. As noted above, farmland in southeastern Wisconsin must be placed in an exclusive agricultural zoning district to enable the farmland owner to participate in the tax relief program. The highest tax credits are available where a county has prepared and adopted a farmland preservation plan and implemented that plan through the application of exclusive agricultural zoning. The level of tax credits available under the program is somewhat lower in situations where the county has adopted a farmland preservation plan but the plan is implemented through town-enacted exclusive agricultural zoning. Legislation to change this latter constraint has been recommended.

A farmland owner who claims a farmland preservation tax credit must include in his state income tax return a certificate from the local zoning administrator verifying that the land in question is located within an exclusive agricultural zoning district. A total of 1,093 zoning certificates for farm parcels encompassing 151,833 acres were issued in the Region for tax year 1983 (see Table 2 and Figure 7). Among the seven counties in the Region, Walworth County had the highest level of participation in the Farmland Preservation Program. A total of 734 zoning certificates for farm parcels encompassing 103,922 acres were issued in Walworth County for tax year 1983 (see Map 3).

Farmland Preservation Planning

Considerable progress has been made in planning for the preservation of farmland within the Southeastern Wisconsin Region since the passage of the Wisconsin Farmland Preservation Act by the State Legislature in 1977. Six counties in the Region—Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha--have adopted farmland preservation plans which were subsequently certified by the Wisconsin Land Conservation Board (see Map 4).

Farmland Preservation Zoning

As noted above, farmland owners in southeastern Wisconsin are eligible to apply for income tax credits under the Farmland Preservation Program only if the land concerned has been placed in an exclusive agricultural zoning district which has been certified by the Wisconsin Land Conservation Board. Under Chapter 91 of the Wisconsin Statutes, exclusive agricultural zoning is defined as zoning which limits the use of land to agricultural use; specifies a minimum parcel size of 35 acres for a residence or farm operation; and prohibits structures or improvements on the land unless consistent with agricultural uses.

By the end of 1984, exclusive agricultural zoning ordinances certified by the Wisconsin Land Conservation Board were in effect in 40 local units of government in the Region. Twenty-eight towns—4 in Kenosha County, 2 in Racine County, 16 in Walworth County, 4 in Washington County, and 2 in Waukesha County—have adopted exclusive agricultural zoning under county-enacted zoning ordinances. Eight towns—6 in Ozaukee County, 1 in Washington County, and 1 in Waukesha County—have applied exclusive agricultural zoning under town-enacted zoning ordinances. The Cities of Franklin in Milwaukee County and Muskego and Pewaukee in Waukesha County and the Village of Germantown in Washington County have also adopted exclusive agricultural zoning in conformance with the standards of the Farmland Preservation Act (see Map 4).

As previously noted, the level of tax credit available to individual farmers depends, in part, on the level of household income and the level of property tax on the farmland, as specified on a state-promulgated schedule. The level of tax credit also depends on the planning and zoning actions taken by county and local units of government to preserve farmland:

- If the county has adopted a state-certified farmland preservation plan and the farmland is within an exclusive agricultural district under a city, village, or county zoning ordinance, farmland owners receive 100 percent of the schedule amount. For tax year 1984, these conditions applied to the Towns of Pleasant Prairie, Randall, Somers, and Wheatland in Kenosha County; the Towns of Burlington and Waterford in Racine County; the Towns of Barton, Hartford, Kewaskum, and Trenton and the Village of Germantown in Washington County; the Cities of Muskego and Pewaukee and the Towns of Eagle and Oconomowoc in Waukesha County; and all civil towns in Walworth County.

- If the county has adopted a state-certified farmland preservation plan and the farmland is within an exclusive zoning district under a town ordinance, farmland owners may receive 70 percent of the schedule amount. For tax year 1984, these conditions applied to the Towns of Belgium, Cedarburg, Fredonia, Grafton, Port Washington, and Saukville in Ozaukee County; the Town of Richfield in Washington County; and the Town of Mukwonago in Waukesha County.

- If the county has not adopted a farmland preservation plan but the farmland is within an exclusive agricultural zoning district under a city, village, or county zoning ordinance, farmland owners may receive 70 percent of the schedule amount. For tax year 1984, these conditions applied only to the City of Franklin in Milwaukee County.

- If the county has not adopted a farmland preservation plan but the farmland is within an exclusive agricultural zoning district under a town zoning ordinance, farmland owners may receive an income tax credit equal to 10 percent of eligible property taxes, up to a maximum credit of $600. For tax year 1984, these conditions did not apply to any communities in the Region.

- If there is no exclusive agricultural zoning in effect, farmers are not eligible to receive tax credits, regardless of whether or not there is a county-adopted farmland preservation plan. This condition applied to the remaining cities, villages, and towns in the Region in tax year 1984.

Chiwaukee Prairie-Carol Beach Planning Program

During 1984, the Regional Planning Commission continued work on the Chiwaukee Prairie-Carol Beach land use management planning program initiated at the request of the Town of Pleasant Prairie and Kenosha County in 1982. The Chiwaukee Prairie-Carol Beach area is the portion of

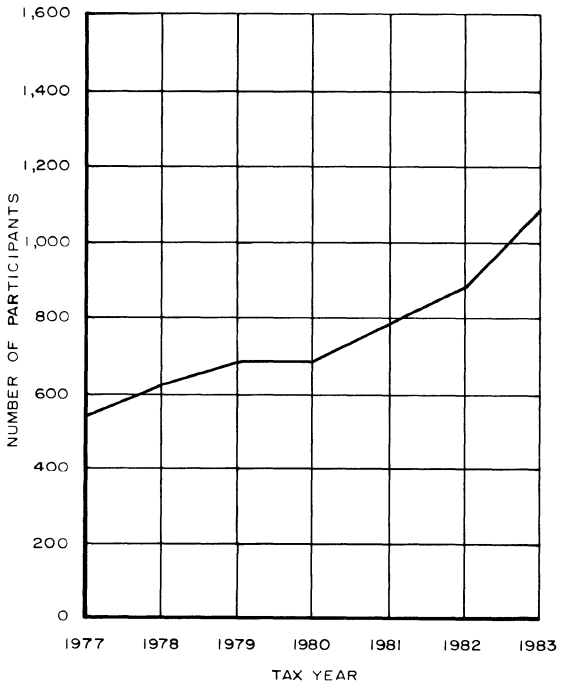
Table 2

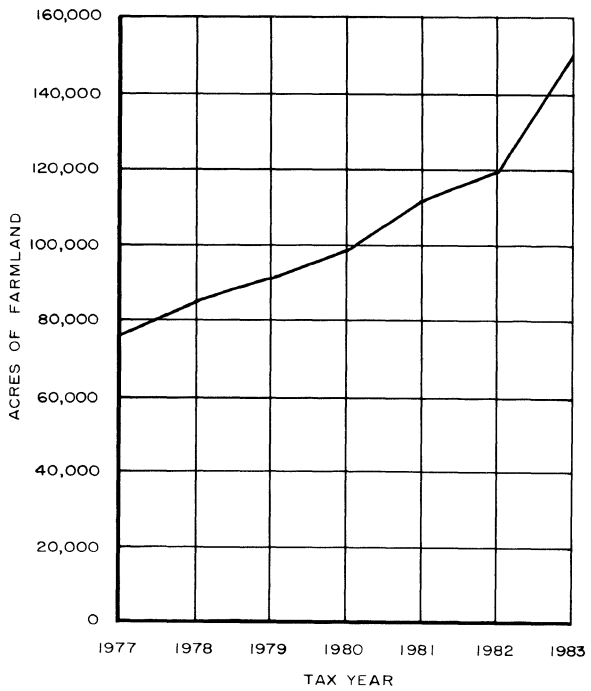
PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM: TAX YEAR 1983

County	Certificates Issued		Acres Certified	
	Number	Percent of Region	Number	Percent of Region
Kenosha	30	2.7	4,872	3.2
Milwaukee	- -	- -	- -	- -
Ozaukee	217	19.9	26,948	17.8
Racine.	35	3.2	6,963	4.6
Walworth.	734	67.2	103,922	68.4
Washington	67	6.1	7,329	4.8
Waukesha.	10	0.9	1,799	1.2
Region	1,093	100.0	151,833	100.0

Figure 7

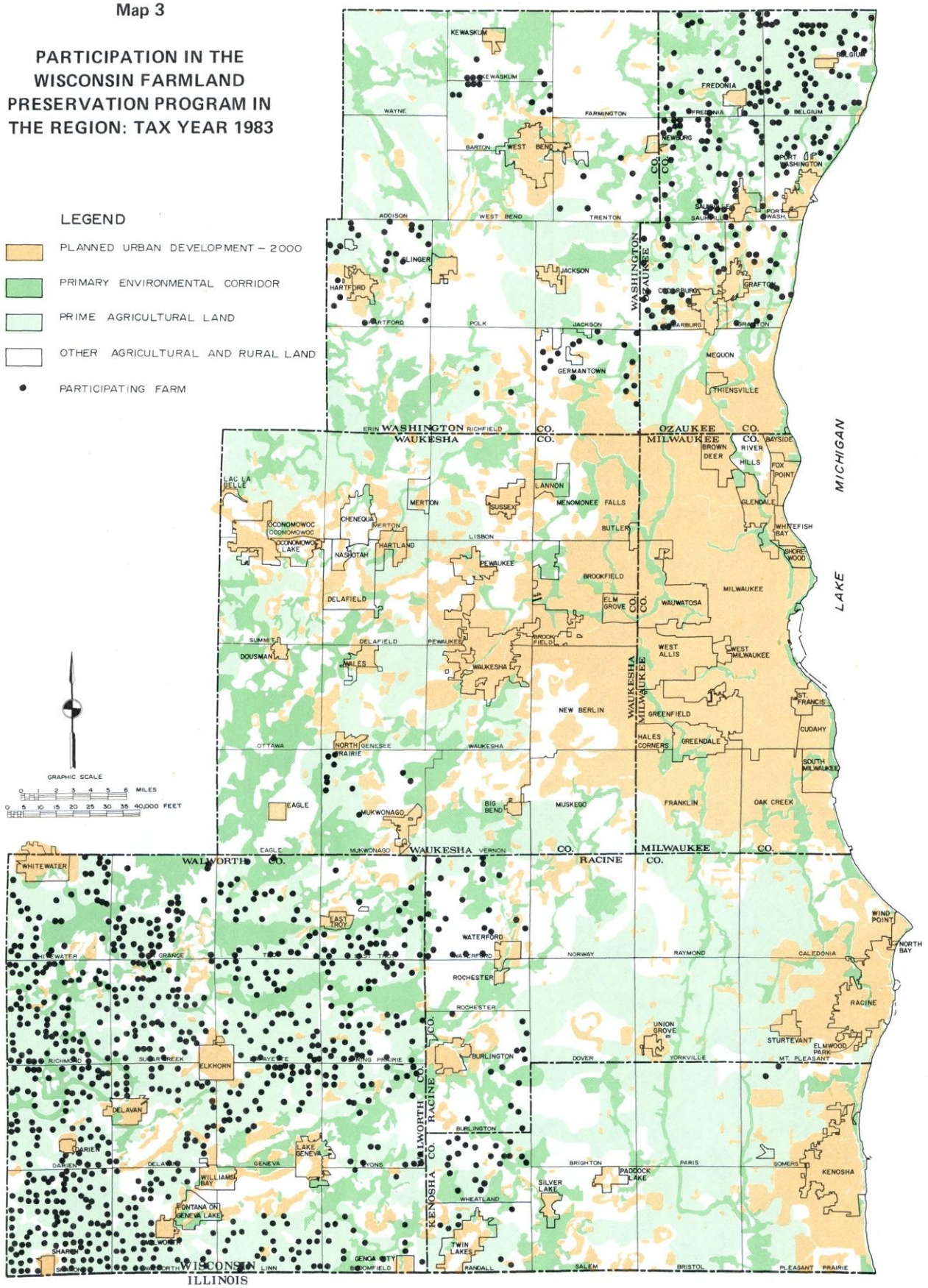
PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM IN THE REGION: TAX YEARS 1977-1983





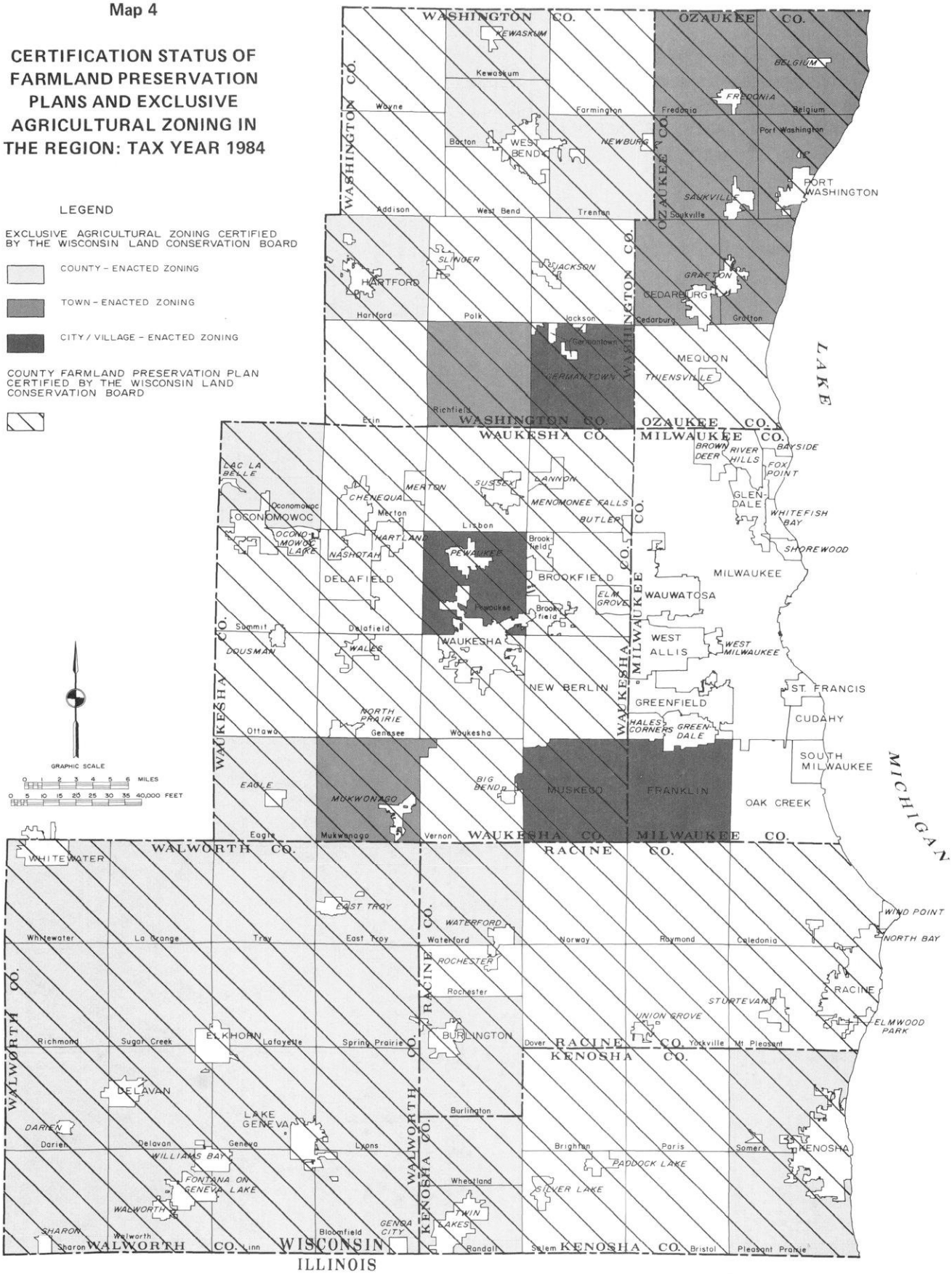
Map 3

PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM IN THE REGION: TAX YEAR 1983



Map 4

CERTIFICATION STATUS OF FARMLAND PRESERVATION PLANS AND EXCLUSIVE AGRICULTURAL ZONING IN THE REGION: TAX YEAR 1984



the Town of Pleasant Prairie located along the Lake Michigan shoreline east of STH 32. The future of this area has been uncertain for many years, owing to conflicting natural resource preservation and urban development objectives. This area, which encompasses slightly less than three square miles, contains some of the outstanding natural resource features of the Southeastern Wisconsin Region. The area includes the Kenosha Sand Dunes on the north, the Chiwaukee Prairie on the south, and many intervening prairies and wetland areas. Much of the area has high groundwater and is poorly suited for urban development. Nevertheless, almost 70 percent of the area has been platted for residential development, resulting in the creation of more than 2,700 lots along an extensive street network. While certain of the platted areas have developed as residential neighborhoods, much of the platted land remains sparsely developed and natural resource values in such areas remain intact.

Under the Chiwaukee Prairie-Carol Beach land use management planning program in 1984, the Commission prepared three alternative plans for the area, each proposing a different combination of development-preservation patterns. The three plans were: 1) a maximum development plan; 2) a maximum preservation plan; and 3) a combination development-preservation plan. After considering the alternatives, the Chiwaukee Prairie-Carol Beach Land Use Management Planning Program Technical Advisory Committee selected the development-preservation alternative as the basis for refinement into a preliminary recommended plan. The resulting preliminary recommended plan was presented for public review at a formal public hearing in October 1984. Based upon careful consideration of the citizen and public agency reaction to the preliminary land use management plan, a draft of a post-public hearing plan was prepared. The draft post-public hearing plan was presented to the Technical Advisory Committee for consideration in January 1985.

Areawide Industrial Land Use Study

Perceiving a need for special efforts to maintain and enhance the regional industrial base, the Wisconsin Electric Power Company (WEPCo) late in 1982 initiated a program to attract and encourage industrial development in the Region. In undertaking the program, the company found that there was a lack of information regarding industrial lands in the Region. Specifically, WEPCo found that a comprehensive, areawide inventory of lands which are suitable for industrial development did not exist. Recognizing that such information would be essential to an effective industrial development program, and recognizing that such information would be useful in areawide and local planning efforts, WEPCo requested the assistance of the Regional Planning Commission in the conduct of a study of industrial land use in southeastern Wisconsin.

The industrial land use study was completed in 1984 by the staffs of the Wisconsin Electric Power Company and the Regional Planning Commission under the guidance of a technical advisory committee consisting of individuals who had strong interest, knowledge, and experience in industrial development-related matters, including representatives from local units of government, the Wisconsin Department of Development, public utilities, railroad companies, and industrial development companies.

Industrial Land Development Trends

Net industrial land, consisting of land devoted to manufacturing, wholesaling, and storage uses, totaled about 10,700 acres in 1980, or less than 1 percent of the total area of the Region. Net industrial land in the Region increased by about 4,300 acres, or 68 percent, between 1963 and 1980, with an annual average increase of about 250 acres. Gross industrial land, consisting of net industrial land plus related parking, totaled about 13,500 acres in 1980, also less than 1 percent of the total area of the Region. Gross industrial land in the Region increased by approximately 6,100 acres, or 82 percent, between 1963 and 1980, an annual average increase of about 350 acres. In 1980 this industrial land provided the location for about 334,000 jobs.

There was considerable variation in the rate of industrial development among the seven counties of the Region between 1963 and 1980. The amount of increase in gross industrial land ranged from a low of 330 acres in Walworth County to a high of about 1,800 acres in Milwaukee County. In relative terms, however, the rate of increase in gross industrial land ranged from a low of about 40 percent in Milwaukee County to a high of about 245 percent in Waukesha County. These differing growth rates result in a significant change in the distribution of industrial land in the Region, with the most dramatic changes occurring in Waukesha

County. Waukesha County's share of industrial land in the Region increased from about 10 percent in 1963 to about 18 percent in 1980, while Milwaukee County's share decreased from about 61 percent to about 47 percent during the same period (see Table 3).

Zoned Industrial Land

A total of about 71,400 acres, or 4.1 percent of the total area of the Region, were zoned for industrial use in 1983. Regarding the seven counties in the Region, the area zoned for industrial use ranged from a low of 3,100 acres in Walworth County to a high of about 27,100 acres in Milwaukee County.

Industrial land use—including land used for manufacturing, wholesaling, and storage activities and related parking—comprised about 12,000 acres, or 17 percent of the total area zoned for industry in 1983. Land in other urban and urban-related uses totaled approximately 23,700 acres, and accounted for 33 percent of all land zoned for industrial use. Undeveloped land accounted for the balance—35,700 acres, or 50 percent of all land zoned for industry (see Table 4).

Industrial Site Evaluation

There were 269 vacant industrial installations encompassing over 13.2 million square feet of building floor area within the Region in 1984. Milwaukee County, with 139 vacant industrial installations, accounted for almost 8.8 million square feet of building floor area, or 67 percent of the total square footage of vacant industrial installations. The very large vacant industrial installations—namely, those installations with a floor area of 100,000 or more square feet—contained almost 6.4 million square feet, or about 50 percent of the total square footage of vacant industrial installations in the Region (see Map 5). Over 5.2 million square feet, or 81 percent of the area of the large vacant installations, were located in Milwaukee County. Twenty-five sites encompassing approximately 5.2 million square feet of building floor area, or 81 percent of the total square footage of the large, vacant industrial installations, were constructed prior to 1950.

Two hundred and seventy-four sites encompassing about 38,300 acres of land were identified as having the potential for industrial use within the Region. Potential industrial sites included all industrially zoned areas containing at least 40 contiguous acres of vacant land, as well as other vacant, nonindustrially zoned areas at least 40 acres in size considered to have potential for industrial development by local units of government. About 28,700 acres, or approximately 75 percent of the total potential industrial site acreage, were zoned for industrial use, while 9,600 acres, or about 25 percent, were currently not zoned for industrial use, but were considered to have potential for industrial development by local units of government (see Table 5).

One hundred and eighty sites, totaling 24,450 acres, or about 64 percent of the total 38,300 acres of potential industrial sites, were considered suitable for industrial development. Suitable industrial sites were defined as sites which are proposed to be served with public sanitary sewer service by the year 2000 and contain at least 40 contiguous acres of land having no significant physical limitations for industrial development. Waukesha County with 6,700 acres and Milwaukee County with 5,500 acres of suitable industrial sites collectively accounted for over 50 percent of the total suitable industrial site acreage in the Region. Almost 16,000 acres, or about 65 percent of the suitable industrial site acreage, were currently zoned for industrial use (see Table 6 and Map 6).

Suitable industrial sites were divided into three classes. Class I industrial sites were defined as sites which are zoned for industrial use, have public sanitary sewer facilities available within the site, and have improved streets for internal site access. Such sites total 2,750 acres, or about 11 percent of the suitable industrial site acreage in the Region. Waukesha County, with 1,200 acres of Class I sites, has almost 45 percent of the Class I site acreage in the Region. Class II industrial sites—that is, sites which are zoned for industrial use and have public sanitary sewer facilities available at the site, but which lack improved streets for internal site access—total almost 9,600 acres, or approximately 39 percent of the suitable industrial site acreage in the Region. Milwaukee County, with 4,300 acres of Class II sites, has approximately 45 percent of the Class II site acreage in the Region. Class III industrial sites—that is, sites which are not zoned for industrial use or which do not have public sanitary sewer facilities available, and which lack improved streets for internal site access—total 12,100 acres, or about 50 percent of the total suitable industrial site acreage in the Region. Waukesha County, with about 4,500 acres of

Table 3

PERCENTAGE DISTRIBUTION OF INDUSTRIAL LAND IN THE REGION BY COUNTY: 1963 AND 1980

County	Gross Industrial Land[a]					
	1963		1980		Change: 1963-1980	
	Acres	Percent of Region	Acres	Percent of Region	Acres	Percent
Kenosha	608	8.3	988	7.3	380	62.5
Milwaukee	4,518	61.3	6,321	47.0	1,803	39.9
Ozaukee	268	3.6	644	4.8	376	140.3
Racine	646	8.8	1,541	11.5	895	138.5
Walworth.	326	4.4	656	4.9	330	101.2
Washington . . .	283	3.8	805	6.0	522	184.5
Waukesha	722	9.8	2,493	18.5	1,771	245.3
Region	7,371	100.0	13,448	100.0	6,077	82.4

[a] *Includes lands used for manufacturing, wholesaling and storage, and related parking.*

Table 4

GENERALIZED LAND USE WITHIN INDUSTRIAL DISTRICTS[a]

County	Area Within Industrial Zoning Districts							
	Area in Industrial Use[b]		Area in Other Urban and Urban-Related Land Uses[c]		Undeveloped Area		Total	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Kenosha	781	6.5	1,103	4.7	4,290	12.0	6,174	8.7
Milwaukee . . .	6,084	50.8	11,887	50.2	9,109	25.5	27,080	37.9
Ozaukee	521	4.3	1,021	4.3	3,642	10.2	5,184	7.3
Racine	1,292	10.8	2,020	8.5	4,456	12.5	7,768	10.9
Walworth. . . .	498	4.2	1,187	5.0	1,386	4.0	3,071	4.3
Washington . .	613	5.1	1,534	6.5	3,496	9.8	5,643	7.9
Waukesha . . .	2,190	18.3	4,934	20.8	9,311	26.0	16,435	23.0
Region	11,979	100.0	23,686	100.0	35,690	100.0	71,355	100.0

[a] *The analysis summarized in this table involved the delineation of industrial zoning districts as of 1983 on aerial photographs dated 1980 and the identification and measurement of actual land use, as reflected on 1980 aerial photographs, within the zoned areas. This table reflects the adoption of updated county zoning by the Towns of Pleasant Prairie, Randall, Somers, and Wheatland in Kenosha County.*

[b] *Includes manufacturing, wholesaling, storage, and related parking.*

[c] *Includes retail and service uses; utilities; transportation facilities including streets, railways, harbor facilities, airports, and truck terminals; quarries; and landfill sites.*

Map 5

EXISTING LARGE VACANT INDUSTRIAL INSTALLATIONS IN THE REGION: 1984

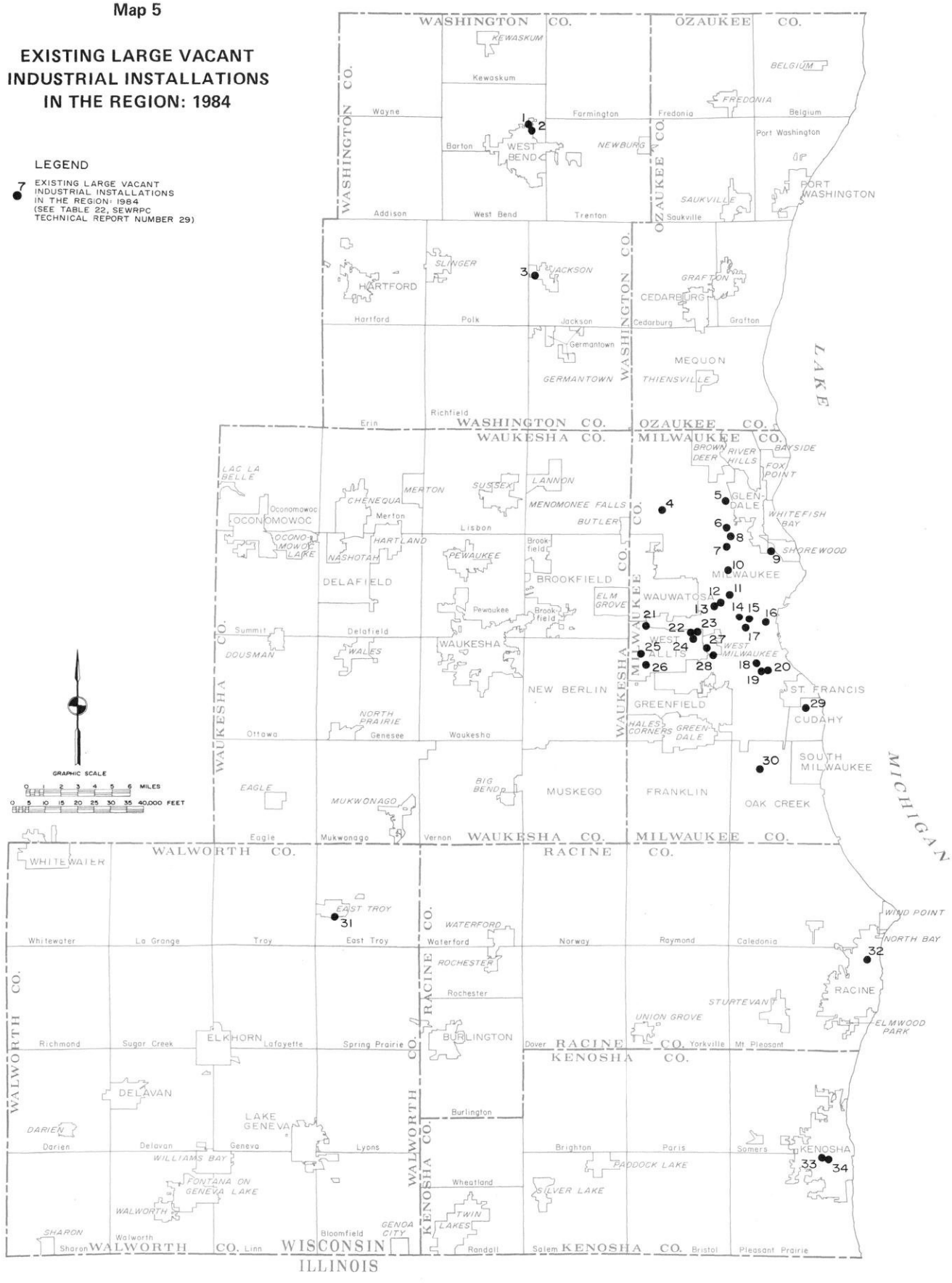


Table 5

POTENTIAL VACANT INDUSTRIAL SITES IN THE REGION: 1983

County	Potential Industrial Sites						
	Zoned[a]		Proposed[b]		Total		Percent of Region
	Sites	Acres	Sites	Acres	Sites	Acres	
Kenosha	19	3,900	3	965	22	4,865	12.7
Milwaukee	51	6,655	3	470	54	7,125	18.6
Ozaukee	20	3,180	7	810	27	3,990	10.4
Racine	25	3,840	5	755	30	4,595	12.0
Walworth	8	1,335	11	945	19	2,280	5.9
Washington	26	2,760	17	2,780	43	5,540	14.5
Waukesha	64	7,015	15	2,905	79	9,920	25.9
Region	213	28,685	61	9,630	274	38,315	100.0

[a] *Includes all industrially zoned areas containing at least 40 contiguous acres of vacant land.*

[b] *Includes nonindustrially zoned vacant lands of at least 40 acres in size considered to have potential for industrial development by local units of government.*

Table 6

SUITABLE VACANT INDUSTRIAL SITES IN THE REGION: 1983

County	Sites Meeting Minimum Industrial Site Suitability Criteria[a]						
	Zoned[b]		Proposed[c]		Total		Percent of Region
	Sites	Acres	Sites	Acres	Sites	Acres	
Kenosha	3	460	3	965	6	1,425	5.8
Milwaukee	42	5,060	3	470	45	5,530	22.6
Ozaukee	12	1,670	5	615	17	2,285	9.4
Racine	15	2,405	3	555	18	2,960	12.1
Walworth	7	1,285	9	800	16	2,085	8.5
Washington	11	950	15	2,500	26	3,450	14.1
Waukesha	39	4,080	13	2,635	52	6,715	27.5
Region	129	15,910	51	8,540	180	24,450	100.0

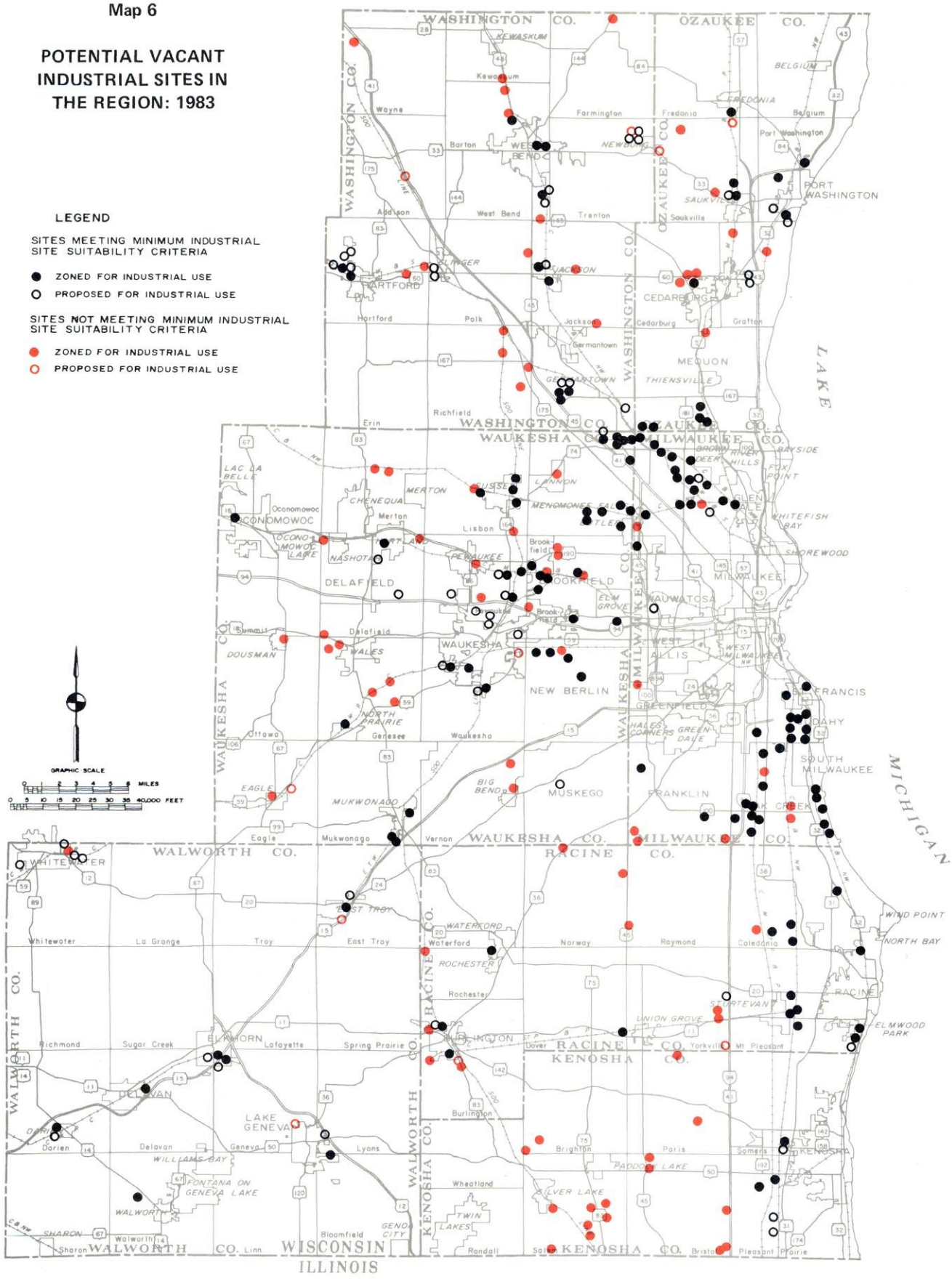
[a] *Potential industrial sites meeting minimum industrial site suitability criteria include those sites which are proposed to be served with public sanitary sewers by the year 2000 and contain at least 40 contiguous acres of land having no significant physical limitations for industrial development. For purposes of this report, significant physical development limitations include: soils classified in the regional soil survey as having very severe limitations for the construction of light industrial or commercial building or for the location of highway or railway facilities; areas designated as wetlands by the Wisconsin Department of Natural Resources; areas designated as primary environmental corridors by the Southeastern Wisconsin Regional Planning Commission; areas with slopes in excess of 12 percent; and areas located within the 100-year recurrence interval flood hazard area.*

[b] *Zoned for industrial use.*

[c] *Not zoned for industrial use, but considered to have potential for industrial development by local units of government.*

Map 6

POTENTIAL VACANT INDUSTRIAL SITES IN THE REGION: 1983



Class III sites, has approximately 37 percent of the Class III site acreage in the Region (see Table 7 and Map 7).

Industry-related employment under the moderate regional growth scenario, the most optimistic scenario for economic development considered for the Region, would increase from about 333,500 jobs in 1980 to about 398,600 jobs in the year 2000, an increase of about 65,100 jobs, or 20 percent. The employment absorption capabilities of the suitable industrial installations and sites inventoried would range from 74,970 employees under a 5:1 land-to-building ratio to 122,110 employees under a 3:1 land-to-building ratio (see Table 8).

Conclusions

The past decade has been marked by major shifts in economic activity patterns, including changes in the distribution of economic activity, both nationally and within the Southeastern Wisconsin Region, and by structural change in the economy as evidenced by the decline in manufacturing employment relative to total employment, and by change in the nature of manufacturing activities as reflected in the growth of high technology industries. Such rapidly changing economic conditions make the task of forecasting future economic activity levels for the Region increasingly difficult and full of uncertainty.

While future economic conditions in the Region will be determined, in part, by external factors over which public and private decision-makers within the Region have little or no influence, such conditions may also be influenced in part by the effectiveness of state, regional, and local level economic development programs undertaken to maintain and enhance the economic vitality of subareas of the State. The effectiveness of such economic development programs will be enhanced if it can be demonstrated that the area concerned has an adequate supply of sites which are suitable for, and can readily be made available to, industrial development.

One of the strengths of the Region is the broad choice in industrial facilities and sites which the Region offers industry seeking to locate a new operation, or to expand an existing operation. These sites and facilities have the potential to accommodate a long-term increase of 65,000 jobs in industrial employment. The range of potential industrial facilities and sites includes vacant but sound industrial facilities which are ready for immediate use and which possess public sanitary sewer, water supply, mass transit service, and power and communication facilities, as well as such amenities as materials-handling equipment and heavy lift cranes and conveyors. Vacant, properly zoned sites are also readily available within the Region, and are able to accommodate small developing industries as well as large industrial complexes. The study also identifies other large vacant industrially zoned areas, as well as nonindustrially zoned areas which are considered to have industrial development potential by local units of government.

On a regional basis, it would thus appear that sufficient industrial areas are available to accommodate the 65,100 increase in industry-related employment anticipated to the year 2000. There may, however, be a shortage of developed industrial sites ready for immediate industrial use. Two hundred and seventy-four potential industrial sites encompassing over 38,300 acres were identified as part of the industrial site inventory, but only 180 sites encompassing 24,450 acres were determined to be suitable for industrial development and, more importantly, only 22 sites characteristic of industrial parks, encompassing 2,750 acres, were ready for immediate industrial use. Such sites would accommodate from 5,780 to 9,640 employees, depending upon the land-to-building ratio assumed. If the anticipated 65,100 increase in industry-related employment is accommodated uniformly over the 20-year period from 1980 to the year 2000, approximately 3,250 new employees would have to be accommodated within the Region each year. Thus, the 22 industrial park sites which are ready for immediate use could, depending on the land-to-building ratio assumed, accommodate a two- to three-year growth in industry-related employment. The number of immediately available sites may, therefore, be insufficient, considering that, within the Region, two to five years are typically required to design and develop a large industrial park.

It is also likely that some of the 22 sites which are immediately available do not possess all of the amenities necessary to satisfy the specific site requirements of certain industries which may seek to locate or relocate within the Region. Such requirements may include, but are not limited to, a large industrial site which can accommodate initial construction, desired additional open space,

Table 7

CLASSIFICATION OF SUITABLE VACANT INDUSTRIAL SITES IN THE REGION: 1983

County	Industrial Site Classification									Total Suitable Sites		
	Class I Sites[a]			Class II Sites[b]			Class III Sites[c]					
	Number	Acres	Percent of Region	Number	Acres	Percent of Region	Number	Acres	Percent of Region	Number	Acres	Percent of Region
Kenosha	1	175	6.4	1	95	1.0	4	1,155	9.5	6	1,425	5.8
Milwaukee	3	495	18.0	37	4,275	44.7	5	760	6.3	45	5,530	22.6
Ozaukee	1	175	6.4	8	1,195	12.5	8	915	7.5	17	2,285	9.4
Racine	3	220	8.0	10	1,980	20.7	5	760	6.3	18	2,960	12.1
Walworth	1	225	8.2	5	475	4.9	10	1,385	11.4	16	2,085	8.5
Washington	3	225	8.2	7	575	6.0	16	2,650	21.9	26	3,450	14.1
Waukesha	10	1,235	44.8	12	975	10.2	30	4,505	37.1	52	6,715	27.5
Region	22	2,750	100.0	80	9,570	100.0	78	12,130	100.0	180	24,450	100.0

[a] *Sites are zoned for industrial use, have public sanitary sewer service available within the site, and have internal streets for site access.*

[b] *Sites are zoned for industrial use and have public sanitary sewer service available at the site, but lack internal streets for site access.*

[c] *Sites are not zoned for industrial use or do not have public sanitary sewer service available at the site, and lack internal streets for site access.*

Table 8

POTENTIAL SUITABLE INDUSTRIAL SITES–EMPLOYMENT ABSORPTION CAPABILITIES: 1983

Industrial Area	Industrial Site Area (acres)		Building Area (acres)		Employee Absorption Potential[j]	
	Gross	Net	3:1 Net Land-to-Building Ratio	5:1 Net Land-to-Building Ratio	3:1 Net Land-to-Building Ratio	5:1 Net Land-to-Building Ratio
Existing Vacant Industrial Installations[a]	--	--	303	303	4,330	4,330
Suitable Large Vacant Industrial Site[b]						
Class I[c]	2,750[f]	2,025[g]	675	405	9,640	5,780
Class II[d]	9,570[f]	8,430[g]	2,810	1,685	40,140	24,070
Class III[e]	12,130[f]	10,770[g]	3,590	2,155	51,290	30,790
Subtotal	24,450	21,225	7,075	4,245	101,070	60,640
Other Small Vacant Industrially Zoned Area	7,000[h]	3,500[i]	1,170	700	16,710	10,000
Total	31,450	24,725	8,548	5,248	122,110	74,970

[a] *Includes existing vacant industrial installations as of June 1984.*

[b] *Industrially zoned or industrial proposed sites which are proposed to be served with public sanitary sewers by the year 2000 and contain at least 40 contiguous acres of vacant land having no significant physical limitations for industrial development.*

[c] *Sites which are zoned for industrial use, have public sanitary sewer facilities available within the site, and have internal streets for industrial parcel access.*

[d] *Sites which are zoned for industrial use and have public sanitary sewer facilities available at the site, but which lack internal streets for site access.*

[e] *Sites which are not zoned for industrial use or which do not have public sanitary sewer facilities available, and which lack internal streets for site access.*

[f] *Includes the undeveloped portion of industrially zoned or locally proposed industrial areas as identified on 1 inch equals 400 feet scale, 1980 aerial photographs.*

[g] *Includes the gross site area less any new industrial development which occurred between 1980 and 1984, and less the undeveloped portion of the site determined to have significant physical limitations for industrial development.*

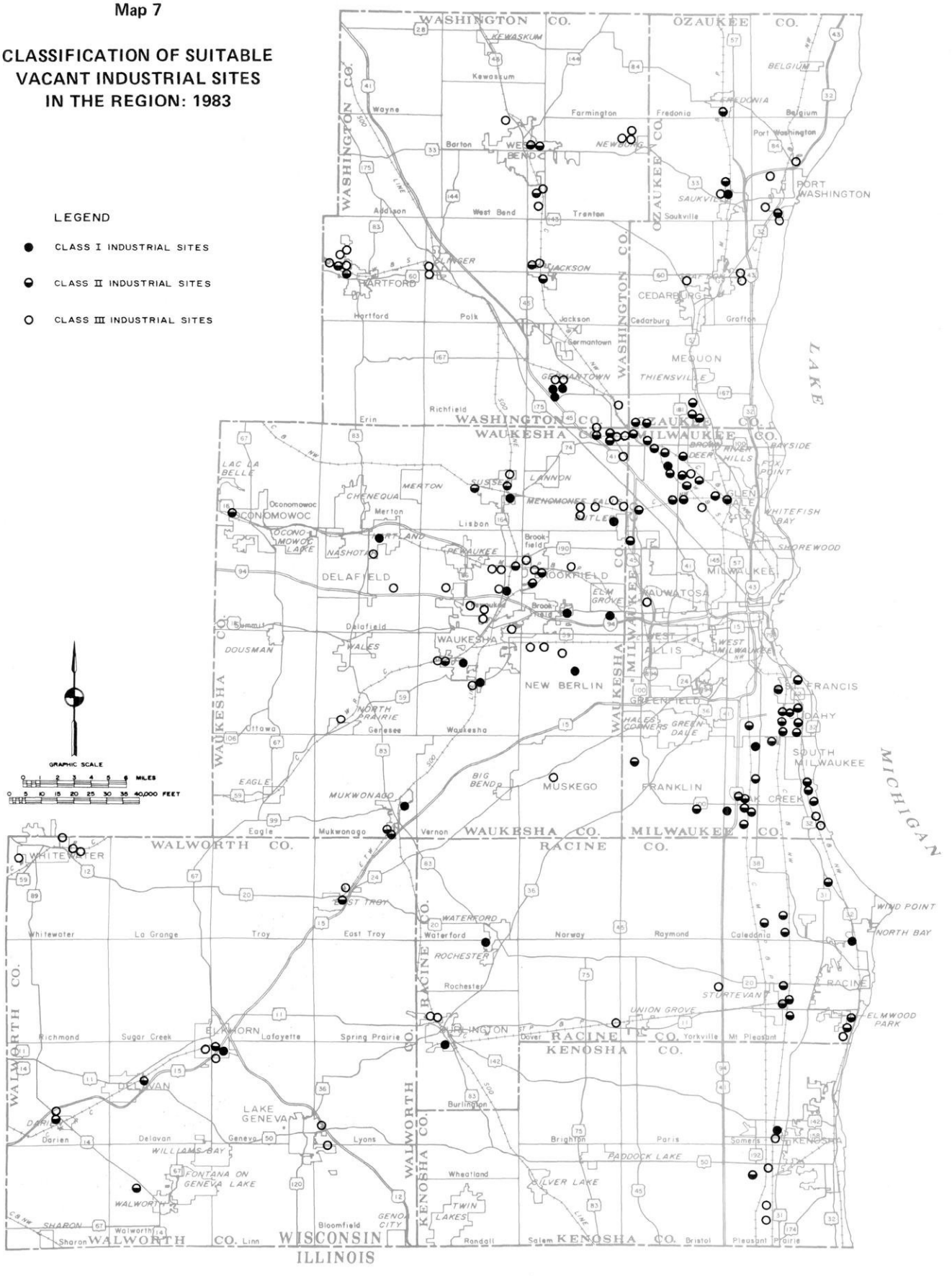
[h] *Includes all industrially zoned areas containing fewer than 40 contiguous acres of vacant land.*

[i] *Assumes 50 percent of vacant industrially zoned land is suitable for industrial development.*

[j] *Utilize SEWRPC regional land use plan design standard of seven acres of net industrial land per 100 employees.*

Map 7

CLASSIFICATION OF SUITABLE VACANT INDUSTRIAL SITES IN THE REGION: 1983



and future industrial expansion needs; a prominent location with high visibility; direct access to freeway or railway service; a full range of public services, including public sanitary sewer, water supply, stormwater drainage, and communication facilities; or simply being within an attractive, well-designed industrial park with architectural controls which offer protection for the sizable investments industries make in land and improvements.

It may thus be concluded that, while there is sufficient industrial land available in the long term to accommodate the anticipated increase in industry-related employment, there are relatively few suitable sites available for immediate industrial use and such sites may, in fact, be deficient in size, type, and location in meeting the specific needs of industries seeking to locate or relocate in the Region.

Public or private industrial development programs within the Region should, among other efforts, seek to provide industrial sites located in well-designed industrial parks, as well as some larger individual industrial sites in suitable locations which are ready for immediate industrial use. The provision of such sites may, because of the potential costs involved, require new initiatives, funding sources, or possibly joint public-private ventures. In addition, the supply of such sites should, at a minimum, be sufficient to meet the staged industrial land development requirements associated with the moderate regional growth scenario, as embodied in the adopted regional land use plan. It would also be desirable that additional potential industrial sites exceeding the area requirements attendant to the moderate regional growth scenario be identified in order to assure that the Region can readily respond to unforeseen industrial development needs, as well as to accommodate the free operation of the land market. The vacant suitable industrial sites identified as part of this study constitute a valuable economic resource which should be protected to assure the availability of a continuous supply of suitable industrial land which can be utilized to retain those industries seeking to expand within the Region, as well as to attract new industries to the Region.

Residential Subdivision Platting Activity

The Land Use Division staff annually monitors land subdivision activities in the Region. A total of 1,157 residential lots were created in the Region during 1984 through subdivision plats, compared with 810 lots platted in 1983. Of the total residential lots created in 1984, 877 lots, or about 76 percent, were served by public sanitary sewers, and the remaining 280 lots, or 24 percent, were designed to be served by onsite septic tank sewage disposal systems (see Table 9 and Map 8). With respect to the seven counties in southeastern Wisconsin, the number of residential lots created through subdivision plats in 1984 ranged from a low in Ozaukee County, where no lots were platted in 1984, to a high of 521 lots in Waukesha County. The historic trend in residential platting activity since 1960 is shown for the Region and by county in Figures 8 through 15.

PARK AND OPEN SPACE PLANNING

The Commission adopted a regional park and open space plan for southeastern Wisconsin on December 1, 1977. The plan consists of two basic elements: an open space preservation element and an outdoor recreation element. The open space preservation element consists of recommendations for the preservation of primary environmental corridors and prime agricultural land. The outdoor recreation element consists of 1) a resource-oriented outdoor recreation plan, which provides recommendations for the number and location of large parks, recreation corridors to accommodate trail-oriented activities, and water access facilities to enable the recreational use of rivers, inland lakes, and Lake Michigan, and 2) an urban outdoor recreation plan, which provides recommendations for the number and distribution of local parks and outdoor recreational facilities required in urban areas of the Region. The plan is documented in SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000, and is graphically summarized on Map 9.

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

During 1984, staff efforts on park and open space planning were directed primarily toward the implementation of the regional park and open space plan. Implementation activities consisted of refining and detailing primary and secondary environmental corridors and important natural resource features on large, one inch equals 400 feet scale aerial photographs, and preparing detailed local park and open space plans consistent with the guidelines provided by the regional plan.

Primary Environmental Corridor Refinement

One of the most important recommendations of the adopted regional land use and regional park and open space plans is the protection and preservation of the primary environmental corridors of the Region in essentially natural, open uses. Such corridors in southeastern Wisconsin generally lie along the major stream valleys, around major lakes, and in the Kettle Moraine area. The corridors contain the best remaining elements of the natural resource base of southeastern Wisconsin and have immeasurable environmental and recreational values. The preservation of these corridors will do much to ensure the maintenance of the overall environmental quality of the Region, and to prevent the creation of new, serious, and costly environmental and developmental problems such as surface- and groundwater pollution; poor drainage and flooding; excessive infiltration of clear water into sanitary sewerage systems; settlement and structural failure of roadways, utilities, and buildings; and inadequate park and open space facilities.

The Commission in 1963 delineated the primary environmental corridors within the Region and set forth recommendations for the preservation of such corridors as part of its initial regional land use plan. This initial environmental corridor delineation was subsequently refined under the regional park and open space, the regional water quality management, and the second generation regional land use planning efforts.

A more detailed delineation of the primary environmental corridors designed to implement the recommendations of the adopted regional land use, park and open space, and water quality management plans was undertaken in 1979 and completed in 1984. The need for such additional refinement stemmed from the increased involvement of the Commission in the preparation of local plans and plan implementation devices; increasing requests from private landowners and developers, and from land surveyors, engineers, and planners engaged by such owners and developers, for detailed natural resource-related information; and from changes in state and federal government policies regarding sanitary sewer service extensions and wetlands preservation. The comprehensive review, refinement, and detailing of the primary environmental corridor delineations utilized Commission 1975 and 1980 large-scale ratioed and rectified photographs both as base maps and as work sheets for the field inspections made as a part of the process. That process is more fully described in SEWRPC Technical Record, Volume 4, No. 2, in an article entitled, "Refining the Delineation of Environmental Corridors in Southeastern Wisconsin." The completed refinement reflected changes in land use and in the natural resource base which occurred through the spring of 1980.

An example of the environmental corridor refinement process along the main stem of the Bark River in the Town of Summit in Waukesha County is shown on 1970, 1975, and 1980 Commission aerial photography reproduced in Figure 16. The more general systems level delineation of the primary environmental corridor identified in 1970 and utilized in the preparation of the adopted regional land use, park and open space, and water quality management plans is shown on the 1970 aerial photograph. As shown on this photograph, the systems level delineation of the primary environmental corridor generally encompassed the woodlands and wetlands along the main stem of the Bark River, as well as certain adjacent agricultural lands.

The results of the application of the environmental corridor refinement process to the 1975 aerial photograph for the same area are shown on the 1975 photo. As shown on this photograph, the refined primary environmental corridor encompasses additional small areas of woodlands and wetlands east of the Bark River and south of USH 18. The refined delineation also provides a more precise delineation of the natural resource features encompassed by the primary environmental corridor and reflects a revision to the location and extent of the environmental corridor based on land use changes occurring between 1970 and 1975—including residential development and attendant loss of woodlands within the primary environmental corridor.

The update of the delineation of environmental corridors to 1980 is shown on the 1980 aerial photograph. As shown on this photograph, changes in the delineation of the primary environmental corridor reflect those changes in the land use and natural resource base occurring between 1975 and

Table 9

RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1984

County	Sewered Lots		Unsewered Lots		Total	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Regional Total
Kenosha	23	29.9	54	70.1	77	6.7
Milwaukee	194	100.0	0	--	194	16.8
Ozaukee	0	- -	0	- -	0	- -
Racine.	195	100.0	0	- -	195	16.8
Walworth.	6	17.1	29	82.9	35	3.0
Washington . . .	102	75.6	33	24.4	135	11.7
Waukesha.	357	68.5	164	31.5	521	45.0
Region	877	75.8	280	24.2	1,157	100.0

Map 8

RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1984

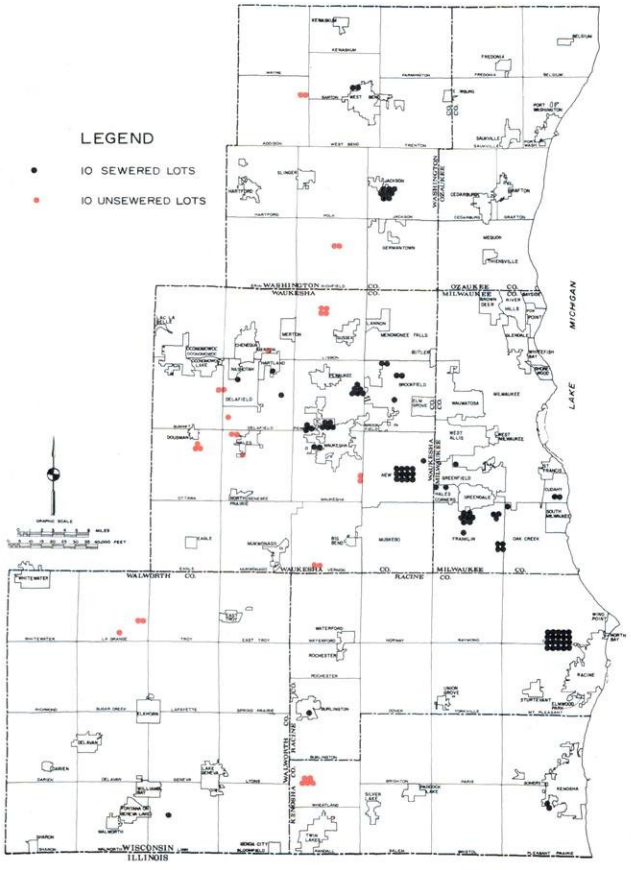


Figure 8

RESIDENTIAL LOTS PLATTED IN THE REGION: 1960-1984

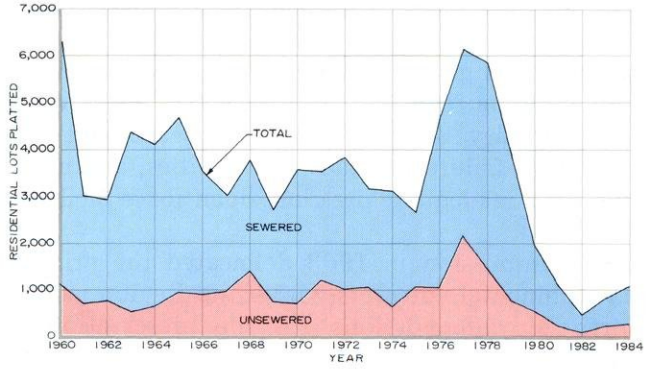


Figure 9

RESIDENTIAL LOTS PLATTED IN KENOSHA COUNTY: 1960-1984

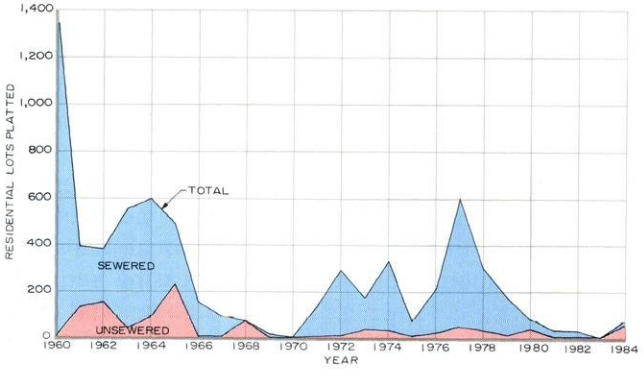


Figure 10

RESIDENTIAL LOTS PLATTED
IN MILWAUKEE COUNTY: 1960-1984

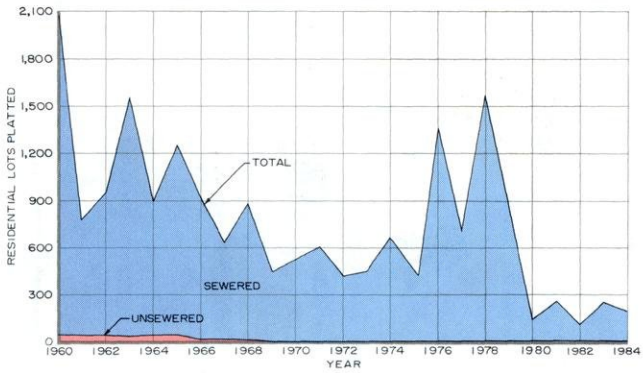


Figure 11

RESIDENTIAL LOTS PLATTED
IN OZAUKEE COUNTY: 1960-1984

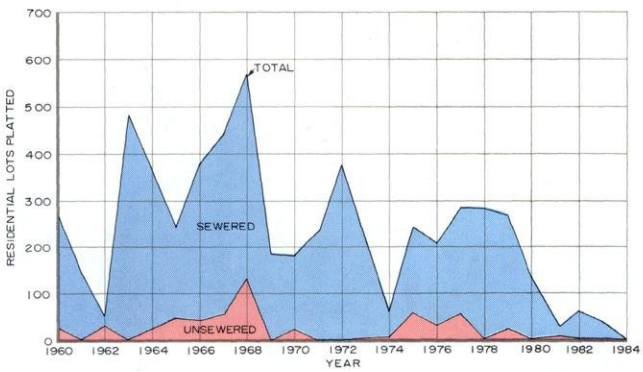


Figure 12

RESIDENTIAL LOTS PLATTED
IN RACINE COUNTY: 1960-1984

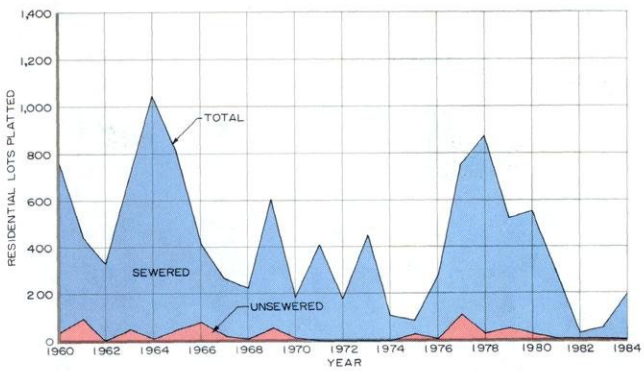


Figure 13

RESIDENTIAL LOTS PLATTED
IN WALWORTH COUNTY: 1960-1984

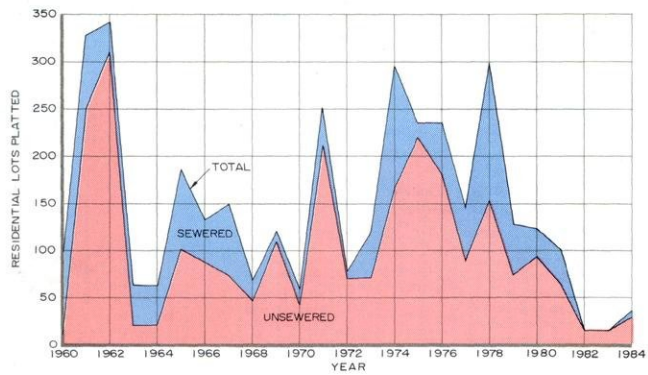


Figure 14

RESIDENTIAL LOTS PLATTED
IN WASHINGTON COUNTY: 1960-1984

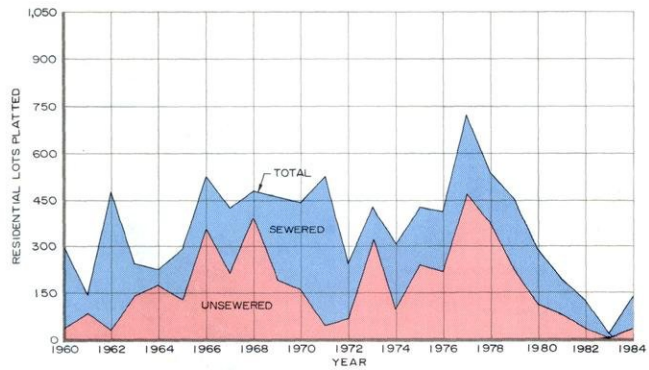
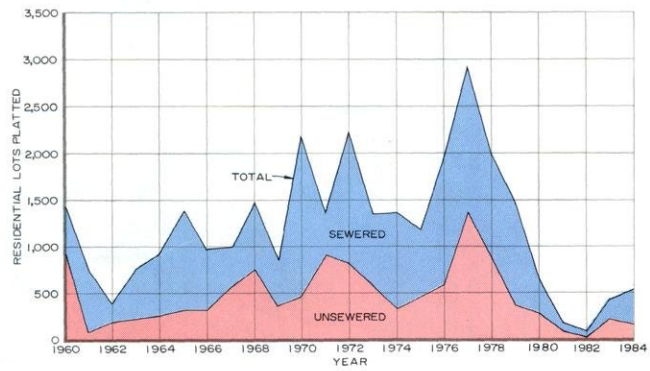


Figure 15

RESIDENTIAL LOTS PLATTED
IN WAUKESHA COUNTY: 1960-1984



Map 9

REGIONAL PARK AND OPEN SPACE PLAN: 2000

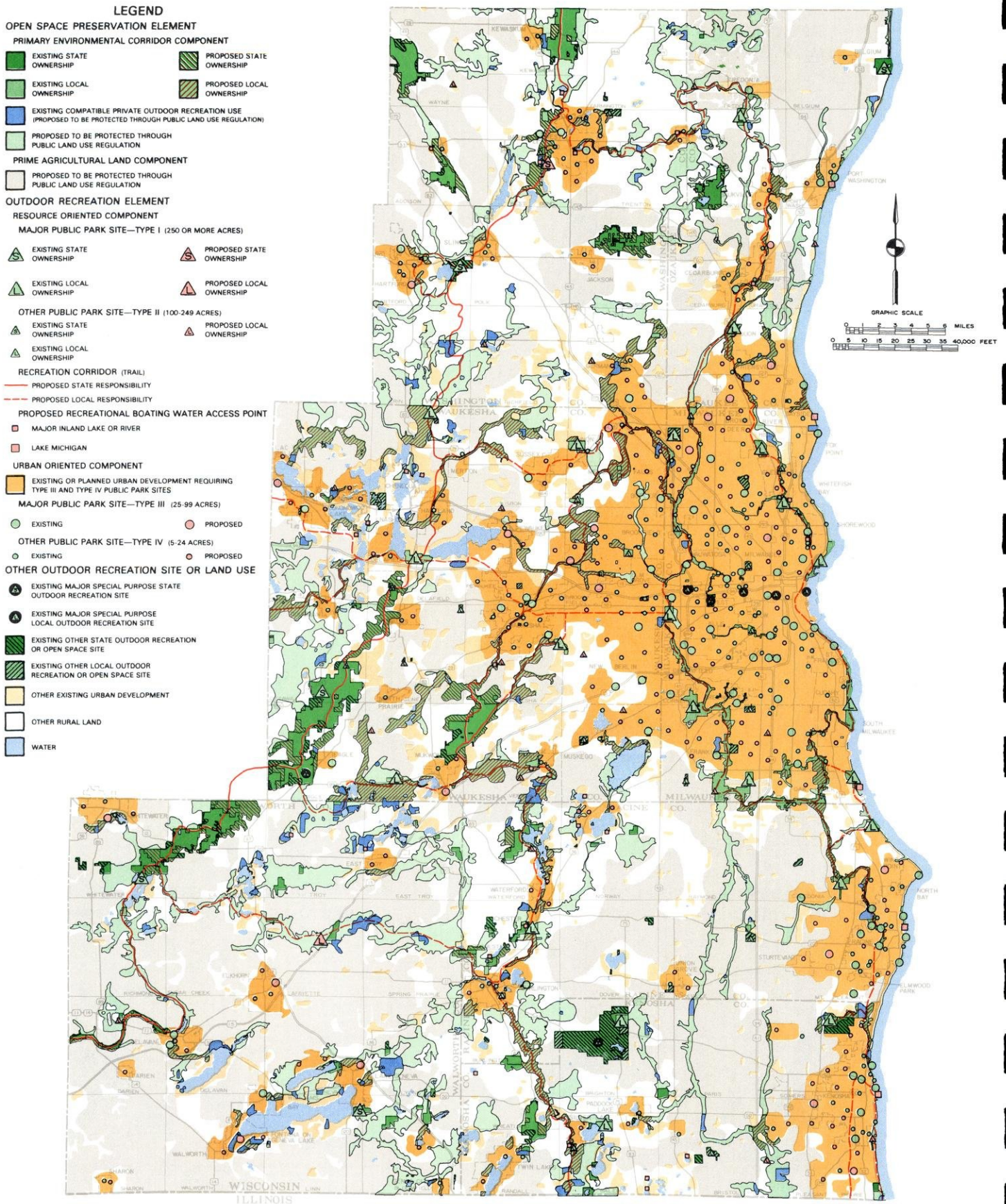


Table 10

ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL AREAS IN THE REGION: 1980

County	Primary Environmental Corridors		Secondary Environmental Corridors		Isolated Natural Areas	
	Acres	Percent of County Area	Acres	Percent of County Area	Acres	Percent of County Area
Kenosha	28,302	15.9	6,132	3.4	3,870	2.2
Milwaukee . . .	9,726	6.3	3,451	2.2	2,300	1.5
Ozaukee	19,810	13.1	4,777	3.2	3,439	2.3
Racine.	23,497	10.8	6,662	3.1	7,572	3.5
Walworth. . . .	65,614	17.8	9,268	2.5	8,185	2.2
Washington . .	60,201	21.6	9,943	3.6	6,659	2.4
Waukesha. . . .	92,224	24.8	7,777	2.1	8,806	2.4
Total	299,374	17.4	48,010	2.8	40,831	2.4

1980. Such changes include the addition of primary environmental corridor lands to encompass former agricultural lands which were reforested during that time period, and the deletion of primary environmental corridor lands as a result of additional residential development. The classification of the area encompassing the remaining natural resource features in the northeastern portion of the photograph isolated from the large wetlands and woodlands along the Bark River was changed from isolated natural area in 1975 to primary environmental corridor in 1980 as a result of the reforestation effort which connected such natural features to the main stem of the environmental corridor.

As already indicated, during 1984, the Commission completed the environmental corridor refinement and detailing process—essentially a re-inventory of the corridors. The results of this updating process are presented in Table 10. In 1970, there were a total of 322,000 acres, or about 500 square miles, of land and water area encompassed within the primary environmental corridors; such corridors comprised about 19 percent of the total area of the Region. In 1980, there were about 299,400 acres, or about 468 square miles, of land encompassed within the primary environmental corridors, comprising about 17 percent of the total area of the Region. Thus, the net change in the primary environmental corridors totaled about 22,600 acres, or about 35.3 square miles, and about 8 percent of the corridor area. This loss in primary environmental corridor was the net result of the refinement of the system level delineation, and of actual changes in the land uses and natural resource base features of the Region. The location and extent of the refined primary environmental corridors in the Region as of 1980 are shown on Map 10. These corridors represent a current inventory of such lands made in accordance with the criteria set forth in the previously referenced Technical Record. As such, the lands involved have not as yet necessarily been included and recommended for preservation in an adopted regional plan. This is particularly true for shorelands in the Milwaukee, Racine, Kenosha, and Port Washington harbor estuary areas where detailed land use urban redevelopment plans are required to determine where it is feasible to reestablish corridor resources.

Primary environmental corridors include a variety of important natural resource features and, by definition in the refinement process, are at least 400 acres in size, two miles long, and 200 feet wide. As shown on Map 10 and indicated in Table 10, about 92,200 acres of the almost 300,000 acres of primary environmental corridors in the Region, or about 31 percent, were located in Waukesha County; and only about 10,000 acres, or only 3 percent of the primary environmental corridors in the Region, were located in Milwaukee County.

Secondary environmental corridors generally connect with the primary environmental corridors and provide areas for the movement of wildlife, maintain "pockets" of natural resource features, and

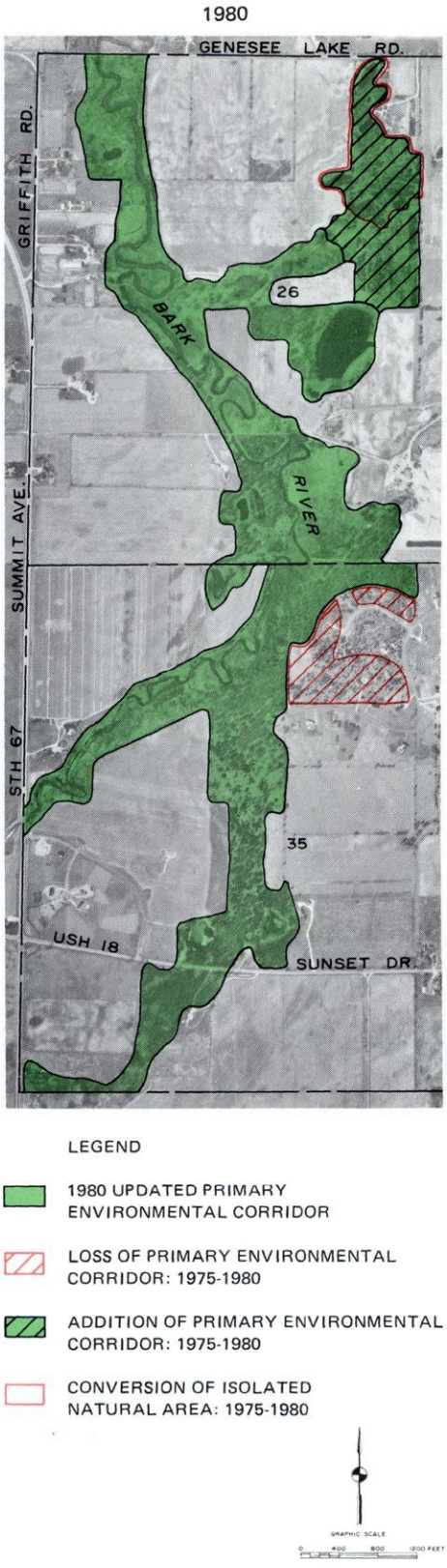
Figure 16

AN EXAMPLE OF THE RESULTS OF THE APPLICATION OF THE ENVIRONMENTAL CORRIDOR REFINEMENT PROCESS AS SHOWN ON 1970, 1975, AND 1980 AERIAL PHOTOGRAPHS COVERING U. S. PUBLIC LAND SURVEY SECTIONS 26 AND 35, TOWNSHIP 7 NORTH, RANGE 17 EAST TOWN OF SUMMIT, WAUKESHA COUNTY

facilitate surface water drainage. By definition in the refinement process, secondary corridors are at least 100 acres in size and one mile long. As indicated in Table 10, in 1980 the secondary environmental corridors encompassed about 48,000 acres in the Region, or about 3 percent of the total area of the Region. Almost 10,000 acres, or about 21 percent of such corridors in the Region, were located in Washington County, and about 9,300 acres, or about 19 percent, were located in Walworth County.

In addition to the environmental corridors, other, smaller concentrations of natural resource features were also identified. These features are physically separated from the environmental corridors by

Figure 16 (continued)



intensive urban and agricultural uses and include important isolated wetlands, woodlands, and wildlife habitat. These areas have been termed "isolated natural areas" and, by definition in the refinement process, are 5 to 99 acres in size and at least 200 feet wide. As indicated in Table 10, in 1980 isolated natural areas encompassed almost 41,000 acres in the Region, or about 2 percent of the total area of the Region. About 8,800 acres, or about 22 percent of such areas in the Region, were located in Waukesha County, and about 8,200 acres, or about 20 percent, were located in Walworth County.

Local Park and Open Space Plans

As already noted, the Commission assists communities in the Region in the preparation of local park and open space plans. These plans are documented in SEWRPC Community Assistance Planning Reports and contain a set of park and open space preservation, acquisition, and development objectives and supporting standards relative to the needs of the citizens of the local community; present pertinent information on the supply of and need for park and open space sites in the community; and identify the actions required to meet park and open space needs. During 1984, the Commission completed work on the drafts of two such community park and open space plans—one for the City of West Bend and one for the Town of Vernon. These plans are scheduled for publication during 1985. It is important to note that the adoption of these plans by the local communities and the approval of the plans by the Wisconsin Department of Natural Resources make the local units of government eligible for up to 50 percent assistance for the acquisition and development of the outdoor recreation and open space sites and related facilities proposed in the plans.

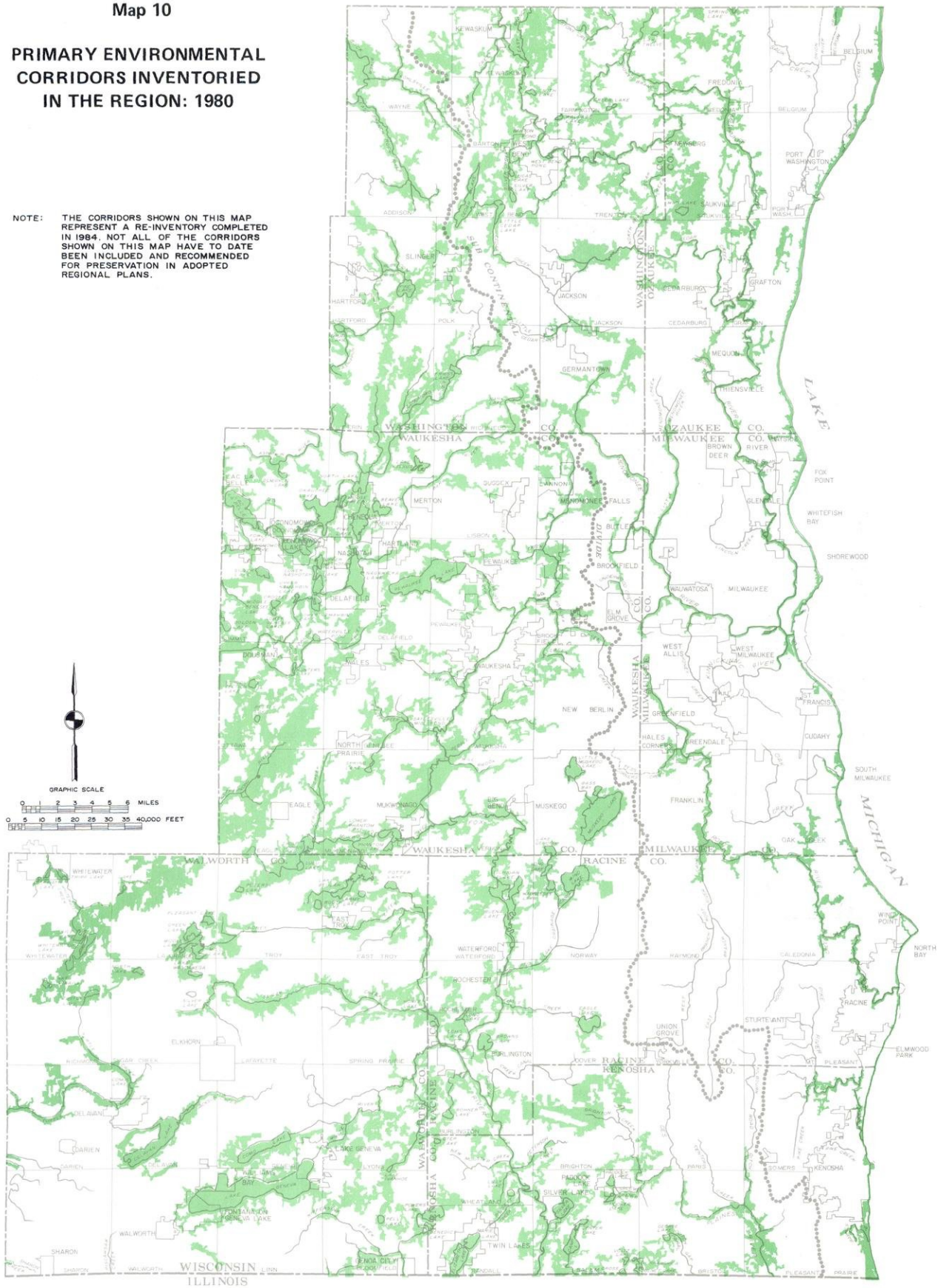
COASTAL MANAGEMENT PLANNING

During 1984, the Division staff continued to provide assistance to the Wisconsin Department of Administration's Bureau of Energy and Coastal Policy Analysis in the conduct of the Wisconsin coastal management program. This program is intended to coordinate governmental activities toward achieving the objective of better management of the resources of the Lake Michigan and Lake Superior coastal zones of the State. The program is being carried out by the State of Wisconsin pursuant to the federal Coastal Zone Management Act of 1972 through the Wisconsin Coastal Management Council.

Map 10

PRIMARY ENVIRONMENTAL CORRIDORS INVENTORIED IN THE REGION: 1980

NOTE: THE CORRIDORS SHOWN ON THIS MAP REPRESENT A RE-INVENTORY COMPLETED IN 1984. NOT ALL OF THE CORRIDORS SHOWN ON THIS MAP HAVE TO DATE BEEN INCLUDED AND RECOMMENDED FOR PRESERVATION IN ADOPTED REGIONAL PLANS.



Under an agreement with the Wisconsin Department of Administration, Bureau of Energy and Coastal Policy Analysis, the Commission in 1975 formed and staffed a Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin. This 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 the review of state coastal studies and reports as they are proposed and produced.

One of the continuing functions of the Division under the coastal management program is the designation of special coastal areas. In 1984, no additional areas in the Region were formally designated as special coastal areas. The existing Lake Michigan shoreline special coastal areas are shown on Map 11. These special areas have natural, scientific, economic, cultural, or historic importance. Designation by the Wisconsin Coastal Management Council as a special coastal area ensures eligibility for financial or technical assistance for special coastal area management activities through the Wisconsin coastal management program, and focuses attention on a valuable coastal resource.

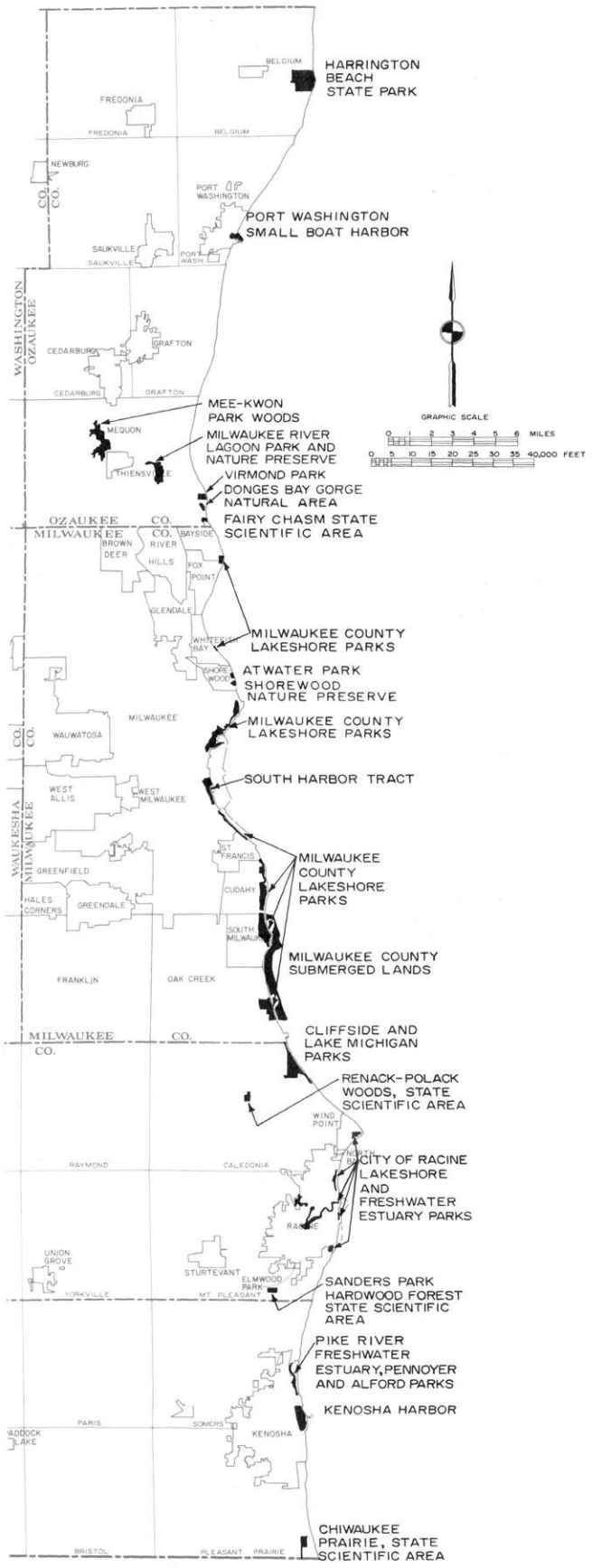
As part of the coastal management efforts in the Region, the Commission staff assists local units of government along the Lake Michigan shoreline in developing and submitting coastal management projects for funding under the coastal management program. Because of limited federal and state funding, no projects were prepared and submitted from southeastern Wisconsin in 1984.

Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis

During 1984, the Commission, in cooperation with the staffs of the City of St. Francis and the Wisconsin Electric Power Company, completed a study of the erosion and recession of the coastal bluffs along the Lake Michigan shoreline of the City of St. Francis. The study was conducted under the guidance of an advisory committee consisting of representatives of the Wisconsin Electric Power Company, the City of St. Francis, and interested and concerned citizens. The study was funded, in part, by the Wisconsin coastal management program, in part by funds provided by the Wisconsin Electric Power Company, and by the City itself. The primary purposes of the study were to identify and map high erosion risk areas; determine bluff recession rates; and develop and recommend nonstructural and structural control measures and suitable land use regulations which could be used to reduce shoreline erosion and bluff recession,

Map 11

DESIGNATED SPECIAL COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 1984



and the resultant damages from such erosion. The study included the preparation of 1 inch equals 100 feet scale, 2 foot contour interval topographic maps and attendant control surveys of an approximately one-square-mile area of the City of St. Francis. These maps were considered essential to the conduct of a sound erosion control study of the area concerned. The study results are documented in SEWRPC Community Assistance Planning Report No. 110, A Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis, Wisconsin.

Extensive field inventories were conducted under this study to identify the physical characteristics, and the causes and types, of slope failure within the actively eroding bluffs of the City of St. Francis. Examples of the causes and types of slope failure observed are shown in Figure 17. The study results indicated that the primary cause of bluff recession in the City of St. Francis is bluff toe erosion caused by wave action. Groundwater seepage, however, was found to be a contributing cause of slope failure in some portions of the study area. Bluff profiles were prepared for selected sites to illustrate the different physical, and erosion-related, characteristics of the actively eroding bluffs. Computerized slope stability analyses were conducted to evaluate existing slope stability and to predict future slope failure. An example of a bluff profile is shown in Figure 18.

The report also evaluated alternative structural and nonstructural shoreline erosion control measures for the study area. The report concluded that a combination of bluff toe protection, bluff slope stabilization, and surface water and groundwater drainage control would be required to adequately prevent continued bluff recession. Erosion risk distances and setback distances from the existing bluff edge for new urban development were identified in the actively eroding shoreline areas under structural and nonstructural alternatives using the procedures summarized in Figures 19 and 20, respectively.

The findings of this study are intended to inform public officials and potential land developers of the erosion risks associated with shoreland development and of the means available to reduce the risk of damages from such erosion. The study recommends that provisions be incorporated into the existing city zoning ordinance which would, in the public interest, regulate shore protection, land uses, activities, and facility locations within the specified nonstructural and structural setback distances.

Recommendations for potential urban development of the study area were made under two alternative assumptions: 1) with no additional structural shore protection measures, and 2) with structural shore protection measures being provided along the entire Lake Michigan shoreline of the City. The potential urban development areas under these shore protection alternatives are summarized on Maps 12 and 13. A portion of a large-scale topographic map prepared under the study showing the erosion hazard and setback areas if no structural shore protection is provided is shown on Map 14. These large-scale maps provide the detailed information required for sound decision-making regarding shoreline development by the public and private interests involved. The study results indicated that the provision of structural shore protection measures would allow the potential development of an additional 12 acres of land at a capital cost of about $150,000 per acre. The implementation of the recommended shore protection measures will help provide a safe and pleasant, as well as economically sound, Lake Michigan shoreland area within the City of St. Francis.

DATA PROVISION AND ASSISTANCE

The land use and park and open space data files are used extensively by local governmental units and agencies and by private interests. Examples of the provision of land use and park and open space-related data during 1984 include the following:

- Provision of technical assistance to the Town of Mt. Pleasant for an analysis of the suitability of a large parcel of land for industrial use.

- Provision of regional land use plan information to the City of West Bend to identify plan design year 2000 alternative populations for the West Bend urban service area.

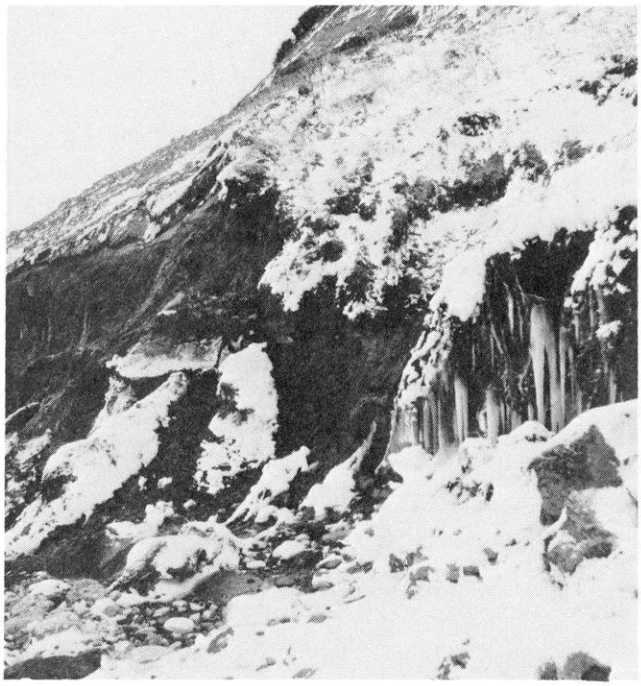
- Provision of land use, outdoor recreation, and natural resource information to the Wisconsin Department of Natural Resources to assist in the development of a Department master plan for the Lulu Lake area in Walworth County and for the Theresa Wildlife Area in Washington County.

Figure 17

EXAMPLES OF THE CAUSES AND TYPES OF SLOPE FAILURE OCCURRING WITHIN THE CITY OF ST. FRANCIS ACTIVELY ERODING BLUFFS

SLOPE FAILURE CAUSED BY WAVE EROSION AT TOE OF BLUFF

GROUNDWATER SEEPAGE



SOLIFLUCTION

SHALLOW SLIDE

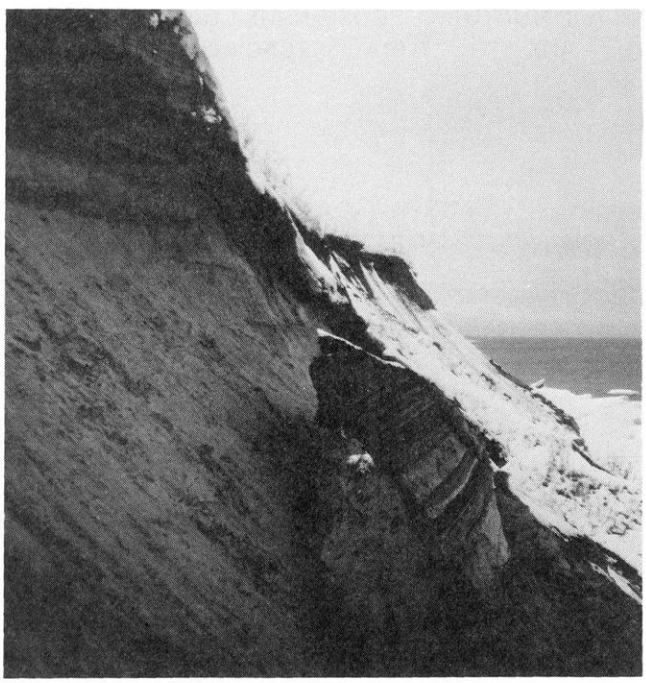
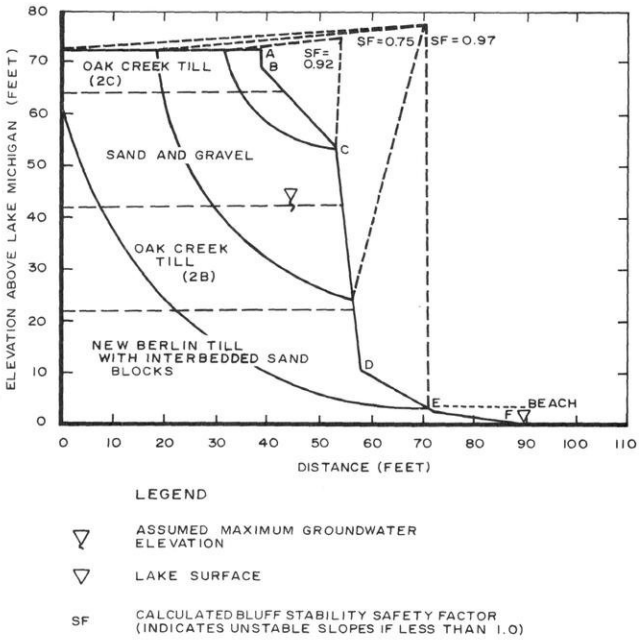


Figure 18

BLUFF PROFILE ALONG THE LAKE MICHIGAN SHORELINE OF THE CITY OF ST. FRANCIS



- Provision of technical assistance to the Village of Fontana on Geneva Lake in the preparation of a site analysis and general development plan for a village-owned park.

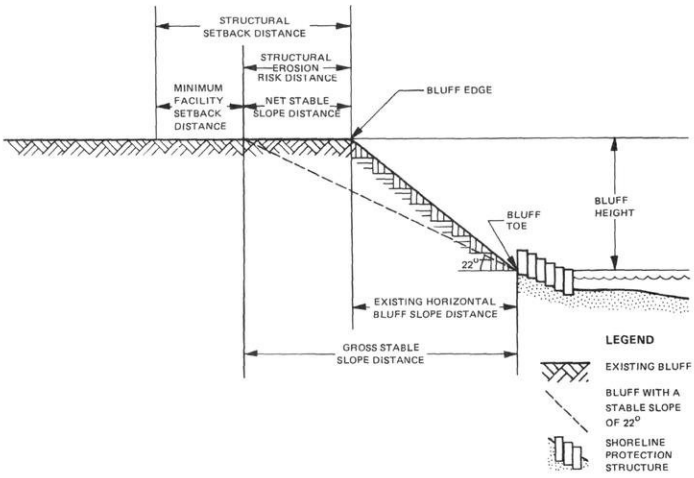
- Provision of 1980 land use inventory data to the Citizen's Governmental Research Bureau for use in a study of the communities of Cudahy, Hales Corners, St. Francis, and South Milwaukee in Milwaukee County.

- Provision of building permit information to the U. S. Postal Service for use in a study of the eastern Racine County service area.

- Provision of natural resource information to the City of Waukesha Public Works Department to assist in the preparation of an environmental impact assessment for the proposed Blackstone Ridge Subdivision Addition in the City of Waukesha.

Figure 19

PROCEDURE UTILIZED TO ESTIMATE STRUCTURAL EROSION RISK DISTANCE AND STRUCTURAL SETBACK DISTANCE



STRUCTURAL EROSION RISK DISTANCE=NET STABLE SLOPE DISTANCE

STRUCTURAL SETBACK DISTANCE=STRUCTURAL EROSION RISK DISTANCE+MINIMUM FACILITY SETBACK DISTANCE

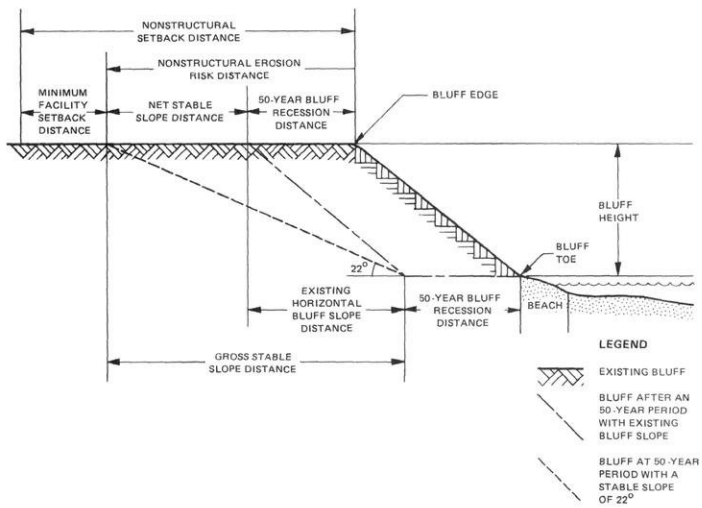
WHERE: NET STABLE SLOPE DISTANCE = GROSS STABLE SLOPE DISTANCE - EXISTING HORIZONTAL BLUFF SLOPE DISTANCE

$$\text{GROSS STABLE SLOPE DISTANCE} = \frac{\text{BLUFF HEIGHT}}{\text{TAN } 22^{\circ}} = \frac{\text{BLUFF HEIGHT}}{0.4}$$

MINIMUM FACILITY SETBACK DISTANCE: TO PROVIDE A SAFETY FACTOR, FOR AESTHETICS, AND FOR PROVISION OF FUTURE SURFACE WATER AND GROUNDWATER DRAINAGE SYSTEMS

Figure 20

PROCEDURE UTILIZED TO ESTIMATE NONSTRUCTURAL EROSION RISK DISTANCE AND NONSTRUCTURAL SETBACK DISTANCE



NONSTRUCTURAL EROSION RISK DISTANCE=NET STABLE DISTANCE+50-YEAR BLUFF RECESSION DISTANCE

NONSTRUCTURAL SETBACK DISTANCE=NONSTRUCTURAL EROSION RISK DISTANCE+MINIMUM FACILITY SETBACK DISTANCE

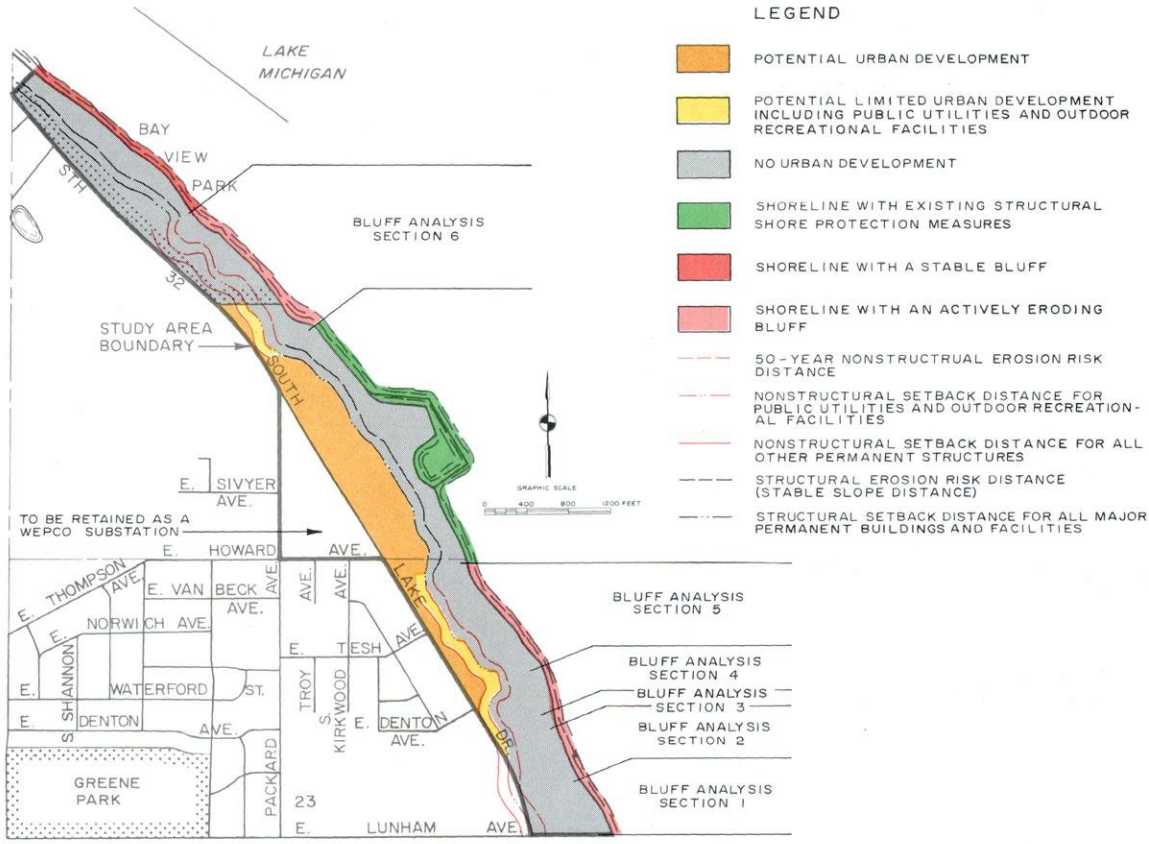
WHERE: NET STABLE SLOPE DISTANCE = GROSS STABLE SLOPE DISTANCE - EXISTING HORIZONTAL BLUFF SLOPE DISTANCE

$$\text{GROSS STABLE SLOPE DISTANCE} = \frac{\text{BLUFF HEIGHT}}{\text{TAN } 22^{\circ}} = \frac{\text{BLUFF HEIGHT}}{0.4}$$

MINIMUM FACILITY SETBACK DISTANCE: TO PROVIDE A SAFETY FACTOR, FOR AESTHETICS, AND FOR PROVISION OF FUTURE SURFACE WATER AND GROUNDWATER DRAINAGE SYSTEMS

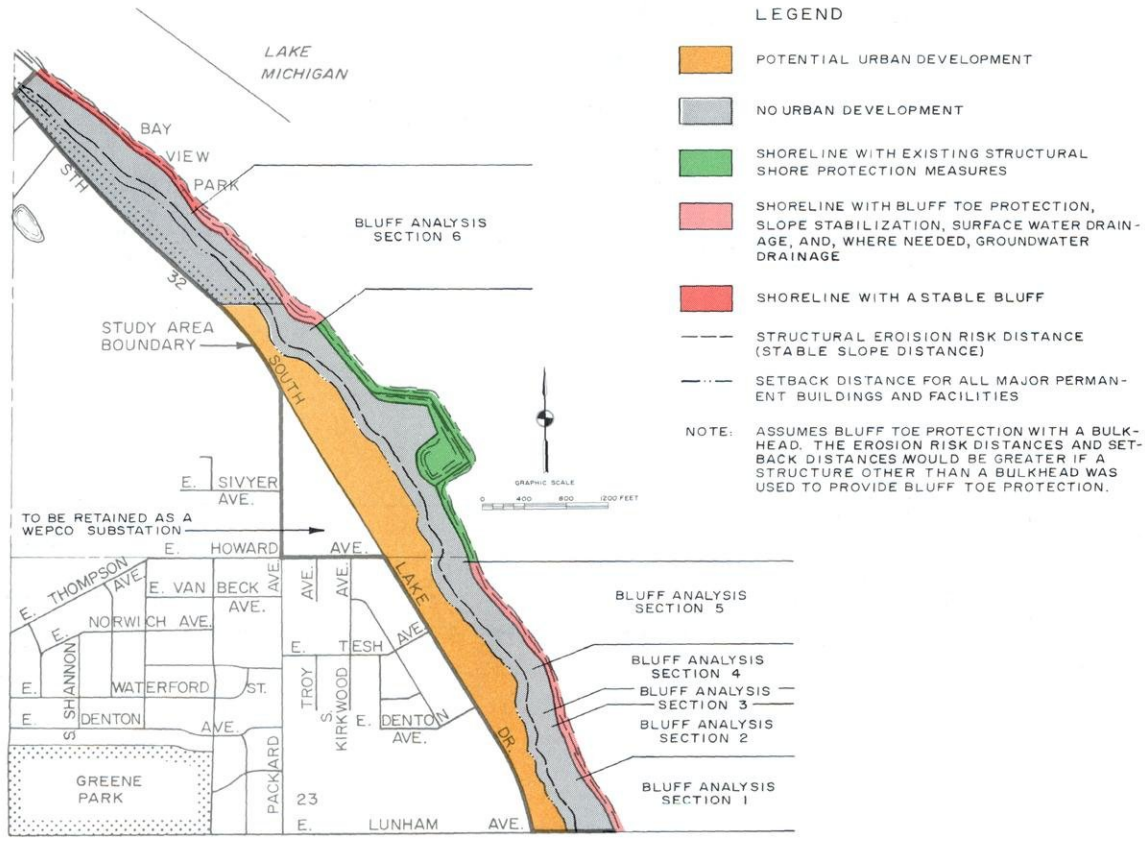
Map 12

RECOMMENDED STRUCTURAL SHORE PROTECTION MEASURES IF MINIMUM URBAN DEVELOPMENT OCCURS OUTSIDE THE EXISTING WEPCO LAKESIDE POWER PLANT SITE



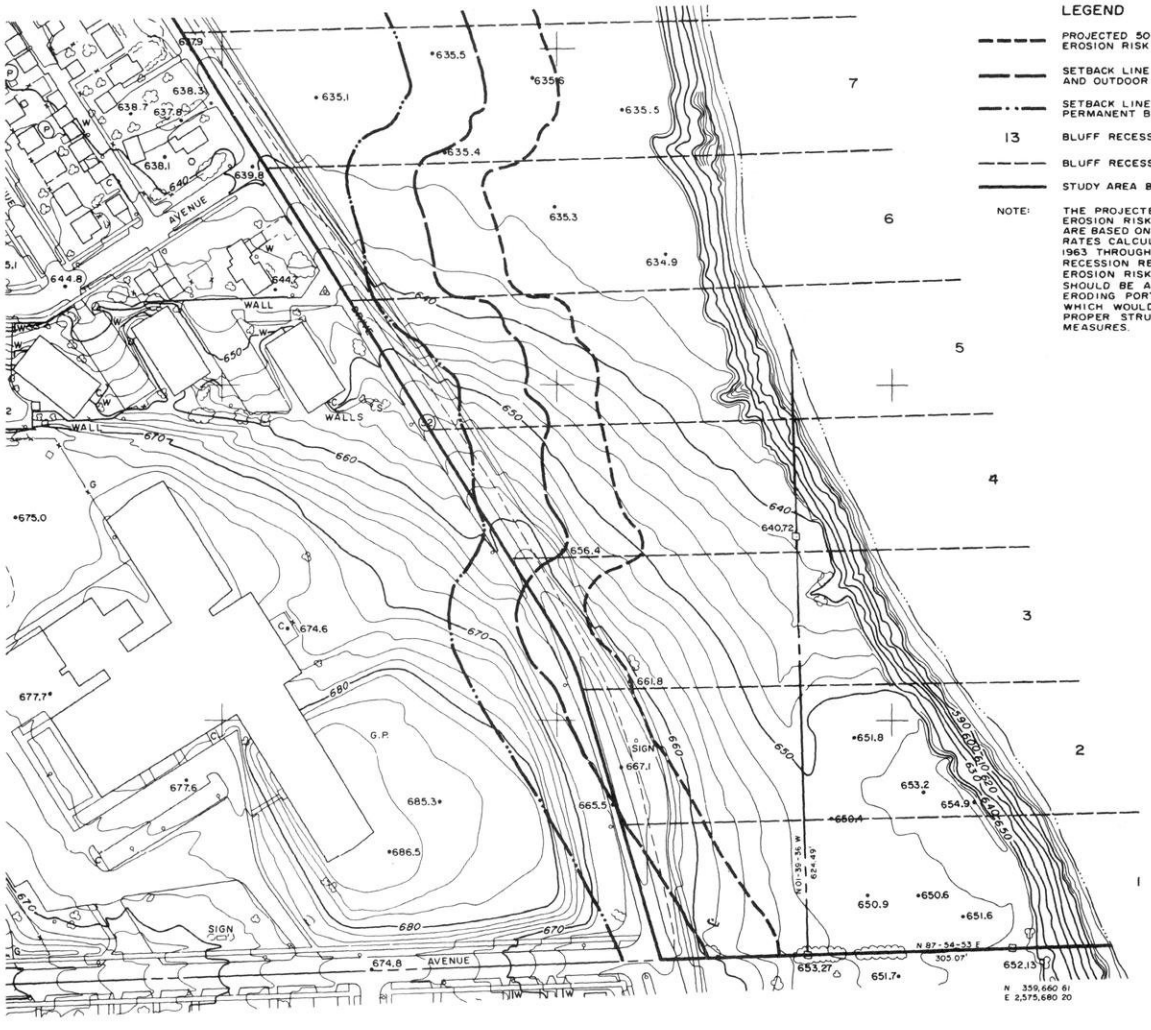
Map 13

RECOMMENDED STRUCTURAL SHORE PROTECTION MEASURES TO ALLOW MAXIMUM URBAN DEVELOPMENT WITHIN THE STUDY AREA



Map 14

NONSTRUCTURAL EROSION RISK AREAS AND SETBACK AREAS ALONG THE LAKE MICHIGAN SHORELINE OF THE CITY OF ST. FRANCIS



LEGEND

- NGS TRIANGULATION OR TRAVERSE STATION
- MONUMENTED U.S. PUBLIC LAND SURVEY CORNER
- PHOTO CENTER

COMBINATION SCALE AND SEA LEVEL REDUCTION FACTOR 0.99992924

HORIZONTAL DATUM IS BASED ON THE WISCONSIN PLANE COORDINATE SYSTEM, SOUTH ZONE.

VERTICAL DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1929.

COMPILED TO NATIONAL MAP ACCURACY STANDARDS UTILIZING STEREO-PHOTOGRAMMETRIC METHODS.

DATE OF PHOTOGRAPHY : APRIL 19, 1983
DATE OF MAPPING : DEC., 1983

GEODETIC GRID NORTH / NORTH +1°28'50"

SCALE 1"=200', CONTOUR INTERVAL 2'

TO PLACE ELEVATIONS ON MILWAUKEE METROPOLITAN SEWERAGE DISTRICT AND CITY OF ST. FRANCIS DATUM SUBTRACT 580.603'

100 0 100 200 300 400
GRAPHIC SCALE IN FEET

CITY OF ST. FRANCIS
LAKE MICHIGAN NONSTRUCTURAL EROSION RISK AREAS AND SETBACK AREAS

PART OF NE 1/4 SECTION 23 AND PART OF NW 1/4 SECTION 24
TOWNSHIP 6 NORTH, RANGE 22 EAST

- Provision of wildlife habitat and plant community information to the City of Kenosha to assist in the preparation of an environmental impact assessment for an Urban Development Action Grant application for a shopping center development in the City.

- Provision of plant community information to the U. S. Department of the Army, Corps of Engineers, to assist in the evaluation of an application for a permit to retain fill and discharge additional fill to a wetland located on property in the Town of Pleasant Prairie, Kenosha County.

- Provision of plant community and resource management recommendations to the Racine County Park Department to assist in the management of Skewes Memorial Park in the Town of Yorkville.

- Provision of plant community and technical information to the Village of Fontana-on-Geneva-Lake for use in the management of the St. Benedict's Fen wetland.

- Provision of natural resource information to consultants for the Wisconsin Department of Transportation to aid in the preparation of a draft environmental impact assessment of STH 83 improvements between IH 94 and STH 16 in Waukesha County.

- Provision of technical assistance to consultants for the Wisconsin Department of Transportation for use in wetland mitigation activities along the STH 50 corridor.

- Provision of biological inventory information to the Village of Menomonee Falls to assist in the evaluation of alternative channel improvement plans for a reach of Lilly Creek.

- Provision of wetland inventory and management recommendations concerning the Pleasant Lake marsh in the Town of La Grange, Walworth County, to the Pleasant Lake District.

TRANSPORTATION PLANNING DIVISION

DIVISION FUNCTIONS

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

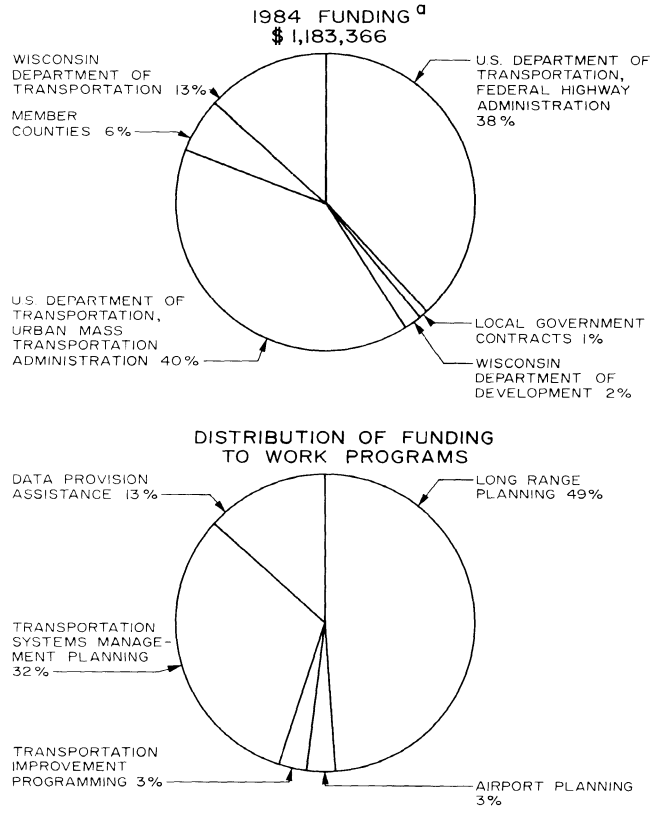
- What are the travel habits and patterns in the Region? How are these changing over time?
- What is the existing supply of transportation facilities and services?
- How can existing transportation facilities best be used and transportation demand managed to avoid new capital investment?
- How much travel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

In attempting to find sound answers to these and other questions, to formulate plans containing recommendations concerning these questions, and to monitor transportation system development activities in the Region, the Transportation Planning Division during 1984 conducted a number of activities in eight identifiable areas: data collection, collation, and development; long-range planning; transportation systems management planning and traffic engineering; transportation improvement programming; elderly and handicapped transportation planning; rail transportation planning; air transportation planning; and data provision and technical assistance.

As the official metropolitan planning organization for transportation planning in the Southeastern Wisconsin Region, the Commission not only conducts transportation planning work programs with its own staff and with consultants, but also oversees related subregional transportation planning by other governmental agencies. In some 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 activities bearing upon the Commission's overall work program are reported herein irrespective of whether they are directly conducted by the Commission.

Figure 21

TRANSPORTATION PLANNING DIVISION



[a] *Includes $118,840 for agencies other than SEWRPC to conduct subregional transportation planning activities identified in the 1984 SEWRPC Overall Work Program.*

Table 11

AUTOMOBILE AVAILABILITY

County	1963	1972	1983	1984
Kenosha	35,160	48,010	61,100	61,070
Milwaukee	304,120	397,690	449,850	443,960
Ozaukee	14,320	24,430	37,140	37,110
Racine	47,580	68,270	85,060	84,970
Walworth	19,440	27,430	35,460	36,160
Washington	16,240	27,030	43,380	43,630
Waukesha	61,900	102,910	157,610	157,820
Total	498,760	695,770	869,600	864,720

DATA COLLECTION, COLLATION, AND DEVELOPMENT

During 1984 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.

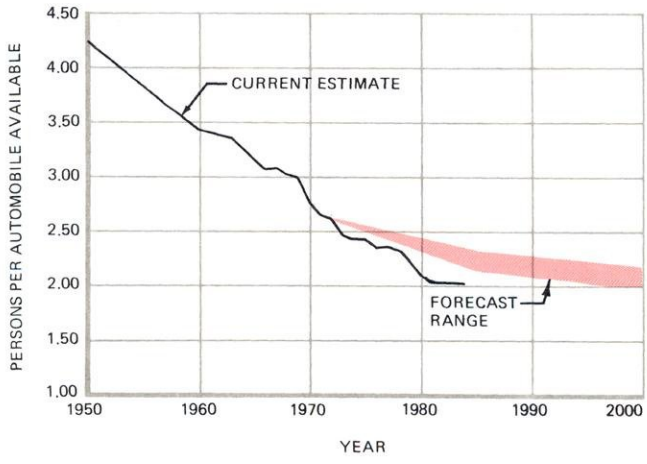
Automobile and Truck Availability

The number of automobiles available to residents of the Region in 1984 totaled 864,720. This represents a decrease of 4,880, or about 0.6 percent, from the 1983 level of 869,600 (see Table 11). Similar decreases occurred within the Region in 1975, 1977, and 1983, which were attributed in part to the then growing preference for the use of light-duty trucks as passenger vehicles. The decrease in 1984 may be attributed, in part, to economic conditions which saw high rates of unemployment throughout most of the Region, and in part to the increased preference for light trucks. As shown in the table, only Walworth, Washington, and Waukesha Counties registered slight gains in automobile availability during the year. The average annual rate of growth in automobile availability within the Region from 1963 through 1984 was 2.7 percent.

The number of persons per automobile within the Region was estimated to be 2.01 in 1984, lower than the estimated 2.03 in 1983, as shown in Figure 22. The estimated number of automobiles available within the Region in 1984 may be compared to the forecast range of automobile availability as developed under the long-range regional

Figure 22

PERSONS PER AUTOMOBILE



transportation system plan, as shown in Figure 23, which depicts the historical and forecast growth in automobile availability. The 1984 forecast automobile availability ranged from 830,200 under the adopted regional transportation system plan to 872,400 under the "no build" alternative. Thus, the 1984 regional automobile availability of 864,720 was about 1 percent lower than the "no build" forecast, and about 4 percent higher than the automobile availability envisioned under the adopted regional transportation system plan.

The number of motor trucks available in the Region increased during the year to a total of about 143,400, an increase of about 3,690, or

Table 12

TRUCK AVAILABILITY

County	1963	1972	1983	1984
Kenosha	4,860	7,040	12,460	12,910
Milwaukee	25,870	33,350	52,670	54,620
Ozaukee	2,290	3,290	6,180	6,320
Racine.	6,200	9,140	16,850	16,690
Walworth.	4,490	6,430	10,790	10,900
Washington	3,410	5,400	10,650	10,870
Waukesha.	8,280	15,060	30,110	31,090
Total	55,400	79,710	139,710	143,400

Figure 23

FORECAST RANGE OF AUTOMOBILE AVAILABILITY

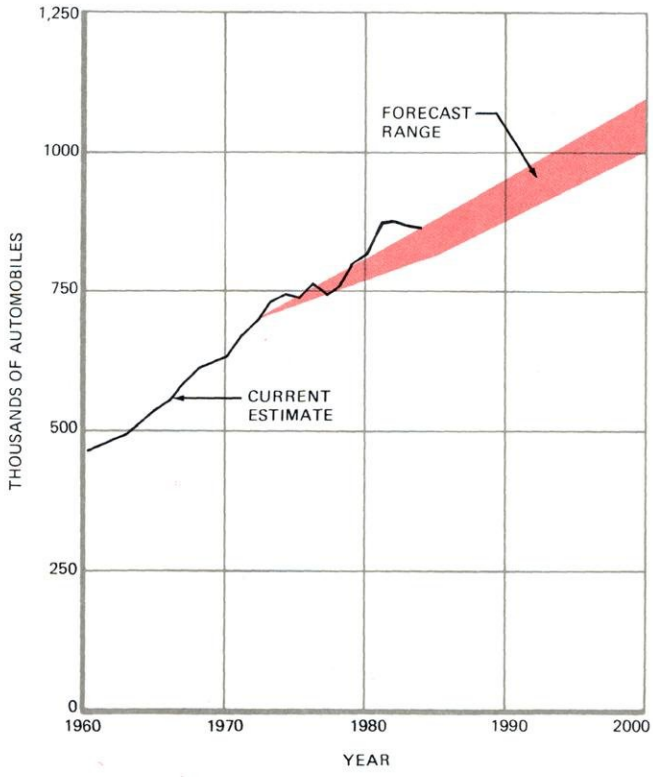
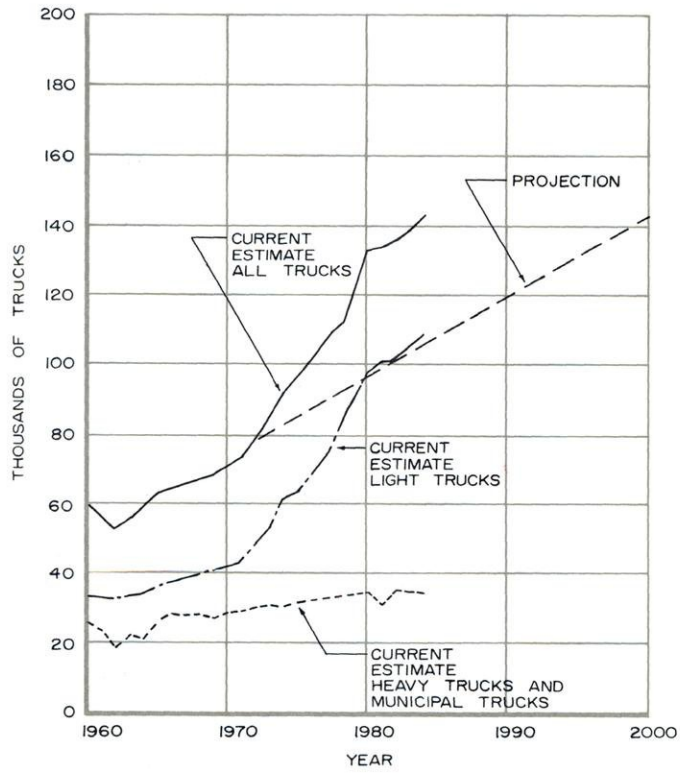


Figure 24

TRUCK AVAILABILITY



2.6 percent, over the 1983 level of 139,710 trucks (see Table 12). As shown in Figure 24, the increase in trucks over time has been confined almost entirely to an increase in light trucks, which now constitute about 76 percent of the total trucks available. Light trucks accounted for about 57 percent of all trucks in 1960, 60 percent of all trucks in 1970, and 74 percent of all trucks in 1980. The number of light trucks available in 1984 totaled about 108,830, showing an increase of 3,740, or about 3.6 percent, over the number of light trucks available in 1983. The number of heavy trucks

Table 13

PUBLIC TRANSIT RIDERS

Transit Operators by Area	1963	1972	1983	1984	Percent Change 1983-1984
Urbanized Areas					
Kenosha					
City of Kenosha	1,876,000	503,000	1,209,500	1,279,200	5.8
Milwaukee					
Milwaukee County	88,546,000	52,141,000	50,932,400	50,464,500	- 0.9
Waukesha County	--	--	339,300	338,100	- 0.4
City of Waukesha	451,000	227,000	269,200	372,400	38.3
Wisconsin Coach Lines, Inc.	165,000	153,000	115,800	104,700	- 9.6
Subtotal	90,013,000	52,521,000	51,656,700	51,279,700	- 0.7
Racine					
City of Racine	2,907,000	526,000	2,250,000	2,422,300	7.7
Urbanized Area Total	93,945,000	53,600,000	55,116,200	54,981,200	- 0.2
Nonurbanized Area					
City of Hartford	--	--	15,500	13,800	- 11.0
Total Region	93,945,000	53,600,000	55,131,700	54,995,000	- 0.2

and municipal trucks decreased slightly to 34,570 in 1984, a decrease of about 50 trucks, or about 0.1 percent, from the 1983 level of 34,620.

Public Transit Ridership

Publicly owned mass transit service is provided in the Region in the Kenosha, Racine, and Milwaukee urbanized areas, and in nonurbanized portions of the Region in the City of Hartford (see Table 13 and Figure 25). In the Kenosha urbanized area, ridership on the fixed route public transit system serving the City of Kenosha increased during 1984 (see Figure 26), reversing a short-term trend of decreasing ridership evident on the transit system since 1981. Ridership during the year approximated 1,279,200 revenue passengers, an increase of about 6 percent over the 1983 ridership level of about 1,209,500 revenue passengers. The number of bus miles operated in revenue service totaled about 696,600, a decrease of less than 1 percent from the 697,400 bus miles operated during 1983. Until 1981, transit ridership had increased on the Kenosha transit system every year since the public acquisition and operation of the system in 1971.

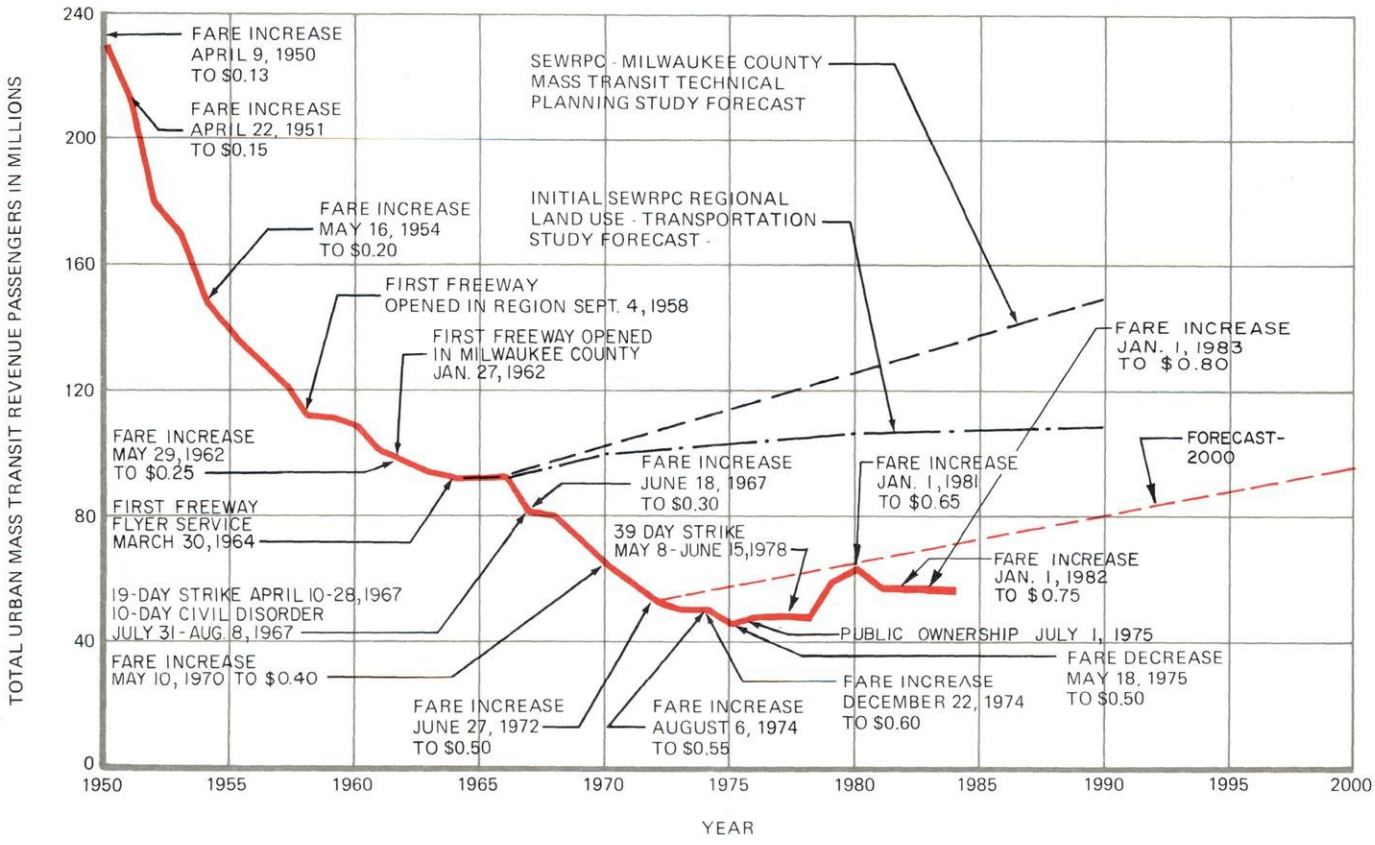
To assist in the public operation of the transit system, the Commission prepared, at the request of the City, a five-year transit development plan in 1976 for the years 1976-1980.[1] Many of the plan's recommendations regarding transit route layout and scheduling were implemented in the mid-1970's as ridership increased on the system. In 1984, the Commission completed work on another transit development plan for the City of Kenosha transit system for the period 1984-1988.[2]

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

[2] *See SEWRPC Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1988.*

Figure 25

HISTORICAL TREND IN MASS TRANSIT RIDERSHIP IN THE REGION



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

Virtually all of the routing changes recommended under the new plan were implemented by the transit system in late December 1984.

Ridership on the fixed route public transit system serving the City of Racine also increased during 1984. Public transit ridership during 1984 increased by about 8 percent over the 1983 level of approximately 2,250,000 revenue passengers to the 1984 level of about 2,422,300 revenue passengers (see Figure 27). The 1984 ridership represented a return to the peak ridership level experienced on the transit system in 1981. Ridership on the transit system had declined slightly during 1982 and 1983. No significant changes in service were made on the transit system during 1984. The number of bus miles operated in revenue service increased by about 6 percent during 1984—from about 1,163,400 bus miles in 1983 to about 1,229,100 bus miles in 1984.

Transit ridership declines on the City of Racine transit system during 1982 and 1983 broke a trend of increasing ridership which began in July 1975 with the public acquisition and operation of the formerly privately operated system. To guide the public acquisition of the system and its initial years of operation, the Commission prepared, at the request of the City of Racine, a transit development plan covering the years 1975 to 1979.[3] Nearly all of the plan recommendations for transit route layout, schedule, fare structure, and service levels were implemented in the first years of public operation. In 1984, the Commission completed

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

Figure 26

MASS TRANSIT RIDERSHIP
KENOSHA URBANIZED AREA

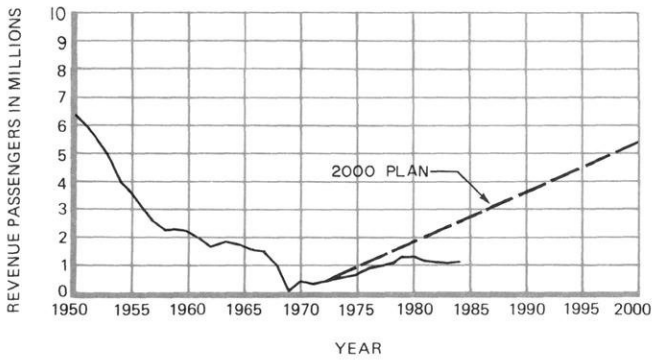
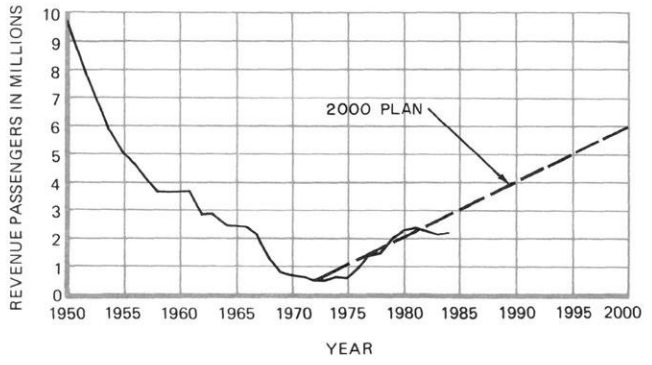


Figure 27

MASS TRANSIT RIDERSHIP
RACINE URBANIZED AREA



work on another transit development program for the City of Racine transit system for the period 1984-1988.[4]

In the Milwaukee urbanized area, public subsidized, fixed route transit service was provided during 1984 by the Milwaukee County Transit System, Waukesha County, and the City of Waukesha. In addition, fixed route transit service was provided without public subsidy by Wisconsin Coach Lines, Inc., a private transit operator, between the Milwaukee central business district and the Cities of Racine and Kenosha.

During 1984, the Milwaukee County Transit System made only minor changes in the transit system route structure, including the addition of a new bus route operating on weekends during the summer months between downtown Milwaukee and the UWM campus via Lincoln Memorial Drive, and serving Milwaukee lakefront recreational sites. The new route was the first scheduled bus route to serve the lakefront area. Also during 1984, the transit system experienced a decline in the number of students carried by the transit system. A policy decision by the Milwaukee Public School District resulted in approximately 1.5 million middle school student passenger trips being transferred from transit system routes to yellow school bus routes at the beginning of the 1984-1985 school year.

Groundbreaking for a new administrative headquarters for the transit system took place in March 1984. The Hillside Administrative Building is the first phase of a $25 million project that will also include the construction of a new major maintenance facility, all on a 15.4-acre triangular site facing W. Fond du Lac Avenue and bounded by W. Walnut Street and N. 17th Street. The new administrative offices are expected to be ready for occupancy in 1985.

During 1984, Waukesha County continued to provide publicly supported, fixed route bus service between Waukesha and Milwaukee Counties. Operated for Waukesha County on a contract basis by both the Milwaukee County Transit System and Wisconsin Coach Lines, Inc., bus service included the commuter-oriented bus service supported by the County since 1977 between the City of Milwaukee central business district and the Cities of Oconomowoc and Waukesha, and additional bus service provided over four bus routes initiated by the County during 1981. These four bus routes operated during 1984 were originally part of a total of seven new routes implemented by Waukesha County on April 1, 1981. The Commission identified these seven routes in 1980 at the request of Waukesha County and proposed that any service implemented should be on a trial basis.[5]

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[4] *See SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1988.*

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

The four routes which continued to be operated during all or part of 1984 included three routes providing modified rapid, or "freeway flyer," transit service between the Milwaukee central business district and the Village of Menomonee Falls, the City of Brookfield, and the City of Oconomowoc, and one route providing local bus service from Milwaukee County to the Brookfield Square Shopping Center. The freeway flyer bus routes serving the City of Oconomowoc and the Village of Menomonee Falls, and the local bus route serving the Brookfield Square Shopping Center, continued to be successful in attracting transit ridership during 1984. However, the elimination of the freeway flyer route serving the City of Brookfield was under consideration at the end of 1984 because of low ridership levels.

In the City of Waukesha, ridership on the fixed route bus system serving the City continued to exceed forecast ridership levels. Local bus service was reestablished in the City of Waukesha in August 1981, when the City placed into full-scale operation a new fixed route transit system. The community had previously been without public transit service since June 1976, when local bus service provided by a private transit operator was discontinued. The reinstitution of transit service was guided by a transit development plan prepared by the Regional Planning Commission in 1980 at the request of the City of Waukesha.[6] The new Waukesha transit system—routes, schedule, service levels, and fare structure—was implemented essentially as recommended by that plan. During calendar year 1984, the system carried approximately 372,400 revenue passengers, an increase of about 38 percent over the 269,200 revenue passengers carried on the system during 1983. After three years of operation, ridership on the Waukesha transit system had exceeded the ridership forecast of 264,000 revenue passengers for the fifth year of system operation as presented in the transit development program.

The number of bus miles operated in revenue service in the Milwaukee urbanized area during the year totaled about 21.0 million, a decrease of about 2 percent from the approximately 21.5 million bus miles operated during 1983. Total transit ridership within the Milwaukee urbanized area

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

Figure 28

MASS TRANSIT RIDERSHIP
MILWAUKEE URBANIZED AREA

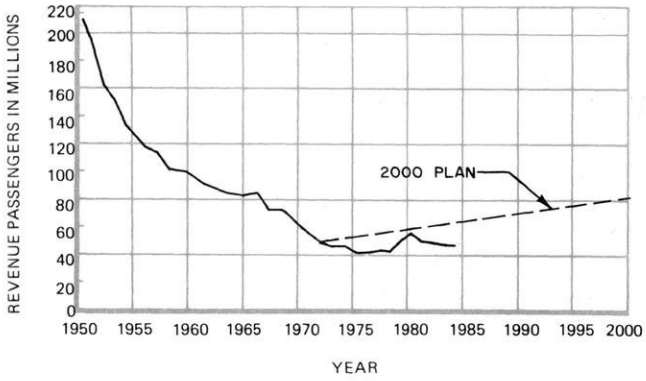
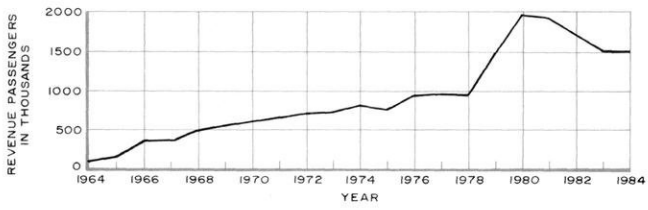


Figure 29

MILWAUKEE URBANIZED AREA
FREEWAY FLYER RIDERSHIP



remained relatively stable, decreasing by less than 1 percent from the 1983 ridership level of about 51.7 million revenue passengers to about 51.3 million revenue passengers in 1984 (see Figure 28). A portion of this ridership decrease may be attributed to the decline in student ridership experienced by the Milwaukee County Transit System during the year due to the change in policy of the Milwaukee Public Schools. Without this change in policy and the attendant loss of passengers, ridership on the transit system would have increased slightly for the first time since 1980.

During 1984, primary transit service in the Milwaukee urbanized area was provided by freeway flyer bus service operated by both Milwaukee and Waukesha Counties from 21 outlying parking terminals to the Milwaukee central business district. Ridership on the freeway flyer bus service totaled about 1,543,600 passengers in 1984, representing a decrease of less than 1 percent from the 1,550,000 passengers carried in 1983 (see Figure 29). This represents the smallest decrease in freeway flyer

ridership in the past four years and can be attributed to stable fares and service levels in 1984, as well as an improvement in the Milwaukee area economy.

Progress in providing the public transit stations recommended in the adopted year 2000 transportation plan is summarized on Map 15. During 1984, no new public transit stations were constructed to add to those which existed during 1983. Table 14 and Figure 30 provide data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 1984 for all transit stations by patrons of freeway flyer bus service and carpoolers. As shown in the table, transit service was provided at 12 of the 14 public transit/park-ride stations and at nine shopping center lots. The total of 23 freeway flyer terminal facilities is the same as that which existed during 1983. The same number of spaces were available at public transit/park-ride stations and at shopping center lots in 1984 as in 1983—3,260 and 1,175, respectively.

Of the 3,260 spaces available at the 14 public transit/park-ride stations, 1,670 spaces were used on an average weekday during the fourth quarter of 1984, representing a utilization rate of about 51 percent. Of the 1,175 spaces available at the nine shopping center lots, 506 spaces were utilized during the last quarter of 1984, representing a utilization rate of about 43 percent. In total, about 49 percent of all available parking spaces were used on an average weekday during the last quarter of 1984.

Publicly operated transit service was also provided in the nonurbanized portion of the Region during 1984 by the City of Hartford in Washington County, which operated a shared-ride taxicab service and a special commuter shuttle bus service. Operated by the City of Hartford Municipal Recreation Department, the taxicab service was initiated in 1981 and is available to the public seven days a week for travel primarily within the City of Hartford and environs. The special commuter bus service was initiated in late 1982 and is operated to shuttle passengers from Hartford and West Bend to and from a transit stop used by an intercity bus operator serving the Milwaukee urbanized area. The services are provided using funds available for capital and operating assistance under the federal Section 18 rural transportation assistance program. During 1984, the Hartford taxicab and shuttle bus services carried approximately 13,800 revenue passengers and operated about 21,300 vehicle miles of revenue service. These figures represent a decrease of about 11 percent from the 15,500 revenue passengers carried in 1983, and a decrease of about 9 percent from the 24,600 revenue vehicle miles operated during 1983.

Transit operating subsidies during 1984 totaled about $40.0 million, as compared with about $34.3 million during 1983, as shown in Table 15. The overall public operating subsidy per ride in the Kenosha urbanized area increased from about $1.00 in 1983 to about $1.15 in 1984 (see Figure 31). In the Racine urbanized area, the overall operating subsidy per ride increased from about $0.72 in 1983 to about $0.82 in 1984 (see Figure 32). In the Milwaukee urbanized area, the overall operating subsidy per ride increased from about $0.61 in 1983 to about $0.71 in 1984 (see Figure 33). By individual operator in the Milwaukee urbanized area, the per-ride subsidies in 1983 and 1984 were as follows: Milwaukee County Transit System, $0.58 and $0.67; Waukesha County, $1.48 and $1.55; and City of Waukesha, $2.31 and $1.93. The overall operating subsidy per ride for the taxicab and shuttle bus services operated by the City of Hartford increased markedly from about $2.55 per ride in 1983 to about $4.09 per ride in 1984 (see Figure 34).

Carpool Parking Facilities

During 1984, the Commission collected data on the use of available parking supply at carpool parking facilities within the Region. As shown in Table 16, 15 publicly owned carpool parking facilities were in operation at key freeway interchanges in the outlying areas of the Region in 1984. This number represents no change from the number of carpool parking facilities available in 1983, as no new facilities were placed into service during 1984. During the fourth quarter of 1984, about 418 of the total 1,160 parking spaces available were used on an average weekday (see Figure 35). This represents a utilization rate of 36 percent, and a decrease of 33 parked vehicles per average weekday from 1983 to 1984. The progress in providing the carpool parking lots recommended in the adopted year 2000 regional transportation plan is summarized on Map 16.

Regional Travel Origin-Destination Studies

In 1984, the Commission completed new sample surveys of the travel habits and patterns of resident households of the Region, and of riders on the Region's urban public transit systems. These

Map 15

PRIMARY TRANSIT SYSTEM PLAN FOR THE REGION: 2000

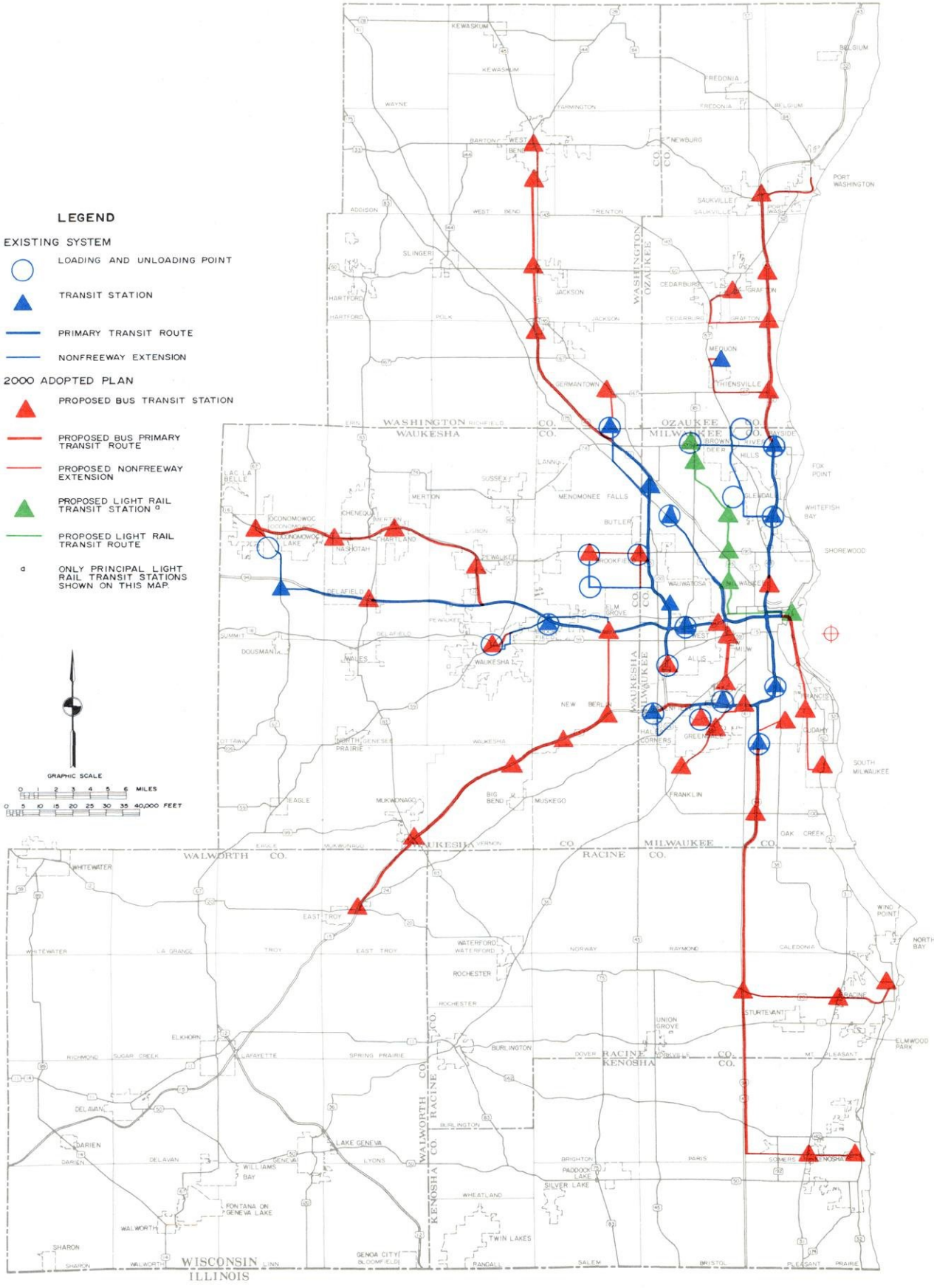


Table 14

USE OF PARKING AT FREEWAY FLYER TERMINALS

Location	Available Parking Spaces	Autos Parked on an Average Weekday—Fourth Quarter: 1984	Percent of Spaces Used
Public Transit Stations			
W. College Avenue (Milwaukee)	530	380	72
W. Watertown Plank Road (Wauwatosa)	200	157	79
North Shore (Glendale)	190	108	57
Brown Deer (River Hills)	250	157	63
Goerkes Corners (Brookfield)	250	115	46
Milwaukee Area Technical College (Mequon)[a]	200	13	7
W. Holt Avenue (Milwaukee)	240	93	39
Whitnall (Hales Corners)	360	280	78
Pilgrim Road (Menomonee Falls)	70	73	104
STH 67 and IH 94 (Summit)	80	36	45
State Fair Park (West Allis)	200	92	46
Timmerman Field (Milwaukee)	140	43	31
W. Loomis Road (Greenfield)	415	115	28
W. Good Hope Road	135	8[b]	6[b]
Subtotal	3,260	1,670	51
Shopping Center Lots			
Northland (Milwaukee)	100	26	26
Zayre-Kohls (West Allis)	250	133	53
Zayre (Brookfield)	200	95	48
Southridge (Greendale)	250	138	55
Northridge (Milwaukee)	100	37	37
Zayre (Brown Deer)	125	60	48
Ruby Isle (Brookfield)	50	9	18
Sentry (Brookfield)	50	8	16
Olympia (Oconomowoc)	50	--[c]	--[c]
Subtotal	1,175	506	43
Total	4,435	2,176	49

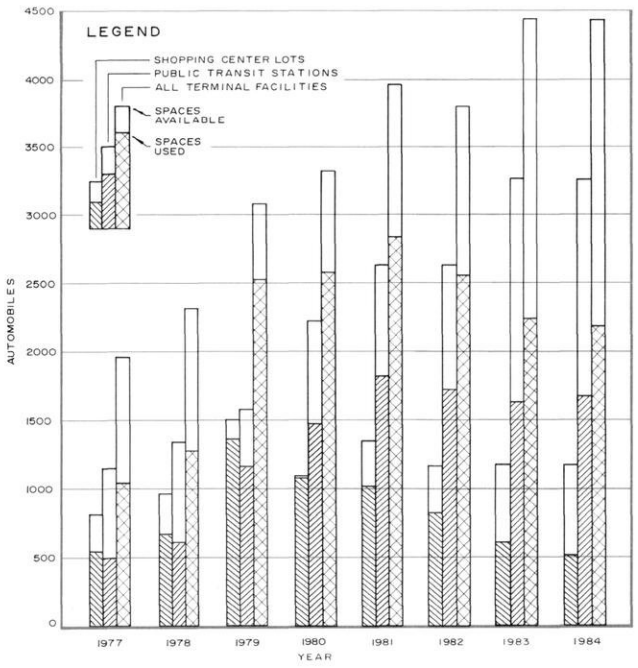
[a] *Public transit service to this station was terminated by the Ozaukee County Board of Supervisors on June 19, 1978. The number of autos parked represents use by carpoolers.*

[b] *Public transit service to this station was not provided during 1984. The number of autos parked represents use by carpoolers.*

[c] *Data not available.*

Figure 30

FREEWAY FLYER PARKING LOT USE



two surveys represent the first of the inventories needed to provide a sound basis for a comprehensive reevaluation of the long-range arterial street and highway system plan for the seven-county Southeastern Wisconsin Region. Together with a survey of travel by taxis and light-duty and heavy-duty trucks, and a survey of travel crossing the external boundaries of the Region, the household and transit rider travel surveys represent the third travel and transportation data collection effort by the Commission. The resulting data are used to better understand the travel habits and patterns within the Region, and to formulate and calibrate, and to validate and recalibrate, the Commission's mathematical travel simulation models.

First conducted in 1963 and updated in 1972, and now in 1984, the travel surveys allow the Commission to identify changes in travel habits and patterns over time, and to determine current travel demand. An understanding of such habits and patterns, and of attendant travel demand, is essential to any technically sound transportation system planning effort. A brief description of the two surveys undertaken in 1984 follows. These surveys, together with the surveys to be conducted in 1985, will provide a complete, albeit small, inventory of travel habits and patterns within the Region.

Household Travel Survey

The household travel survey, the most important and complex of all transportation planning surveys, obtained pertinent information on the socioeconomic characteristics of the resident households of the Region and on the personal travel characteristics of those households. Regional households were first separated by four geographic subareas—the Kenosha, Milwaukee, and Racine urbanized areas, and the remainder of the Region. Households were then contacted by telephone at random to determine household size, vehicle availability, and willingness to participate in the survey.

The survey collected the detailed travel information needed to develop an accurate picture of the travel habits and patterns of Region residents at now a third point in time. The data collected included pertinent socioeconomic information, such as the size of household; automobile availability; household income; and the age, sex, and work status of each household member. Travel data collected included the origin, destination, purpose, time, mode, and parking requirements for each trip undertaken on a specified weekday by a household member.

The information obtained from this survey will be used to relate trip frequencies, lengths, and purposes to household location, size, income, and auto availability, and thus will allow the Commission to develop an accurate description of the different types of households and their differing travel characteristics within the four geographic subareas of the Region. Reliable estimates of number of trips, trip lengths, and trip purposes, along with the total amount of travel and the types of vehicles used, can then be developed for each household in the seven-county Region. In addition, trip origins and destinations can be determined. These estimates can then be compared with the similar figures from the surveys conducted in 1963 and 1972 to document changes and trends in travel habits and patterns over time, and can be used to revalidate travel simulation models.

Mass Transit User Survey

The mass transit user survey was undertaken to document the amount and type of travel undertaken on the Region's five public urban transit systems. This survey is particularly important in the most heavily urbanized portions of the Region, where transit trips make up a larger proportion of

Table 15

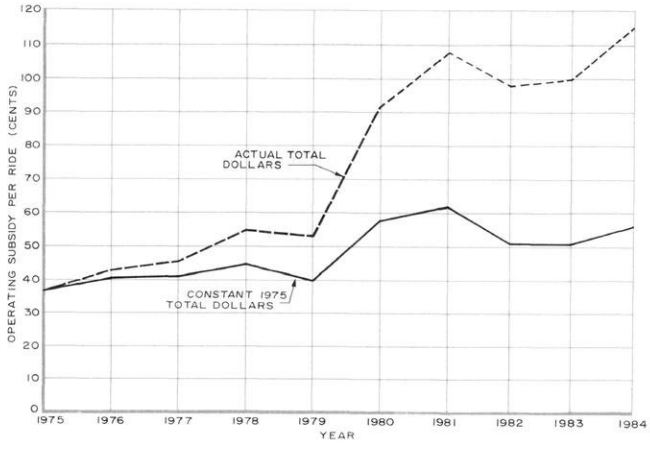
PUBLIC TRANSIT OPERATING SUBSIDIES WITHIN THE REGION: 1983-1984

Area	Public Transit Operating Assistance (dollars)							
	1983 Actual				1984 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Urbanized Areas								
Kenosha	677,515	482,918	49,584	1,210,017	816,173	649,388	374	1,465,935
Milwaukee								
Milwaukee County	7,445,495	18,165,332	4,656,775	30,267,602	7,445,495	23,152,335	4,674,599	35,272,429
Waukesha County	251,980	251,979	--	503,959	185,332	339,786	--	525,118
City of Waukesha	275,166	219,805	125,762	620,733	365,000	288,873	64,888	718,761
Subtotal	7,972,641	18,637,116	4,782,537	31,392,294	7,995,827	23,780,994	4,739,487	36,516,308
Racine	881,368	707,135	35,562	1,624,065	1,100,291	896,860	--	1,997,151
Subtotal	9,531,524	19,827,169	4,867,683	34,226,376	9,912,291	25,327,242	4,739,861	39,979,394
Nonurbanized Area								
Hartford	19,791	16,646	3,144	39,581	28,243	25,370	2,873	56,486
Total	9,551,315	19,843,815	4,870,827	34,265,957	9,940,534	25,352,612	4,742,734	40,035,880

Area	Operating Subsidy per Ride (cents)							
	1983 Actual				1984 Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
Urbanized Areas								
Kenosha	56	40	4	100	64	51	--	115
Milwaukee								
Milwaukee County	14	35	9	58	14	44	9	67
Waukesha County	74	74	--	148	55	100	--	155
City of Waukesha	102	82	47	231	98	78	17	193
Subtotal	16	36	9	61	16	46	9	71
Racine	39	31	2	72	45	37	--	82
Nonurbanized Area								
Hartford	128	107	20	255	205	184	21	409

Figure 31

MASS TRANSIT OPERATING SUBSIDIES IN THE KENOSHA URBANIZED AREA: 1975-1984



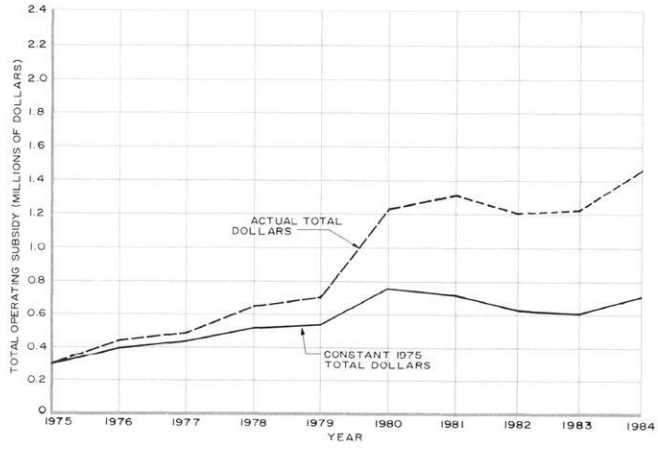


Figure 32

MASS TRANSIT OPERATING SUBSIDIES IN THE RACINE URBANIZED AREA: 1975-1984

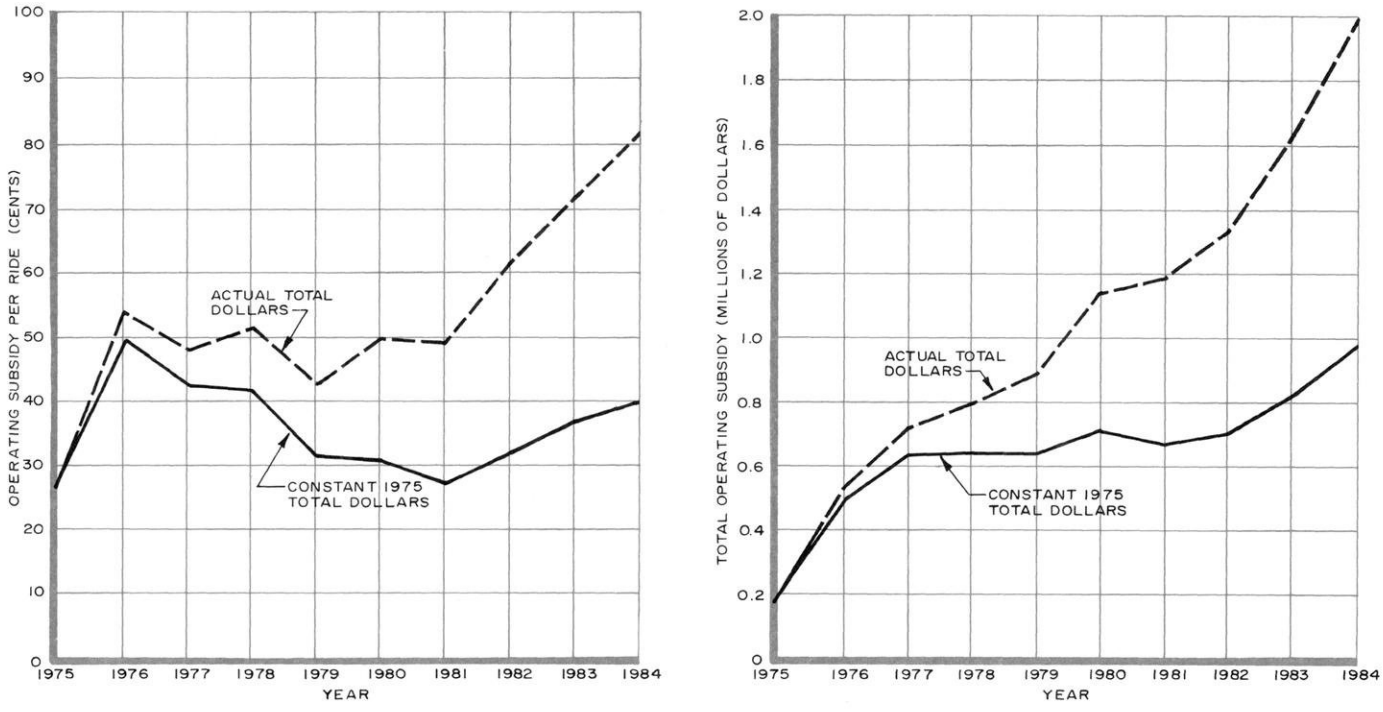


Figure 33

MASS TRANSIT OPERATING SUBSIDIES IN THE MILWAUKEE URBANIZED AREA: 1975-1984

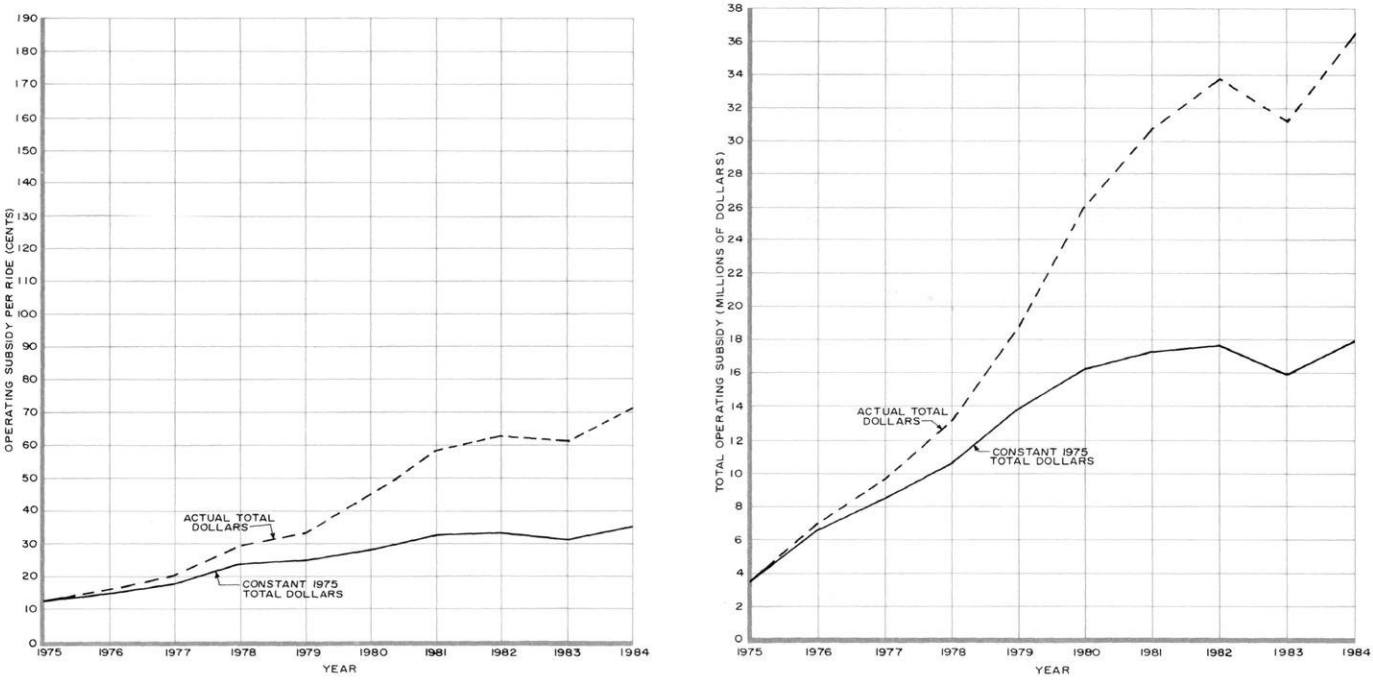


Figure 34

MASS TRANSIT OPERATING SUBSIDIES IN THE CITY OF HARTFORD: 1981-1984

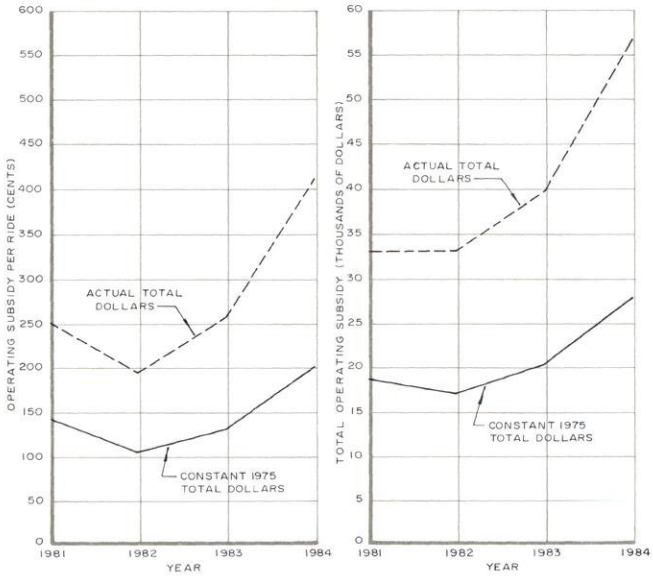
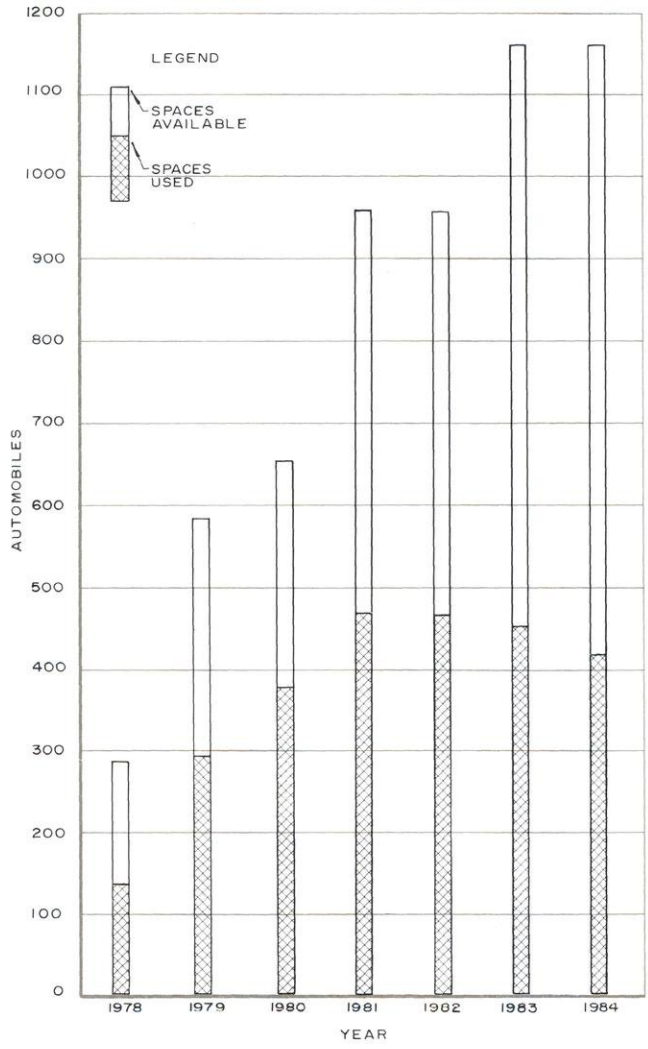


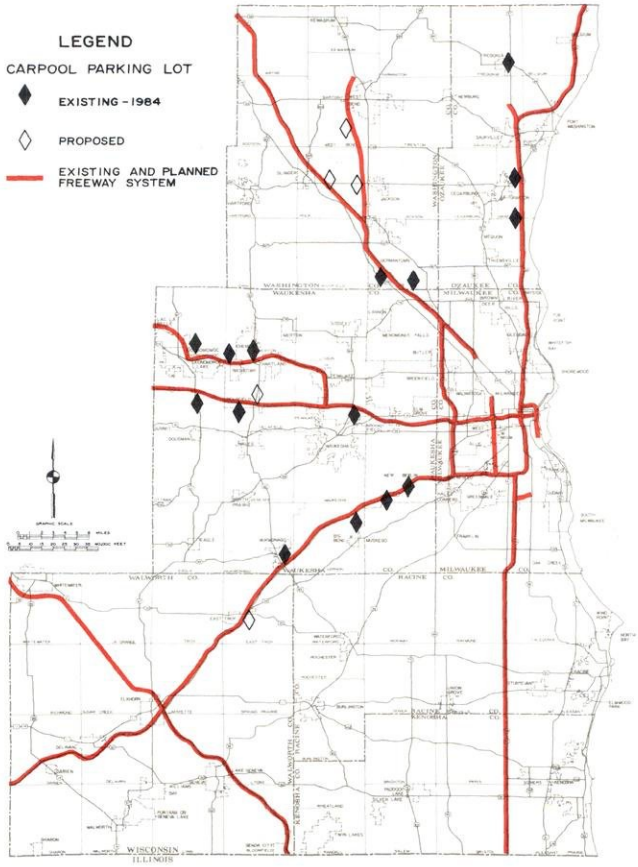
Figure 35

CARPOOL PARKING LOT USE



Map 16

CARPOOL PARKING LOTS



total trips. For example, while transit trips comprised approximately 4 percent of total trips regionwide in 1984, they comprised about 23 percent of the total trips made to the Milwaukee central business district. The mass transit user survey, along with the household travel survey, will provide definitive data on the type and volume, and origins and destinations, of transit trips undertaken in the urbanized areas of the Region. The mass transit user survey data will also indicate the factors underlying the choice of travel modes by residents of the Region.

This survey collected pertinent personal data on each transit rider, as well as information about the

Table 16

USE OF PARKING SUPPLY AT CARPOOL PARKING LOTS

Location	Available Parking Spaces	Autos Parked on an Average Weekday Fourth Quarter 1984	Percent of Spaces Used
Ozaukee County			
IH 43 and STH 57(Saukville)	100	15	15
IH 43 and CTH C(Grafton)	50	27	54
STH 57 and STH 84(Fredonia)	20	7	35
Washington County			
USH 41 and CTH Y(Germantown)	120	17	14
Waukesha County			
STH 16 and CTH C(Nashotah)	50	13	26
STH 16 and STH 83(Chenequa)	65	13	20
IH 94 and STH 67(Oconomowoc)	80	36	45
STH 16 and CTH P(Oconomowoc)	40	16	40
IH 94 and CTH CC(Delafield)	30	13	43
IH 94 and STH 164(Pewaukee)	80	51	64
STH 15 and STH 83(Mukwonago)	95	46	48
STH 15 and CTH F(Big Bend)	100	42	42
STH 15 and CTH Y(New Berlin)	60	26	43
STH 15 and CTH O(New Berlin)	200	23	12
USH 41 and Pilgrim Road(Menomonee Falls)	70	73	104
Total	1,160	418	36

transit trip being undertaken at the time of the survey. Personal data collected included the transit rider's home address, household size, age, sex, race, household income, and automobile availability. Trip data collected included the location at which the passenger boarded and deboarded the bus, the time of day of the transit trip, fare type and amount, trip purpose, and transfer information. These data are used to develop estimates of the length and frequency of transit trips in the Region, and of the level of utilization of the service provided by public transit carriers in the Region. Also, these data provide information about trip origins and destinations. These data can then be compared with the similar figures from 1963 and 1972 to determine long-term trends and changes in transit ridership, and can be used to revalidate travel simulation models.

Taken together, the household travel survey and the transit user survey will provide the Commission with an accurate picture of the tripmaking characteristics of households in the seven-county Region, and will provide the information on long-term trends and changes in the travel habits and patterns of residents required for proper planning of the regional transportation system.

Traffic Count Data

The Commission collates on a continuing basis traffic count data collected by other state, county, and local agencies during the year. These data are essential to monitoring changes in travel occurring in the Region and to calculating estimates of levels of, and trends in, vehicle miles of travel. During 1984 traffic volume data were collected from the Wisconsin Department of Transportation, the Milwaukee County Department of Public Works, and the City of Milwaukee, all of which operate regular traffic-counting programs. These data will be used in 1985 to develop estimates of vehicle miles of travel and to measure the level of congestion occurring on the arterial street and highway

system; to test the adequacy of the travel simulation models maintained by the Commission; and to provide the information needed to conduct other Commission studies such as the Milwaukee area rapid transit/freeway traffic management study. In addition, during the year the Commission staff conducted traffic counts for use in the analysis and planning activities related to the community assistance and traffic engineering services provided to municipalities within the Region. At selected sites, data were collected on vehicle classification, turning movements, peak-hour factors, and other traffic engineering considerations.

LONG-RANGE PLANNING

Long-Range Transportation System Plan

On June 1, 1978, the Commission adopted a long-range regional transportation system plan for the design year 2000. This plan is documented in SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume Two, Alternative and Recommended Plans. The plan extends and amends the regional transportation system plan for the design year 1990 adopted in 1966. The adopted plan is graphically summarized on Map 17. The long-range regional transportation system plan was prepared to accommodate the existing and probable future travel demand in the Region. Such demand is expected to increase by about 28 percent—from a total of about 4.5 million person trips per average weekday in 1972 to about 5.7 million such trips by the year 2000. Total vehicle miles of travel on an average weekday is anticipated to increase by more than 49 percent—from about 20.1 million to about 30.1 million. The design year 2000 regional transportation system plan seeks to provide the Region with a safe, efficient, and economical transportation system which can effectively serve the existing and probable future travel demand within the Region, which will meet the recommended regional transportation system development objectives, and which will serve and promote implementation of the adopted regional land use plan.

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

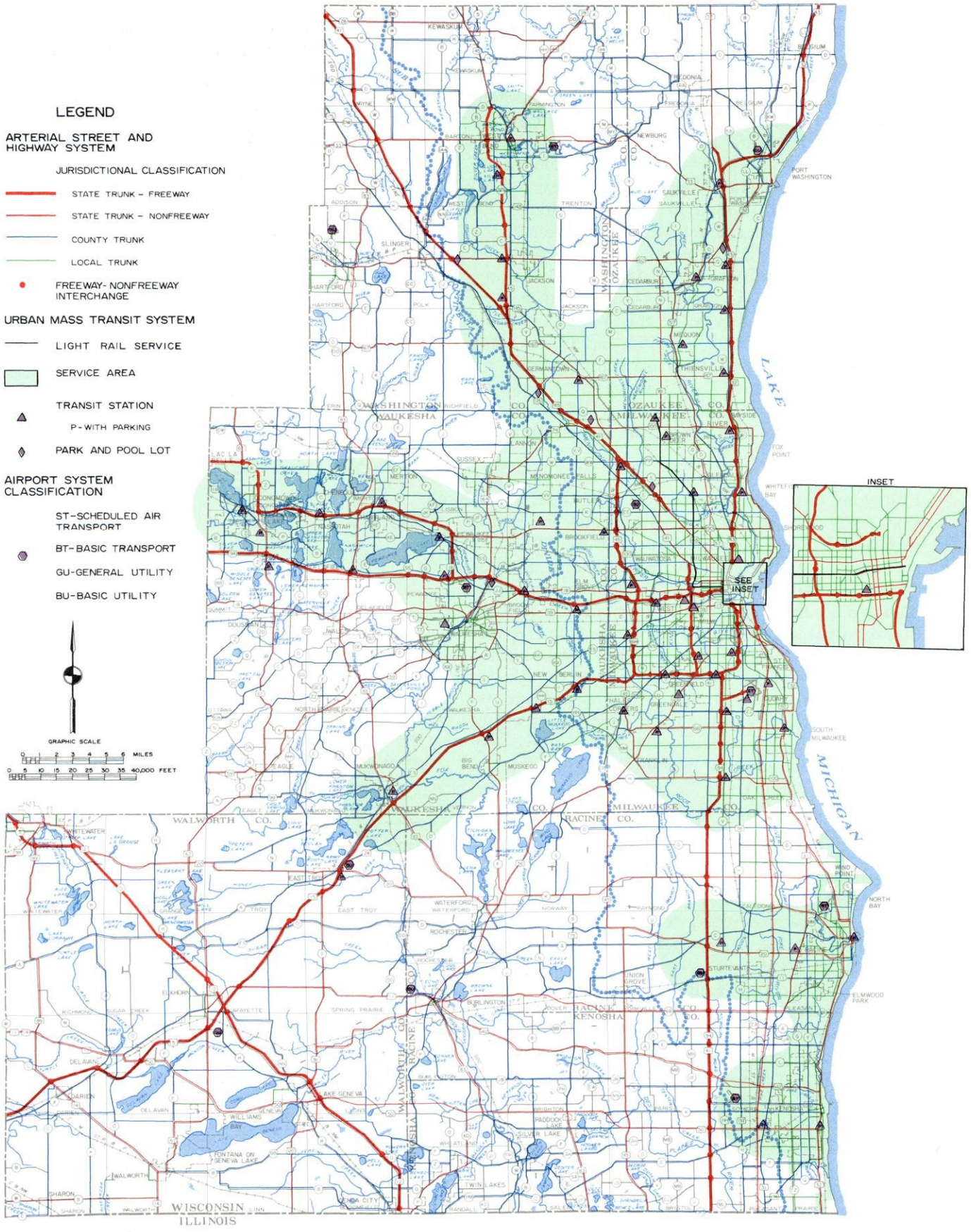
In 1981 the plan was amended to replace the Lake Freeway-South with a four-lane, limited access surface arterial. In 1983 the plan was further amended to remove the Milwaukee Downtown Loop Freeway and to add in its place a connection of the Park Freeway-East leg of that loop to N. Jefferson Street and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

Stadium Freeway-South Corridor

In 1983 the State Legislature removed the Stadium Freeway-South from its current terminus at W. National Avenue to the Airport Freeway (IH 894) from the Milwaukee County expressway system plan. In taking that action, the Legislature directed that a study be conducted to determine what surface street improvements should be made in the absence of the once-planned freeway and to determine whether or not S. 43rd Street in the freeway corridor should remain on the state trunk highway system. The Legislature also directed that a disposition plan be prepared for the cleared lands in the Stadium Freeway-South corridor which would not be required for transportation purposes.

The Legislature gave the responsibility for undertaking the required studies to the Wisconsin Department of Development. That Department, in turn, requested the Commission to carry out the arterial street improvement analyses required by the Legislature. During 1984, the Commission completed those studies with the aid of a Stadium Freeway-South Intergovernmental Advisory Committee appointed by the Department of Development. In addition, the study findings and recommendations were reviewed by the Commission's

REGIONAL TRANSPORTATION SYSTEM PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2000



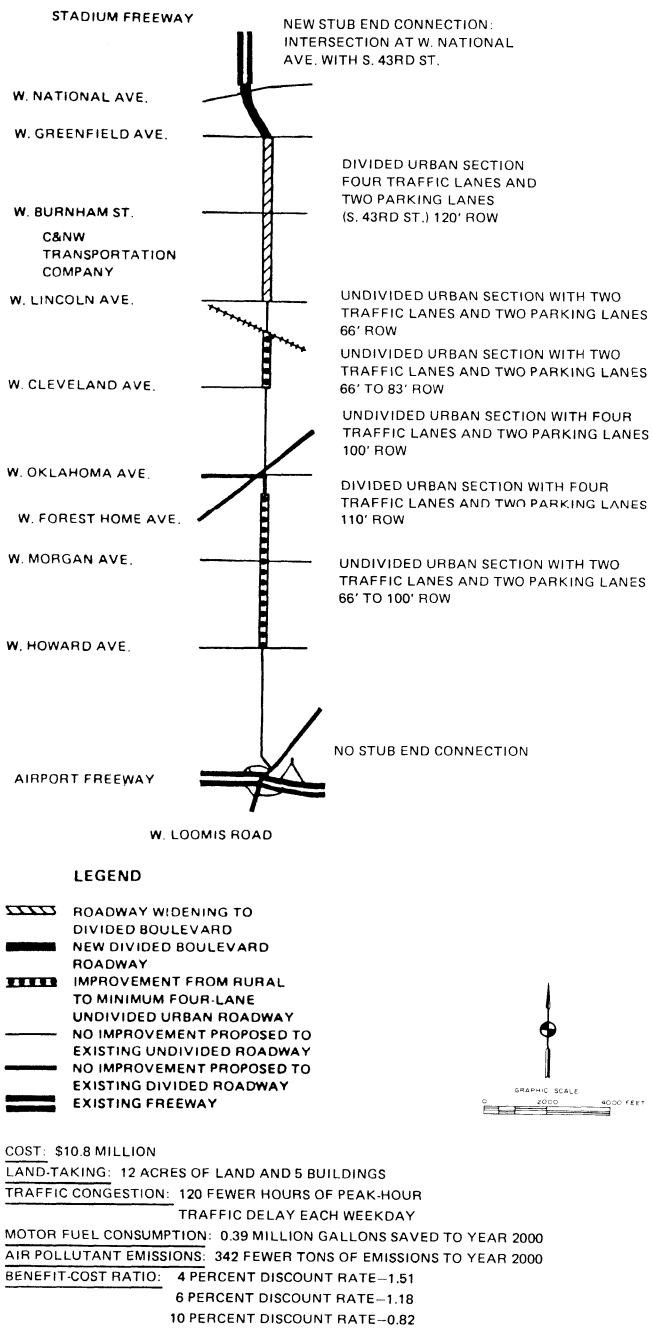
Intergovernmental Coordinating and Advisory Committee on Transportation System Planning and Programming for the Milwaukee Urbanized Area.

A wide range of surface street alternatives in the Stadium Freeway-South corridor were evaluated, from a "do nothing" alternative to an alternative which would provide a divided six-lane boulevard with full freeway interchange connections at W. National Avenue and the Airport Freeway. All alternatives were evaluated and compared with respect to cost; land acquisition requirements; the effect on traffic conditions on S. 43rd Street and on other arterial streets in south-central Milwaukee County; the ability to remove through traffic from local streets, particularly in the Village of West Milwaukee; the effect on traffic safety; and the implications for motor fuel consumption and air pollutant emissions. The findings of the study were presented at three public informational meetings held by the Department of Development in May 1984.

Following the informational meetings, the Commission staff and the advisory committees concerned proposed to the Department of Development a recommended plan for improvements along S. 43rd Street. As shown in Figure 36, the recommended plan would limit major improvements on S. 43rd Street to the segment north of W. Lincoln Avenue. A new freeway connection with an at-grade intersection between the Stadium Freeway-South, W. National Avenue, and S. 43rd Street would be provided under the plan. South 43rd Street would be changed from a one-way street to a two-way street between this new intersection and W. Burnham Avenue, and would be converted to a divided boulevard with four traffic lanes and two parking lanes, thus providing essentially the same capacity as provided today with the one-way pair of S. 43rd Street and S. 44th Street. From W. Burnham Avenue to W. Lincoln Avenue, S. 43rd Street would also be converted to a divided boulevard with four traffic lanes and two parking lanes, replacing an existing two-lane rural roadway. The S. 43rd Street ditch would be enclosed in a large conduit as a part of this improvement. The only improvement recommended south of W. Lincoln Avenue was the conversion of rural to minimum urban arterial cross-sections. The improvements recommended by the Commission staff and advisory committee did, however, include the reconstruction of the Chicago & North Western Railway bridge to accommodate two parking, or distress, lanes in addition to its existing two traffic lanes

Figure 36

COMMISSION STAFF-RECOMMENDED S. 43RD STREET IMPROVEMENT PLAN



COST: $10.8 MILLION
LAND-TAKING: 12 ACRES OF LAND AND 5 BUILDINGS
TRAFFIC CONGESTION: 120 FEWER HOURS OF PEAK-HOUR TRAFFIC DELAY EACH WEEKDAY
MOTOR FUEL CONSUMPTION: 0.39 MILLION GALLONS SAVED TO YEAR 2000
AIR POLLUTANT EMISSIONS: 342 FEWER TONS OF EMISSIONS TO YEAR 2000
BENEFIT-COST RATIO: 4 PERCENT DISCOUNT RATE—1.51
6 PERCENT DISCOUNT RATE—1.18
10 PERCENT DISCOUNT RATE—0.82

and to provide adequate vertical clearances; and the reconstruction of S. 43rd Street from the railway bridge to W. Cleveland Avenue and from approximately W. Euclid Avenue to W. Howard Avenue from two-lane, rural roadways to minimum, undivided urban roadways with two traffic lanes and two parking lanes.

The Commission analyses indicated that the recommended plan would have substantial benefits with modest cost and disruption. A difficult and poorly operating freeway stub end would be removed from the Milwaukee County freeway system. It would be replaced with a workable, at-grade intersection and a connecting boulevard roadway. This would reduce traffic congestion at the stub end and on arterials paralleling S. 43rd Street in south-central Milwaukee County, as well as remove much through traffic from local residential streets in the Village of West Milwaukee. The improvements would also assist in encouraging the redevelopment of the cleared freeway lands in the Village of West Milwaukee.

With respect to the jurisdictional responsibility for S. 43rd Street, the Commission staff and the advisory committees recommended that that street be removed from the state trunk highway system. This recommendation was based upon consideration of the existing and forecast traffic volumes on S. 43rd Street, trip lengths, degree of land access provided, types and intensities of land uses served, and proximity to parallel state trunk routes. It was recommended, however, that the State complete the construction of the recommended S. 43rd Street improvements prior to returning that street to the local governments concerned.

The foregoing recommendations were presented by the Commission to the Wisconsin Department of Development. That Department held a series of additional public hearings in August 1984. Those hearings were held both upon the recommended transportation improvements along S. 43rd Street and upon recommendations by others attendant to the disposition of the excess land previously acquired for construction of the freeway. Late in 1984, the Department of Development made its final recommendations concerning this matter to the Governor and to the State Legislature. With respect to the transportation improvements along S. 43rd Street as described above, the Department, based upon the testimony provided at the hearings, recommended three modifications. The first involved the proposed reconstruction of the Chicago & North Western Railway bridge across S. 43rd Street south of W. Lincoln Avenue. The Department recommended that this bridge remain unimproved, thereby accommodating only two traffic lanes and retaining the existing inadequate vertical clearances. A second modification involved the particular design of the recommended at-grade intersection of S. 43rd Street, W. National Avenue, and the existing Stadium Freeway-South. The Department recommended that Harnischfeger Avenue be reconstructed to provide a cul-de-sac at its northern end rather than at its southern end as previously proposed, and that access continue to be permitted to Harnischfeger Avenue from W. National Avenue. Finally, the Department recommended that the transition on S. 43rd Street between the four-lane divided boulevard section north of W. Lincoln Avenue and the four-lane undivided section south of W. Lincoln Avenue be accomplished south of W. Lincoln Avenue. At year's end, these final recommendations were under consideration by the Governor, the State Legislature, and the Commission.

Milwaukee Northwest Corridor Rapid Transit Study

In 1984, work began on the second phase of the Milwaukee northwest corridor rapid transit study. The first phase of this study had been completed in 1982 and documented in SEWRPC Planning Report No. 33, A Primary Transit System Plan for the Milwaukee Area. One of the primary recommendations of that study was for Milwaukee County to consider further the possible construction of a light rail transit line in the northwest corridor of Milwaukee County. At the request of the Milwaukee County Executive and Milwaukee County Board, the Commission prepared a prospectus setting forth the general scope of the necessary detailed facility planning and preliminary engineering work attendant to this matter. The second phase of the study would provide a comprehensive comparison of the benefits and costs of alternative light rail and express bus service in the Milwaukee northwest corridor, generally defined as extending from the Milwaukee central business district north and west to the Northridge Shopping Center. The study would also include a detailed assessment of the environmental, social, and economic development impacts attendant to the basic light rail and express bus alternatives.

The second phase study is being funded cooperatively by the federal Urban Mass Transportation Administration, the Wisconsin Department of Transportation, and Milwaukee County. On behalf of Milwaukee County, the Commission applied for and received in September 1983 a federal grant in the amount of $713,800, representing 80 percent of the cost of the study. Milwaukee County and the Wisconsin Department of Transportation are equally sharing the remaining 20 percent of the

cost, or $89,225 each. By late 1983 the Commission had completed a draft scope of work for the study. That scope of work was approved by the Milwaukee County Board of Supervisors in January 1984. At that time, the Board also reviewed and approved a time schedule for the study and a consultant selection procedure, including the establishment of a consultant selection panel. The Milwaukee County Executive also gave his approval to these matters.

Public informational meetings were then held to obtain public comment on the draft scope of the study, principally with respect to the transit alternatives and impacts proposed to be examined. Two meetings were held within the corridor, the first on May 1, 1984, at the Milwaukee County Courthouse Annex in downtown Milwaukee, and the second on May 2, 1984, at the Northwest Senior Citizens Center in the outer portion of the northwest corridor. In addition, a third meeting was requested and held on May 8, 1984, at Washington High School in the central portion of the northwest corridor.

To supplement the presentations made at these meetings, two publications were prepared by the Commission to explain the scope and purpose of the study. The first publication was a draft version of the study scoping report, and was widely distributed to public technical officials, elected officials, and neighborhood, community, and special interest groups. The draft scoping report set forth in detail the alternatives to be examined and the overall methodology for conducting the study. Copies of this report were also placed in each of the public libraries within the northwest corridor. The second publication was a brochure which introduced in summary form the study, its purpose, and its scope. The brochure was widely distributed and made available at the public meetings.

The public reaction to the proposed scope of work included comments and questions regarding the design of alternatives, the range of impacts to be assessed, the evaluation criteria to be used, and the proposed public involvement program. The concerns raised by residents of the corridor at these meetings were carefully considered by the study advisory committee, resulting in modifications to the scope of work of the study to address additional alternatives and alignments which needed to be examined in the study, important impacts which needed to be assessed, and the need for a thorough public involvement program to respond to the concerns of all corridor residents. The draft scoping report document was subsequently revised to include the changes recommended by the study advisory committee in response to the comments made and questions raised at the meetings. The revised scoping report was reviewed and approved by the Milwaukee County Mass Transit Committee at its meeting held on June 8, 1984, and was reviewed and approved by the Milwaukee County Board of Supervisors at its meeting held on June 19, 1984.

The final scoping report was subsequently submitted to, and approved by, the federal and state funding agencies concerned. Following completion of the scoping report, the consultant selection panel completed its review and ranking of interested and qualified consulting teams. Recommendations of the panel were subsequently submitted to, and approved by, the advisory committee on July 13, 1984; the Milwaukee Mass Transit Committee on July 16, 1984; and the Milwaukee County Board on July 19, 1984. In September 1984, an agreement for the consultant work with the firm of Parsons Brinckerhoff Quade & Douglas, Inc., was executed.

Following execution of the agreement, work was initiated on several study work elements, including the preparation of a detailed study design, the development of technical methodologies, and the initiation of public involvement activities. By the end of 1984, the study advisory committee had approved study documents completed by the consultant team which included the detailed study design and five technical memoranda documenting methodologies to be followed in the critical areas of operating and maintenance cost estimation, capital cost estimation, alternative evaluation, environmental impact analysis, and public involvement. The study advisory committee had also reviewed a technical memorandum prepared by the Commission staff documenting the Commission's travel simulation models and procedures which are to be utilized in preparing patronage forecasts for each alternative. By the end of 1984, the study design and six technical methodology memoranda had been transmitted to the federal Urban Mass Transportation Administration for its review and comment.

TRANSPORTATION SYSTEMS MANAGEMENT PLANNING

During 1984, the Commission completed a number of transportation systems management planning efforts. These included updated five-year transit development plans for the Racine and Kenosha areas; a short-range traffic engineering plan for E. Moreland Boulevard in the City of Waukesha; and a local street traffic management plan in the Village of Shorewood. In addition, work continued on a major freeway traffic management study for the Milwaukee area. Finally, the Commission continued to assist Milwaukee County during the year both in its short-range transit planning efforts and in its ride-share promotional program.

Transit System Plans and Programs— Racine and Kenosha Areas

During 1984 the Commission completed new short-range transit system development plans and programs for the Racine and Kenosha metropolitan areas. The Racine transit system plan is documented in SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1988. The Kenosha transit system plan is documented in SEWRPC Community Assistance Planning Report No. 101, Kenosha Area Transit System Plan and Program: 1984-1988. The new plans are intended to provide direction in the operation and development of the Racine and Kenosha transit systems for the remainder of the 1980's and promote implementation of the regional transportation system plan. The previous plans and programs had provided direction to these two cities during the mid-1970's after they had acquired the old, privately operated bus system serving each area, and served to implement the original regional transportation system plan adopted in 1966. The original development plans and programs for both areas were completed by the Commission in the mid-1970's. The majority of the recommendations of each of those plans have been successfully implemented over the last decade.

The Racine transit system plan and program was prepared under the direction of the Racine Public Transit Planning Advisory Committee. The Kenosha transit system plan and program was prepared under the direction of the Kenosha Public Transit Planning Advisory Committee. The memberships of both of these committees, which worked intensively during 1984 to formulate their recommendations, are set forth in Appendix B.

As the initial step in preparing the new plans, information on the basic characteristics of the Racine and Kenosha transit systems and of their respective service areas was assembled. This information included data describing the current operation of the transit system and the geographic concentrations of the population subgroups which historically have been transit-dependent, including the elderly, the handicapped, low-income individuals and families, racial and ethnic minorities, students, and households with very low automobile availability. In addition, the locations of major trip generators within each study area which either attracted, or had the potential to attract, a significant number of transit trips were identified. These included employment centers, shopping centers, educational institutions, public buildings, medical facilities, and certain recreational areas. For the Racine transit planning effort, the study area was defined as the Racine Urban Planning District, comprised of all that portion of Racine County lying east of IH 94 and including the City of Racine, the Villages of Elmwood Park, North Bay, Sturtevant, and Wind Point; and the Towns of Caledonia and Mt. Pleasant. For the Kenosha transit planning effort, the study area was defined as the Kenosha Urban Planning District, comprised of all that portion of Kenosha County lying east of IH 94 and including the City of Kenosha and the Towns of Pleasant Prairie and Somers. These study areas were the same as those used in the original transit planning efforts completed during the mid-1970's.

After assembling information on the basic characteristics of each transit system and transit service area, the current performance of each transit system was analyzed to determine the extent to which each system met the system service objectives and standards adopted by the advisory committees. The performance evaluation for both studies was conducted at two levels. At the first level, performance was assessed on a systemwide basis. This assessment not only examined the extent to which the existing transit system served the population and major land uses within each respective study area, but also compared the ridership and financial performance of each transit system with the ridership and financial perform-

ance of a comparable group of Wisconsin transit systems. At the second level of evaluation, the performance of each route in the existing transit systems was evaluated based upon its operating characteristics, ridership, and financial condition.

The analyses conducted for the Racine transit system indicated that major changes to the system to improve performance were not needed. However, it was noted that the performance of specific routes could be significantly improved by relatively modest changes in, and adjustments to, the system. In contrast, the analyses for the Kenosha transit system indicated that some changes in the overall route structure and service levels of the system, as well as to individual routes, should be considered to improve performance.

The data gathered from the inventories and analyses were used as the basis for the development and evaluation of alternative five-year transit system development plans for each transit system. The following sections discuss the alternative plans and the final recommended plan developed for each transit system.

Racine Transit System Alternative and Recommended Transit Development Plans

Four basic alternative transit system development plans were evaluated for the Racine transit system:

1. A "status quo" alternative, under which no changes would be made to the Racine transit system as operated at the end of 1983.

2. A minimum improvement alternative, under which only a limited number of operational improvements would be made to the Racine system, primarily involving the routes exhibiting the lowest performance levels.

3. A moderate improvement alternative, under which a moderate number of operational improvements would be made to the Racine system involving changes in routing and service levels.

4. A maximum improvement alternative, under which a substantial number of operational improvements would be made to the Racine system, including extension of service hours into the late evening of each weekday.

The four alternative plans were evaluated using the adopted transit service objectives and the same key standards and associated performance measures used in the systemwide evaluation of the existing transit system. Because of concern over substantially increasing the public funding requirement for the transit system during a period when federal subsidies for operating assistance may decline, the advisory committee for the Racine study recommended implementation of the moderate service improvement alternative over the planning period.

The recommended plan for the Racine transit system calls for a moderate number of changes in the existing route structure of the system. The recommended route structure and service area for the transit system are shown on Map 18. Foremost among the proposed routing changes are the restructuring of Route 10 to eliminate unproductive route segments; the elimination of Routes 11 and 12 as separate routes; the extension of Route 1 into the Town of Caledonia to replace some service now provided by Route 10; the extension of Route 7 to the Amtrak station in the Village of Sturtevant to replace service now provided by Route 11; and the rerouting and extension of Routes 3 and 6 into the Town of Mt. Pleasant to replace service now provided by Route 12. These actions should improve transit service by reducing or eliminating the transfer and associated wait time required of current passengers on Routes 10, 11, and 12.

To compensate for routing adjustments recommended for Routes 3 and 6, it was recommended that adjustments be made to Routes 2, 4, and 8. These adjustments would be necessary to maintain service to major traffic generators and residential areas presently served by Routes 3 and 6. It was also recommended that the service hours of Route 10 be increased to be consistent with those of Route 1 and the other routes of the transit system, primarily by the addition of service on weekdays during the middle of the day and on Saturdays during the early morning and late afternoon periods of the day. Finally, special routing was recommended on Route 3 to provide service to students attending William Horlick High School, and on Route 8 to provide service to students attending McKinley Junior High School.

Under the recommended plan, several capital improvement projects would be undertaken between 1984 and 1988. The most significant

would be the replacement or rehabilitation of the primary vehicle fleet of the Racine transit system, consisting of the 25 GMC "new look" diesel transit buses purchased by the City of Racine in 1976. It was recommended that the City undertake a combined program of new bus purchase and old bus rehabilitation as the buses reach their maximum service life between 1988 and 1990. Under the recommended program, the City would purchase nine new advance design transit buses, similar to those acquired by the City in 1982, for delivery some time in the second half of 1986. The City would also rehabilitate five new look buses in the existing vehicle fleet in 1986, 1987, and 1988—a total of 15 buses during the planning period. The remaining 10 new look buses would be rehabilitated in 1989 and 1990 if in a suitable condition for rehabilitation. If the City rehabilitates all 25 new look buses, purchases nine new buses, and sells the two old mini-buses in the existing fleet, the fleet size of the transit system would be increased from 39 to 42 buses. To accommodate this increase and to maintain maximum flexibility in the use of bus maintenance and servicing areas, the plan recommends that the existing bus storage building be expanded to provide for eight additional bus storage berths.

Finally, new operating equipment is also recommended for this transit system, including new fareboxes and mobile radios for all new and rehabilitated buses, 15 new passenger waiting shelters, and a new automobile for the transit system supervisor. The total cost of implementing the recommended capital improvement projects is estimated at $3.18 million over the five-year planning and programming period, expressed in constant 1983 dollars.

The recommended plan also calls for the City to continue to make special efforts to provide transportation services that can be effectively used by handicapped persons. While the City's public transportation program was found to be in compliance with an existing federal regulation regarding public transportation for handicapped persons, several alternatives were examined in the study to determine how the City could comply with proposed new federal regulations. It was recommended that the City continue its current contract arrangement with Racine County to provide specialized transportation service through a countywide program in order to meet its obligation to provide public transportation to handicapped persons.

At year's end, the report documenting the plan and program had been forwarded to the Mayor and Common Council of the City of Racine for adoption.

Kenosha Transit System Alternative and Recommended Transit Development Plan

Four basic alternative transit system development plans were evaluated for the Kenosha transit system.

1. A "status quo" alternative, under which no changes would be made to the transit system as operated at the end of 1982.

2. A minimum level of service alternative, under which a substantial reduction in the frequency of service would be combined with a limited number of routing changes.

3. A moderate level of service alternative, under which a moderate reduction in the frequency of service would be combined with a significant number of routing changes.

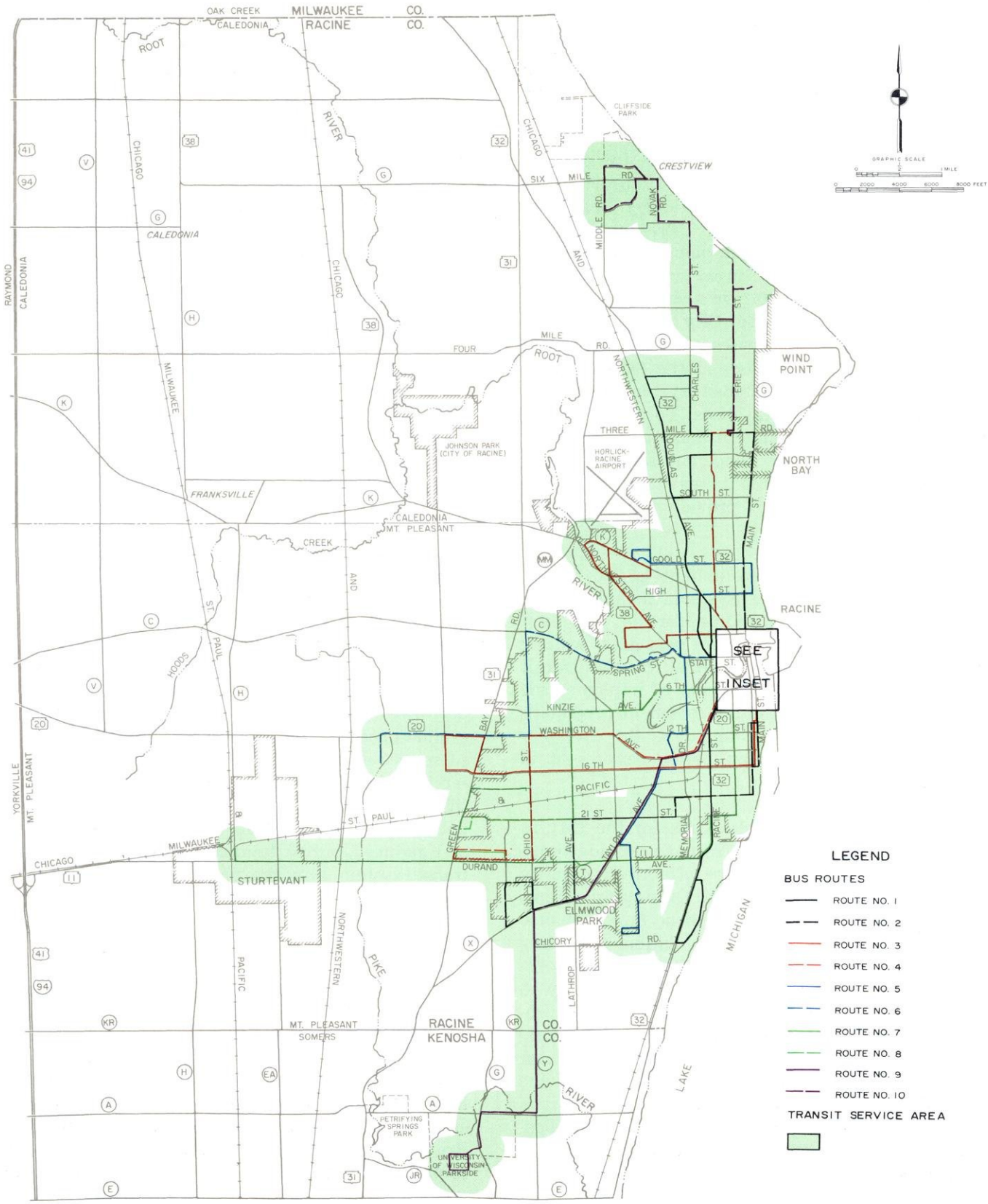
4. A maximum level of service alternative, under which little or no reduction in the existing frequency of service would be combined with extensive routing changes.

The four alternative transit system plans were evaluated using the adopted transit service objectives and the same key standards and associated performance measures used in the systemwide evaluation of the existing transit system. The transit service alternative proposing a moderate level of service, the more cost-effective of these alternatives, was believed to strike the best balance between the desired transit system improvements and reduced public funding requirements for the transit system over the planning period, and was, accordingly, recommended for adoption and implementation by the advisory committee for the Kenosha study.

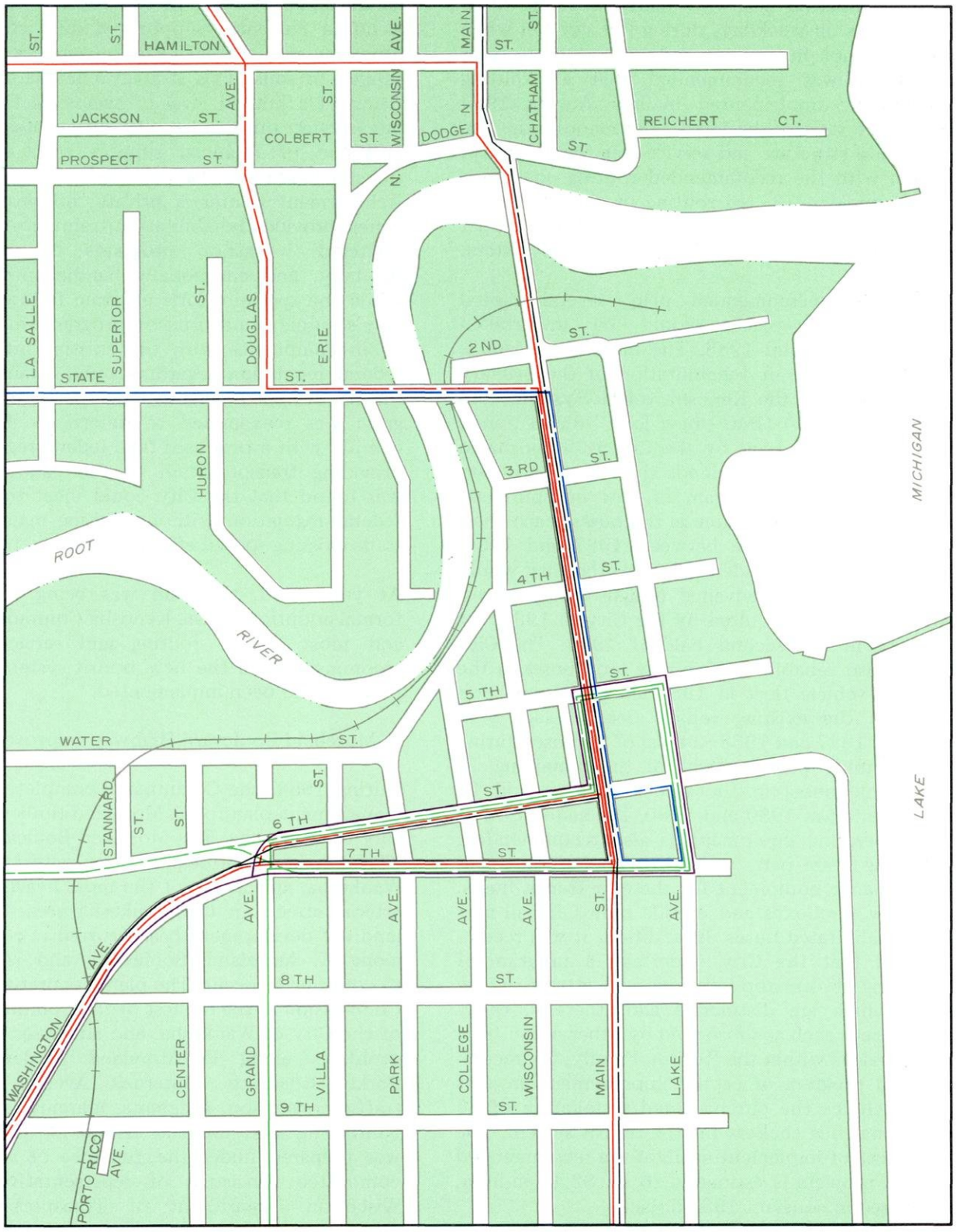
The recommended plan for the Kenosha transit system calls for a moderate number of changes to the routes of the existing system. Foremost among the proposed changes is the elimination of Route 6 as presently operated; the division of the existing Route 2 into two separate routes, with the southern half of the old Route 2 becoming the new Route 6; and the addition of a new, seventh route to provide additional transit service to major traffic

Map 18

RECOMMENDED ROUTE STRUCTURE FOR THE BELLE URBAN SYSTEM



Map 18 (continued)



INSET GRAPHIC SCALE

0 400 800 FEET

generators on the north side of the City. The recommended plan also includes changes in the frequency of service for all routes in the system, with peak-period headways increased from 30 to 60 minutes on weekdays during the summer when school is not in session, and on Saturdays year round. It was recommended that all routing changes be implemented in late August 1984 before the start of the 1984-1985 school year. The new route structure and service area for the transit system with the recommended routing changes is shown on Map 19. No routing or service changes were recommended for the peak-hour tripper service presently operated by the transit system.

Under the recommended plan, several capital improvement projects would be undertaken between 1984 and 1988. The most significant is the replacement or rehabilitation of the primary vehicle fleet of the Kenosha transit system, consisting of the 24 GMC "new look" diesel transit buses purchased new by the City of Kenosha in 1975. The plan recommends that the City undertake a combined program of new bus purchase and old bus rehabilitation as the buses reach their maximum service life between 1987 and 1990. Under the recommended program, the City would purchase six new advance design transit buses, similar to those acquired by the City in 1981, for delivery in the second half of 1986. The City would also rehabilitate five new look buses in the existing vehicle fleet in 1986 and four new look buses in the existing vehicle fleet in each year between 1987 and 1988—a total of 13 buses during the planning period. Eight of the remaining 11 new look buses in the vehicle fleet would be rehabilitated in 1989 and 1990. The acquisition of new operating equipment is also recommended, including spare parts and miscellaneous tools and maintenance equipment for the new transit buses, and new fareboxes and mobile radios for all new and rehabilitated buses. In addition, it was recommended that the City undertake a program of re-signing all bus stop locations with attractive new signs which are distinctive and, thereby, easily recognized, such as those used by other urban transit operators within the Region. Finally, the recommended program of capital improvement projects also includes the purchase and installation of 15 additional bus shelters on the transit system. The total cost of implementing all of the recommended capital projects is estimated to be $2.40 million, expressed in constant 1983 dollars.

The recommended plan also calls for the City to continue to make special efforts to provide transportation service that can be effectively used by handicapped persons. In this respect, the City of Kenosha currently supports a dual strategy for providing special transportation services for handicapped persons. This strategy consists of the provision of a limited level of accessible fixed route bus service on regular city bus routes, and the provision of financial support to a specialized transportation service provided by the Kenosha Achievement Center—a private, nonprofit agency which provides rehabilitation/training services and sheltered workshop programs for physically, mentally, and emotionally handicapped persons. While the special efforts program followed by the City's public transportation program was found to be in compliance with the existing interim final federal regulation regarding public transportation for handicapped persons, the special efforts program was reexamined to determine if it could comply with a proposed final federal regulation on providing transportation to the handicapped. It was found that the City could meet the pending federal regulation without making major changes to its existing special efforts program.

At year's end, the plan was being readied for formal adoption by the Kenosha Common Council, and most of the routing and service changes recommended in the new transit system plan and program had been implemented.

E. Moreland Boulevard Highway Improvement Plan

During 1984, the Commission completed a traffic management plan for E. Moreland Boulevard in the City of Waukesha. East Moreland Boulevard carries STH 18, is the principal entrance to the City of Waukesha, and is one of the most heavily traveled arterial streets in the Waukesha area. Significant land use development has occurred in recent years along E. Moreland Boulevard, and is expected to continue to occur. The plan was prepared by the Commission at the request of the Common Council of the City of Waukesha, and addresses the traffic problems along E. Moreland Boulevard from Barker Road to Whiterock Avenue, including traffic congestion, accidents, marginal access, and conflicting land use and traffic needs. The plan was prepared under the guidance of an advisory committee consisting of representatives of the Wisconsin Department of Transportation, the

Waukesha County Highway and Transportation Committee, and the City of Waukesha Departments of Public Works and Planning.

The plan, which was documented in SEWRPC Community Assistance Planning Report No. 107, East Moreland Boulevard Short-Range and Long-Range Highway Improvement Plan, City of Waukesha, Waukesha County, Wisconsin, contains both a short-range and a long-range element. The short-range element addresses existing traffic conflict and accident problems with relatively low-cost traffic engineering measures which can be implemented very quickly. The long-range element recommends more costly roadway improvements which would be necessary to fully resolve existing problems and serve future traffic volumes efficiently and safely. Specifically, the short-range plan recommends that a new access road to the Westown Theater be constructed between the Marine Bank and Target Department Store, and that the existing road be vacated; that pavement marking guidelines and channelization be provided at the Springdale Road intersection to reduce vehicle conflicts and improve driver sight distance; that the Longview Drive intersection with Springdale Road and W. Moreland Boulevard be vacated; that a new median opening be constructed opposite the east intersection of Longview Drive with E. Moreland Boulevard; that the existing Westbrook Shopping Center driveways on E. Moreland Boulevard be vacated and replaced by a new driveway at the Main Street intersection; that street lighting be improved between Springdale Road and E. Main Street; that signal changes and channelization be implemented at the CTH A intersection to reduce vehicle conflicts; and that street lighting along E. Moreland Boulevard be improved in the vicinity of Manhattan Drive.

Under the long-range plan, it is recommended that E. Moreland Boulevard from Barker Road to CTH A be reconstructed to six lanes, and that Barker Road be reconstructed to four lanes from its intersection with E. Moreland Boulevard to W. North Avenue. It is further recommended that roadway extensions from E. Moreland Boulevard to Main Street and from CTH JJ to Abbott Drive be constructed to accommodate development in these areas, and that street lighting all along E. Moreland Boulevard be improved.

At year's end, the E. Moreland Boulevard plan had been submitted to the City of Waukesha, Waukesha County, and the Wisconsin Department of Transportation for consideration and implementation. The Wisconsin Department of Transportation determined that it would proceed as soon as possible with the recommended relatively low-cost, short-range improvements, programming some of the improvements for 1985 (see Map 20).

Village of Shorewood Traffic Management Plan

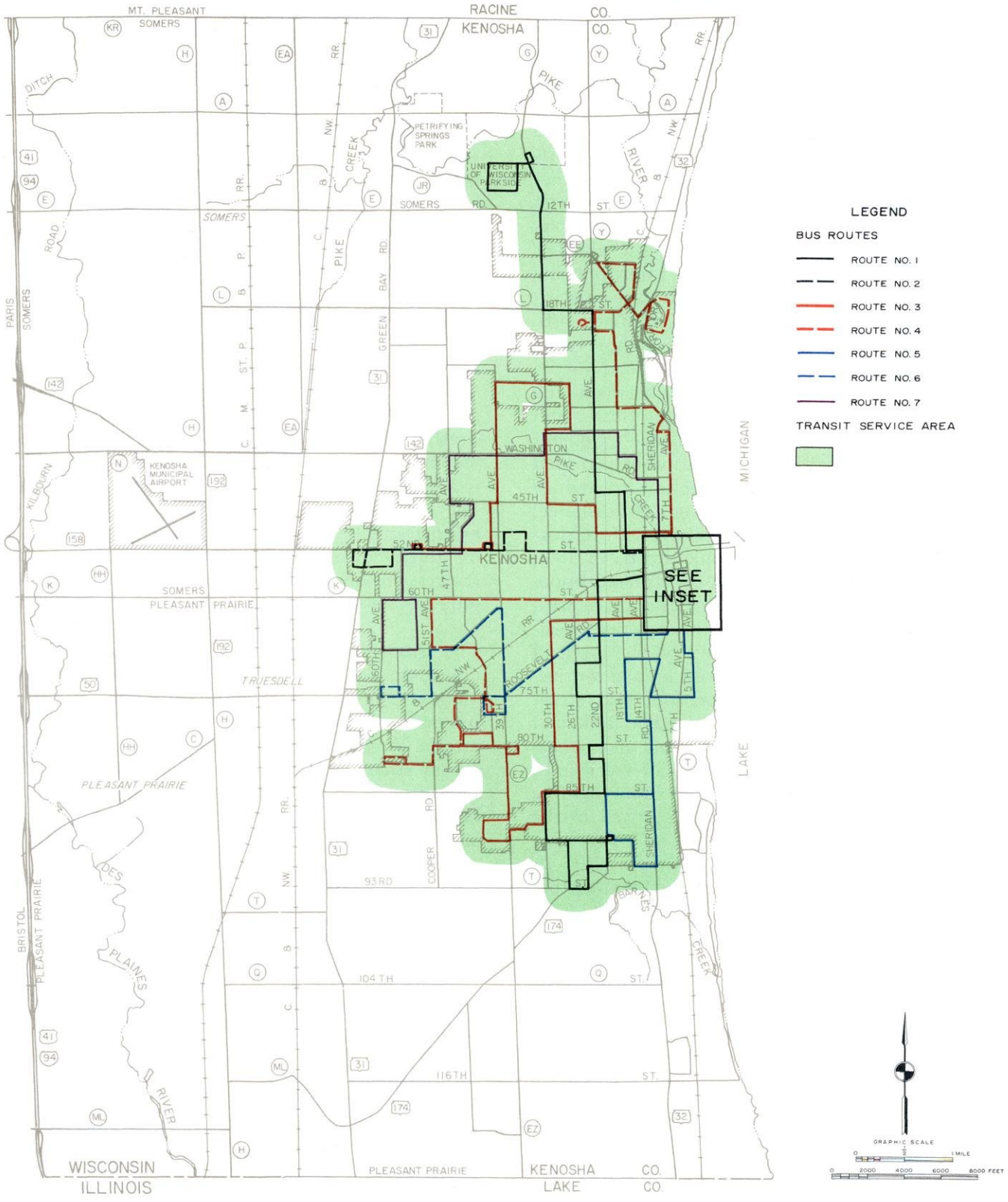
During 1984, the Commission completed a study designed to address concern of citizens and officials in the Village of Shorewood over the high volume of through traffic on nonarterial streets in residential neighborhoods of the Village. An advisory task force consisting of concerned citizens was created by the Village to assist the Commission in the conduct of the study, the findings and recommendations of which are set forth in SEWRPC Community Assistance Planning Report No. 114, Village of Shorewood Comprehensive Traffic Plan. The purpose of the study was to recommend traffic control measures which would reduce traffic volumes on residential streets while not seriously degrading the level of service on arterial streets in the Village, and to provide a set of traffic control implementation criteria to assist the responsible public officials in addressing future requests for traffic control devices and regulations.

The study: 1) identified the existing arterial, collector, and land access street systems in the Village; 2) inventoried the physical characteristics, operating conditions, and traffic volumes on the arterial streets and on selected collector and land access streets in the Village; 3) developed traffic management control criteria to help assess the efficiency of, and identify traffic problems on, the street system of the Village; 4) designed and evaluated a broad set of alternative traffic control measures to solve the identified traffic problems; 5) recommended a set of coordinated traffic control measures judged to best solve the identified problems; and 6) recommended priorities for the implementation of the recommended traffic control measures.

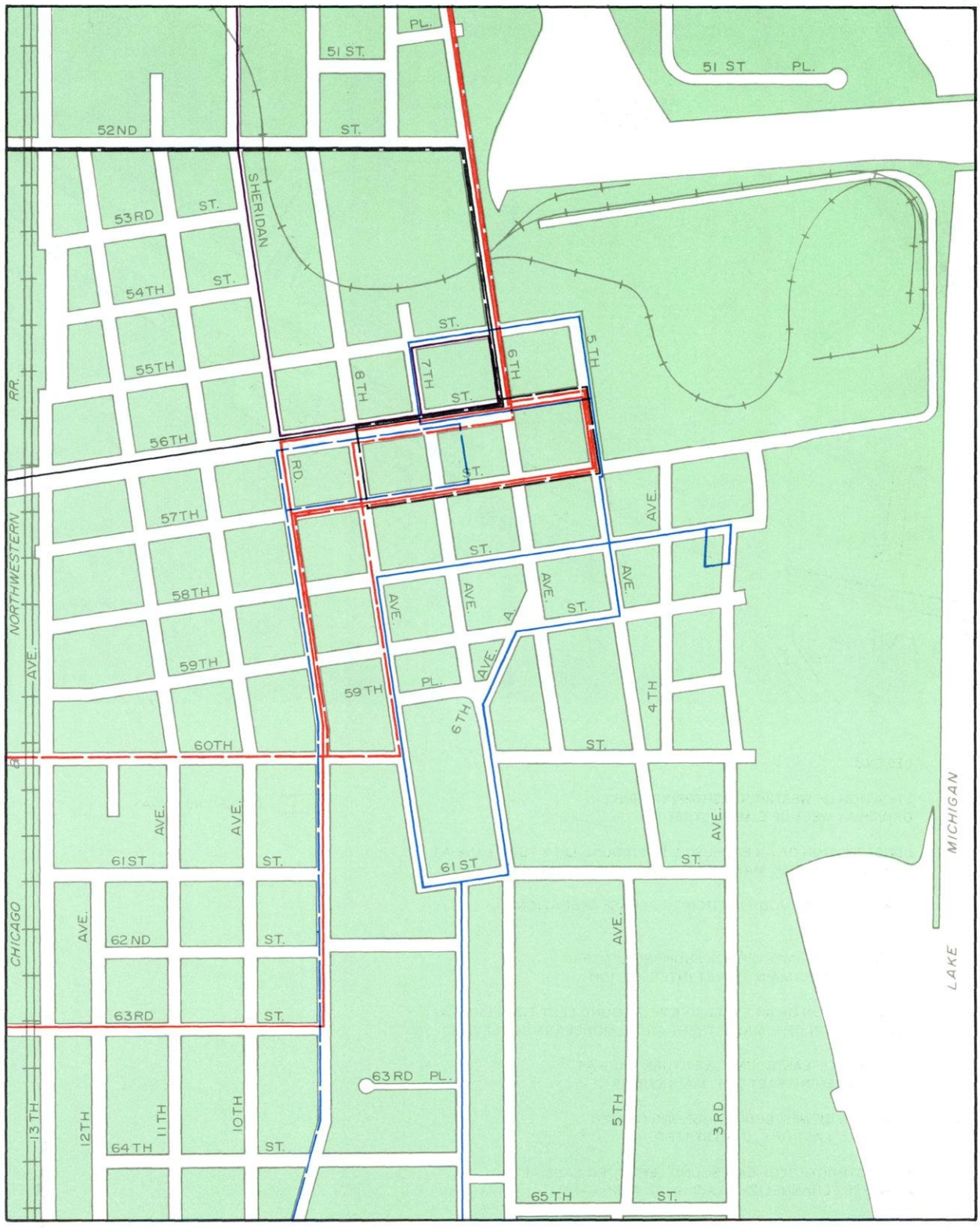
The plan recommends that 23 traffic control measures be applied to solve or mitigate the traffic problems identified at 31 locations in the Village. The total capital investment, in 1984 dollars, required to implement those measures is estimated at $279,300, with the cost of individual measures ranging from about $100 for the installation of

Map 19

RECOMMENDED ROUTE STRUCTURE AND SERVICE AREA FOR THE KENOSHA TRANSIT SYSTEM

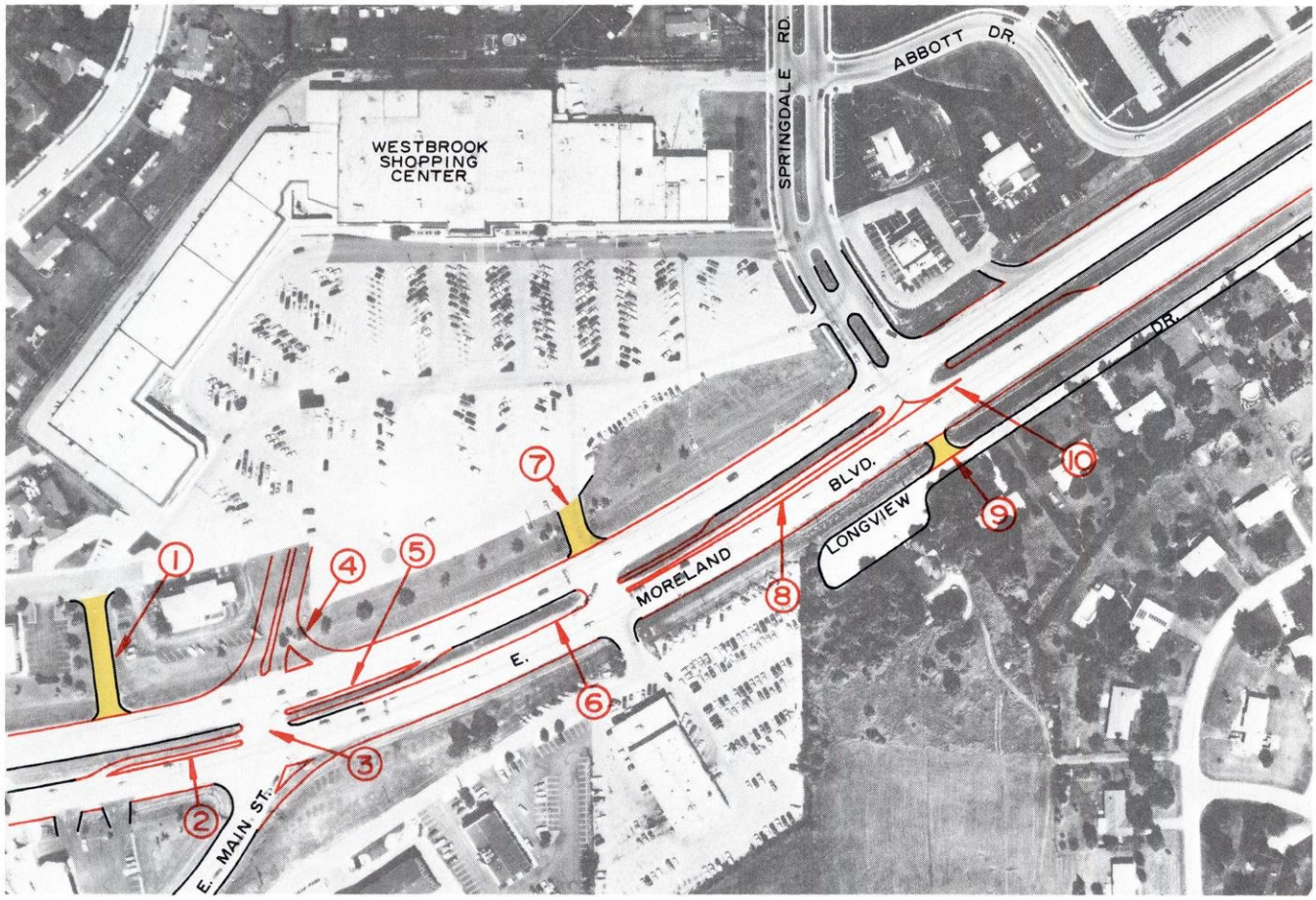


Map 19 (continued)



Map 20

LOCATION OF TRAFFIC MANAGEMENT ACTIONS ALONG E. MORELAND BOULEVARD PROGRAMMED FOR CONSTRUCTION DURING 1985 BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION



LEGEND

① VACATION OF WESTBROOK SHOPPING CENTER DRIVEWAY WEST OF E. MAIN STREET

② CONSTRUCTION OF AN EXCLUSIVE EASTBOUND LEFT-TURN LANE AT INTERSECTION OF E. MAIN STREET AND E. MORELAND BOULEVARD

③ TRAFFIC SIGNAL MODIFICATION TO 3-PHASE OPERATION

④ RELOCATION OF WESTBROOK SHOPPING CENTER DRIVEWAY TO E. MAIN STREET INTERSECTION

⑤ CONSTRUCTION OF AN EXCLUSIVE WESTBOUND LEFT-TURN LANE AT INTERSECTION OF E. MAIN STREET AND E. MORELAND BOULEVARD

⑥ VACATION OF EASTBOUND LEFT-TURN LANE AT MEDIAN OPENING EAST OF E. MAIN STREET

⑦ VACATION OF WESTBROOK SHOPPING CENTER DRIVEWAY EAST OF E. MAIN STREET

⑧ RECONSTRUCTION OF EASTBOUND LEFT-TURN LANE AS AN OFFSET CHANNELIZED EXCLUSIVE TURN LANE

⑨ VACATION OF LONGVIEW DRIVE INTERSECTION WITH E. MORELAND BOULEVARD

⑩ RECONSTRUCTION OF INTERSECTION AT SPRINGDALE ROAD AND E. MORELAND BOULEVARD AS A CHANNELIZED MEDIAN OPENING

CLOSED ROADWAY

GRAPHIC SCALE
0 100 200 300 FEET

traffic regulatory signs, to $100,000 for property acquisition to permit the construction of a parking lot driveway. The recommended traffic control measures determined to have the highest implementation priority in the Village involve signalization improvements and interconnection of traffic signals on both N. Oakland Avenue and E. Capitol Drive to reduce vehicle delays and improve traffic operating conditions on these two major arterials. Another high-priority recommendation, as shown in Figure 37, involves reconstruction with roadway narrowings to reduce through traffic and travel speeds on segments of E. Menlo and N. Morris Boulevards located between N. Oakland Avenue and E. Capitol Drive.

Many of the recommendations set forth in the plan have been included in the Village's capital improvement budget and are scheduled for implementation in 1985. Implementation of the plan should provide the direction necessary to improve the quality of life in the residential neighborhoods of the Village, as well as to improve operating conditions and safety on the Village's arterial street and highway system.

Freeway Traffic Management Study

During 1984, the Commission continued the detailed planning and preliminary engineering for the proposed Milwaukee area freeway traffic management system. Such a system was recommended in both the new design year 2000 regional transportation system plan and the regional transportation systems management plan. The detailed planning and preliminary engineering study will examine in depth the performance, environmental, economic, and technical features of alternative freeway traffic management systems for the greater Milwaukee area in order to determine the best means of managing the freeway system to meet specified objectives. The study is a major step toward implementation of a freeway traffic management system.

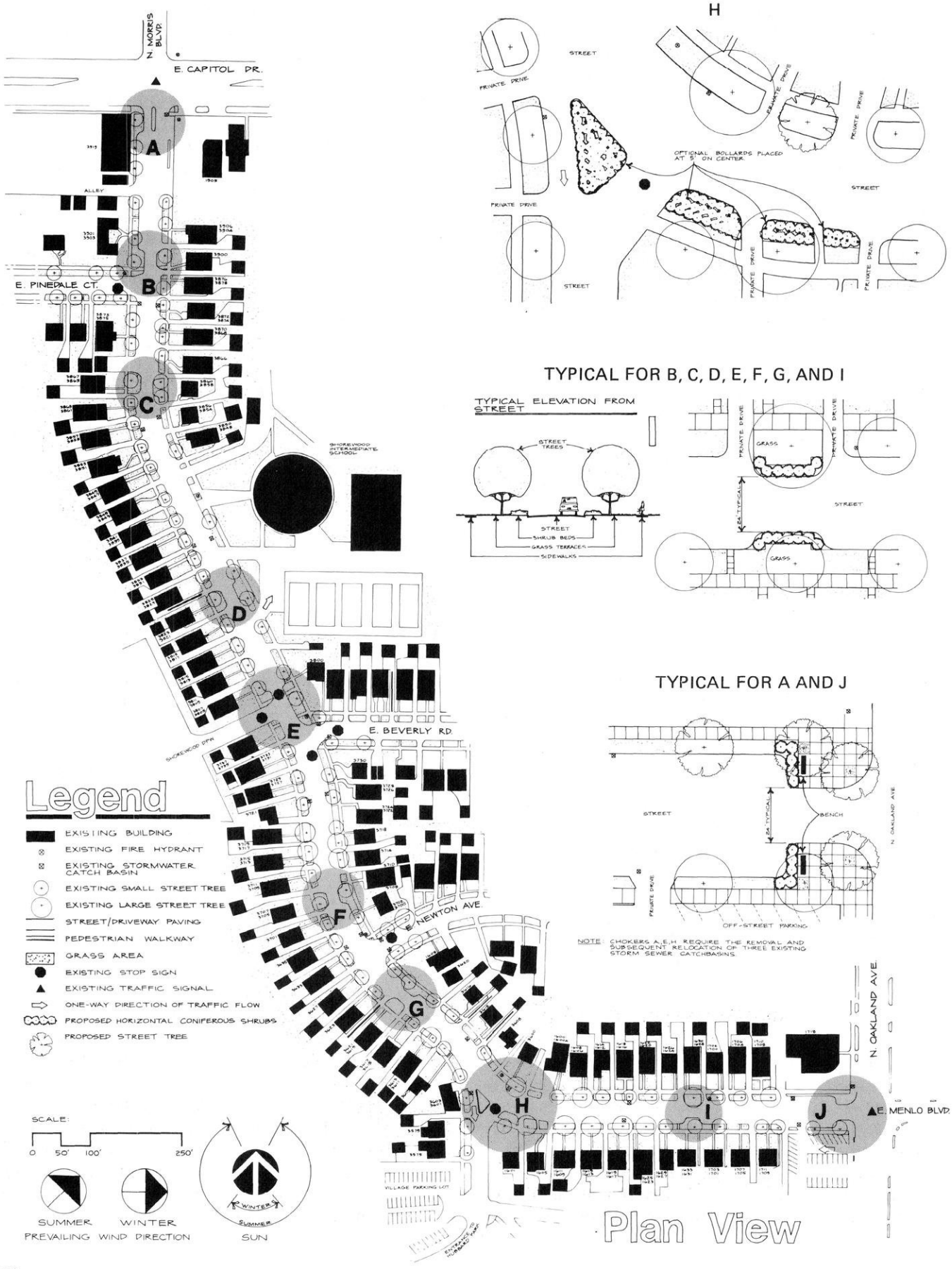
The envisioned freeway traffic management system would provide preferential treatment on area freeways for buses and carpool and vanpool vehicles by obtaining operational control of area freeways. Traffic entering freeway on-ramps throughout the greater Milwaukee area during peak travel periods, except buses and carpool and vanpool vehicles, would be metered, and sufficiently restrained so that freeway traffic breakdowns would be avoided. To the extent possible, smooth traffic flow at speeds of at least 40 miles per hour would be maintained on all segments of the freeway system, particularly on those which would otherwise be congested and subject to stop-and-go traffic. Buses and carpool and vanpool vehicles would be provided with exclusive freeway on-ramps or on-ramp lanes in order to bypass the ramp meters. As a result, the peak-period level of service for buses and carpool and vanpool vehicles on area freeways will substantially increase. The peak-period level of service for automobiles and trucks on area freeways should not necessarily be significantly affected, and may even increase slightly as the required waiting at freeway on-ramps should be offset by the faster and more reliable speeds on area freeways. The freeway operational control system may also incorporate a freeway advisory information system to inform motorists of freeway and surface street traffic conditions, and freeway incident management strategies may be applied to identify and minimize the effects of freeway incidents.

During 1984 the Commission staff completed processing the license plate origin-destination survey data collected during 1983 at freeway on- and off-ramps in the Milwaukee area. These data provided the basis for the development of morning and afternoon peak-hour trip tables which represent peak-hour Milwaukee area freeway travel patterns. These tables were utilized to determine which ramps contribute substantially to congested freeway segments and, therefore, are candidates for an expanded ramp-metering system. These tables will also be used to evaluate the impacts of alternative ramp-metering strategies and the impacts of metering various additional ramps.

During 1984 the Commission staff, with the cooperation of the Wisconsin Department of Transportation and the City of Milwaukee, also collected and analyzed accident data for the freeway system and selected arterial streets in the City of Milwaukee. Analysis of the data was conducted to determine comparative accident rates for the freeway system and the arterial street system. These rates will be utilized to estimate the change in accidents on the freeway and arterial street systems as a result of alternative ramp-metering strategies and the metering of additional on-ramps. The freeway accident data will also be analyzed to determine high accident locations which would benefit from the implementation of a freeway incident management system.

Figure 37

N. MORRIS/E. MENLO BOULEVARD ALTERNATIVE ROADWAY NARROWING TRAFFIC CONTROL MEASURE-VILLAGE OF SHOREWOOD



During the year, the Commission staff also determined which segments of the freeway system currently operate at and over capacity during the peak hours. These segments have operating speeds of less than 40 miles per hour, and, therefore, will benefit from implementation of an expanded freeway traffic management system. A similar analysis was conducted for arterial street intersections on those arterial routes which parallel the freeway system and, therefore, will probably be utilized by traffic diverted from the freeway system.

Ridesharing Programs

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

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

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

Early in 1983, Milwaukee County received approval of a funding request for federal urban aid funds to conduct a two-year ridesharing promotional program. This program includes media promotion of ridesharing activities, continuation of a computerized matching program for potential carpoolers with the additional feature of staff contact to follow up persons who have requested services, development of a marketing program to focus on employers and employees in the Milwaukee central business district, promotion of park-ride lots for carpool use, and erection of 35 additional rideshare information signs. Late in 1984, federal funding was provided to extend the promotional program through 1986. The Commission will continue to assist in this effort by providing the computer facilities necessary to conduct the matching program.

Milwaukee County Short-Range Transit Planning

During 1984, short-range transit planning activities for the Milwaukee County Transit System were conducted by the Milwaukee County Transit System staff and the Milwaukee County Department of Public Works. The activities were directed toward improving the productivity of the transit system. Productivity improvements have become increasingly important with the rising costs of providing service and decreasing amounts of federal revenues to provide subsidies for operation of the system. In addition to analyzing and making recommendations on requests for changes in transit routes and service levels, staff activities included:

- Ongoing analyses of passenger loads and operating costs to determine which transit system routes should be considered for transit service modification and transit route realignment.

- An effort to provide for the coordination of public information. This task continued during 1984 with a review of messages presented on bus destination signs, timetables, and bus stop signs to make sure that such messages are consistent, legible, and easily understood.

- Preparation of required reports, such as the updated Minority Business Enterprise Program seeking to promote businesses operated by women and the disadvantaged, and the updated Title VI assessment evaluating the provision of transit service to special population groups; monitoring of service provided to the transportation handicapped; and preparation of the annual transportation improvement program.

ELDERLY AND HANDICAPPED TRANSPORTATION PLANNING

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

Section 504 Transition Plans

The adopted transportation plan for the transportation handicapped was amended during 1980 following the completion of "transition plans" for each of the public transit operators within the Region. These planning efforts were designed to identify activities necessary to ensure that the planning and provision of public transit service in the Region is fully in accordance with Section 504 of the federal Rehabilitation Act of 1972. That act prohibits discrimination on the basis of handicap in all programs and activities receiving federal financial assistance. These planning efforts were conducted in accordance with rules promulgated by the Secretary of the U. S. Department of Transportation and issued in 1979. Recommendations for making the federally assisted public transportation systems within the Region accessible to handicapped persons are set forth in SEWRPC Community Assistance Planning Report No. 39, A Public Transit System Accessibility Plan, Volume One, Kenosha Urbanized Area; Volume Two, Milwaukee Urbanized Area/Milwaukee County; Volume Three, Racine Urbanized Area; and Volume Four, Milwaukee Urbanized Area, Waukesha County. The four transition plans were submitted during 1980 for review by the U. S. Department of Transportation, Urban Mass Transportation Administration (UMTA), and were approved by this agency in early 1981.

On July 20, 1981, the U. S. Department of Transportation issued a new interim revised regulation on transportation for elderly and handicapped persons which amended the Department's former regulation in Section 504 of the Rehabilitation Act of 1972. In direct contrast to requirements established under the former Section 504 regulation, the new regulation no longer required buses for fixed route transit systems to be equipped with wheelchair lifts, or facilities for transit systems to be retrofitted with accessibility features, as the

sole means of making transit systems accessible to wheelchair-bound handicapped persons. Instead, the new rule adopts the "special efforts" approach originally employed in a federal rule issued during 1976 which requires transit operators receiving federal funds to certify that special efforts are being made in their service area to provide transportation that handicapped persons can effectively use. The new regulation also eliminates the requirement for the preparation of transit operator transition plans and the submission of subsequent status reports thereon.

Within the Southeastern Wisconsin Region, the change in approach to meeting handicapped accessibility requirements has had significant impacts on the fixed route transit systems operating within the Kenosha, Milwaukee, and Racine urbanized areas. During 1984 the transit systems within these areas met the special efforts requirements of the new regulations by continuing to provide funds for the operation of specialized transportation services to serve handicapped persons within their transit service areas. The specialized transportation services supported by the transit operators within each urbanized area are described below.

- In the Kenosha urbanized area, the City of Kenosha currently supports a dual strategy for providing transportation services for handicapped persons. This strategy consists of the provision of a limited level of accessible fixed route bus service on the regular city bus routes, and the provision of financial support to the operation of a specialized transportation service provided by the Kenosha Achievement Center. During 1984, approximately 13,300 one-way trips were made on the specialized transportation service supported by the City.

- In the Milwaukee urbanized area, Milwaukee County provides transportation services for handicapped persons primarily through support of a user-side subsidy program which provides door-to-door transportation for mobility-restricted Milwaukee County residents. Under the current program, eligible users are provided with a subsidy for their transportation with which they can purchase service from private taxicab companies and wheelchair van carriers. During 1984, about 294,000 one-way trips were made on this program by mobility-restricted residents of Milwaukee County. Milwaukee County also provides transportation service for handicapped persons through programs sponsored by the Milwaukee County Commission on Aging and the Milwaukee County Social Services Department. These agencies contract with a private nonprofit organization—Elder Care Lines, Inc.—for specialized transportation services. During 1984, about 236,000 one-way trips were provided to elderly and handicapped persons through these programs.

  Waukesha County continued to support specialized transportation services for elderly and handicapped persons during 1984. The County supported several specialized transportation projects administered by the Waukesha County Department of Aging, including a parallel commuter service which provided elderly and handicapped persons with service similar to that offered by the commuter bus service provided to the general public and supported by the County; an advance-reservation, door-to-door general transportation service for elderly and handicapped county residents; a user-side subsidy program using private taxicabs for elderly and handicapped county residents; and volunteer driver services providing elderly and handicapped county residents with transportation to and from congregate nutrition sites, and for medical purposes. During 1984, about 55,800 one-way trips were made using these services.

  Finally, the City of Waukesha also provided specialized transportation service for mobility-restricted persons through a special program operated by the City's public transit system. The program, which utilized small accessible buses provided by a private transportation company, served handicapped persons within the service area of the City's fixed route transit system who were unable to use the regular bus system. During 1984, about 6,200 one-way trips were made using this special program.

- In the Racine urbanized area, the City of Racine annually contributes funds to the operation of the specialized transportation program administered by the Racine County Human Services Department. The Department uses the funds provided by the City to support the operation of an advance-

reservation transportation service in the eastern portion of Racine County, including the entire service area of the Racine transit system. The service is made available to both elderly and nonelderly transportation-handicapped persons. During 1984, approximately 30,500 one-way trips were made on the Racine County specialized transportation service partially supported by the City of Racine.

RAILWAY TRANSPORTATION PLANNING

The Regional Planning Commission participates in railway planning by monitoring railway service within the Southeastern Wisconsin Region and proposals for service abandonments and related issues that may affect the Region, and by providing technical assistance to local communities as requested on these and other railway matters. During 1984, staff activities included review of the regional railway system facilities and services, the continuing reorganization efforts of the bankrupt Milwaukee Road, railway line abandonment activities within the Southeastern Wisconsin Region, and shortline railroad activities. Although there were no significant changes to the railway system or the level of railway service in southeastern Wisconsin during the 1984 calendar year, the Commission staff recognized that certain activities occurring during 1984 could result in important changes in the regional railway system during the first half of 1985. Such potential changes are identified throughout the following discussion.

Regional Railway System

As of December 31, 1984, railway freight service was being provided within southeastern Wisconsin over a total of 497 miles of railway line by six railroads. Two of the six carriers operated about 68 percent of the total railway mileage: the Chicago & North Western Transportation Company (C&NW), which operated 203 miles, or 41 percent of the railway mileage in the Region, and the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (Milwaukee Road), which operated 135 miles, or 27 percent of the railway mileage in the Region. Operation of the remaining 32 percent of the railway mileage in the Region is divided among the four remaining carriers: the Soo Line Railroad Company—79 miles; the Wisconsin & Southern Railroad Company—34 miles; the Central Wisconsin Railroad Company—40 miles; and the Municipality of East Troy Wisconsin Railroad—6 miles. The locations of the common carrier railway lines within southeastern Wisconsin are shown on Map 21. The extent of railway mileage in each of the seven counties is presented in Table 17.

Intercity passenger service is provided by the National Railroad Passenger Corporation (Amtrak) between Chicago and Minneapolis-St. Paul over 73 miles of Milwaukee Road trackage within the Region, with trains stopping within southeastern Wisconsin at Milwaukee and Sturtevant. Commuter rail service is provided between Kenosha and Chicago, with intermediate stops throughout northern Illinois by the Regional Transportation Authority over C&NW trackage.

Milwaukee Road Reorganization

The status of the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (Milwaukee Road) was nearly decided by the end of 1984. Since 1977, when bankruptcy was declared, the Milwaukee Road has been under the protection and control of a federal bankruptcy court in Chicago and a court-appointed trustee. Throughout much of 1984, bidding for the acquisition of the Milwaukee Road was chiefly between the Soo Line Railroad Company and the Chicago & North Western Transportation Company (C&NW). A formal decision was anticipated to be reached during the first quarter of 1985.

Shortline Railroad Activities

A major railway planning issue of continuing concern within the Southeastern Wisconsin Region is the status of shortline railroads, especially those that have been operating over former branch lines abandoned by major railroads. One such shortline railroad operator is the Southeastern Wisconsin Transportation Company, doing business within southeastern Wisconsin as the Central Wisconsin Railroad Company and the Elkhorn & Walworth Railroad Company. Within the Region, this carrier operates over the railway lines between Waukesha and Milton, serving the communities of Genesee Depot, North Prairie, Eagle, Palmyra, and Whitewater; and between Janesville and Elkhorn, serving the communities of Avalon, Darien, and Delavan. On December 11, 1984, the Southeastern Wisconsin Transportation Company declared bankruptcy and attempted to reorganize under Chapter 11 protection. During the remainder of December, continued operations by this carrier were made

Map 21

COMMON CARRIER RAILWAY FREIGHT LINES IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1984

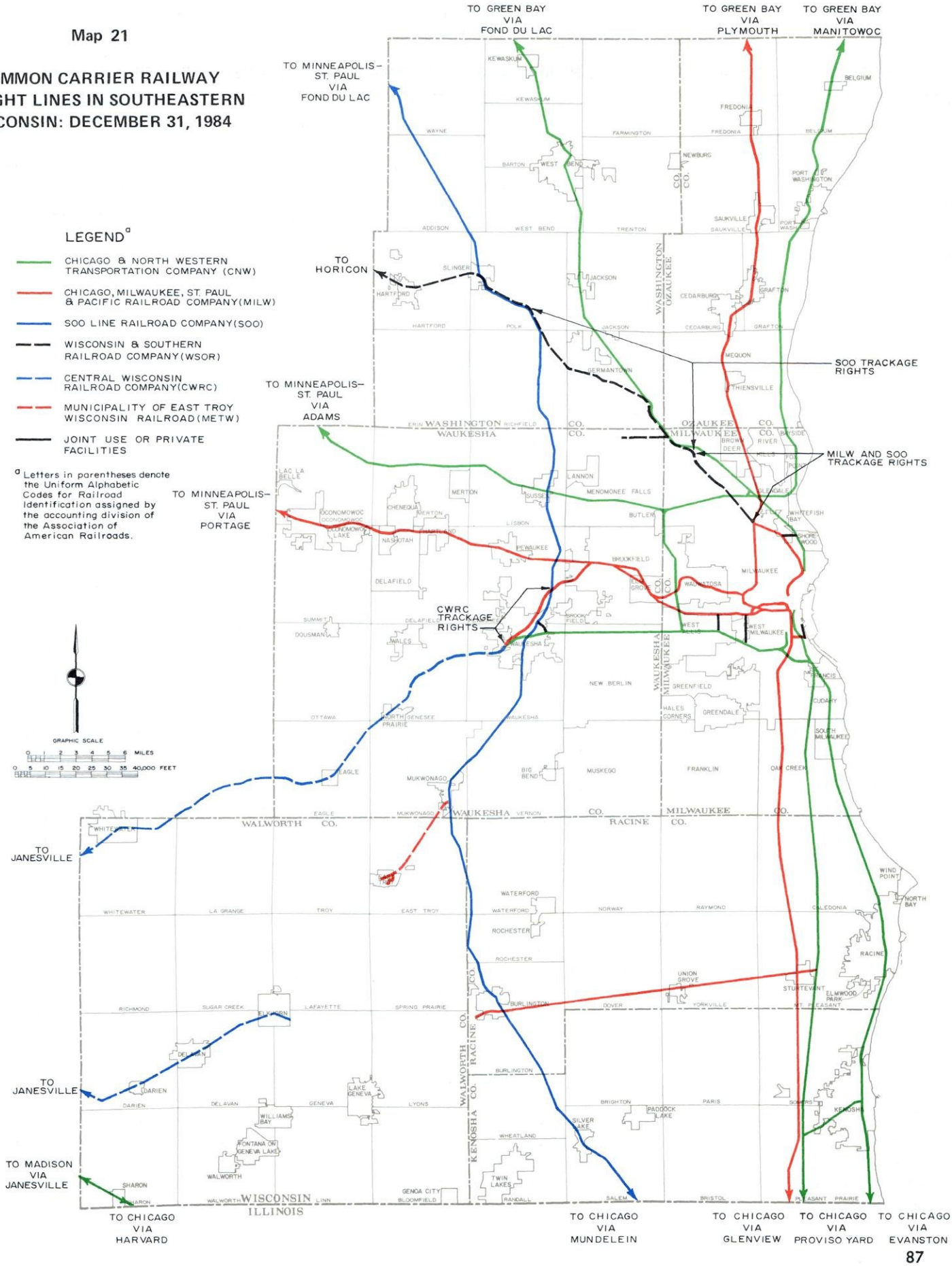


Table 17

COMMON CARRIER RAILWAY MAINLINE MILEAGE IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1984

County	Chicago & North Western Transportation Company		Chicago, Milwaukee, St. Paul & Pacific Railroad Company		Soo Line Railroad Company		Wisconsin & Southern Railroad Company		Central Wisconsin Railroad Company		Municipality of East Troy Wisconsin Railroad		Total	
	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region	Mileage	Percent of Total in Region
Kenosha	28.5	5.7	12.2	2.5	10.2	2.0	--	--	--	--	--	--	497.4	10.2
Milwaukee	61.2	12.3	37.2	7.5	--	--	9.1	1.8	--	--	--	--	107.5	21.6
Ozaukee	25.8	5.2	25.1	5.0	--	--	--	--	--	--	--	--	50.9	10.2
Racine	24.5	4.9	27.4	5.5	13.5	2.7	--	--	--	--	--	--	65.4	13.1
Walworth	3.8	0.8	--	--	4.0	0.8	--	--	20.9	4.2	5.0	1.0	33.7	6.8
Washington	27.3	5.5	--	--	25.3	5.1	22.5	4.5	--	--	--	--	75.1	15.1
Waukesha	32.1	6.5	33.0	6.6	26.5	5.3	2.4	0.5	18.6	3.7	1.3	0.3	113.9	22.9
Region	203.2	40.9	134.9	27.1	79.5	16.0	34.0	6.8	39.5	7.9	6.3	1.3	497.4	100.0

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

difficult because of the Company's inability to cover greatly increased operating expenses. As of December 31, 1984, it appeared as if service over these lines may be suspended by the Southeastern Wisconsin Transportation Company.

Railroad Abandonment Activities

Another major railway planning issue of continuing concern in southeastern Wisconsin is the status of railway branch lines which are being abandoned by major railroad companies. Those railway line segments which were under some type of abandonment action during 1984 are described below.

Waukesha to Cottage Grove

As discussed in the 1983 Annual Report, the Chicago & North Western Transportation Company (C&NW) filed an application before the Interstate Commerce Commission (ICC) to abandon its railway line between the communities of Waukesha and Cottage Grove in Dane County. Although the ICC authorized such abandonment in May 1983, the C&NW did not discontinue train operations over the portion of this line located within the Southeastern Wisconsin Region until January 1984. During the summer of 1984, this railway line was dismantled and the right-of-way was purchased by the Wisconsin Department of Transportation and the Wisconsin Department of Natural Resources.

Burlington to Beloit

As discussed in the 1983 Annual Report, the Trustee of the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (Milwaukee Road) filed an application in June 1982 proposing to abandon the Milwaukee Road's railway line between the communities of Burlington and Beloit in Rock County. Abandonment of this segment was approved by the ICC in January 1983, with service provided by the Milwaukee Road being discontinued in February 1983. Shortly thereafter, the Southeastern Wisconsin Transportation Company, doing business as the Elkhorn & Walworth Railroad Company, began providing service over a portion of this line to the communities of Darien, Delavan, and Elkhorn under a temporary lease agreement with the Milwaukee Road. As noted above, however, service by the shortline carrier was in jeopardy at the end of 1984 because of financial difficulties.

In March 1983, Walworth County, with assistance from Regional Planning Commission staff, prepared and submitted a grant application to the Wisconsin Department of Transportation for acquisition of this railway line between Bardwell Junction and Elkhorn, as well as between Bardwell Junction and the Village of Walworth. During 1984, this application was amended to include acquisition of a section of former Milwaukee Road line between Walworth and Fox Lake, Illinois.

Chestnut Street Line

In July 1984, the Trustee of the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (Milwaukee Road) filed an application before the ICC in connection with the Milwaukee Road's proposal to abandon 2.7 miles of industrial trackage in the Milwaukee terminal area. This segment of railway line—locally referred to as the "Beer Line"—is located entirely within the City of Milwaukee and extends from W. Highland Avenue north to N. Richards Street and includes a network of switching tracks in the Richards Street industrial area, referred to as the "Snake." Following a split decision by the ICC, the application was referred back to the Bankruptcy Court without a recommendation. Thus, at the end of 1984, a formal decision had not been reached, although approval of abandonment of most of the line is ultimately expected during 1985.

TRANSPORTATION IMPROVEMENT PROGRAM

In December 1984, 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: 1985-1989. The program was developed with the assistance of the Wisconsin Department of Transportation staff and through the cooperation of various local units and agencies of government in the three urbanized areas of the Region, and of the Cities of Kenosha, Milwaukee, and Racine and the Counties of Milwaukee and Waukesha as the operators of special mass transportation systems in these urbanized areas.

The 1985-1989 TIP document identifies all highway and mass transportation projects in the three urbanized areas programmed for implementation during this five-year period with the aid of U. S. Department of Transportation funds administered through the Federal Highway Administration (FHwA) and the Urban Mass Transportation Administration (UMTA). Following approval of the 1985-1989 TIP by the Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming for the Kenosha, Milwaukee, and Racine Urbanized Areas, the Regional Planning Commission formally adopted the program on December 6, 1984.

The 1985-1989 TIP authorizes funding for many important projects essential to maintaining the existing highway system, including the resurfacing of the Zoo Freeway (USH 45) from W. Capitol Drive to W. Appleton Avenue; the resurfacing of the East-West Freeway (IH 94) from the Milwaukee County line west to USH 18; the replacement of the S. 16th Street viaduct over the Menomonee River Valley; and the replacement of the E. North Avenue viaduct over the Milwaukee River. The TIP also authorizes funding for key transit maintenance projects, including the complete rehabilitation of 56 buses and the purchase of new fareboxes to permit modernization of the fare collection system for the Milwaukee County Transit System.

In addition, the TIP authorizes projects essential to the improvement of the highway and transit systems. For example, included in the TIP are the proposed purchase of 40 articulated high-capacity buses which will reduce labor costs per passenger on the Milwaukee County Transit System; the construction of the Stadium Freeway-North (USH 41) ramp from W. Lisbon Avenue to improve the current stub end connection; and the reconstruction of S. 43rd Street between W. National Avenue and W. Howard Avenue.

Within the three urbanized areas of the Region, the program contains 442 projects for the five-year programming period, representing a total potential investment in transportation improvement and services of about $743 million. Of this total, $371 million, or about 50 percent, is proposed to be provided in federal funds; $202 million, or about 20 percent, in state funds; and $170 million, or about 23 percent, in local funds.

While the entire five-year program is an important planning tool, it is the annual element which is of primary interest for it represents those projects that are intended to be implemented over the 12- to 24-month period beginning January 1, 1985. The annual element for federal aid highway funding support is a 21-month element to match the federal fiscal year funding allocation and is broken into the first nine months of calendar year 1985 and the federal 1986 fiscal year beginning October 1, 1985, and extending through September 30, 1986. For federally funded transit projects involving transit system operating assistance, the annual element consists of a 24-month period, calendar years 1985 and 1986. All other federally assisted transit projects within the transportation improvement program have an annual element consisting of a 12-month period of calendar year 1985.

Table 18

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

Funding	Kenosha	Milwaukee	Racine	Total
Federal	$6,778,200	$179,004,600	$ 7,998,900	$193,781,700
State	1,799,700	74,115,300	2,351,700	78,266,700
Local	1,358,600	74,001,500	1,522,700	76,880,800
Total	$9,936,500	$327,121,400	$11,873,300	$348,931,200

A cost summary for these projects is shown in Table 18. The cost data in this table represent the proposed annual element expenditures for a total of 358 projects.

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

- A significant proportion of financial resources are to be devoted to the preservation of the existing transportation facilities and services in the 1985 annual element: over 62 percent in the Milwaukee urbanized area, about 64 percent in the Racine urbanized area, and about 47 percent in the Kenosha urbanized area. This allocation of resources is especially notable when it is realized that virtually none of the funding for routine highway maintenance activities—snowplowing, ice control, grass cutting, power for street lighting, and litter pickup—is included in the TIP.

- The expenditure of funds for highway expansion is nearly nonexistent in the urbanized areas of the Region—no expenditures for this purpose are proposed in either the Kenosha or Racine urbanized areas, and less than 3 percent of the total expenditures is proposed for this purpose in the Milwaukee urbanized area.

- A significant proportion of financial resources is devoted to public transit projects, which account for over 47 percent of the resources in the Milwaukee urbanized area annual element, about 50 percent of the resources in the Racine urbanized area annual element, and nearly 47 percent of the resources in the Kenosha urbanized area annual element.

A comparison of the 1985 annual element of the TIP with the 1984 annual element of the 1984-1988 TIP as reported in the Commission's 1983 Annual Report indicated the following:

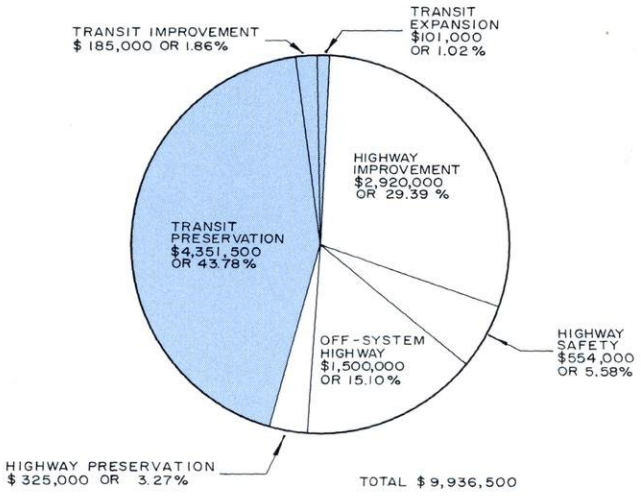
- In the Kenosha urbanized area, total expenditures are proposed to increase by about 3 percent—from $9.6 million to about $9.9 million. Expenditures for highways, which comprised about 61 percent of total expenditures in 1984, are proposed to comprise about 53 percent of total expenditures in 1985. Expenditures for transit comprised about 39 percent of total expenditures in 1984, and are proposed to account for about 47 percent of expenditures in 1985.

- In the Milwaukee urbanized area, total expenditures are proposed to increase by about 4 percent—from about $313.6 million

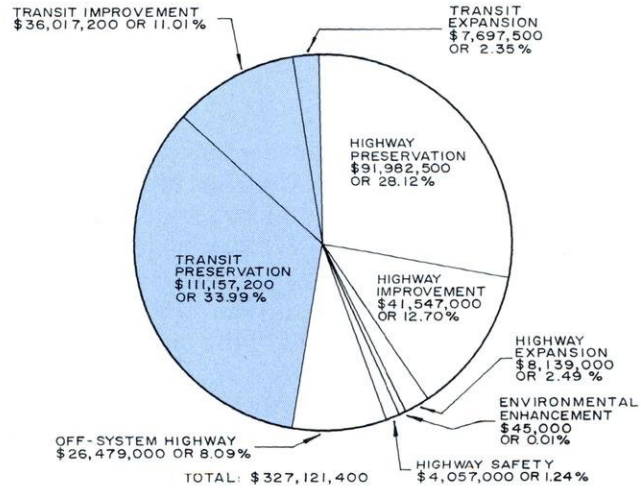
Figure 38

DISTRIBUTION OF EXPENDITURES IN THE ANNUAL ELEMENT OF THE 1985-1989 TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY

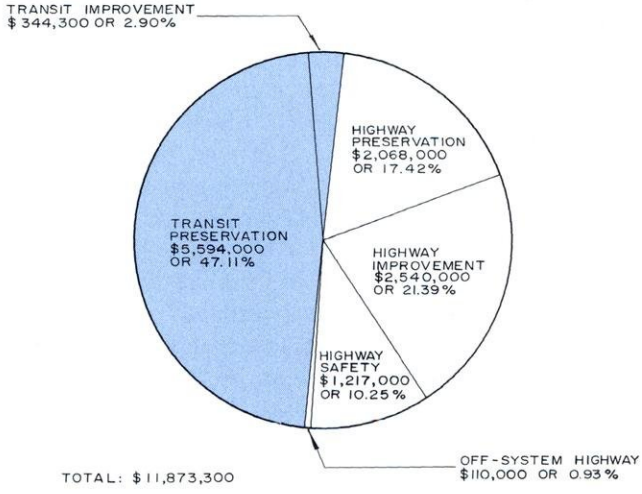
KENOSHA URBANIZED AREA



MILWAUKEE URBANIZED AREA



RACINE URBANIZED AREA



to about $327.1 million. Expenditures for highways, which comprised about 56 percent of total expenditures in 1984, are proposed to comprise about 53 percent of total expenditures in 1985.

- In the Racine urbanized area, total expenditures are proposed to decrease by about 26 percent—from $15.9 million to $11.9 million. Expenditures for highways, which comprised about 68 percent of total expenditures in 1984, are proposed to comprise about 50 percent of total expenditures in 1985. Expenditures for transit comprised about 32 percent of total expenditures in 1984, and are proposed to account for about 50 percent of expenditures in 1985.

AIRPORT TRANSPORTATION PLANNING

During 1984, Commission activities in air transportation and airport planning included the continued monitoring of aviation activities within the Region through secondary data sources, continuation of work on an update of the adopted regional airport system plan, and the continued monitoring of airport master planning activities within the Region. Airport master plans are prepared as the first step toward implementation of the adopted regional airport system plan. This plan, adopted in 1979, is documented in SEWRPC Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin.

Aviation Activity

The Commission staff continued to monitor aviation activity within the Region during 1984. General trends in the level of aviation activity within southeastern Wisconsin are indicated by the number of aircraft operations at, and passengers using, General Mitchell Field. Milwaukee's General Mitchell Field is the largest and busiest airport facility in the Region, and the only airport within the Region with scheduled air carrier service. As shown in Figure 39, in 1984 aircraft operations of all types at General Mitchell Field totaled about 171,000, an increase of about 5,000 operations, or 3 percent, over the 166,000 operations that occurred during 1983. This total is, however, 39 percent below the 278,000 operations forecast to occur at Mitchell Field during 1984 under the original regional airport system plan, a condition attributable, in part, to the continued effects of the economic recession within the Region over the past several years; in part to the effects of federal deregulation of commercial air service; and in part

Figure 39

ANNUAL AIRPORT OPERATIONS AT GENERAL MITCHELL FIELD, MILWAUKEE

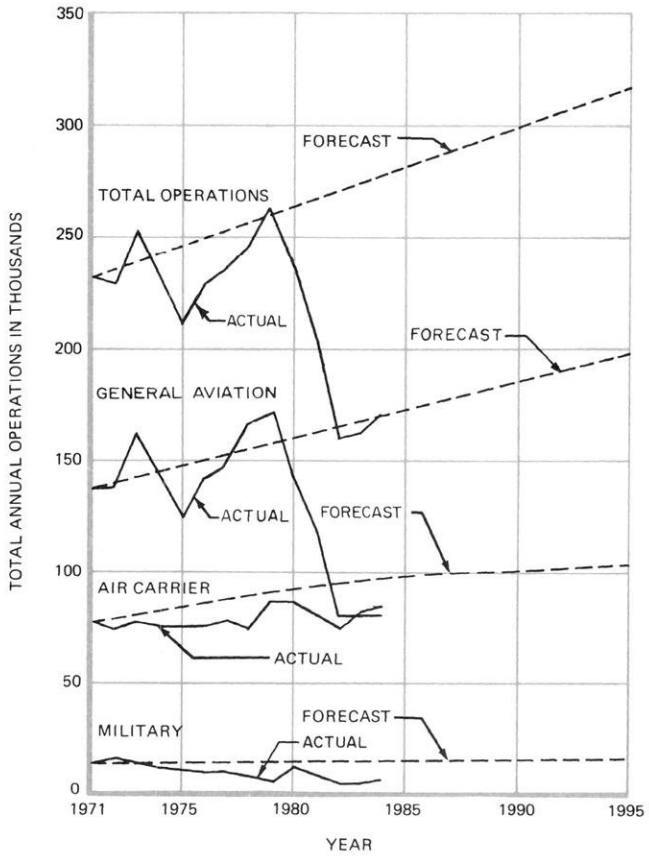
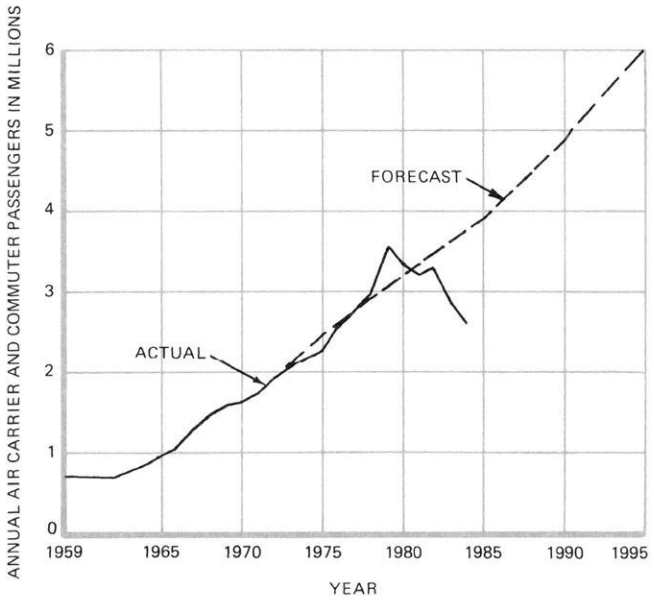


Figure 40

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



to the continued increase in the cost to private individuals of owning and operating general aviation aircraft.

Total aircraft operations at General Mitchell Field can be divided into three categories: air carrier, general aviation, and military. Air carrier operations during 1984 totaled about 84,500, an increase of 4 percent over the 1983 level of about 81,000 operations. General aviation operations at General Mitchell Field totaled about 79,500 during 1984, reflecting no change from the 1983 level of operations. Military aircraft operations at General Mitchell Field during 1984 totaled about 7,000, an increase of about 30 percent over the 1983 level of about 5,400 operations.

From 1983 to 1984, air carrier enplaning and deplaning passengers at General Mitchell Field decreased by about 352,000 to about 2.6 million passengers per year, about 12 percent below the 1983 level. The 1984 level was about 1.2 million, or about 32 percent, less than the 2.8 million passengers forecast for 1984 in the original regional airport system plan, as shown in Figure 40. This may be attributed primarily to the continued effects of the severe economic recession within the Region and to the impacts of federal deregulation of commercial air service. A major impact of deregulation as it affects Milwaukee is the restructuring of route networks by the scheduled air carriers into "hub-and-spoke" patterns. Many of the direct flights between Milwaukee and many other domestic cities have been replaced with direct flights only to some of the largest cities which serve as centralized hubs for the largest scheduled air carriers. Thus, many of the connecting passengers who formerly used Milwaukee now change flights at Detroit, Chicago, Minneapolis-St. Paul, or some other airport used as a hub by the largest airlines. Indeed, much of the decrease in passengers at General Mitchell Field during the past two years can be attributed to this reduction in connecting passengers as opposed to a loss of originating passengers.

Table 19

REGISTERED AIRCRAFT BASED IN THE REGION

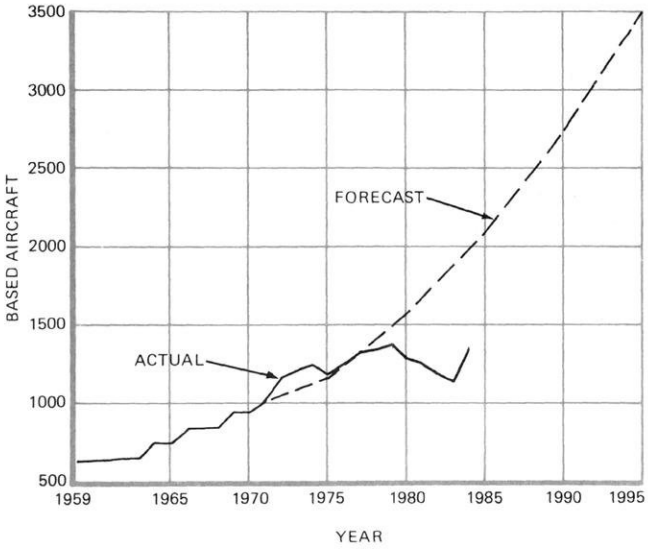
County	1960	1965	1970	1975	1980	1984
Kenosha	28	60	76	148	123	120
Milwaukee	338	362	356	371	388	383
Ozaukee	19	13	32	28	29	32
Racine	65	89	108	151	179	189
Walworth	23	31	48	82	98	113
Washington	45	63	118	136	158	169
Waukesha	118	163	243	255	304	346
Total	636	781	981	1,171	1,279	1,352

NOTE: Registered aircraft counts for 1984 include the registration categories of: active, antique, amateur built, municipal, air carrier, pending, and FAA match. Counts for 1984 represent total aircraft registered at the end of the registration year (October 1). Counts for years prior to 1984 represent aircraft registered in March of the specified year.

General aviation activity can also be measured in terms of civil aircraft based within southeastern Wisconsin. A total of 1,352 aircraft were registered as based in the Region during 1984, an increase of 18 percent over the 1,148 aircraft registered during 1983, as shown in Figure 41 and in Table 19. The number of aircraft registered as based within the Region during 1984 was about 32 percent lower than the total of 1,980 aircraft forecast for 1984 under the original regional airport system plan. The severe economic recession experienced within the Region from 1979 to 1983, together with the increasing costs of purchasing and operating private aircraft, has contributed to this condition. However, the 18 percent increase in the number of based aircraft in the Region between 1983 and 1984, represents the first increase in based aircraft within the Region since 1979.

Figure 41

ACTIVE REGISTERED AIRCRAFT BASED IN THE REGION



Regional Airport System Plan Update

During 1984, work continued on an update of the original regional airport system plan for southeastern Wisconsin. The purpose of this study is to review the adopted regional airport system plan and the underlying assumptions supporting it, particularly the forecasts where, as noted above, there are substantial deviances from actual levels of aviation activity; to prepare alternative plans given changes in existing and forecast air carrier, passenger, and general aviation travel demand; and to revise and amend the adopted airport system plan as a second generation plan, based on the actual implementation of the adopted plan that has occurred and changes in aviation travel demand. This work effort is being cooperatively conducted with the Wisconsin Department of Transportation, which is conducting a similar work effort for the balance of the State of Wisconsin. The study will

be documented in an updated and revised version of Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin.

During 1984, the Commission staff completed substantial portions of the necessary inventories for this project, the analysis of these inventories, and the preparation of aviation forecasts. Much of this work involved the continued editing, summarizing, documenting, and analyzing of data collected from the surveys conducted for this study during 1983. These surveys included: an enplaning passenger survey, a general aviation origination-destination survey, and Chicago O'Hare Airport license plate and on-board bus surveys.

Work also continued on the design and execution of a survey of corporate aircraft ownership and activity in Wisconsin. This survey effort was conducted jointly with the Wisconsin Department of Transportation. A survey sample size was also agreed upon, and included owners of all business and corporate aircraft registered in the State of Wisconsin, all firms within the State of Wisconsin with 500 or more employees, and selected smaller businesses within the State. By the end of the year, about 250 of these questionnaires had been returned, realizing about a 34 percent return rate.

Substantial portions of the draft chapters of the plan update were completed during 1984 for advisory committee review. These portions covered the following material: review of the airport classification system, the impact of federal deregulation, procedures to be used for calculating the existing and future capacity of airports within southeastern Wisconsin, development and documentation of the existing air transportation system inventory, review of those recommendations of the original regional airport system plan which have been implemented to date, development of the legal and institutional inventory, and review of the airport planning objectives, principles, and standards. Work was also initiated on the air transportation demand forecasts. Substantial work was completed toward the development and analysis of historical trend data relating to scheduled air carrier passenger traffic and general aviation demand, including the number of based aircraft and the number of general aviation operations.

Airport Master Plans

Airport master plans are intended to refine the recommendations of the adopted regional airport system plan. Specifically, an airport master plan is intended to specify precise land-area requirements for acquisition and protection; provide a detailed airport layout plan; provide an analysis of financial feasibility and set forth a capital improvement budget; provide environmental impact information; and provide for local citizen participation. The preparation of airport master plans is primarily the responsibility of the local implementing governmental agency and establishes eligibility for federal financial aid under the Airport and Airway Improvement Act of 1982.

As discussed in previous annual reports, airport master plans have been completed for, and adopted by, the local governing bodies for the Kenosha, West Bend, and Hartford municipal airports and the Waukesha County Airport. All technical work was completed on an airport master plan for General Mitchell Field in Milwaukee, but the plan has yet to be adopted by the Milwaukee County Board of Supervisors.

DATA PROVISION AND TECHNICAL ASSISTANCE

The Commission spends a considerable amount of time and effort each year in answering requests for transportation data and technical assistance. Most transportation data requests involve obtaining existing or forecast traffic volumes on selected arterial facilities. Other data requests are usually for data necessary for the support of special studies. The majority of these special requests are made by the Wisconsin Department of Transportation.

Most transportation technical assistance requests fall into two categories. The first category is long-range highway planning. Local governments and state agencies occasionally request the preparation of traffic forecasts for alternative improvements to a major facility, and the recommendation of an improvement which would operate within design capacity. Two such requests in this category were fulfilled in 1984, the first relating to the Lake Arterial between E. Carferry Drive and E. Layton Avenue and the second relating to the Stadium Freeway-South corridor. The second category is a traffic impact study of proposed land development. This type of analysis is increasingly being requested by local units of government. In 1984, the Cities of Mequon and New Berlin and the Villages of Hales Corners, Menomonee Falls, Shorewood, and Thiensville requested studies in this category. Typically, the studies entail estimating the amount of traffic which will be generated by the development, the directions from which the

traffic will approach the development (or traffic pattern), and the impact of this additional traffic on arterial street level of service. It may also be requested that actions to minimize any adverse impacts of the additional traffic be investigated.

The following is a listing of the typical data and assistance requests received by the Commission in 1984:

- The Commission prepared and presented a scope of work for the preparation of a transportation plan for the Village of Germantown. This planning effort is intended to refine the adopted regional transportation plan for the Village and was begun late in 1984.

- The Commission prepared a scope of work and initiated a work effort to assist the City of Milwaukee in the analysis of the costs of solid waste transfer to alternative collection and disposal sites.

- At the request of the Village of East Troy, the Commission provided assistance in preparing, printing, and mailing a letter from the Village to selected Wisconsin businesses requesting information in support of proposed runway improvements to the East Troy Municipal Airport.

- The Commission, in support of the Transportation Subcommittee of the Milwaukee 1992 Committee, prepared three staff memoranda: "Inventory of Existing Railways and Highways in the Milwaukee-Chicago Corridor and Their Potential Use for the 1992 Chicago World's Fair"; "Potential Actions for the 1992 Committee to Consider Pursuing With Respect to Automobile, Bus, and Railway Modes of Travel in Preparation for the 1992 Chicago World's Fair"; and "Potential Actions for the 1992 Committee to Consider Pursuing With Respect to Visitor Transportation Within the Milwaukee Area in Preparation for the 1992 Chicago World's Fair."

- At the request of Milwaukee County, the Commission provided technical assistance to county staff in the preparation of a document indicating compliance with the provisions of Title VI of the Civil Rights Act of 1964. The Commission staff assisted in the preparation of an up-to-date transit network for computer simulations. The Commission also used its battery of computer programs for transportation planning to provide the County with information needed to assess the accessibility provided to the minority population within the County by the Milwaukee County Transit System.

- The Wisconsin Department of Transportation was provided with an analysis of travel to the Brookfield Square Shopping Center. The analysis concerned the level of evening peak-hour trip touring, or the number of automobile drivers stopping at the shopping center on their way home from work. The analysis indicated that about 21 percent of automobile driver trips to the shopping center between the hours of 4:00 p.m. and 6:00 p.m. came from work locations, and of those trips about 60 percent were destined to travel home following the shopping center stop.

- At the request of the City of Wauwatosa, the Commission undertook a traffic signal optimization study in the "old village" area of the City. The study was conducted with the use of the TRANSYT 7F traffic flow simulation computer program to determine the traffic signal timing plan—cycle lengths, offsets, and phasing—which would provide for the safest and most efficient flow of traffic through the "old village" area. The study involved the coordination of traffic signals at four intersections: Harmonee Avenue and Menomonee River Parkway, Wauwatosa Avenue and Harmonee Avenue, N. 75th Street and W. State Street, and Milwaukee Avenue and Wauwatosa Avenue. It was recommended that the City reduce the existing 90-second cycle length by instituting a 70-second cycle length during the 6:00 a.m. to 9:00 a.m. weekday time period; a 75-second cycle length during the 9:00 a.m. to 4:00 p.m. weekday time period; and an 80-second cycle length during the 4:00 p.m. to 6:00 p.m. weekday time period. After 6:00 p.m., the midday time period cycle length of 70 seconds would be used until the late evening and early morning hours, when flashing red and amber patterns were proposed. At year's end, these recommendations were transmitted to the City Engineer, with the City indicating that it would institute the proposed changes in the spring of 1985.

- At the request of the City of West Bend, the Commission conducted a traffic safety and vehicular operating condition study at the intersection of Decorah Road and S. Main Street (USH 45). The study found that a severe accident problem does not exist at the intersection, given relatively low accident rates in recent years, and that no specific cause or deficiency in intersection design can be identified as a contributing factor to the accidents that do occur at the intersection. The study further found that both the northbound left-turn movement and westbound combined right-turn, through, and left-turn movements are operating above design-capacity levels, with attendant vehicle delays and congestion, during the evening peak hour. To help resolve these congestion problems, the Commission recommended that the existing 90-second signal cycle be reduced to 75 seconds, that an exclusive southbound left-turn arrow be deleted from the signal sequence, that an exclusive northbound left-turn arrow be added to the signal sequence, that the traffic signals at the intersections of S. Main Street and Decorah Road and S. Main Street and Hawthorne Drive be interconnected to provide for more efficient traffic flow, and that a pedestrian push-button at the traffic signals at the intersection of Decorah Road and S. Main Street be removed. At year's end, these recommendations had been presented to the West Bend Traffic Safety Committee for its consideration and implementation.

- The Commission assisted the Institute of Transportation Engineers, Wisconsin Section, with the development and conduct of a workshop on traffic engineering in small communities. The workshop, which was held on April 5, 1984, in West Bend, was designed for those persons responsible for traffic operation and safety in small communities. A total of 98 engineers, public works officials, technicians, police chiefs, and public officials participated in the workshop. The workshop emphasized the basic principles of traffic engineering, with presentations on: roadway lighting economics, parking problem identification and solutions, downtown redevelopment, traffic control in construction and maintenance areas, accident identification and analysis, traffic engineering funding sources and programs, and liability.

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 lakes, streams, and groundwaters of the Region? Is water quality getting better or worse over time?
- What are the sources of water pollution? How can these sources best be controlled to abate water pollution and meet water quality objectives?
- What is the extent of the natural floodlands along lakes and streams?
- What are the best ways to resolve existing flooding problems and to ensure that new flooding problems are not created?
- What are the best ways to resolve existing stormwater drainage, as opposed to flooding, problems and to provide adequate drainage facilities for existing and probable future rural and urban development?
- What areas of the Region should be provided with sanitary sewer service, and what are the most cost-effective ways of providing such service?
- What needs to be done to ensure a continued ample supply of safe drinking water?
- How can solid wastes best be managed for recycling and disposal in an environmentally safe and energy-efficient manner?

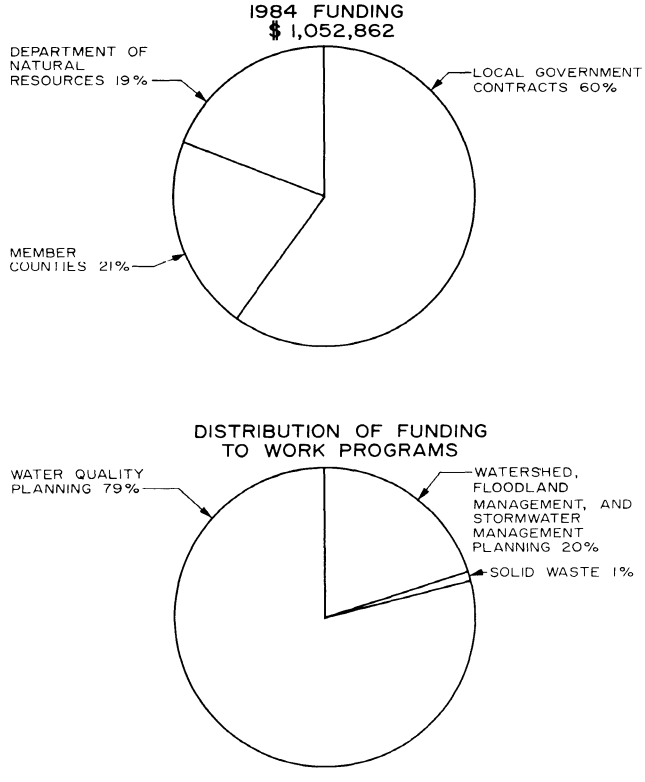
In attempting to find sound answers to these and related questions, develop recommendations concerning environmental protection and enhancement, monitor levels of environmental quality in the Region, and respond to requests for data and technical assistance, activities were conducted in 1984 in three identifiable program areas: water quality management planning; watershed, floodland, and stormwater management planning; and solid waste management planning. In addition, in an effort to actively seek input from the public on the Commission's on-going environmental work programs, the Commission continued a strong public participation/education program during 1984.

WATER QUALITY MANAGEMENT PLANNING

During 1984, Commission water quality planning efforts continued to be focused primarily on activities relating to the implementation of the adopted regional water quality management plan. Such activities included the preparation of more detailed and refined nonpoint source pollution abatement plans, inland lake water quality management plans, and local sanitary sewer service

Figure 42

ENVIRONMENTAL PLANNING DIVISION



area plans. In addition, the Commission continued to assist local units of government in completing detailed sewerage facilities plans in preparation for the construction of point source pollution abatement facilities identified as needed in the adopted regional plan. The Commission also continued to assist the Wisconsin Department of Natural Resources in the review of proposed sanitary sewer extensions. Finally, the Commission continued work on the comprehensive Milwaukee Harbor estuary water resources planning program.

Regional Water Quality Management Plan

In 1979, the Commission completed and adopted a regional water quality management plan. The plan, designed in part to meet the Congressional mandate that the waters of the United States be made to the extent practicable "fishable and swimmable," is set forth in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative Plans; and Volume Three, Recommended Plan. The plan provides recommendations for the control of water pollution from point sources—such as sewage treatment plants, points of separate and combined sewer overflow, and industrial waste outfalls—and from nonpoint sources—such as urban and rural stormwater runoff.

This regional plan element is one of the more important plan elements adopted by the Commission for, in addition to providing clear and concise recommendations for the control of water pollution, it provides the basis for the continued eligibility of local units of government for federal and state grants in partial support of sewerage system development and redevelopment, for the issuance of waste discharge permits by the Wisconsin Department of Natural Resources (DNR), for the review and approval of sanitary sewer extensions by the DNR, and for federal and state financial assistance in support of local nonpoint source water pollution control projects.

The adopted regional water quality management plan for southeastern Wisconsin consists of five major elements: a land use plan element, a point source pollution abatement element, a nonpoint source pollution abatement element, a sludge management element, and a water quality monitoring element. A descriptive summary of the regional water quality management plan is provided in the Commission's 1979 Annual Report.

Nonpoint Source Pollution Abatement Planning

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

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

For nonpoint source detailed planning and plan implementation purposes, the DNR has divided the Southeastern Wisconsin Region into 27 "priority" watersheds as shown on Map 22. As of the end of 1984, priority watershed nonpoint source pollution abatement plans had been completed for the Root River watershed, lying primarily in Racine and Milwaukee Counties; for the Onion River watershed, a small portion of which lies in Ozaukee County and which drains north out of the Region through Sheboygan County; and for the Turtle Creek watershed, a major portion of which lies in Walworth County and which drains west out of the Region through Rock County. Each of these detailed plans includes specific recommendations for nonpoint source water pollution abatement in urban areas, including construction site erosion control, improved street sweeping and vegetative debris collection and disposal, installation of spent oil disposal stations, roadside and stream bank erosion control, and landfill site runoff control; and in rural areas, including improved cropping practices, better livestock waste management,

Map 22

STATUS OF PRIORITY WATERSHEDS IN SOUTHEASTERN WISCONSIN: 1984

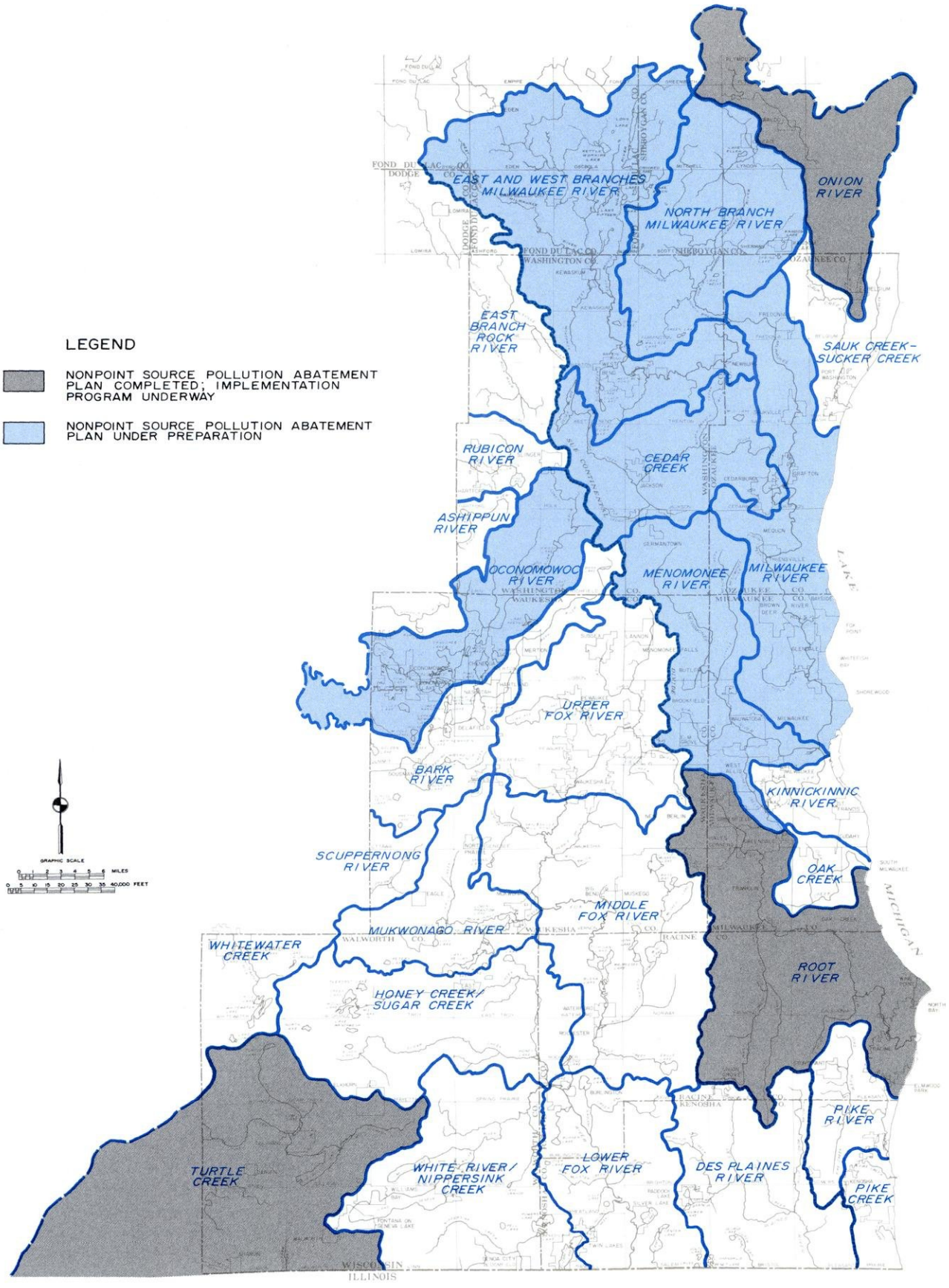


Table 20

ROOT RIVER PRIORITY WATERSHED PROJECTS AND PRACTICES COMPLETED AS OF DECEMBER 31, 1984

Projects and Practices	Amount	Cost		
		Wisconsin Fund	Local Government or Landowner	Total
Diversions	4,221 Feet	$ 8,745	$ 9,168	$ 17,913
Grassed Waterways with Tile	42.2 Acres	189,946	82,949	272,895
Conservation Tillage	259 Acres	7,250	7,250	14,500
Contour Strip Cropping	66 Acres	349	149	498
Manure Storage Facilities	2 Facilities	9,087	9,165	18,252
Barnyard Runoff Systems	3 Systems	14,112	6,048	20,160
Terraces	11,400 Feet	7,753	3,323	11,076
Structural Stream Crossing	1 Crossing	283	120	403
Grade Stabilization Structures	42 Structures	89,748	38,798	128,546
Stream Bank Protection	11,952 Feet	169,595	65,040	234,635
Critical Area Planting	108.5 Acres	89,151	39,599	128,750
Oil Disposal Storage Units	2 Units	314	314	628
Street Sweeping	1 Municipal Program	2,326	2,326	4,652

stream bank erosion control, and stormwater runoff control. Each of the priority watershed programs includes a detailed planning phase which lasts from 18 to 24 months; a project "sign-up" phase which begins at the completion of the plan and ends from four to five years later; and a project completion phase which ends from four to five years after the end of the project sign-up phase.

The Root River priority watershed plan was completed in 1980. The project sign-up phase ended on December 31, 1984. The projects and practices completed through the end of 1984 in the Root River watershed are summarized in Table 20. Local governments and landowners in the Root River watershed have through the end of March 1989 to complete all of the projects and practices which had been approved by the DNR at the end of the sign-up phase.

The Onion River priority watershed plan was completed in 1981. The project sign-up phase concluded on June 30, 1984. The projects and practices completed within the portion of the watershed in the Region through the end of 1984 are summarized in Table 21. Local governments and landowners in the Onion River watershed will have through the end of June 1989 to complete all projects and practices which are approved by the DNR during the sign-up phase.

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

During 1984, the Commission worked with the DNR and the land conservation committees of Washington, Waukesha, and Jefferson Counties in developing a detailed nonpoint source pollution abatement plan for the Oconomowoc River priority watershed. Commission involvement in that planning effort included assisting the DNR and county staffs in conducting inventories of the sources of nonpoint pollution, the preparation of materials for a public information effort in the watershed, and staffing the Oconomowoc River Priority Watershed Plan Development Advisory Committee. That Committee met twice during

Table 21

ONION RIVER PRIORITY WATERSHED PROJECTS AND PRACTICES
COMPLETED IN THE REGION AS OF DECEMBER 31, 1984

Projects and Practices	Amount	Cost		
		Wisconsin Fund	Local Government or Landowner	Total
Diversion	400 Feet	$ 420	$ 180	$ 600
Grassed Waterways with Tile	4,560 Feet (4.1 acres)	6,703	2,873	9,576
Conservation Tillage	75 Acres	600	--	600
Manure Storage Facility	1 Facility	6,000	19,000	25,000

Table 22

TURTLE CREEK PRIORITY WATERSHED PROJECTS AND PRACTICES
COMPLETED IN THE REGION AS OF DECEMBER 31, 1984

Projects and Practices	Amount	Cost		
		Wisconsin Fund	Local Government or Landowner	Total
Diversion	300 Feet (0.3 acre)	$ 473	$ 202	$ 675
Grassed Waterways	8,800 Feet (8.1 acres)	10,317	4,421	14,738
Grassed Waterway with Tile	465 Feet (0.5 acre)	875	375	1,250
Conservation Tillage	57 Acres	2,565	--	2,565
Contour Strip Cropping[a]	35 Acres	--	--	--

[a] *Contracted as a noncost-sharable item.*

1984. The detailed priority watershed plan for the Oconomowoc River watershed is scheduled to be completed late in 1985, and will be followed by the project sign-up and project completion phases of the priority watershed program.

In May 1984, the Wisconsin Legislature and Governor through special legislation designated five additional priority watersheds in the Region and directed the DNR to begin the priority watershed planning process for those watersheds as soon as possible. These five watersheds are all tributary to the Milwaukee Harbor estuary and include the Menomonee River, Cedar Creek, the North Branch of the Milwaukee River, the East and West Branches of the Milwaukee River, and the Milwaukee River main stem. In September 1984, the DNR requested that the Commission help prepare a prospectus that would provide the basis for determining how best to approach in a coordinated way the detailed planning for these five additional watersheds. At year's end, that prospectus was under preparation.

Lake Water Quality Management Planning

The adopted regional water quality management plan recommended that in-depth lake water quality management plans be prepared for the direct tributary drainage areas to each of the 100 major lakes in southeastern Wisconsin. The Commission and the DNR have been working with lake community organizations and agencies, including formal lake protection and rehabilitation districts, to complete over time the preparation of such plans. Where budget and work program conditions permit, these lake studies are being documented in SEWRPC community assistance planning reports. These reports describe the existing chemical, biological, and physical water quality conditions of the lake; the existing and proposed uses of the lake and attendant water quality objectives and standards; the required land management and land use measures in each lake watershed; and required point and nonpoint source pollution abatement measures.

By the end of 1984, lake water quality management plans had been completed for six lakes—Ashippun, La Belle, Pewaukee, North, and Okauchee Lakes in Waukesha County; and Friess Lake in Washington County. For four of the lakes—Ashippun, La Belle, North, and Okauchee—the management plans have been adopted by the local governments concerned and by the Commission as amendments to the regional water quality management plan. Formal adoption of the plans for Pewaukee and Friess Lakes was pending at the local government level.

The detailed plan for the drainage area to Pewaukee Lake was published during 1984. This plan is set forth in SEWRPC Community Assistance Planning Report No. 58, A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin. The detailed planning effort found that Pewaukee Lake supports a large and diverse fish community, and that the major management problem continues to be excessive aquatic plant growth which tends to inhibit recreational use of the lake at certain times. The plan recommends that the local governmental units having jurisdiction over the lands in the tributary drainage area take steps to reduce nutrient loadings to the lake from nonpoint sources. Furthermore, recognizing that aquatic plant growth will continue to be a nuisance in the lake even if nutrient loadings are reduced, the plan recommends the continuation of a weed harvesting program.

At the end of 1984, the Commission had additional lake studies underway. These included studies for the tributary drainage areas to Oconomowoc Lake in Waukesha County, Pike Lake in Washington County, and Geneva Lake in Walworth County. Detailed lake management plans for these and perhaps other major lakes will be completed over the next several years as budget conditions permit.

Local Sewerage Facilities Planning

During 1984, the Commission continued to work with local engineering staffs and consultants in the preparation of detailed local sewerage facilities plans designed to meet the requirements of Section 201 of the federal Clean Water Act, the requirements of the Wisconsin Fund established by the State Legislature in 1978 and administered by the Wisconsin Department of Natural Resources, and good preliminary engineering practice. Work activities during 1984 included the provision of basic economic, demographic, land use, and natural resource base data for use in the preparation of the facilities plans; the extension of the findings and recommendations of the regional water quality management plan, in particular those regarding sanitary sewer service areas, trunk sewer configurations, and treatment plant locations, capacities, and levels of treatment; and the review of, and comment on, the preliminary plans.

During 1984, local sewerage facilities plans were completed for the City of Lake Geneva and jointly for the Villages of Fontana, Walworth, and Williams Bay. These two plans set forth recommendations for the construction of new sewerage facilities in accordance with the recommendations of the adopted regional water quality management plan. As such, the two plans were recommended by the Commission to the Wisconsin Department of Natural Resources for approval. At year's end, similar sewerage facilities plans were under development for the Allenton and Bark Lake Sanitary Districts in Washington County; the Eagle Springs Lake Sanitary District in Waukesha County; the Village of Lac La Belle and the Town of Oconomowoc in Waukesha County; and the Town of Waterford Sanitary District No. 1 in Racine County.

During 1984, the Commission also continued to respond to requests submitted on behalf of several communities to amend the regional water quality management plan, in each case to provide for an

additional sewage treatment facility rather than to maintain current plan recommendations for joint treatment. These requests were submitted by the Villages of Germantown and Thiensville, by the Town of Bristol Utility District No. 3, and jointly by the North Park and Crestview Sanitary Districts in the Racine area. The Commission formally responded to each request through analyses documented in staff memoranda, concluding in each of the four cases that, given the application of the federal and state cost-effectiveness planning guidelines, there was no basis upon which the Commission could amend the regional water quality management plan in the manner desired by the petitioners. The draft responses by the Commission staff regarding these matters were under consideration at the end of the year by the local units of government concerned and by the Wisconsin Department of Natural Resources.

Finally, during 1984, the Commission did formally amend the regional water quality management plan in response to a joint request submitted by the Town and Village of Mukwonago, Waukesha County. In that request, the Town and Village asked the Commission to change the plan to provide for the treatment of sewage from the Rainbow Springs Resort complex and Mukwonago County Park through a connection to the Village of Mukwonago sanitary sewerage system. The original plan recognized the prior approval by the DNR of a separate, private sewage treatment plant to serve the resort and called for continued reliance on onsite septic tank systems at the county park. In responding to this request, the Commission conducted its own analyses, finding that connection of the Rainbow Springs Resort complex and Mukwonago County Park to the Mukwonago system would be the most cost-effective, environmentally sound alternative for resolving sewage disposal problems in this area of Waukesha County. The Commission recommendations were set forth in a document entitled, Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago, published in June 1984.

Sanitary Sewer Extensions and Sewer Service Area Refinement Process

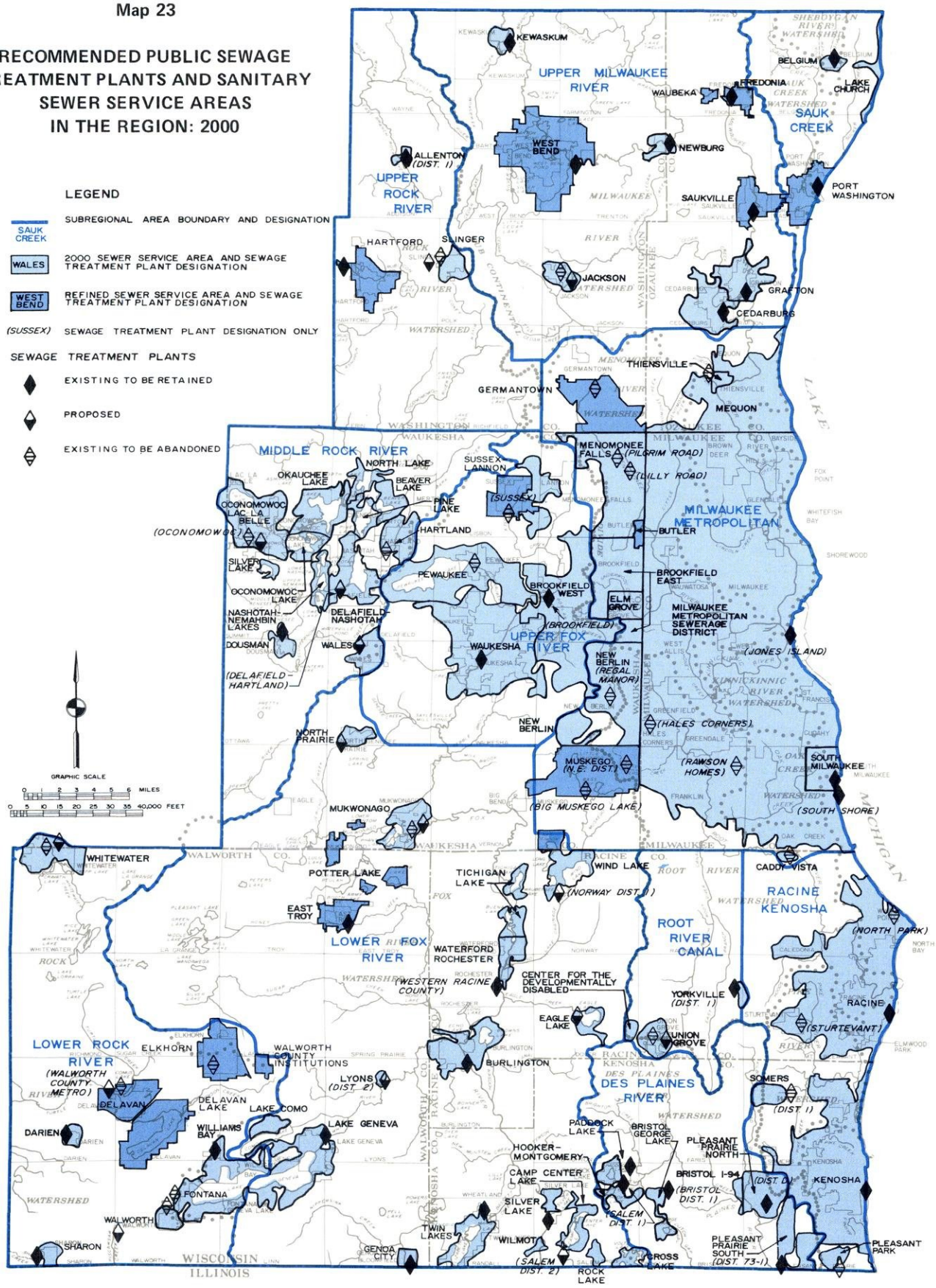
The adoption during 1979 of a regional water quality management plan for southeastern Wisconsin set into motion a process whereby, under rules promulgated by the Wisconsin Department of Natural Resources, the Commission must review and comment on all proposed sanitary sewer extensions. Such review and comment must relate a proposed sewer extension to the sanitary sewer service areas identified in the adopted plan. Under Section NR 110.08(4) of the Wisconsin Administrative Code, the Wisconsin Department of Natural Resources may not approve sanitary sewer extensions unless such extensions are found to be in conformance with an adopted areawide water quality management plan.

The adopted regional water quality management plan includes preliminary recommended sanitary sewer service areas tributary to each recommended public sewage treatment facility in the Region. There are a total of 85 such sanitary sewer service areas in the adopted plan (see Map 23). These recommended sanitary sewer service areas are based upon the adopted regional land use plan for the year 2000. As such, these preliminary delineations are necessarily general in nature and do not reflect detailed local planning considerations. Accordingly, the Commission determined that, upon adoption of the regional water quality management plan, steps should be taken to refine and detail each of the 85 sanitary sewer service areas in cooperation with the local units of government concerned. A process for refining and detailing the areas was set forth in the plan, consisting of intergovernmental meetings with the affected units of government and culminating in the holding of a public hearing on a refined and detailed sewer service area map. Such a map would identify the location and extent of the primary environmental corridors lying within the service area, such corridors containing the best and most important elements of the natural resource base within the sewer service area. Preserving the environmental corridor lands in essentially natural, open land uses is important to the maintenance of the overall quality of the environment, and helps avoid the creation of serious and costly developmental problems. Accordingly, urban development should be discouraged from occurring within the corridors in the service area plans, an important factor to be considered in the future extension of sanitary sewer service.

Each refined and detailed sanitary sewer service area plan, including the detailed delineations of primary environmental corridors, was to be documented in a Commission community assistance planning report. That report would be formally adopted by the operator of the affected sewage treatment facility and by the Commission and

Map 23

RECOMMENDED PUBLIC SEWAGE TREATMENT PLANTS AND SANITARY SEWER SERVICE AREAS IN THE REGION: 2000



forwarded to the Wisconsin Department of Natural Resources and the U.S. Environmental Protection Agency as an amendment to the adopted regional water quality management plan.

By the end of 1984, the recommended plan refinement process had been completed for 16 sanitary sewer service areas. The refined sanitary sewer service areas for these 16 areas are shown on Map 23. Ten of these refinements—those for the Cities of Delavan, Elkhorn, Muskego, Port Washington, and West Bend; the Villages of Germantown, Saukville, and Sussex; the Delavan Lake Sanitary District; and the Walworth County Institutions complex—were completed and adopted both by the local governments concerned and by the Commission prior to 1984. During 1984, sanitary sewer service area plans were completed and adopted locally and by the Commission for the following six additional areas: the Village of Butler—SEWRPC Community Assistance Planning Report No. 99, Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin; the City of Hartford—SEWRPC Community Assistance Planning Report No. 92, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin; the Village of Fredonia and the Waubeka Area Sanitary District—SEWRPC Community Assistance Planning Report No. 96, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin; and the Village of East Troy and the Town of East Troy Sanitary District No. 2 (Potter Lake area)—SEWRPC Community Assistance Planning Report No. 112, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin. The recommended sewer service area plan for the Village of East Troy and environs is shown on Map 24.

Sewer service area refinement plans were in various stages of completion at the end of 1984 for the Village of Belgium; jointly for the City of Brookfield, Town of Brookfield, and Village of Elm Grove; jointly for the City of Cedarburg and Village of Grafton; for the Village of Hartland; for the Village of Menomonee Falls; jointly for the City of Mequon and Village of Thiensville; for the City of Oak Creek; jointly for the Village of Pewaukee and Town of Pewaukee; for the City of Waukesha; for the City of Whitewater; and for the Allenton Sanitary District in the Town of Addison. Pending the completion of such plan refinement processes in cooperation with the local units of government concerned, the Commission must use the more general sewer service area recommendations set forth in the adopted regional water quality management plan as a basis for reviewing and commenting on individual proposed sanitary sewer extensions. During 1984, such review comments were provided on 153 extensions as indicated in Table 23.

Table 23

SANITARY SEWER EXTENSION REVIEWS: 1984

County	Number
Kenosha	18
Milwaukee	47
Ozaukee	7
Racine	8
Walworth	7
Washington	17
Waukesha	49
Total	153

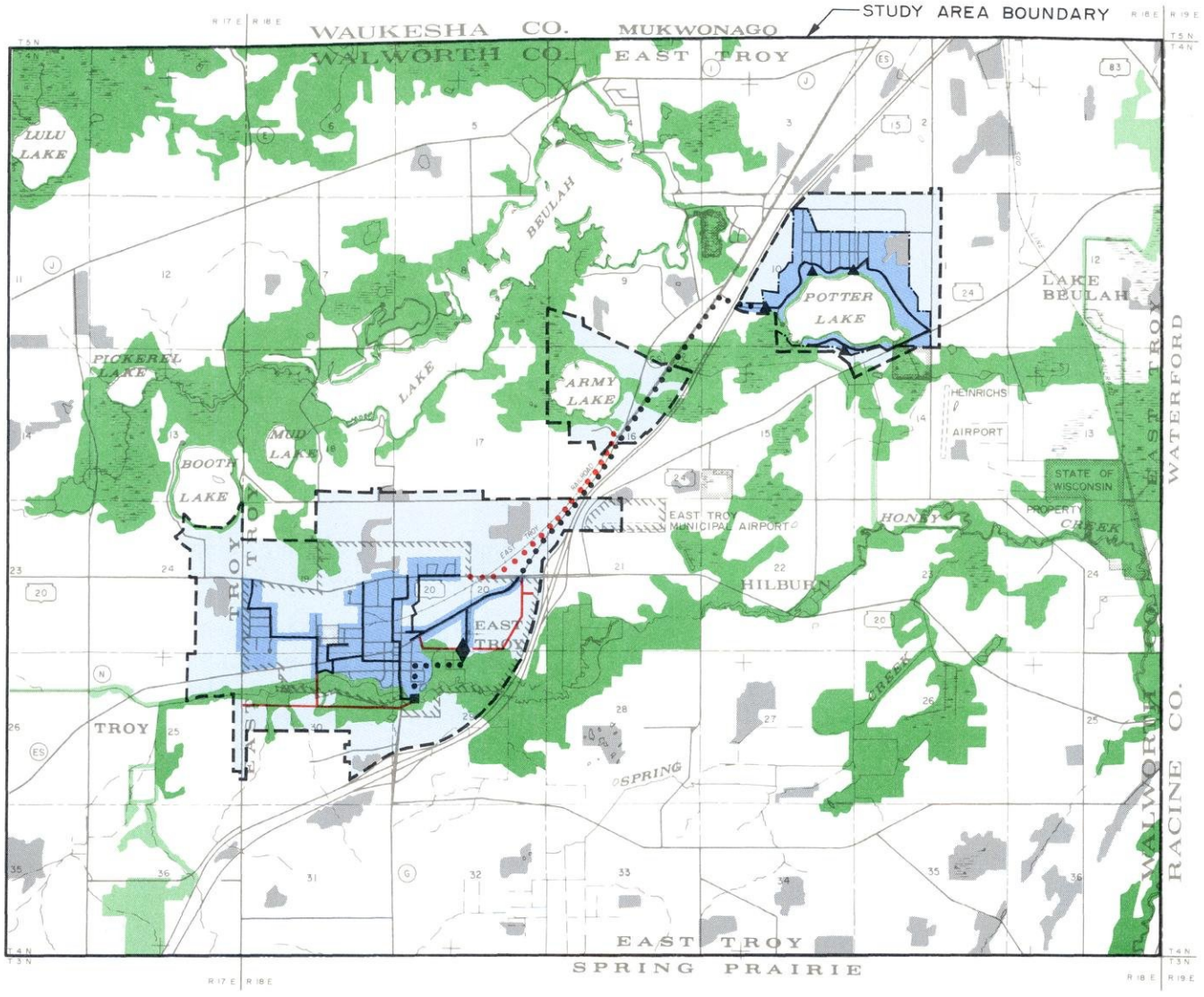
Milwaukee Harbor Estuary Comprehensive Water Resources Planning Program

In 1984 the Commission completed the third year of work under the four-year study of the water resources of the Milwaukee Harbor estuary. This study, which was undertaken at the request of the Common Council of the City of Milwaukee, represents a cooperative effort between the U. S. Environmental Protection Agency (EPA), the U. S. Geological Survey (USGS), the Milwaukee Metropolitan Sewerage District (MMSD), and the Commission. The primary objectives of the Milwaukee Harbor estuary study are to assess the existing and historic water quality, flooding, and storm damage problems in the inner and outer harbors of the estuary; to identify and quantify sources of water pollutants—including in-place sediments; to review water uses and supporting water quality objectives and standards; to formulate and evaluate alternative means of attaining those objectives and standards; and to recommend a cost-effective water resources management plan for the Milwaukee Harbor estuary. The study will have particularly important implications for the selection of the level of protection to be provided by the combined sewer overflow abatement measures, and for the need to provide in-stream treatment measures, including sediment removal.

During 1984, extensive field data collection efforts were completed by the agencies concerned. The MMSD data collection effort principally involved

Map 24

RECOMMENDED SANITARY SEWER SERVICE AREA FOR THE VILLAGE OF EAST TROY AND ENVIRONS



LEGEND

- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL AREA
- NET SANITARY SEWER SERVICE AREA (EXISTING)
- NET SANITARY SEWER SERVICE AREA (2000)
- GROSS SANITARY SEWER SERVICE AREA BOUNDARY
- TOWN OF EAST TROY SANITARY DISTRICT # 2 BOUNDARY
- EXISTING PUBLIC SEWAGE TREATMENT FACILITY
- EXISTING PUMPING STATION
- EXISTING LIFT STATION
- EXISTING TRUNK SEWER
- EXISTING FORCE MAIN
- PROPOSED TRUNK SEWER
- PROPOSED FORCE MAIN

GRAPHIC SCALE
0 1/2 1 MILE
0 2000 4000 6000 FEET

weekly water quality sampling at all sampling sites in the study area and storm-event sampling in February and August 1984 at sites requiring boat access; continuous water quality monitoring at five sites; and extensive laboratory studies of bottom sediments collected from the study area for use in the sediment submodel of the estuary water quality model, and also for determination of the duration of sediment effects upon water quality following combined sewer overflow abatement. The MMSD laboratory conducted most of the water quality and sediment quality analyses for the study.

The USGS data collection effort included continuous water level monitoring at six sites in the inner and outer harbors; continuous streamflow and suspended sediment monitoring at seven locations on the rivers tributary to the estuary; and intensive runoff event quality sampling at 16 sites for two storms in the months of February and August 1984.

The Commission field data collection effort during 1984 involved the continued development and refinement of stage-discharge relationships at four of the water quality sampling sites in the study area, and the collection, along with the USGS, of water quality data during intensive runoff event sampling surveys. The Commission staff also continued the development and maintenance of a computerized data management system to facilitate the analysis of the water quality and suspended sediment data obtained during the study.

The Commission staff provided data management and analytical services throughout the year to a consultant retained to perform needed water quality simulation modeling analyses of the inner and outer harbors and adjacent Milwaukee Bay in order to facilitate the simulation modeling effort.

Following review of historical toxic substances data collected in the study area, five special surveys were conducted to assess the toxicity of estuary and tributary river waters to an indicator organism, the zooplankton Ceriodaphnia affinis/dubia. Assisting in this effort were the EPA Environmental Research Laboratory at Duluth, Minnesota; the Milwaukee Metropolitan Sewerage District; and a private laboratory retained by the Commission.

Following review of the water quality data and water quality modeling results, another special survey—two weeks in duration—was conducted in September to assess the effects of discharges from existing flushing tunnels which pump water from Lake Michigan into the inner harbor. This survey was conducted by staffs of the USGS, MMSD, and SEWRPC.

Another special field study was carried out in 1984 by the USGS, and included sampling of shoreland runoff draining directly to the estuary from industrial areas. Ten sites in the Kinnickinnic and Menomonee River estuaries were selected for sampling during two storm events which occurred in August and September. Samples were analyzed for organochloride compounds, phenols, and toxic metals.

The Water Quality Modeling Subcommittee of the Technical Advisory Committee for the study met in April, July, and November 1984 to review the water quality simulation modeling results and to review and recommend, as necessary, changes in the data collection program. The full Technical Advisory Committee met once during the year to complete its review and recommendations attendant to the water resource management objectives, principles, and standards to be assigned to the waters of the Milwaukee Harbor estuary.

WATERSHED, FLOODLAND, AND STORMWATER MANAGEMENT PLANNING

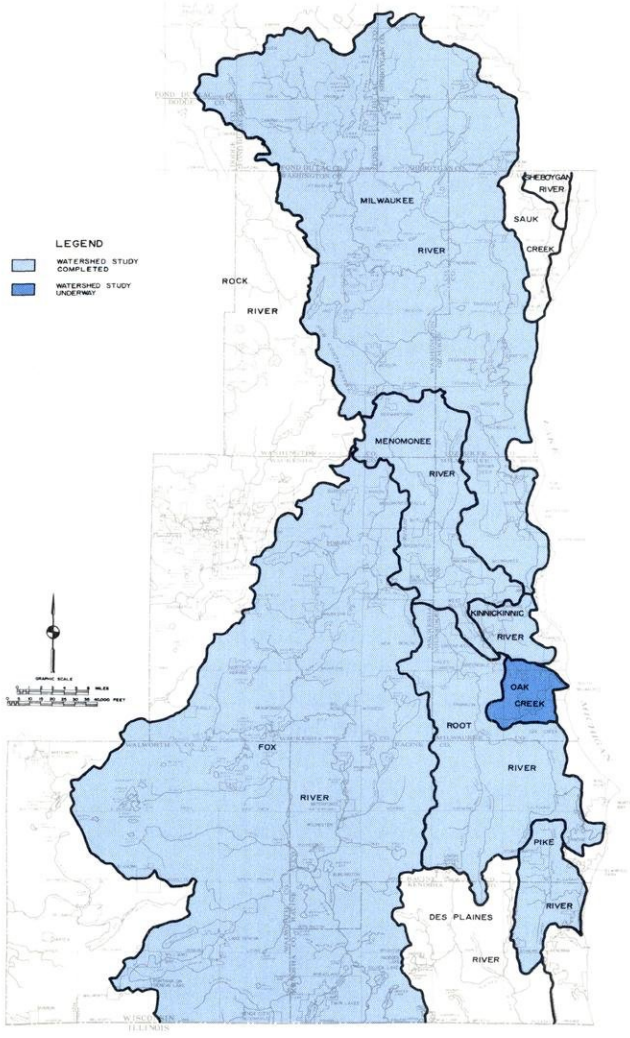
During 1984, Commission efforts in watershed, floodland, and stormwater management consisted of continued work on the Oak Creek watershed study; the provision of technical assistance to local governmental units in the development and implementation of stormwater management plans, policies, and practices; the provision of hydrologic and hydraulic data—including flood flow and stage data—to consulting engineers and governmental agencies; and the conduct of a cooperative stream gaging program. Map 25 indicates the status of the watershed studies conducted by the Commission through 1984.

Oak Creek Watershed Study

During 1984, work on the Oak Creek watershed study included completion of the extensive inventories required for the study, the formulation of a set of watershed development objectives and standards, and the preparation of a watershed land use plan, park and open space plan, and water quality management plan. The Oak Creek watershed committee met three times during the year to consider final planning report materials prepared

Map 25

SEWRPC WATERSHED STUDY STATUS: 1984



by the Commission staff documenting these portions of the comprehensive plan. At year's end, the Commission staff had begun the hydrologic and hydraulic studies necessary for the design and evaluation of alternative floodland management measures in the watershed.

Stormwater Management Planning

During 1984, the Commission staff provided technical assistance to state and local governmental agencies in resolving stormwater management problems. Both stormwater drainage and flood control deal with problems of disposal of unwanted water, and the distinction between these two areas of concern is not always clear-cut. The Commission defines flood control as the prevention of damage from the overflow of natural streams and watercourses. In contrast, drainage is defined by the Commission as the disposal of excess stormwater on the land surface before such water has entered defined stream channels. While the Commission continues to be extensively involved in flood control planning, in recent years the Commission's work efforts have been increasingly directed toward stormwater management planning.

The following is a summary of some of the stormwater management planning activities undertaken by the Commission in 1984:

- At the request of the City of Oconomowoc, the Commission analyzed stormwater drainage problems in the western portion of the City, including lands in the adjoining Town of Oconomowoc southwest of Lac La Belle. The City and landowners in the area were concerned about the effects of increasing stormwater drainage from those areas on the quality of Lac La Belle. Alternative plans were prepared to accommodate stormwater runoff flows while abating the nonpoint source pollution from such flows, and the costs of such plans were estimated.

- At the request of the City of West Bend, a stormwater management plan was prepared for a proposed new industrial park and tributary drainage area within the Quaas Creek watershed. The planning effort included the evaluation of alternative drainage and nonpoint source pollution control elements. The latter included an evaluation of the potential pollutant removal effectiveness of stormwater detention ponds.

- At the request of the Town of Wheatland, the Commission staff analyzed surface and groundwater drainage problems in the Slades Corners area of the Town. These problems had resulted in failing onsite septic systems and wet basements. A recommended plan was prepared for the abatement of such problems.

- At the request of the Village of Hales Corners, work began in the fall of 1984 on the preparation of a master stormwater management plan for the Village. At year's end, work had progressed to the point

where deficiencies in the existing stormwater management system had been determined and documented.

In 1985 it is expected that the Commission will continue to be involved in stormwater management planning activities. The Village of Hales Corners stormwater management master plan will be completed. In addition, the Commission will remain responsive to requests for similar stormwater management planning assistance from local governmental units.

Floodplain Data Availability

The status of existing flood hazard data in the Region is shown on Map 26. The Commission has completed comprehensive watershed studies for the Fox, Kinnickinnic, Menomonee, Milwaukee, Root, and Pike River watersheds, resulting in the development of flood hazard data for about 673 miles of major stream channels, not including stream channels in the Milwaukee River watershed lying outside the Region in Sheboygan and Fond du Lac Counties. In addition, special Commission floodland management studies have resulted in the delineation of floodlands for about another 20 miles of stream channel. Large-scale flood hazard maps prepared to Commission specifications are available for about 359 miles of major stream channel for which the Commission and the Federal Emergency Management Agency have developed flood hazard data.

Flood Insurance Rate Studies

Under the National Flood Insurance Act of 1968, the Federal Emergency Management Agency (FEMA) was given authority to conduct studies to determine the location and extent of floodlands and the monetary damage risks related to the insurance of urban development in floodland areas. FEMA is proceeding with the conduct of such studies on a community-by-community basis throughout the United States. While the Commission has not directly contracted with FEMA for the conduct of such studies, the Commission does cooperate with all of the engineering firms and agencies involved in the conduct of such studies, particularly in the provision of basic floodland data already developed by the Commission in a more comprehensive and cost-effective manner through its series of watershed studies. The Commission provides to the contractors all of the detailed hydrologic and hydraulic data developed under the watershed studies for the various streams in the Region and shares with the contractors the results of the analytical phases of such studies. Development by the Commission of such data makes it possible for FEMA to carry out the flood insurance rate studies more efficiently and at considerably less cost than if such data had to be developed on a community-by-community basis. Commission participation in and review of the study findings, moreover, assures consistency between studies for communities located along a given river or stream.

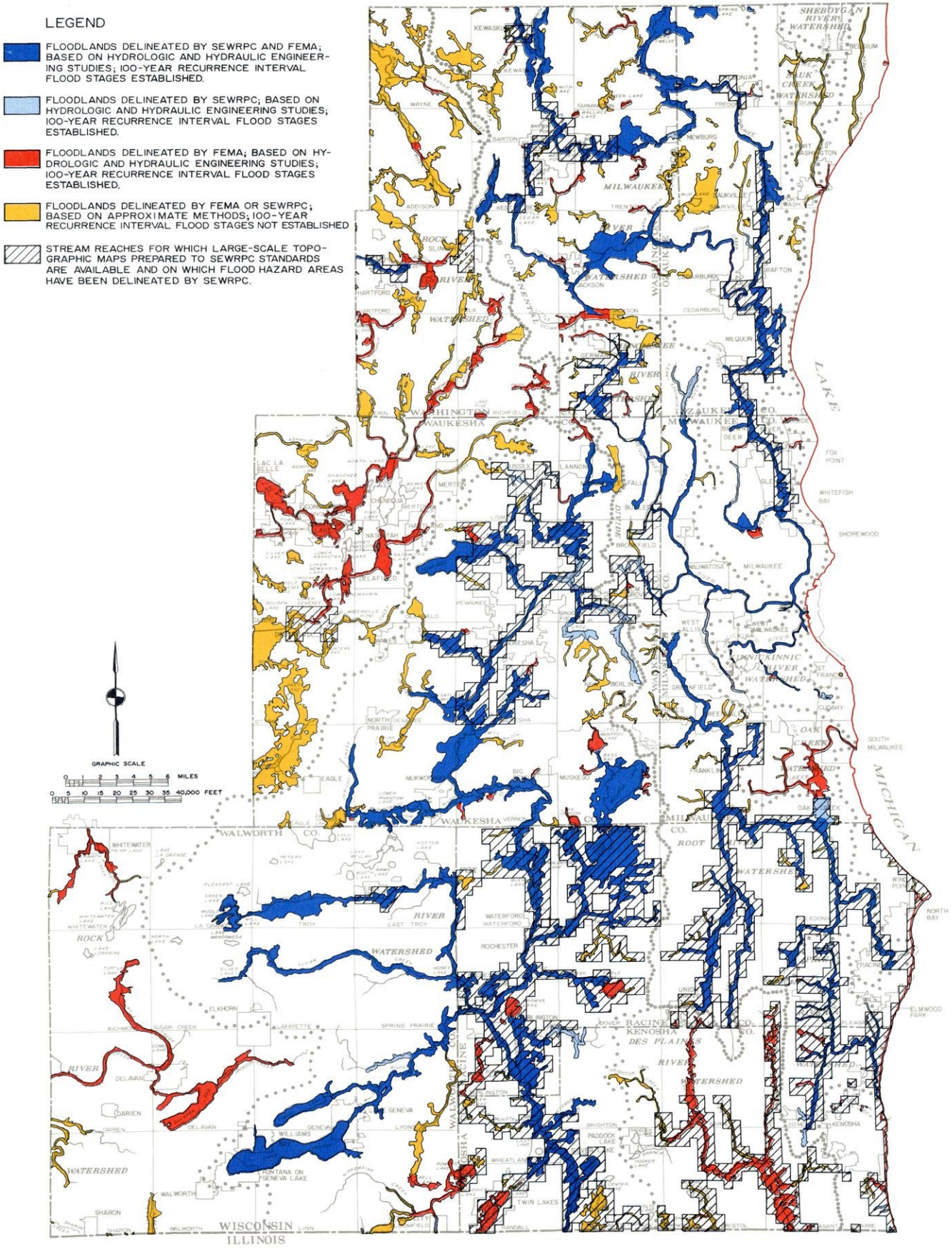
By the end of 1984, federal flood insurance rate studies had been completed and were underway, respectively, for 59 and four civil divisions in the Region (see Map 27). Of the four studies in progress, a report presenting the findings of one was in draft form by the end of 1984. The Commission was involved not only in providing available data from the Commission files to the contractors conducting such studies, but also in delineating regulatory floodways and attending meetings with local officials to discuss the conduct and results of the flood insurance rate studies. The Commission also assists the local communities concerned in the enactment of sound local floodland regulations as required by the federal flood insurance program and State Statutes.

Stream Gaging Program

Streamflow data are essential to the sound management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous recording streamflow gages were in operation on the entire regional stream network. Since that time, the Commission has been instrumental in establishing, through cooperative, voluntary intergovernmental action, a more comprehensive streamflow gaging program (see Map 28). In 1984, there were a total of 18 continuous recording streamflow gages in operation in the Region. Of that total, 13 were financially supported by the Waukesha County Board of Supervisors, the Milwaukee Metropolitan Sewerage District, and the Kenosha Water Utility under the Commission's cooperative program. In addition, one gage was supported entirely by the U. S. Geological Survey, two were supported by the U. S. Army Corps of Engineers, one was supported by the Illinois Department of Transportation, and one was supported by the Illinois Environmental Protection Agency, Division of Water Resources. The U. S. Geological Survey annually publishes the data collected under this streamflow monitoring program.

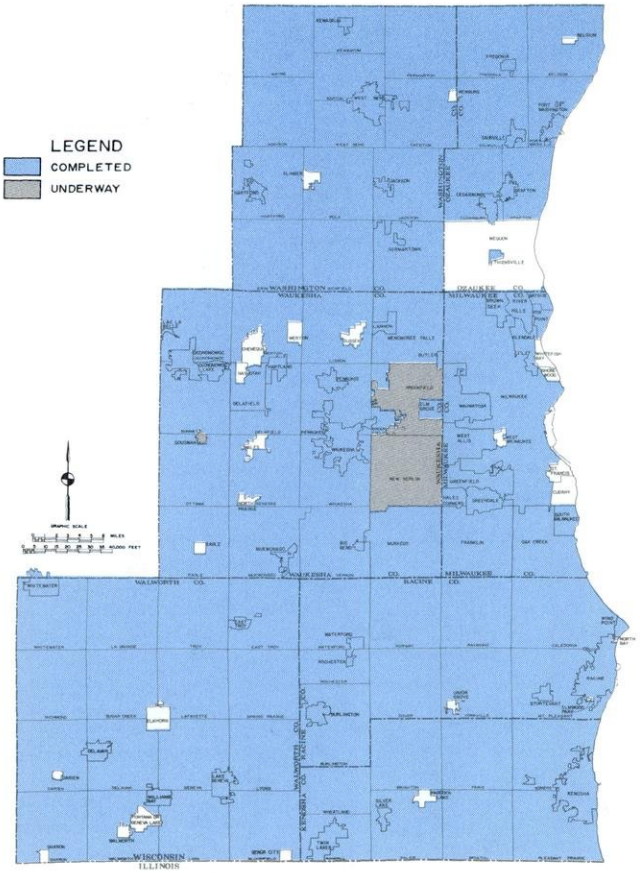
Map 26

DELINEATION OF FLOODLANDS: 1984



Map 27

STATUS OF FLOOD INSURANCE RATE STUDIES



SOLID WASTE MANAGEMENT

During 1984, the Commission continued to assist counties in the Region in the preparation and implementation of locally developed, county-oriented, solid waste management plans. These activities included the following:

- The provision of technical assistance to Walworth County in the review of a proposed new privately operated landfill in the East Troy area. This assistance included determining the relationship of the proposed landfill to the recommendations included in the previously adopted Walworth County solid waste management plan and the provision of testimony on behalf of Walworth County at a formal contested case hearing concerning the landfill, such hearing being held by the Wisconsin Department of Natural Resources.

- The provision of technical assistance to Walworth County in the preparation of the scope of services to be used by a consultant in preparing a detailed feasibility study pertaining to the first phase of the county incinerator facility as recommended in the Walworth county solid waste management plan.

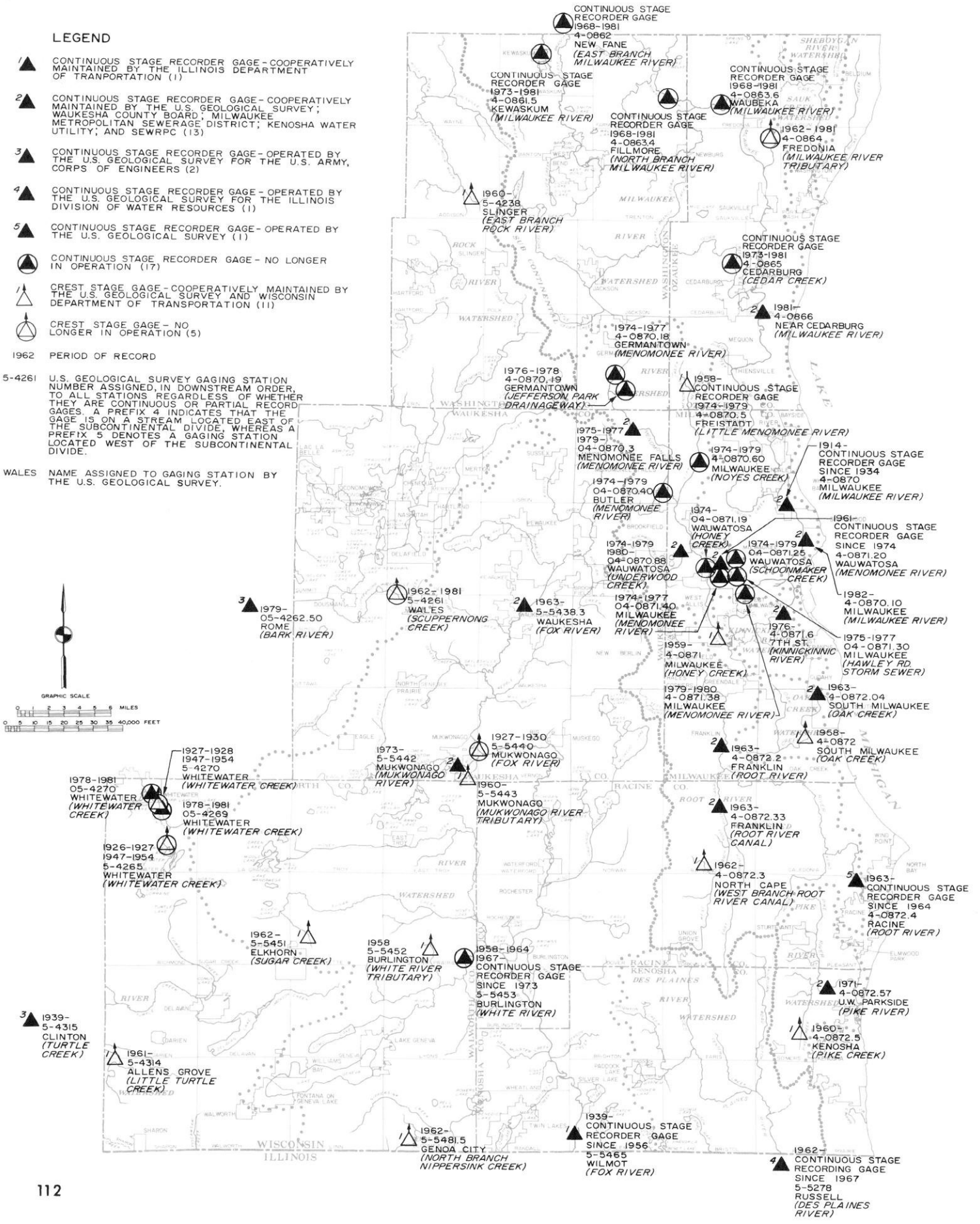
- The initiation of work at the request of Milwaukee County on a comprehensive solid waste management plan for the County. This planning effort is being conducted under the guidance of a technical coordinating and advisory committee comprised of elected and appointed officials from throughout Milwaukee County. At year's end, work had begun on the collection of information on existing solid waste management activities and practices, both by the municipalities in Milwaukee County and by selected industrial, commercial, and institutional generators of solid waste.

PUBLIC PARTICIPATION EFFORTS

During 1984, a full-time Extension Agent again worked with the Commission under a cooperative agreement with the University of Wisconsin-Extension (UWEX). Responsibilities of this position include formulating and conducting educational and informational programs in the areas of water quality, land use, and natural resource preservation and utilization. The following is a summary of some of the educational and informational efforts undertaken by the Extension Agent during the year:

- Presentations on nonpoint source water pollution control at a number of functions, including the annual meeting of local officials involved in the Root River priority watershed; a public hearing pertaining to the Turtle Creek priority watershed; a meeting of the Oconomowoc River Watershed Plan Development Advisory Committee; three meetings of the citizen-based Oconomowoc River Task Force; a workshop for local officials and contractors concerning the problem of construction site erosion in Waukesha County; a meeting of the Wisconsin Environmental Decade, a citizens' advocacy group; and a meeting of UWEX agriculture and resource agents from throughout southeastern Wisconsin.

LOCATION OF U. S. GEOLOGICAL SURVEY STREAM GAGING STATIONS



- Provision of leadership to a multi-county team of Extension agents conducting planning efforts and educational programs in the Oconomowoc River priority watershed. This included a proposal for educational activities submitted to the Wisconsin Department of Natural Resources which received funding approval; a newsletter distributed to some 1,700 persons in the three-county watershed; a van tour of the watershed for members of the Plan Development Advisory Committee and other local officials; and a meeting in the Town of Concord designed to inform elected officials and interested landowners about the watershed project.

- Provision of leadership to an areawide team of Extension agents in the development of a proposal submitted to the DNR for conducting an accelerated education program in the Milwaukee and Menomonee River watersheds.

- Preparation of UWEX-Commission informational materials designed to promote an understanding of water quality problems and recommended pollution abatement strategies, including a question-and-answer summary of the findings and recommendations of the Turtle Creek priority watershed project in Walworth County; and individualized fact sheets for Milwaukee and Ozaukee Counties describing how landscaping practices can help to abate nonpoint sources of pollution.

- Assistance in the writing, editing, and layout of two issues of the "Root River Ripples" newsletter for distribution to environmental groups and landowners, respectively, in Kenosha, Milwaukee, Racine, and Waukesha Counties. Assistance was also provided to Walworth County in the production of a newly formatted Turtle Creek watershed newsletter.

- Development of a synchronized slide-tape set regarding the steps that farm owners, elected officials, and concerned citizens can take to reduce nonpoint source water pollution. This slide-tape set was the central element of an educational program presented to two groups of Milwaukee County Extension homemaker leaders. The homemaker leaders, in turn, took the program, including handouts provided to them by the UWEX-Commission, and taught it to their ndividual groups which encompass some 400 households in the County.

- Participation in the City of Waukesha's sesquicentennial (150-year) celebration through representation on one of the planning committees for this event; and the development and placement of a manned exhibit on land use planning and environmental preservation during the celebration's "Tomorrow Day."

- Provision of assistance to the Land Conservation Committees in Kenosha, Ozaukee, Racine, Walworth, and Waukesha Counties at their annual meetings designed to review activities of the previous year and plan work programs for the upcoming ycar. Assistance was also provided to the areawide association of these committees in southeastern Wisconsin by planning and conducting an educational program on wetland regulations during its annual workshop session and regular participation and reporting during two business sessions.

- Staff participation in, and Commission co-sponsorship and evaluation of, a Second Annual Spring Sludge Symposium for sewage treatment plant operators, wastewater sludge-hauling contractors, county sanitarians, consulting engineers, and town and county public officials. Representation was also provided on the Agri-Life Citizens' Advisory Committee of the Milwaukee Metropolitan Sewerage District, which is advising the District on the sludge issue.

- Updating and distribution of a fact sheet entitled, "The Farmland Preservation Program in Southeastern Wisconsin: Questions and Answers" throughout Ozaukee and Waukesha Counties during the year. This fact sheet was one of several informational items utilized during a Commission-UWEX workshop on exclusive agricultural zoning conducted for town zoning officials in Ozaukee County.

PLANNING RESEARCH DIVISION

DIVISION FUNCTIONS

The Commission's Planning Research Division is responsible for developing demographic, economic, and public financial resource data that serve as the basis for the preparation of regional and subregional plans by other Commission divisions. The kind of basic questions addressed by this Division include:

- How many people live and work in the Region? How are these levels of population and employment changing over time?
- Where in the Region do people live and work? How are these distribution patterns changing over time?
- What are the characteristics of those who live and work in the Region in such terms as age, sex, race, income, household size, and occupation? How are these characteristics changing over time?
- What is the structure of the Region's economy in terms of employment in major industry groups? How is this structure changing over time?
- What is the most probable future level of population and employment in the Region? Where will people live and work in the future?
- How much is being spent to provide public facilities and services? What are the sources of this money? How are these patterns changing over time?
- Will there likely be sufficient public financial resources to carry out regional plan recommendations?

In an attempt to find sound answers to these and other questions, the Planning Research Division during 1984 conducted a number of activities in three identifiable areas: data collation and development, data provision and technical assistance, and census coordination.

DATA COLLATION AND DEVELOPMENT

During 1984, 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, Transportation, and Environmental Planning Division staffs in the conduct of major work programs by those divisions.

Number of Available Jobs

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

Figure 43

PLANNING RESEARCH DIVISION

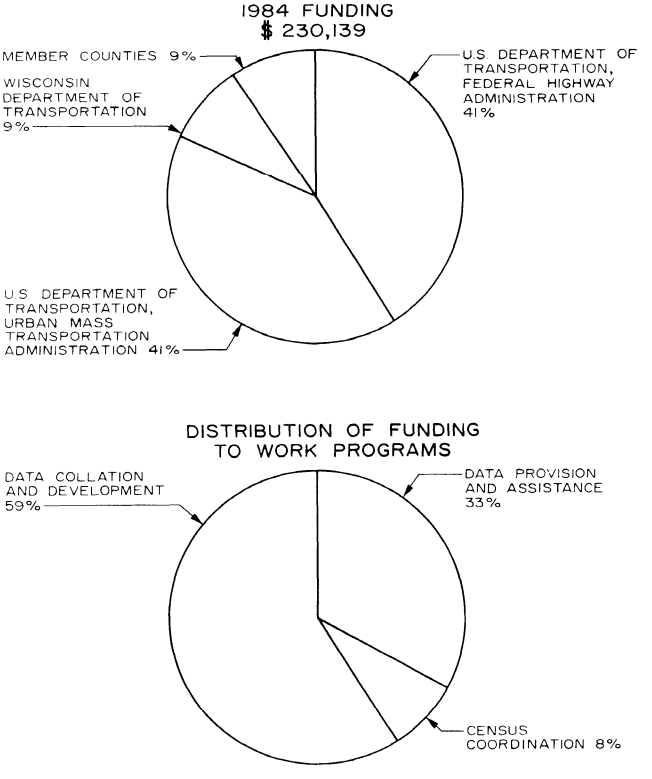


Table 24

REGIONAL EMPLOYMENT BY CATEGORY: 1970, 1980, AND 1984

Employment Category	Jobs (in thousands)			Difference			
				1970-1980		1980-1984	
	1970	1980	1984	Number	Percent	Number	Percent
Agriculture	11.9	12.8	12.1	0.9	7.6	- 0.7	- 5.5
Construction	27.2	25.8	22.8	- 1.4	- 5.2	- 3.0	- 11.6
Manufacturing							
Food and Kindred Products	18.9	20.9	17.4	2.0	10.6	- 3.5	- 16.7
Printing and Publishing	14.9	16.3	18.1	1.4	9.4	1.8	11.0
Primary Metals	22.5	16.6	11.7	- 5.9	- 26.2	- 4.9	- 29.5
Fabricated Metals	24.6	31.8	26.5	7.2	29.3	- 5.3	- 16.7
Nonelectrical Machinery	68.1	73.1	56.3	5.0	7.3	- 16.8	- 23.0
Electrical Machinery	36.5	40.1	37.3	3.6	9.9	- 2.8	- 7.0
Transportation Equipment	22.0	21.5	21.5	- 0.5	- 2.3	0.0	0.0
Other Manufacturing	44.8	41.5	40.0	- 3.3	- 7.4	- 1.5	- 3.6
Manufacturing Subtotal	252.3	261.8	228.8	9.5	3.8	- 33.0	- 12.6
Transportation, Communication, and Utilities	36.7	39.6	37.5	2.9	7.9	- 2.1	- 5.3
Wholesale Trade	35.3	43.5	44.6	8.2	23.2	1.1	2.5
Retail Trade	115.7	131.9	132.5	16.2	14.0	0.6	0.5
Finance, Insurance, and Real Estate	32.8	46.4	50.5	13.6	41.5	4.1	8.8
Services	119.6	178.0	197.0	58.4	48.8	19.0	10.7
Government and Education	83.3	95.7	91.4	12.4	14.9	- 4.3	- 4.5
Self-Employed, Except Farm	37.2	46.2	49.2	9.0	24.2	3.0	6.5
Miscellaneous[a]	1.7	2.5	2.3	0.8	47.0	- 0.2	- 8.0
Total Jobs	753.7	884.2	868.7	130.5	17.3	- 15.5	- 1.8

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

available in the Region by employment category for the years 1970, 1980, and 1984 are set forth in Table 24.

The number of jobs in the Region in 1984 was estimated at 868,700, an increase of about 42,600 jobs, or about 5 percent, over the 1983 level of about 826,100 jobs. Therefore, 1984 is the first year since 1979 in which an increase in the number of jobs in the Region was indicated, thus ending four consecutive years of regional job decline. The 1984 level of 868,700 jobs, however, is still about 33,000 jobs, or about 4 percent, below the historic high of about 901,700 jobs recorded in 1979.

As set forth in Table 24, a majority of employment sectors continue to provide fewer jobs in 1984 than in 1980 in spite of the recent improvement in the Region's economic climate. Only finance, insurance, and real estate, services, and self employment provided significantly more jobs in 1984 than in 1980. There were about 33,000 fewer manufacturing jobs in 1984 than in 1980. About one-half of this decline occurred in the nonelectrical machinery manufacturing sector, which accounted for about 16,800 fewer jobs in 1984 than in 1980. Within the manufacturing category, only the printing and publishing sector provided more jobs in 1984 than in 1980.

Table 25

REGIONAL EMPLOYMENT BY COUNTY: 1970, 1980, AND 1984

County	Jobs			Difference			
				1970-1980		1980-1984	
	1970	1980	1984	Number	Percent	Number	Percent
Kenosha	40,000	49,500	45,400	9,500	23.8	- 4,100	- 8.3
Milwaukee . . .	507,100	547,900	536,000	40,800	8.0	- 11,900	- 2.2
Ozaukee	19,800	24,800	24,000	5,000	25.3	- 800	- 3.2
Racine.	62,700	78,700	75,800	16,000	25.5	- 2,900	- 3.7
Walworth. . . .	24,500	32,100	32,700	7,600	31.0	600	1.9
Washington . .	23,100	31,800	31,200	8,700	37.7	- 600	- 1.9
Waukesha. . . .	76,500	119,400	123,600	42,900	56.1	4,200	3.5
Region	753,700	884,200	868,700	130,500	17.3	- 15,500	- 1.8

Between 1983 and 1984, the number of available jobs increased in all seven counties in the Region. However, as set forth in Table 25, only Walworth and Waukesha Counties provided more jobs in 1984 than in 1980—about 600 and 4,200 jobs, respectively. In the remaining five counties, there were still fewer available jobs in 1984 than in 1980. Milwaukee County accounted for the largest absolute difference—about 11,900 fewer jobs—and Kenosha County, for the largest percentage difference—about -8 percent.

Civilian Labor Force Levels

Another important measure of economic activity within the Region is the characteristics of the Region's civilian labor force. By definition, the civilian labor force of an area consists of all of its residents who are 16 years of age and older and who are either employed at one or more jobs, or are temporarily unemployed. Civilian labor force data are often referred to as "place-of-residence" employment data. Because of the different definitions and estimation procedures utilized in their preparation, "place-of-work" and "place-of-residence" employment data for a particular geographic area will often differ in absolute values, but generally exhibit similar trends, as shown in Figures 44 through 51. In addition to providing information about regional economic activity, comparisons between "place-of-work" and "place-of-residence" employment data can provide important insights into such characteristics of the resident population of the Region as labor force participation and work trip commutation, and when compared with changes in population levels, can provide indirect evidence of population migration.

In 1984, the Region's civilian labor force was estimated to be 891,300 persons, or slightly less than the 1980 civilian labor force of about 894,200 persons. However, the 1984 level is about 24,300 persons, or about 3 percent, below the historic high level of about 915,600 persons which occurred in 1982. While some of this decline may be a function of people withdrawing from the labor force, the continued out-migration of persons from the Region is also a factor. The number of employed members of the civilian labor force increased from about 804,900 in 1983 to about 831,100 in 1984, an increase of about 26,200 persons, or about 3 percent. The number of unemployed members of the civilian labor force decreased from about 95,700 in 1983 to about 60,100 in 1984—a decrease of about 35,600, or about 37 percent. The unemployment rate in 1984 was 6.7 percent, in comparison to 10.6 percent in 1983. Both the number of unemployed and the unemployment rate in 1984 were at their lowest levels since 1980, when they were 58,000 persons and 6.5 percent, respectively.

New Regional Employment Projections Prepared

During 1983 and continuing into 1984, the Commission staff—with the assistance of the Socio-economic Subcommittee of the Technical Coor-

Figure 44

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR THE REGION: 1975-1984

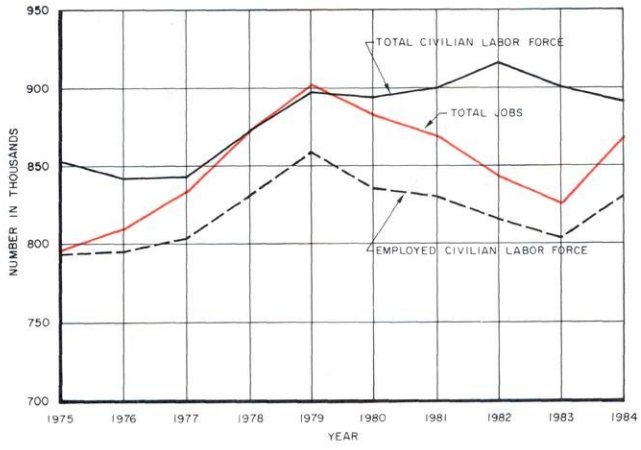


Figure 45

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR KENOSHA COUNTY: 1975-1984

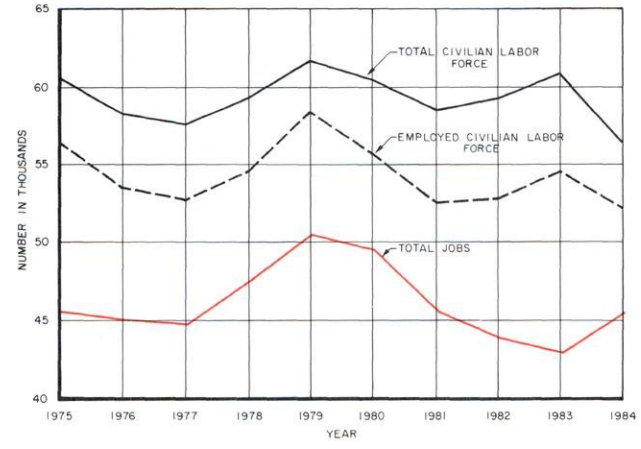


Figure 46

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR MILWAUKEE COUNTY: 1975-1984

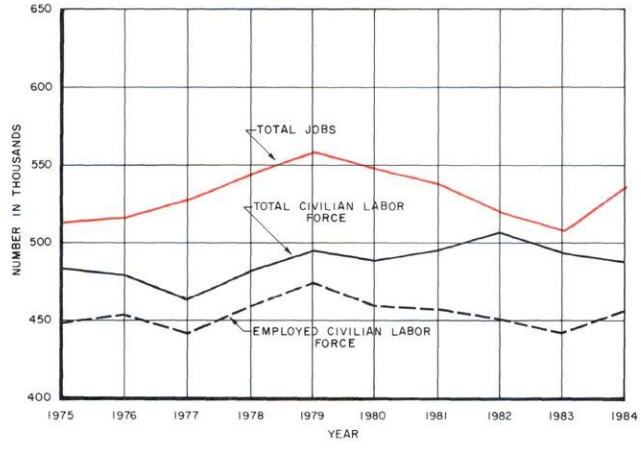


Figure 47

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR OZAUKEE COUNTY: 1975-1984

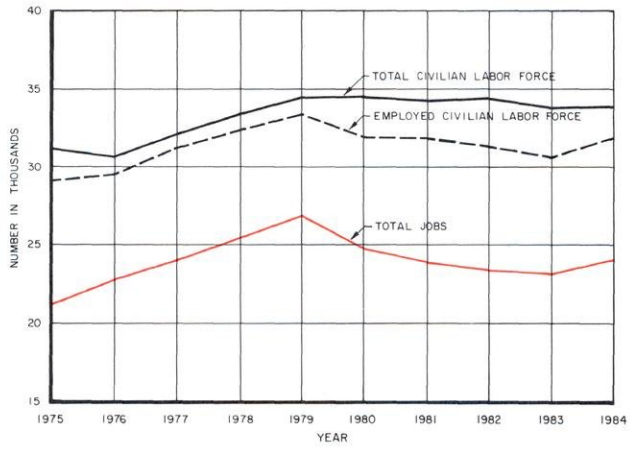


Figure 48

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR RACINE COUNTY: 1975-1984

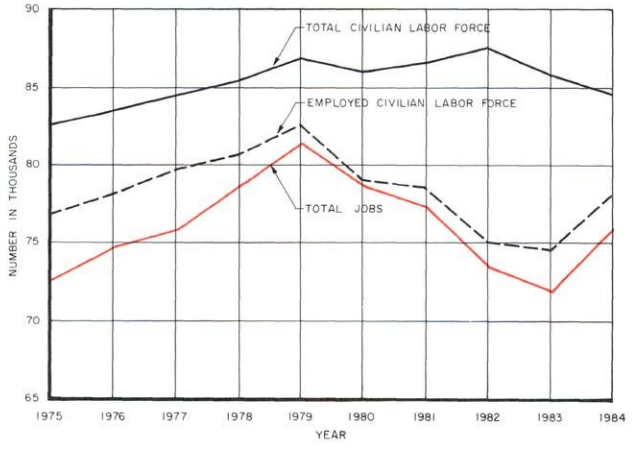


Figure 49

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR WALWORTH COUNTY: 1975-1984

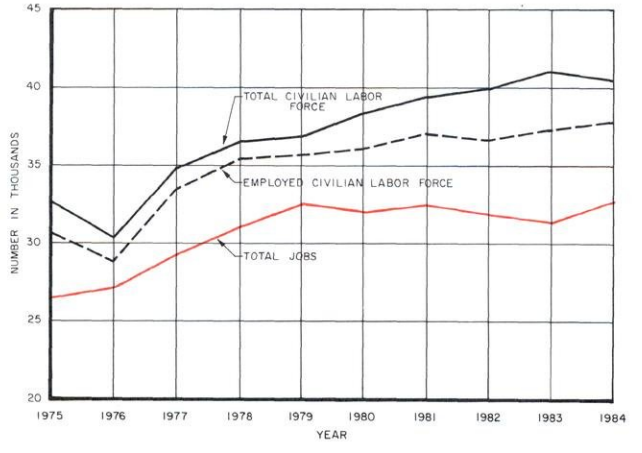


Figure 50

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR WASHINGTON COUNTY: 1975-1984

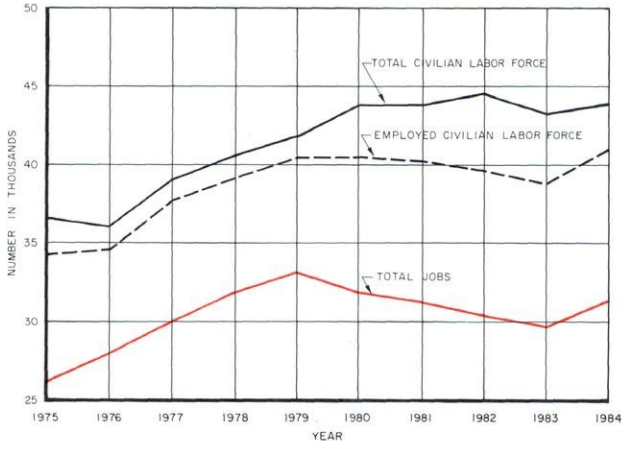
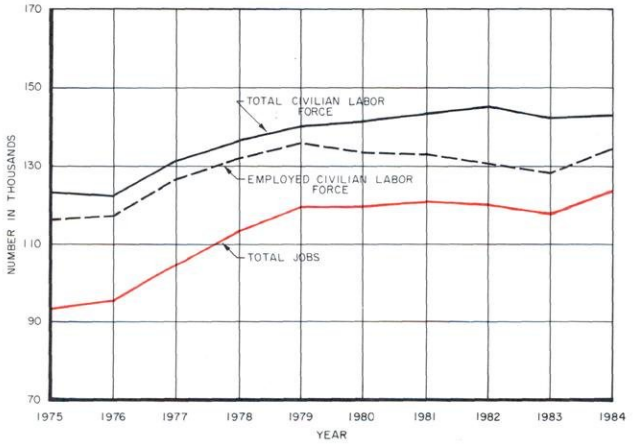


Figure 51

TRENDS IN SELECTED MEASURES OF EMPLOYMENT FOR WAUKESHA COUNTY: 1975-1984



dinating and Advisory Committee on Regional Land Use-Transportation Planning—developed a new set of projections of regional employment change. These projections are for the design year 2010 and will provide one of the bases upon which all adopted regional plan elements, particularly the adopted regional land use and regional transportation system plans, will be reappraised and extended to the design year 2010. These projections are fully set forth and documented in SEWRPC Technical Report No. 10 (2nd Edition), The Economy of Southeastern Wisconsin, copies of which are available from the Commission offices.

The historic practice in long-range systems planning has been to prepare a number of projections of possible population and economic activity levels, selecting from this range a single forecast population level and a single forecast economic activity level believed to be the most representative of future conditions. The selected forecasts would then be utilized as two of the bases for the development, test, and evaluation of alternative land use and supporting physical facilities system plans. The selection and use of such single forecast levels was usually dictated by budgetary and staff time limitations that precluded the preparation of alternative system plans for a number of alternative population and economic activity levels spanning the range of possible future conditions.

This traditional approach to planning works well in periods of socioeconomic stability, when historic trends can be anticipated to continue relatively unchanged over the plan design period. However, during periods of major change in social and economic conditions, when there is uncertainty as to whether historic trends will continue, an alternative to this traditional approach may be required. One such alternative approach proposed in recent years is termed "alternative futures." Under this approach, the development, test, and evaluation of alternative plans is based not upon a single most probable forecast of future conditions, but rather upon a number of futures chosen to represent a range of conditions which may be expected to occur over the plan design period. The purpose of this approach is to permit the evaluation of the performance of alternative plans under a variety of possible future conditions in order to identify those alternatives that perform well under a wide range of such conditions. The alternative futures used under this approach are selected to represent the reasonable extremes of a range of future conditions on the assumption that alternative plans which perform well under the extremes of a range will also perform well at intermediate points in the range. In this way, "robust" plans which can be expected to remain viable under greatly varying future conditions can be identified.

Using the "alternative futures" approach to develop projections for the design year 2010, three alternative future scenarios were postulated—two intended to identify extremes and one intended to identify an intermediate future—that is, a future between the extremes.

The optimistic economic growth scenario represents a return to the types of economic trends that have historically been evident in the regional economy. Briefly, under this scenario there would be no long-term damage to the regional economy as a result of the 1979 to 1983 recession, and the economic recovery of the Region would be strong

in the second half of this decade, with long-term economic growth rates recovering to levels at or slightly below national averages. This growth in the regional economy would be expected to result from the identification and exploitation of strengths in the regional economy such as labor availability, a good vocational-technical educational system, land availability, a high-quality infrastructure of railway, highway, seaport, airport, and sewerage and water supply systems, and a high level of environmental and recreational resources. In addition, the traditional manufacturing sectors that comprise the foundations of the regional economy would be successful in reducing production costs and increasing productivity through application of advanced technologies to traditional manufacturing processes. The optimistic economic future thus envisions a strengthening and expansion of the existing manufacturing base. Under this scenario, the trade and service sectors would continue to grow with increases in consumer purchasing power.

The pessimistic economic growth scenario represents a departure from long-term trends under which the Region was able to maintain or increase its relative share of national employment. Under the pessimistic scenario, the recovery of the regional economy from the 1979 to 1983 recession would be lengthy, with regional employment remaining depressed over the remainder of the current decade. Over the long term, the Region would experience a continuation or even an acceleration of a trend first observed in the 1970's, when southeastern Wisconsin began to experience a decline in its share of national employment. This departure from long-term trends is based on an assumed inability of area manufacturers to modernize their aging physical capital stock, resulting in declining productivity and the continued erosion of product markets first experienced a decade ago. Increased foreign competition in manufacturing industries and the continued migration of manufacturing employment to other regions of the United States would more than offset the employment gains that could be expected in such possible growth sectors as wholesale trade, retail trade, medical and other professional services, or finance, insurance, and real estate. Under this scenario, the lack of industrial expansion or rejuvenation could be expected to hold total employment levels in the Region at or below their 1980 levels through the year 2010.

The intermediate economic growth scenario is characterized by a continuation of the types of changes that have been evident in the Region and nation since 1970. Briefly, under this scenario, the regional recovery from the most recent economic recession would be delayed somewhat, and would be initially weaker than that occurring nationally as the heavy industrial and manufacturing concerns that dominate the regional economy continue to close unprofitable plants and limit operations in the streamlining efforts that were necessary for their survival during poor economic conditions. This scenario envisions the changes that occur during this contraction of the manufacturing employment group to ultimately lead to a revitalized regional manufacturing economy as more efficient factory operations allow employers to expand and modernize existing plants. The contraction would be rather prolonged, however, as under this scenario regional employment levels would remain below the 1980 level until after 1990. Employment in retail and wholesale trade would again experience employment increases as the economy rebounds, as would the service sectors that have seen such rapid growth in the past decade at both the regional and national levels. Moreover, under this scenario, the Region would benefit from an existing complementary mix of trade, service, and public employment enterprises that would help to foster a modest level of employment growth in the long term and allow the area economy to compete successfully with other regions of the nation for employment growth.

The employment projections for the Region for the year 2010 prepared under the alternative futures framework range from a high of approximately 1,251,600 jobs under the optimistic scenario to a low of about 870,900 jobs under the pessimistic scenario, with a level of about 1,051,300 jobs anticipated under the intermediate scenario. These projected levels represent increases of about 42 percent and 19 percent for the optimistic and intermediate scenarios and a decrease of about 2 percent for the pessimistic scenario when compared with the 1980 regional employment level of 884,200 jobs. The regional employment levels anticipated at selected intermediate years of the projection period under each of the three scenarios are set forth in Table 26 and Figure 52.

The employment level in the Region was anticipated to be 924,400 jobs in 1984 under the optimistic scenario, 858,200 jobs under the intermediate scenario, and 824,300 jobs under the pessimistic scenario. The estimated 1984 level of 868,700 jobs is about 6 percent below the level anticipated under the optimistic scenario and about 1 percent and 6 percent, respectively, above

Table 26

ANTICIPATED NUMBER OF AVAILABLE JOBS UNDER THREE ALTERNATIVE ECONOMIC ACTIVITY SCENARIOS FOR THE REGION: 1980, 1985, 1990, 2000 AND 2010

Scenario	Year				
	1980	1985	1990	2000	2010
Optimistic	884,200	934,500	987,900	1,110,800	1,251,600
Intermediate. . .	884,200	851,700	880,900	951,600	1,051,300
Pessimistic	884,200	809,500	811,200	840,900	870,900

the levels anticipated under the intermediate and pessimistic scenerios. The 1984 employment levels projected for each of the Region's seven counties under each of the three alternative futures and the 1984 estimated county employment levels are set forth in Table 27 and Figures 53 through 59.

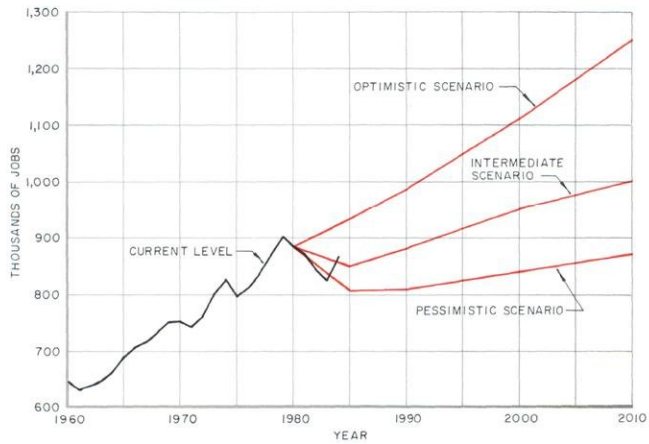
Current Population Levels

The size of the resident population of the Region remained virtually unchanged between 1970 and 1980, increasing from about 1,756,100 residents in 1970 to about 1,764,800 residents in 1980—an increase of only about 8,700 residents, or less than 1 percent. This stands in marked contrast to the large population increases of the immediately preceding decades—333,000 residents, or about 27 percent, from 1950 to 1960, and 182,500 residents, or about 12 percent, from 1960 to 1970. In 1984, the resident population of the Region was estimated by the Wisconsin Department of Administration to be 1,742,300 persons—about 22,500, or about 1 percent, fewer persons than were enumerated in the 1980 federal census and about 13,800 persons, or about three-quarter percent, fewer persons than were enumerated in the 1970 federal census. The 1979 to 1983 economic downturn in the Region, with four consecutive years of depressed employment levels, undoubtedly contributed to the estimated net out-migration from the Region of 73,700 persons between the 1980 census and 1984.

The Wisconsin Department of Administration (DOA) estimates of 1984 resident population levels are set forth in Table 28. The DOA has statutory responsibility for preparing intercensal population estimates as a basis for distributing state-shared taxes to local units of government. These estimates are based upon symptomatic indicators of population change, including automobile registrations, the number of persons filing income tax returns, and

Figure 52

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



the dollar value of exemptions for dependents claimed on income tax returns. According to these estimates, Kenosha, Milwaukee, and Racine Counties experienced population declines—about 1 percent, 2 percent, and 3 percent, respectively—since the 1980 federal census was taken. The aggregate loss of population in these three counties totaled about 27,400 persons. The resident populations of Ozaukee and Walworth Counties remained essentially static between 1980 and 1984. The remaining two counties experienced an increase of about 4,900 persons, with about 3,400 of this gain occurring in Waukesha County.

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

Table 27

EXISTING AND PROJECTED NUMBER OF AVAILABLE JOBS BY COUNTY: 1984

County	Estimated 1984 Jobs	Projected 1984 Jobs		
		Pessimistic Scenario	Intermediate Scenario	Optimistic Scenario
Kenosha	45,400	46,100	48,100	51,700
Milwaukee	536,000	503,900	521,100	558,500
Ozaukee	24,000	23,000	24,600	27,300
Racine.	75,800	73,400	77,700	85,300
Walworth.	32,700	29,500	32,300	34,700
Washington . . .	31,200	31,000	32,400	35,500
Waukesha.	123,600	117,400	122,000	131,400
Region	868,700	824,300	858,200	924,400

Figure 53

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

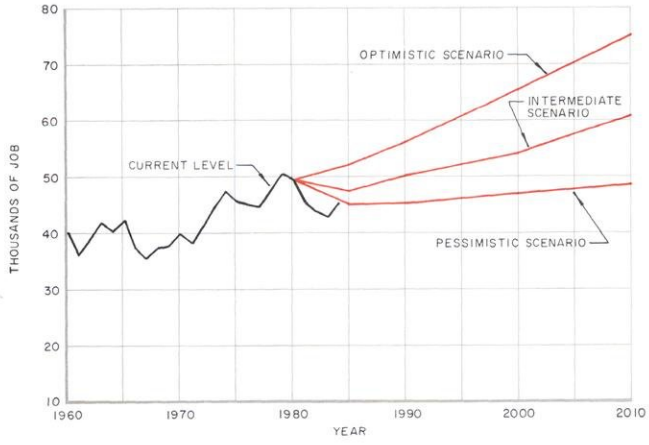


Figure 54

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

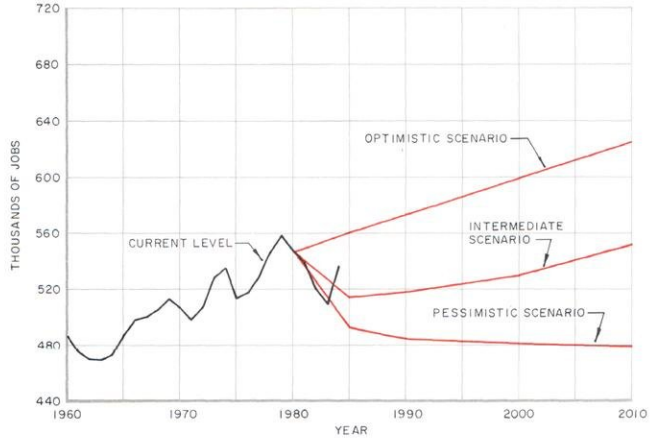


Figure 55

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

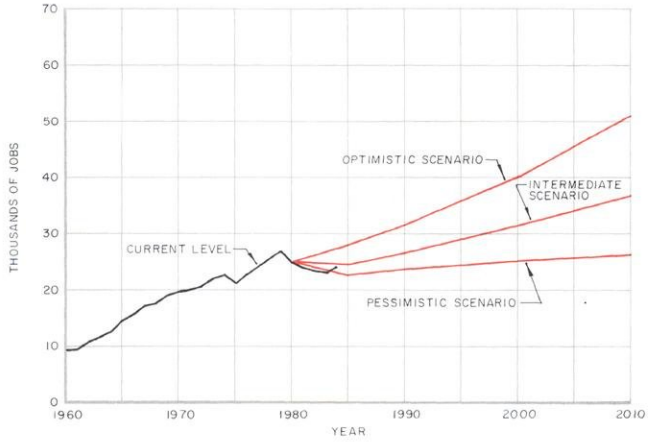


Figure 56

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

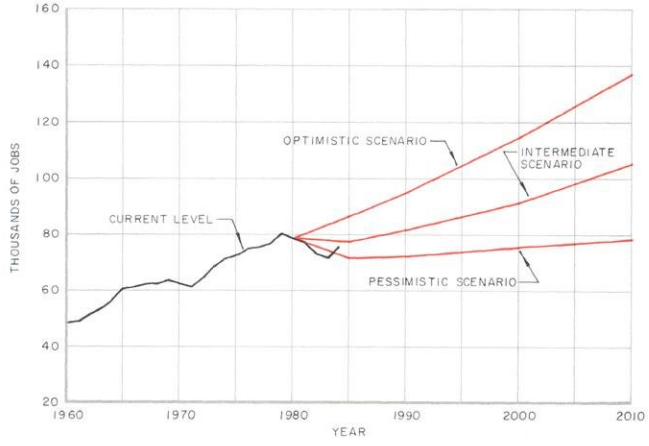


Table 28

REGIONAL POPULATION BY COUNTY: 1970, 1980, AND 1984

County	Population			Difference			
				1970-1980		1980-1984	
	1970	1980	1984	Number	Percent	Number	Percent
Kenosha	117,900	123,100	121,400	5,200	4.4	- 1,700	- 1.4
Milwaukee . . .	1,054,300	965,000	944,600	- 89,300	- 8.5	- 20,400	- 2.1
Ozaukee	54,500	67,000	67,300	12,500	23.0	300	0.4
Racine.	170,800	173,100	167,800	2,300	1.3	- 5,300	- 3.1
Walworth. . . .	63,500	71,500	71,200	8,000	12.7	- 300	- 0.4
Washington . .	63,800	84,900	86,400	21,100	32.9	1,500	1.8
Waukesha[a]. . .	231,300	280,200	283,600	48,900	21.1	3,400	1.2
Region	1,756,100	1,764,800	1,742,300	8,700	0.5	- 22,500	- 1.3

[a] *During 1982, the official 1980 total population count for Waukesha County was revised from 280,326 persons to 280,203 persons.*

Figure 57

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

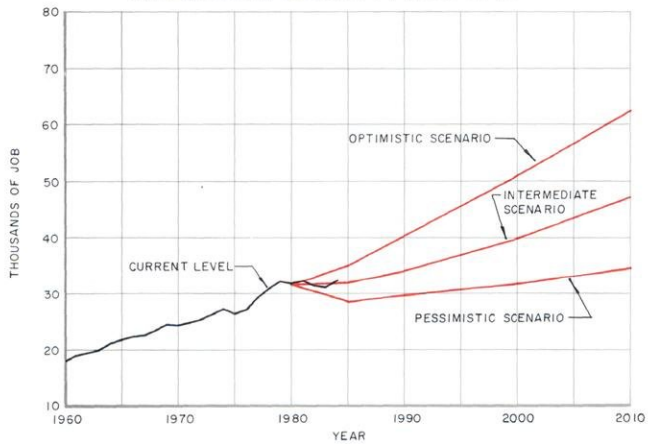


Figure 58

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

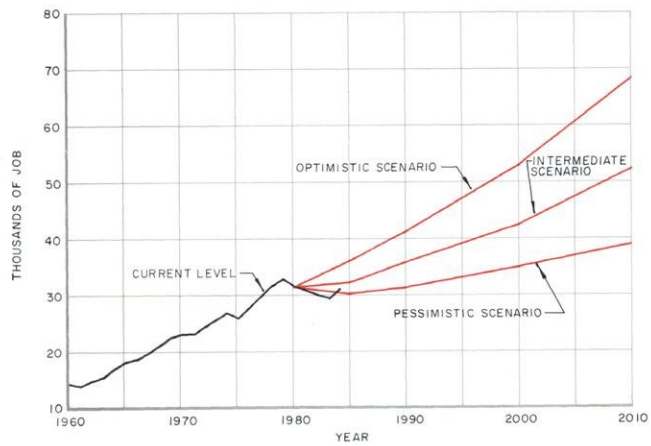
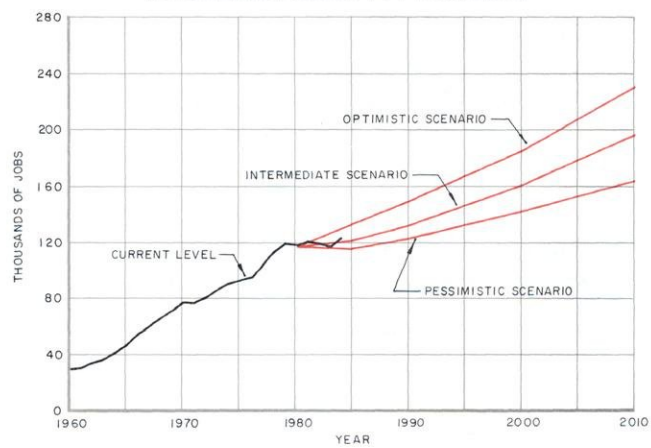


Figure 59

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



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

Changes in natural increase and net migration over the past 10 years in the Region and each of the Region's seven counties are illustrated in Figures 59A through 59H. The measurement of

Figure 59A

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR THE REGION:1975-1984

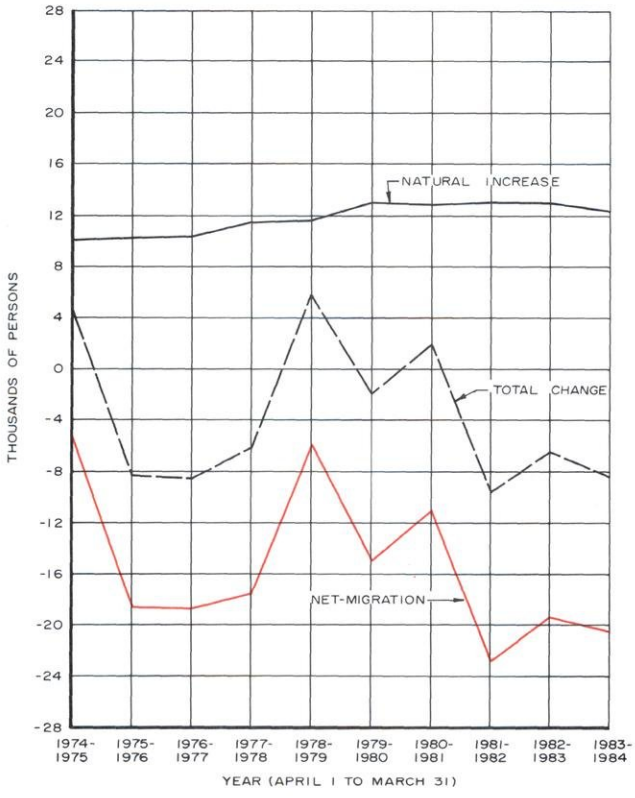


Figure 59B

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR KENOSHA COUNTY:1975-1984

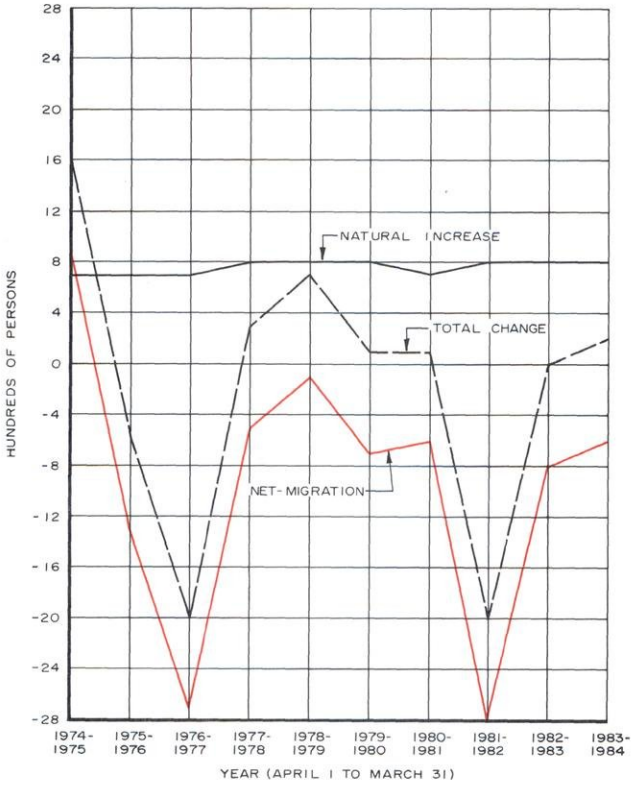


Figure 59C

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR MILWAUKEE COUNTY:1975-1984

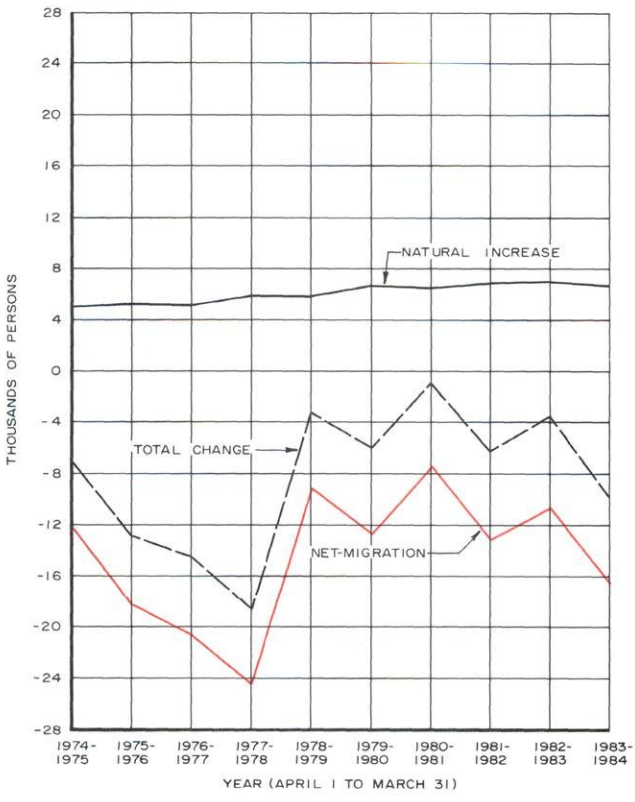


Figure 59D

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR OZAUKEE COUNTY:1975-1984

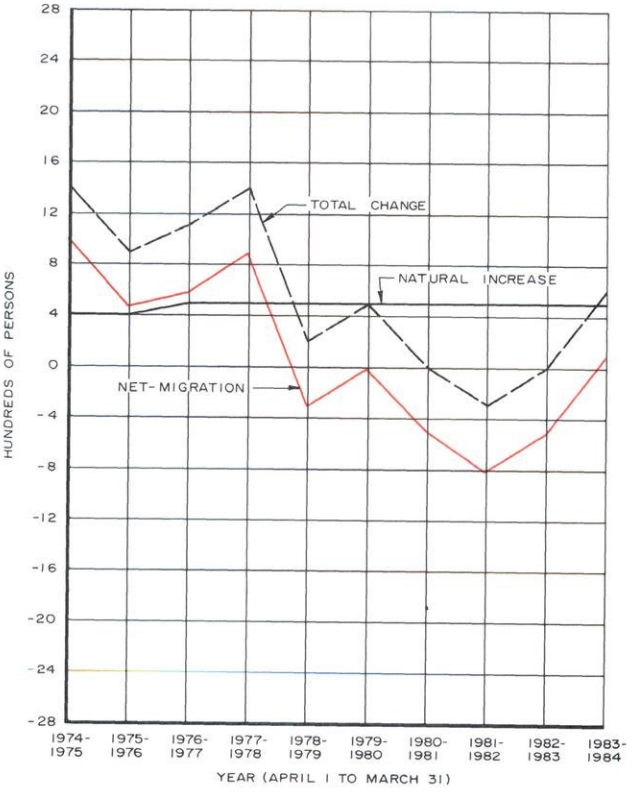


Figure 59E

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR RACINE COUNTY:1975-1984

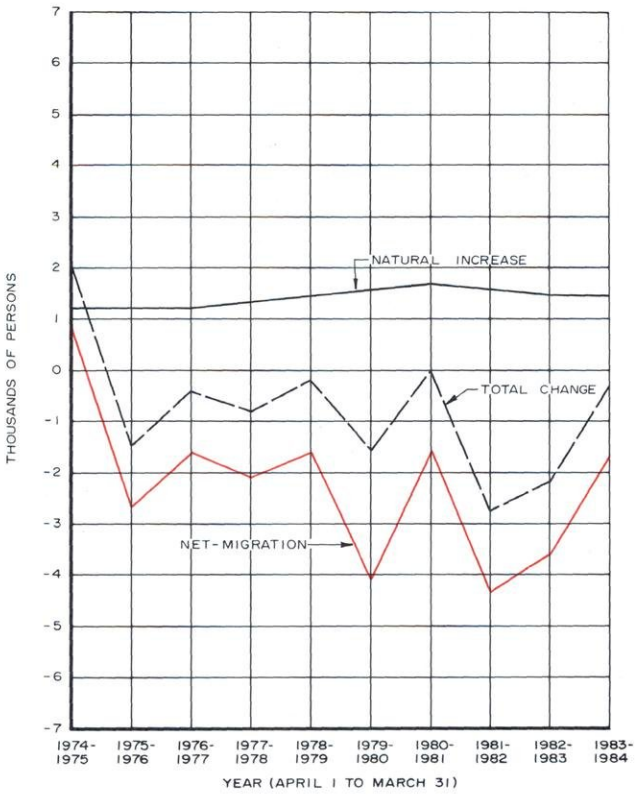


Figure 59F

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR WALWORTH COUNTY:1975-1984

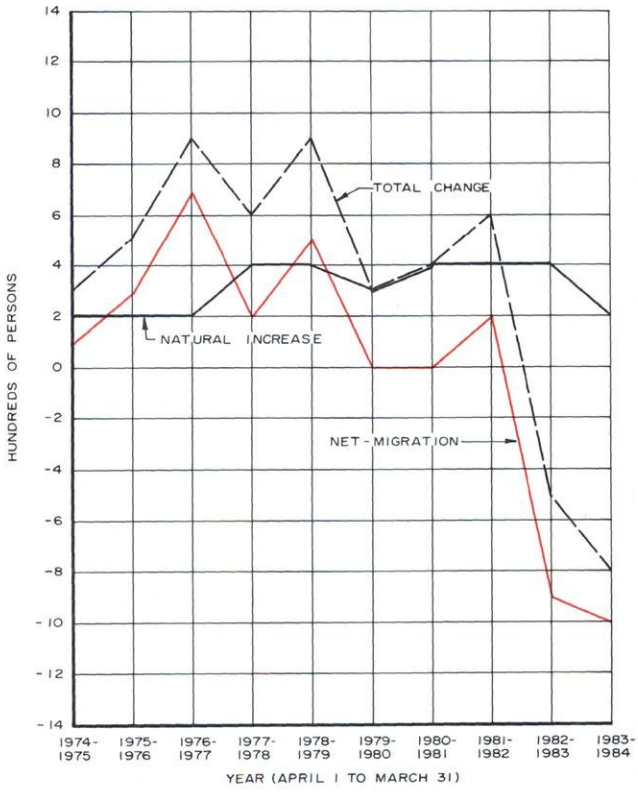


Figure 59G

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR WASHINGTON COUNTY:1975-1984

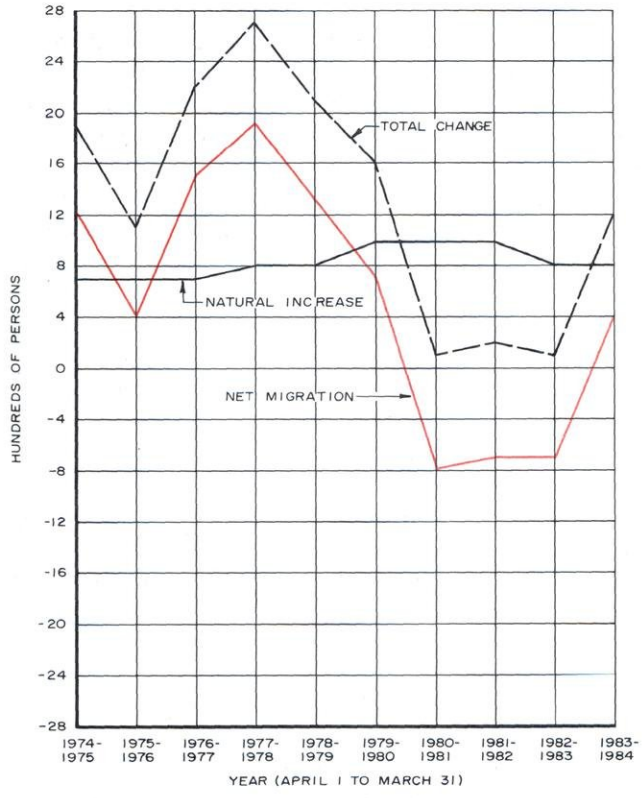
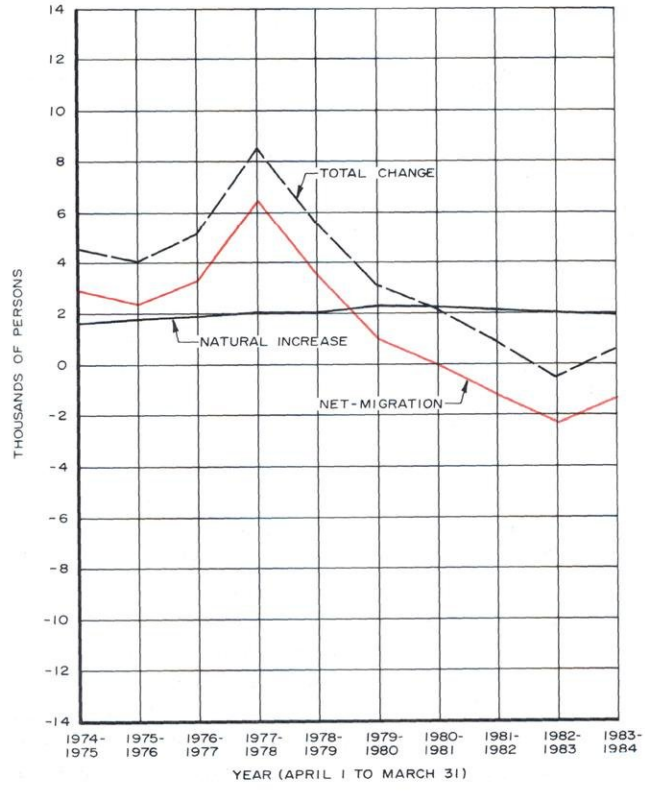


Figure 59H

TRENDS IN COMPONENTS OF POPULATION CHANGE FOR WAUKESHA COUNTY:1975-1984



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

Natural increase in the Region has been relatively stable over the past 10 years, ranging from about 10,000 to 13,000 persons yearly. In more recent years, there has been a trend toward slightly higher levels of natural increase due to a modest increase of about 2,000 yearly in the number of births occurring in the Region. This increase appears to be a function of an increase in the number of women of child-bearing age living in the Region rather than an increase in birthrates, and may, therefore, be transitory in nature.

In contrast to natural increase, yearly net migration levels for the Region have fluctuated greatly over the past 10 years, although they have consistently indicated that larger numbers of people are moving from the Region than to the Region. A comparison of Figure 59A with Figure 52 indicates that over the past 10 years, the highest levels of net out-migration generally correspond with contractions in the number of jobs available in the Region, but even during periods of increase in the number of available jobs, there has been a net out-migration.

Net out-migration was recorded in Milwaukee County during the 1960's and in Kenosha, Milwaukee, and Racine Counties during the 1970's. These trends have continued into the first part of the 1980's. Of particular note, however, is the changing trend from net in-migration to net out-migration that is occurring in the outlying counties of the Region. In Ozaukee, Walworth, Washington, and Waukesha Counties, the recent—generally since 1980—net migration history has been of net out-migration, which represents a fundamental deviation from the longer term historic trend. Whether this is attributable solely to the recent disruption of the Region's economy and attendant job losses or represents a turning point in the character of population change in these counties is a concern that will require careful evaluation over the next several years.

New Regional Population Projections Prepared

During 1983 and continuing into 1984, the Commission staff—with the assistance of the Socioeconomic Subcommittee of the Technical Coordinating and Advisory Committee on Regional Land Use-Transportation Planning—developed a new set of projections of regional population change. These projections are for the design year 2010, and will provide one of the bases upon which all adopted regional plan elements, particularly the adopted regional land use and regional transportation system plans, will be reappraised and extended to the year 2010. These projections are fully set forth and documented in SEWRPC Technical Report No. 11 (2nd Edition), The Population of Southeastern Wisconsin, copies of which are available from the Commission offices.

The conceptual framework employed by the Commission to develop these projections was the "alternative futures" method. As in the preparation of employment projections, three alternative future scenarios were postulated—two intended to identify extremes and one intended to identify an intermediate future—a future between the extremes. Critical social and economic factors that could be expected to impact mortality, fertility, and migration rates over the next 25 years within the United States, the State, and the Region were examined, and a reasonably extreme range of values was established for each component of population change by logically linking various component rates to these critical factors. This provided "most reasonably optimistic" and "most reasonably pessimistic" scenarios of population change. The most reasonably optimistic scenario is a combination of internally consistent factors that would create favorable conditions for economic and population growth within the Region, and the most reasonably pessimistic scenario is a combination of factors that would create unfavorable conditions for economic and population growth. This process allowed the population projections to be based on a range of possible conditions that have been evaluated for reasonableness and internal consistency. These projections are closely linked to the employment projections for the year 2010 in that the migration assumptions postulated for each scenario were based upon the projected availability of jobs.

The population projections for the Region for the year 2010 prepared under the alternative futures framework range from a high of approximately

Table 29

ANTICIPATED RESIDENT POPULATION UNDER THREE ALTERNATIVE ECONOMIC ACTIVITY SCENARIOS FOR THE REGION: 1980, 1985, 1990, 2000, AND 2010

Scenario	Year				
	1980	1985	1990	2000	2010
Optimistic	1,764,800	1,834,600	1,926,700	2,123,900	2,316,100
Intermediate	1,764,800	1,731,300	1,754,200	1,782,300	1,872,100
Pessimistic	1,764,800	1,680,800	1,597,600	1,547,800	1,517,100

Table 30

EXISTING AND PROJECTED RESIDENT POPULATION LEVELS BY COUNTY: 1984

County	Estimated 1984 Population	Projected 1984 Population		
		Pessimistic Scenario	Intermediate Scenario	Optimistic Scenario
Kenosha	121,400	117,400	119,400	127,300
Milwaukee	944,600	920,500	934,900	961,500
Ozaukee	67,300	64,500	67,400	73,300
Racine	167,800	165,100	168,300	178,300
Walworth	71,200	70,700	72,900	76,500
Washington	86,400	82,800	87,000	95,900
Waukesha	283,600	276,600	288,100	307,800
Region	1,742,300	1,697,600	1,738,000	1,820,600

2,316,100 persons under the optimistic scenario to a low of about 1,517,100 persons under the pessimistic scenario, with the level anticipated under the intermediate scenario being about 1,872,100 persons. These projected levels represent increases of about 31 percent and 6 percent for the optimistic and intermediate scenarios and a decrease of about 14 percent for the pessimistic scenario when compared with the 1980 regional population level of 1,764,800 persons. The regional population levels anticipated at selected intermediate years of the projection period under each of the three scenarios are set forth in Table 29 and Figure 60.

Under the optimistic scenario, the population level of the Region was anticipated to be about 1.82 million persons in 1984. The estimated 1984 regional population level of about 1.74 million persons noted above is about 4 percent below this anticipated level. Under the pessimistic scenario, the population level of the Region was anticipated to be about 1.70 million persons in 1984. The 1984 estimated population level is about 3 percent above this anticipated level. The regional population level of 1.74 million persons anticipated in 1984 under the intermediate scenario is within 1 percent of the 1984 estimated regional population level. The 1984 population levels projected for each of the Region's seven counties under each of the three alternative futures and the 1984 estimated county population levels are set forth in Table 30 and Figures 61 through 67.

School Enrollment

School enrollment within the Region continued to decline during 1984, as shown in Table 31. The decline of about 28,400 students represents a decrease of about 8 percent between 1980 and 1984. Public school enrollment declined by approximately 22,800 students, or about 8 percent—from about 294,900 students in 1980 to about 272,100 students in 1984. Nonpublic school enrollment decreased by approximately 5,400 students, or about 7 percent—from about 74,300 students in 1980 to about 68,900 students in

Figure 60

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

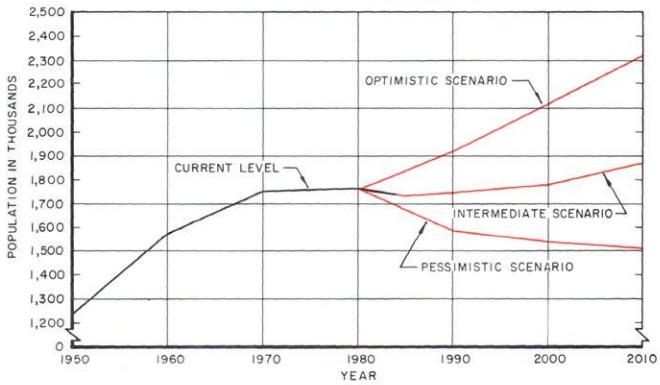


Figure 61

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

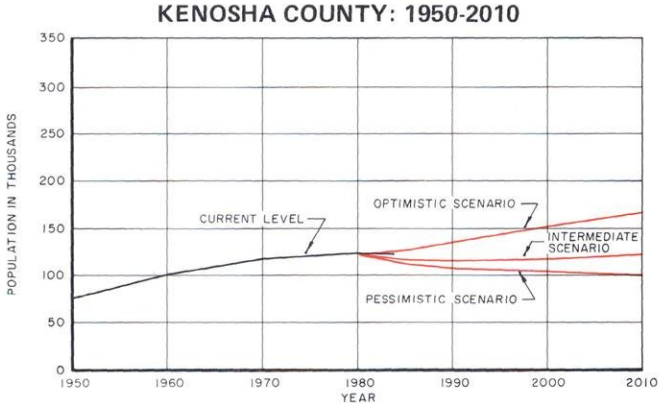


Figure 62

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

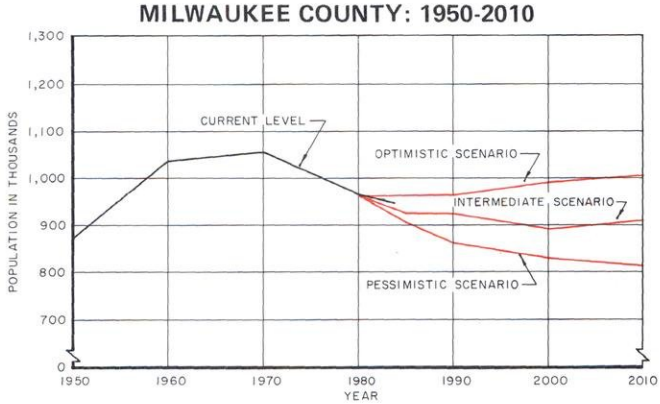


Figure 63

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

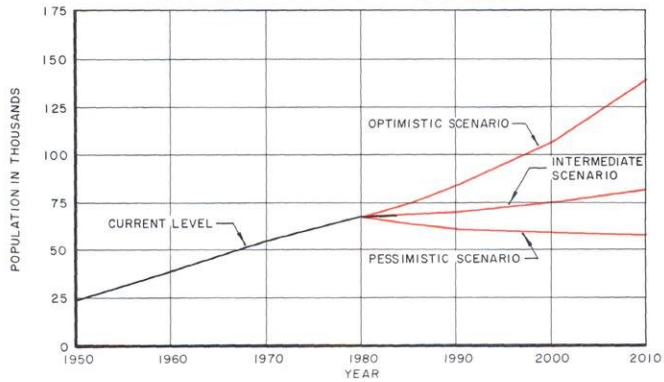


Figure 64

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

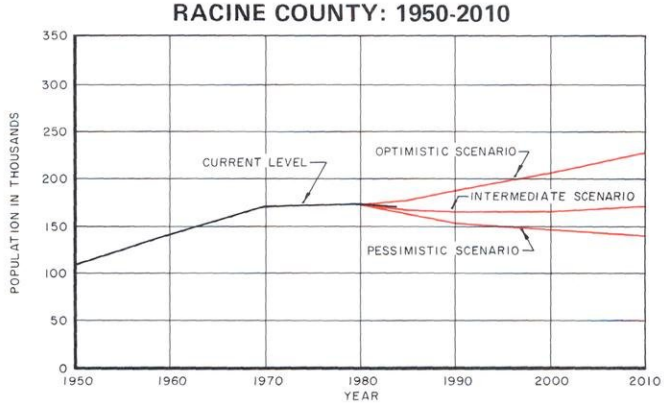


Figure 65

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

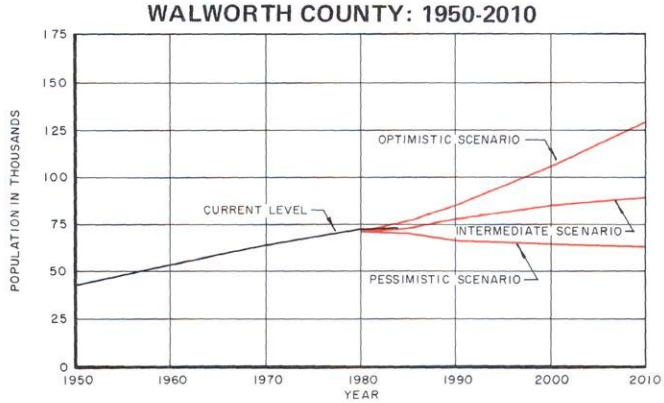


Figure 66

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

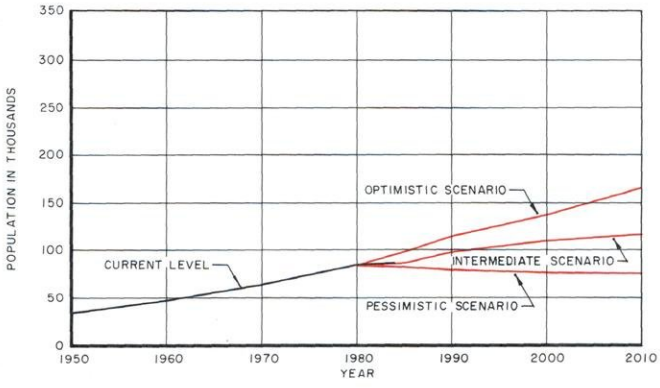
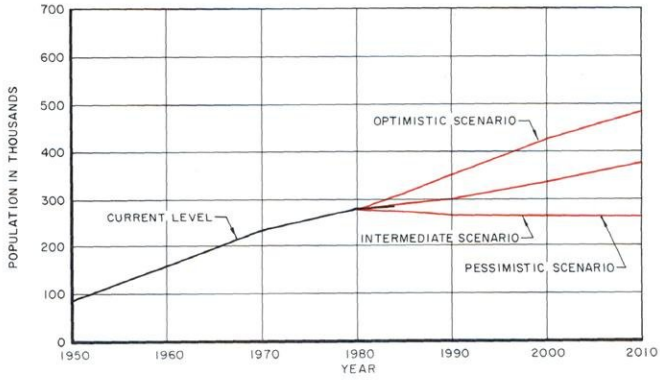


Figure 67

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



1984. Public school and nonpublic school enrollments decreased in all seven counties between 1980 and 1984.

Map 29 shows public school enrollment changes between 1980 and 1984 for public high school districts operating wholly or partially within the Region. Union high school districts and their constituent feeder K-8 school districts have been combined into a single "district" for the purpose of preparing this map. About 84 percent of the public K-12 and the combined union high school and K-8 districts have experienced enrollment declines of 5 percent or more since 1980. Only two districts—Milwaukee Public Schools and Mukwonago Area Schools—have experienced an enrollment gain during this period.

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

HISTORIC LOCAL GOVERNMENTAL STRUCTURE STUDY

During 1984, the Commission completed a study of the historic evolution of the local governmental structure in southeastern Wisconsin. The work completed during the year involved determination and documentation of the original incorporation of, and subsequent growth in, the Region's incorporated civil divisions. This research was published in SEWRPC Technical Record, Volume 4, No. 4, February 1984. This technical record article was the last in a three-article series that examined the historic evolution of the local governmental structure in the Region. The first article, published in SEWRPC Technical Record, Volume 4, No. 2, March 1981, described the development of the local governmental structure in the Region from pre-statehood through the establishment of the seven county boundaries as they exist today. The second article, published in SEWRPC Technical Record, Volume 4, No. 3, February 1982, examined the development of the boundaries of the civil towns in the Region. Together these three articles provide a comprehensive history of the evolution of the local governmental structure in the Region.

The research completed in 1984 indicated that by 1980, there were 82 incorporated villages and cities in the Region, encompassing about 631.6 square miles, or about 23 percent of the area of the Region. The City of Milwaukee is the oldest incorporated civil division in southeastern Wisconsin, having received a charter as a village in 1838. In 1846—two years before Wisconsin became a state—Milwaukee received a charter as a city from the Territorial Legislature. In that same period prior to statehood, the villages which subsequently became the present day cities of Kenosha, Lake Geneva, Racine, and Waukesha were also chartered.

At the beginning of 1900, the Region contained 28 incorporated civil divisions with a total areal extent of about 73.9 square miles, or about 3 percent of the area of the Region. By 1950 an additional 33 villages and cities were in existence for a total of 61 incorporated civil divisions in that year. The total areal extent of incorporated civil divisions had increased to about 172.9 square miles by 1950, representing about 6 percent of the Region's area.

Table 31

REGIONAL SCHOOL ENROLLMENT BY COUNTY: 1970, 1980, AND 1984

County	School Enrollment			Difference			
				1970-1980		1980-1984	
	1970	1980	1984	Number	Percent	Number	Percent
Kenosha	32,300	26,700	23,800	- 8,500	- 26.3	- 2,900	- 10.9
Milwaukee . . .	267,900	184,900	175,400	- 92,500	- 34.5	- 9,500	- 5.1
Ozaukee	15,900	15,000	13,300	- 2,600	- 16.4	- 1,700	- 11.3
Racine.	48,600	38,800	35,100	- 13,500	- 27.8	- 3,700	- 9.5
Walworth. . . .	15,600	13,700	12,400	- 3,200	- 20.5	- 1,300	- 9.5
Washington . .	19,200	21,500	19,700	500	2.6	- 1,800	- 8.4
Waukesha. . . .	73,100	68,700	61,200	- 11,900	- 16.3	- 7,500	- 10.9
Region	472,600	369,300	340,900	- 131,700	- 27.9	- 28,400	- 7.7

The most extensive and significant municipal growth in southeastern Wisconsin occurred during the 1950's. Eighteen civil divisions were incorporated during that 10-year period. More importantly, all of Milwaukee County became incorporated, resulting in the disappearance of all seven town governments there. Three towns in adjacent counties—Menomonee, Mequon, and New Berlin—also disappeared, and one—Brookfield—was greatly reduced in area. The areal extent of the incorporated territory in the Region tripled during this decade, increasing from about 172.9 square miles in 1950 to about 545.5 square miles in 1960. The additional 372.3 square miles of territory incorporated during this decade represented about 59 percent of all territory incorporated in southeastern Wisconsin up to 1980.

In addition to a narrative discussion of the historic development of incorporated civil divisions, the most recent Technical Record article contains tables setting forth the years of original incorporation of the Region's villages and cities, the years of subsequent changes in status—consolidations and changes from village to city status—and the years of official name changes. The article also contains maps of the areal extent of the Region's incorporated civil divisions for the years 1848, 1880, 1900, 1920, 1940, 1950, 1960, 1970, and 1980.

DATA PROVISION AND TECHNICAL ASSISTANCE

Considerable Division staff time is directed each year to answering requests for demographic, economic, and related data. This function also includes the provision of technical assistance to local units of government, public agencies, and school districts in the conduct of special data acquisition activities and in the analysis of data. During 1984, the Division prepared letter responses to 117 requests for population, economic, and related information from the Commission data files. In addition, 174 requests were handled by telephone and 93 requests were accommodated through personal visits to the Commission offices. These requests came from local units of government, federal and state agencies, private firms, and individual citizens. The following are some examples of Division staff activity during 1984 in performing this function.

- Provision of an analysis of local employment and residential development potential to the City of South Milwaukee for use in planning activities.

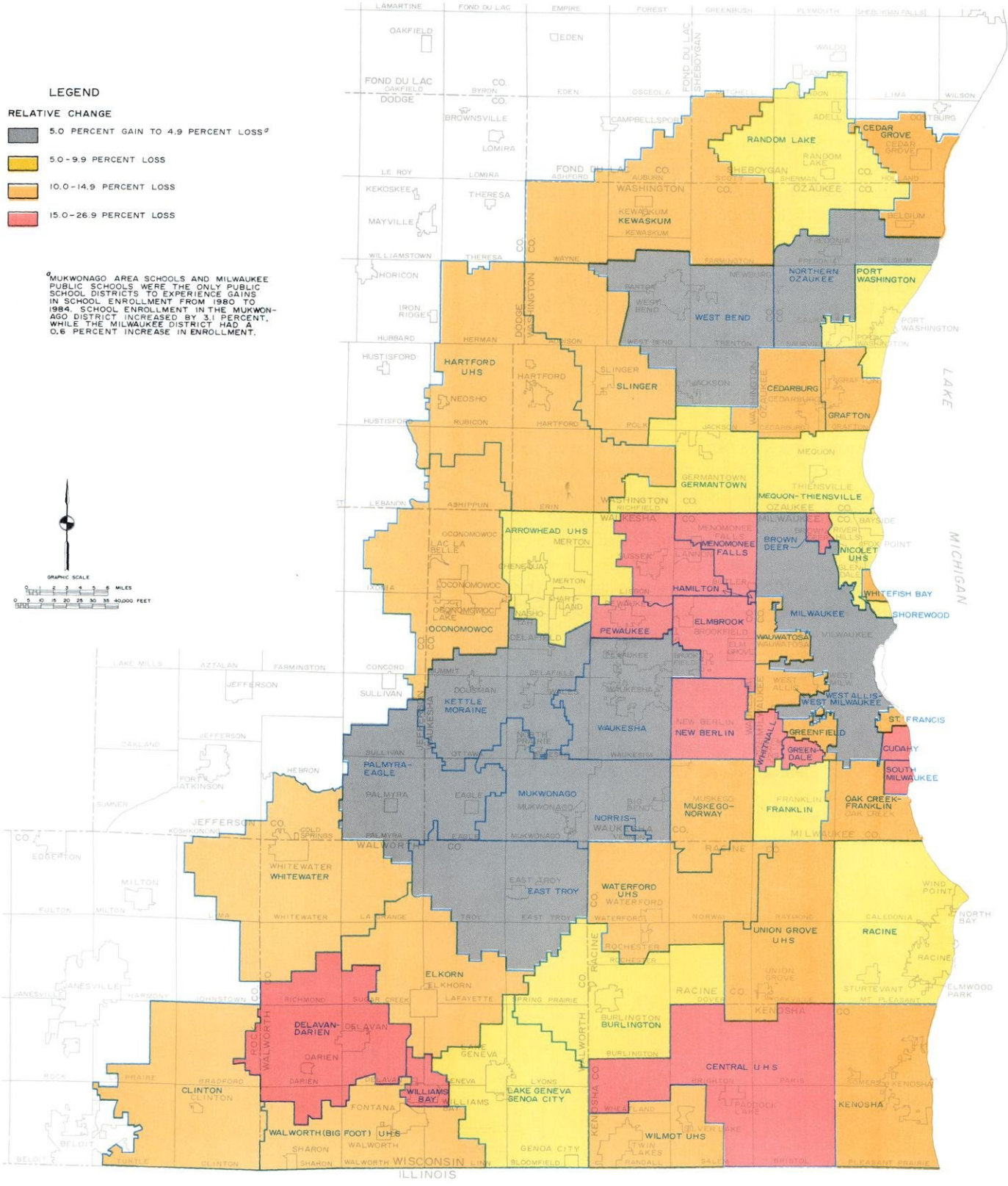
- Provision of forecast population data for Kenosha County to the U. S. Army Corps of Engineers.

- Provision of labor force data to the Waukesha Public School District for use in a report to the Wisconsin Department of Public Instruction.

- Provision of 1 inch equals 400 feet and 1 inch equals 2,000 feet scale aerial photography of the Region to the U. S. Census Bureau for use in advance planning for the 1990 census of population and housing.

Map 29

RELATIVE PUBLIC SCHOOL ENROLLMENT CHANGES IN THE REGION: 1980-1984



- Provision of 1980 federal census and 1975 City of Milwaukee special census data regarding the characteristics of heads of households to a Milwaukee city alderman for use in a study of the problems associated with households and families headed by unmarried individuals between the ages of 15 and 24.

- Provision of Commission population projections to various companies and agencies, including the Racine Unified School District, the Wisconsin Electric Power Company, and a major oil company.

- Provision of general demographic information to local hospitals and retail companies for market research, as well as to local churches for use in church planning.

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. As part of this coordination activity, the Commission serves as a clearinghouse and central repository for a wide variety of census data holdings. A computer-readable geographic base file containing street address ranges and census statistical tabulating and reporting unit boundaries is maintained by the Commission for portions of the Region. The Commission also participates in the Census Bureau's State Data Center Program, a nationwide program under which the governor of each state identifies an agency or group of agencies within the state government to serve as the lead group within that state--the State Data Center--for the dissemination of the large volume of information collected and reported by the Census Bureau.

Within the State of Wisconsin, the State Data Center is a joint function of the Wisconsin Department of Administration and the University of Wisconsin-Madison. Under a joint agreement between the Commission and the Wisconsin State Data Center, the Commission serves as an affiliate member of the State Data Center and supplies census data access and technical assistance to census data users in the seven-county Southeastern Wisconsin Region.

Included in the census material held by the Commission are all published reports, maps, and micro-fiche cards which contain data for the Southeastern Wisconsin Region. Also included is a complete set of computer-readable summary tape files for the State of Wisconsin as produced by the U. S. Bureau of the Census. Assistance is provided to local units of government, the public, and local businesses in accessing these materials.

As a part of its census coordination function during 1984, Division staff provided assistance in accessing 1980 census data to various local units of government. This assistance was in the form of computer-generated reports of data from the summary tape files, copies of published data tables, and census maps. The Division staff provided assistance to the Cities of Brookfield, Delavan, Mequon, Milwaukee, New Berlin, Oak Creek, South Milwaukee, Waukesha, West Allis, and West Bend; to the Village of Grafton and the Town of Mt. Pleasant; to Milwaukee, Racine, and Waukesha Counties; and to four school districts and three vocational technical schools.

ECONOMIC DEVELOPMENT ASSISTANCE DIVISION

DIVISION FUNCTIONS

The Economic Development Assistance Division has primary responsibility for assisting local units of government in the Region in the pursuit of local economic development activities, thereby promoting coordination of local and regional plans that affect or are affected by these activities. The Division provides four basic types of services: economic development program planning, data and information provision, preparation of grant applications and administration of grant awards, and project planning services.

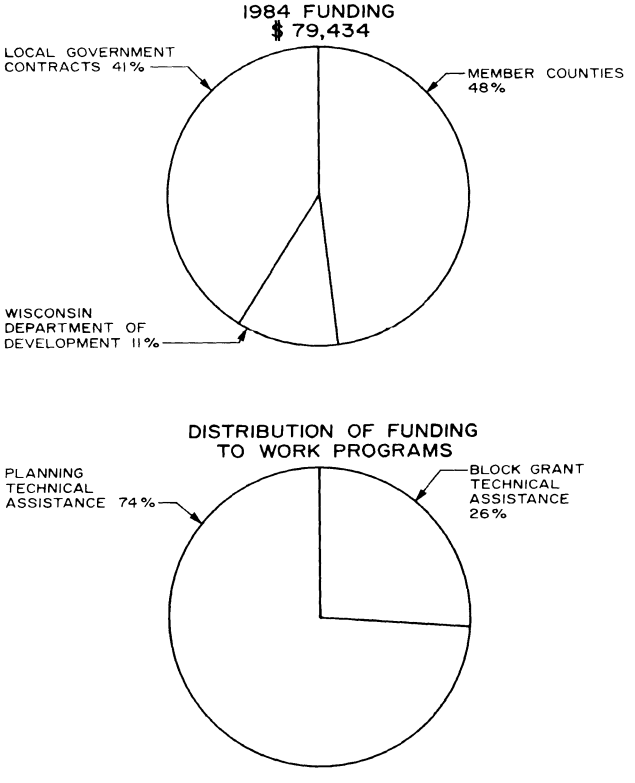
LOCAL ECONOMIC DEVELOPMENT PROGRAM PLANNING

Increasingly, communities within the Southeastern Wisconsin Region have identified a need for on-going local economic development program activities. This need has often been evidenced by a decline in the strength and vitality of the local economy as marked by: 1) The dramatic increases in unemployment rates that began during the severe national economic recession that took place from 1979 to 1983; 2) the potential long-term increases in unemployment and decreases in personal income attendant to the decline in the importance of durable goods manufacturing within the national, state, and regional economies; and, 3) decisions by local businesses and industries to relocate to, or expand in, areas outside the Region.

There has also been an increasing interest in local economic development programs because of the increasing costs of promoting economic development. In order to attract new employers, and retain existing employers, some communities have chosen to purchase land for industrial parks and to provide the necessary infrastructure for development—roadway, sanitary sewer, water supply, and stormwater drainage improvements. Other communities have improved central commercial business districts through street resurfacing; improvements to curbs and gutters, sidewalks, public parking lots, and utilities; and the provision of streetscape amenities such as trees and curbside benches. As the cost of these improvements have escalated, however, many communities have begun to reevaluate previous decisions to promote economic development. While some have decided not to promote the growth of existing business and industry, or the location of new firms within their communities, others have decided to continue to pursue a range of local economic development measures. These include identifying the types of economic growth compatible with community development goals and objectives, and promoting compatible economic activities. In response to the increased interest in promoting economic development at the county and local level, the Commission has developed a staff capability to assist public agencies and private organizations in such promotion. During 1984, the Commission engaged in the following overall economic development efforts:

Figure 68

ECONOMIC DEVELOPMENT ASSISTANCE DIVISION



- Preparation of local economic development program plans for the Cities of Whitewater and Elkhorn in Walworth County. The local units of government concerned requested that the Commission assist them in the conduct of the local economic development programs, identifying appropriate public and private activities for improving the local economy.

- Preparation of countywide economic development program plans for the Counties of Milwaukee, Washington, and Waukesha. During 1984, these counties were identified by the U. S. Department of Commerce, Economic Development Administration (EDA), as eligible for public works grants and business loan guarantees to further economic development. The first step in taking advantage of this eligibility is the preparation of a countywide overall economic development program plan, and approval of the plan by the U. S. EDA.

PROVISION OF ECONOMIC DEVELOPMENT DATA AND INFORMATION

Considerable Division staff time is directed to answering requests for economic development data and information. This function also includes the provision of short-term technical assistance to local units of government, public agencies, and local development corporations in the analysis of economic development data. During 1984, the Division prepared letter responses to 30 requests for economic development data and related information from the Commission data files. In addition, approximately 200 requests were handled by telephone and through personal visits to the Commission offices. These requests came from local units of government, federal and state agencies, local development organizations, and private firms and individual citizens. The following are some examples of Division staff activity in performing this function during 1984:

- Provision of information to the Citizens Governmental Research Bureau regarding countywide economic development activities in Milwaukee, Ozaukee, Washington, and Waukesha Counties. This information was used by the Bureau to publish a monograph on countywide economic development activities in the Bureau's service area.

- Provision of information to Milwaukee County relative to the overall economic development program planning processes used by local units of government in the Southeastern Wisconsin Region. This information was used in the development of a strategic economic development plan for Milwaukee County by the firm of Anderson/Roethle, Inc.

- Provision of information to the Hartland National Bank in Hartland, Wisconsin, concerning an application for a business loan guarantee from the U. S. Department of Commerce, Economic Development Administration.

- Provision of information about new industrial revenue bond projects in Wisconsin in 1984 to the Waukesha, Ozaukee, and Washington Private Industry Council.

- Provision of economic development data and information to the Sentry Capital Group, a private consulting firm, to be used for marketing purposes. The information provided included current and forecast population and employment levels, community economic development profiles, and industrial site maps for various areas within the Region.

- Provision of information to the Oconomowoc Chamber of Commerce about the various types of organizational structures that could be utilized in central business district redevelopment efforts; and information to the City of Mequon about alternative types of development organizations that could be utilized for industrial development activities.

- Provision of Milwaukee County employment and wage data to Amherst and Associates, a private consulting firm.

PREPARATION AND ADMINISTRATION OF ECONOMIC DEVELOPMENT GRANT APPLICATIONS

The Commission staff provides assistance to local units of government in the preparation of economic development grant applications to state and federal agencies and in the administration of programs following grant awards. In most cases, the grant applications seek to acquire funding to

improve community facilities and services in order to meet the needs of business and industry, and to provide below-market interest rate loans to businesses to provide for the expansion of employment opportunities and to increase the community's tax base.

The following are representative grant application and administration services performed during 1984:

- The Commission staff prepared the 1984 Community Development Block Grant (CDBG) applications for the City of Whitewater and Village of Saukville. The City of Whitewater application was approved and resulted in a grant to the City of $1.3 million for various loans to local businesses that should result in the creation of approximately 100 new jobs, and in loans to local residents for the rehabilitation of approximately 80 housing units. Following the grant award, the City requested the Commission staff to administer the economic development portion of the program supported by the grant.

- The Commission staff prepared an Urban Development Action Grant (UDAG) application to the U. S. Department of Housing and Urban Development for the City of Kenosha. The application was for a grant of approximately $893,000 to the City which would, in turn, loan the money to a private developer as secondary financing for a commercial project that was to create about 250 new jobs.

- The Commission staff assisted Kenosha County in the preparation of a 1985 housing rehabilitation grant application under the Wisconsin Small Cities CDBG program. The grant application for the amount of $648,250 will be considered in 1985, and would provide for the rehabilitation of approximately 80 housing units located in the Town of Salem and the Villages of Paddock Lake, Silver Lake, and Twin Lakes.

- The Commission staff provided assistance to 20 communities throughout the Southeastern Wisconsin Region that were considering the preparation of grant applications under the Wisconsin Small Cities CDBG program. For example, the Commission reviewed the Town of Caledonia grant application prior to submittal to the Wisconsin Department of Development.

- The Commission staff provided Racine County with the economic development data required to maintain its eligibility for U. S. Department of Commerce, Economic Development Administation (EDA), public works and business loan guarantee funds. EDA eligible counties must prepare an annual report describing the progress of the County in meeting the goals and objectives of the County's overall economic development program plan.

ECONOMIC DEVELOPMENT PROJECT PLANNING SERVICES

Economic development project planning services involve the conduct of detailed economic development planning studies for local units of government, development corporations, and other organizations interested in economic development and seeking Commission assistance. During 1984, the following representative project planning services were conducted:

- In 1984, the Commission, in cooperation with the Wisconsin Electric Power Company, prepared a series of economic development profiles for communities in southeastern Wisconsin. The profiles are intended to be used by county and local units of government, and by private development organizations, in efforts to attract and retain industrial and commercial development. The profiles, prepared in a succinct, easy-to-read format, provide information on resident population, personal income, employment and labor force, financial and educational institutions, public and private utilities and public services, transportation facilities, housing stock, and health facilities and services. In addition, each profile is illustrated with graphs that serve to highlight detailed information, and with a map of the subject area. In 1984, the Commission completed community profiles for the Region and for each of the constituent seven counties, as well as for 47 selected cities villages, and towns within the Region. Figure 69 shows an example of an economic development profile, reduced for the purpose of reproduction herein. The communities for which profiles have been prepared are listed in Appendix D.

Figure 69

EXAMPLE OF COMMUNITY ECONOMIC PROFILE

CITY OF

WEST BEND

ECONOMIC PROFILE

LOCATION

Washington County in Southeastern Wisconsin

Land area 8.18 square miles

INCOME

1980 Mean Family Income	1980 Total Per Capita Income
$23,761	$7,264

Source: U. S. Bureau of the Census, 1980.

TAXES

Local Property Taxes, 1983
- Assessment Ratio: 1.018
- Net Rate/$1,000: $21.60
- Total Equalized Value: $516,189,540

Source: Southeastern Wisconsin Regional Planning Commission.

POPULATION

	1960	1970	1980	Percent Change 1960-1980
City of West Bend	9,969	16,555	21,484	+ 115.5

Percent of Population by Age Group

Percent of Total	11	21	Potential Labor Force: 57	11
Age Group	0-5	6-17	18-64	65 +

Source: U. S. Bureau of the Census.

1

MAJOR EMPLOYERS

Retail Trade
Fleet & Farm Supply Company
K-Mart Discount Store
Kohl's Department Store
Prescott's Shop Rite Store
Shopko Stores, Inc.
West Bend Outlet Mall
West Bend United Foods

Manufacturing—Printing and Publishing
Serigraph Sales & Manufacturing Company, Inc.
West Bend News, Inc.

Manufacturing—Electric and Electronic Equipment
Wesbar Corporation
The West Bend Company, Dart & Kraft, Inc.

Manufacturing—Machinery, Except Electrical
Gehl Company

Manufacturing—Transportation Equipment
EIS Division, Parker Hannifin Corporation
Weasler Engineering, Inc.

Manufacturing—Leather and Leather Products
Amity Leather Products Company
Enger Kress Company

Transportation and Public Utilities
Johnson School Bus Service
Wisconsin Electric Power Company
Wisconsin Gas Company

Finance, Insurance, and Real Estate
B. C. Ziegler and Company
Heritage Bank, West Bend
M & I First National Bank
West Bend Marine Bank
West Bend Mutual Insurance Company
West Bend Savings & Loan Association

Services
Kettle Moraine YMCA, Inc.
St. Joseph's Community Hospital
State of Wisconsin Job Service
West Bend Area Chamber of Commerce, Inc.

Source: Southeastern Wisconsin Regional Planning Commission and City of West Bend, 1984.

EMPLOYMENT

1981 WAGE AND SALARIED JOBS*

Local Employment by Industry*	Number of Reporting Units	Number of Persons Employed	Percent of Persons Employed	Washington County Average Weekly Wages (first quarter 1982)
Agriculture, Forestry, and Fishing	6	24	0.2	180
Construction	39	193	1.7	290
Manufacturing	39	4,478	40.1	335
Transportation, Communications	19	298	2.7	249
Wholesale Trade	26	179	1.6	330
Retail Trade	132	1,872	16.8	136
Finance, Insurance, Real Estate	31	682	6.1	301
Services and Government	121	3,438	30.8	178**
Total	413	11,164	100.0	

**Not included: self-employed, unpaid family workers, and private household workers.*
***Wage datum is for service industry only.*

Source: Wisconsin Department of Development, 1981; and Wisconsin Department of Industry, Labor and Human Relations.

2

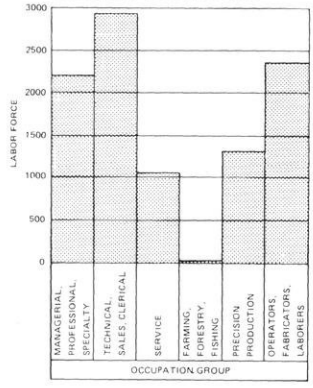
LABOR FORCE

1980 Employed Labor Force: 9,861*

**The term "labor force" is defined as the number of persons within the City counted by place of residence.*

Source: U. S. Bureau of the Census, 1980; and Southeastern Wisconsin Regional Planning Commission.

DISTRIBUTION OF THE EMPLOYED PORTION OF THE LABOR FORCE 16 YEARS OF AGE AND OVER BY OCCUPATION GROUP



TRANSPORTATION

Highway
IH 43 is located 12 miles to the east and USH 41, five miles to the west of the City. USH 45, STH's 33 and 144, and CTH's B, G, and I serve the City of West Bend.

Public Transit
The City is served by one interregional bus line, Greyhound Lines, Inc., which operates two bus trips daily between Milwaukee and Eau Claire. The Red Flyer bus service operated by the City of Hartford provides shuttle bus service between the City of West Bend and the Village of Slinger. The City is also served by the specialized public transportation service provided by the Washington County Office on Aging to elderly and handicapped county residents.

Trucking
There are 47 trucking and warehousing establishments in Washington County.

Freight
The Chicago & North Western Transportation Company serves the City of West Bend.

Air Service
The West Bend Municipal Airport serves the City of West Bend and Washington County.

3

UTILITIES/SERVICES

Electric Power
Wisconsin Electric Power Company
920 Indiana Avenue
West Bend, Wisconsin 53095
Telephone: (414) 338-6111

Telephone
Wisconsin Bell
Service Information:
1-800-472-8800

Solid Waste
The City provides residential refuse collection services. Commercial and industrial solid waste is collected by private collection services.

Natural Gas
Wisconsin Gas Company
206 N. 6th Avenue
West Bend, Wisconsin 53095
Telephone: (414) 338-6141

Police and Fire
The City has full-time police and fire departments. The fire underwriters' rating is 4.

Sanitary Sewerage
City of West Bend Wastewater Treatment Plant
Average Annual Hydraulic Loading:
3.749 million gallons a day
Average Hydraulic Design Capacity:
9.0 million gallons a day
Adequate Capacity for New Industry
Rate Information: City Clerk—(414) 338-5102

Water
City of West Bend Water Department
Source: wells
Average Daily Consumption: 3,200,000 gallons
Pumping Capacity: 8,425 gallons per minute
Adequate Capacity for New Industry
Rate Information: City Clerk—(414) 338-5102

Other
The City provides standard services such as street maintenance, snow removal, mercury vapor street lighting, and a public library.

The City of West Bend has a plan commission, a land use plan, and a zoning ordinance to ensure orderly growth and to guarantee long-range protection of both economic and natural resources.

HOUSING

City of West Bend:

Number of Housing Units		Percent of Total Housing Units
Total Housing Units	7,483	100.0
Year-Round Housing Units	7,477	99.9
Occupied Housing Units	7,293	97.4
Owner-Occupied Housing Units	4,753	63.5
Renter-Occupied Housing Units	2,540	33.9
Median Value, Specified Owner-Occupied Noncondominium Housing Units	$60,800	
Mean Value, Specified Owner-Occupied Noncondominium Housing Units	60,178	
Median Monthly Contract Rent, Specified Renter-Occupied Housing Units	213	
Rental Vacancy Rate (percent)	2.6	

Source: U. S. Bureau of the Census, 1980.

4

Figure 69 (continued)

EDUCATION

Number of Schools in the District*

High Schools	2
Junior High	2
Elementary	7
Private Elementary	8
Private High School	1
Private Elementary and Secondary Schools Combined	3

**The City of West Bend is served by the West Bend School District, which also serves adjacent communities in Washington County.*

Source: Wisconsin Department of Public Instruction, 1984.

School Enrollment in the City of West Bend

PK-8	3,441
9-12	1,570
Total	5,011

Source: U. S. Bureau of the Census, 1980.

University of Wisconsin-Washington County
Two-year liberal arts school
Location: City of West Bend

Moraine Park Technical Institute-West Bend
Vocational, technical, and adult education center
Location: City of West Bend

Public Library
West Bend Public Library

FINANCIAL

Banks	Telephone
Heritage Bank-West Bend 868 S. Main Street West Bend, Wisconsin 53095	(414) 338-6666
M & I First National Bank 321 N. Main Street West Bend, Wisconsin 53095	(414) 338-0611
West Bend Marine Bank 801 W. Washington Avenue West Bend, Wisconsin 53095	(414) 338-2111
Savings	
Great American Savings & Loan Association 2165 W. Washington Street West Bend, Wisconsin 53095	(414) 334-4500

Savings (continued)	Telephone
Guaranty Savings 876 S. Main Street West Bend, Wisconsin 53095	(414) 338-6611
West Bend Savings & Loan Association (main office) 201 5th Avenue West Bend, Wisconsin 53095	(414) 334-5563
Credit Unions	
State Central Credit Union 1811 W. Washington Street West Bend, Wisconsin 53095	(414) 338-0011
West Bend Employees Credit Union 18 E. Washington Street West Bend, Wisconsin 53095	(414) 338-1888

Source: Office of the Commissioner of Banking, 1982; Office of the Commissioner of Credit Unions, 1982; and FSLIC Insured Savings and Loan Associations, 1982.

5

MEDIA

Newspapers	Published
West Bend News, Inc. 100 S. 6th Avenue West Bend, Wisconsin 53095	Semiweekly (Tuesday and Thursday)
Milwaukee Journal Sentinel 1605 S. Main Street West Bend, Wisconsin 53095	Daily

Broadcasting Stations

Milwaukee Television Stations	Channel	Commercial Radio Stations-West Bend	Channel
WCGV	24	WBKV	1470
WISN	12	WBKV-FM	92.5
WITI	6	Milwaukee stations	
WTMJ	4		
WVTV	18		
WMVS	10		
WMVT	36		

Cable TV: River Bend Cablevision

GOVERNMENT

The City of West Bend has a mayor/council form of government and a city administrator.

CONTACT

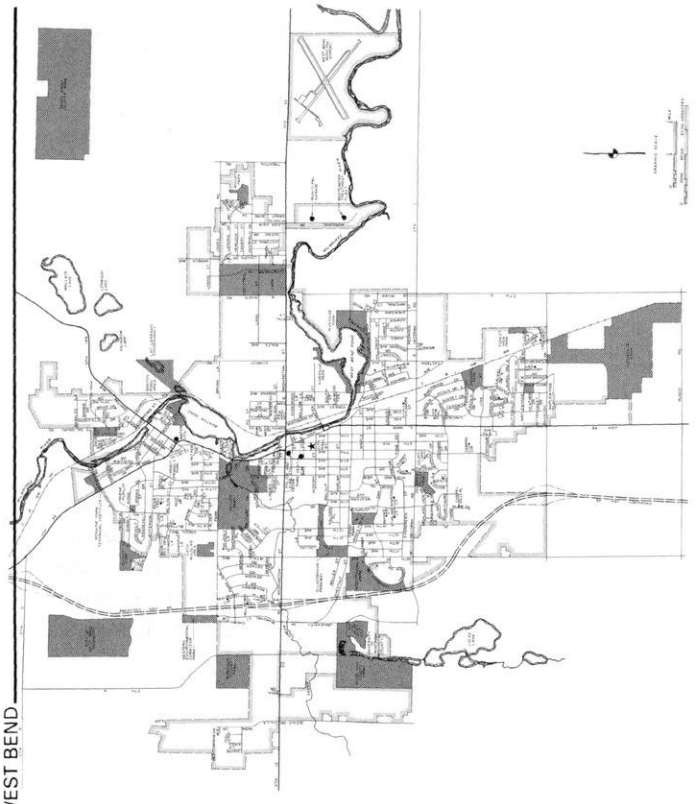
For industrial, commercial, or business information about the City of West Bend contact:

- City Administrator
  City Hall
  100 N. 6th Avenue
  West Bend, Wisconsin 53095
  Telephone: (414) 338-5103
- Executive Vice-President
  West Bend Area
  Chamber of Commerce, Inc.
  108 S. 6th Avenue
  West Bend, Wisconsin 53095
  Telephone: (414) 338-2666
- Manager-Industrial Development
  Wisconsin Electric Power Company
  231 W. Michigan Street
  Milwaukee, Wisconsin 53201
  Telephone: (414) 277-3018

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

P. O. Box 769
Old Courthouse
Waukesha, Wisconsin 53186
(414) 547-6721

6



CITY OF WEST BEND

7

REGIONAL SETTING IN THE MIDWEST

8

- The Commission staff assisted the Sherman Park Community Association and Cooperation West Side Association in the City of Milwaukee in conducting a structural survey of neighborhood residential and commercial buildings. The survey enabled these associations to identify poorly maintained residential and commercial buildings in an effort to mount activities that would improve those structures, and thereby improve the overall quality of the neighborhoods.

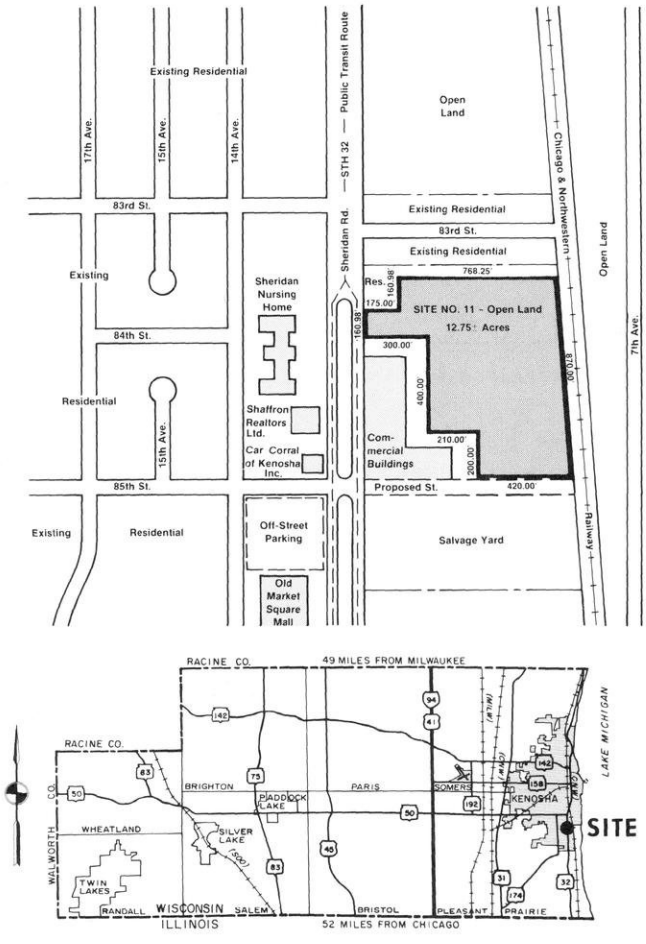
- At the request of Kenosha County, the Commission staff completed a series of 30 industrial site information sheets, location sketches, aerial photographs, and photographs and slides for each of the available vacant commercial and industrial buildings and sites in the County, as well as an economic fact book that includes physical, social, and economic data important to the pursuit of economic development activities in Kenosha County. The information and the fact book are utilized by the County in industry retention and attraction efforts. Figure 70 illustrates one of the location sketches provided to the County.

- At the request of the Racine County Economic Development Corporation, the Commission staff completed a business retention survey of 123 manufacturing firms located in Racine County. The purpose of the survey was to identify the problems and needs perceived by local employers in the County relating to: a firm's past expansion; a firm's expected future expansion; labor force; public facilities and services; the availability of financing; and overall impressions of Racine County and the State of Wisconsin as places in which to do business. This information was important to the Racine County Economic Development Corporation in formulating the foundation for an on-going local economic development program in the County.

- In response to a request by the Wisconsin Chapter of the American Planning Association (APA), Southeast District, the Commission staff assisted the Association in planning a conference on economic development activities in Wisconsin that was subsequently held in the Southeastern Wisconsin Region. The conference highlighted activities and funding sources available to local communities for improving the local economy.

Figure 70

EXAMPLE OF INDUSTRIAL SITE LOCATION SKETCH FOR KENOSHA COUNTY



CITY OF KENOSHA
KENOSHA COUNTY
WISCONSIN

COMMUNITY ASSISTANCE PLANNING DIVISION

DIVISION FUNCTIONS

The Community Assistance Planning Division has responsibility for assisting local units of government in the Region in the conduct of county and 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.

EDUCATIONAL SERVICES

Educational services are provided by the Division staff to county and local units of government and citizen groups on request, and are directed at explaining the need for, and purposes of, continuing local, regional, state, and federal 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 1984, educational efforts included the following:

- Presentations regarding the work of the Commission to local governmental, civic, and professional groups, such as the City of Waukesha Chamber of Commerce, the Washington County League of Women Voters, the Lake Church Lakeshore Citizens League, and classes at the University of Wisconsin-Milwaukee and Waukesha County Technical Institute.

- Conduct of a workshop on the administration of farmland preservation zoning and the Wisconsin farmland preservation tax credit program for town officials in Ozaukee County.

- Conduct in cooperation with the Wisconsin Department of Natural Resources of a workshop and opinion survey on alternative mapping requirements for the National Flood Insurance Program.

- Presentations on the need for and means of preparing large-scale topographic maps and attendant control surveys to the Villages of Walworth and Williams Bay, Walworth County.

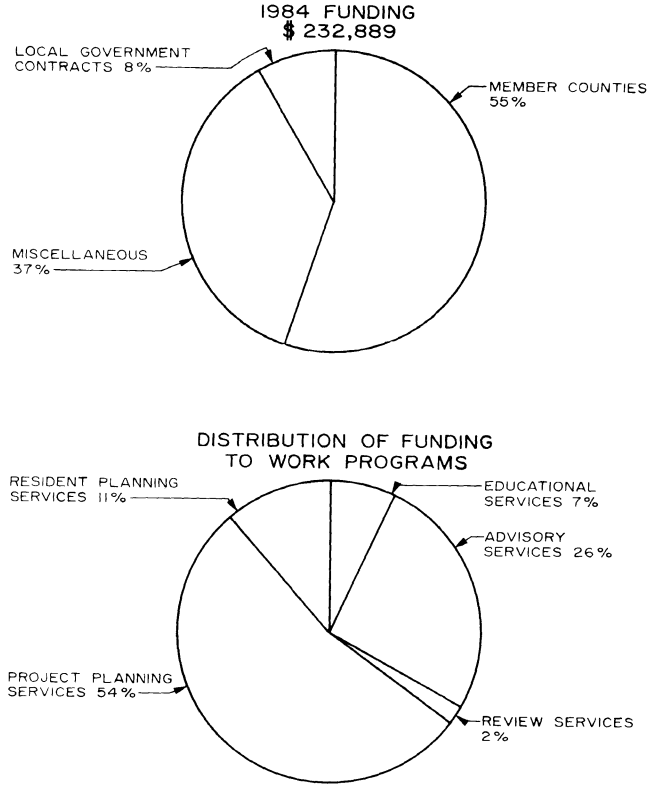
- Presentations on wetland preservation to the Elm Grove Garden Club, the Hoy Nature Club, Wehr Nature Center Volunteers, and a class at Cardinal Stritch College.

- Conduct of wetland management field trips for the Milwaukee Audubon Society and the City of Waukesha Parks Department.

- Preparation of six Commission newsletters discussing Commission planning programs and related activities. The newsletters are distributed to about 1,400 public officials and interested citizens.

Figure 71

COMMUNITY ASSISTANCE PLANNING DIVISION



- Preparation and distribution to newspapers and to radio and television stations of six news releases during the year, concerning the conduct of a public hearing on the scope of the Milwaukee northwest corridor transit planning effort; the conduct of the Kenosha bus passenger survey; the conduct of the Racine bus passenger survey; the conduct of the Milwaukee bus passenger survey; the conduct of the regional household interview travel survey; and the completion of the regional industrial lands inventory.

- Preparation of the Commission's 1983 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 1984 include:

- Provision of technical data to federal flood insurance study contractors and provision of assistance to municipal officials in the review of federal flood insurance studies for the Cities of Brookfield and New Berlin and the Village of Dousman.

- Provision of data and advice concerning floodland-related development proposals to the Cities of Brookfield, Greenfield, Mequon, Milwaukee, New Berlin, South Milwaukee, and Whitewater; the Villages of Germantown, Hartland, and Jackson; and the Towns of Barton, Brookfield, Jackson, Mt. Pleasant, Pleasant Prairie, and Salem.

- Conduct of site-specific wetland and wildlife habitat inventories in the Cities of Brookfield, New Berlin, and Mequon.

- Review of the Village of West Milwaukee Zoning Ordinance for compliance with contemporary zoning practice.

REVIEW SERVICES

Review services are intended to encourage the incorporation of regional studies and plans into local planning programs, plans, and plan implementation devices, such as zoning and subdivision control ordinances. In addition, review services are intended to prevent unnecessary duplication of planning efforts, and to coordinate and encourage regional plan implementation. Four basic types of review services are performed: review of local plans, plan implementation devices, and development proposals; review of federal and state grant applications; review of environmental impact statements, reports, and assessments; and review of flood hazards affecting individual properties.

The following represent typical review services completed in 1984 by the Division staff in the first review category:

- Review of and comment on 26 preliminary land subdivision plats at the request of the Cities of Mequon and Waukesha; the Village of Sussex; the Towns of Delafield and Pewaukee; and Kenosha and Walworth Counties.

- Review of and comment on 17 petitions to rezone lands and five proposed zoning text amendments at the request of the Cities of Franklin and Mequon; the Villages of Germantown and Sussex; and the Town of Somers.

- Review of and comment on floodplain zoning ordinances for the Cities of Hartford, Milwaukee, and Port Washington; and the Villages of Dousman, Lac La Belle, and Williams Bay.

- Review of and comment on the master plan for the Theresa Wildlife Area in Washington County as prepared by the Wisconsin Department of Natural Resources.

Division activities regarding the review of federal and state grant applications are summarized in Table 32. In total, review comments were provided for 279 applications for federal and state grants, loans, or mortgage insurance guarantees, requesting in the aggregate nearly $439 million in federal and state financial assistance. Of the total 279 requests, 86 were found to be in conformance with and serve to implement the adopted regional plan elements, and 193 were found to be not in conflict with the adopted regional plan elements. None were found to be in conflict with the adopted regional plan elements.

Table 32

STATE AND FEDERAL GRANT REVIEWS: 1984

Review Category	Number of Reviews	Aggregate Amount of Federal and/or State Grant, Loan, or Mortgage Insurance Requests
Community Action (social services programs)	105	$249,607,453
Economic Development	32	28,422,766
Community Facilities	6	2,600,000
Resource Conservation	24	17,397,819
Historic Preservation	2	884,843
Housing	12	14,399,424
Law Enforcement	15	1,358,200
Park and Open Space	14	921,850
Sanitary Sewerage	5	2,729,227
Solid Waste Management	1	193,500
Transportation	62	119,776,321
Water Supply	1	680,000
Total	279	$438,935,403

Division activities regarding the review of environmental impact statements, reports, and assessments are summarized in Table 33. Comments are provided by the Commission relating the proposed projects and the data contained in the environmental impact statements to the adopted regional plans.

Flood hazard reviews relating to residential properties are requested by realtors and lending institutions. During 1984 the Division staff conducted a total of 198 flood hazard reviews, distributed by county as indicated in Table 34.

PROJECT PLANNING SERVICES

Project planning services involve the conduct for county and local units of government, at cost, of detailed planning studies resulting in the preparation of local plans and plan implementation devices. During 1984, the following representative project planning efforts were conducted:

- Completion of a revision to the plan for the Echo Lake Neighborhood in the City of Burlington in Racine County. Such plans are viewed by the Commission as an important means of guiding and shaping urban land use development and redevelopment at the local level. The Echo Lake Neighborhood plan is set forth in SEWRPC Community Assistance Planning Report No. 63 (2nd Edition), A Development Plan for the Echo Lake Neighborhood. Neighborhood plans suggest future collector and land access street alignments and attendant block configurations, as well as locations within the neighborhood considered to be best suited for institutional, recreational, and commercial uses and for various kinds of residential uses. Such plans recommend areas that should be protected from intensive development for environmental reasons, and indicate the need to reserve land for major drainageways and utility easements.

- Completion of SEWRPC Community Assistance Planning Report No. 115, A Fire Station Building Program and Site Location Analysis, Village of Sturtevant, Racine County, Wisconsin. The report analyzes historic fire hazards in the Village and

Table 33

ENVIRONMENTAL IMPACT STATEMENTS REVIEWED: 1984

Document Reviewed	Requesting Agency
Environmental Impact Statement for the Menomonee Valley Correctional Institute	Wisconsin Department of Health and Social Services
Environmental Impact Statement for Wastewater Treatment Facilities for the Geneva Lake Area	U. S. Environmental Protection Agency
Environmental Assessment for Expansion and Utilization of the United States Army Reserve Center Complex and Training Area	Department of the Army
Environmental Impact Statement for Improvement of STH 50 from USH 12 to IH 94	Wisconsin Department of Transportation
Environmental Impact Statement for Development of a Student Center for the Milwaukee Area Technical College of Milwaukee	Wisconsin Board of Vocational, Technical and Adult Education
Environmental Assessment for a Proposed Boundary Expansion of the Kettle Moraine State Forest–Southern Unit	Wisconsin Department of Natural Resources

Table 34

FLOOD HAZARD REVIEWS: 1984

County	Number of Reviews
Kenosha	3
Milwaukee	63
Ozaukee	15
Racine	11
Walworth	4
Washington	23
Waukesha	79
Total	198

evaluates the effectiveness of seven alternative fire station locations. A proposed site development plan is provided for the best site, together with estimated development costs. Figure 72 illustrates the recommended fire station site plan.

- Completion of a municipal industrial park plan for the City of Burlington in Racine County. In addition to preparing the site plan, the Commission assisted the City in the preparation and publication of a Community Profile for Burlington, Wisconsin and a Development Guide for the Industrial Park. These documents were intended to assist the City in promoting and marketing the industrial park. Figure 73 illustrates the industrial park design.

Figure 72

GRAPHIC ANALYSIS OF THE SITE PLAN FOR THE RECOMMENDED FIRE STATION-VILLAGE OF STURTEVANT

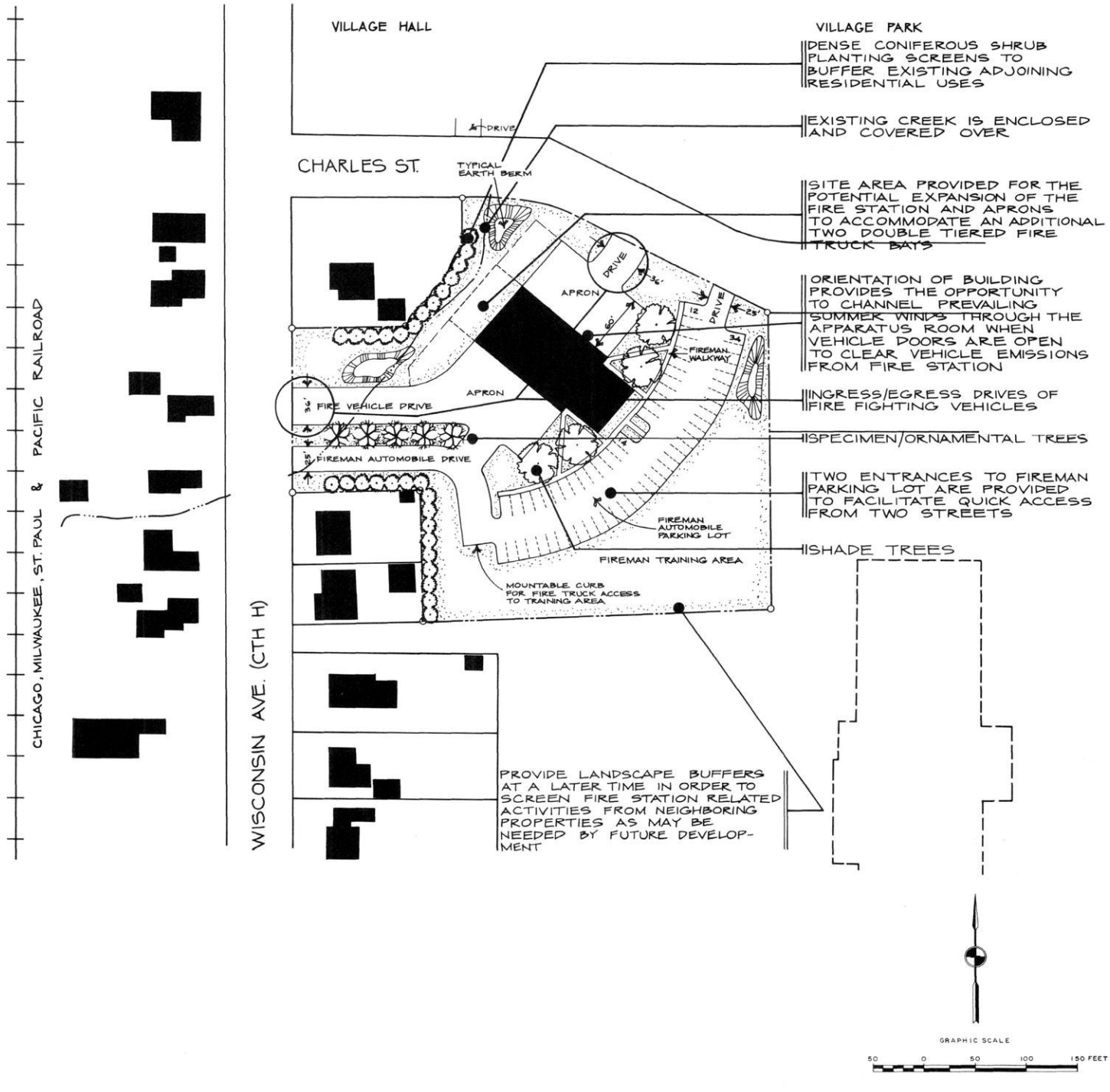
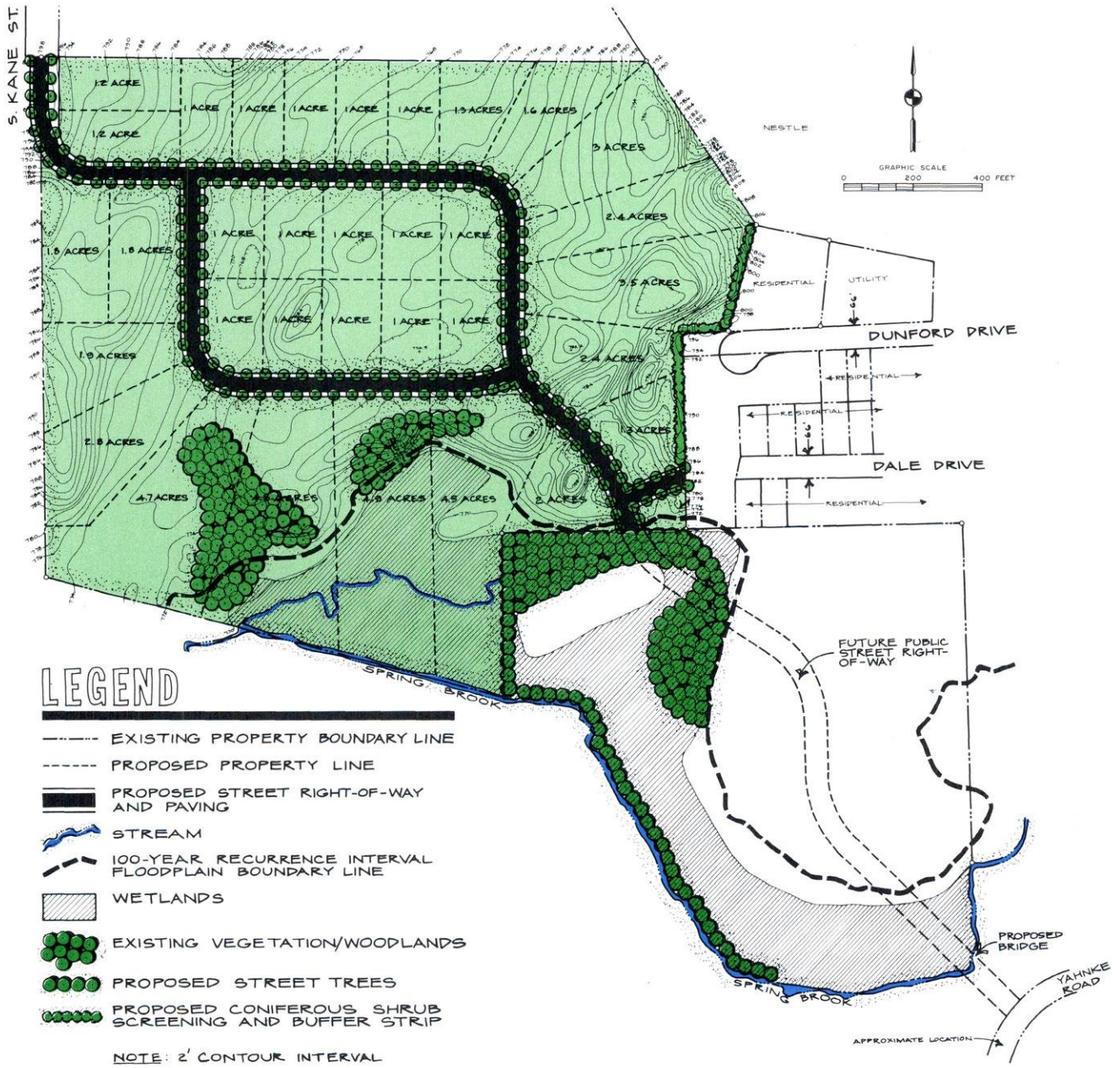


Figure 73

SITE DEVELOPMENT PLAN FOR THE CITY OF BURLINGTON INDUSTRIAL PARK



- Completion of a zoning ordinance and attendant zoning district maps for the Town of Saukville in Ozaukee County. This ordinance was adopted by the Town in 1984 and serves to implement the land use development and farmland preservation objectives set forth in regional plan elements. The Commission staff also assisted the City of Franklin in the preparation of a farmland preservation zoning district as an amendment to the City's current zoning ordinance. Both the Saukville and Franklin ordinances were certified by the Wisconsin Department of Agriculture, Trade and Consumer Protection and will qualify farmers in those communities for income tax credits provided under the Wisconsin Farmland Preservation Program.

- Preparation of a number of ad hoc planning studies to address local development issues. These studies included industrial site development plans for the Village of Menomonee Falls in Waukesha County; alternative subdivision layouts for the Village of Sussex in Waukesha County; wetland delineations in shoreland areas for the City of Oak Creek in Milwaukee County; and a street address map for the Town of Fredonia in Ozaukee County. The Commission staff also prepared a number of zoning text amendments for various cities, villages, and towns in the Region, addressing such issues as sign control, floodplain management, and the installation of satellite dish antennas. These ad hoc studies were documented in Community Assistance Staff Memoranda.

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 1984, resident planning assistance was provided on a contractual basis to the City of Burlington; to the Villages of Germantown and Sussex; and to the Town of Somers. Collectively, these services required Division staff assistance and participation in a total of 74 plan commission, village board, and city council meetings.

CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

DIVISION FUNCTIONS

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

The Division also serves as a regional coordinating center for the conduct of large-scale topographic and cadastral mapping efforts and the collation of horizontal and vertical survey control data. This function includes the preparation on request of contracts and specifications for large-scale mapping efforts by local units of government. Another Division function, beginning in 1984, is the indexing and filing of records of all land surveys completed in Milwaukee County. Finally, a major Division function involves final report production, including editing, type composition, proofreading, illustration preparation, offset printing, and binding.

BASE MAPPING

During 1984, work continued on the updating of the Commission 1 inch equals 2,000 feet scale county planning base maps using Wisconsin Department of Transportation state aid mileage summary maps. In 1984, the updating effort included changing 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 inch equals 100 feet scale and 1 inch equals 200 feet scale, 2-foot contour interval topographic maps based on a Commission-recommended monumented control survey network, relating the U. S. Public Land Survey System to the State Plane Coordinate System. The Division assists local communities in the preparation of contracts and specifications for these programs. All of the horizontal and vertical control survey data obtained as a part of these mapping efforts are compiled by the Division. The Commission thus serves as a center for the collection, collation, and coordination of control survey data throughout the Region.

In 1977 Racine County completed a pioneering program which resulted in the completion of large-scale topographic maps and the attendant relocation, monumentation, and coordination of all of the U. S. Public Land Survey corners within the County. That work was done in accordance with specifications prepared by the Regional Planning Commission. In 1980 Kenosha County undertook a similar program. The County Board assigned the responsibility for the preparation of the necessary contract documents and specifications and for the supervision of the work to the Executive Director of the Commission, a responsibility which includes the field inspection of the completed control survey monumentation and the quality control of the land and control survey work, as well as assistance in obtaining available state grants in partial support of the work. In 1981 Waukesha County undertook a similar countywide program and asked that the Commission staff provide the necessary supervision and assistance. These three county-level surveying and mapping programs represent model programs of national interest.

Map 30 shows those areas of the Region for which large-scale topographic maps have been or are being prepared to Commission-recommended standards. As shown in Figure 74 and Table 35, this area totals 1,171 square miles, or over 43 percent of the total area of the Region. A total of 6,149 U. S. Public Land Survey corners in the Region have been or are being relocated, monumented, and coordinated, representing over 52 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 about 350 inquiries for such data during 1984 alone.

MILWAUKEE COUNTY LAND SURVEY RECORDS

In 1984, legislation was enacted which in part requires that in a county having a population of 500,000 or more where there is no county surveyor, a copy of each land survey plat prepared by a land surveyor shall be filed in the office of the regional planning commission, which is to act in the capacity of county surveyor for the county. Under this act, the Commission is also made responsible for perpetuating corners of the U. S. Public Land Survey which may be subject to destruction, removal, or cover up due to construction or other activities, and for maintaining a record of the surveys required for such perpetuation. This act became effective on May 18, 1984. Under the requirements of the new legislation, the Division received, indexed, and filed 338 records of land surveys completed within Milwaukee County—the only county within the Region which meets the statutory criteria—from May 18 through December 31, 1984. In addition, the Division received, indexed, and filed 64 records of land surveys completed within Milwaukee County prior to May 18, 1984.

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

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

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

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

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

5. Chronologically by the date of the survey.

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

Since 1961, the Commission has maintained records on U. S. Public Land Survey corners within the Region. No requests for the perpetuation of any corners of that system in Milwaukee County threatened by destruction were received in 1984.

REPRODUCTION SERVICES

In addition to serving all other Commission divisions through in-house reproduction of reports, the Division provided reproduction services for local units of government and private interests. A total of 3,717 prints of aerial photographs of portions of the Region were reproduced, along with 26 soil map prints and 457 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 1984 the Division was responsible for the production of the following Commission publications:

PROSPECTUSES

- Overall Work Program—1985 Southeastern Wisconsin Regional Planning Commission, October 1984, 211 pages

ANNUAL REPORTS

- 1983 Annual Report, July 1984, 196 pages

TECHNICAL REPORTS

- No. 10, 2nd Edition, The Economy of Southeastern Wisconsin, May 1984, 111 pages

- No. 11, 2nd Edition, The Population of Southeastern Wisconsin, June 1984, 202 pages

- No. 29, Industrial Land Use in Southeastern Wisconsin, November 1984, 156 pages

COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 58, A Water Quality Management Plan for Pewaukee Lake, March 1984, 173 pages

Map 30

LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1984

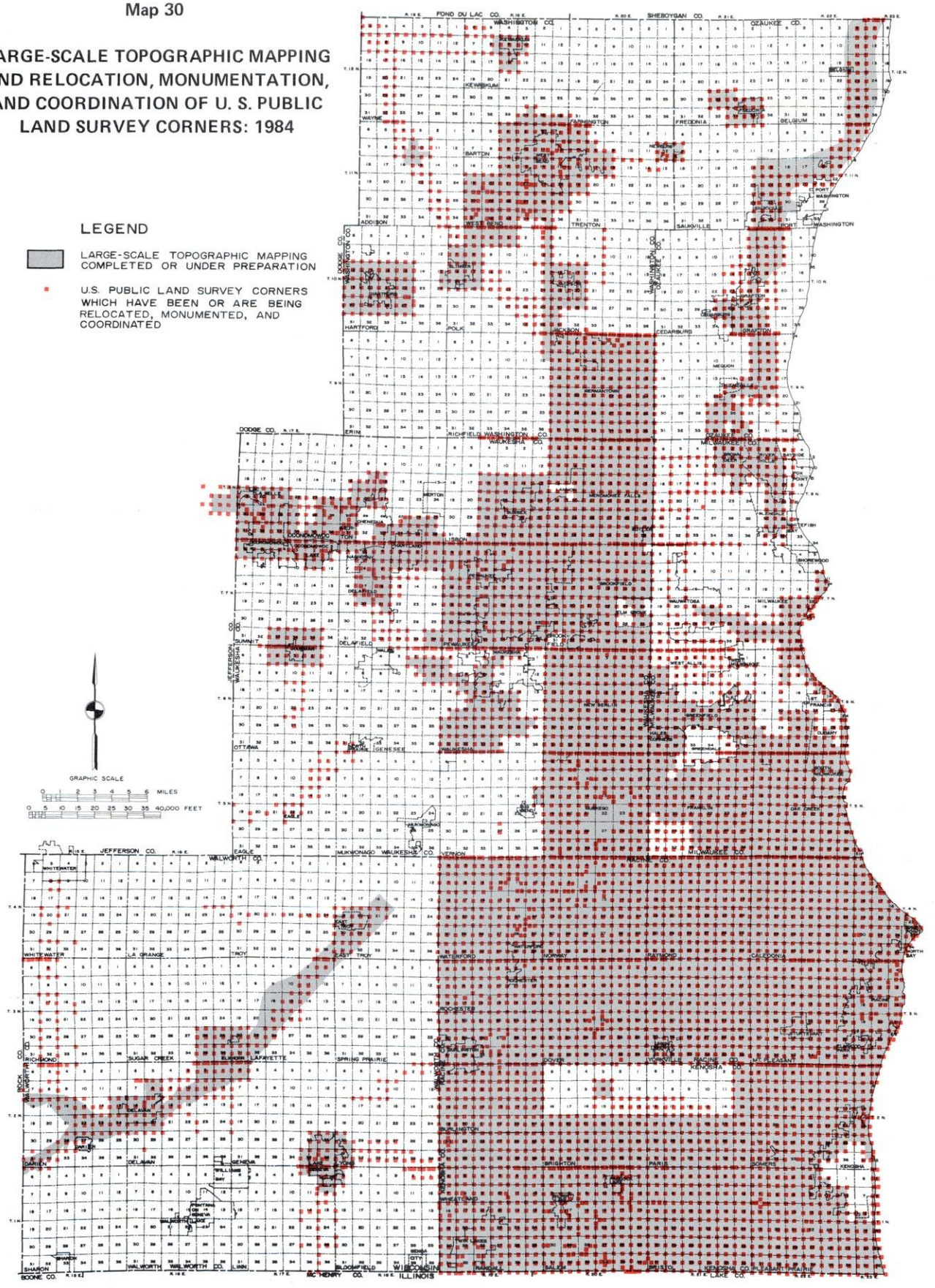
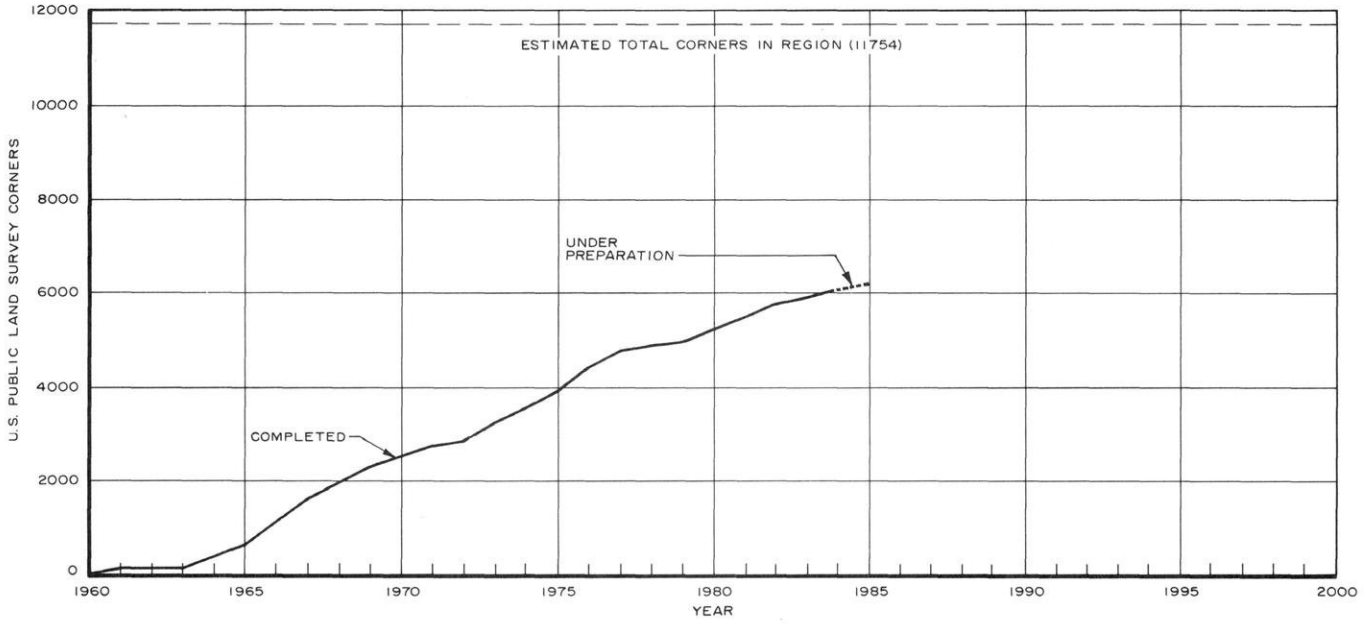
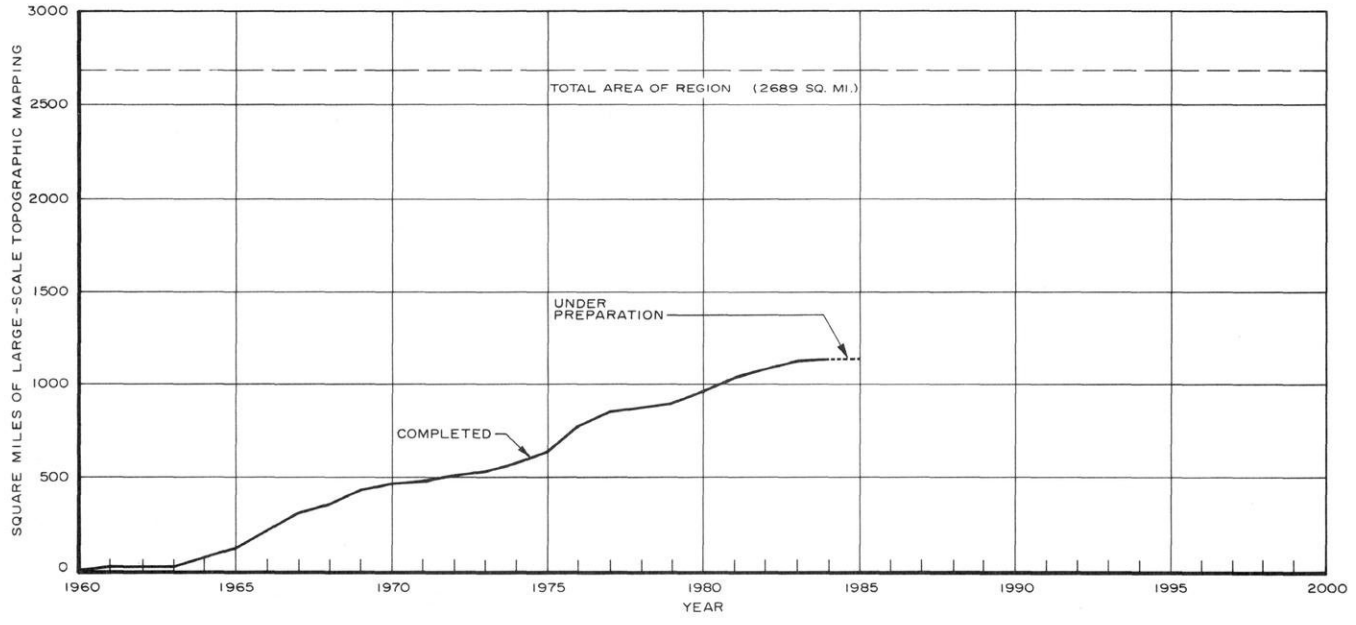


Figure 74

STATUS OF U. S. PUBLIC LAND SURVEY SECTION AND QUARTER SECTION CORNER RELOCATION, MONUMENTATION, AND COORDINATION AND LARGE-SCALE TOPOGRAPHIC MAPPING OF THE REGION: 1960-1984





TYPICAL SEWRPC MONUMENT

- No. 63, 2nd Edition, A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1984, 165 pages
- No. 79, Racine Area Transit System Plan and Program: 1984-1988, May 1984, 264 pages

Table 35

LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1984

County	Total Area (square miles)	Area (square miles) of Large-Scale Topographic Mapping Completed or Under Preparation					
		Wisconsin Department of Transportation	SEWRPC	County[a]	Local[b]	Total	Percent
Kenosha	278	--	22.50	201.75	13.75	238.00	85.61
Milwaukee . . .	242	--	28.25	6.50	78.50	113.25	46.80
Ozaukee	234	26.75	24.25	--	2.00	53.00	22.65
Racine	340	--	25.32	314.29	--	339.61	100.00
Walworth. . . .	578	30.25	--	--	24.00	54.25	9.39
Washington . .	436	1.50	22.75	--	83.75	108.00	24.77
Waukesha . . .	581	1.25	75.50	59.25	129.00	265.00	45.61
Region	2,689	59.75	198.57	581.79	331.00	1,171.11	43.55

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.

[a] *Includes four county boards and Milwaukee Metropolitan Sewerage District.*

[b] *Includes 17 cities, 13 villages, and 2 towns.*

County	Estimated Total Corners	Number of U. S. Public Land Survey Corners Which Have Been or Are Being Relocated, Monumented, and Coordinated					
		Wisconsin Department of Transportation	SEWRPC	County[a]	Local[b]	Total	Percent
Kenosha	1,204	55	168	803	63	1,089	90.45
Milwaukee . . .	1,065	70	132	62	507	771	72.39
Ozaukee	1,064	104	169	--	21	294	27.63
Racine	1,478	--	172	1,306	--	1,478	100.00
Walworth. . . .	2,503	299	--	--	121	420	16.78
Washington . .	1,905	131	142	23	405	701	36.80
Waukesha . . .	2,535	76	463	261	596	1,396	55.07
Region	11,754	741	1,227	2,357	1,707	6,149[c]	52.31

[a] *Includes four county boards and Milwaukee Metropolitan Sewerage District.*

[b] *Includes 17 cities, 14 villages, and 2 towns.*

[c] *Because of the need to set witness corners these 6,149 U. S. Public Land Survey corners, including the centers of the sections, are marked by 6,224 monuments.*

- No. 92, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, March 1984, 31 pages
- No. 96, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, July 1984, 33 pages
- No. 97, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, November 1984, 33 pages
- No. 99, Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin, February 1984, 27 pages
- No. 101, Kenosha Area Transit System Plan and Program: 1984-1988, June 1984, 255 pages
- No. 103, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, September 1984, 25 pages

- No. 107, East Moreland Boulevard Short-Range and Long-Range Highway Improvement Plan, April 1984, 83 pages

- No. 110, A Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis, Wisconsin, August 1984, 125 pages

- No. 112, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, August 1984, 41 pages

- No. 114, Village of Shorewood Comprehensive Traffic Plan, Milwaukee County, Wisconsin, September 1984, 124 pages

- No. 115, A Fire Station Building Program and Site Analysis, Village of Sturtevant, Racine County, Wisconsin, September 1984, 56 pages

TECHNICAL RECORDS

- Volume 4, No. 4, February 1984, 132 pages, including the following articles:

  Characteristics of Travel in Six Major Attractors in the Southeastern Wisconsin Region
  by Jean M. Lusk, SEWRPC Planner and John L. Zastrow, SEWRPC Senior Specialist

  Shopping Centers: Characteristics of Travel—1963-1972
  by Jean M. Lusk, SEWRPC Planner and John L. Zastrow, SEWRPC Senior Specialist

  A Backward Glance—Historic Evolution of the Local Governmental Structure in Southeastern Wisconsin
  by Eileen Hammer

NEWSLETTERS

- Volume 24, Nos. 1-6, 180 pages

OTHER

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984, 247 pages

- Amendment to the Regional Water Quality Management Plan—2000, Village of Mukwonago, Towns of East Troy and Mukwonago, June 1984, 18 pages

- Amendment to the Regional Water Quality Management Plan—2000, City of Milwaukee, September 1984, 1 page

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 23-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 8,000 reels of magnetic tape, representing approximately 3,200 active data files. This permits the efficient filing, conversion, and retrieval of planning and engineering data essential to the execution of areawide comprehensive planning. The file's basic unit of geographic reference is the U. S. Public Land Survey quarter section. The file is, however, also organized to permit retrieval of data for various other geographic units, such as civil divisions, census tracts, traffic analysis zones, special planning analysis areas, and watersheds.

During 1984, the Commission used an IBM Model 4381 central processing unit. The Model 4381 has 8,000,000 bytes of main memory storage. Attached to the Model 4381 are six high-speed magnetic tape drives, a 1,200-line-per-minute printer, and 17.8 billion characters of on-line magnetic disk storage. Two IBM Model 3742 data stations are maintained for entering data into the main computer using magnetic diskettes. Also attached to the system are 35 IBM Model 3178 and 3278 display station terminals and four IBM Personal Computers through which staff engineers, planners, and computer programmers can enter and retrieve data and use computer programs. In addition to this "in-house" terminal equipment, the system has attached to it 185 "remote" display stations and printers for use by the four counties and 10 local communities to which the Commission provides "on-line" data processing services. The workload during 1984 averaged approximately 60,000 teleprocessing tasks and 500 batch runs daily.

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 Commission staff, including trip generation and modal split models and an air quality emissions model. In the water resources planning field, the Commission uses a water surface profile model developed by the U. S. Army Corps of Engineers; a hydrologic, hydraulic, and water simulation model developed by Hydrocomp, Inc.; and a flood economics model developed by the Commission staff.

DATA PROCESSING SERVICES TO LOCAL GOVERNMENTS

Since its inception, the Commission has offered to its member units of government special services, including professional advice on the selection of computer systems and the provision of special data processing services. Direct data processing services have been provided in the traditional "batch" mode

of processing whereby the community delivers data to the Commission to process and the Commission returns appropriate reports and materials to the community. In 1984 the Commission continued to offer interested communities the opportunity to control and process their own data through the "on-line" use of small computer terminals attached to the Commission's Model 4381 computer via telephone lines. These terminals give the community the power of a large computer system at the price of a small computer.

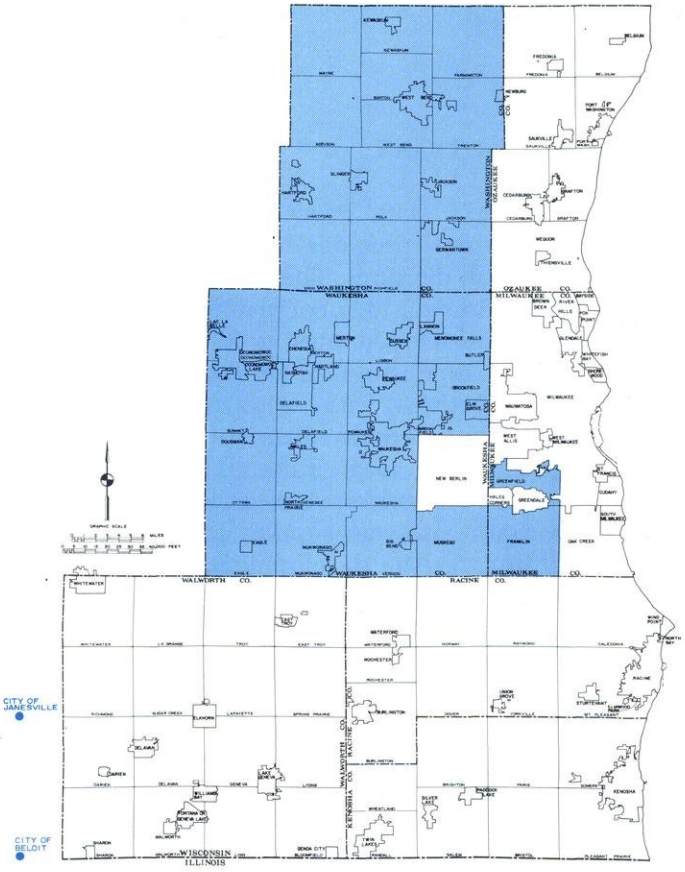
During 1984, services were provided to communities utilizing both methods of processing. Some communities used both methods, doing some data processing in the "batch" mode and some data processing in the "on-line" mode.

One of the services provided in the "batch" mode is the tax bill processing system, which provides communities with property tax assessment rolls and tax bills. Throughout 1984 these property tax-related services were provided at cost to 60 communities, as shown on Map 31. In addition, all of Kenosha County was added to the property tax system in December 1984. Another service provided in the "batch" mode is the payroll processing system, which was provided to nine school districts and one village in the Region, as shown on Map 32. In addition, payroll services were provided to 10 school districts outside the Region. Map 33 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 the Allenton Sanitary District in the area of utility billing; to two school districts—Brown Deer and Waukesha—in the area of school census; and to one county—Racine—in the area of foster home check processing.

Map 31

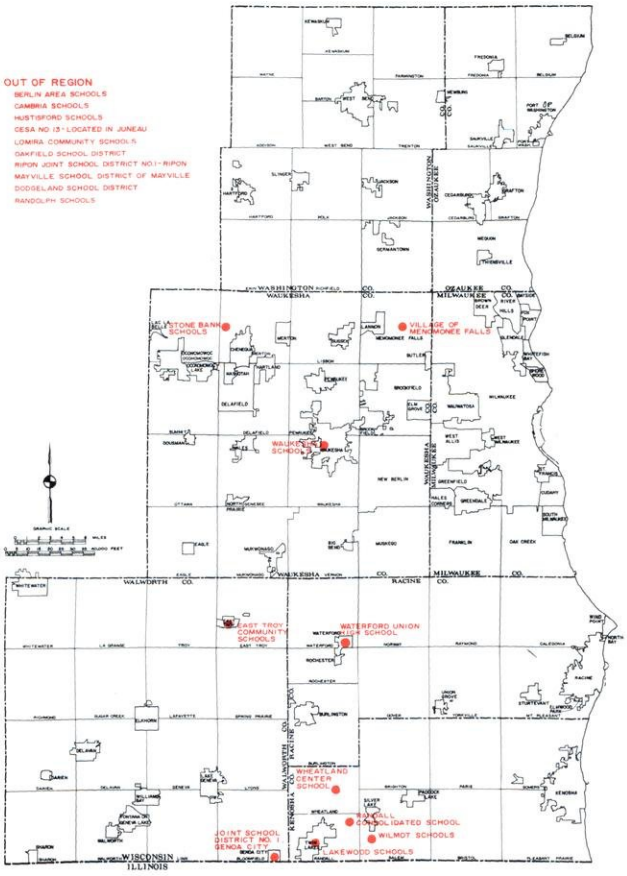
LOCAL COMMUNITIES USING SEWRPC FOR PROPERTY TAX DATA PROCESSING



In the "on-line" processing mode, the Commission has installed computer terminals in four counties, nine cities, and one village. Map 34 shows the locations of the terminals and the applications which were processed from those terminals during 1984.

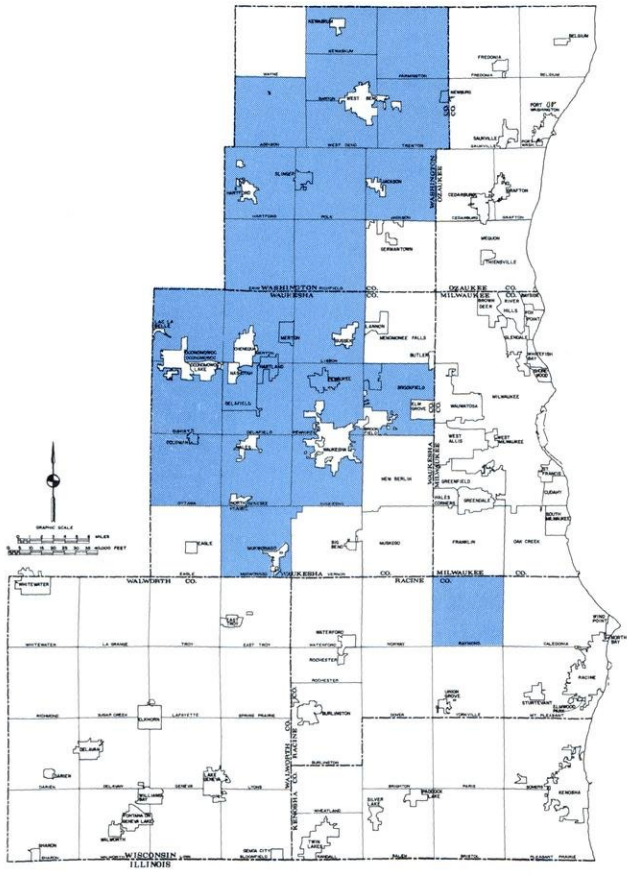
Map 32

SCHOOL DISTRICTS AND LOCAL COMMUNITIES USING SEWRPC FOR PAYROLL DATA PROCESSING



Map 33

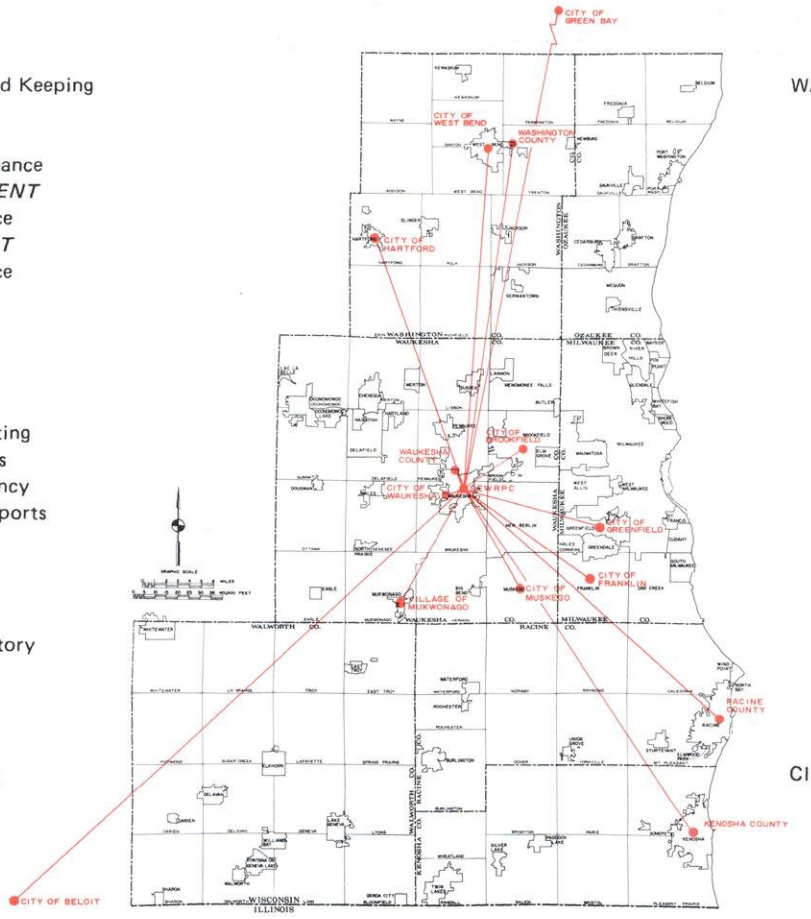
LOCAL COMMUNITIES USING SEWRPC FOR VOTER REGISTRATION AND POLL LIST DATA PROCESSING



LOCAL GOVERNMENT-SEWRPC TELEPROCESSING CONFIGURATION AND APPLICATIONS

WAUKESHA COUNTY

- *CLERK OF COURTS*
  - Alimony and Support
  - Paternity Payments
  - Fine and Forfeiture Record Keeping
  - Cash Collection
- *TAX LISTER*
  - Property Tax File Maintenance
- *PERSONNEL DEPARTMENT*
  - Employee File Maintenance
- *PAYROLL DEPARTMENT*
  - Employee File Maintenance
- *DATA PROCESSING*
  - Accounts Payable
  - Receipts
  - Payroll
  - General Ledger
  - Register of Deeds Accounting
  - Sheriff Wants and Warrants
  - Highway Accident Frequency
  - Personnel Management Reports
  - Mailing Labels
  - CETA
  - 4H
  - Grantor-Grantee Records
  - Physical Equipment Inventory
- *TREASURER*
  - Receipts
  - Property Tax File Inquiry
  - Cash Collections
  - Delinquent Tax Processing



CITY OF GREEN BAY

- *ASSESSOR*
  - Computer-Aided Mass Appraisal

WASHINGTON COUNTY

- *TAX LISTER*
  - Property Tax File Maintenance
- *TREASURER*
  - Property Tax File Inquiry
  - Receipts
  - Delinquent Tax Processing
- *AUDITOR*
  - Accounts Payable
  - Receipts
  - Payroll
  - General Ledger
  - Nursing Home Billing
  - Nursing Home Staff Statistics
  - Mental Health Billing
  - Welfare Payroll
  - District Attorney Case Disposition
- *CLERK OF COURTS*
  - Alimony and Support
  - Paternity
  - Traffic Fine and Forfeiture
  - Receipts
- *HIGHWAY DEPARTMENT*
  - Equipment and Labor Invoicing
  - State Reports

CITY OF WEST BEND

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

CITY OF BELOIT

- *ASSESSOR*
  - Property Tax File Maintenance
  - Computer-Aided Mass Appraisal
  - Mobile Home Billing
  - Delinquent Personal Property
  - Special Assessments
- *TREASURER*
  - Tax Payment Inquiry
  - Cash Collection
- *BUILDING INSPECTOR*
  - Dwelling Description Inquiry

CITY OF WAUKESHA

- *COMPTROLLER*
  - Accounts Payable
  - Receipts
  - General Ledger
  - Special Assessments
  - Payroll
  - Municipal Bonds
  - Municipal Invoices
- *ASSESSOR*
  - Property Tax File Maintenance
  - Computer-Aided Mass Appraisal
- *CLERK*
  - Bartender License
  - Voter Registration
- *POLICE DEPARTMENT*
  - Parking Tickets
  - **Bicycle** Registration

CITY OF HARTFORD

- *ASSESSOR*
  - Property Tax File Maintenance
  - Computer-Aided Mass Appraisal

VILLAGE OF MUKWONAGO

- *CLERK*
  - Utility Billing and Accounting
  - Payroll
  - Accounts Payable
  - General Ledger
  - Receipts
- *ASSESSOR*
  - Property Tax File Maintenance

KENOSHA COUNTY

- *SOCIAL SERVICES*
  - General Relief
  - Foster Care
  - General Case Tracking
  - Client Profile
  - Access (Hot Line) System
- *COUNTY WIDE TEXT PROCESSING*
- *ASSESSOR*
  - CAMA Tax System
- *TREASURER*
  - Cash Collection
- *HIGHWAY DEPT.*
  - Cost Accounting

CITY OF MUSKEGO

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

RACINE COUNTY

- *SOCIAL SERVICES*
  - Foster Care
  - Work Relief
  - General Assistance

CITY OF FRANKLIN

- *CLERK*
  - Budget Processing
  - Accounts Payable
  - Receipts
  - Purchase Orders
  - Special Assessments
  - Voter Tabulation
  - General Ledger
  - Utility Billing
- *ASSESSOR*
  - Property Tax File Maintenance

CITY OF GREENFIELD

- *ASSESSOR*
  - Property Tax File Maintenance
- *TREASURER*
  - Utility Billing
  - Receipts
  - Special Assessments

CITY OF BROOKFIELD

- *COMPTROLLER*
  - Receipts
  - Payroll
  - Accounts Payable
  - Special Assessments
  - General Ledger
  - Utility Billing
- *POLICE DEPARTMENT*
  - Uniform Crime Reporting
  - Officer Activity
- *ASSESSOR*
  - Property Tax File Maintenance
- *CLERK*
  - Voter Registration
- *TREASURER*
  - Receipts
- *LIBRARY*
  - Circulation
  - Fines
  - Reference
  - Inventory System

ADMINISTRATIVE SERVICES DIVISION

DIVISION FUNCTIONS

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

FINANCIAL MANAGEMENT AND PLANNING

One of the most important functions of the Division is managing the Commission financial affairs. This includes maintaining a fund accounting system, preparing an annual Commission budget, preparing Commission payrolls, and processing accounts receivable and payable. Through the computerized accounting system, monthly financial management reports are prepared, including budget control, cash flow, and quarterly Treasurer's reports. These reports are utilized by the Commission, its committees, and the Executive Director to ensure that the financial integrity of the Commission is maintained.

The Division is also responsible for ensuring that financial institutions controlled by members of minority groups receive a fair share of the Commission's business. This task was continued during 1984 by maintaining a trust account with a minority-controlled bank within the Commission's service area. In addition, the Commission has established a business enterprise program, commencing with the generation of a list of disadvantaged/women businesses which were contacted as potential Commission vendors.

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

PERSONNEL ADMINISTRATION

Personnel recruitment, testing, and selection are centered in the Administrative Services Division. During 1984 the Commission continued to make progress in carrying out a comprehensive equal employment opportunity program in the areas of recruitment, employment, promotion, transferring, and training. Action was taken to better monitor applicant flow in order to gage progress in attracting minority applicants as required in the affirmative action program. Efforts were continued toward attracting qualified minority and women applicants during the year.

GRANT-IN-AID PROCUREMENT

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

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

The Commission's annual overall work program, a document, as already noted, required by federal regulation, is also prepared with the assistance of the Division. This report is an important vehicle for securing federal and state grants-in-aid, and serves as a guide to the financial management of the Commission. In addition, under the overall work program, the Commission serves as a "pass through" agency to provide federal and state planning monies directly to certain local units of government. For example, transportation planning funds are provided in this way to the County of Milwaukee. The Division administers these "pass through" funds, which in 1984 totaled $118,840.

PURCHASING AND CLERICAL SUPPORT

The Administrative Services Division provides the Commission with purchasing services and

clerical staff support in the typing of reports, in addition to the typing of routine and specialized correspondence.

SALE AND DISTRIBUTION OF PUBLICATIONS

During 1984 the Division distributed a total of 4,176 copies of Commission reports. These included: 42 prospectuses, 146 study designs, 133 planning reports, 132 amendments to planning reports, 6 planning guides, 747 technical reports, 1,202 community assistance planning reports, 207 technical records, 930 annual reports, 297 conference proceedings, 27 community profiles, 5 lake use reports, 173 public hearing minutes, 82 transportation improvement programs, and 47 overall work programs. In addition, the Division distributed 3,717 aerial photographs, 26 soils maps, 99 topographic maps, 307 control survey station dossiers and control survey summary diagrams, and 457 maps from the Commission's base map series.

APPENDICES

Appendix A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
COMMISSIONERS AND COMMITTEES AS OF DECEMBER 31, 1984

COMMISSIONERS

	Term Expires
KENOSHA COUNTY	
***Mary A. Plunkett	1988
**Sheila M. Siegler	1986
*Francis J. Pitts	1986
MILWAUKEE COUNTY	
**Irene M. Brown	1986
*Harout O. Sanasarian, Vice-Chairman	1978
***Jean B. Tyler	1990
OZAUKEE COUNTY	
***Sara L. Johann	1988
*Allen F. Bruederle	1990
**Alfred G. Raetz, Chairman	1990
RACINE COUNTY	
*John R. Hansen	1990
**Earl G. Skagen	1988
***Michael W. Wells	1986
WALWORTH COUNTY	
**John D. Ames	1990
***Anthony F. Balestrieri	1988
*Allen L. Morrison	1988
WASHINGTON COUNTY	
**Thomas J. Sackett	1986
*Harold F. Ryan	1990
***Frank F. Uttech	1988
WAUKESHA COUNTY	
*Robert F. Hamilton	1988
**William D. Rogan, Treasurer	1986
***Paul G. Vrakas	1986

NOTE: The office of Secretary is not listed because Richard W. Cutler, who was elected Secretary for calendar year 1984, was succeeded by Jean B. Tyler on September 28, 1984.

*County Board-appointed Commissioners.

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

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

COMMITTEES

EXECUTIVE COMMITTEE
Alfred G. Raetz, Chairman
Harout O. Sanasarian, Vice-Chairman
Anthony F. Balestrieri
Allen F. Bruederle
Robert F. Hamilton
John R. Hansen
Allen L. Morrison
Francis J. Pitts
William D. Rogan
Harold F. Ryan
Frank F. Uttech
Paul G. Vrakas

ADMINISTRATIVE COMMITTEE
Francis J. Pitts, Chairman
Frank F. Uttech, Vice-Chairman
Irene M. Brown
Robert F. Hamilton
Allen L. Morrison
Alfred G. Raetz
William D. Rogan
Sheila M. Siegler
Paul G. Vrakas

INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE
Robert F. Hamilton, Chairman
Allen L. Morrison, Vice-Chairman
Allen F. Bruederle
John R. Hansen
Francis J. Pitts
Alfred G. Raetz
William D. Rogan
Harold F. Ryan
Harout O. Sanasarian

PLANNING AND RESEARCH COMMITTEE
Anthony F. Balestrieri, Chairman
Michael W. Wells, Vice-Chairman
John D. Ames
Irene M. Brown
John R. Hansen
Sara L. Johann
Allen L. Morrison
Mary A. Plunkett
Alfred G. Raetz
William D. Rogan
Harold F. Ryan
Thomas J. Sackett
Sheila M. Siegler
Earl G. Skagen
Paul G. Vrakas

Appendix B

COMMISSION ADVISORY COMMITTEES: 1984

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.

C. Barry Bateman (7) . . . . . Airport Director, Milwaukee County
John M. Bennett (1,4) . . . . . City Engineer, City of Franklin
James J. Blazek (2) . . . . . City Engineer, City of Racine
Richard A. Bolte (2) . . . . . Highway Commissioner, Waukesha County
Richard R. Brandt (1) . . . . . Manager, Energy Requirements, Wisconsin Gas Company, Milwaukee
Donald M. Cammack (7) . . . . . Chief Planning Engineer, Bureau of Aeronautics, Wisconsin Department of Transportation
Dennis M. Carr (1,3) . . . . . District Accounting Manager, Wisconsin Telephone Company
Arnold L. Clement (1,2) . . . . . Planning Director and Zoning Administrator, Racine County
Lucian M. Darin (2) . . . . . Director of Public Works, City of Hartford
Russell A. Dimick (2) . . . . . City Engineer, City of Cedarburg
Arthur D. Doll (1) . . . . . Director, Bureau of Planning, Wisconsin Department of Natural Resources
William R. Drew (1,2,3,4,5,6,7) . . . . . Commissioner, Department of City Development, City of Milwaukee
Raymond T. Dwyer (6) . . . . . City Engineer, City of Greenfield
Joel P. Ettinger (5,7) . . . . . Regional Director, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration
John M. Fredrickson (1) . . . . . Village Manager, Village of River Hills
Arne L. Gausmann (1,2) . . . . . Director, Bureau of Systems Planning, Wisconsin Department of Transportation
Norman N. Gill (1) . . . . . Executive Director, Citizens Governmental Research Bureau, Milwaukee
Lee H. Greenwood (2) . . . . . District General Manager, Central Greyhound Lines, Milwaukee
Gerald G. Griswold (5) . . . . . Town Engineer, Town of Caledonia
George A. Gundersen (2,4) . . . . . Chief, Statewide Planning Section, Division of Planning and Budget, Wisconsin Department of Transportation
Douglas F. Haist (5) . . . . . Administrator, Division of Transportation Assistance, Wisconsin Department of Transportation
John M. Hartz (5) . . . . . Director, Bureau of Transit, Wisconsin Department of Transportation
Frank M. Hedgcock (7) . . . . . Director of Community Development, City of Waukesha
Sebastian J. Helfer (3) . . . . . Director, Campus Planning and Construction, Marquette University, Milwaukee
Donald K. Holland (2,6) . . . . . Director of Public Works, City of Kenosha
Karl B. Holzwarth (2,4) . . . . . Director, Racine County Park Commission
Ronald Hustedde (1,4) . . . . . Resource Agent, Walworth County
Robert F. Hutter (2) . . . . . Director of Public Works, Village of Sussex
Jerome P. Hytry (4) . . . . . State Conservationist, U. S. Soil Conservation Service
Edward A. Jenkins (5) . . . . . Transportation Director, City of Kenosha
Dr. Leonard C. Johnson (4) . . . . . Soil and Water Conservation Specialist, University of Wisconsin-Extension
Paul Juhnke (3) . . . . . Vice-President, Urban Affairs, Metropolitan Milwaukee Association of Commerce
Bal Kale (3) . . . . . Demographer, Wisconsin Department of Administration
Kipton Kaplan (3) . . . . . Executive Director, Southeastern Wisconsin Health Systems Agency, Inc., Milwaukee
Richard A. Keyes (2) . . . . . Environmental Engineer, Milwaukee County Department of Public Works Public Works, Milwaukee County
Henry C. Krebs (3) . . . . . Chief of Demographic and Special Analysis, Bureau of Health Statistics, Wisconsin Department of Health and Social Services
David A. Kuemmel (2,4,6) . . . . . Commissioner of Public Works, City of Milwaukee
Galen C. Larson (5) . . . . . Managing Director, Milwaukee County Transit System
Edwin J. Laszewski, Jr. (2) . . . . . City Engineer, City of Milwaukee
Gerald P. Lee (1) . . . . . Building Inspector, City of Muskego
James J. Lynch (1) . . . . . Village Planner, Village of Shorewood
Patrick Marchese (4,6) . . . . . Executive Director, Milwaukee Metropolitan Sewerage District
John Margis, Jr. (2,4,7) . . . . . Highway Commissioner, Racine County
Frank M. Mayer (2,5,6,7) . . . . . Division Administrator, U. S. Department of Transportation, Federal Highway Administration
Gloria L. McCutcheon (1) . . . . . District Director, Wisconsin Department of Natural Resources
Norman H. McKegney (5) . . . . . Terminal Superintendent, the Milwaukee Road
Robert J. Mikula (2,4) . . . . . Director of Parks, Recreation and Culture, Milwaukee County
Paul Milewski (3) . . . . . Director, Department of Community Development, City of Oak Creek
Paul E. Mueller (1,4) . . . . . Land Use and Park Administrator, Washington County
William A. Muth, Jr. (6) . . . . . Director of Public Works, City of Brookfield
Roger M. Nacker (3) . . . . . Research Director, Wisconsin Department of Development
George J. Novenski (7) . . . . . Chief, Travel Statistics and Data Coordination Section, Wisconsin Department of Transportation
William F. O'Donnell (1,5) . . . . . County Executive, Milwaukee County
Daniel J. O'Neil (1,4) . . . . . Agricultural Agent, Ozaukee County
Glen A. Orcutt (5,7) . . . . . Airports Planner, U. S. Department of Transportation, Federal Aviation Administration
Dwayne Partain (1,5) . . . . . Librarian, Milwaukee Area Technical College
Nick T. Paulos (1,2) . . . . . Village Engineer, Village of Greendale
Allan P. Pleyte (5,7) . . . . . Traffic Engineer and Superintendent, Bureau of Traffic Engineering and Electrical Services, City of Milwaukee
John B. Prince (1,3,6) . . . . . Manager of System Planning, Wisconsin Electric Power Company, Milwaukee
Ronald A. Ramlow (3) . . . . . Manpower Information Supervisor, Job Service-Milwaukee, Wisconsin Department of Industry, Labor and Human Relations
Richard A. Rechlicz (5) . . . . . Executive Secretary, Wisconsin School Bus Contractors Association
Donald V. Revello (5,7) . . . . . Chief of Traffic Planning, Wisconsin Department of Transportation
Donald A. Roensch (1,6) . . . . . Administrator, City of Mequon
Gordon Rozmus (1,3) . . . . . City Planner, City of Wauwatosa
Gene A. Scharfenorth (1,2) . . . . . Highway Commissioner, Kenosha County
Franklin B. Scharrer (2,7) . . . . . Highway Commissioner, Washington County
Dr. Eric Schenker (3,5,7) . . . . . Dean, School of Business Administration, University of Wisconsin-Milwaukee
Karl Schroeder (1,3,4) . . . . . Horticultural/Natural Resource Agent, Racine County
John E. Schumacher (2,7) . . . . . City Engineer, City of West Allis
Gerald Schwerm (2,7) . . . . . Director of Transportation, Milwaukee County
Harvey Shebesta (2,3,5,7) . . . . . District Director, Wisconsin Department of Transportation
Leland C. Smith (4) . . . . . Horticultural Agent, Kenosha County
John M. Sowinski (3) . . . . . Supervisor of Local and Regional Planning Assistance, Wisconsin Department of Transportation
Walter J. Tarmann (1,4) . . . . . 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
Floyd W. Usher (2) . . . . . City Engineer, City of Oconomowoc
Rodney W. Vanden Noven (6) . . . . . Director of Public Works, City of Waukesha
Donald M. Vold . . . . . District Staff Manager—Forecasting, Wisconsin Telephone Company
Ernest R. Vogel (2,5,7) . . . . . Deputy Director, Milwaukee County Department of Public Works
Max A. Vogt (2,6) . . . . . Director of Public Works, Village of Menomonee Falls
Lloyd O. Wadleigh (3) . . . . . Professor, Department of Economics, Carroll College, Waukesha

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

Gerald T. Waelti (2,7) . . . . . Highway Commissioner, Walworth County
Sylvester N. Weyker (2) . . . . . Highway Commissioner, Ozaukee County
C. Elgar Williams (1,3) . . . . . City Planner, City of West Allis
Dan Wilson (4) . . . . . Resource Development Agent, University of Wisconsin-Extension, Washington County
Thomas A. Winkel (2,5,7) . . . . . District Chief Planning Engineer, Wisconsin Department of Transportation
Thomas N. Wright (1,3,5) . . . . . Director of Community Development, City of Racine

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIRPORT SYSTEM PLANNING

William D. Rogan . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission
Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
C. Barry Bateman . . . . . Airport Director, Milwaukee County
John H. Batten . . . . . President, Twin Disc, Inc., Racine; Member, National Business Aircraft Association
Richard A. Bolte . . . . . Highway Commissioner, Waukesha County
Roger S. Chapman . . . . . Manager, Kenosha Municipal Airport
Edwin H. Daniels . . . . . Citizen Member, Village of Darien
Fred D. Gammon . . . . . Director, Bureau of Aeronautics, Wisconsin Department of Transportation
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning, Wisconsin Department of Transportation
Jerome F. Mann . . . . . Director, Central Region, Air Transport Association of America, Elk Grove Village, Illinois
Paul E. Milewski . . . . . Director, Department of Community Development, City of Oak Creek
Glen A. Orcutt . . . . . Airports Planner, Federal Aviation Administration, U. S. Department of Transportation, Minneapolis, Minnesota
Gerald Schwerm . . . . . Director of Transportation, Milwaukee County
Robert C. Wattleworth . . . . . Chairman, Airport Board, City of West Bend
Sylvester N. Weyker . . . . . Highway Commissioner, Ozaukee County
Lt. Col. Fred R. Wylie . . . . . Deputy Commander of Maintenance, 128th Air Refueling Group, Wisconsin Air National Guard, Milwaukee

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

Gene A. Scharfenorth . . . . . Highway Commissioner, Kenosha County
Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
Ralph L. Drinkwine, Jr. . . . . President, Village of Silver Lake
Noel Elfering . . . . . Chairman, Town of Bristol
Thomas L. Frank . . . . . Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Gerald K. Graff . . . . . Chairman, Town of Randall
Richard B. Hautzinger . . . . . Chairman, Town of Salem
Donald K. Holland . . . . . Director of Public Works, City of Kenosha
Earl W. Hollister . . . . . Supervisor, Kenosha County
Merlin F. Jahns . . . . . Trustee, Village of Twin Lakes
Norman Krueger . . . . . President, Village of Paddock Lake
Richard J. Lindl . . . . . Chairman, Town of Somers
Frank Petranek . . . . . Chairman, Town of Brighton
Roger E. Prange . . . . . Clerk, Town of Pleasant Prairie
Richard C. Schipper . . . . . Chairman, Town of Wheatland
Harvey Shebesta . . . . . District Director, Wisconsin Department of Transportation
Virginia Taylor . . . . . Citizen Member, City of Kenosha
Donald H. Wruck . . . . . Chairman, Town of Pleasant Prairie
August Zirbel, Jr. . . . . Chairman, Town of Paris

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

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

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

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

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

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

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

Milton R. Reik, Chairman — Citizen Member, City of Lake Geneva
Gerald T. Waelti, Secretary — Highway Commissioner, 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
Oliver W. Fleming — Supervisor, Walworth County
Thomas L. Frank — Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
George Gundersen — Chief, Statewide Planning Section, Division of Planning and Budget, Wisconsin Department of Transportation
Lamarr Lundberg — President, Village of Williams Bay
Harvey Shebesta — District Director, Wisconsin Department of Transportation
Clement Tracy — Chairman, Town of East Troy
Lowell Wilson — Chairman, Town of Whitewater
Donald E. Zenz — Planning Commission, Village of Fontana

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

Richard A. Bolte, Chairman and Secretary — Highway Commissioner, Waukesha County
Kurt W. Bauer — Executive Director, Southeastern Wisconsin Regional Planning Commission
Ralph A. Becker — Director of Public Works, City of New Berlin
Thomas L. Frank — Planning and Research Engineer, U. S. Department of Transportation, Federal Highway Administration
Arne L. Gausmann — Director, Bureau of Systems Planning, Wisconsin Department of Transportation
Richard M. Jung, Sr. — Chairman, Town of Lisbon
Gerald P. Lee — Building Inspector, City of Muskego
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TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON JURISDICTIONAL HIGHWAY PLANNING FOR WASHINGTON COUNTY

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Carl Hohlweck — Chairman, Town of Wayne
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John B. Kohl — Chairman, Town of Richfield
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Adolph Lofy — Supervisor, Washington County
Frank M. Mayer — Division Administrator, U. S. Department of Transportation, Federal Highway Administration
John J. Meyer — City Administrator, City of West Bend
Paul E. Mueller — Land Use and Park Administrator, Washington County
Jerome O'Connor — Administrator, Village of Germantown
Dean Otte — Clerk, Village of Slinger
Marshall Paust — President, Village of Germantown
Helmuth F. Prahl — Supervisor, Washington County
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Franklin B. Scharrer — Highway Commissioner, Washington County
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Roland F. Senner — Chairman, Town of Trenton
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TECHNICAL COORDINATING AND ADVISORY COMMITTEE FOR DETAILED PLANNING OF RAPID TRANSIT IMPROVEMENTS IN THE MILWAUKEE NORTHWEST CORRIDOR

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Dennis J. Conta — Citizen Member
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William R. Drew — Commissioner, City of Milwaukee Department of City Development
James N. Elliott — President, Milwaukee Building and Construction Trades Council—AFL-CIO
Joel P. Ettinger — Regional Administrator, Region V, U. S. Department of Transportation, Urban Mass Transportation Administration
Arne L. Gausmann — Director, Bureau of Systems Planning, Wisconsin Department of Transportation
Mark Goff — Home Secretary, Staff of Congressman James P. Moody
John M. Hartz — Director, Bureau of Transit, Wisconsin Department of Transportation
David M. Krahn — Executive Assistant to U. S. Senator Robert W. Kasten
Thomas P. Kujawa — Vice-President and Director of Public and Employee Relations, Milwaukee County Transit System
Edwin J. Laszewski, Jr. — City Engineer, City of Milwaukee
Lee M. Letchford — Vice-President and General Manager, Rouse Company
Paul F. Mathews — Supervisor, Milwaukee County Board
Charles C. Mulcahy — Member, Board of Directors, Greater Milwaukee Committee
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Pepe Rodriquez — Member, Milwaukee County Planning Commission
Harout O. Sanasarian — Supervisor, Milwaukee County Board
Susan Schneider — Trustee, Village of Brown Deer
Gerald Schwerm — Director of Transportation and Public Works, Milwaukee County
Thomas Seery — Wisconsin State Assemblyman
Harvey Shebesta — District Director, Wisconsin Department of Transportation
Richard L. Spaulding — Alderman, City of Milwaukee
Leo C. Talsky — Executive Chief of Staff, Milwaukee County Executive's Office

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

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Secretary Regional Planning Commission
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Agnes Buckley . . . . . President, Village of North Bay
Jon I. Dederich . . . . . Plan Commissioner,
Village of Elmwood Park
Joel P. Ettinger . . . . . .Regional Director, Region V,
U. S. Department of Transportation,
Urban Mass Transportation Administration
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning,
Wisconsin Department of Transportation
Clair W. Jenn . . . . . .Traffic Engineer, City of Racine
Frank M. Mayer . . . . . .Division Administrator,
U. S. Department of Transportation,
Federal Highway Administration
Lloyd C. Meier . . . . . .President, Village of Wind Point
Herman V. Nelson . . . . . Trustee, Village of Sturtevant
Harvey Shebesta . . . . . District Director, Wisconsin
Department of Transportation
Robert F. White . . . . . Supervisor, Town of Mt. Pleasant

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

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Chairman Kenosha County
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin
Secretary Regional Planning Commission
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U. S. Department of Transportation,
Urban Mass Transportation Administration
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning,
Wisconsin Department of Transportation
Donald K. Holland . . . . . .Director of Public Works, City of Kenosha
Edward A. Jenkins . . . . . Transportation Director, City of Kenosha
Frank M. Mayer . . . . . .Division Administrator,
U. S. Department of Transportation,
Federal Highway Administration
Francis J. Pitts . . . . . .Commissioner, Southeastern Wisconsin
Regional Planning Commission
Harvey Shebesta . . . . . District Director, Wisconsin
Department of Transportation

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

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Chairman Chairman, Milwaukee County Transit
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William R. Drew . . . . . Commissioner, Department of City
Development, City of Milwaukee
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David A. Kuemmel . . . . . Commissioner of Public Works,
City of Milwaukee
Edwin J. Laszewski, Jr. . . . . City Engineer, City of Milwaukee
Nick T. Paulos . . . . . Village Engineer, Village of Greendale
Gordon M. Rozmus . . . . . Acting Administrator, City of Wauwatosa
John E. Schumacher . . . . . .City Engineer, City of West Allis
Gerald Schwerm . . . . . Director of Transportation, Milwaukee
County Department of Public Works
Udo L. Wilharm . . . . . City Engineer, City of Oak Creek
Representative (vacant) . . . . . Local Government, Ozaukee/Washington Counties
Representative (vacant) . . . . . .Milwaukee County Board
Representative (vacant) . . . . . .Milwaukee County Board
Representative (vacant) . . . . . .City of Milwaukee
Representative (vacant) . . . . . .City Milwaukee North Shore Suburbs

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

Ex Officio Nonvoting Members

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Joel P. Ettinger . . . . . .Regional Director, Region V,
U. S. Department of Transportation,
Urban Mass Transportation Administration
Thomas J. Hart . . . . . .Director, Bureau of Program Management,
Wisconsin Department of Transportation
John M. Hartz . . . . . Director, Bureau of Transit,
Wisconsin Department of Transportation
Wolfgang H. Klassen . . . . . .Director, Southeast Wisconsin District,
Bureau of Air Management,
Wisconsin Department of Transportation
Galen C. Larson . . . . . .Managing Director, Milwaukee
County Transit System
Frank M. Meyer . . . . . .Division Administrator,
U. S. Department of Transportation,
Federal Highway Administration
Harvey Shebesta . . . . . District Director, District 2,
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Department of Public Works

RACINE PUBLIC TRANSIT PLANNING ADVISORY COMMITTEE

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Jean M. Braun, ... Supervisor, Town of Mt. Pleasant
Vice-Chairman
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Racine Unified School District
John M. Bjelajac . . . . . .Chairman, Racine Transit
and Parking Commission
William Braden . . . . . .Supervisor, Village of Sturtevant
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A. Brian Calhoun . . . . . .Supervisor, 10th District, Racine County
James C. Cefalu . . . . . Vice-President of Operations, Racine
Area Manufacturers and Commerce
James L. Delagrave . . . . . .Supervisor, Town of Caledonia
Richardo Enriquez . . . . . .Executive Director, Spanish Center
of Racine, Kenosha, and Walworth, Inc.
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Raymond Mathews . . . . . .Executive Director, Urban League of Racine
Lloyd C. Miller . . . . . .Secretary of Economic Development, City of Racine
Catherine Puta-Mocarski . . . . . Plan and Budget Specialist, Racine
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Lloyd Vanderkwaak . . . . . .Executive Director, Society's Assets

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Arnold L. Clement . . . . . Planning Director and Zoning Administrator,
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John M. Hartz . . . . . Director, Bureau of Transit, Wisconsin
Department of Transportation
William A. Heimlich . . . . . Planning Supervisor, District 2,
Wisconsin Department of Transportation
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KENOSHA PUBLIC TRANSIT PLANNING ADVISORY COMMITTEE

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Edward A. Jenkins, Vice-Chairman — Director of Transportation, City of Kenosha
Alfred W. Andreucci — President, Common Council, City of Kenosha; Alderman, City of Kenosha
Henrietta Bankhead — Corporate Member, Kenosha Neighborhood Housing Service
John D. Bilotti — Mayor, City of Kenosha
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Raymond Forgianni — Director of City Development, City of Kenosha
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Theodore N. Green — Corporate Member, Kenosha Neighborhood Housing Service
Mark C. Hunter — Member, School Board, Kenosha Unified School District
Richard J. Lindl — Chairman, Town of Somers
Patrick E. Moran — Executive Director, Kenosha Manufacturers' Association
Cynthia Nickolai — Aging Coordinator, Kenosha County Department on Aging
Francis J. Pitts — Supervisor, Kenosha County; Commissioner, Southeastern Wisconsin Regional Planning Commission
Nancy L. Principe — Alderman, City of Kenosha
Carol A. Schaufel — Chairman, City/County Coordinating Committee for Elderly/Handicapped Transportation
Charles W. Woelffer — Transportation Supervisor, Kenosha Unified School District
Donald H. Wruck — Chairman, Town of Pleasant Prairie

Nonvoting Technical Staff Members

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James A. Beckwith — Chief, Public Transit Section, Bureau of Transit, Wisconsin Department of Transportation
George E. Melcher — Director, Kenosha County Planning and Zoning Administration
Harvey Shebesta — District Director, District 2, Wisconsin Department of Transportation

TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON FREEWAY TRAFFIC MANAGEMENT

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Galen C. Larson — Managing Director, Milwaukee County Transit System
Edwin J. Laszewski, Jr. — City Engineer, City of Milwaukee
Frank M. Mayer — Administrator, Region V, U. S. Department of Transportation, Federal Highway Administration
Robert J. Mooney — Captain, Traffic Bureau, Milwaukee County Sheriff's Department
Frank B. Scharrer — Highway Commissioner, Washington County
John E. Schumacher — City Engineer, City of West Allis
Gerald Schwerm — Director of Transportation, Milwaukee County
Harvey Shebesta — District Director, Wisconsin Department of Transportation
Sylvester N. Weyker — Highway Commissioner, Ozaukee County

ROOT RIVER WATERSHED COMMITTEE

Robert J. Mikula, Chairman — Director of Parks, Recreation and Culture, Milwaukee County Park Commission
Thomas N. Wright, Vice-Chairman — Director of Community Development, City of Racine
Kurt W.sBauer, Secretary — Executive Director, Southeastern Wisconsin Regional Planning Commission
John M. Bennett — City Engineer, City of Franklin
James J. Blazek — City Engineer, City of Racine
Raymond T. Dwyer — City Engineer, City of Greenfield
Donald W. Hermann — Mayor, City of Oak Creek
Orville L. Kurth — District Conservationist, U. S. Soil Conservation Service, Milwaukee and Waukesha Counties
Frederick L. Licau — President, Village of Hales Corners
Patrick Marchese — Executive Director, Milwaukee Metropolitan Sewerage District
John Margis, Jr. — Highway Commissioner, Racine County
Stephen F. Olsen — Mayor, City of Racine
Nick T. Paulos — Village Engineer, Village of Greendale
Wayne G. Salentine — Mayor, City of Muskego
Karl Schroeder — Horticultural/Natural Resource Agent, Racine County
John E. Schumacher — City Engineer, City of West Allis
Patricia Trochlell — Water Management Specialist, Southeast District, Wisconsin Department of Natural Resources
Udo L. Wilharm — City Engineer, City of Oak Creek

FOX RIVER WATERSHED COMMITTEE

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Kurt W. Bauer, Secretary — Executive Director, Southeastern Wisconsin Regional Planning Commission
Edmund Brick — Assistant Director, Bureau of Water Regulation and Zoning, Wisconsin Department of Natural Resources
William Burmeister — Chairman, Norway-Dover Drainage District
Arnold L. Clement — Planning Director and Zoning Administrator, Racine County
Ralph Dickinson — Chairman, Town of Waterford
Frank H. Dobbs — Director, Walworth County Planning, Zoning, and Sanitation Department
Herbert W. Gauger — President, Village of Waterford
Myron L. Herman — Natural Resources Agent, Kenosha County
Karl B. Holzwarth — Director, Racine County Park Commission
Lloyd Human — Chairman, Town of Norway
Ronald Hustedde — Resource Agent, Walworth County
Dr. Leonard C. Johnson — Soil and Water Conservation Specialist, University of Wisconsin-Extension
Ronald W. Kazmierczak — Assistant District Director, Southeast District, Wisconsin Department of Natural Resources
Orville L. Kurth — District Conservationist, U. S. Soil Conservation Service, Milwaukee and Waukesha Counties
Walter Maas — Member, Western Racine County Sewerage District
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
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Eistein Pedersen — President, Village of Rochester
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Wayne G. Salentine — Mayor, City of Muskego
Phil Sander — Executive Secretary, Southeastern Wisconsin Sportsmen's Federation
Dr. Bruno E. Schiffleger — Citizen Member, City of Elkhorn
Richard C. Schipper — Chairman, Town of Wheatland
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Arthur Stratton — Commissioner, Hoosier Creek Drainage District
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Franklin Walsh — 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 — Member, Village of Fox Point Plan Commission; Commissioner, Southeastern Wisconsin Regional Planning Commission
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission — Secretary
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Delbert J. Cook . . . . . Chairman, Cedar Creek Restoration Council
Jody Mark Cronin . . . . . Director, Ozaukee County Department of Environmental Health
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Arthur D. Doll . . . . . Director, Bureau of Planning, Wisconsin Department of Natural Resources
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Michael C. Harrigan . . . . . Administrator, Village of Saukville
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John Justen . . . . . Citizen Member
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Patrick Marchese . . . . . Executive Director, Milwaukee Metropolitan Sewerage District
Robert J. Mikula . . . . . Director of Parks, Recreation and Culture, Milwaukee County Park Commission
Paul E. Mueller . . . . . Land Use and Park Administrator, Washington County
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Roland F. Senner . . . . . Chairman, Town of Trenton
George Watts . . . . . President, George Watts & Son, Inc., Milwaukee
Donald W. Webster . . . . . Supervisor, Town of Fredonia
Richard E. Zarling . . . . . Director of Elementary Education, Kewaskum Community Schools

MENOMONEE RIVER WATERSHED COMMITTEE

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Glenn H. Evans . . . . . Citizens for Menomonee River Restoration
Frederick E. Gottlieb . . . . . Manager, Village of Menomonee Falls
Frank S. Hartay . . . . . Director of Manufacturing, Falk Corporation, Milwaukee
Edmund M. Henschel . . . . . Manager, Village of Elm Grove
Ronald W. Kazmierczak . . . . . Assistant District Director, Southeast District, Wisconsin Department of Natural Resources
George C. Keller . . . . . President, Wauwatosa State Bank
Raymond J. Kipp . . . . . Dean, College of Engineering, Marquette University
Patrick Marchese . . . . . Executive Director, Milwaukee Metropolitan Sewerage District
Robert J. Mikula . . . . . Director of Parks, Recreation, and Culture, Milwaukee County Park Commission
Donald A. Roensch . . . . . Administrator, City of Mequon
John E. Schumacher . . . . . City Engineer, City of West Allis
Walter J. Tarmann . . . . . Executive Director, Waukesha County Park and Planning Commission
Lloyd L. Turner . . . . . Director of Public Works, Village of Germantown
Clark E. Wangerin . . . . . City Engineer, City of Brookfield

KINNICKINNIC RIVER WATERSHED COMMITTEE

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Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission — Secretary
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Patrick Marchese . . . . . Executive Director, Milwaukee Metropolitan Sewerage District
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 . . . . . Transportation Director, Milwaukee County
Frank J. Wabiszewski . . . . . Vice-President, Maynard Steel Casting Company, Milwaukee

PIKE RIVER WATERSHED COMMITTEE

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Jerome Konicek . . . . . Chairman, Mt. Pleasant Drainage District — Vice-Chairman
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Jerry Hibbard . . . . . District Conservationist, U. S. Soil Conservation Service, Racine County
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Karl B. Holzwarth . . . . . Park Director, Racine County
Gerald J. Jarmuz . . . . . Planning Analyst, Southeast District, Wisconsin Department of Natural Resources
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Niels E. Ladine . . . . . Director of Parks, Kenosha County
Leverett F. Leet . . . . . Retired Farmer, Town of Somers
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Chelvadurai Manogaran . . . . . Associate Professor, Department of Geography, University of Wisconsin-Parkside
Raymond J. Moyer . . . . . Supervisor, Racine County
O. Fred Nelson . . . . . Manager, Kenosha Water Utility
Francis J. Pitts . . . . . Supervisor, Kenosha County; Commissioner, Southeastern Wisconsin Regional Planning Commission
Stanley Renick . . . . . Member, Kenosha County Country Club
Karl Schroeder . . . . . Horticulture and Natural Resources Agent, Racine County

OAK CREEK WATERSHED COMMITTEE

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Thomas D. Borgwardt . . . . . Airport Engineer, Milwaukee County Department of Public Works
Gerald J. Jarmuz . . . . . Planning Analyst, Southeast District, Wisconsin Department of Natural Resources
Charles G. Lambert . . . . . Secretary, Milwaukee County Conservation Alliance
Edwin J. Laszewski, Jr. . . . . City Engineer, City of Milwaukee
Patrick Marchese . . . . . Executive Director, Milwaukee Metropolitan Sewerage District
Robert J. Mikula . . . . . Director of Parks, Recreation and Culture, Milwaukee County Park Commission
Fred R. Rehm . . . . . Director, Professional Services Division, Milwaukee County Department of Public Works
John D. St. John . . . . . Supervisor, Milwaukee County Board
Douglas R. Sleight . . . . . Member, South Milwaukee Yacht Club

TECHNICAL ADVISORY COMMITTEE ON REGIONAL WATER QUALITY MANAGEMENT PLANNING

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Chairman	
Raymond J. Kipp	Dean, College of Engineering, Marquette University
Vice-Chairman	
Kurt W. Bauer	Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary	
Vinton W. Bacon	Professor, College of Applied Science and Engineering, University of Wisconsin-Milwaukee
Frank R. Boucher	Director, Environmental Department, Wisconsin Electric Power Company
Arnold L. Clement	Planning Director and Zoning Administrator, Racine County
Norbert H. Dettmann	Supervisor, Washington County
Frank H. Dobbs	Administrator, Planning, Zoning, and Sanitation Department, Walworth County
Robert J. Grigeurich	Assistant District Director, U. S. Department of Agriculture, Farmers Home Administration
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
Dr. Leonard C. Johnson	Soil and Water Conservation Specialist, University of Wisconsin-Extension
Ronald W. Kazmierczak	Assistant District Director, Southeast District, Wisconsin Department of Natural Resources
David A. Kuemmel	Commissioner of Public Works, City of Milwaukee
Orville L. Kurth	District Conservationist, U. S. Soil Conservation Service, Milwaukee and Waukesha Counties
Paul E. Mueller	Land Use and Park Administrator, Washington County
Dr. William G. Murphy	Professor, Soils Mechanics, College of Engineering, Marquette University; Engineers and Scientists of Milwaukee
O. Fred Nelson	Manager, Kenosha Water Utility
Vacant	Project Officer, Planning Branch, U. S. Environmental Protection Agency
Herbert E. Ripley	Health Officer, Waukesha County Department of Health
Donald A. Roensch	Administrator, City of Mequon
Harold F. Ryan	Supervisor, Washington County; Commissioner, Southeastern Wisconsin Regional Planning Commission
Karl Schroeder	Horticultural/Natural Resource Agent, Racine County
Marvin E. Schroeter	Secretary-Treasurer and General Manager, United Sewer and Water, Inc., Menomonee Falls
Walter J. Tarmann	Director, Waukesha County Park and Planning Commission
Rodney W. Vanden Noven	Director of Public Works, City of Waukesha
Udo L. Wilharm	City Engineer, City of Oak Creek

TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON COASTAL MANAGEMENT IN SOUTHEASTERN WISCONSIN

Dr. Norman P. Lasca	Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee; Representative of Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin
Chairman	
Robert J. Mikula	Director of Parks, Recreation and Culture, Milwaukee County Park Commission
Vice-Chairman	
Donald M. Reed	Principal Specialist-Biologist, Southeastern Wisconsin Regional Planning Commission
Secretary	
Hubert J. Albert	Port Washington Yacht Club
Josephine Boucher	Member, North Shore League of Women Voters
Sol Burstein	Executive Vice-President, Wisconsin Electric Power Company
Benjamin C. Chapla	Health Officer, Town of Caledonia
Roy F. Hoffmann	Municipal Port Director, Board of Harbor Commissioners, City of Milwaukee
Stanley Kerkman	County Board Supervisor, Kenosha County

TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON COASTAL MANAGEMENT IN SOUTHEASTERN WISCONSIN (Continued)

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George O. Lampert	City of Port Washington
Patrick Marchese	Executive Director, Milwaukee Metropolitan Sewerage District
Dr. Harold M. Mayer	Professor, Department of Geography, University of Wisconsin-Milwaukee
Gloria L. McCutcheon	District Director, Wisconsin Department of Natural Resources
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
James M. Phinney	Resident, Village of Fox Point; Member, Wisconsin Coastal Management Council's Citizens Advisory Committee
Francis J. Pitts	Commissioner, Southeastern Wisconsin Regional Planning Commission
Fred R. Rehm	Director, Professional 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
Henry A. Scholz	Manager, Village of Fox Point
Karl Schroeder	Horticultural/Natural Resource Agent, Racine County
Norbert S. Theine	Administrator, City of South Milwaukee

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

Robert J. Mikula	Director of Parks, Recreation and Culture, Milwaukee County
Chairman	
Loren R. Anderson	President, Geneva Lake Development Corporation, Village of Williams Bay
Donald B. Brick	Recreation Agent, Walworth County
Delbert J. Cook	Chairman, Cedar Creek Restoration Council
Norbert H. Dettmann	Supervisor, Washington County
Arthur D. Doll	Director, Bureau of Planning, Wisconsin Department of Natural Resources
David F. Egelhoff	Park Commissioner, Ozaukee County
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	Chairman, Town of Somers
Paul E. Mueller	Land Use and Park Administrator, Washington County
Kathleen Pfister	Cultural Specialist, Department of City Development, City of Milwaukee
Robert D. Ross	Vice-President, Lee Enterprises Newspapers, Racine
Phil Sander	Executive Secretary, Southeastern Wisconsin Sportsmen's Federation
George L. Schlitz	Former Chairman, Kenosha County Park Commission
Frederick G. Schmidt	Izaak Walton League; Member, Sierra Club
Mrs. John D. Squier	Member, Riveredge Nature Center, Inc.
Walter J. Tarmann	Director, Waukesha County Park and Planning Commission
Edgar W. Trecker	Supervisor of Forestry, Wildlife, and Recreation, Southeast District, Wisconsin Department of Natural Resources
Elwood R. Voigt	Park Commissioner, Ozaukee County
Joseph C. Waters	President, Wisconsin Association of Campground Owners, Proprietor, Lazy Day Campground, Town of Farmington
Dr. Harry J. Wilkins	Citizen Member, City of Wauwatosa
Dr. George T. Wilson	Visiting Lecturer, Department of Continuing and Vocational Education, University of Wisconsin-Madison
Thomas N. Wright	Director of City Development, City of Racine

TECHNICAL ADVISORY COMMITTEE MILWAUKEE HARBOR ESTUARY COMPREHENSIVE WATER RESOURCES MANAGEMENT PLAN

Herbert A. Goetsch . . . . . Former Commissioner, Public Works
Chairman — Department, City of Milwaukee
Helen M. Jacobs . . . . . Member, Milwaukee River
Vice-Chairman — Restoration Council
Kurt W. Bauer . . . . . Executive Director, Southeastern
Secretary — Wisconsin Regional Planning Commission
Earl K. Anderson . . . . . Harbor Engineer, Port of Milwaukee
Jeannette Bell . . . . . Member, League of Women Voters
Patrick Marchese . . . . . Executive Director, Milwaukee Metropolitan Sewerage District
Dominic A. DeAmicis . . . . . Water Quality Section Supervisor, Wisconsin Department of Natural Resources
Kent B. Fuller . . . . . Chief of Environmental Planning, Great Lakes National Program Office, U. S. Environmental Protection Agency
John D. Haliday . . . . . Rear Commodore, Milwaukee Yacht Club
Jay G. Hochmuth . . . . . Special Assistant for Milwaukee Metropolitan Environmental Affairs, Wisconsin Department of Natural Resources
Andrew E. Jackson . . . . . Chairman of the Board, Edward E. Gillen Company
Paul B. Juhnke . . . . . Vice-President, Metropolitan Milwaukee Association of Commerce
John J. Justen . . . . . Member, Greater Milwaukee Committee
Orville L. Kurth . . . . . District Conservationist, U. S. Soil Conservation Service
Dr. Norman P. Lasca . . . . . Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee
Edwin J. Laszewski, Jr . . . . . City Engineer, City of Milwaukee
Robert J. Mikula . . . . . Director of Department of Parks, Recreation and Culture, Milwaukee County
Robert J. Miller . . . . . President, Miller Compressing Company
William D. Rogan . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission
Thomas G. Ross . . . . . Subdistrict Chief, U. S. Geological Survey
Harold F. Ryan . . . . . Supervisor, Washington County
Rudolpho N. Salcedo . . . . . Environmental Scientist, Department of City Development
Harout O. Sanasarian . . . . . Supervisor, Milwaukee County
Gerald Schwerm . . . . . Director of Transportation, Department of Public Works
Michael Soika . . . . . Member, Wisconsin Environmental Decade
George Watts . . . . . President, George Watts & Son, Inc.
Walter T. Woelfle . . . . . Attorney, Wisconsin Electric Power Company
Dr. Alphonse E. Zanoni . . . . . Professor, Department of Civil Engineering, Marquette University

OCONOMOWOC RIVER PRIORITY WATERSHED PLAN DEVELOPMENT ADVISORY COMMITTEE

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Lisa L. Conley . . . . . Representative, Village of Lac La Belle and Lac La Belle Management District
Fern Dickson . . . . . Supervisor, Town of Summit
Phillip J. Ferguson . . . . . Representative, North Lake Management District
Martha J. Ibach . . . . . Citizen Member, Village of Oconomowoc Lake
Carl F. Jaeger . . . . . Supervisor, Jefferson County
John B. Kohl . . . . . Chairman, Town of Richfield
Katherine C. Matschnig . . . . . Secretary, Okauchee Lake Management District
Roland L. Merz . . . . . Supervisor, Waukesha County
Peter J. Mihelich . . . . . Citizen Member, Town of Merton
George A. Morris . . . . . Director of Environmental Health, Waukesha County
Paul E. Mueller . . . . . Administrator, Washington County Land Use and Park Department
George L. Oncken . . . . . Acting Project Manager, Oconomowoc River Priority Watershed; Chairman, University of Wisconsin-Extension, Waukesha County
Dean A. Otte . . . . . Clerk, Village of Slinger
Robert E. Roskopf . . . . . Supervisor, Town of Erin
Bernard G. Schultz . . . . . Director of Public Works, City of Oconomowoc; Representative, Fowler Lake Management District
Hugo Schwulst . . . . . Supervisor, Washington County
Carol A. Wilson . . . . . Supervisor, Town of Oconomowoc

TECHNICAL ADVISORY COMMITTEE ON THE STUDY OF INDUSTRIAL LAND USE FOR SOUTHEASTERN WISCONSIN

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Chairman — Director, Racine County
Paul Milewski . . . . . Director of Community
Vice-Chairman — Development, City of Oak Creek
Kurt W. Bauer . . . . . Executive Director, Southeastern
Secretary — Wisconsin Regional Planning Commission
Frank H. Dobbs . . . . . Planning Director, Walworth County Park and Planning Commission
James N. Dollhausen . . . . . Director of Planning, City of Mequon
Edward F. Dorsey . . . . . Administrative Coordinator for Economic Development, Wisconsin Gas Company
William R. Drew . . . . . Commissioner, Department of City Development, City of Milwaukee
Ray Forgianni . . . . . Director, Department of City Development, City of Kenosha
Michael C. Harrigan . . . . . Administrator, Village of Saukville
Frank M. Hedgcock . . . . . Community Development Director, City of Waukesha
Weldon R. Hultgren . . . . . Manager of Industrial Development, Soo Line Railroad
Paul Juhnke . . . . . Vice-President, Urban Affairs, Metropolitan Milwaukee Association of Commerce
Larry D. Krause . . . . . Director of Development, Opus Corporation
Rick W. Kuckkahn . . . . . Planner, City of New Berlin
Patrick A. LeSage . . . . . Manager, Industrial Development, Wisconsin Electric Power Company
George E. Melcher . . . . . Director of Planning, Zoning and Sanitation, Kenosha County
Paul E. Mueller . . . . . Administrator, Washington County Land Use and Park Department
Roger M. Nacker . . . . . Director, Bureau of Research, Wisconsin Department of Development
J. P. Nail . . . . . Regional Manager, Property Management, Chicago, Milwaukee, St. Paul & Pacific Railroad
Darrell R. Paulsen . . . . . Vice-President, Jansen Corporation
Laura Strain . . . . . Director, Economic Development Division, Milwaukee Area Technical College
Walter J. Tarmann . . . . . Director, Waukesha County Park and Planning Commission
Glenn A. Unger . . . . . District Staff Manager, Switching Planning, Wisconsin Telephone Company
Frederick Vogel, III . . . . . President, Univest Corporation
Fred Walendowski . . . . . Manager of Industrial Development, Chicago & North Western Transportation Company
Thomas E. Wendt . . . . . Director, Division Operations, Wisconsin Natural Gas Company
Thomas N. Wright . . . . . Director of City Development, City of Racine

TECHNICAL AND CITIZEN ADVISORY COMMITTEE FOR THE CHIWAUKEE PRAIRIE-CAROL BEACH LAND USE MANAGEMENT PLANNING PROGRAM

Roger E. Prange . . . . . Town Clerk, Town of Pleasant Prairie
Chairman
George E. Melcher . . . . . Director of Planning, Zoning and Sanitation, Kenosha County
Vice-Chairman
Philip C. Evenson . . . . . Assistant Director, Southeastern Wisconsin Regional Planning Commission
Secretary
Elvin Crispell . . . . . Town Engineer, Town of Pleasant Prairie
Lewis R. Dixon . . . . . Senior Land Use Planner, Wisconsin Electric Power Company
Howard J. Ecklund . . . . . Regulatory Functions Branch, St. Paul District, U. S. Army Corps of Engineers
James L. Fonk . . . . . Supervisor, Kenosha County Board of Supervisors
Charles Graf . . . . . Resident, Carol Beach Estates
Florence Jenson . . . . . President, Carol Beach Homeowners Association
Russell Knetzger . . . . . Town Planner, Town of Pleasant Prairie
LaVerne Kulisek . . . . . League of Women Voters of Kenosha
O. Fred Nelson . . . . . General Manager, Kenosha Water Utility
John Papan . . . . . Chairman, Town of Pleasant Prairie Plan Commission
Carl Salerno . . . . . Resident, Carol Beach Estates
Phil Sander . . . . . Member, Technical and Citizens Advisory Committee on Coastal Management in Southeastern Wisconsin
Allen K. Shea . . . . . Planning Analyst, Water Quality Planning Section, Wisconsin
Dr. Forest Stearns . . . . . Professor, Department of Botany, University of Wisconsin-Milwaukee
Russel Van Herik . . . . . Director, The Nature Conservancy

Appendix C

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 1984

EXECUTIVE DIVISION

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

Philip C. Evenson
Assistant Director

Kenneth R. Yunker, PE
Assistant Director

Margaret M. Shanley
Executive Secretary

Elaine I. Andersen
Executive Secretary

Joan M. Starr
Secretary I

TRANSPORTATION PLANNING DIVISION

Donald R. Martinson
Chief Transportation Engineer

Robert E. Beglinger
Kenneth H. Voigt, PE
Principal Engineers

John L. Zastrow
Senior Specialist

Albert A. Beck
Otto P. Dobnick
Principal Planner

Andrew L. Schwartz, AICP
Senior Planner

Michael J. Maierle
Planner

ECONOMIC DEVELOPMENT PLANNING DIVISION

Gordon M. Kacala
Chief Economic Development Planner

Richard B. Untch, AICP
Principal Planner

Jean M. Plum
Planner

ADMINISTRATIVE SERVICES DIVISION

Joan A. Zenk
Administrative Officer

Rita L. Rolfson
Bookkeeper

Kari L. Lurvey
Bookkeeping Clerk

Luella M. Fredrickson
Secretary II

Lena B. Caracci
Clerk

LAND USE AND HOUSING PLANNING DIVISION

Bruce P. Rubin
Chief Land Use Planner

Gerald H. Emmerich, Jr.
William J. Stauber
Principal Planners

Kathleen M. Hazen
Dennis K. Lefevre
Planners

Lon M. Scott
Research Analyst

Joyce G. Pariseau
Research Aide

COMMUNITY ASSISTANCE PLANNING DIVISION

Roland O. Tonn, AICP
Chief Community Assistance Planner

Patrick J. Meehan
Principal Planner

Betty Haideman
Clerk-Typist

PLANNING RESEARCH DIVISION

Thomas D. Patterson
Chief of Planning Research

Donald G. Dittmar
Senior Specialist

Karen J. Goralski
Nancy M. Kresse
Digitizer Operators

ENVIRONMENTAL PLANNING DIVISION

Robert P. Biebel, PE
Chief Environmental Engineer

Roger A. Baumann, PE
Richard S. Grant
Curtis R. Hulterstrum, PE
Principal Engineers

Donald M. Reed
Principal Specialist

Ronald J. Printz
Senior Engineer

David B. Kendziorski
Principal Planner

James R. D'Antuono
Senior Planner

W. Scott Leedom
David J. Ostrowski
Engineers

Irene A. Brown
Secretary I

CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Leland H. Kreblin
Chief Planning Illustrator

Ronald H. Heinen
Donald P. Simon
Principal Planning Draftsmen

B. Lynn Nowak
Senior Planning Draftsman

Jacqueline B. Hartig
Bergetta J. Ruehmer
Planning Draftsmen

Charlotte S. Vega
Composer Operator

Wendy A. Koeppl
Office Equipment Operator

DATA PROCESSING AND SYSTEMS ENGINEERING DIVISION

John W. Ernst
Data Processing Manager

John C. Stelpflug
Assistant Data Processing Manager

Robert J. Baier
Lawrence D. Langowski
Community Services Representatives

Richard A. Runte
Senior Data Processing Systems Analyst

John D. Harasha
Programming Supervisor

Paul J. Clavette
Richard L. Henley
Senior Systems Analysts

Victor J. Janka, Jr.
Bruce W. Lecus
Martin E. Staszak
Senior Programmer/Analysts

Donald S. Johnson
Programmer

Michael J. Soyck
Operations Supervisor

Melody M. Fohr
Heather W. Kluth
Lead Computer Operators

Kristine M. Engelhardt
Communications Specialist

Rosemary K. Wilcenski
Lead Key Entry Operator

Diane L. Curtiss
Sylvia Carlson
Key Entry Operators

INTERAGENCY STAFF ASSIGNMENT

Gary K. Korb
Natural Resources Agent
University of Wisconsin-Extension

Appendix D

PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-DECEMBER 1984

PROSPECTUSES

Regional Planning Program, April 1962*
Root River Watershed Planning Program, March 1963
Fox River Watershed Planning Program, October 1964
Continuing Land Use-Transportation Study, October 1965
Milwaukee River Watershed Planning Program, September 1966*
Comprehensive Library Planning Program, April 1968
Community Shelter Planning Program, August 1968
Racine Urban Planning District Comprehensive Planning Program, November 1968
Regional Sanitary Sewerage System Planning Program, December 1968
Menomonee River Watershed Planning Program, November 1969
Comprehensive Regional Airport Planning Program, December 1969*
Regional Housing Study, December 1969
Deep Sandstone Aquifer Simulation Modeling Program, October 1972
Regional Park, Outdoor Recreation, and Related Open Space Planning Program, March 1973
Preliminary Engineering Study for the Abatement of Pollution from Combined Sewer Overflow in the Milwaukee-Metropolitan Area, July 1973*
Kinnickinnic River Watershed Planning Program Prospectus, November 1974*
Regional Air Quality Maintenance Planning Program Prospectus, November 1974
Preliminary Engineering Study for the Abatement of Water Pollution in the Kenosha Urban Area, December 1975
Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1976-1980, December 1975
Overall Work Program of the Southeastern Wisconsin Regional Planning Commission: 1977-1981, December 1976
Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1978-1982, December 1977
Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus, September 1978
Overall Work Program—1979 Southeastern Wisconsin Regional Planning Commission, October 1978
Milwaukee Area Primary Transit System Alternatives Analysis Prospectus, October 1978
Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Prospectus, November 1978
Milwaukee Area Work Time Rescheduling Study Prospectus, December 1978
Pike River Watershed Planning Program Prospectus, April 1979
Milwaukee Area Freeway Traffic Management System Study Prospectus, June 1979
Overall Work Program—1980 Southeastern Wisconsin Regional Planning Commission, November 1979
Oak Creek Watershed Planning Program Prospectus, December 1979
Overall Work Program—1981 Southeastern Wisconsin Regional Planning Commission, November 1980
Overall Work Program—1982 Southeastern Wisconsin Regional Planning Commission, November 1981
Overall Work Program—1983 Southeastern Wisconsin Regional Planning Commission, October 1982
Overall Work Program—1984 Southeastern Wisconsin Regional Planning Commission, November 1983
Overall Work Program—1985 Southeastern Wisconsin Regional Planning Commission, October 1984
Prospectus for an Energy Emergency Contingency Plan for Southeastern Wisconsin, December 1983

STUDY DESIGNS

Study Design for the Continuing Regional Land Use-Transportation Study: 1970-1974*
Study Design for the Continuing Land Use-Transportation Study: 1972-1976
Study Design for the Areawide Water Quality Planning and Management Program for Southeastern Wisconsin: 1975-1977*
Study Design for the Milwaukee Harbor Estuary Comprehensive Water Resources Planning Program, September 1981

PLANNING REPORTS

No. 1 - Regional Planning Systems Study, December 1962
No. 2 - Regional Base Mapping Program, July 1963
No. 3 - The Economy of Southeastern Wisconsin, June 1963
No. 4 - The Population of Southeastern Wisconsin, June 1963
No. 5 - The Natural Resources of Southeastern Wisconsin, June 1963
No. 6 - The Public Utilities of Southeastern Wisconsin, July 1963
No. 7 - The Land Use-Transportation Study
Volume 1 - Inventory Findings: 1963, May 1965
Volume 2 - Forecasts and Alternative Plans: 1990, June 1966
Volume 3 - Recommended Regional Land Use and Transportation Plans: 1990, November 1966
No. 8 - Soils of Southeastern Wisconsin, June 1966
No. 9 - A Comprehensive Plan for the Root River Watershed, July 1966
No. 10 - A Comprehensive Plan for the Kenosha Planning District
Volume 1 - Inventory Findings, Forecasts, and Recommended Plans, February 1967
Volume 2 - Implementation Devices, February 1967
No. 11 - A Jurisdictional Highway System Plan for Milwaukee County, March 1969
No. 12 - A Comprehensive Plan for the Fox River Watershed
Volume 1 - Inventory Findings and Forecasts, April 1969
Volume 2 - Alternative Plans and Recommended Plan, February 1970
No. 13 - A Comprehensive Plan for the Milwaukee River Watershed
Volume 1 - Inventory Findings and Forecasts, December 1970
Volume 2 - Alternative Plans and Recommended Plan, October 1971
No. 14 - A Comprehensive Plan for the Racine Urban Planning District
Volume 1 - Inventory Findings and Forecasts, December 1970
Volume 2 - The Recommended Comprehensive Plan, October 1972
Volume 3 - Model Plan Implementation Ordinances, September 1972
No. 15 - A Jurisdictional Highway System Plan for Walworth County, October 1972
No. 16 - A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974
No. 17 - A Jurisdictional Highway System Plan for Ozaukee County, December 1973
No. 18 - A Jurisdictional Highway System Plan for Waukesha County, January 1974
No. 19 - A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974
No. 20 - A Regional Housing Plan for Southeastern Wisconsin, February 1975
No. 21 - A Regional Airport System Plan for Southeastern Wisconsin, December 1975
No. 22 - A Jurisdictional Highway System Plan for Racine County, February 1975
No. 23 - A Jurisdictional Highway System Plan for Washington County, October 1974
No. 24 - A Jurisdictional Highway System Plan for Kenosha County, April 1975
No. 25 - A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000
Volume 1 - Inventory Findings, April 1975
Volume 2 - Alternative and Recommended Plans, May 1978
No. 26 - A Comprehensive Plan for the Menomonee River Watershed
Volume 1 - Inventory Findings and Forecasts, October 1976
Volume 2 - Alternative Plans and Recommended Plan, October 1976
No. 27 - A Regional Park and Open Space Plan for Southeastern Wisconsin, November 1977
No. 28 - A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000, June 1980
No. 29 - A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin, July 1978
No. 30 - A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000,
Volume 1 - Inventory Findings, September 1978
Volume 2 - Alternative Plans, February 1979
Volume 3 - Recommended Plan, June 1979
No. 31 - A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, April 1978
No. 32 - A Comprehensive Plan for the Kinnickinnic River Watershed, December 1978
No. 33 - A Primary Transit System Plan for the Milwaukee Area, June 1982

PLANNING REPORTS—continued

No. 34 - A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area, August 1983
No. 35 - A Comprehensive Plan for the Pike River Watershed, June 1983

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. 10 - 2nd Edition, The Economy of Southeastern Wisconsin, May 1984
No. 11 - The Population of Southeastern Wisconsin, December 1972
No. 11 - 2nd Edition, The Population of Southeastern Wisconsin, June 1984
No. 12 - A Short-Range Action Housing Program for Southeastern Wisconsin: 1972 and 1973, June 1972
No. 13 - A Survey of Public Opinion in Southeastern Wisconsin, September 1974
No. 14 - An Industrial Park Cost-Revenue Analysis in Southeastern Wisconsin: 1975, June 1975
No. 15 - Household Response to Motor Fuel Shortages and Higher Prices in Southeastern Wisconsin, August 1976
No. 16 - Digital Computer Model of the Sandstone Aquifer in Southeastern Wisconsin: April 1976
No. 17 - Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975, June 1978
No. 18 - State of the Art of 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. 19 - A Regional Population Projection Model, October 1980
No. 20 - Carpooling in the Metropolitan Milwaukee Area: March 1977
No. 21 - Sources of Water Pollution in Southeastern Wisconsin: 1975, September 1978
No. 22 - Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977, September 1979
No. 23 - Transit-Related Socioeconomic, Land Use, and Transportation Conditions and Trends in the Milwaukee Area, December 1980
No. 24 - State-of-the-Art of Primary Transit System Technology, February 1981
No. 25 - Alternative Futures for Southeastern Wisconsin, December 1980
No. 26 - Milwaukee Area Alternative Primary Transit System Plan Preparation, Test, and Evaluation, March 1982
No. 27 - Milwaukee Area Work Time Rescheduling Study, August 1981
No. 28 - Evaluation of the Milwaukee Area Rideshare Program: 1972-1982, May 1983
No. 29 - Industrial Land Use in Southeastern Wisconsin, November 1984

COMMUNITY ASSISTANCE PLANNING REPORTS

No. 1 - Residential, Commercial, and Industrial Neighborhoods, City of Burlington and Environs, February 1973
No. 2 - Alternative Land Use and Sanitary Sewerage System Plans for the Town of Raymond: 1990, January 1974
No. 3 - Racine Area Transit Development Program: 1975-1979, June 1974
No. 4 - Floodland Information Report for the Rubicon River, City of Hartford, Washington County, Wisconsin, December 1974
No. 5 - Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed, May 1975
No. 6 - A Uniform Street Naming and Property Numbering System for Racine County, Wisconsin, November 1975
No. 7 - Kenosha Area Transit Development Program: 1976-1980, March 1976
No. 8 - Analysis of the Deployment of Paramedic Emergency Medical Services in Milwaukee County, April 1976
No. 9 - Floodland Information Report for the Pewaukee River, October 1976
No. 10 - The Land Use and Arterial Street System Plans, Village of Jackson, Washington County, December 1976
No. 11 - Floodland Information Report for Sussex Creek and Willow Springs Creek, March 1977
No. 12 - Waukesha Area Transit Development Program: 1977-1981, January 1977
No. 13 - Flood Control Plan for Lincoln Creek, September 1977
No. 13 - (2nd Edition), Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1983
No. 14 - Floodland Management Plan for the Village of Pewaukee, February 1978
No. 15 - Off-Airport Land Use Development Plan for General Mitchell Field and Environs: 1977, May 1977
No. 16 - A Plan for the Whittier Neighborhood, June 1977
No. 17 - A Plan for the Jefferson Park Neighborhood, Village of Germantown, Washington County, Wisconsin, March 1978
No. 18 - A Land Use Plan for the Town of Erin: 2000, July 1978
No. 19 - Storm Water Storage Alternatives for the Crossway Bridge and Port Washington-Bayfield Drainage Area in the Village of Fox Point, August 1977
No. 20 - A Rail Transportation Service Plan for the East Troy Area, September 1977
No. 21 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978, December 1977
No. 22 - Alternative and Recommended Land Use Plans for the Town of Genesee: 2000, February 1978
No. 23 - A Park and Recreation Plan for Ozaukee County, August 1978
No. 24 - A Park and Open Space Plan for the Village of Darien, December 1978
No. 25 - A Plan for the Delrock Neighborhood, City of Delavan, Walworth County, Wisconsin, January 1979
No. 26 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 1978
No. 27 - A Park and Open Space Plan for the Town of Eagle, April 1979
No. 28 - Oconomowoc Area Traffic Management Plan, City of Oconomowoc, Waukesha County, Wisconsin, December 1979
No. 29 - A Development Plan for the Quarry Ridge Neighborhood, City of Burlington, Racine County, Wisconsin, July 1979
No. 30 - Whitewater Area Rail Service Plan, August 1979
No. 31 - Waukesha Area Transit Development Program: 1981-1985, February 1980
No. 32 - Recommended Electronic Data Processing and Transmittal System for Criminal Justice Agencies in Southeastern Wisconsin, September 1979
No. 33 - A Land Use Plan for the Town of Fredonia: 2000, September 1979
No. 34 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980, December 1979
No. 35 - Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin, December 1982

No. 36 - A Land Use Plan for the Village of Germantown: 2000, Village of Germantown, Washington County, Wisconsin, July 1980
No. 37 - A Nonpoint Source Water Pollution Control Plan for the Root River Watershed, March 1980
No. 38 - A Land Use and Traffic Circulation Plan for the Village of Fredonia: 2000, Ozaukee County, Wisconsin, September 1980
No. 39 - A Public Transit System Accessibility Plan
Volume 1 - Kenosha Urbanized Area, June 1980
Volume 2 - Milwaukee Urbanized Area, Milwaukee County, May 1980
Volume 3 - Racine Urbanized Area, June 1980
Volume 4 - Milwaukee Urbanized Area, Waukesha County, June 1980
No. 40 - Recommended Locations for Motor Vehicle Inspection and Emissions Test Facilities in the Southeastern Wisconsin Region, October 1980
No. 41 - A Park and Open Space Plan for the Kenosha Planning District, December 1980
No. 42 - A Park and Open Space Plan for the Town and Village of Pewaukee, Waukesha County, Wisconsin, October 1980
No. 43 - A Development Plan for the Woodview Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1980
No. 44 - Proposed Public Transit Service Improvements: 1980, Waukesha County, Wisconsin, July 1980
No. 45 - A Farmland Preservation Plan for Kenosha County, Wisconsin, June 1981
No. 46 - A Farmland Preservation Plan for Racine County, Wisconsin, August 1981
No. 47 - A Water Quality Management Plan for Lac La Belle, December 1980
No. 48 - A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin, January 1982
No. 49 - A Land Use and Traffic Circulation Plan for the Village of Hartland: 2000, Waukesha County, Wisconsin, July 1981
No. 50 - A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin; 1981, June 1981
No. 51 - A Land Use Plan for the Village of Sussex: 2000, Waukesha County, Wisconsin: 2000, January 1982
No. 52 - Housing Opportunities Guide for the Southeastern Wisconsin Region, December 1980
No. 53 - A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin, August 1981
No. 54 - A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin, July 1982
No. 55 - A Land Use Plan for the Village of Darien: 2000, Walworth County, Wisconsin, December 1981
No. 56 - Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, August 1981
No. 57 - A Development Plan for the Forest Hills Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1983
No. 58 - A Water Quality Management Plan for Pewaukee Lake, March 1984
No. 61 - A Public Transportation Service Plan for Washington County, October 1981
No. 62 - A Traffic Circulation Plan for the West Bend Central Business District, August 1981
No. 63 - A Development Plan for Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1982
No. 63 - 2nd Edition, A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1984
No. 64 - Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, February 1982
No. 65 - A Public Transportation Service Plan for Walworth County, January 1982
No. 66 - A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, October 1981
No. 67 - A Traffic Circulation Plan for Lac La Belle, Waukesha County, Wisconsin, March 1982

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

No. 68 - Upland Disposal Area Siting Study for Dredged Materials from the Port of Milwaukee, December 1981
No. 70 - Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983
No. 73 - A Shoreland Development Management Study for Racine County, Wisconsin, January 1982
No. 74 - Kenosha County Overall Economic Development Program (OEDP) Update—1981, April 1982
No. 75 - A Solid Waste Management Plan for Walworth County, Wisconsin, September 1982
No. 76 - A Land Use Plan for the Town and Village of Pewaukee: 2000, December 1982
No. 77 - A Wetland Protection and Management Plan for the City of Waukesha and Environs, February 1983
No. 79 - Racine Area Transit System Plan and Program: 1984-1988, May 1984
No. 80 - A Lake Michigan Public Access Study for Racine County, Wisconsin, September 1982
No. 81 - Hartford Area Traffic Management Plan, June 1983
No. 82 - A Central Transfer Site Location and Design Analysis for the City of Waukesha Transit System, December 1982
No. 83 - A Transit System Operations Analysis for the City of Waukesha Transit System, February 1983
No. 84 - Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, February 1983
No. 85 - A Land Use Plan for the Village of Eagle: 2000, Waukesha County, Wisconsin, September 1983
No. 86 - A Lake Michigan Coastal Erosion Management Study for Racine County, Wisconsin, October 1982
No. 87 - A Farmland Preservation Plan for Ozaukee County, Wisconsin, May 1983
No. 89 - A Stormwater Management Plan for the Village of Sussex, Waukesha County, Wisconsin, October 1983
No. 90 - Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983
No. 92 - Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin March 1984
No. 95 - Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983
No. 96 - Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin July 1984
No. 97 - Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, November 1984
No. 98 - A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin, August 1983
No. 99 - Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin, February 1984
No. 101 - Kenosha Area Transit System Plan and Program: 1984-1988, June 1984
No. 103 - Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, September 1984
No. 107 - East Moreland Boulevard Short-Range and Long-Range Highway Improvement Plan, April 1984
No. 110 - A Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis, Wisconsin, August 1984
No. 112 - Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, August 1984
No. 114 - Village of Shorewood Comprehensive Traffic Plan, Milwaukee County, Wisconsin, September 1984
No. 115 - A Fire Station Building Program and Site Analysis, Village of Sturtevant, Racine County, Wisconsin, September 1984

ECONOMIC DEVELOPMENT PROFILES

Economic Development Profiles have been prepared for the Southeastern Wisconsin Region, for each of the seven counties in the Region, and for the following communities within each of the seven counties:

Kenosha County
- City of Kenosha
- Town of Bristol
- Town of Pleasant Prairie

Milwaukee County
- City of Cudahy
- City of Milwaukee
- City of Oak Creek
- City of Wauwatosa
- City of West Allis

Ozaukee County
- City of Cedarburg
- City of Mequon
- City of Port Washington
- Village of Grafton
- Village of Saukville

Racine County
- City of Burlington
- City of Racine
- Village of Rochester
- Village of Sturtevant
- Village of Union Grove
- Village of Waterford
- Town of Burlington
- Town of Caledonia
- Town of Dover
- Town of Mt. Pleasant
- Town of Norway
- Town of Raymond
- Town of Rochester
- Town of Waterford
- Town of Yorkville

Walworth County
- City of Elkhorn
- City of Lake Geneva
- City of Whitewater

Washington County
- City of Hartford
- City of West Bend
- Village of Germantown
- Village of Slinger

Waukesha County
- City of Brookfield
- City of Delafield
- City of Muskego
- City of New Berlin
- City of Oconomowoc
- City of Waukesha
- Village of Elm Grove
- Village of Hartland
- Village of Menomonee Falls
- Village of Mukwonago
- Village of Pewaukee
- Village of Sussex

LAKE USE REPORTS—FOX RIVER WATERSHED

Kenosha County
- No. FX-40, Benedict Lake
- No. FX-12, Camp Lake
- No. FX-27, Center Lake
- No. FX-35, Cross Lake
- No. FX-45, Dyer Lake
- No. FX-7, Elizabeth Lake
- No. FX-34, Lilly Lake
- No. FX-17, Marie Lake
- No. FX-13, Powers Lake
- No. FX-11, Silver Lake
- No. FX-45, Voltz Lake

Racine County
- No. FX-25, Bohner Lake
- No. FX-15, Browns Lake
- No. FX-9, Eagle Lake
- No. FX-42, Echo Lake
- No. FX-32, Kee Nong Go-Mong Lake
- No. FX-29, Long Lake
- No. FX-6, Waterford-Tichigan Lakes
- No. FX-26, Waubeesee Lake
- No. FX-5, Wind Lake

LAKE USE REPORTS—FOX RIVER WATERSHED

Walworth County
- No. FX-41, Army Lake
- No. FX-40, Benedict Lake
- No. FX-7, Beulah Lake
- No. FX-31, Booth Lake
- No. FX-4, Como Lake
- No. FX-1, Lake Geneva
- No. FX- 17, 20, 18, Lauderdale Lakes (Green Lake, Middle Lake, Mill Lake)
- No. FX-39, Lulu Lake
- No. FX-21, North Lake
- No. FX-37, Pell Lake
- No. FX-43, Peters Lake
- No. FX-25, Pleasant Lake
- No. FX-24, Potters Lake
- No. FX-38, Silver Lake
- No. FX-30, Wandawega Lake

Waukesha County
- No. FX-3, Big Muskego Lake
- No. FX-23, Denoon Lake
- No. FX-19, Eagle Spring Lake
- No. FX-10, Little Muskego Lake
- No. FX-14, Lower Phantom Lake
- No. FX-2, Pewaukee Lake
- No. FX-34, Spring Lake
- No. FX-33, Upper Phantom Lake

LAKE USE REPORTS—MILWAUKEE RIVER WATERSHED

Fond du Lac County
- No. ML-2, Long Lake
- No. ML-9, Auburn Lake
- No. ML-21, Forest Lake
- No. ML-12, Mauthe Lake
- No. ML-18, Mud Lake
- No. ML-5, Kettle Moraine Lake

Ozaukee County
- No. ML-4, Mud Lake
- No. ML-17, Spring Lake

Sheboygan County
- No. ML-6, Random Lake
- No. ML-10, Crooked Lake
- No. ML-7, Lake Ellen

Washington County
- No. ML-3, Little Cedar Lake
- No. ML-14, Green Lake
- No. ML-19, Lake Twelve
- No. ML-13, Lucas Lake
- No. ML-11, Smith Lake
- No. ML-20, Wallace Lake
- No. ML-15, Barton Pond
- No. ML-1, Big Cedar Lake
- No. ML-8, Silver Lake
- No. ML-16, West Bend Pond

TECHNICAL RECORDS

Volume 1 - No. 1, October-November 1963

Regional Planning in Southeastern Wisconsin
by Kurt W. Bauer, Executive Director

The SEWRPC Land Use-Transportation Study
by J. Robert Doughty, Study Director

Home Interview Sample Selection - Part I
by Kenneth J. Schlager, Chief Systems Engineer

Truck and Taxi Sample Selection
by Thomas A. Winkel, Urban Planning Supervisor

A Backward Glance: Early Toll Roads in Southeastern Wisconsin
by Richard E. Rehberg, Editor

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

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

Volume 1 - No. 3, February-March 1964

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

Volume 1 - No. 4, April-May 1964

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

Volume 1 - No. 5, June-July 1964

Reconciliation of Sample Coverage in the Internal O & D Surveys
by Eugene G. Muhich, P.E., Transportation Planning Engineer
The Contingency Check Program
by Wade G. Fox, Cartography and Design Supervisor
Inventory of the Arterial Street Network
by William T. Wambach, Jr., P.E.
A Backward Glance: The Milwaukee and Rock River Canal
by James E. Seybold, Editor

Volume 1 - No. 6, August-September 1964

Checking the Network Description for Arterial Highway and Transit Networks
by Richard B. Sheridan, Chief Transportation Planner
A Study of the Water Quality and Flow of Streams in Southeastern Wisconsin
by Roy W. Ryling, Hydrologist
Expanding the Origin-Destination Sample
by Richard B. Sheridan, Chief Transportation Planner and
Wade G. Fox, Cartography and Design Supervisor
A Backward Glance: Greendale—Garden City in Wisconsin
by Kurt W. Bauer, Executive Director

Volume 2 - No. 1, October-November 1964

Simulation Models in Urban and Regional Planning
by Kenneth J. Schlager, Chief Systems Engineer

Volume 2 - No. 2, December 1964-January 1965

Capacity of Arterial Network Links
by Richard B. Sheridan, Chief Transportation Planner
The ABC Method of Current Population Estimation
by Donald L. Gehrke, Economics and Population Analyst and
Orlando E. Delogu, Financial Resources and Legal Analyst
O & D Surveys Accuracy Checks
by Eugene E. Muhich, P.E., Transportation Planning Engineer
A Backward Glance: Railroad Transportation in Southeastern Wisconsin
by Patricia J. Tegge, Editor

Volume 2 - No. 3, February-March 1965

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

Volume 2 - No. 4, April-May 1965

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

Volume 2 - No. 5, June-July 1965

Screen Line Adjustment of Trip Data
by Richard B. Sheridan, P.E., Chief Transportation Planner
Inventory of Land Development Regulations in Southeastern Wisconsin
by William J. Kockelman, Chief Community Assistance Planner
A Backward Glance: Highway Development in Southeastern Wisconsin - Part I
by Jean C. Meier, Librarian and Research Assistant

Volume 2 - No. 6, August-September 1965

A Modal Split Model for Southeastern Wisconsin
by Edward Weiner, Highway Engineer

Volume 3 - No. 1, 1968

Transit System Development Standards
by Edward Weiner, Transportation Planning Engineer
Modified Rapid Transit Service in the Southeastern Wisconsin Region
by Sheldon W. Sullivan, Administrative Officer
A Backward Glance: Highway Development in Southeastern Wisconsin - Part II
by Jean C. Meier, Research Assistant and
Sheldon W. Sullivan, Administrative Officer

Volume 3 - No. 2, 1969

Characteristics of Travel in the Milwaukee Central Business District
by Sheldon W. Sullivan, Administrative Officer
Computing the Center of Population and the Geographic Center
by Wayne H. Faust, Associate Planner
A Backward Glance: Downtown Yesterdays
by Gerald P. Caffrey, Milwaukee Municipal Reference Librarian

Volume 3 - No. 3, September 1971

Hydrogeologic Considerations in Liquid Waste Disposal,
with a Case Study in Southeastern Wisconsin
by Martha J. Ketelle, Department of Geology and Geophysics,
University of Wisconsin-Madison, Wisconsin

Volume 3 - No. 4, September 1971

Characteristics of Air and Ground Travel Generated by
General Mitchell Field Airport Terminal: May 1968
by Sheldon W. Sullivan, Chief of Data Collection
Shifts in Centers of Population within the Region: 1960-1970
by Wayne H. Faust, Associate Planner
A Backward Glance: The Development of General Mitchell Field
by Sheldon W. Sullivan, Chief of Data Collection

Volume 3 - No. 5, March 1973

Freeway Flyer Service in Southeastern Wisconsin—A Progress Report: 1964-1971
by Sheldon W. Sullivan, Chief of Data Collection
Development of Equations for Rainfall Intensity—Duration-Frequency Relationship
by Stuart G. Walesh, Water Resources Engineer
A Backward Glance: The American Automobile—A Brief History of the Development
of the American Automobile and the Growth of Automobile Registrations in the
United States, Wisconsin, and the Southeastern Wisconsin Region: 1896-1970
by Sheldon W. Sullivan, Chief of Data Collection

Volume 3 - No. 6, April 1976

Floodland Management: The Environmental Corridor Concept
by Stuart G. Walesh, SEWRPC Water Resources Engineer
Characteristics of Travel in the Milwaukee Central Business District: 1963 and 1972
by Sheldon W. Sullivan, SEWRPC Chief of Data Collection and
Jean Lusk, SEWRPC Research Analyst
The Changing Factorial Ecology of Milwaukee's Black Ghetto
by Harold McConnell, Richard A. Karsten, and Marilyn Ragusa
A Backward Glance: Environmental Corridors of Yesterday and Today
by Dr. Jeremy M. Katz, Research Psychologist and Jeanne Sollen, Editor

Volume 4 - No. 1, March 1978

A Backward Glance: Milwaukee's Water Story
by Milwaukee Water Works
Is There a Groundwater Shortage in Southeastern Wisconsin?
by Douglas A. Cherkaver and Vinton W. Bacon,
University of Wisconsin-Milwaukee
An Overview of the Sources of Water Pollution in Southeastern Wisconsin
by Kurt W. Bauer, Executive Director, SEWRPC
The Effect of Sample Rate on Socioeconomic and Travel Data
Obtained through Standard Home Interview
by Jean Lusk, SEWRPC Planner

Volume 4 - No. 2, March 1981

Refining the Delineation of the Environmental Corridors in Southeastern Wisconsin
by Bruce P. Rubin, Chief Land Use Planner, SEWRPC, and
Gerald H. Emmerich, Jr., Senior Planner, SEWRPC
Water Quality and Quantity Simulation Modeling for the Areawide
Water Quality Management Planning Program for Southeastern Wisconsin
by Thomas R. Sear, P.E., Senior Water Resources Engineer, SEWRPC
Evaluation of a Water Quality Standard for Total Phosphorus in
Flowing Streams in Southeastern Wisconsin
by David B. Kendziorski, Senior Planner, SEWRPC
Bibliography of Lake Michigan Shore Erosion and Nearshore Process Studies
by Norman P. Lasca, Professor, Department of Geological Sciences and Center for
Great Lakes Studies, University of Wisconsin-Milwaukee, and
David Baier, Warren Baumann, Patrick Curth, and Jan H. Smith, Geologists,
Department of Geological Sciences and Center for Great Lakes Studies,
University of Wisconsin-Milwaukee,
A Backward Glance—Historic Evolution of the
Local Governmental Structure in Southeastern Wisconsin
by Eileen Hammer

Volume 4 - No. 3, February 1982

Preservation of Scientifically and Historically Important Geologic Sites
in Milwaukee County, Wisconsin
by Donald G. Mikulic, Staff Geologist, Illinois State Geological Survey; and
Joanne Kluessendorf, Geologic Research Assistant, Illinois State Geological Survey,
Champaign, Illinois
Inventory of Solid Waste Management Facilities in Southeastern Wisconsin: 1980
by Robert P. Biebel, Principal Engineer, SEWRPC, and
Joseph E. Stuber, Senior Engineer, SEWRPC
Inventory Findings of Cannonball Passenger Surveys: 1980 and 1971
by Jean M. Lusk, SEWRPC Planner
A Backward Glance—Historic Evolution of the Local Governmental Structure
in Southeastern Wisconsin
by Eileen Hammer
University of Wisconsin-Milwaukee,
A Backward Glance—Historic Evolution of the
Local Governmental Structure in Southeastern Wisconsin
by Eileen Hammer

TECHNICAL RECORDS—continued

Volume 4 - No. 4, February 1984

Characteristics of Travel in Six Major Attractors
in the Southeastern Wisconsin Region
by Jean M. Lusk, SEWRPC Planner and
John L. Zastrow, SEWRPC Senior Specialist
Shopping Centers: Characteristics of Travel—1963-1972
by Jean M. Lusk, SEWRPC Planner and
John L. Zastrow, SEWRPC Senior Specialist
A Backward Glance—Historic Evolution of the Local Governmental Structure
in Southeastern Wisconsin
by Eileen Hammer

ANNUAL REPORTS

1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973
1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, and 1983

CONFERENCE PROCEEDINGS

1st Regional Planning Conference, December 6, 1961
2nd Regional Planning Conference, November 4, 1962
3rd Regional Planning Conference, November 20, 1963
4th Regional Planning Conference, May 12, 1965
5th Regional Planning Conference, October 26, 1965
6th Regional Planning Conference, May 6, 1969
7th Regional Planning Conference, January 19, 1972
8th Regional Planning Conference, October 16, 1974
Regional Conference on Sanitary Sewerage System User and
Industrial Waste Treatment Recovery Charges, July 18, 1974
9th Regional Planning Conference, April 14, 1976
10th Regional Planning Conference, March 15, 1978
11th Regional Planning Conference, April 19, 1979
12th Regional Planning Conference, January 31, 1980
13th Regional Planning Conference, November 9, 1983

NEWSLETTERS

Volume 24, Nos. 1-6

OTHER

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1978-1982, December 1977
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1979-1983, December 1978
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1980-1984, December 1979
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1981-1985, December 1980
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1982-1986, December 1981
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1983-1987, December 1982
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1984-1988, December 1983
A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine
Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984

VICTOR L. YOUNG, S.C.
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WAUKESHA, WISCONSIN 53186

TELEPHONE
(414) 542-6334

MEMBER
WISCONSIN INSTITUTE CPA'S
AMERICAN INSTITUTE OF
CERTIFIED PUBLIC ACCOUNTANTS

July 12, 1985

To the Commissioners of
the Southeastern Wisconsin
Regional Planning Commission
916 N. East Avenue
P. O. Box 769
Waukesha, Wisconsin 53186-1607

Gentlemen:

We have examined the accompanying Balance Sheets and the related Statements of Revenues, Expenditures, and Changes in Fund Balances for the year 1984 of the following funds of the Southeastern Wisconsin Regional Planning Commission:

1. Southeastern Wisconsin Regional Planning Commission Fund
2. U. S. Department of Housing and Urban Development
3. U. S. Department of Transportation, Urban Mass Transportation Administration Fund
4. U. S. Department of Transportation, Federal Highway Administration Fund
5. U. S. Environmental Protection Agency Section 175 Fund
6. Wisconsin Department of Administration Fund
7. Wisconsin Department of Transportation Fund
8. Wisconsin Department of Natural Resources Fund
9. Wisconsin Department of Development Fund
10. Milwaukee County Fund
11. City of Milwaukee Fund
12. Service Agreements Fund
13. U. S. Environmental Protection Agency Section 208 Fund
14. Data Processing Fund
15. Milwaukee Metropolitan Sewerage District Fund
16. Stream Gaging Fund
17. Indirect Expense Fund
18. Kenosha County Mapping Fund
19. Waukesha County Mapping Fund
20. Digitizer Service 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.

Our examination was made in accordance with the guidelines set forth in OMB A-102, Attachment P and, in our opinion, the Commission is in compliance with the terms and conditions of the grant contracts. Also, the Commission is, in our opinion, in compliance with the terms and conditions governing letter-of-credit procedures and requests for reimbursement.

In our opinion, the accompanying financial statements present fairly the financial position of the above funds at December 31, 1984, and the results of its operations for the fiscal year then ended, in conformity with generally accepted accounting procedures applied on a basis in accordance with standards prescribed by the Office of Management and Budget in its documents A-102 governing requirements for grant management and FMC-74-4 governing allowability and allocability of costs.

We have also revised compliance and internal control matters in accordance with the provisions of the Office of Management and Budget's Circular A-102, "Uniform Requirements for Grants to State and Local Governments," and have included applicable comments on Pages 3 and 4.

Respectfully submitted,

Victor L. Young, S.C.

Victor L. Young, S.C.

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, the Commission's grantor agencies, and the Office of Management and Budget.

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 OMB, as set forth in OMB A-102, Attachment P.

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 A-102 and Federal Management 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, 1984, no findings were made which would require recommendations.

EXHIBIT A-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Southeastern Wisconsin Regional Planning Commission Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contributions from Counties		$758,360.00	
Contract Revenue		5,000.00	
Other Income			
Service Agreements	$ 35,961.25		
Interest on Invested Funds	28,703.97		
Other Income (Note 3)	130,608.44		
Total Other Income		195,273.66	
Total Revenues			$958,633.66
Expenditures			
Salaries and Fringe Benefits		$392,617.91	
Office and Other Expenses			
Technical Consultants	$ 1,456.43		
Services by Other Public Agencies	12,252.39		
Outside Salaries and Services	5,654.59		
Data Processing Services	16,380.00		
Drafting Supplies	301.50		
Library Acquisition and Dues	146.99		
Reproduction and Publication	3,893.34		
Publication of Report	8,683.76		
Postage Expense	263.68		
Travel Expense	5,572.60		
Digitizer Services	26,299.16		
Other Operating Expenses	104.16		
Unemployment Compensation Expense	2,417.40		
Office Supplies	1,102.25		
Depreciation of Automobile/Equipment	19,432.01		
Total Office and Other Expenses		103,960.26	
Indirect Expense		275,956.13	
Total Expenditures			772,534.30
Excess Revenues over Expenditures			$186,099.36
Fund Balance - Beginning of Year			309,488.20
Fund Balance - Adjustments (Note 2)			(77,679.74)
Fund Balance - End of Year			$417,907.82

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

EXHIBIT A-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Southeastern Wisconsin Regional Planning Commission Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Cash and Grants Available	$526,152.89	$208,910.94
Furniture, Fixtures, Equipment, Autos, etc. (Schedule A-B-1)	68,486.24	84,561.65
Service Agreement Receivable	--	300.00
Prepaid Expense	--	2,841.35
Due From Data Processing Fund	--	166,875.00
Total Assets	$594,639.13	$463,488.94
Liabilities		
Fringe Benefits	$ 48.12	$ 452.10
State Sales Tax	381.85	429.16
Accounts Payable	93,787.72	67,810.30
Annuity	4,856.66	5,997.44
Vacation Accrual	77,656.96	79,311.74
Total Liabilities	176,731.31	154,000.74
Fund Balance		
Unappropriated Fund Balance	417,907.82	309,488.20
Total Liabilities and Fund Balance	$594,639.13	$463,488.94

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

SCHEDULE A-B-1

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Southeastern Wisconsin Regional Planning Commission Fund

Equipment Schedules

December 31, 1984 and 1983

December 31, 1984

Description	Cost	Accumulated Depreciation	Net Book Value
Desks	$ 12,080.60	$ 11,554.24	$ 526.36
Chairs	10,140.96	8,051.72	2,089.24
Calculators and Adding Machines	11,991.54	9,578.35	2,413.19
Filing Cabinets	29,526.41	22,782.24	6,744.17
Typewriters	18,417.91	13,209.72	5,208.19
Book Cases	15,227.23	10,561.18	4,666.05
Tables	6,239.16	5,402.74	836.42
Data Processing Equipment	9,164.02	4,454.27	4,709.75
Major Equipment	44,016.40	23,050.70	20,965.70
Automobiles	21,507.00	5,936.25	15,570.75
Miscellaneous	12,339.19	7,582.77	4,756.42
	$190,650.42	$122,164.18	$68,486.24

December 31, 1983

Description	Cost	Accumulated Depreciation	Net Book Value
Desks	$ 13,420.55	$11,591.37	$ 1,829.18
Chairs	10,764.83	8,110.46	2,654.37
Calculators and Adding Machines	12,762.31	9,540.79	3,221.52
Filing Cabinets	31,871.41	21,705.47	10,165.94
Typewriters	19,808.99	12,840.32	6,968.67
Book Cases	14,261.51	9,611.25	4,650.26
Tables	6,368.56	5,451.36	917.20
Data Processing Equipment	9,164.02	3,744.78	5,419.24
Major Equipment	45,091.40	16,284.06	28,807.34
Automobiles	42,567.10	27,891.25	14,675.85
Miscellaneous	11,918.42	6,666.34	5,252.08
	$217,999.10	$133,437.45	$84,561.65

Method of Depreciation

Autos are depreciated over three (3) years. Prior to January 1, 1983, autos were depreciated over five (5) years on the straight-line method, with a 10 percent salvage value used.

Equipment is depreciated over ten (10) years on the straight-line method, five (5) years for acquisitions after January 1, 1982.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Southeastern Wisconsin Regional Planning Commission
(SEWRPC Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the SEWRPC Fund are used to partially support the following continuing planning programs: land use, transportation, planning research, floodland management, water quality, community assistance, economic development, and coastal zone management. In addition, the Commission enters into special contracts and may provide partial support to other special planning programs such as the Milwaukee Area Primary Transit Systems Freeway Traffic Management Study. This fund also includes the office equipment, unemployment compensation, and operating fund balances of the Commission.

   Included in the SEWRPC Fund are revenues generated from the following sources: the constituent seven counties in the form of tax levy requests; revenues from contracts and/or service agreements; interest income; sale of maps, publications and aerial photographs; and other miscellaneous income sources.

   Revenues generated in the SEWRPC Fund are not only used to provide partial support to the referenced planning programs, but are also used in concert with other state and local funding agencies to satisfy appropriate local matching requirements mandated by the Commission's federal funding agencies. Receipt of the revenues reflected in the SEWRPC Fund is obtained by the Commission by letter requests to the constituent seven counties, customary invoicing procedures, or in accordance with specific terms and conditions set forth in individual contracts or service agreements.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Southeastern Wisconsin Regional Planning Commission
(SEWRPC Fund)

Notes to Financial Statements
December 31, 1984

2. Fund Balance--Adjustments-1984

The studies included in the following funds were completed prior to calendar year 1984. The fund balances, therefore, were transferred to the SEWRPC fund:

U. S. Environmental Protection Agency Section 175 Fund--		
Prior years Expenditures which were reimbursed by the SEWRPC Fund	$119,600.06	
Prior years revenues which were recorded in the SEWRPC Fund	79,873.45	
		(199,473.51)
U. S. Environmental Protection Agency Section 208 Fund--		
Current year fund balance transfer reimburses the SEWRPC Fund for funds advanced in prior years		112,912.78
U. S. Department of Housing and Urban Development--		
Current year fund balance transfer reimburses the SEWRPC Fund for funds advanced in prior years		8,880.99
		$ (77,679.74)

3. Other Income

Refund of Retirement Costs	$ 55,628.83
Errors and Ommissions allocated to Data Processing Fund	10,000.00
Vacation Liability Allocated to Indirect Fund	27,000.00
Depreciation Allocated to Indirect Fund	19,432.01
Unemployment Compensation Allocated to Indirect Fund	2,417.40
Sale of Aerial Photos	10,938.48
Sale of Publications	3,051.30
Floodplain Information	1,860.00
Miscellaneous	280.42
	$ 130,608.44

EXHIBIT B-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Housing and Urban Development Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$ --	$8,880.99
Total Assets	$ --	$8,880.99
Liabilities		
Accounts Payable	$ --	$ --
Total Liabilities	--	--
Fund Balance		
Fund Balance (Note 2)	--	8,880.99
Total Liabilities and Fund Balance	$ --	$8,880.99

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Housing and Urban Development
(HUD Fund)
Notes to Financial Statements
December 31, 1984

1. The studies included in this fund were completed and closed out in 1983. Excess expenditures incurred in 1979, prior to the implementation of OMB A-102, were funded by the SEWRPC fund. The current year fund balance transfer reimburses the SEWRPC Fund for funds advanced in prior years.

EXHIBIT C-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Transportation
Urban Mass Transportation Administration Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Grant Revenue		$565,482.88	
Total Revenues			$565,482.88
Expenditures			
Salaries and Fringe Benefits		$192,068.00	
Office and Other Expenses			
Technical Consultants	$ 36,870.72		
Outside Salaries and Services	11,771.43		
Data Processing Services	73,260.00		
Drafting Supplies	1,160.67		
Library Acquisition and Dues	555.21		
Reproduction and Publication	1,225.27		
Publication of Report	4,208.47		
Postage Expense	1,011.56		
Travel Expense	3,437.82		
Digitizer Services	116,369.18		
Other Operating Expenses	1,040.59		
Office Supplies	588.84		
Total Office and Other Expenses		251,499.76	
Indirect Expense		134,425.68	
Total Expenditures			577,993.44
Excess Expenditures over Revenues			$ 12,510.56
Fund Balance - Beginning of Year			251,532.31
Fund Balance - End of Year			$339,021.75

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

EXHIBIT C-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Transportation
Urban Mass Transportation Administration Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$313,339.23	$424,083.55
Grant Receivable	27,652.00	--
Total Assets	$340,991.23	$424,083.55
Liabilities		
Accounts Payable	$ 1,969.48	$ 72,551.24
Total Liabilities	1,969.48	72,551.24
Fund Balance		
Fund Balance	339,021.75	251,532.31
Total Liabilities and Fund Balance	$340,991.23	$424,083.55

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Transportation
Urban Mass Transportation Administration Fund
(UMTA Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the UMTA Fund are used to partially support the continuing planning programs of transportation and planning research. In addition, under separate contract UMTA provides partial support to the Commission for the conduct of the Milwaukee Area Freeway Traffic Management System Study and the Milwaukee Northwest Corridor Detailed Rapid Transit Planning Study.

Included in the UMTA Fund are revenues generated from the 1984 grant with the required local match provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Fund, the Wisconsin Department of Transportation (WISDOT) Fund and the Milwaukee County Fund.

For the referenced continuing planning programs, UMTA revenue is used in concert with the Federal Highway Administration (FHWA) Fund and receipt of the revenues in the UMTA fund is obtained by the Commission in accordance with the terms and conditions of the U. S. Department of Treasury letter of credit procedures.

EXHIBIT D-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Transportation
Federal Highway Administration Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Grant Revenue		$551,308.93	
Total Revenues			$551,308.93
Expenditures			
Salaries and Fringe Benefits		$160,605.58	
Office and Other Expenses			
Technical Consultants	$ 27,639.51		
Outside Salaries and Services	24,042.32		
Data Processing Services	146,668.00		
Drafting Supplies	1,149.99		
Library Acquisition and Dues	430.25		
Reproduction and Publication	1,742.33		
Publication of Report	3,388.45		
Postage Expense	1,739.14		
Travel Expense	1,696.13		
Digitizer Services	123,328.77		
Other Operating Expenses	40.12		
Office Supplies	1,108.07		
Total Office and Other Expenses		332,973.08	
Indirect Expense		112,412.38	
Total Expenditures			605,991.04
Excess Expenditures over Revenues			$ 54,682.11
Fund Balance - Beginning of Year			13,221.71
Fund Balance - End of Year			$(41,460.40)

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

EXHIBIT D-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Transportation
Federal Highway Administration Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Receivable	$154,256.93	$29,585.44
Total Assets	$154,256.93	$29,585.44
Liabilities		
Accounts Payable	$ 28,646.56	$ 57.39
Grant Balance	167,070.77	16,306.34
Total Liabilities	195,717.33	16,363.73
Fund Balance		
Fund Balance	(41,460.40)	13,221.71
Total Liabilities and Fund Balance	$154,256.93	$29,585.44

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Transportation
Federal Highway Administration Fund
(FHWA Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the FHWA Fund are used to partially support the continuing planning programs of transportation and planning research.

   The required local match for the revenues reflected in the FHWA Fund is provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Fund and the Wisconsin Department of Transportation (WISDOT) Fund.

   For referenced continuing planning programs, FHWA revenues are used in concert with the Urban Mass Transportation Administration (UMTA) Fund and receipt of the revenues in the FHWA Fund is obtained by the Commission from the Wisconsin Department of Transportation in accordance with an agreed-upon method of invoicing.

EXHIBIT E-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency Section 175 Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Total Assets	$ --	$ --
Liabilities		
Accounts Payable	$ --	$ --
Grant Balance	--	199,473.51
Total Liabilities	--	199,473.51
Fund Balance		
Fund Balance	--	(199,473.51)
Total Liabilities and Fund Balance	$ --	$ --

The notes which are an integral part of this statement.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency Section 175 Fund
(EPA 175 Fund)

Notes to Financial Statements
December 31, 1984

1. The study included in this fund was completed in 1983. Fund balance transferred to the SEWRPC Fund.

Prior years expenditures which were reimbursed by the SEWRPC Fund	$119,600.06	
Prior years revenues which were recorded in the SEWRPC Fund	79,873.45	
		(199,473.51)

EXHIBIT F-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Administration Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$75,275.04	
Total Revenues			$ 75,275.04
Expenditures			
Salaries and Fringe Benefits		$19,712.67	
Office and Other Expenses			
Technical Consultants	$12,200.95		
Services by Other Public Agencies	512.95		
Publication of Report	1,079.47		
Travel Expense	369.77		
Other Operating Expenses	45.50		
Total Office and Other Expenses		14,208.64	
Indirect Expense		13,797.81	
Total Expenditures			47,719.12
Excess Revenues over Expenditures			$ 27,555.92
Fund Balance - Beginning of Year			(10,729.49)
Fund Balance - End of Year			$ 16,826.43

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

EXHIBIT F-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Administration Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$10,341,74	$ --
Contract Receivable	12,291.76	10,248.91
Total Assets	$22,633.50	$ 10,248.91
Liabilities		
Accounts Payable	5,807.07	$ 9,817.16
Grant Balance	--	11,161.24
Total Liabilities	5,807.07	20,978.40
Fund Balance		
Fund Balance	16,826.43	(10,729.49)
Total Liabilities and Fund Balance	$22,633.50	$ 10,248.91

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Administration Fund
(DOA Fund)

Notes to Financial Statement
December 31, 1984

1. The revenues reflected in the DOA Fund are used to partially support the continuing Coastal Zone Management Program, the Milwaukee County Coastal Zone Mapping Project, and the St. Francis Erosion Control and Land Use Study.

   The revenues in the DOA Fund are U. S. National Oceanic and Atmospheric Administration (NOAA) grant funds that are administered by the DOA.

   The required local match is provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Fund for the Coastal Zone Management Project.

   The required local match for the Milwaukee County Coastal Zone Mapping Project is provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Fund, the Milwaukee County Fund, and the City of Milwaukee Fund.

   The required local match for the St. Francis Erosion Control and Land Use Study is provided by the City of St. Francis.

   Receipt of the revenues in the DOA Fund is obtained by the Commission from the Wisconsin Department of Administration in accordance with an agreed-upon method of invoicing.

EXHIBIT G-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Transportation Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Grant Revenue		$108,918.07	
Contract Revenue		66,442.31	
Total Revenues			$175,360.38
Expenditures			
Salaries and Fringe Benefits		$ 62,584.46	
Office and Other Expenses			
Technical Consultants	$ 9,302.86		
Outside Salaries and Services	3,589.81		
Data Processing Services	31,252.08		
Drafting Supplies	246.40		
Library Acquisition and Dues	105.77		
Reproduction and Publication	306.55		
Publication of Report	824.20		
Postage Expense	279.65		
Travel Expense	1,921.09		
Digitizer Services	26,299.46		
Other Operating Expenses	133.42		
Office Supplies	171.20		
Total Office and Other Expenses		74,432.49	
Indirect Expense		43,806.36	
Total Expenditures			180,823.31
Excess Expenditures over Revenues			$ (5,462.93)
Fund Balance - Beginning of Year			8,022.98
Fund Balance - End of Year			$ 2,560.05

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

EXHIBIT G-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Transportation Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Receivable	$18,518.23	$22,533.92
Contract Receivable	36,391.82	--
Total Assets	54,910.05	$22,533.92
Liabilities		
Accounts Payable	$ 5,133.42	$ 18.58
Grant Balance	47,216.58	14,492.36
Total Liabilities	52,350.00	14,510.94
Fund Balance		
Fund Balance	2,560.05	8,022.98
Total Liabilities and Fund Balance	$54,910.05	$22,533.92

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Transportation Fund
(WISDOT Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the WISDOT Fund are used to partially support the continuing planning programs of transportation and planning research. In addition, under separate contracts, WISDOT provides support to the Commission for the conduct of the Regional Airport System Update Plan, and partial support to the Commission for the conduct of the Milwaukee Area Freeway Traffic Management System Study, and the Milwaukee Northwest Corridor Detailed Rapid Transit Planning Study.

   Receipt of revenues in the WISDOT Fund is obtained by the Commission in accordance with the terms and conditions of an agreed-upon method of invoicing.

EXHIBIT H-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Natural Resources Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$260,544.09	
Total Revenues			$260,544.09
Expenditures			
Salaries and Fringe Benefits		$169,999.58	
Office and Other Expenses			
Services by Other Public Agencies	$ 7,804.15		
Outside Salaries and Services	391.32		
Reproduction and Publication	2,770.68		
Publication of Report	3,234.29		
Travel Expense	725.07		
Other Operating Expenses	90.19		
Total Office and Other Expenses		15,015.70	
Indirect Expense		118,980.94	
Total Expenditures			303,996.22
Excess Expenditures over Revenues			$ 43,452.13
Fund Balance - Beginning of Year			(9,076.39)
Fund Balance - End of Year			$(52,528.52)

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

EXHIBIT H-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Natural Resources Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Contract Receivable	$180,430.76	$135,412.20
Total Assets	$180,430.76	$135,412.20
Liabilities		
Accounts Payable	$ 13,304.06	$ 11,410.80
Grant Balance	219,655.22	133,077.79
Total Liabilities	232,959.28	144,488.59
Fund Balance		
Fund Balance	(52,528.52)	(9,076.39)
Total Liabilities and Fund Balance	$180,430.76	$135,412.20

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

EXHIBIT I-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Development Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Receivable	$ --	$ 30,248.00
Contract Receivable	5,000.00	--
Total Assets	5,000.00	$ 30,248.00
Liabilities		
Accounts Payable	$ 18.50	$ 125.79
Grant Balance	58,936.55	84,441.62
Total Liabilities	58,955.05	84,567.41
Fund Balance		
Fund Balance	(53,955.05)	(54,319.41)
Total Liabilities and Fund Balance	$ 5,000.00	$ 30,248.00

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Natural Resources Fund
(DNR Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the DNR Fund are used to partially support the continuing Floodland Management Planning Program and the Continuing Water Quality Planning Program.

   Receipt of revenues in the DNR Fund is obtained by the Commission from the Wisconsin Department of Natural Resources in accordance with an agreed-upon method of invoicing.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Development Fund
(DOD Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the DOD Fund are used to partially support the continuing economic development planning program, and to provide support to the Commission for the conduct of the Stadium Freeway-South study.

   The receipt of the revenues in the DOD Fund is obtained by the Commission in accordance with an agreed-upon method of invoicing.

EXHIBIT I-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Development Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$37,052.00	
Total Revenues			$ 37,052.00
Expenditures			
Salaries and Fringe Benefits		$20,715.22	
Office and Other Expenses			
Reproduction and Publication	$ 948.60		
Travel Expense	527.03		
Total Office and Other Expenses		1,475.63	
Indirect Expense		14,496.79	
Total Expenditures			36,687.64
Excess Revenues over Expenditures			$ 364.36
Fund Balance - Beginning of Year			(54,319.41)
Fund Balance - End of Year			$(53,955.05)

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

EXHIBIT J-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Milwaukee County Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$14,934.64	
Total Revenues			$ 14,934.64
Expenditures			
Salaries and Fringe Benefits		$4,004.38	
Office and Other Expenses			
Technical Consultants	$4,042.35		
Travel Expense	66.06		
Other Operating Expenses	147.40		
Total Office and Other Expenses		4,255.81	
Indirect Expense		2,805.52	
Total Expenditures			11,065.71
Excess Revenue over Expenditures			$ 3,868.93
Fund Balance - Beginning of Year			(17,871.07)
Fund Balance - End of Year			$(14,002.14)

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

EXHIBIT J-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Milwaukee County Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Contract Receivable	$ 14,934.64	$ --
Total Assets	$ 14,934.64	$ --
Liabilities		
Accounts Payable	$ 2,656.41	$ 1.10
Grant Balance	26,280.37	17,869.97
Total Liabilities	28,936.78	17,871.07
Fund Balance		
Fund Balance	(14,002.14)	(17,871.07)
Total Liabilities and Fund Balance	$ 14,934.64	$ --

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

EXHIBIT K-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

City of Milwaukee Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Contract Receivable	$ 4,500.00	$ --
Total Assets	$ 4,500.00	$ --
Liabilities		
Accounts Payable	$ 2,811.33	$ 9.06
Grant Balance	3,842.32	2,268.19
Total Liabilities	6,653.65	2,277.25
Fund Balance		
Fund Balance	(2,153.65)	(2,277.25)
Total Liabilities and Fund Balance	$ 4,500.00	$ --

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Milwaukee County Fund

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the Milwaukee County Fund are used to partially support the Milwaukee Northwest Corridor Detailed Rapid Transit Planning Study and the Milwaukee County Coastal Zone Mapping Project.

   For the referenced studies, receipt of the revenues is obtained by the Commission from Milwaukee County in accordance with an agreed-upon method of invoicing.

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

City of Milwaukee Fund

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the City of Milwaukee Fund are used to partially support the Milwaukee County Coastal Zone Mapping Program.

   Receipt of the revenues in the City of Milwaukee Fund is obtained by the Commission from the City of Milwaukee in accordance with an agreed-upon method of invoicing.

EXHIBIT K-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

City of Milwaukee Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$4,500.00	
Total Revenues			$ 4,500.00
Expenditures			
Salaries and Fringe Benefits		$ 56.75	
Office and Other Expenses			
Technical Consultants	$4,281.35		
Total Office and Other Expenses		4,281.35	
Indirect Expense		38.30	
Total Expenditures			4,376.40
Excess Revenues over Expenditures			$ 123.60
Fund Balance - Beginning of Year			(2,277.25)
Fund Balance - End of Year			$(2,153.65)

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

EXHIBIT L-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Service Agreements Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$10,202.00	
Service Agreements		79,321.88	
Total Revenues			$ 89,523.88
Expenditures			
Salaries and Fringe Benefits		$77,930.33	
Office and Other Expenses			
Technical Consultants	$18,684.51		
Reproduction and Publication	923.87		
Publication of Report	971.23		
Data Processing Services	27.00		
Travel Expense	1,399.32		
Other Operating Expenses	106.93		
Total Office and Other Expenses		22,112.86	
Indirect Expense		54,540.11	
Total Expenditures			154,583.00
Excess Expenditures over Revenues			$ 65,059.12
Fund Balance - Beginning of Year			21,195.22
Fund Balance - End of Year			$(43,863.90)

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

EXHIBIT L-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Service Agreements Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Service Agreements Receivable	$ 60,260.96	$22,533.92
Total Assets	60,260.96	$22,533.92
Liabilities		
Accounts Payable	$ 283.79	$ --
Grant Balance	103,841.07	1,338.70
Total Liabilities	104,124.86	1,338.70
Fund Balance		
Fund Balance	(43,863.90)	21,195.22
Total Liabilities and Fund Balance	$ 60,260.96	$22,533.92

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Service Agreements Fund

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the Service Agreements Fund are used to partially support special studies or work efforts in a variety of program areas including: land use; transportation; watershed studies; economic development; and community assistance planning.

   Included in the Service Agreements Fund are revenues generated from letter agreements, memorandums of understanding, and contracts. Work efforts undertaken under the service agreements heading occasionally require local matching.

   For the referenced programs, receipt of the revenues in the Service Agreements Fund is obtained by the Commission in accordance with the terms and conditions set forth in an individual agreement.

EXHIBIT M-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency 208 Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$ --	$112,912.78
Total Assets	$ --	$112,912.78
Liabilities		
Total Liabilities	$ --	$ --
Fund Balance		
Fund Balance	--	112,912.78
Total Liabilities and Fund Balance	$ --	$112,912.78

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency Fund
(EPA 208 Fund)

Notes to Financial Statements
December 31, 1984

1. The study included in this fund began in 1975 and was completed in 1983. Expenditures incurred in 1978, prior to the implementation of OMB A-102, were funded by SEWRPC. The current year fund balance transfer reimburses the SEWRPC fund for funds advanced in prior years.

EXHIBIT N-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Data Processing Fund (Note 1)

Statement of Revenues, Expenditures, and Change in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Service Agreements		$2,060,893.14	
Total Revenues			$2,060,893.14
Expenditures			
Salaries and Fringe Benefits		$ 682,490.51	
Office and Other Expenses			
Equipment and Maintenance: In-House	$ 361,003.17		
Equipment and Maintenance: Out-of-House	514,471.81		
Outside Salaries and Services	10,016.00		
Central Processing Unit	25,547.69		
Rent	54,000.00		
Library Acquisition and Dues	207.97		
Forms and Supplies: In-House	42,452.35		
Forms and Supplies: Pass Through	7,025.59		
Software and Maintenance	115,083.45		
Travel Expense	11,251.78		
Telephone	11,284.63		
Errors and Omissions Insurance	10,000.00		
Vacation Liability	6,500.00		
Automobile/Office Equipment Maintenance	1,221.10		
Total Office and Other Expenses		1,170,065.54	
Total Expenditures			1,852,556.05
Excess Revenue over Expenditures			$ 208,337.09
Fund Balance - Beginning of Year			(372,085.62)
Fund Balance - End of Year			$ (163,748.53)

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

EXHIBIT N-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Data Processing Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Due from Service Agreements	$ 561,179.82	$ 254,043.42
Total Assets	561,179.82	$ 254,043.42
Liabilities		
Accounts Payable	$ 317,874.46	$ 73,484.10
Sales Tax	71.28	69.76
Grant Balance Deficit	406,982.61	385,700.18
Due to SEWRPC Fund	--	166,875.00
Total Liabilities	724,928.35	626,129.04
Fund Balance		
Fund Balance-(Deficit)	(163,748.53)	(372,085.62)
Total Liabilities and Fund Balance	$ 561,179.82	$ 254,043.42

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Data Processing Fund
(DP Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the DP Fund are used to support the Commission's data processing operations.

   The cost of supporting the Commission's Data Processing Operations is apportioned between the Continuing Planning Programs and the Community Assistance Data Processing Customers. Costs for data processing are distributed to the Continuing Planning Programs according to a "Direct Cost Allocation Plan" approved by the U. S. Environmental Protection Agency (USEPA) acting in the capacity as the Commission's cognizant agency. Cost for data processing services are directly billed to the Community Assistance Data Processing customers.

   Receipt of the revenues in the DP Fund is obtained by the Commission by including the costs distributed to the Commission's Continuing Planning Programs as a direct expense item on all letters of credit or requests for reimbursement. Revenue is also obtained in the DP Fund by directly billing the Community Assistance Data Processing Customers in accordance with an agreed-upon method of invoicing.

EXHIBIT O-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Milwaukee Metropolitan Sewerage District Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$700,205.53	
Total Revenues			$700,205.53
Expenditures			
Salaries and Fringe Benefits		$164,561.87	
Office and Other Expenses			
Technical Consultants	$367,740.44		
Services by Other Public Agencies	29,171.73		
Publication of Report	365.09		
Data Processing Services	6,973.08		
Office Supplies	575.28		
Travel Expense	3,231.16		
Other Operating Expenses	322.33		
Total Office and Other Expenses		408,379.11	
Indirect Expense		115,179.61	
Total Expenditures			688,120.59
Excess Revenues over Expenditures			$ 12,084.94
Fund Balance - Beginning of Year			50,090.94
Fund Balance - End of Year			$ 62,175.88

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

EXHIBIT O-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Milwaukee Metropolitan Sewerage District Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$ 53,426.96	$ 33,974.93
Contract Receivable	74,710.93	51,088.08
Total Assets	$128,137.89	$ 85,063.01
Liabilities		
Accounts Payable	$ 65,962.01	$ 34,972.07
Total Liabilities	65,962.01	34,972.07
Fund Balance		
Fund Balance	62,175.88	50,090.94
Total Liabilities and Fund Balance	$128,137.89	$ 85,063.01

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Milwaukee Metropolitan Sewerage District Fund
(MMSD Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the MMSD Fund are used to provide support to the Commission for the conduct of the Milwaukee Inner Harbor Estuary Study and to provide partial support for the conduct of the Oak Creek Watershed Study.

   The revenues in the MMSD Fund are obtained by the Commission in accordance with terms and conditions set forth in the grant contracts.

EXHIBIT P-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Stream Gaging Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues		
Contract Revenue	$36,875.00	
Total Revenues		$ 36,875.00
Expenditures		
Office and Other Expenses		
Services by Other Public Agencies	$45,000.00	
Total Expenditures		45,000.00
Excess Expenditures over Revenues		$ (8,125.00)
Fund Balance - Beginning of Year		7,876.91
Fund Balance - End of Year		$ (248.09)

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

EXHIBIT P-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Stream Gaging Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Contract Receivable	$12,575.00	$8,175.00
Total Assets	$12,575.00	$8,175.00
Liabilities		
Grant Balance	$ 12,823.09	$ 298.09
Total Liabilities	12,823.09	298.09
Fund Balance		
Fund Balance	(248.09)	7,876.91
Total Liabilities and Fund Balance	$12,575.00	$8,175.00

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Stream Gaging Fund
(SG Fund)

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the SG Fund are used to partially support the continuing stream flow gaging station operations in calendar year 1984. During calendar year 1984, the Commission administered the stream gaging program for the United States Geological Survey (USGS) and the local participants.

   During 1984, the Commission administered 13 stream flow gages. One-half of the cost of this project is borne by the USGS, with the remaining one-half borne by the local participants.

   Receipt of the revenues in the SG Fund is obtained by the Commission in the format of a letter request to USGS and the local participants annually.

EXHIBIT Q-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Indirect Expense Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$29,071.04	$21,130.30
Total Assets	29,071.04	$21,130.30
Liabilities		
Accounts Payable	$29,071.04	$21,130.30
Total Liabilities	29,071.04	21,130.30
Fund Balance		
Fund Balance	--	--
Total Liabilities and Fund Balance	$29,071.04	$21,130.30

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Indirect Expense Fund
(Indirect Fund)

Notes to Financial Statement
December 31, 1984

1. The Indirect Fund is created annually for the purpose of identifying, categorizing, and distributing individual cost items which are not directly allocable to a specific project or program. Costs accumulated in the Indirect Fund are distributed to all of Commission's funding agencies in accordance with an Indirect Cost Proposal as approved by the U. S. Environmental Protection Agency acting in the capacity of the Commission's cognizant agency.

   Total Indirect Expenses for calendar year 1984 were $957,516.05.

EXHIBIT R-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Kenosha County Mapping Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues		
Contract Revenue	$145,081.59	
Total Revenues		$145,081.59
Expenditures		
Office and Other Expenses		
Technical Consultants	$ 99,561.60	
Total Expenditures		99,561.60
Excess Revenues over Expenditures		$ 45,519.99
Fund Balance - Beginning of Year		9,308.40
Fund Balance - End of Year		$ 54,828.39

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

EXHIBIT R-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Kenosha County Mapping Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$ --	$ 9,308.40
Contract Receivable	70,003.59	6,985.80
Total Assets	$70,003.59	$16,294.20
Liabilities		
Accounts Payable	631.80	$ 6,985.80
Grant Balance	14,543.40	--
Total Liabilities	15,175.20	6,985.80
Fund Balance		
Fund Balance	54,828.39	9,308.40
Total Liabilities and Fund Balance	$70,003.59	$16,294.20

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Kenosha County Mapping Fund

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the Kenosha County Mapping Fund support a special large-scale topographic mapping project for Kenosha County. This project is supported under separate contract by Kenosha County.

EXHIBIT S-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Waukesha County Mapping Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1984

Revenues			
Contract Revenue		$49,863.03	
Total Revenues			$ 49,863.03
Expenditures			
Salaries and Fringe Benefits		$ 29.54	
Office and Other Expenses			
Technical Consultants	$ 95,384.02		
Total Office and Other Expenses		95,384.02	
Indirect Expense		19.15	
Total Expenditures			95,432.71
Excess Expenditures over Revenues			$ 45,569.68
Fund Balance - Beginning of Year			1,981.29
Fund Balance - End of Year			$(43,588.39)

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

EXHIBIT S-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Waukesha County Mapping Fund (Note 1)

Balance Sheets

December 31, 1984 and 1983

	1984	1983
Assets		
Grant Available	$ 1,931.60	$1,981.29
Total Assets	$ 1,931.60	$1,981.29
Liabilities		
Accounts Payable	$45,519.99	$ --
Total Liabilities	45,519.99	--
Fund Balance	(43,588.39)	1,981.29
Total Liabilities and Fund Balance	$ 1,931.60	$1,981.29

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Waukesha County Mapping Fund

Notes to Financial Statements
December 31, 1984

1. The Waukesha County Mapping Fund is in support of a special large-scale topographic mapping project for Waukesha County. This project is supported under separate contract by Waukesha County.

EXHIBIT T-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Digitizer Services Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
for the Year Ended December 31, 1984

Revenues			
Service Agreements		$292,296.57	
Total Revenues			$292,296.57
Expenditures			
Salaries and Fringe Benefits		$101,520.00	
Office and Other Expenses			
Office Supplies	$ 2,591.45		
Digitizer Maintenance	30,080.99		
Digitizer Lease	81,452.54		
Services by Other Public Agencies	103.61		
Automobile/Office Equipment Maintenance	5,490.71		
Total Office and Other Expenses		119,719.30	
Indirect Expense		71,057.27	
Total Expenditures			292,296.57
Excess Revenues over Expenditures			$ --
Fund Balance - Beginning of Year			--
Fund Balance - End of Year			$ --

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

EXHIBIT T-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Digitizer Services Fund (Note 1)

Balance Sheets

December 31, 1984 and 1984

	1984	1983
Assets		
Grant Available	$430.00	$3,623.75
Total Assets	430.00	$3,623.75
Liabilities		
Accounts Payable	$430.00	$3,623.75
Total Liabilities	430.00	3,623.75
Fund Balance	430.00	--
Total Liabilities and Fund Balance	$430.00	$3,623.75

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Digitizer Services Fund

Notes to Financial Statements
December 31, 1984

1. The revenues reflected in the Digitizer Services Fund are used to support the Commission's digitizing operations.

   The cost of supporting the Commission's Digitizing Operations is apportioned between the Continuing Planning Programs. Costs for Digitizer Services are distributed to the Continuing Planning Programs according to a "Direct Cost Allocation Plan" approved by the U. S. Environmental Protection Agency (USEPA) acting in the capacity as the Commission's cognizant agency.

   Receipt of the revenues in the Digitizer Services Fund is obtained by the Commission by including the costs distributed to the Commission's Continuing Planning Programs as a direct expense item on all letters of credit or requests for reimbursement.

KURT W. BAUER
EXECUTIVE DIRECTOR

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