# Twenty-third annual report. July 1984

Waukesha, Wisconsin: Southeastern Wisconsin Regional Planning Commission, July 1984

# 1983 ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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



SERVING THE COUNTIES OF
KENOSHA • MILWAUKEE • OZAUKEE • RACINE • WALWORTH • WASHINGTON • WAUKESHA

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Thomas D. Patterson . . . . . .Chief of Planning Research

Bruce P. Rubin . . . . . .Chief Land Use Planner

Roland O. Tonn, AICP . . . . . .Chief Community Assistance Planner

Joan A. Zenk . . . . . .Administrative Officer

# TWENTY-THIRD ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Commission Offices
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July 1984



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Outside Region $4.00

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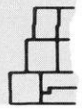

July 30, 1984

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 23rd annual report of the Commission, summarizes the accomplishments of the Commission in calendar year 1983 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 important 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, plans, and proposals in the Region. In addition, this report summarizes the findings and recommendations of a number of important new plan elements adopted by the Commission during 1983. During the year, the Commission prepared, in cooperation with the local units of government concerned, and adopted a farmland preservation plan for Ozaukee County; a joint land use plan for the Town and Village of Pewaukee; short-range and long-range transportation system plans for the Milwaukee northwest side and southern Ozaukee County areas; a flood control plan for Lincoln Creek; sanitary sewer service area plans for the Villages of Sussex, Germantown, and Saukville and for the City of Port Washington; and a comprehensive water resources plan for the Pike River watershed. In addition, the Commission amended the regional transportation system plan to remove the previously proposed extensions of the Lake Freeway-North and Park Freeway-East in the Milwaukee central business district, substituting in their place permanent ramp connections to the surface arterial street system. All of these plan development efforts and other important development efforts are summarized within this annual report.

The Commission is pleased to note that during 1983, the Town of Vernon, Waukesha County, joined the Commission. With that action, all 154 local units of government in the Region are fully participating members in the Commission. This action by the Town of Vernon is particularly gratifying because regional planning is basically a cooperative effort, and, in the last analysis, its success depends upon the full support and active participation of the local units of government concerned.

Overall, the Commission is 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. The Commission looks forward to continuing to serve its constituent local units of government and the state and federal agencies concerned in the years ahead.

Very truly yours,

Alfred G. Raetz

Alfred G. Raetz
Chairman

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# ABOUT THE COMMISSION

## AUTHORITY

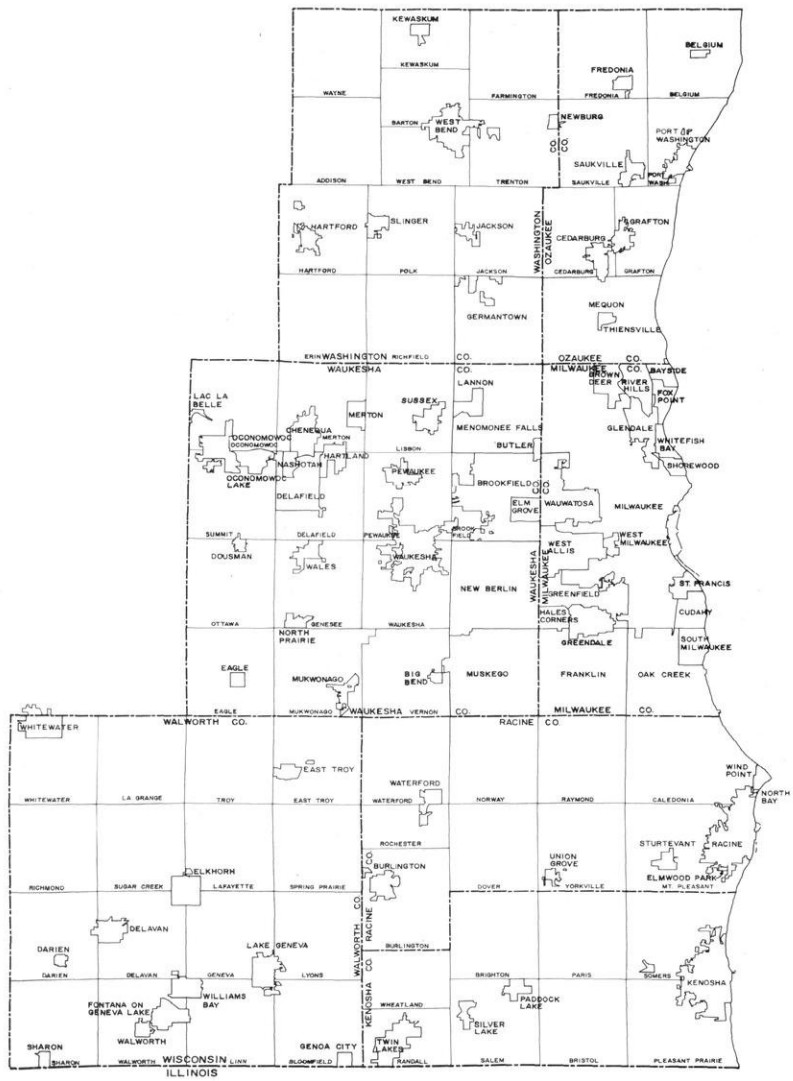
The Southeastern Wisconsin Regional Planning Commission was established in 1960 under Section 66.945 of the Wisconsin Statutes as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning services 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 1.75 million persons, or about 37 percent of the total population of the State. The seven counties provide about 826,100 jobs, or about 39 percent of the total employment of

Map 1

THE SOUTHEASTERN WISCONSIN REGION

the State, and contain real property worth about $43.9 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. During 1983, the Town of Vernon in Waukesha County, which had withdrawn from the Commission during the 90-day organizational period of the Commission in 1960, rejoined the Commission. The return of the Town of Vernon to the Commission marks the first time in the Commission's history that all local units of government in the Region are fully participating in the Commission's work.

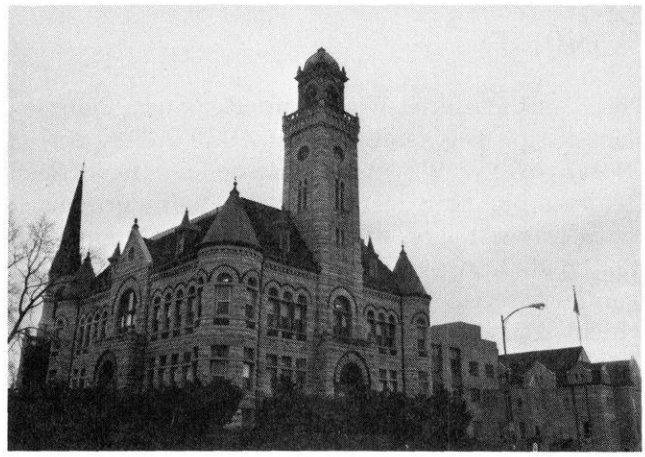
## BASIC CONCEPTS

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

OLD COURTHOUSE
COMMISSION OFFICES
WAUKESHA COUNTY



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.

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 area-wide 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 39 technical, citizen, and intergovernmental coordinating and advisory committees. These committees include both elected and appointed public officials and interested citizens with knowledge in the Commission work areas. The committees perform a significant function in both the formulation and the execution of the Commission work programs. Membership on the advisory committees, which totals 815 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 1983, the staff totaled 97, including 72 full-time and 25 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 eight divisions. Four of these divisions—Transportation Planning, Environmental Planning, Land Use Planning, and Community Assistance Planning—have direct responsibility for the conduct of the Commission's major planning programs. The remaining four divisions—Planning Research, Administrative Services, Data Processing and Systems Engineering, and Cartographic and Graphic Arts—provide day-to-day support of the four planning divisions.

## FUNDING

Basic financial support for the Commission's work program is provided by county tax levies apportioned on the basis of equalized valuation. These basic funds are heavily supplemented by state and federal aids. Revenues received by the Commission during 1983 totaled about $4.5 million, of which about 30 percent, or $1.4 million, represents contract revenues for local government data processing services. County tax levies in 1983 totaled $758,360, or about $0.43 per capita. The sources of this revenue for 1983 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 1

## SEWRPC ORGANIZATIONAL STRUCTURE: 1983

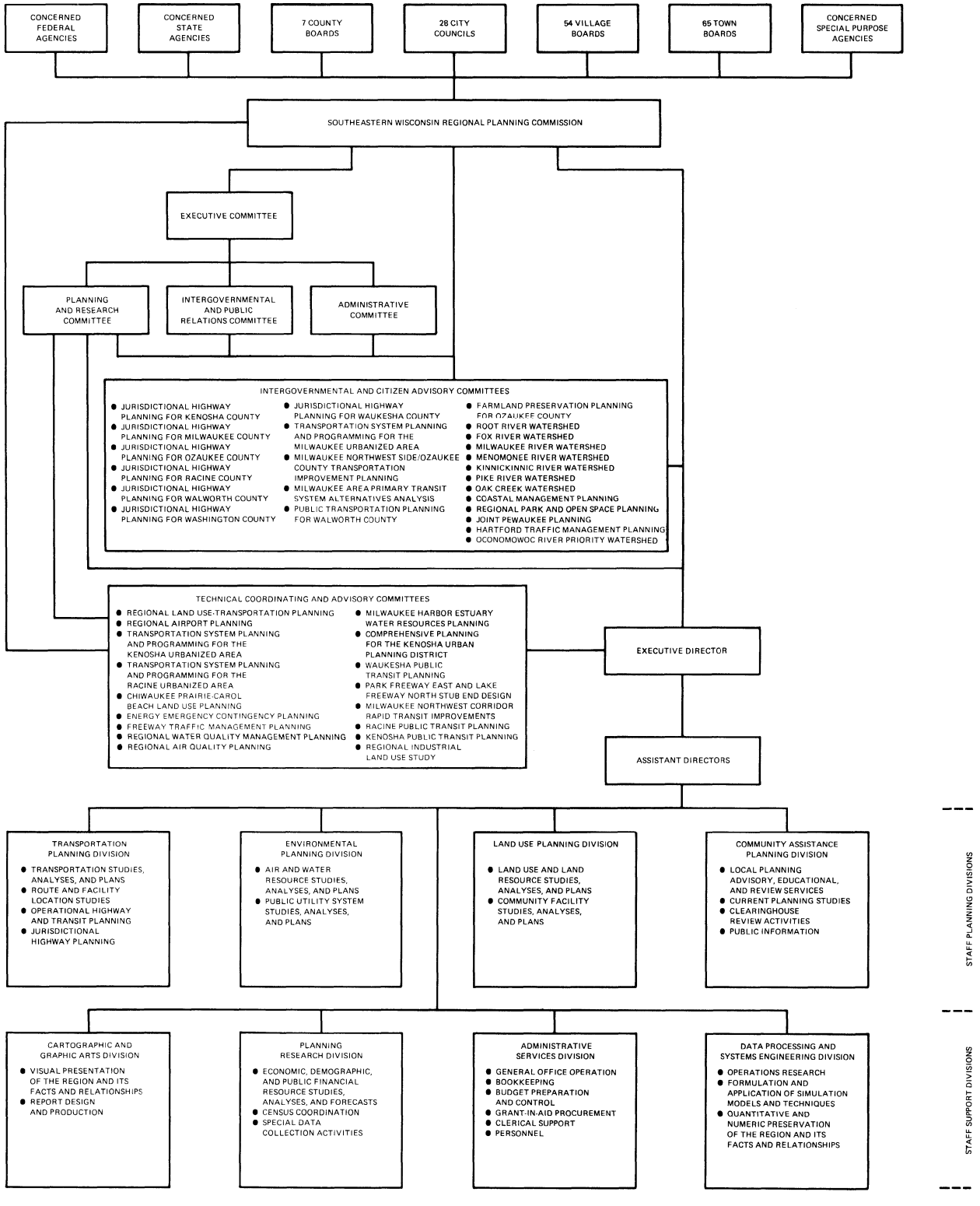


Figure 2

## FUNDING TREND: 1961-1983

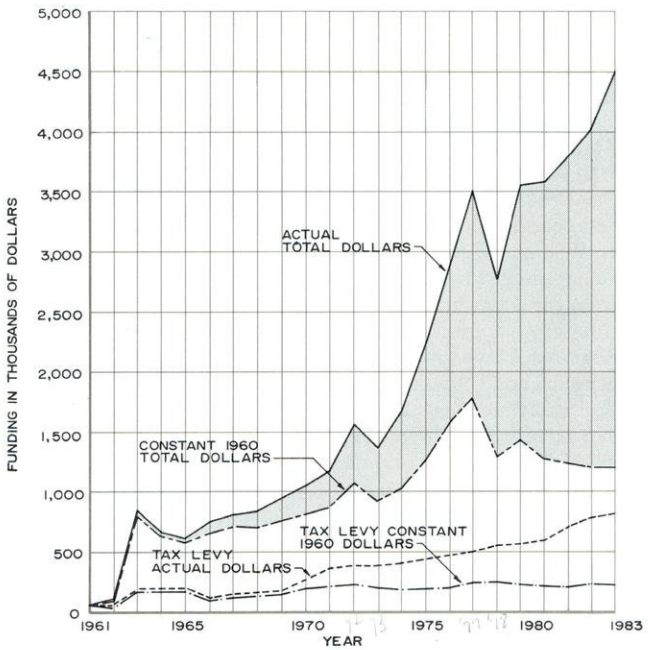



Figure 3

## SOURCES OF REVENUES TREND: 1961-1983

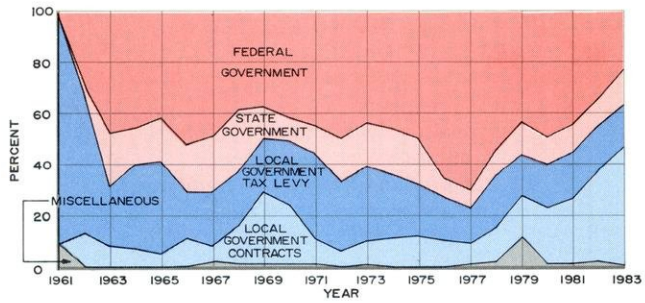



Figure 4

## EXPENDITURES TREND: 1961-1983

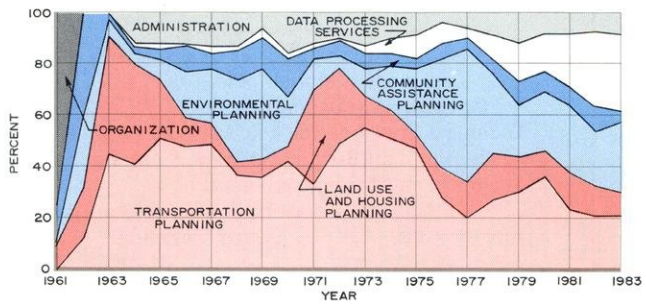
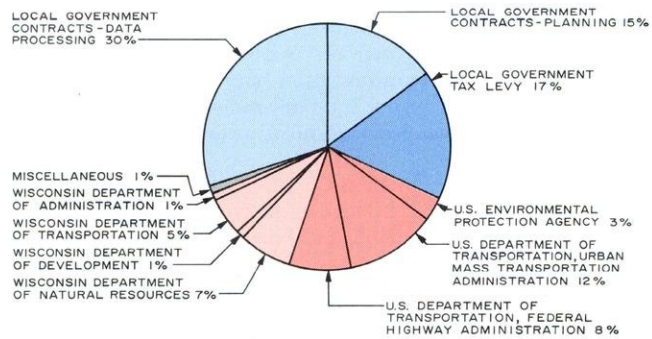



Figure 5

## REVENUES AND EXPENDITURES

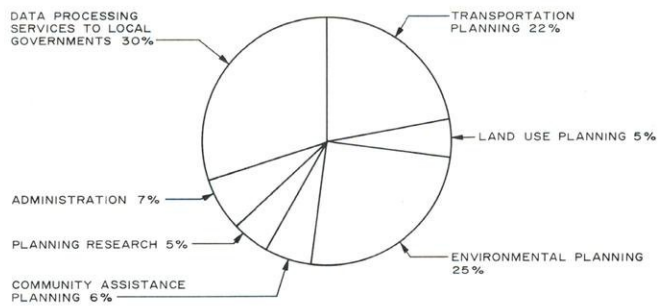
### REVENUES

| | | |
|---|---|---|
| Federal Government . . . . . | $1,056,735 | 24% |
| State Government. . . . . | 602,525 | 13% |
| Local Government Tax Levy . . . . | 758,360 | 17% |
| Local Government Contracts . . . . | 2,034,478 | 45% |
| Miscellaneous . . . . . | 54,811 | 1% |
| Total | $4,506,909 | 100% |




### EXPENDITURES

| | | |
|---|---|---|
| Transportation Planning . . . . . | $ 989,703 | 22% |
| Land Use Planning . . . . . | 229,245 | 5% |
| Planning Research. . . . . | 241,029 | 5% |
| Environmental Planning . . . . . | 1,104,192 | 25% |
| Community Assistance Planning . . | 263,903 | 6% |
| Data Processing Services to Local Governments . . . . . | 1,364,608 | 30% |
| Administration . . . . . | 314,229 | 7% |
| Total | $4,506,909 | 100% |



## COMMISSION AND ADVISORY COMMITTEE MEETINGS

| | |
|---|---|
| Full Commission | 4 |
| Executive Committee | 9 |
| Administrative Committee | 9 |
| Planning and Research Committee | 5 |
| Intergovernmental and Public Relations Committee | 0 |
| Technical Coordinating and Advisory Committee on Regional Land Use-Transportation Planning | |
| Land Use Subcommittee | 0 |
| Highway Subcommittee | 0 |
| Transit Subcommittee | 0 |
| Socioeconomic Subcommittee | 0 |
| 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 | 1 |
| 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 | 1 |
| Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Citizens Intergovernmental and Technical Coordinating and Advisory Committee | 2 |
| Intergovernmental Coordinating and Advisory Committees on Transportation System Planning and Programming | |
| Kenosha Urbanized Area | 1 |
| Milwaukee Urbanized Area | 1 |
| Racine Urbanized Area | 1 |
| Waukesha Mass Transit Citizens and Technical Coordinating and Advisory Committee | 1 |
| Public Transit Planning Advisory Committees | |
| Racine | 1 |
| Kenosha | 1 |
| Technical and Citizens Advisory Committee for Park Freeway-East and Lake Freeway-North "Stub End" Design | 3 |
| Southeastern Wisconsin Energy Emergency Contingency Plan Prospectus Advisory Committee | 1 |
| Technical Coordinating and Advisory Committee on Freeway Traffic Management | 0 |
| Citizens and Technical Advisory Committee for the Hartford Area Traffic Management Plan | 3 |
| Watershed Committees | |
| Root River | 0 |
| Fox River | 0 |
| Milwaukee River | 0 |
| Menomonee River | 0 |
| Kinnickinnic River | 0 |
| Pike River | 1 |
| Oak Creek | 1 |
| Technical Advisory Committee on Regional Water Quality Management Planning | 2 |
| Technical Coordinating and Advisory Committee on Regional Air Quality Planning | 1 |
| Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin | 0 |
| Technical Advisory Committee Milwaukee Harbor Estuary Comprehensive Water Resources Management Plan | 2 |
| Oconomowoc River Priority Watershed Plan Development Advisory Committee | 1 |
| 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 | 4 |
| Technical Advisory Committee on Farmland Preservation for Ozaukee County | 1 |
| Technical and Citizen Advisory Committee for the Chiwaukee Prairie-Carol Beach Land Use Management Planning Program | 0 |
| Technical Coordinating and Advisory Committee on Comprehensive Planning for the Kenosha Planning District | 0 |
| Joint Planning Committee for the Town and Village of Pewaukee | 5 |

## STAFF TECHNICAL MEETINGS

| | |
|---|---|
| Executive Director | 257 |
| Assistant Directors | 184 |
| Cartographic and Graphic Arts Division | 23 |
| Community Assistance Planning Division | 181 |
| Environmental Planning Division | 249 |
| Land Use Planning Division | 316 |
| Planning Research Division | 30 |
| Transportation Planning Division | 27 |

## STAFF SPEAKING ENGAGEMENTS

| | |
|---|---|
| Executive Director | 28 |
| Assistant Directors | 11 |
| Community Assistance Planning Division | 2 |
| Environmental Planning Division | 44 |
| Land Use Planning Division | 12 |
| Planning Research Division | 6 |
| Transportation Planning Division | 8 |

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.

The Commission has a complete financial audit performed each year by a certified public accountant. The report of this audit for 1983 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 to local public officials and interested citizens a comprehensive overview of the Commission's activities and thereby to provide a focal point for the promotion of regional plan implementation.

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

While many of the Commission's publications are relatively long and are, necessarily, written in technical style, they do provide the conscientious, concerned citizen and elected official, as well as concerned technicians, with all of the data and information needed to comprehend fully the scope and complexity of the areawide developmental and environmental problems and of the Commission's recommendations with respect to the resolution of those problems. A complete publication list is set forth in Appendix D.

# THE EVOLVING COMPREHENSIVE PLAN FOR THE REGION

## PLAN DESIGN FUNCTION

As already noted, the Commission is charged by law with the function and duty of "making and adopting a master plan for the physical development of the Region." The permissible scope and content of this plan, as outlined in the enabling legislation, extend to all phases of regional development, implicitly emphasizing, however, the preparation of alternative spatial designs for the use of land and for supporting transportation and utility facilities.

The scope and complexity of areawide development problems prohibit the making and adopting of an entire comprehensive development plan at one point in time. The Commission has, therefore, determined to proceed with the preparation of individual plan elements which together can comprise the required comprehensive plan. Each element is intended to deal with an identified areawide developmental or environmental problem. The individual elements are coordinated by being related to an areawide land use plan. Thus, 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—1983

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 1983, 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—1983

| 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 |
| | 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 |

## Table 1 (continued)

| Functional Area | Plan Element | Plan Document | Date of Adoption |
|---|---|---|---|
| Transportation Planning (continued) | 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 |
| | 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 |

## Table 1 (continued)

| Functional Area | Plan Element | Plan Document | Date of Adoption |
|---|---|---|---|
| Environmental Planning (continued) | 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 |
| | 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.

One new major plan element was adopted by the Commission in 1983—a comprehensive water resources plan for the Pike River watershed. In addition, a number of important amendments to existing plan elements were completed and adopted. These include the Ozaukee County farmland preservation plan, which amends the regional land use and regional water quality management plans; a land use plan for the Town and Village of Pewaukee, which amends the regional land use and regional water quality management plans; a transportation system plan for the Milwaukee Northwest Side/Ozaukee County study area, which amends both the regional transportation system plan and the regional transportation systems management plan; an amendment to the regional transportation system plan concerning the Lake Freeway-North and Park Freeway-East; the Lincoln Creek flood control plan, which amends the Milwaukee River watershed plan; an amendment to the regional air quality attainment and maintenance plan pertaining to the establishment of an emission reduction credit banking and trading system; amendments to the regional water quality management plan pertaining to sewer service area delineations in the Village of Sussex in Waukesha County, the Village of Germantown in Washington County, the Village of Saukville in Ozaukee County, and the City of Port Washington in Ozaukee County; an amendment to the regional water quality management plan pertaining to nonpoint source pollution control in the Belgium Creek subwatershed of Ozaukee County; and an amendment to the regional water quality management plan pertaining to sewerage facilities to serve urban development in the Geneva Lake area of Walworth County. As appropriate, these plans and plan amendments are discussed in the following sections 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 1983, 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 at the end of 1984. In addition, work will continue during 1984 on a comprehensive water resources study of the Milwaukee Harbor estuary. This study, which had been requested in the mid-1970's 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 1983 to refine, detail, and amend the regional water quality management plan. A series of additional community level sanitary sewer service area plans were being prepared in cooperation with local communities. Such localized planning efforts were underway at the end of 1983 for the communities of Allenton, Belgium, Butler, Cedarburg, Fredonia, Grafton, Hartford, Hartland, Mequon, Oak Creek, Thiensville, Waukesha, and Whitewater.

Work will continue during 1984 on completing additional detailed lake management plans. A total of nine lake management studies are to be completed in addition to the four that have already been completed. These nine additional studies are for George and Paddock Lakes in Kenosha County; Eagle Lake in Racine County; Geneva and Wandawega Lakes in Walworth County; Friess and Pike Lakes in Washington County; and Oconomowoc and Pewaukee Lakes in Waukesha County.

Several additional studies were underway in the area of transportation planning at the end of 1983. These include 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 1983 on the preparation of a second generation regional airport system plan. Other transportation studies underway include detailed analyses of the transit operations in the Racine and Kenosha urbanized areas, such studies designed to result in new transit development plans and programs for those areas.

## 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. At year's end, the prospectus was being readied for transmittal to the counties for their consideration.

At the end of 1983, the Commission had also completed arrangements for assisting the Waukesha and Washington County Boards of Supervisors and Land Conservation Committees 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 administered by the Wisconsin Department of Natural Resources. The Oconomowoc River priority watershed plan would serve to amend the regional water quality management plan.

Finally, the Commission will begin 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 1986.

# LAND USE PLANNING DIVISION

## DIVISION FUNCTIONS

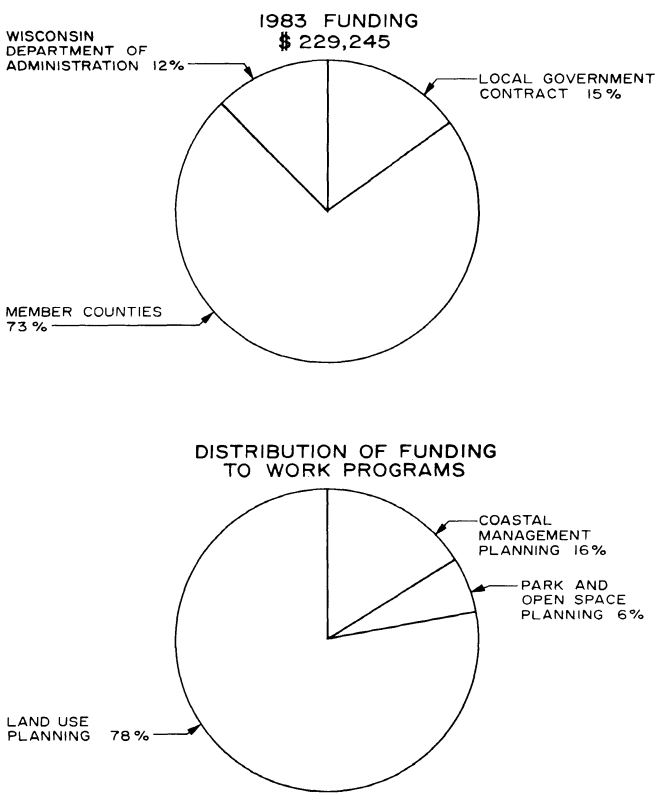
The Land Use Planning Division conducts studies and prepares plan recommendations concerning the physical aspects of land use development. The kinds of basic questions addressed by this Division include:

- 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 1983, conducted a number of activities in three identifiable areas: land use planning, park and open space planning, and coastal management planning.

**Figure 6**

**LAND USE PLANNING DIVISION**




## LAND USE PLANNING

During 1983, the Division staff efforts in land use planning were directed toward implementation of the regional land use plan for the year 2000. Major efforts in this regard involved the completion of a farmland preservation plan for Ozaukee County 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 activity within the seven-county Region during 1983.

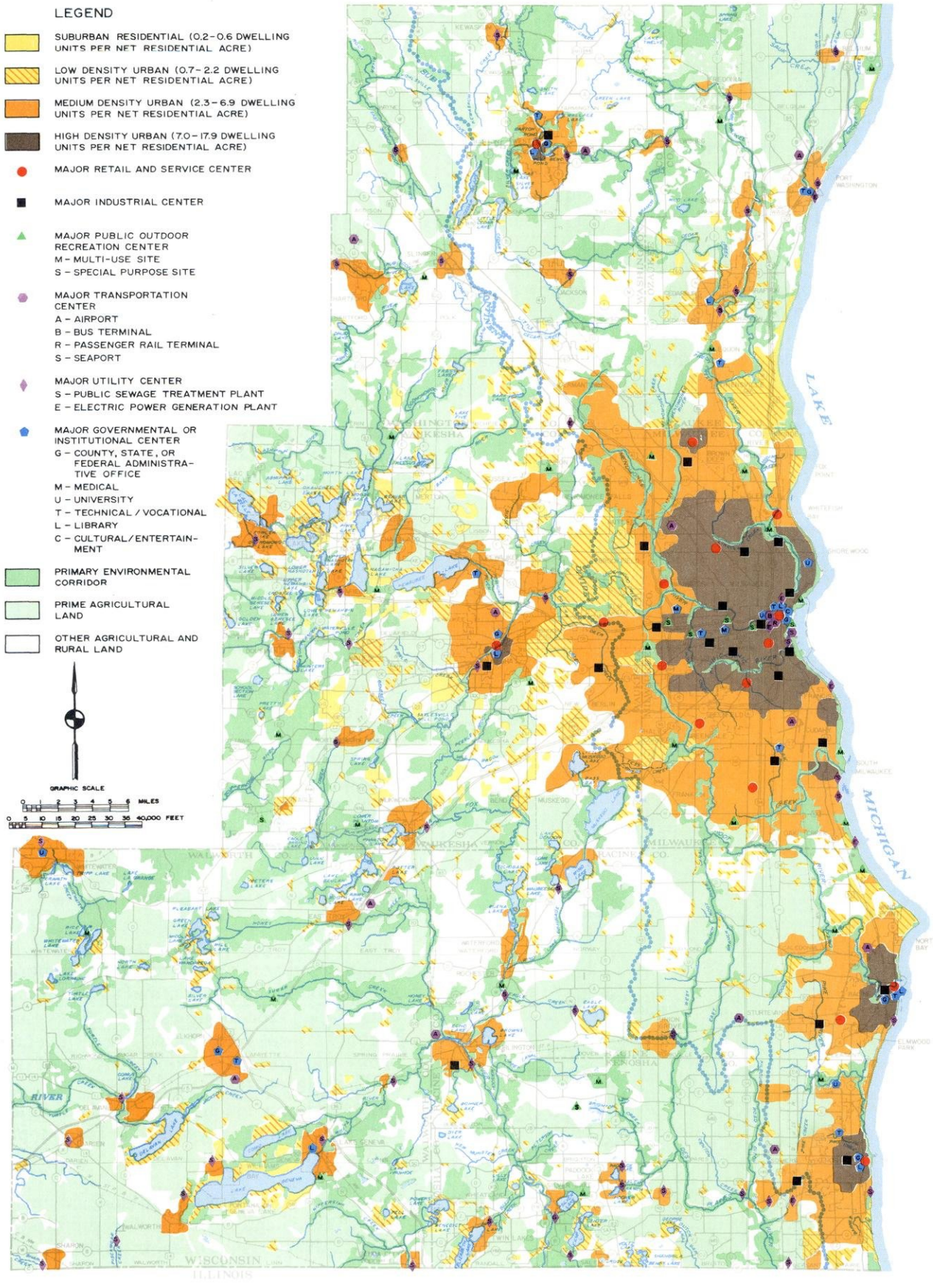
### Regional Land Use Plan—An Overview

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

Map 2

## ADOPTED REGIONAL LAND USE PLAN FOR SOUTHEASTERN WISCONSIN: 2000



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

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

The recommended regional land use plan envisions converting about 113 square miles of land from rural to urban use from 1970 through 2000, 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 the best remaining 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. Together, the primary environmental corridors encompass about 503 square miles, or 20 percent of the 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 1983, 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 Kenosha County Park Commission; the City of Oconomowoc Plan Commission; and the Town of Dover Plan Commission. In addition, the plan had been endorsed by the U. S. Department of Agriculture, Soil Conservation Service; the U. S. Department of Housing and Urban Development;

the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; the Wisconsin Department of Transportation; and the Wisconsin State Board of Soil and Water Conservation Districts.

**Preservation of Farmland**

As indicated above, 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 Southeastern Wisconsin 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. Under the permanent—as opposed to initial—phase of the program, which began in tax year 1982, participation in the program by owners of farmland in southeastern Wisconsin requires that the land be placed in an exclusive agricultural zoning district.

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 where the plan is implemented through town-enacted exclusive agricultural zoning.

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 881 zoning certificates for farm parcels encompassing 119,582 acres were issued in the Region for tax year 1982 (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 680 zoning certificates for farm parcels encompassing 94,468 acres were issued in Walworth County for tax year 1982 (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. Five counties in the Region—Kenosha, Ozaukee, Racine, Walworth, and Washington—have adopted farmland preservation plans which were subsequently certified by the Wisconsin Land Conservation Board (see Map 4). The Ozaukee County farmland preservation plan—prepared with the assistance of the Regional Planning Commission and certified by the State in 1983—is described later in this section.

### 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 1983, exclusive agricultural zoning ordinances certified by the Wisconsin Land Conservation Board were in effect in 35 local units of government in the Region. Twenty-five towns—including 16 in Walworth County, three in Kenosha County, two in Racine County, and four in Washington County—have adopted exclusive agricultural zoning under county-enacted zoning ordinances. Nine towns—including six in Ozaukee County, two in Waukesha County, and one in Walworth County—have applied exclusive agricultural zoning under town-enacted zoning ordinances. The Village of Germantown in Washington County is the only incorporated unit of government in the Region to date to adopt 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 1983, these conditions applied to the Towns of 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; 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 1983, these conditions applied to the Towns of Belgium, Cedarburg, Fredonia, Grafton, Port Washington, and Saukville in Ozaukee County, and the Town of Richfield in Washington 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 1983, these conditions did not apply to any communities in the Region.

- 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 1983, these conditions applied to the Towns of Mukwonago and Pewaukee in Waukesha County.

- 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 applies to the remaining cities, villages, and towns in the Region.

## OZAUKEE COUNTY FARMLAND PRESERVATION PLAN

Ozaukee County, under the direction of the County Zoning Committee and with the assistance of the Regional Planning Commission, completed a farmland preservation plan in 1983. The work was carried out with the help of a technical advisory committee created by the County Board and consisting of local farmers, elected and appointed public officials, and certain state and federal agency personnel. The farmland preservation plan is intended to serve as a guide to the preservation of agricultural lands in Ozaukee County. In addition, the plan includes recommendations for the protection of environmentally significant areas, and recommendations regarding the location and intensity of urban development within the County through the turn of the century. The plan also sets

Table 2

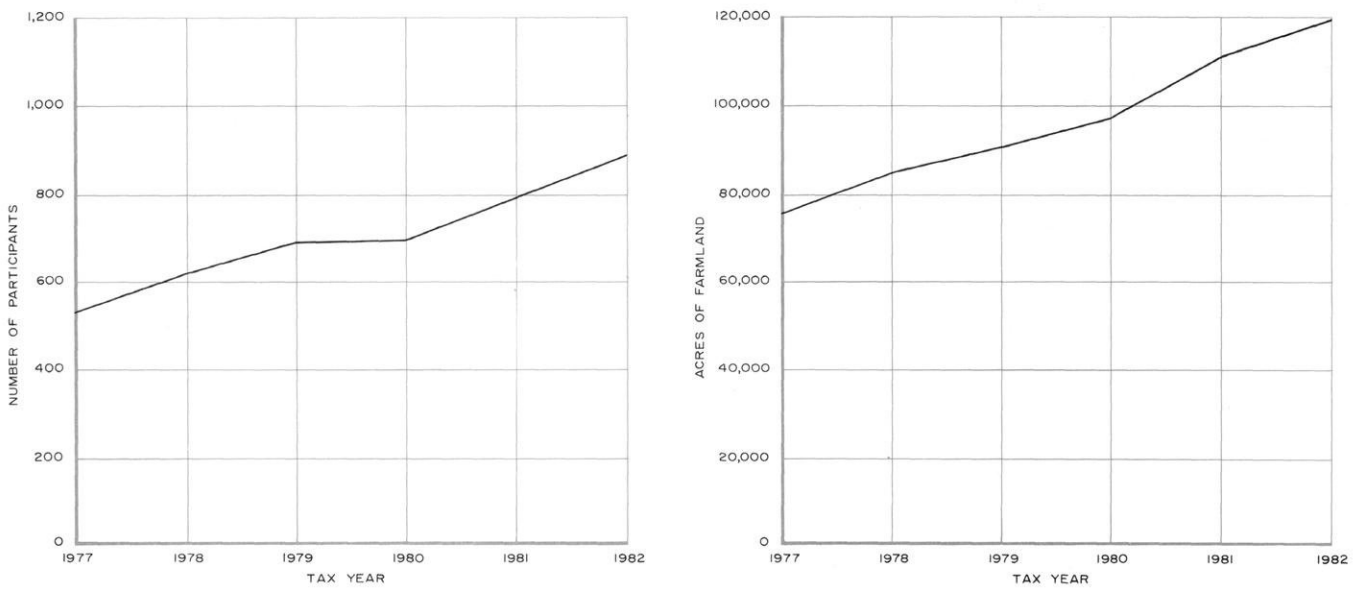
PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM: TAX YEAR 1982

| County | Certificates Issued | | Acres Certified | |
|---|---|---|---|---|
| | Number | Percent of Region | Number | Percent of Region |
| Kenosha | -- | -- | -- | -- |
| Milwaukee | -- | -- | -- | -- |
| Ozaukee | 68 | 7.7 | 7,574 | 6.3 |
| Racine | 39 | 4.4 | 6,574 | 5.5 |
| Walworth | 680 | 77.2 | 94,468 | 79.0 |
| Washington | 83 | 9.4 | 9,089 | 7.6 |
| Waukesha | 11 | 1.3 | 1,877 | 1.6 |
| Region | 881 | 100.0 | 119,582 | 100.0 |

*Source: Wisconsin Department of Agriculture, Trade and Consumer Protection; and SEWRPC.*

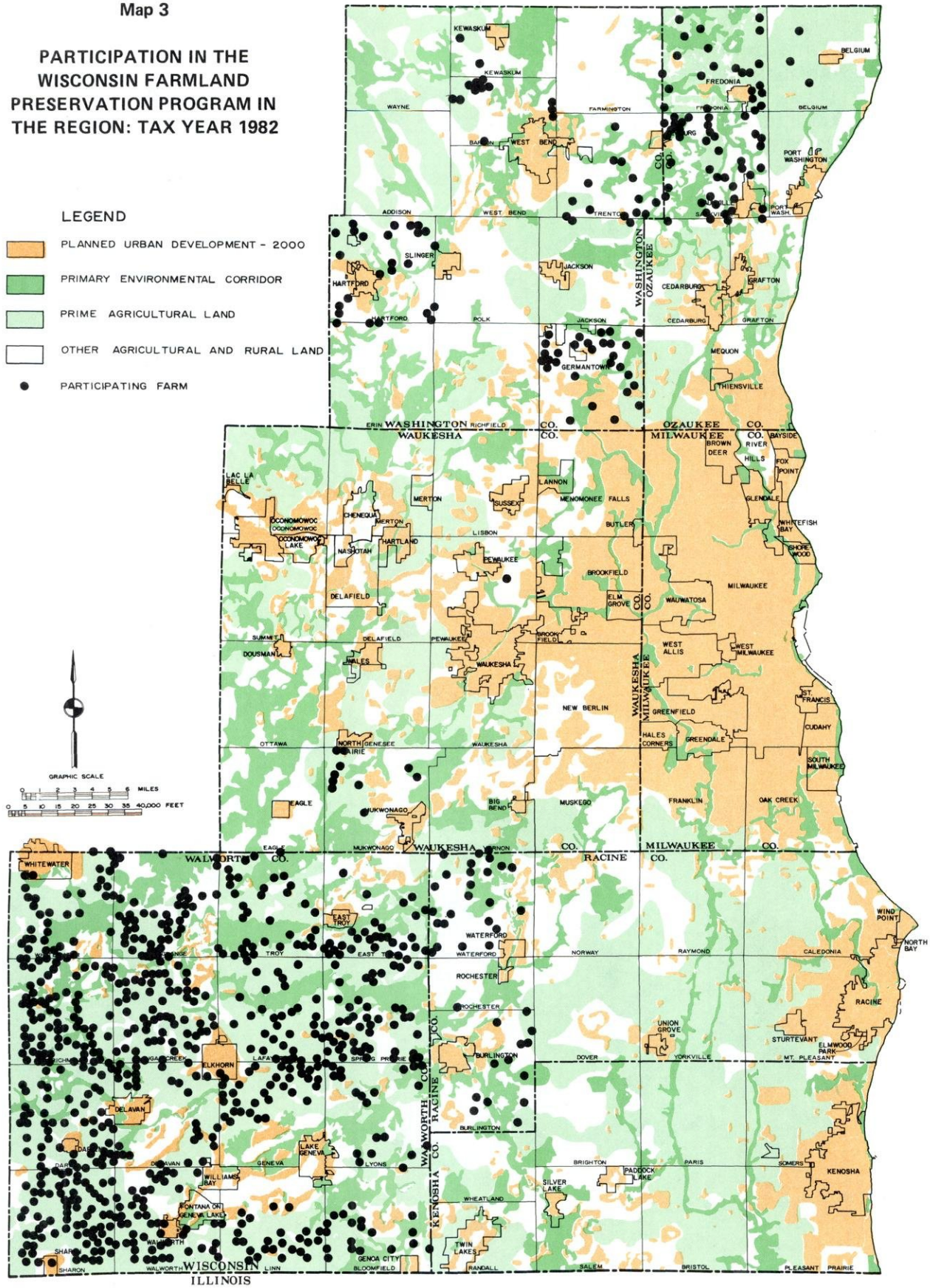
Figure 7

PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM IN THE REGION: TAX YEARS 1977-1982



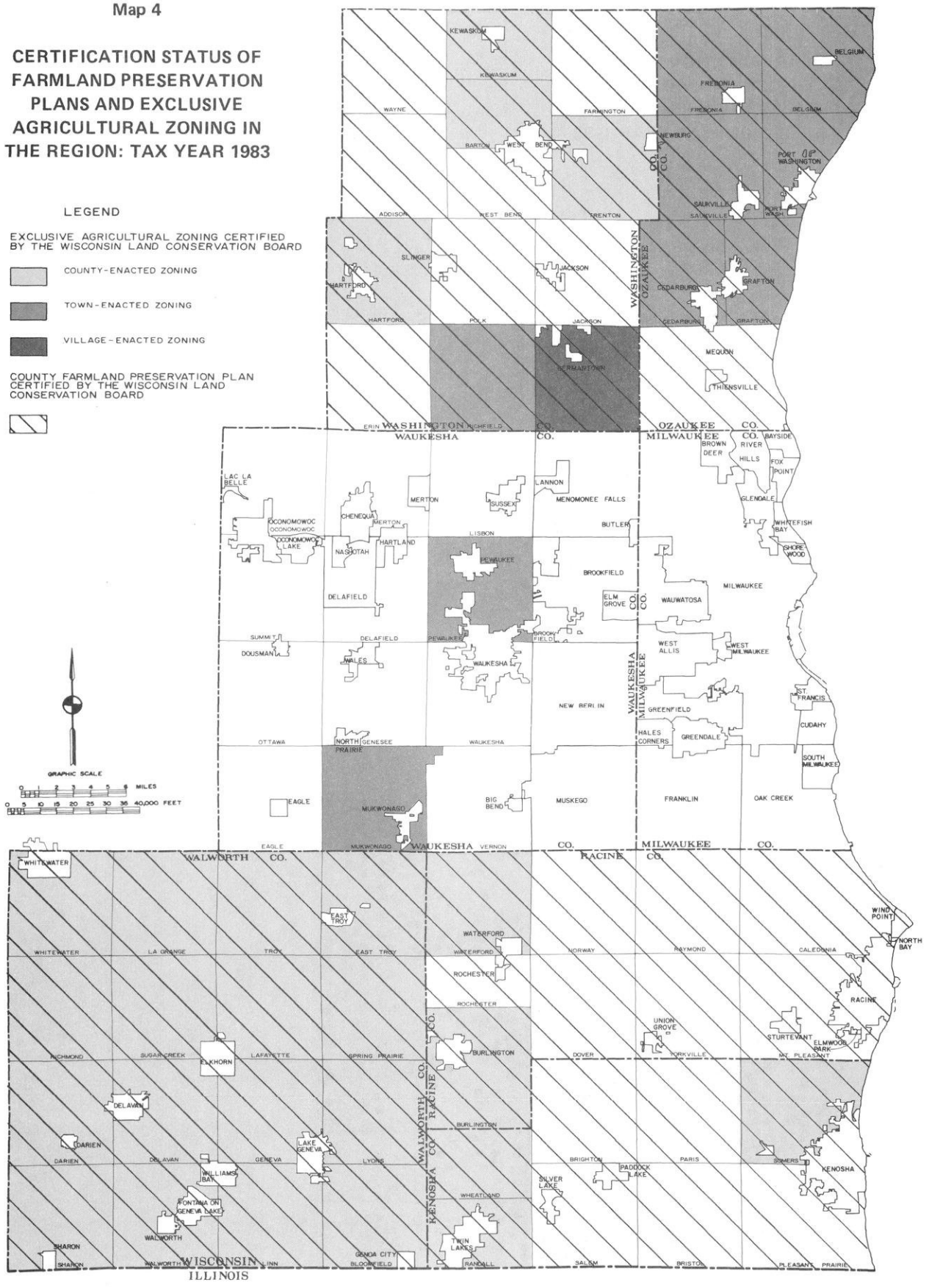
Map 3

## PARTICIPATION IN THE WISCONSIN FARMLAND PRESERVATION PROGRAM IN THE REGION: TAX YEAR 1982



Map 4

## CERTIFICATION STATUS OF FARMLAND PRESERVATION PLANS AND EXCLUSIVE AGRICULTURAL ZONING IN THE REGION: TAX YEAR 1983



forth recommendations concerning the manner in which the farmland preservation, natural resource protection, and urban land use development objectives of the farmland preservation plan can be implemented.

The farmland preservation plan for Ozaukee County is shown graphically on Map 5. A summary of the salient recommendations of each of the three elements of the farmland preservation plan for Ozaukee County—the farmland preservation element, the natural resource preservation element, and the urban development element—is provided below.

### Farmland Preservation Element

The farmland preservation element of this plan seeks to the maximum extent practicable to preserve in agricultural use prime agricultural land and farmlands of local significance. Prime agricultural lands are defined as those lands which are well suited for agricultural use and which meet the specific mapping criteria established by the advisory committee regarding farm size and agricultural soil capability. These criteria are: 1) the farm unit must be at least 35 acres in area, 2) at least 50 percent of the farm unit must be covered by soils which meet the U. S. Soil Conservation Service standards for national prime farmland or farmland of statewide importance, and 3) the farm unit should be located in a block of farmland of at least 100 acres in size. Prime agricultural lands in Ozaukee County were identified on the basis of the application of these criteria, using information regarding farm parcel boundaries and agricultural soil capability developed under the inventory phase of the farmland preservation planning program.

Farmlands of local significance are defined as lands in addition to prime agricultural lands which represent an important part of the local agricultural resource base. Such lands were identified by local city, village, and town plan commission members and other local officials in a series of meetings held for this purpose between November 1982 and February 1983. The farmlands recommended for preservation in the plan include both the identified prime agricultural lands and farmlands of local significance. The farmland preservation areas, as shown on Map 5, encompass a total of about 74,700 acres, or about 50 percent of the total area of the County. The plan recommends that all land within the identified farmland preservation areas be preserved for and in agricultural use.

Certain farmlands designated as prime agricultural land lie in areas which may be expected to be developed for urban use over the next two decades. Such lands are shown as "transition" lands on the farmland preservation plan map. These lands, which are in addition to the farmland preservation areas, encompass a total of about 4,600 acres in Ozaukee County, or about 3 percent of the total area of the County. Such lands should be preserved in agricultural use until a sufficient demand for additional urban development to warrant conversion to urban use has been demonstrated, and until essential urban utilities, facilities, and services can be readily and economically provided.

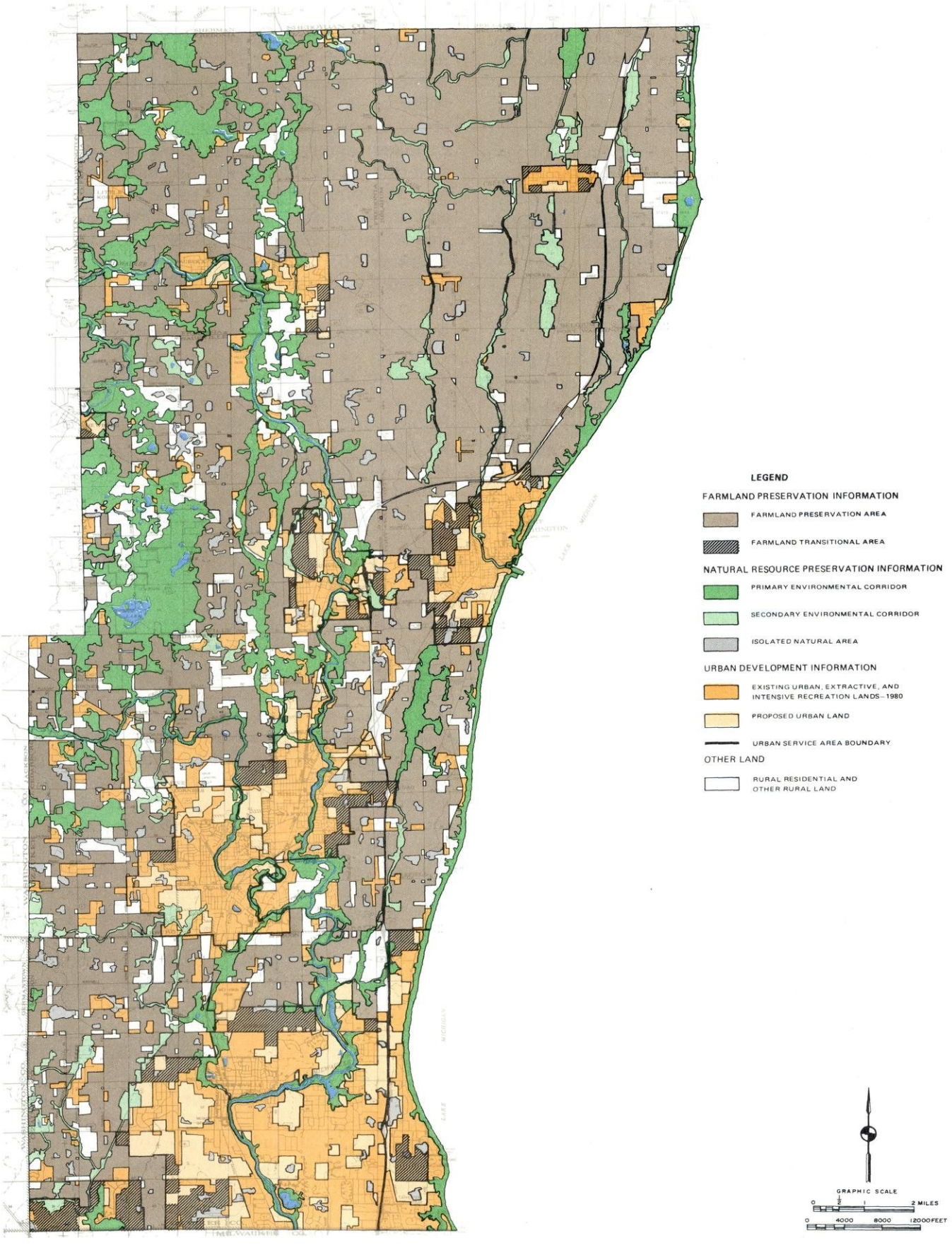
### Natural Resource Preservation Element

The natural resource preservation element of the plan seeks to protect the most important remaining features of the natural resource base by preserving in essentially natural, open uses the remaining primary environmental corridors, secondary environmental corridors, and isolated natural areas which have been identified in Ozaukee County. Primary environmental corridors are defined as elongated areas in the landscape which represent a composite of the best remaining elements of the natural resource base—the best remaining woodlands, wetlands, prairies, and wildlife habitat areas; the lakes and major streams and most of the associated undeveloped shorelands and floodlands; areas covered by wet, poorly drained, and organic soils; and areas with rugged terrain and high relief topography. Primary environmental corridors also include many of the County's existing outdoor recreation sites; potential outdoor recreation and related open space sites; historic, archaeological, and other cultural sites; scenic areas and vistas; and natural and scientific areas. Primary environmental corridors have truly immeasurable environmental and recreational value. The farmland preservation plan recommends that the remaining primary environmental corridors in Ozaukee County, which encompass 19,800 acres, or about 13 percent of the total area of the County, be preserved in essentially natural open uses (see Map 5).

Secondary environmental corridors facilitate surface water drainage and provide potential sites for community and neighborhood parks and open spaces. Such corridors, while not as significant in terms of their size and natural resource content as the primary environmental corridors, should, nevertheless, be preserved to the extent practicable as

Map 5

## RECOMMENDED FARMLAND PRESERVATION PLAN FOR OZAUKEE COUNTY: 2000



urban development proceeds within the County, particularly when such corridors can be incorporated into urban stormwater detention areas, associated drainageways, and community and neighborhood parks. Under the plan, secondary environmental corridors—which encompass 4,800 acres in Ozaukee County, or about 3 percent of the total area of the County—should be considered by the local units of government concerned for preservation in essentially natural, open uses as urban development proceeds (see Map 5).

In addition to primary and secondary environmental corridors, other, small and scattered concentrations of natural resource base elements exist within Ozaukee County. These resource base elements are isolated from the environmental corridors by urban development or agricultural uses. Although separated from the environmental corridor network, such isolated natural areas have important natural values. Identified isolated natural features within Ozaukee County include a geographically well-distributed variety of wetlands, woodlands, and wildlife habitat areas. The farmland preservation plan recommends that such areas—which encompass 3,400 acres in Ozaukee County, or about 2 percent of the total area of the County—be protected and preserved in a natural state to the extent practicable (see Map 5).

### Urban Development Element

The urban development element of the farmland preservation plan is intended to provide a guide to decision-making concerning the amount and location of land to be converted from rural to urban use in Ozaukee County through the plan design year 2000. This development framework is based in part upon the population and economic activity forecasts set forth in the plan, and in part upon land use development objectives agreed upon by the advisory committee.

Commission studies indicate that the resident population of the County may be expected to range from 75,000 persons to 148,900 persons by the year 2000. After careful review of the range of possible future population levels, the technical advisory committee determined that the farmland preservation plan should be designed to accommodate a resident population of 114,000 persons by the year 2000, the forecast population level envisioned under the moderate growth, centralized land use scenario which served as the basis for development of the regional land use plan. This approach allows for the maximum reasonable acreage of rural lands to be converted to urban use to accommodate population increases through the year 2000 without compromising the farmland preservation objectives of the plan.

In order to accommodate the anticipated increases in population and economic activity levels, the farmland preservation plan proposes a relatively compact, centralized form of urban growth, with new urban development recommended to occur adjacent to, and outward from, existing development in areas which are covered by soils suitable for such development, which are not subject to special hazards such as flooding and shoreline erosion, and into which basic urban utilities and services can be readily and economically extended. To accommodate the anticipated increases in population in the locations and at the densities recommended, the farmland preservation plan calls for the conversion of about 12,200 acres of land from rural to urban use in Ozaukee County over the next two decades (see Map 5). Thus, the plan envisions that about 34,500 acres, or about 23 percent of the total area of Ozaukee County, will be in urban use by the year 2000. The envisioned conversion of land from rural to urban use—accounting for about 8 percent of the total area of the County—would be more than adequate to meet the urban development needs of the anticipated resident population of the County over the next two decades.

A public hearing was held on the plan in May 1983. The plan was subsequently adopted by the Ozaukee County Board in June 1983, and by year's end all six towns in the County had adopted exclusive agricultural zoning ordinances which were certified by the Wisconsin Land Conservation Board and in effect within their respective jurisdictions.

## CHIWAUKEE PRAIRIE-CAROL BEACH PLANNING PROGRAM

During 1983, 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 the Town of Pleasant Prairie located along the Lake Michigan shoreline east of STH 32. 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.

The purpose of the planning program is to develop an environmentally sound land use development plan for the area which reconciles valid, but conflicting, open space preservation and resource protection objectives with urban development objectives for the area through the active involvement of all major concerned public and private interests. In particular, the planning program seeks to identify the portions of the study area which should be preserved and protected to maintain its important environmental qualities, and to identify those concentrations of existing urban development and related areas of potential urban development which may be served by public sanitary sewers and other urban services in a manner which is sensitive to the natural resource features of the area. An important part of the planning program is a clarification of the manner in which the state and federal regulations govern the use of the extensive wetland areas in the Chiwaukee Prairie-Carol Beach area.

The planning program is being conducted under the guidance of a techical and citizen advisory committee consisting of representatives of the Town of Pleasant Prairie, Kenosha County, the Wisconsin Department of Natural Resources, and the U. S. Army Corps of Engineers; major affected landowners, including the Wisconsin Electric Power Company and The Nature Conservancy; and citizen members. During 1983 the Regional Planning Commission conducted an in-depth analysis of the wetlands in the study area in terms of the shoreland-wetland rezoning criteria of Chapter NR 115 of the Wisconsin Administrative Code. In addition, work was initiated on the preparation of alternative land use management plans for the area.

## RESIDENTIAL SUBDIVISION PLATTING ACTIVITY

The Land Use Division staff annually monitors land subdivision activities in the Region. A total of 810 residential lots were created in the Region during 1983 through subdivision plats, compared with only 481 lots platted in 1982. Of the total residential lots created in 1982, 585 lots, or about 72 percent, were served by public sanitary sewers, and the remaining 225 lots, or 28 percent, were designed to be served by onsite septic tank sewage disposal systems (see Table 3 and Map 6). In comparison, in 1982 a total of 83 lots, or about 17 percent of the lots platted, were to be served by onsite sewage disposal systems. Among the seven counties in southeastern Wisconsin, the number of residential lots created through subdivision plats in 1983 ranged from a low in Kenosha County, where no lots were platted in 1983, to a high of 433 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 recreation facilities required in urban areas of the Region. The plan is documented in SEWRPC Planning Report No. 27, A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000, and is graphically summarized on Map 7.

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

Table 3

RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 1983

| County | Sewered Lots | | Unsewered Lots | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent of Total | Number | Percent of Total | Number | Percent of Regional Total |
| Kenosha . . . . . | 0 | - - | 0 | - - | 0 | - - |
| Milwaukee . . . . | 251 | 100.0 | 0 | - - | 251 | 31.0 |
| Ozaukee . . . . . | 40 | 100.0 | 0 | - - | 40 | 4.9 |
| Racine. . . . . | 55 | 100.0 | 0 | - - | 55 | 6.8 |
| Walworth. . . . . | 0 | - - | 15 | 100.0 | 15 | 1.9 |
| Washington . . . | 16 | 100.0 | 0 | - - | 16 | 2.0 |
| Waukesha. . . . . | 223 | 51.5 | 210 | 48.5 | 433 | 53.4 |
| Region | 585 | 72.2 | 225 | 27.8 | 810 | 100.0 |

Map 6

RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 1983

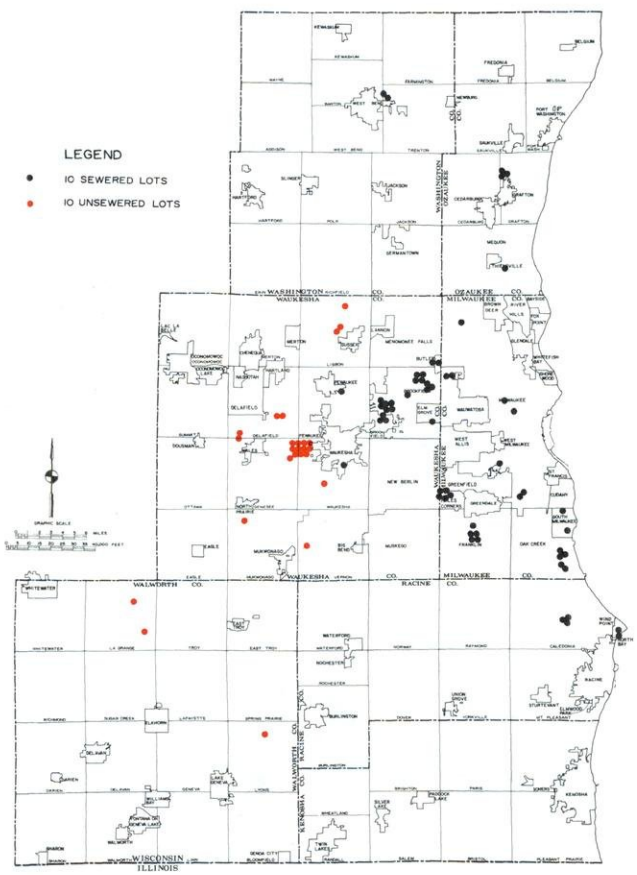



Figure 8

RESIDENTIAL LOTS PLATTED IN THE REGION: 1960-1983

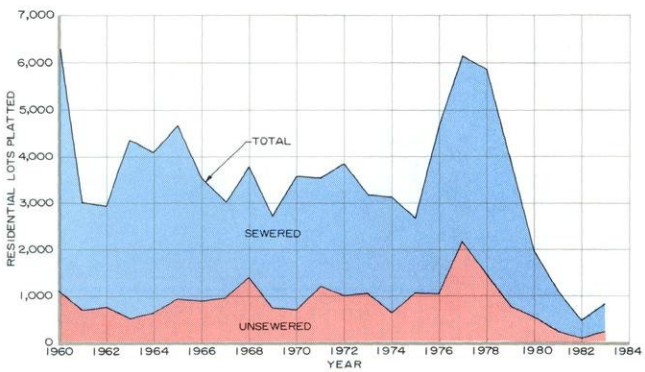



Figure 9

RESIDENTIAL LOTS PLATTED IN KENOSHA COUNTY: 1960-1983

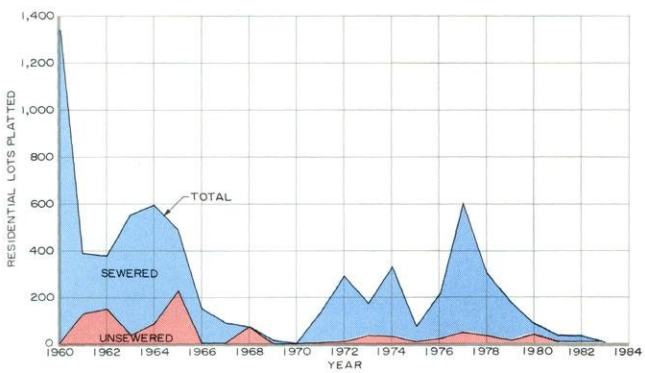


Figure 10

RESIDENTIAL LOTS PLATTED
IN MILWAUKEE COUNTY: 1960-1983

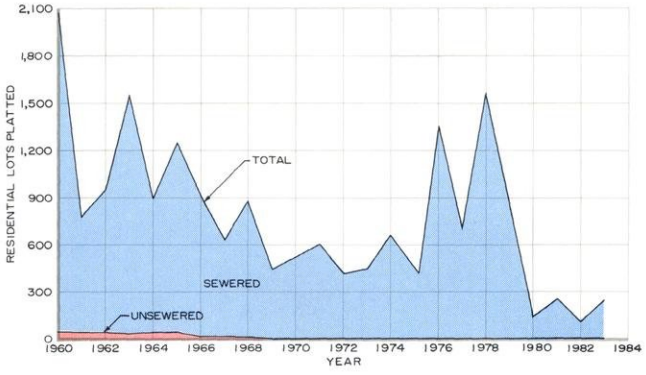



Figure 11

RESIDENTIAL LOTS PLATTED
IN OZAUKEE COUNTY: 1960-1983

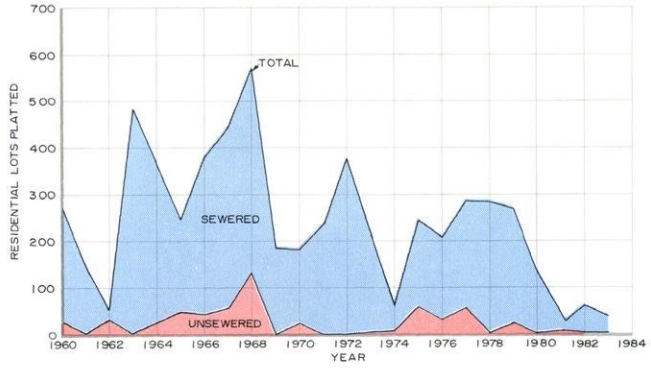



Figure 12

RESIDENTIAL LOTS PLATTED
IN RACINE COUNTY: 1960-1983

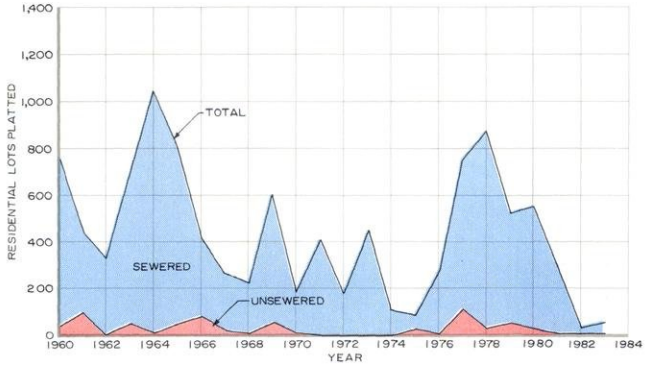



Figure 13

RESIDENTIAL LOTS PLATTED
IN WALWORTH COUNTY: 1960-1983

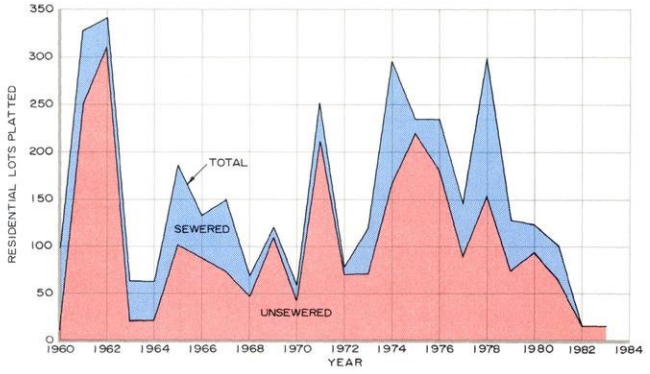



Figure 14

RESIDENTIAL LOTS PLATTED
IN WASHINGTON COUNTY: 1960-1983

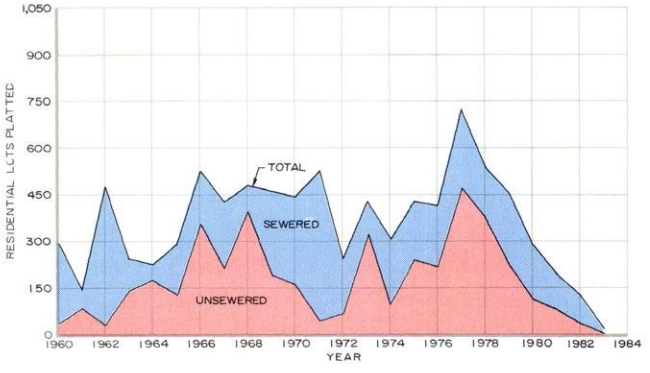
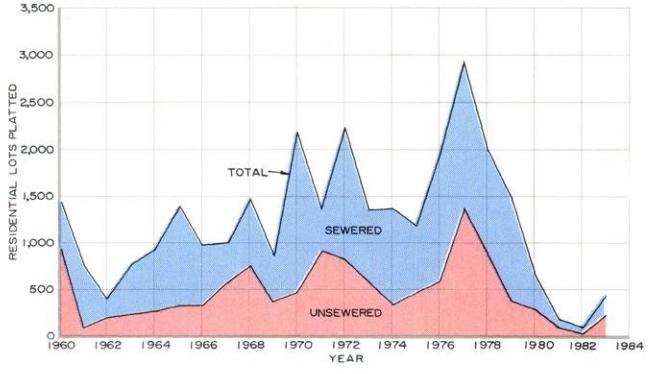


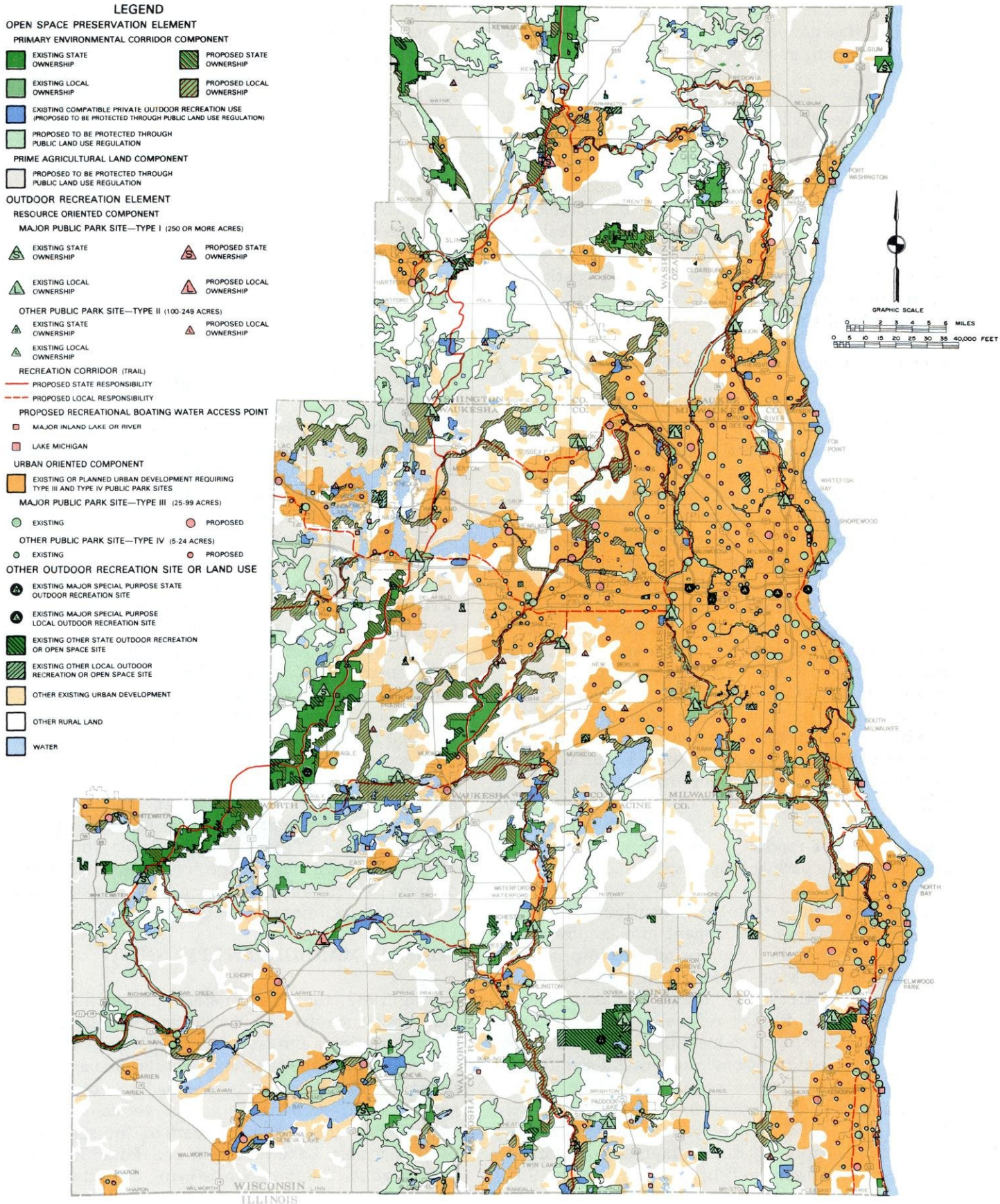

Figure 15

RESIDENTIAL LOTS PLATTED
IN WAUKESHA COUNTY: 1960-1983



Map 7

# REGIONAL PARK AND OPEN SPACE PLAN: 2000



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 1983, staff efforts on park and open space planning were directed primarily toward the implementation of the regional park and open space plan. Implementation activities consisted of assisting local units of government in refining and detailing primary and secondary environmental corridors and important natural resource features on large-scale, one inch equals 400 feet scale aerial photographs, in 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, regional water quality management, 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 avoid 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.

During 1983, the Commission continued its environmental corridor refinement process initiated in 1979 utilizing the Commission's 1975 one inch equals 400 feet scale, ratioed and rectified aerial photographs both as base "maps" and as an important data source for the refinement process. This process was developed to meet the need for a more detailed delineation of environmentally significant lands within the Region as an aid to plan implementation, and is described in SEWRPC Technical Record, Vol. 4, No. 2, in an article entitled "Refining the Delineation of Environmental Corridors in Southeastern Wisconsin." In addition, during 1983 the Commission continued the environmental corridor updating process to modify the environmental corridor configuration, refined on the basis of 1975 aerial photography, to reflect changes in land use and in the natural resource base which occurred between 1975 and 1980. The Commission's 1980 one inch equals 400 feet scale, ratioed and rectified aerial photographs were used as the additional data source for this update. By the end of 1983, the corridor refinement process using the Commission's 1975 aerial photographs had been completed for about 2,513 square miles of area, or about 93 percent of the total area of the Region; and the corridor refinement process using the Commission's 1980 aerial photographs had been completed for 2,441 square miles of area, or about 91 percent of the total area of the Region.

### 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 1983, the Commission initiated work on two such community park and open space plans—one for the City of West Bend and one for the Town of Vernon. These plans will be completed during 1984. 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 outdoor recreation and open space sites and related facilities proposed in the plans.

## COASTAL MANAGEMENT PLANNING

During 1983, the Division staff continued to provide assistance to the Wisconsin Department of Administration's Bureau of Coastal Management in the conduct of the Wisconsin coastal management program. This program is intended to coordinate governmental activities in order to achieve the objective of better management of the resources of Wisconsin's Lake Michigan and Lake Superior coastal zone. The program is being carried out by

the State of Wisconsin pursuant to the federal Coastal Zone Management Act of 1972 through the Wisconsin Coastal Management Council.

Under an agreement with the Wisconsin Department of Administration, Bureau of Coastal Management, the Commission has 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 to review and comment on state coastal studies and reports as they are proposed and produced.

One of the continuing functions of the Division under the coastal management program is the designation of special coastal areas. In 1983, 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 8. These special areas include coastal areas which have special 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, increases the area's priority for funding through other public agencies and programs, 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-related projects for funding under the coastal management program. In 1983, because of limited federal and state funding, no projects were prepared and submitted from southeastern Wisconsin.

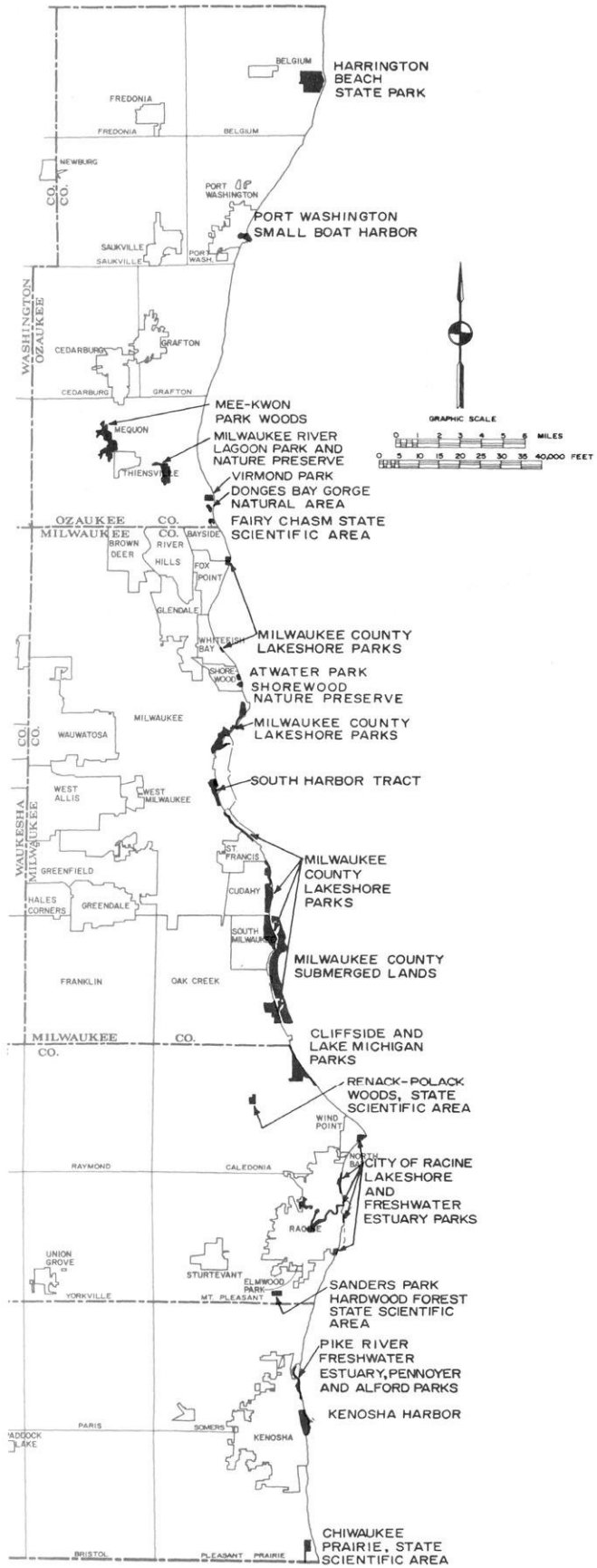
## DATA PROVISION AND ASSISTANCE

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 1983 include the following:

- Provision of technical assistance to the Town of Hartford for an undeveloped town park, including the preparation of a site analysis and alternative general site development plans.

**Map 8**

**DESIGNATED SPECIAL COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 1983**



- Provision of technical assistance to the Village of Saukville for an undeveloped village park, including the preparation of a site analysis.

- Provision of environmental corridor and other natural resource information to the Geneva Lake Land Conservancy, Inc., to assist in its efforts to protect important natural resource features in the Geneva Lake area.

- Provision of technical assistance to Ozaukee County to coordinate the review of, and conduct informational meetings and hearings for, the Wisconsin Wetlands Inventory mapping program in Ozaukee County.

- Provision of technical assistance to the City of Franklin to assist in the identification of prime agricultural lands in the City.

- Provision of environmental corridor and other natural resource information to Jack E. Leisch & Associates to assist in the preparation of an environmental impact statement for the proposed improvement of STH 50 between USH 12 near the City of Lake Geneva in Walworth County and IH 94 near the City of Kenosha in Kenosha County.

- Provision of land use, outdoor recreation, and natural resource information to the Wisconsin Department of Natural Resources to assist in the analysis of the need for boat access facilities to Beaver Lake in Waukesha County.

- Provision of regional land use plan information to the Milwaukee Metropolitan Sewerage District to identify those areas proposed to be provided with sanitary sewer service under the Commission's adopted regional land use plan.

- Provision of interpretive soils maps showing the suitability of soils for agricultural purposes to the City of Mequon.

# TRANSPORTATION PLANNING DIVISION

## DIVISION FUNCTIONS

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

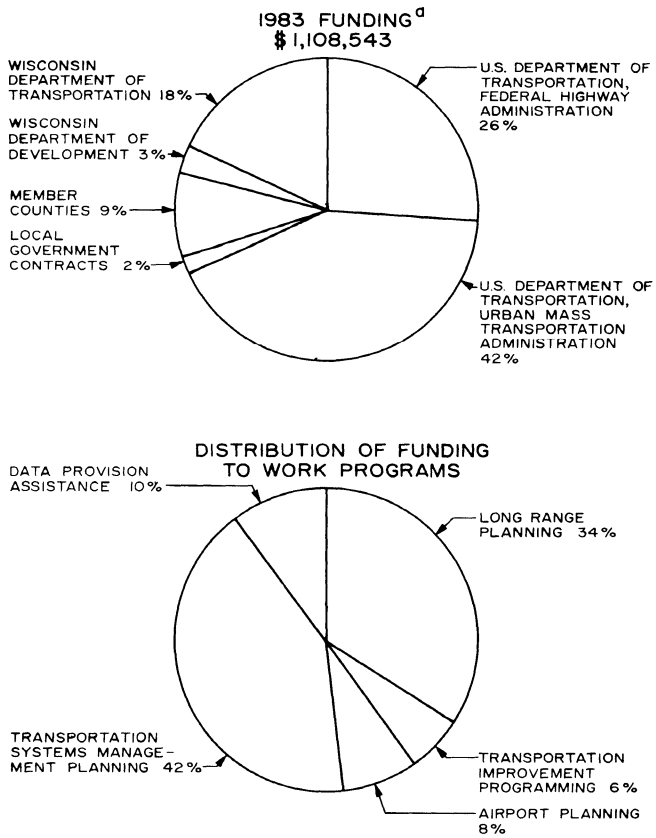
- What are the travel habits and patterns in the Region? How are these changing over time?
- What is the existing supply of transportation facilities and services?
- How can existing transportation facilities and transportation demand best be used and managed to avoid new capital investment?
- How much 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 1983 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 respon-

Figure 16

TRANSPORTATION PLANNING DIVISION




[a] *Includes $118,840 for agencies other than SEWRPC to conduct subregional transportation planning activities identified in the 1983 SEWRPC Overall Work Program.*

Table 4

AUTOMOBILE AVAILABILITY

| County | 1963 | 1972 | 1982 | 1983 |
|---|---|---|---|---|
| Kenosha | 35,160 | 48,010 | 60,840 | 61,100 |
| Milwaukee | 304,120 | 397,690 | 456,300 | 449,850 |
| Ozaukee | 14,320 | 24,430 | 37,660 | 37,140 |
| Racine | 47,580 | 68,270 | 87,090 | 85,060 |
| Walworth | 19,440 | 27,430 | 35,780 | 35,460 |
| Washington | 16,240 | 27,030 | 43,080 | 43,380 |
| Waukesha | 61,900 | 102,910 | 158,350 | 157,610 |
| Total | 498,760 | 695,770 | 879,100 | 869,600 |

sible for all of this transportation-related planning work. Accordingly, all transportation planning activities bearing upon the Commission's overall work program are reported herein irrespective of whether they are directly conducted by the Commission.

## DATA COLLECTION, COLLATION, AND DEVELOPMENT

During 1983 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 1983 totaled 869,600. This represents a decrease of 9,500, or about 1.1 percent, from the 1982 level of 879,100 (see Table 4). Similar decreases occurred within the Region in 1975 and 1977, which were attributed in part to the then growing preference for the use of light-duty trucks as passenger vehicles. The decrease in 1983 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 Kenosha and Washington Counties registered slight gains in automobile availability during the year. The average annual rate of growth in automobile availability from 1963 through 1983 was 3.0 percent.

The number of persons per automobile within the Region was estimated to be 2.03 in 1983, higher than the estimated 2.00 in 1982, as shown in

Figure 17

PERSONS PER AUTOMOBILE

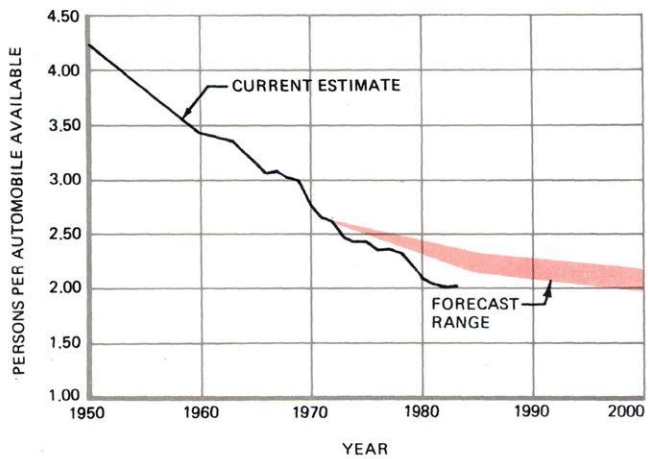



Figure 17. The estimated number of automobiles available within the Region in 1983 may be compared to the forecast range of automobile availability as developed under the long-range regional transportation system plan, as shown in Figure 18, which depicts the historical and forecast growth in automobile availability. The 1983 forecast automobile availability ranged from 819,700 under the adopted regional transportation system plan to 858,400 under the "no build" alternative. Thus, the 1983 regional automobile availability of 869,600 was about 1 percent higher than the "no build" forecast, and about 6 percent higher than the automobile availability envisioned under the adopted regional transportation system plan.

Table 5

TRUCK AVAILABILITY

| County | 1963 | 1972 | 1982 | 1983 |
|---|---|---|---|---|
| Kenosha . . . . . | 4,860 | 7,040 | 12,160 | 12,460 |
| Milwaukee . . . . . | 25,870 | 33,350 | 51,430 | 52,670 |
| Ozaukee . . . . . | 2,290 | 3,290 | 6,020 | 6,180 |
| Racine. . . . . | 6,200 | 9,140 | 16,330 | 16,850 |
| Walworth. . . . . | 4,490 | 6,430 | 10,590 | 10,790 |
| Washington . . . . . | 3,410 | 5,400 | 10,420 | 10,650 |
| Waukesha. . . . . | 8,280 | 15,060 | 29,150 | 30,110 |
| Total | 55,400 | 79,710 | 136,100 | 139,710 |

Figure 18

FORECAST RANGE OF AUTOMOBILE AVAILABILITY

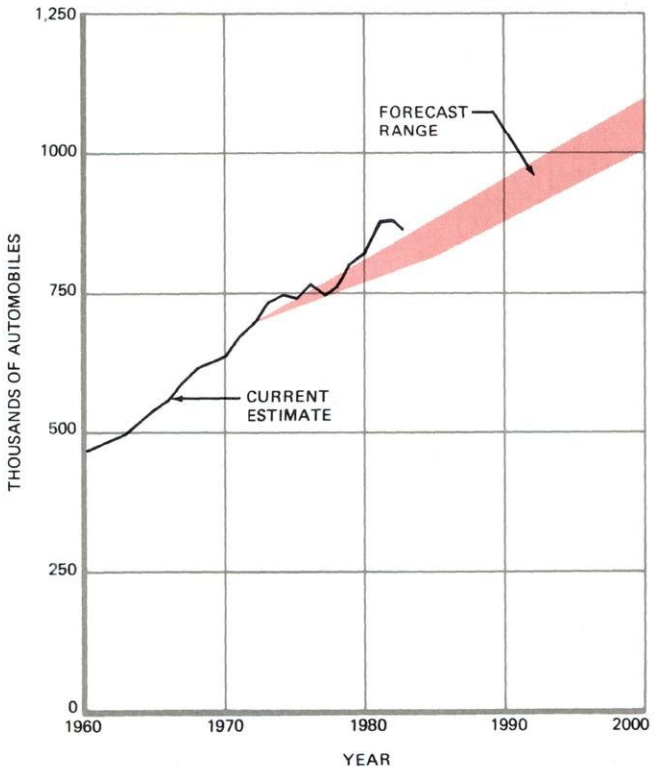
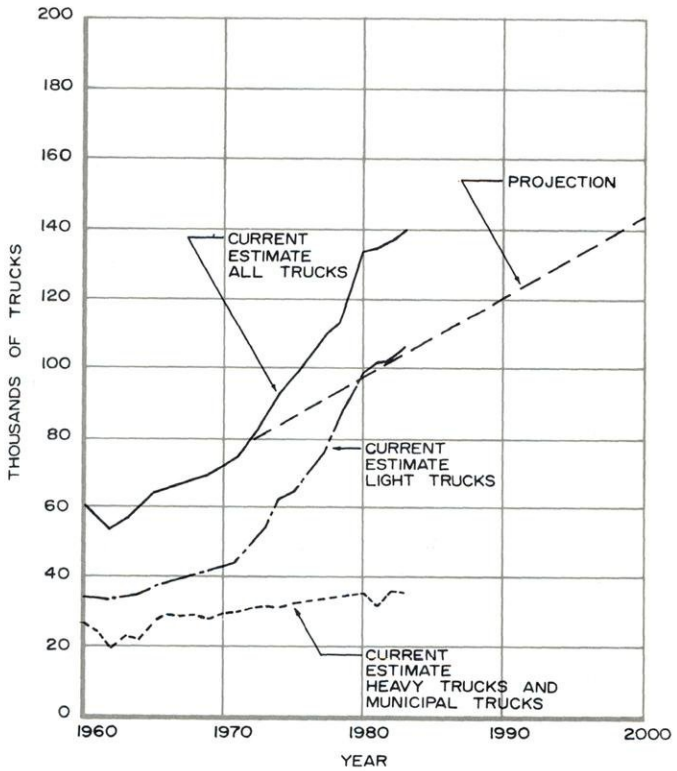



Figure 19

TRUCK AVAILABILITY




The number of motor trucks available in the Region increased during the year to a total of about 139,710, an increase of about 3,610, or 2.6 percent, over the 1982 level of 136,100 trucks (see Table 5). As shown in Figure 19, the increase in trucks over time has been confined almost entirely to an increase in light trucks, which now constitute about 75 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 1983 totaled about 105,090, showing an increase of 3,270, or about 3.2 percent, over the number of light trucks

Table 6

PUBLIC TRANSIT RIDERS

| Transit Operators by Area | 1963 | 1972 | 1982 | 1983 | Percent Change 1982-1983 |
|---|---|---|---|---|---|
| Urbanized Areas | | | | | |
| Kenosha | | | | | |
| City of Kenosha | 1,876,000 | 503,000 | 1,224,100 | 1,209,500 | - 1.1 |
| Milwaukee | | | | | |
| Milwaukee County | 88,546,000 | 52,141,000 | 52,981,400 | 50,932,400 | - 3.9 |
| Waukesha County | -- | -- | 360,700 | 339,300 | - 5.9 |
| City of Waukesha | 451,000 | 227,000 | 202,700 | 269,200 | 32.8 |
| Wisconsin Coach Lines, Inc. | 165,000 | 153,000 | 147,300 | 115,800 | - 21.4 |
| Subtotal | 90,013,000 | 52,635 | 53,663,700 | 51,656,700 | - 3.7 |
| Racine | | | | | |
| City of Racine | 2,907,000 | 526,000 | 2,340,700 | 2,231,000 | - 4.7 |
| Urbanized Area Total | 93,945,000 | 53,600,000 | 57,228,500 | 55,097,200 | - 3.7 |
| Nonurbanized Area | | | | | |
| City of Hartford | -- | -- | 17,000 | 15,500 | - 8.8 |
| Total Region | 93,945,000 | 53,600,000 | 57,245,500 | 55,112,700 | - 3.7 |

available in 1982. The number of heavy trucks and municipal trucks increased to 34,620 in 1983, an increase of 370 trucks, or about 1 percent, over the 1982 level of 34,260.

### 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 6 and Figure 20). In the Kenosha urbanized area, ridership on the fixed route public transit system serving the City of Kenosha declined during 1983 (see Figure 21). Ridership during the year approximated 1,209,500 revenue passengers, a decrease of about 1 percent from the 1982 ridership level of about 1,224,100 revenue passengers. No significant changes in transit service were made on the Kenosha transit system during 1983; however, fares on the transit system were increased in January 1983 from $0.35 to $0.40 per adult trip. The number of bus miles operated in revenue service totaled about 611,100, a decrease of about 1 percent from the 619,000 bus miles operated during 1982.

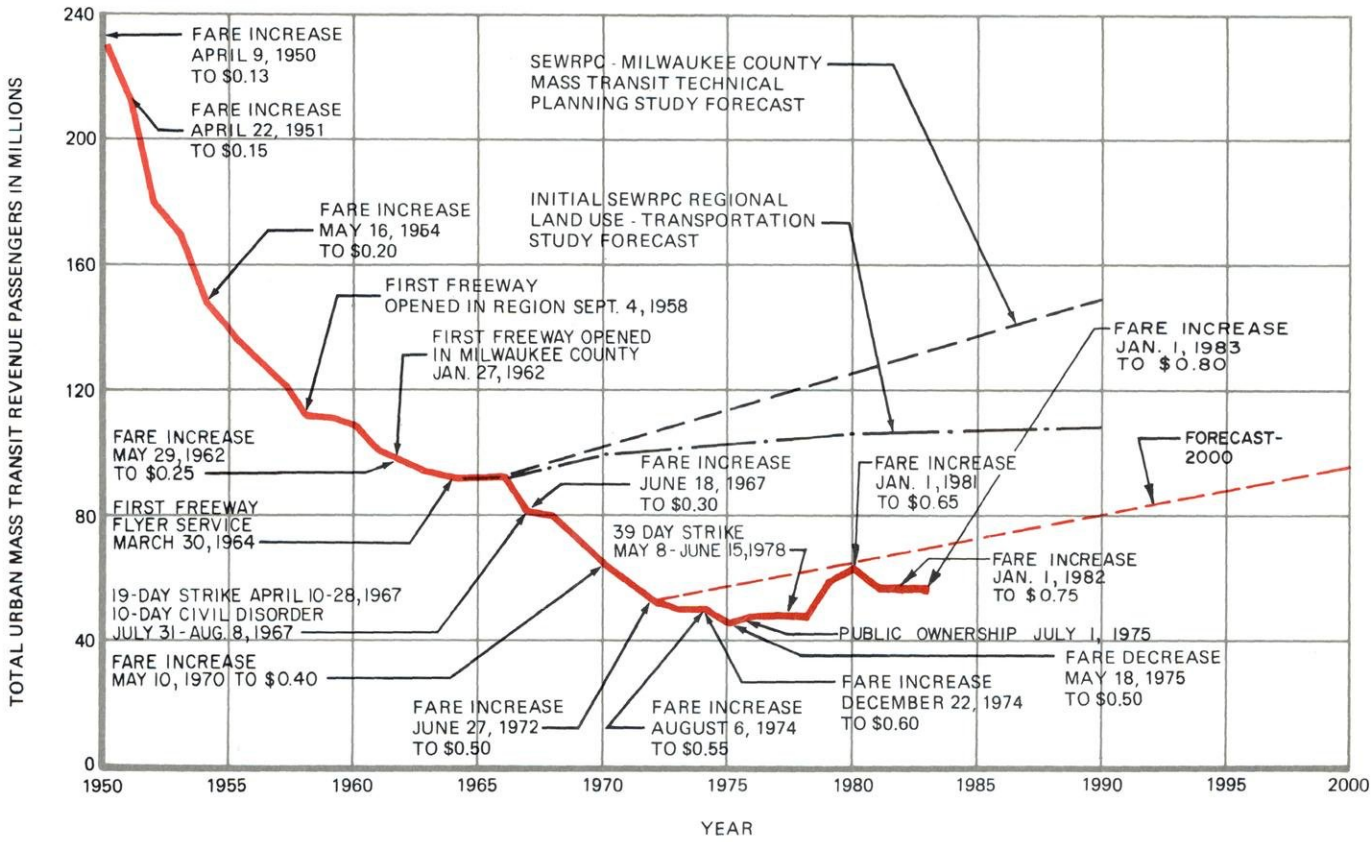
Until 1981, transit ridership had increased on the Kenosha transit system every year since the public acquisition and operation of the transit system in 1971. To assist in the public operation of the transit system, the Commission prepared, at the request of the City, a five-year transit development 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 1983, the Commission began the preparation of another transit development plan for the City of Kenosha transit system for the period 1984-1988. The plan will consider and address the recent history of ridership decline on the City of Kenosha transit system.

Ridership on the fixed route public transit system serving the City of Racine also declined during 1983. Public transit ridership during 1983

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

Figure 20

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.

decreased by about 5 percent from the 1982 level of approximately 2,340,700 revenue passengers to the 1983 level of about 2,231,000 revenue passengers (see Figure 22). The decline in ridership during 1983 may be partially attributable to a fare increase which was implemented in October 1982, when adult cash fares were raised from $0.25 to $0.35 per passenger trip. While no significant changes in transit service were made on the transit system during 1983, peak-period headway reductions implemented on four routes in October 1982 resulted in an increase of about 10 percent in the number of bus miles operated in revenue service—from about 1,057,000 bus miles in 1982 to about 1,163,400 bus miles in 1983.

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.[2] 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 1982, the Commission began the preparation of another transit development program for the City of Racine transit system for the period 1984-1988.

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

Figure 21

MASS TRANSIT RIDERSHIP
KENOSHA URBANIZED AREA

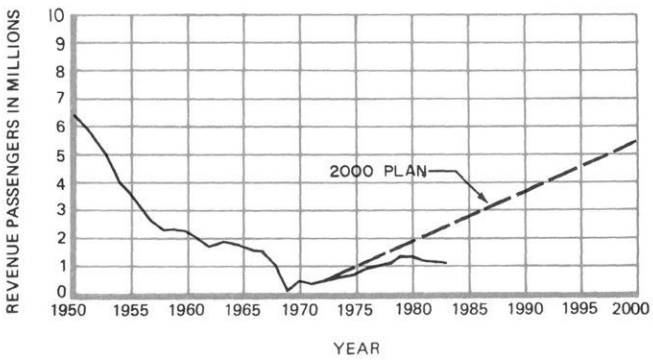
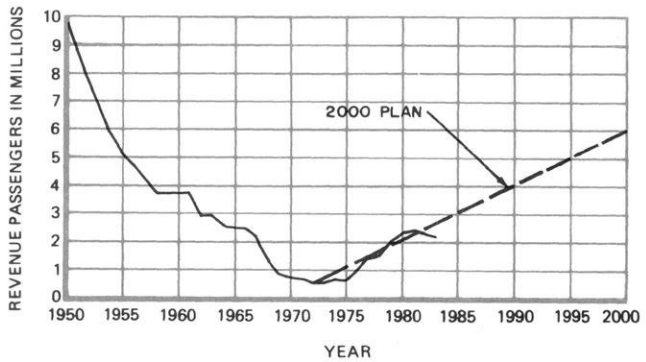



Figure 22

MASS TRANSIT RIDERSHIP
RACINE URBANIZED AREA




In the Milwaukee urbanized area, public subsidized, fixed route transit service was provided during 1983 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.

On January 1, 1983, passenger fares for transit service provided by the Milwaukee County Transit System, the principal transit operator within the Milwaukee urbanized area, were increased for the third time in three years. Adult cash fares for local transit service were increased from $0.75 to $0.80 per passenger trip. Fares for freeway flyer transit service were not increased and remained at $1.00 per passenger trip. Some changes were also made in the transit system route structure, including the addition of two new freeway flyer routes, one serving a new park-ride lot located near Timmerman Field in the City of Milwaukee and one serving a new park-ride lot located at State Fair Park in the City of West Allis.

During 1983, 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 five bus routes initiated by the County during 1981. These five bus routes operated during 1983 were originally part of a total of seven new routes implemented by Waukesha County on April 1, 1981. The Commission identified these seven potential routes in 1980 at the request of Waukesha County and proposed that any service implemented should be on a trial basis.[3]

The five routes which continued to be operated during all or part of 1983 included four 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, the City of Oconomowoc, and the Village of Mukwonago, 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 1983, However, low ridership resulted in the elimination of the freeway flyer route serving the Village of Mukwonago in May 1983.

In the City of Waukesha, ridership on the fixed route bus system serving the City continued to exceed ridership levels forecast for the transit

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

system. 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.[4] The new Waukesha transit system—routes, schedule, service levels, and fare structure—was implemented essentially as recommended by that plan. During calendar year 1983, the system carried approximately 269,200 revenue passengers, an increase of about 33 percent over the 202,700 revenue passengers carried on the system during 1982. After two 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. One transit service improvement implemented by the City of Waukesha during 1983 was the construction of a new off-street central transfer terminal in downtown Waukesha. The location of the new terminal facility was based upon the recommendations of a bus passenger transfer site study completed by the Commission in 1982.[5] The new terminal was served by a fleet of 11 new 35-foot transit buses purchased by the City and delivered in August 1983.

The number of bus miles operated in revenue service in the Milwaukee urbanized area during the year totaled about 21.5 million, a decrease of about 1 percent from the approximately 21.7 million bus miles operated during 1981. Total transit ridership within the Milwaukee urbanized area decreased by about 4 percent from the 1982 ridership level of about 53.0 million revenue passengers to about 50.9 million revenue passengers in 1983 (see Figure 23). The major portion of this ridership decrease can be attributed to the decline in ridership experienced by the Milwaukee County Transit System during the year.

Figure 23

MASS TRANSIT RIDERSHIP
MILWAUKEE URBANIZED AREA

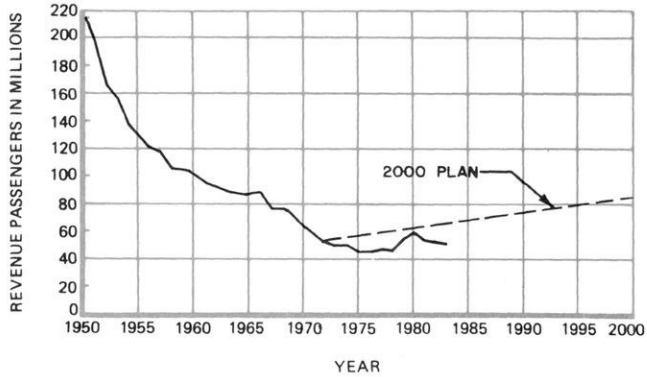
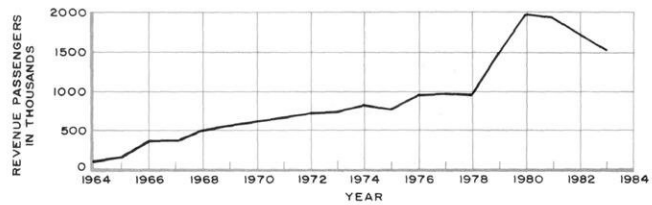



Figure 24

MILWAUKEE URBANIZED AREA
FREEWAY FLYER RIDERSHIP




During 1983, 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 1,550,000 passengers in 1983, representing a decrease of about 11 percent from the 1,740,300 passengers carried in 1982 (see Figure 24).

Progress in providing the public transit stations recommended in the adopted year 2000 transportation plan is summarized on Map 9. During 1983, this progress included the construction and opening of the State Fair Park public transit station at the interchange of the East-West Freeway (IH 94) with S. 84th Street in the City of West Allis. Freeway flyer bus service was initiated at this transit station in December 1983. A second recommended public transit station was also constructed during 1983—at the interchange of the Zoo Freeway-North (USH 45) and W. Good Hope Road. However, no transit service was provided from this

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

[5] *See SEWRPC Community Assistance Planning Report No. 82, A Central Transfer Site Location and Design Analysis for the City of Waukesha Transit System.*

## Map 9

## PRIMARY TRANSIT SYSTEM PLAN FOR THE REGION: 2000

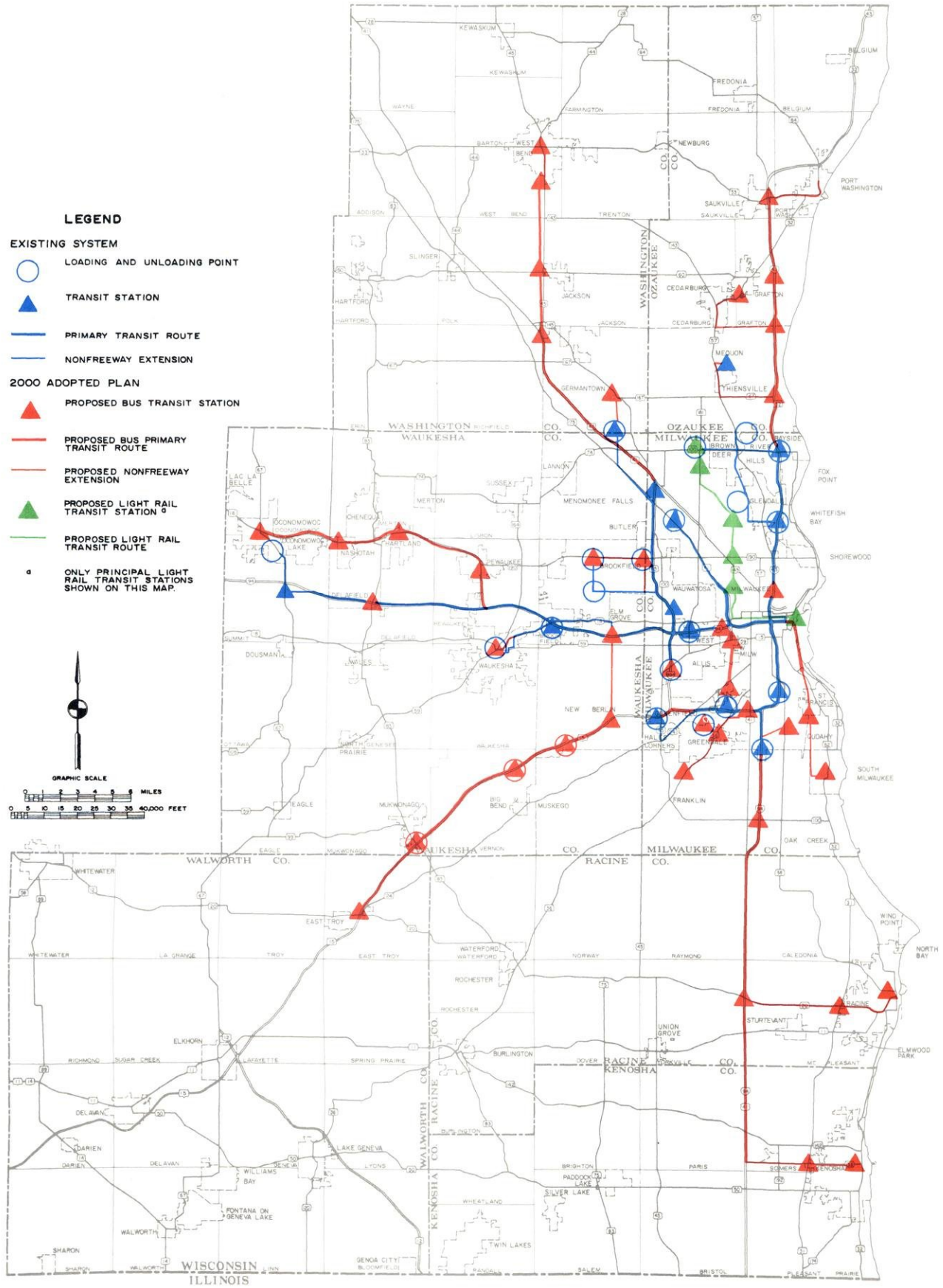


Table 7

USE OF PARKING AT FREEWAY FLYER TERMINALS

| Location | Available Parking Spaces | Autos Parked on an Average Weekday—Fourth Quarter: 1983 | Percent of Spaces Used |
|---|---|---|---|
| Public Transit Stations | | | |
| W. College Avenue (Milwaukee) | 530 | 386 | 73 |
| W. Watertown Plank Road (Wauwatosa) | 200 | 168 | 84 |
| North Shore (Glendale) | 190 | 132 | 69 |
| Brown Deer (River Hills) | 250 | 171 | 68 |
| Goerkes Corners (Brookfield) | 250 | 141 | 56 |
| Milwaukee Area Technical College (Mequon)[a] | 200 | 14 | 7 |
| W. Holt Avenue (Milwaukee) | 240 | 105 | 44 |
| Whitnall (Hales Corners) | 360 | 286 | 79 |
| Pilgrim Road (Menomonee Falls) | 70 | 68 | 97 |
| STH 67 and IH 94 (Summit) | 80 | 36 | 45 |
| State Fair Park (West Allis) | 200 | --[b] | --[b] |
| Timmerman Field (Milwaukee) | 140 | 41 | 29 |
| W. Loomis Road (Greenfield) | 415 | 85 | 20 |
| W. Good Hope Road | 135 | 5[c] | 4[c] |
| Subtotal | 3,260 | 1,633 | 50 |
| Shopping Center Lots | | | |
| Northland (Milwaukee) | 100 | 33 | 33 |
| Zayre-Kohls (West Allis) | 250 | 175 | 70 |
| Zayre (Brookfield) | 200 | 107 | 54 |
| Southridge (Greendale) | 250 | 160 | 64 |
| Northridge (Milwaukee) | 100 | 51 | 51 |
| Zayre (Brown Deer) | 125 | 70 | 56 |
| Ruby Isle (Brookfield) | 50 | 8 | 16 |
| Sentry (Brookfield) | 50 | 8 | 16 |
| Olympia (Oconomowoc) | 50 | --[b] | --[b] |
| Subtotal | 1,175 | 612 | 52 |
| Total | 4,435 | 2,245 | 51 |

[a] *Public transit service to this station was terminated by the Ozaukee County Board of Supervisors on June 19, 1978.*

[b] *Data not available.*

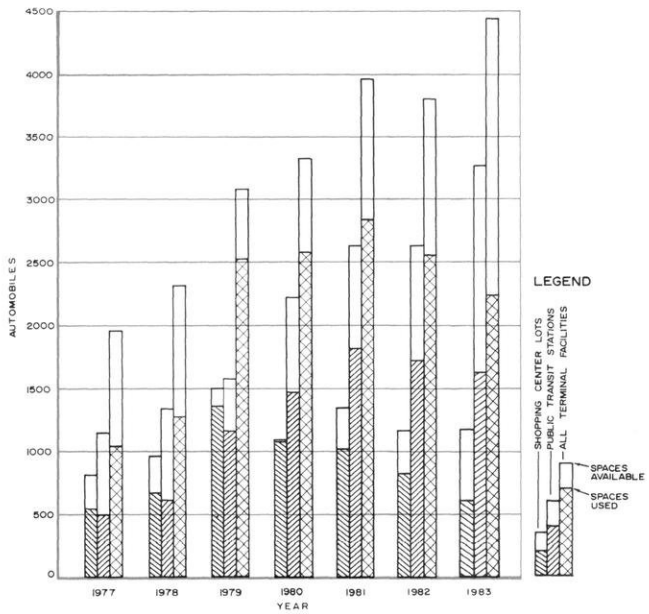
[c] *Public transit service to this station, while not provided during 1983, is planned for the near future by the Milwaukee County Transit System.*

facility during 1983, and its use was limited to carpoolers. Two other public transit stations were also opened during 1983: one at the interchange of the Airport Freeway (IH 894) and W. Loomis Road in the City of Greenfield using land acquired for the proposed Stadium Freeway-South, and one on W. Appleton Avenue across from Timmerman Field in the City of Milwaukee. Although not included in the adopted plan, both stations were served by freeway flyer routes in 1983. Finally, transit service to freeway flyer terminals located on the Rock Freeway (STH 15) at STH 83, CTH F, and CTH Y was discontinued in May 1983 when Waukesha County discontinued freeway flyer bus service between Mukwonago and downtown Milwaukee. These three terminals continued to be used for carpooling.

Table 7 and Figure 25 provide data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 1983 for all transit stations by patrons of free-

Figure 25

FREEWAY FLYER PARKING LOT USE




way 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, representing an increase of one freeway flyer terminal facility over the 22 which existed during 1982. The number of spaces available in 1983 at public transit/park-ride stations totaled 3,260, representing an increase of about 635 spaces over the 2,625 spaces available in 1982. The same number of spaces were available at shopping center lots in 1983 as in 1982—1,175.

Of the 3,260 spaces available at the 14 public transit/park-ride stations, 1,633 spaces were used on an average weekday during the fourth quarter of 1983, representing a utilization rate of about 50 percent. Of the 1,175 spaces available at the nine shopping center lots, 612 spaces were utilized during the last quarter of 1983, representing a utilization rate of about 52 percent. In total, about 51 percent of all available parking spaces were used on an average weekday during the last quarter of 1983.

Publicly operated transit service was also provided in the nonurbanized portion of the Region during 1983 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 1983, the Hartford taxicab and shuttle bus services carried approximately 15,500 revenue passengers and operated about 24,600 vehicle miles of revenue service. These figures represent a decrease of about 9 percent from the 17,000 revenue passengers carried in 1982, and an increase of about 14 percent over the 21,500 revenue vehicle miles operated during 1982.

Transit operating subsidies during 1983 totaled about $35.2 million, as compared with about $36.6 million during 1982, as shown in Table 8. The overall public operating subsidy per ride in the Kenosha urbanized area remained about the same: $0.98 in 1982 and $1.00 in 1983 (see Figure 26). In the Racine urbanized area, the overall operating subsidy per ride increased from about $0.61 in 1982 to about $0.76 in 1983 (see Figure 27). In the Milwaukee urbanized area, the overall operating subsidy per ride remained the same: $0.63 in both 1982 and 1983 (see Figure 28). By individual operator in the Milwaukee urbanized area, the per-ride subsidies in 1982 and 1983 were as follows: Milwaukee County Transit System, $0.62 and $0.61; Waukesha County, $1.44 and $1.67; and City of Waukesha, $3.07 and $2.60. The overall operating subsidy per ride for the taxicab service operated by the City of Hartford increased markedly from about $1.95 per ride in 1982 to about $3.13 per ride in 1983 (see Figure 29).

### Carpool Parking Facilities

During 1983, the Commission collected data on the use of available parking supply at carpool parking facilities within the Region. As shown in Table 9, 15 publicly owned carpool parking facilities were in operation at key freeway interchanges in the outlying areas of the Region in 1983. This number includes one new facility, located at STH 15 and Moorland Road in the City of New Berlin, which was placed into service in August 1983. During the fourth quarter of 1983, about

Table 8

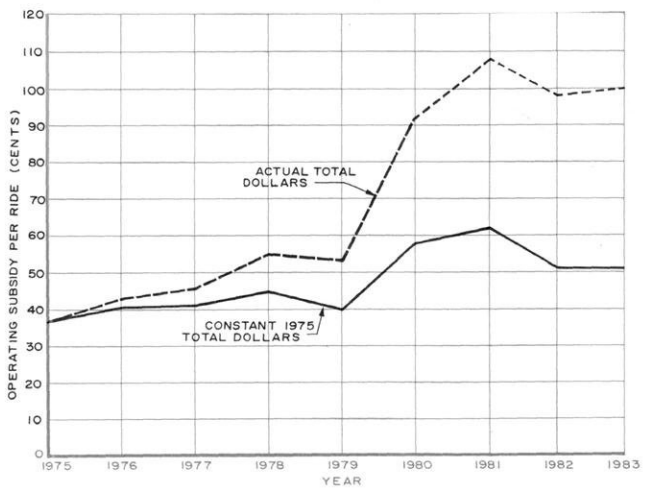
## PUBLIC TRANSIT OPERATING SUBSIDIES

| Area | Public Transit Operating Assistance (dollars) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1982 Actual | | | | 1983 Estimated | | | |
| | Federal | State | Local | Total | Federal | State | Local | Total |
| Urbanized Areas | | | | | | | | |
| Kenosha | 665,259 | 470,836 | 67,018 | 1,203,113 | 677,515 | 482,918 | 54,598 | 1,215,031 |
| Milwaukee | | | | | | | | |
| Milwaukee County | 7,465,113 | 17,530,906 | 7,856,273 | 32,852,292 | 7,445,495 | 18,917,229 | 4,673,905 | 31,036,629 |
| Waukesha County | 259,623 | 259,623 | -- | 519,246 | 275,166 | 291,771 | -- | 566,937 |
| City of Waukesha | 267,143 | 209,671 | 145,486 | 622,300 | 275,166 | 238,400 | 185,488 | 699,054 |
| Subtotal | 7,991,879 | 18,000,200 | 8,001,759 | 33,993,838 | 7,995,827 | 19,447,400 | 4,859,393 | 32,302,620 |
| Racine | 730,489 | 589,246 | 35,224 | 1,354,959 | 933,069 | 748,359 | -- | 1,681,428 |
| Subtotal | 9,387,627 | 19,060,282 | 8,104,001 | 36,551,910 | 9,606,411 | 20,678,677 | 4,913,991 | 35,199,079 |
| Nonurbanized Area | | | | | | | | |
| Hartford | 14,209 | 13,597 | 5,341 | 33,147 | 24,252 | 20,481 | 3,771 | 48,504 |
| Total | 9,401,836 | 19,073,879 | 8,109,342 | 36,585,057 | 9,630,663 | 20,699,158 | 4,917,762 | 35,247,583 |

| Area | Operating Subsidy per Ride (cents) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1982 Actual | | | | 1983 Estimated | | | |
| | Federal | State | Local | Total | Federal | State | Local | Total |
| Urbanized Areas | | | | | | | | |
| Kenosha | 54 | 38 | 6 | 98 | 56 | 40 | 4 | 100 |
| Milwaukee | | | | | | | | |
| Milwaukee County | 14 | 33 | 15 | 62 | 15 | 37 | 9 | 61 |
| Waukesha County | 72 | 72 | -- | 144 | 81 | 86 | -- | 167 |
| City of Waukesha | 132 | 103 | 72 | 307 | 102 | 89 | 69 | 260 |
| Subtotal | 15 | 33 | 15 | 63 | 15 | 38 | 9 | 63 |
| Racine | 33 | 26 | 2 | 61 | 42 | 34 | -- | 76 |
| Nonurbanized Area | | | | | | | | |
| Hartford | 84 | 80 | 31 | 195 | 157 | 132 | 24 | 313 |

Figure 26

### MASS TRANSIT OPERATING SUBSIDIES IN THE KENOSHA URBANIZED AREA: 1975-1983



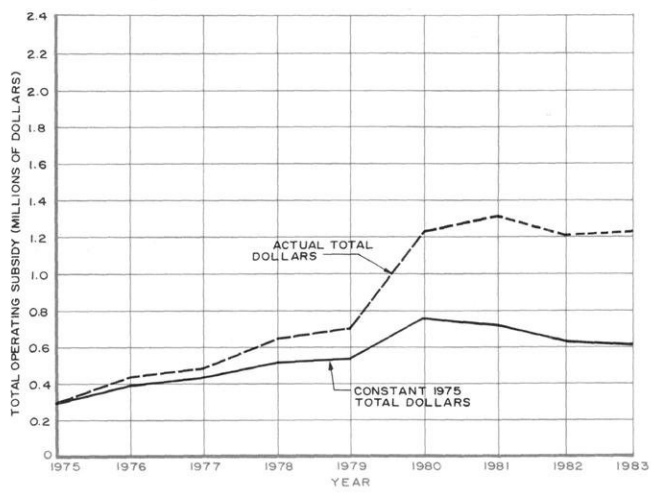



Figure 27

MASS TRANSIT OPERATING SUBSIDIES IN THE RACINE URBANIZED AREA: 1975-1983

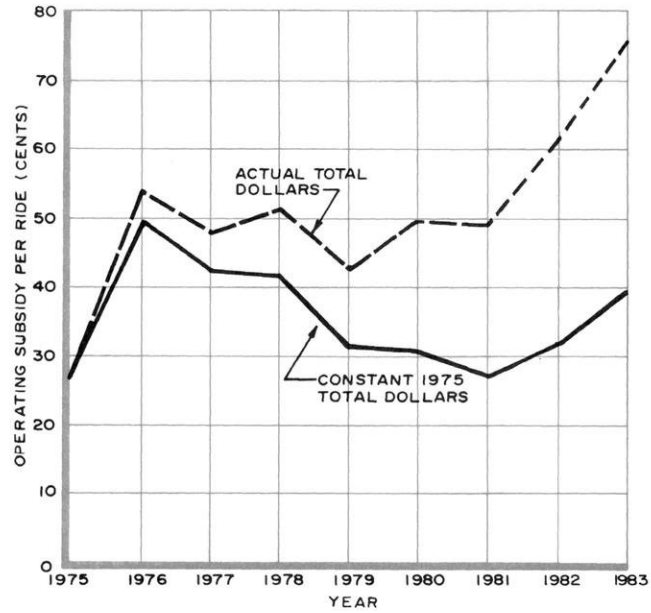
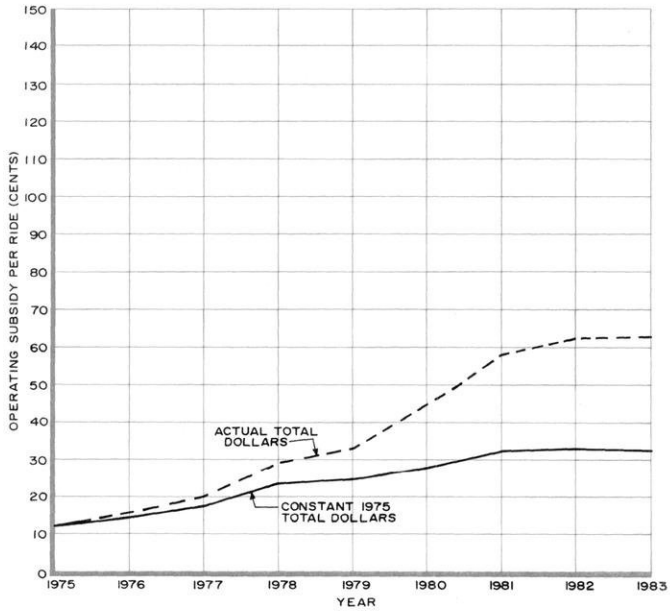
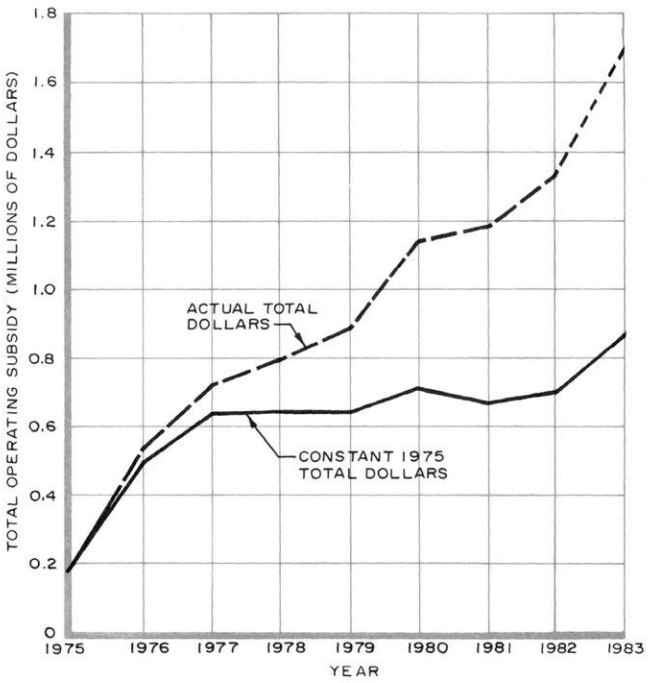



Figure 28

MASS TRANSIT OPERATING SUBSIDIES IN THE MILWAUKEE URBANIZED AREA: 1975-1983



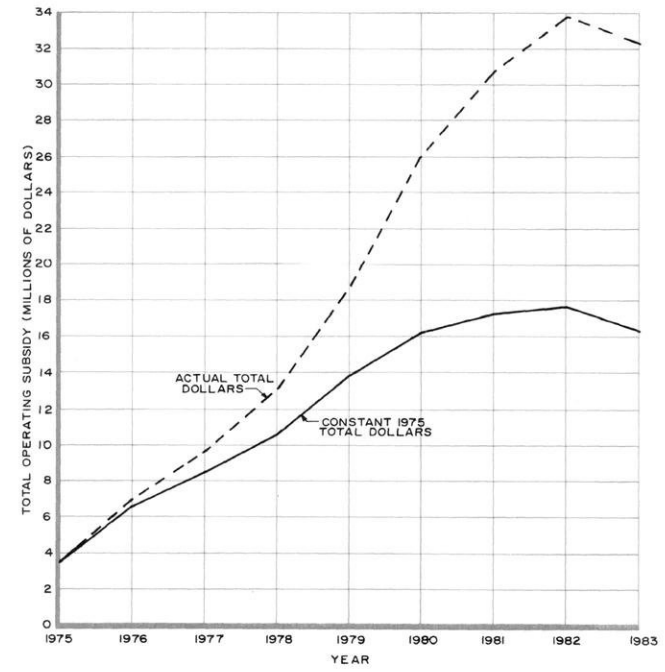
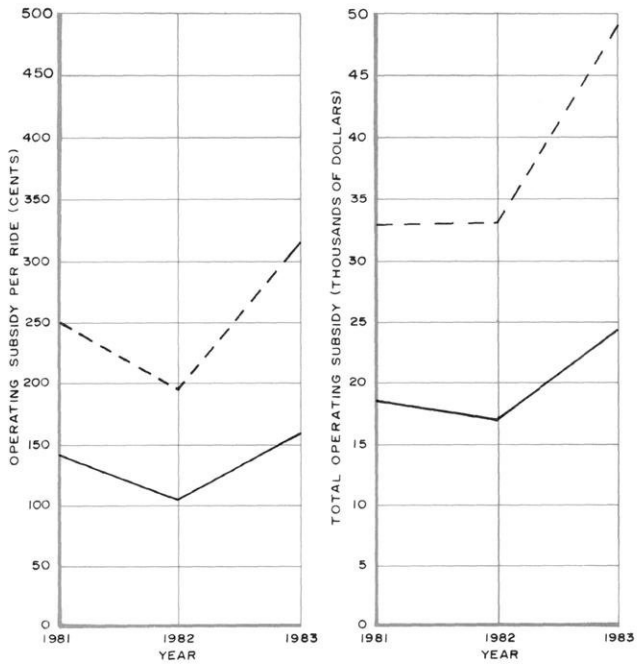



Figure 29

MASS TRANSIT OPERATING SUBSIDIES IN THE CITY OF HARTFORD: 1981-1983




451 of the total 1,160 parking spaces available were used on an average weekday (see Figure 30). This represents a utilization rate of 39 percent, and a decrease in the number of parked vehicles from 1982 to 1983 of 15 vehicles per average weekday. The progress in providing the carpool parking lots recommended in the adopted year 2000 regional transportation plan is summarized on Map 10.

## TRAFFIC COUNT DATA

The Commission collated traffic count data collected by other state, county, and local agencies during the year. These data are essential to monitoring changes in travel occurring in the Region and to calculating estimates of levels of, and trends in, vehicle miles of travel. During 1983 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 1984 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 11. The long-range regional transportation system plan was prepared to accommodate the existing and probable future travel demand in the Region. Such demand is expected to increase by about 28 percent—from a total of about 4.5 million person trips per average weekday in 1972 to about 5.7 million such trips by the year 2000. Total vehicle miles of travel on an average weekday is anticipated to increase by more than 49 percent—from about 20.1 million to about 30.1 million. The design year 2000 regional transportation system plan seeks to provide the Region with a safe, efficient, and economical transportation system which can effectively serve the existing and probable future travel demand within the Region, which will meet the recommended regional transportation system development objectives, and which will serve and promote implementation of the adopted regional land use plan.

With respect to freeways, the plan did not include a number of previously planned freeways, including the Metropolitan Belt Freeway, the Bay Freeway from Pewaukee to Whitefish Bay, the Stadium Freeway-North, the Park Freeway-West, and the Racine Loop Freeway. The remaining previously proposed freeways were included in the new plan in one of two tiers. Included in the lower tier were the following freeways recommended for

Table 9

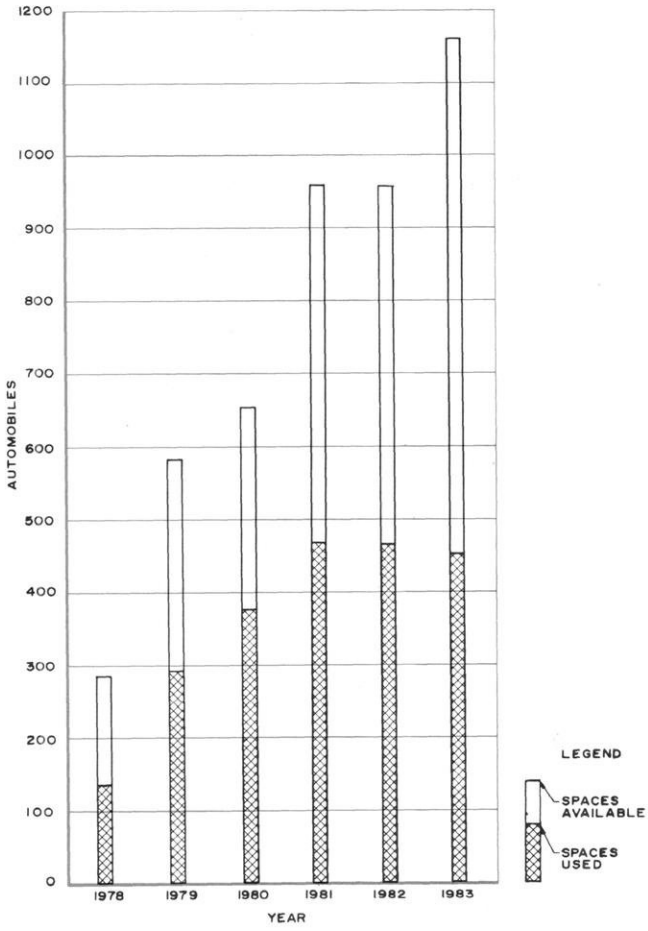
USE OF PARKING SUPPLY AT CARPOOL PARKING LOTS

| Location | Available Parking Spaces | Autos Parked on an Average Weekday—Fourth Quarter 1981 | Percent of Spaces Used |
|---|---|---|---|
| Ozaukee County | | | |
| Saukville | | | |
| IH 43 and STH 57 | 100 | 24 | 24 |
| Grafton | | | |
| IH 43 and CTH C | 50 | 35 | 70 |
| Fredonia | | | |
| STH 57 and STH 84 | 20 | 7 | 35 |
| Washington County | | | |
| Germantown | | | |
| USH 41 and CTH Y | 120 | 17 | 14 |
| Waukesha County | | | |
| Nashotah | | | |
| STH 16 and CTH C | 50 | 20 | 40 |
| Chenequa | | | |
| STH 16 and STH 83 | 65 | 11 | 17 |
| Oconomowoc | | | |
| IH 94 and STH 67 | 80 | 36 | 45 |
| STH 16 and CTH P | 40 | 14 | 35 |
| Delafield | | | |
| IH 94 and CTH CC | 30 | 14 | 47 |
| Pewaukee | | | |
| IH 94 and STH 164 | 80 | 53 | 66 |
| Mukwonago | | | |
| STH 15 and STH 83 | 95 | 53 | 56 |
| Big Bend | | | |
| STH 15 and CTH F | 100 | 45 | 45 |
| New Berlin | | | |
| STH 15 and CTH Y | 60 | 27 | 45 |
| STH 15 and CTH O | 200 | 27 | 14 |
| Menomonee Falls | | | |
| USH 41 and Pilgrim Road | 70 | 68 | 97 |
| Total | 1,160 | 451 | 39 |

construction in the relatively near-term future: the Stadium Freeway-South to W. Lincoln Avenue, the West Bend Freeway (USH 45), the USH 41 Freeway conversion in Washington County, the STH 16 Freeway in Waukesha County, and the USH 12 Freeway in Walworth County. The remaining proposed freeway in Milwaukee County, the Stadium Freeway-South from W. Lincoln Avenue to the Airport Freeway (IH 894), was placed in the upper tier of the plan. This proposed freeway represents a facility which Commission studies indicate will be needed only if regional population, employment, urban development, and travel demand increase in accordance with the forecasts on which the long-range system plan is, in part, based. Two other previously proposed freeways—the Lake Freeway-South and the Downtown Loop Freeway—were included in both the lower and upper tiers of

Figure 30

CARPOOL PARKING LOT USE




the plan, that portion of the Lake Freeway-South south to E. Layton Avenue in the lower tier and that portion of the Lake Freeway-South from E. Layton Avenue to the Illinois-Wisconsin state line and the Downtown Loop Freeway in the upper tier. During 1981 the plan was amended to replace the Lake Freeway-South with a four-lane, limited access surface arterial. During 1983 the plan was further amended to remove the Downtown Loop Freeway from the upper tier of the plan; to add a connection of the Park Freeway-East to N. Jefferson Street (shown on Map 12); and to add the connection of the East-West Freeway and Lake Freeway-North to N. Harbor Drive (shown on Map 13).

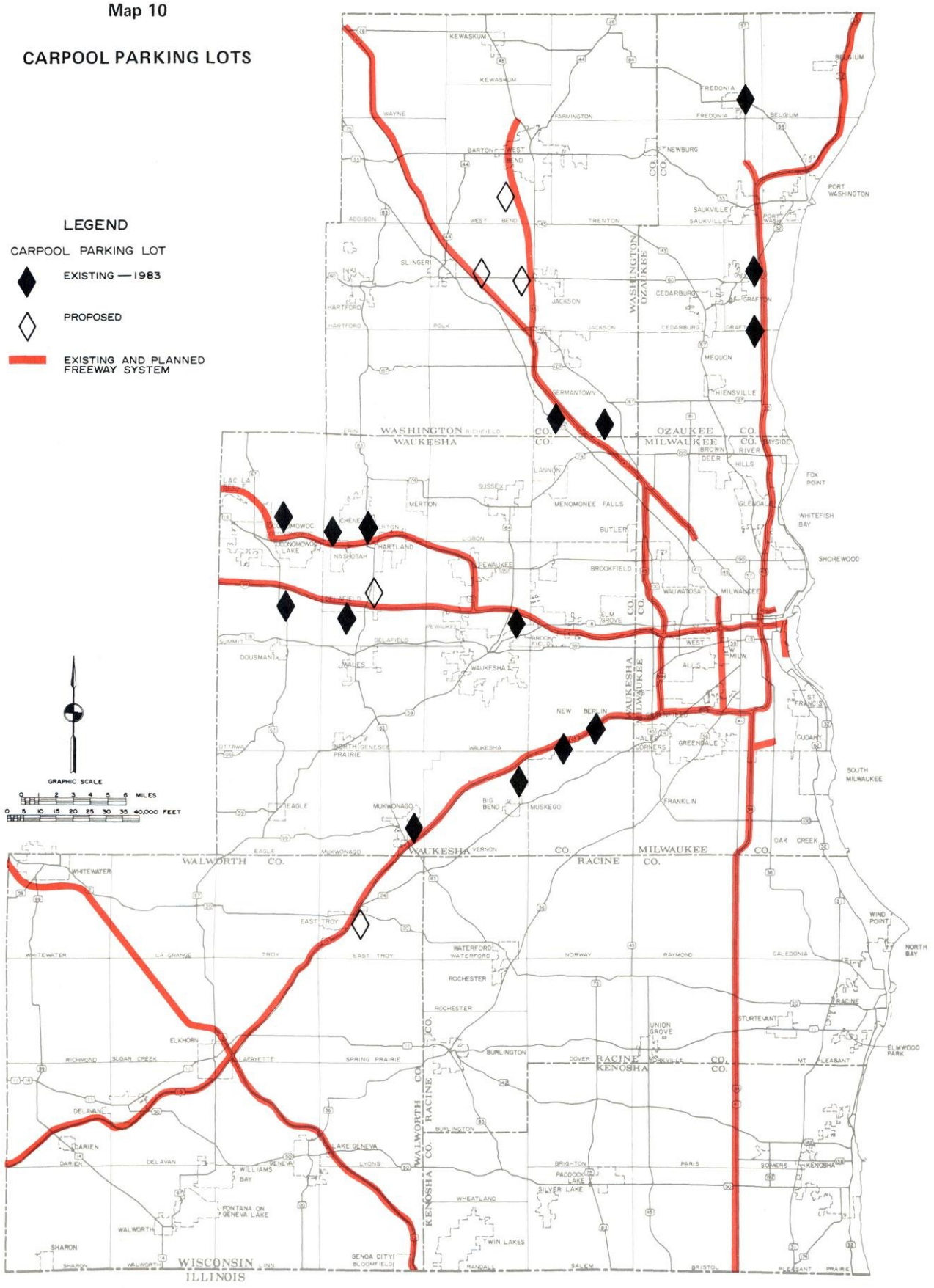
An ad hoc advisory committee established by the Commission facilitated and assisted in the planning work resulting in the recommended plans for the completion of the "stub ends" of the uncompleted Park Freeway-East and Lake Freeway-North. The Wisconsin Department of Transportation conducted the study as a result of a legislative mandate to the Department to prepare detailed plans for such "stub end" connections as a part of a major state legislative action to remove the uncompleted freeway segments of the Milwaukee Downtown Freeway Loop from the state trunk highway system. The Commission created an ad hoc advisory committee, chaired by Commissioner Harout O. Sanasarian, to provide an intergovernmental and public forum for the review of this design work. Through the Committee, the many public and private interests involved did exchange viewpoints, and reach a consensus as to how each of these two "stub ends" should be treated.

The recommended "stub end" treatment at the end of the Park Freeway-East in the vicinity of N. Milwaukee Street and E. Ogden Avenue and E. Lyons Street is graphically shown on Map 12. This recommended alternative was the least costly of the alternatives considered by the Committee, requiring no changes to the existing street system while providing for improved access to and from the Park Freeway-East and "freeing up" as much of the previously cleared freeway right-of-way for private redevelopment as possible. Under the plan recommended by the Committee and adopted by the Wisconsin Department of Transportation, Jefferson Street would be reconstructed to a 48-foot urban cross-section with dedicated turn lanes as necessary to facilitate movement onto, and off, the freeway. The cost of implementing this particular "stub end" plan is estimated at $150,000. The Wisconsin Department of Transportation has indicated that the project will be undertaken and completed in 1984.

The problem of dealing with the "stub end" connections at the Lake Freeway interchange was more difficult than at the end of the Park Freeway-East. Severe traffic congestion and safety hazards currently exist at this location—for example, at the Van Buren off-ramp and its Jackson Street intersection. In addition, there are pedestrian/vehicular conflicts at the First Wisconsin Center and at parking lots and structures north and south of Jackson Street and Clybourn Street. Also, traffic using the Jackson Street on-ramp to westbound IH 794 is required to make a difficult "S" maneuver from Clybourn Street onto the Jackson Street on-ramp and then across IH 794 to its right-hand lanes leading to westbound IH 94.

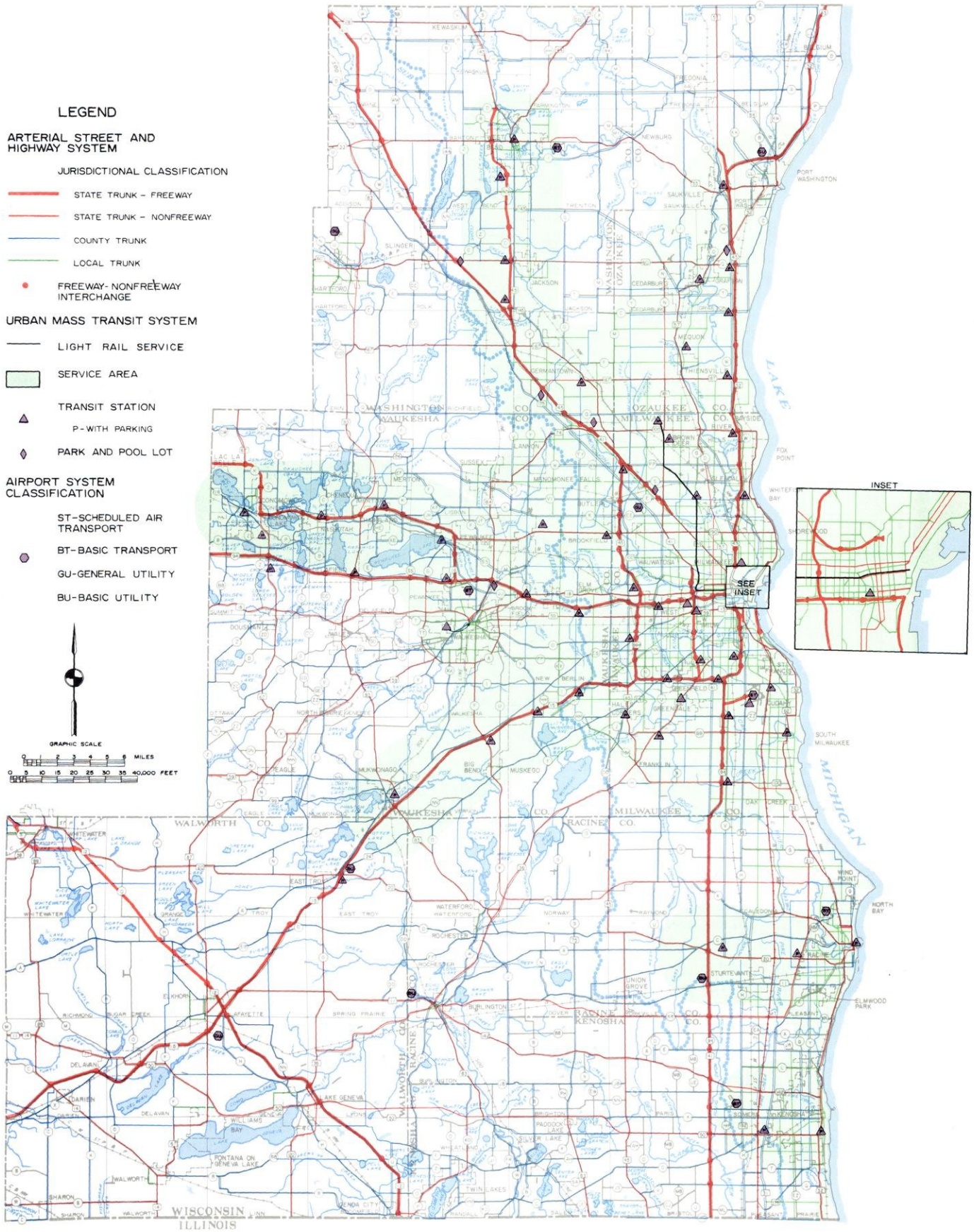
## Map 10

## CARPOOL PARKING LOTS



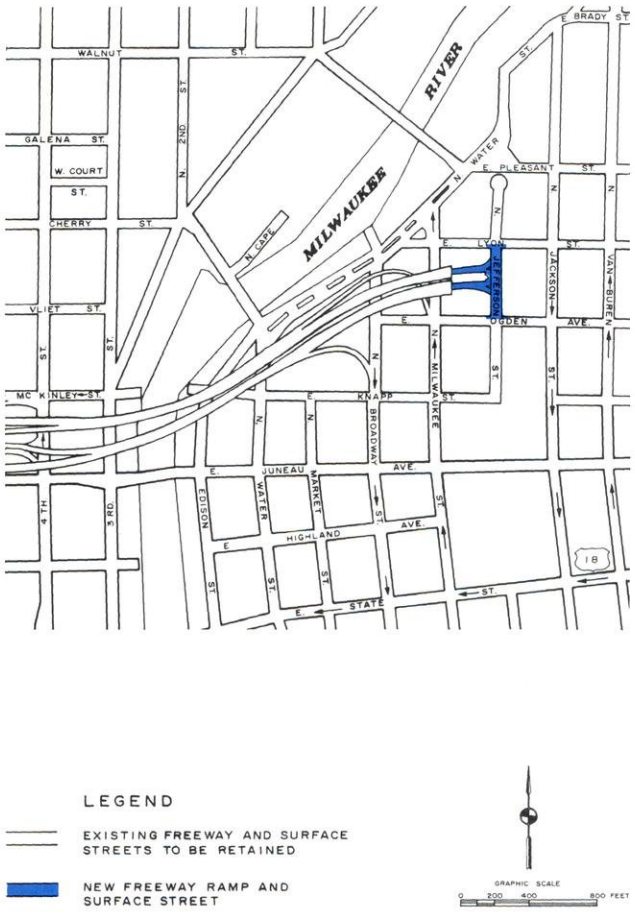
Map 11

# REGIONAL TRANSPORTATION SYSTEM PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2000



Map 12

RECOMMENDED PARK FREEWAY-
EAST "STUB END" CONNECTION




In addition to traffic considerations, the Committee wanted to take into account other factors, including the need to define the boundaries of both the lakefront and downtown area, while providing convenient interaction between the two; improvement of access to the Milwaukee central business district; the provision of convenient and safe pedestrian access between the central business district and the lakefront; the need to maintain an unobstructed view of Lake Michigan, and the need to provide for private land redevelopment opportunities.

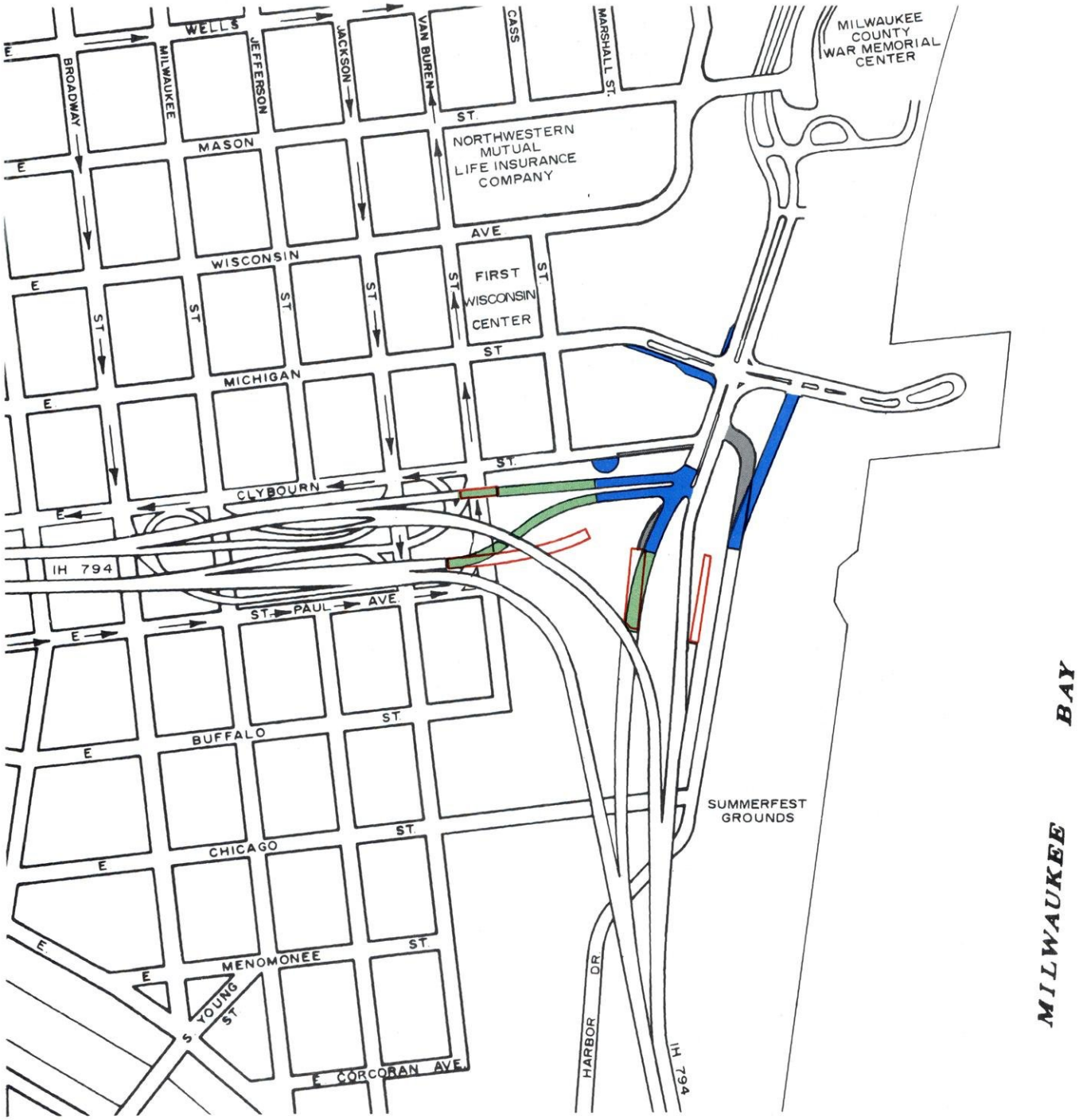
Working with the Wisconsin Department of Transportation, the Committee commented on a number of alternatives presented. At the final Committee meeting, the Secretary of the Wisconsin Department of Transportation presented the selected alternative. This alternative is shown on Map 13. Under this plan, approximately 570 feet of the unused eastbound "stub end" ramp from IH 794 would be removed and be replaced by a new bridge structure and surface roadway. This extension would then connect to an at-grade intersection with Harbor Drive and the Daniel Webster Hoan Memorial Bridge ramps. The plan also includes the removal of approximately 200 feet of the westbound "stub end" ramp leading to IH 794—to be replaced with a new bridge structure and a new surface roadway intersecting with Harbor Drive—and of the unused northbound exit ramp "stub end" from the Hoan Bridge. Among other modifications included in this plan, the southbound ramp leading to the Hoan Bridge would be rebuilt to reduce the curvature and improve the grade, Clybourn Street would be reduced in width and made one-way westbound from Harbor Drive west to a cul-de-sac at the southeast corner of the First Wisconsin National Bank's transfer building, and the south leg of N. Harbor Drive would be realigned to intersect with Michigan Street approximately 200 feet east of the present Michigan Street-Harbor Drive intersection.

The Wisconsin Department of Transportation is proceeding with final design of the recommended plan. Among the factors to be considered in that design is the precise alignment of Harbor Drive. The cost of implementing the recommended plan is estimated at $7.0 million, of which 90 percent would be provided by federal interstate highway funds. It is expected that this project will be under construction in 1984 and be completed in 1985.

State legislation was enacted in 1983 which effectively prohibited the construction of the Stadium Freeway-South. 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 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 that would not be required for transportation purposes. The Wisconsin Department of Development, in turn, requested the Southeastern Wisconsin Regional Planning Commission, which is the official area-wide planning agency for the greater Milwaukee area, to carry out the state improvement study required by the Legislature. The study is scheduled to be completed by mid-1984.

Map 13

## RECOMMENDED LAKE FREEWAY-NORTH "STUB END" CONNECTION




LEGEND

- EXISTING FREEWAY AND SURFACE STREETS TO BE RETAINED
- NEW STRUCTURE
- NEW FREEWAY RAMPS AND SURFACE STREETS
- EXISTING PAVEMENT TO BE REMOVED
- EXISTING STRUCTURE TO BE REMOVED

GRAPHIC SCALE
0 200 400 600 FEET

The plan also recommended that attempts be made to reduce vehicular travel demand through transportation system management actions, including the institution of auto use disincentives, particularly in terms of the parking rate structure in downtown Milwaukee, extensive freeway ramp metering, increased carpooling and vanpooling, work time rescheduling, and improved mass transit service. The plan envisioned that if such management measures encourage a sufficient shift from the automobile mode to transit and other high-occupancy vehicle modes of travel, it may never be necessary to construct those freeway segments placed in the upper tier of the plan. Along with these recommendations, the adopted regional transportation plan recommended that certain freeway modifications and ramp improvements be made to effect better transitions between existing "stub ends" of the freeway system and the surface arterial system. The latter recommendations were made for the following locations. the current terminus of the Park Freeway-East; the northerly terminus of the Daniel Webster Hoan Memorial Bridge portion of the Lake Freeway; the proposed south end of the Lake Freeway-South near E. Layton Avenue; the proposed south end of the proposed Stadium Freeway-South at W. Lincoln Avenue; the existing terminus of the Stadium Freeway-North near N. 47th Street and W. Lloyd Street; and the Hillside Interchange on IH 43.

The transportation system management actions and "stub end" connections were to be designed to accomplish five objectives: to ensure that maximum use is made of existing transportation facilities before commitments are made to new capital investment; to encourage the use of high-occupancy vehicles, including buses, vans, and carpools; to reduce vehicle use in congested areas; to effect motor fuel savings; and to reduce air pollutant emissions. The adopted regional transportation plan also contains extensive recommendations relative to the maintenance and improvement of the standard surface arterial streets and highways in the Region, as well as recommendations directed at improving public transit facilities and services.

During 1983, the Commission amended the plan for the northwestern Milwaukee County and southwestern Ozaukee County areas of the Region. This amendment, resulting from the adoption of the transportation system plan for the Milwaukee northwest side and Ozaukee County which contains recommendations for both the long-range and short-range transportation system plans, is described below.

By the end of 1983, this plan had been adopted by the Kenosha, Ozaukee, Racine, and Waukesha County Boards of Supervisors; by the Common Councils of the Cities of Burlington and Milwaukee; by the Village Board of the Village of River Hills; and by the plan commissions of the City of Oconomowoc and the Town of Dover. In addition, the new plan had been accepted and/or endorsed by the U. S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration, and by the Wisconsin Department of Transportation.

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

When the Commission deleted the Park Freeway-West and the Stadium Freeway-North from the regional transportation system plan in 1978, it directed that a special study be undertaken in cooperation with the Wisconsin Department of Transportation, Milwaukee County, Ozaukee County, the concerned local units of government within those counties, and concerned citizens of the best way to meet the existing and probable future transportation needs of the subarea of the Region proposed to have been served by these two freeways in the absence of such freeways. Such a study would have two distinct and related purposes: first, to identify in a definitive manner the effect of the removal of the two freeways from the long-range plan on the northwestern quadrant of the urbanized areas of Milwaukee and Ozaukee Counties; and second, to explore alternative means, including low capital-intensive systems management measures and more capital-intensive surface arterial improvements, of providing an improved level of transportation service to the affected area within acceptable limits of cost and negative social, economic, and environmental impacts.

During 1983, the Commission completed work on the important study of transportation improvements for the Milwaukee northwest side and Ozaukee County, and thereby amended the long-range arterial street and highway element of the adopted transportation system plan for the Southeastern Wisconsin Region, as well as the transportation system management plans for the study area. The findings and recommendations of the approximately three-and-one-half-year study are documented in SEWRPC Planning Report No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area. The study was conducted with the help of

an 18-member Technical and Citizens Advisory Committee, whose membership is set forth in Appendix B.

Extensive inventories of the factors affecting the demand for, and supply of, transportation system capacity were conducted under the study. Those inventories included the collection of definitive data on the demographic, economic, and public financial resource base, and on the land use pattern of the study area; on the configuration, capacity, and use of the existing transportation system in the study area; and on the travel habits and patterns in the study area as of 1978, the base year for the study. Some of the more important findings and conclusions resulting from the analysis of these data were as follows:

- In 1980, the resident population of the study area was about 476,000 persons, representing about one-quarter of the resident population of the seven-county Region. The population of the study area has declined by about 40,900 persons since 1960, when the population peaked at about 517,300 persons. Despite this overall population loss, the outlying portions of the area, and in particular the former Town of Granville area of the City of Milwaukee and the Ozaukee County portion of the study area, have continued to experience substantial increases in population, the losses having occurred in the southern portions of the study area in the City of Milwaukee. Under the adopted regional land use plan, the population of the study area would approximate 528,700 by the turn of the century, an increase of about 11 percent over the 1980 level. The number of households in the study area, which totaled about 168,900 in 1980, may be expected to increase at a somewhat higher rate than population because of an expected continuation of decreases in household size. By the year 2000, about 193,300 households may be expected to reside in the study area.

- The study area in 1975 provided about 199,300 jobs, or about one-fourth of the total jobs available in the Region. Over 90 percent of these jobs were located in Milwaukee County. Under the adopted regional land use plan, the number of jobs in the study area would approximate 252,000 by the turn of the century, an increase of about 25 percent over the 1975 level.

- About one-half of the study area is currently devoted to intensive urban land uses. The study area contains three of the 12 major retail and service centers in the Region, and six of the 17 major industrial centers.

- In 1978, arterial streets and highways in the study area totaled 439 miles, or nearly one-third of the arterial street and highway system of the Region. On an average weekday in 1978, about 7.8 million vehicle miles of travel occurred on that arterial street system, with nearly 90 percent of this occurring on the Milwaukee County portion. While comprising less than 12 percent of the study area arterial street mileage, freeways carried about 38 percent of the total arterial travel on an average weekday in the study area.

- Transit service in the study area is provided at three levels. Primary, or rapid, transit service is provided through four freeway flyer routes totaling 96 route miles in length and operating from seven park-ride lots located within, or immediately adjacent to, the study area. Secondary, or express, bus service is provided over one route in the extreme southeastern portion of the study area totaling eight route miles in length. Tertiary, or local, transit service is provided only within the Milwaukee portion of the study area over 31 routes, totaling 336 route miles in length.

- Nearly 1.2 million person trips are made on an average weekday in the study area. Of these trips, 94 percent are made by automobile and 6 percent by public transit. In the southeastern portion of the study area, however, where the most intensive transit service is provided, about 10 percent of all trips are made by transit.

Existing transportation problems in the study area were identified by evaluating the performance of the existing transportation system against seven transportation systems management and development objectives and supporting standards adopted by the Advisory Committee. Arterial street and highway reaches exhibiting existing problems were identified on the basis of such symptoms as: operation over design capacity during either the morning or evening peak hour or both; substandard operating speeds—that is, operating speeds below 25 miles per hour (mph) on divided facilities, and

below 20 mph on undivided facilities; and the presence of high accident locations—that is, intersections experiencing 10 or more accidents per year. A total of 20 such problem arterial street and highway reaches in the study area were identified. Eighteen of the 20 problem reaches were located within Milwaukee County, and two were located within Ozaukee County. The problem reaches identified are shown on Map 14.

The public transit routes within the study area were not found to individually exhibit a combination of problems such as substandard speeds, poor frequency of service, and excessive load factors. Rather, existing public transit system problems in the study area were identified in terms of a lack of certain types of transit service in some parts of the study area. Within the central part of the southeastern portion of the study area, only local transit service which operates at relatively slow speeds is provided. In the outlying portion of the transit service area, there are inadequacies in the provision of all three types of transit service: freeway flyer, express, and local. The transit service problem areas identified are shown on Map 15.

*Short-Range Plan*

To address the existing problems of the arterial street and highway and public transit systems, a short-range transportation system plan was developed for the study area. This short-range plan was designed to provide for the alleviation of traffic congestion and related traffic problems on the 20 identified problem reaches, involving 210 intersections, of the arterial street and highway system. In this respect, a total of 209 traffic management actions to abate traffic problems at 84 problem intersections are recommended under the plan at a cost of between $1,637,000 and $1,972,000 in 1980 dollars (see Table 10). These actions would be successful in abating congestion-related and noncongestion-related traffic problems on all but three problem intersections each during both the morning and evening peak traffic hours. These intersections are W. Lisbon Avenue and W. North Avenue and N. 60th Street and W. Appleton Avenue in the City of Milwaukee and STH 57 and STH 60 in the Village of Grafton.

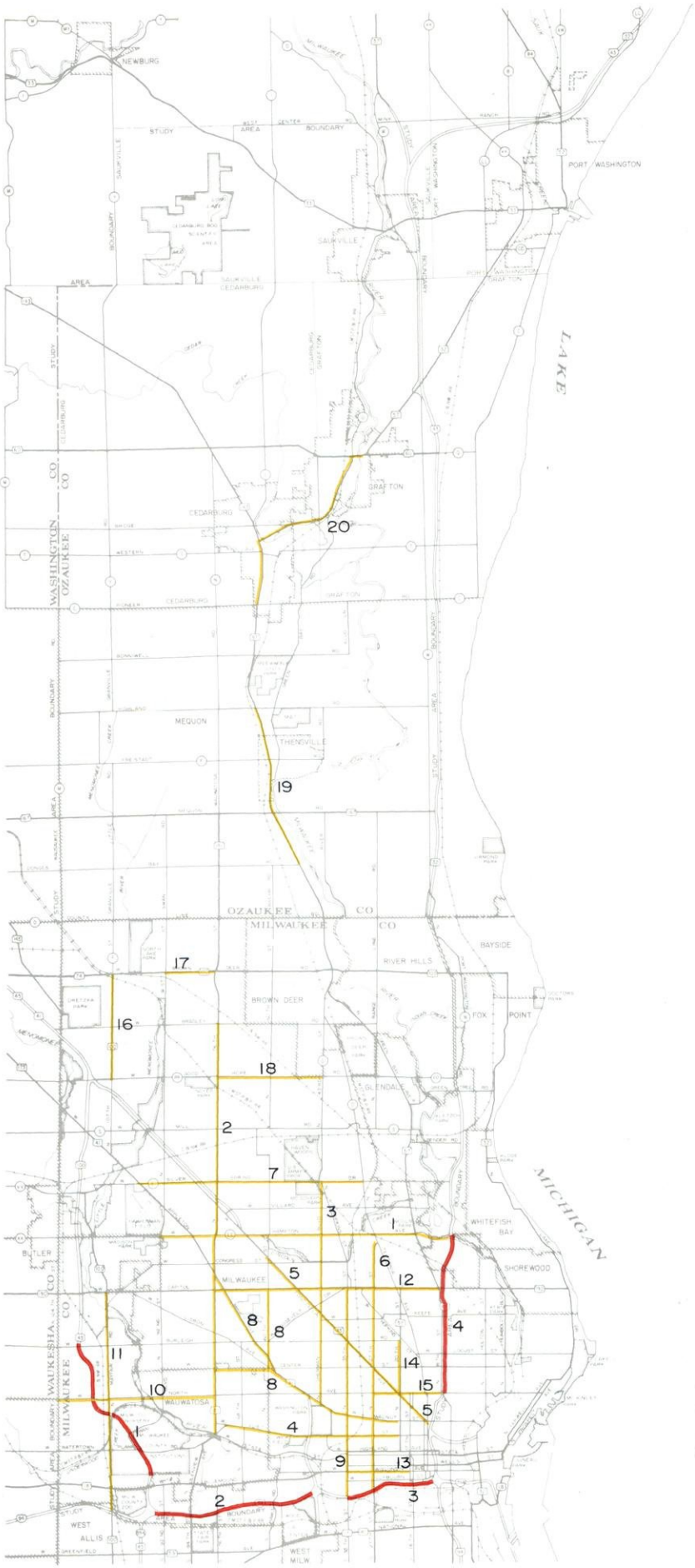
The short-range plan was also designed to provide recommendations for the completion of the freeway "stub ends" at the Hillside Interchange and at the Stadium Freeway-North (see Maps 16 and 17). At the Hillside Interchange proper, ramp construction is recommended to integrate the Park Freeway-East and the North-South Freeway with the existing surface arterial street system. At the Hillside Interchange northern spur, removal of the existing ramps and ramp bridges is recommended. In addition, it is recommended that the North-South Freeway be widened through this area to provide for three continuous through traffic lanes in each direction. The total capital cost of the actions at the Hillside Interchange is estimated to be $6.1 million in 1980 dollars. At the Stadium Freeway-North "stub end," only a new on-ramp to the southbound lanes of the freeway is recommended, at an estimated cost of $483,000 in 1980 dollars.

Finally, the short-range plan was also designed to address the identified public transit service problems of the study area. It is recommended under the plan that 20 miles of additional local service, 15 additional miles of express service, and 67 miles of additional freeway flyer service be provided, in addition to two new freeway flyer park-ride lots. These improvements, achievable at a cost of about $85 million over the five-year 1980 to 1985 period, would be expected to abate the existing problems on the transit system of the study area. The recommended transit service plan is summarized on Map 18.

An analysis was conducted to determine the extent to which the above-described traffic management, freeway "stub end," and transit improvement actions could be expected to alleviate the most significant arterial street and highway system problems identified under existing development and travel conditions. This analysis indicated that many of the more severe existing traffic congestion problems on the surface arterial street system may be expected to be resolved upon implementation of the short-range plan recommendations. Significant unresolved traffic congestion problems would, however, continue to be experienced, particularly along segments of W. Lisbon and W. Appleton Avenues and W. North Avenue near the terminus of the Stadium Freeway-North and along W. Fond du Lac Avenue north of W. North Avenue. Thus, while the short-range plan recommendations would be beneficial, the projects embodied in those recommendations would not resolve all of the existing traffic congestion problems in the study area, nor would they provide the basis for accommodating any increases in travel demand along the major arterial streets serving the study area as that area continues to develop.

Map 14

# IDENTIFIED PROBLEM ARTERIAL STREET SEGMENTS WITHIN THE MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY STUDY AREA: 1978




LEGEND

PROBLEM SEGMENT – FREEWAY

PROBLEM SEGMENT – SURFACE ARTERIAL

4 REFERENCE NUMBER – SEE TABLE 10

GRAPHIC SCALE

0 1/2 1 2 MILES

0 4000 8000 12000 FEET

Map 15

## PORTIONS OF THE MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY STUDY AREA EXHIBITING PUBLIC TRANSIT PROBLEMS: 1978


LEGEND

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

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

## Table 10

# SUMMARY OF THE RECOMMENDED TRAFFIC MANAGEMENT ACTIONS AT THE 83 PROBLEM INTERSECTIONS ALONG THE 20 PROBLEM ARTERIAL STREET SEGMENTS IN THE MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY STUDY AREA

| Arterial Street and Highway Segment | | Controlled Intersections with Identified Traffic Problems | Recommended Actions | | | | | | | | | | | | | | | | | Estimated Cost (dollars) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Signals | | | Turning Lanes | | | | | | | | | | | | Regulation | | |
| | | | | | | Add New | | | | Lengthen Existing | | | | Widen Existing | | | | | | |
| | | | | | | Right | | Left | | Right | | Left | | | | Other Modification | Approach Parking Restrictions | Pavement Restriping | |
| Number[a] | Description | | Install | Modify | Retime | Single | Double | Single | Double | Single | Double | Single | Double | Right | Left | | | | |
| 1 | W. Hampton Avenue from N. 92nd Street to the North-South Freeway (IH 43) | W. Hampton Avenue with: | | | | | | | | | | | | | | | | | | |
| | | N. 92nd Street | | X | X | | | | | | | X | | | | | | | | |
| | | W. Appleton Avenue | | | X | | | | | | | | | | | | | | | |
| | | W. Fond du Lac Avenue | | X | | | | | | | | | | | X | | X | X | | |
| | | N. Teutonia Avenue | | | X | | | | | | | | | X | | | | | | |
| | | N. Green Bay Avenue | | X | X | | | | | | | | | | | X | | | | 101,400 |
| 2 | N. 76th Street from W. Harwood Avenue to W. Bradley Road | N. 76th Street with: | | | | | | | | | | | | | | | | | | |
| | | W. Harwood Avenue[b] | | | | | | | | | | | | | | | | | | |
| | | W. North Avenue | | | | | | | | | | X | | | | | | | | |
| | | W. Center Street | | | X | | | | | | | | | | | | | | | |
| | | W. Capitol Drive | | | X | | | | | | | | | | | | X | | | |
| | | W. Grantosa Drive | | | X | | | | | | | | | | | | | | | |
| | | W. Appleton Avenue | | X | X | | | | | | | X | | | X | | | | | |
| | | W. Fond du Lac Avenue | | X | | | | | | | | | | | | | | | | |
| | | W. Silver Spring Drive | | X | | | | | | | | | | | | | | | | |
| | | W. Mill Road | | X | | | | | | | | | | | | | | | | |
| | | W. Acacia Street | | X | | | | | | | | | | | | X | | | | |
| | | W. Good Hope Road | | X | X | X | | | X | X | | | | | | | X | | | |
| | | W. Bradley Road | | X | X | | | | | | | | | | | | | | | 272,400 - 387,400 |
| 3 | N. Sherman Boulevard from W. Lisbon Avenue to W. Silver Spring Drive | N. Sherman Boulevard with: | | | | | | | | | | | | | | | | | | |
| | | W. Lisbon Avenue | | | | | | | | | | | X | | | | | | | |
| | | W. North Avenue | | X | X | | | | | | | | | | | | X | | | |
| | | W. Fond du Lac Avenue | | X | X | | | | | | | | | | | | X | | | |
| | | W. Roosevelt Drive | | | | | | | | | | X | | | | | | | | |
| | | W. Capitol Drive | | X | | | | | | | | | | | | | X | | | |
| | | W. Villard Avenue | | X | X | | | | | | | | | | | | | | | |
| | | W. Custer Avenue | | X | X | | | | | | | | | | | | X | | | 113,000 |
| 4 | W. Milwaukee Avenue and W. Vliet Street from W. Harwood Avenue to N. 20th Street | W. Milwaukee Avenue with: | | | | | | | | | | | | | | | | | | |
| | | N. 68th Street | X | | | X | | X | X | | | | | | | X | | | | |
| | | W. Vliet Street with: | | | | | | | | | | | | | | | | | | |
| | | W. Highland Boulevard | | X | | | | | | | | X | | | | | X | X | | |
| | | N. 35th Street | | X | | | | | | | | X | | | | | X | | | |
| | | N. 20th Street | | | X | | | | | | | | | | | | | | | 286,400 |
| 5 | W. Fond du Lac Avenue from N. 60th Street to W. Walnut Street | W. Fond du Lac Avenue with: | | | | | | | | | | | | | | | | | | |
| | | W. Maxwell Street | | | | | | | | | | X | | | | | | | | |
| | | N. 51st Street | | | X | | | | | | | | | | | | | | | |
| | | W. Capitol Drive | | X | | | | | | | | X | | | | | | | | |
| | | W. Burleigh Street | | | | | | | | | | | | | | | X | | | |
| | | W. Locust Street | | X | | | | | | | | | | | | | | | | |
| | | N. 28th Street | | | | | | | | | | | | | | | X | | | |
| | | N. 27th Street | | | X | | | | | | | | | | | | X | | | |
| | | N. 17th Street | | X | | | | | | | | | | | | | X | | | |
| | | W. North Avenue | | | X | | | | | | | | | | | | | | | |
| | | N. 16th Street | | X | X | | | | | | | | | | | | | | | 56,800 |
| 6 | N. 27th Street from the East-West Freeway (IH 94) to N. Teutonia Avenue | N. 27th Street with: | | | | | | | | | | | | | | | | | | |
| | | W. St. Paul Avenue | | | X | | | | | | | | | | | | | | | |
| | | W. Clybourn Street | | | X | | | | | | | | | | | | X | | | |
| | | W. Michigan Street | | | X | | | | | | | | | | | | X | | | |
| | | W. Highland Boulevard | | | X | | | | | | | | | | | | | | | |
| | | W. Lisbon Avenue | | | | | | | | | | X | | | | | | | | |
| | | W. Burleigh Street | | | X | | | | | | | | | | | | | | | |
| | | W. Townsend Street | | | X | | | | | | | | | | | | | | | |
| | | W. Capitol Drive | | X | X | | | | | | | X | | | | | X | | | |
| | | N. Teutonia Avenue | | | X | X | | | | | | | | | | | X | | | 94,800 - 159,800 |
| 7 | W. Silver Spring Drive from W. Appleton Avenue to N. Teutonia Avenue | W. Silver Spring Drive with: | | | | | | | | | | | | | | | | | | |
| | | N. 91st Street | | X | X | | | | | | | | | | X | | | | | |
| | | N. 68th Street | | X | | | | | | | | | | | | | | | | |
| | | N. 51st Street | | X | | | | | | | | | | | | | | | | 47,000 |
| 8 | Related street segments proceeding from the terminus of the Stadium Freeway-North "Stub End" | W. Appleton Avenue with: | | | | | | | | | | | | | | | | | | |
| | | W. Capitol Drive | | X | | | | | | | | | | | | | | | | |
| | | W. Burleigh Street | | X | X | | | | | | | | | | | | X | | | |
| | | N. 60th Street | | X | X | | | | | | | X | | | | | X | | | |
| | | W. Center Street | | | | | | | | | | | | | | | X | | | |
| | | W. Lisbon Avenue | | | | | | | | | | | | | | | X | | | |
| | | W. Lisbon Avenue with: | | | | | | | | | | | | | | | | | | |
| | | N. 55th Street | | | X | | | | | | | | | | | | X | | | |
| | | N. 51st Street | | | X | | | | | | | | | | | | | | | |
| | | W. North Avenue | | | | | | | | | | | | | | | | | | |
| | | N. 46th Street | | | X | | | | | | | | | | | | | | | |
| | | N. 35th Street | | | X | | | | | | | | | | | | | | | |
| | | N. 60th Street with: | | | | | | | | | | | | | | | | | | |
| | | W. Roosevelt Drive | | | X | | | | | | | | | | | | X | | | |
| | | W. Capitol Drive | | X | X | | | | | | | | | | X | | | | | |
| | | W. Burleigh Street | | X | X | | | | | | | | | | | | | | | 104,600 |
| 9 | N. 35th Street from the East-West Freeway (IH 94) to W. Capitol Drive | N. 35th Street with: | | | | | | | | | | | | | | | | | | |
| | | W. Michigan Street | | X | X | | | | | | | | | | | | | | | |
| | | W. Wisconsin Avenue | | X | | | | | | | | | | | | | | | | |
| | | W. State Street | | | | | | | | | | | | | | | X | | | |
| | | W. Capitol Drive | | X | X | | | | | | | X | | | | | | | | 56,200 |
| 10 | W. Wisconsin Avenue from N. 35th Street to N. 16th Street | (see N. 35th Street above) | | | | | | | | | | | | | | | | | | |

**Table 10 (continued)**

| Arterial Street and Highway Segment | | Controlled Intersections with Identified Traffic Problems | Recommended Actions | | | | | | | | | | | | | | | | Estimated Cost (dollars) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Traffic Signals | | | Turning Lanes | | | | | | | | | | | Regulation | | |
| | | | | | | Add New | | | | Lengthen Existing | | | | Widen Existing | | | | | |
| | | | | | | Right | | Left | | Right | | Left | | | | | | | |
| Number[a] | Description | | Install | Modify | Retime | Single | Double | Single | Double | Single | Double | Single | Double | Right | Left | Other Modification | Approach Parking Restrictions | Pavement Restriping | |
| 11 | N. 20th Street from W. North Avenue to W. Hopkins Street | None | | | | | | | | | | | | | | | | | -- |
| 12 | W. North Avenue from N. 124th Street to N. 76th Street | W. North Avenue with:<br>N. 124th Street<br>N. Mayfair Road | X | X | X<br>X | | | | | | | | | | X | | | | 153,000 |
| 13 | W. North Avenue from N. 35th Street to the North-South Freeway (IH 43) | (see W. Fond du Lac Avenue above) | | | | | | | | | | | | | | | | | |
| 14 | W. Capitol Drive from N. 76th Street to the North-South Freeway (IH 43) | W. Capitol Drive with:<br>N. 31st Street<br>N. 20th Street<br>W. Atkinson Avenue | | | X<br><br>X | | | | | | | | | | | | X<br>X<br>X | | 17,800 |
| 15 | N. 107th Street from W. Good Hope Road to W. Brown Deer Road | N. 107th Street with:<br>W. Good Hope Road<br>W. Brown Deer Road | | | X<br>X | | | | | | | | X | | X | | | | 35,000 |
| 16 | N. Mayfair Road from the East-West Freeway (IH 94) to W. Capitol Drive | N. Mayfair Road with:<br>W. Bluemound Road<br>W. Watertown Plank Road<br>W. Burleigh Street<br>W. Capitol Drive | | X<br>X<br>X<br>X | X<br><br>X<br>X | X | X | | | X | | | | | X<br><br>X<br>X | | X | X | 245,800 - 400,000 |
| 17 | W. Brown Deer Road from N. 91st Street to N. 76th Street | W. Brown Deer Road with:<br>N. 91st Street | | X | | | | | | | | | | | | | | | 2,000 |
| 18 | W. Good Hope Road from N. 76th Street to N. Teutonia Avenue | W. Good Hope Road with:<br>N. Teutonia Avenue | | X | X | | | | | | | X | | | X | | | | 34,000 |
| 19 | STH 57 from Donges Bay Road to Highland Road | STH 57 with:<br>Mequon Road (STH 167)<br>Green Bay Road<br>Friestadt Road | | X<br>X<br>X | | | | | | | | | | | | | | | 15,000 |
| 20 | STH 57 from Pioneer Road to the intersection of Washington Street and Grafton Avenue | STH 57 with:<br>Washington Street (STH 60)[b] | | | | | | | | | | | | | | | | | |

[a] *See Map 14.*

[b] *No recommended actions.*

Accordingly, the study also identified long-range improvements in both the public transit system and the surface arterial street system which would be required to resolve the remaining existing transportation problems in the study area, and to meet potential future demands for travel in and through the area.

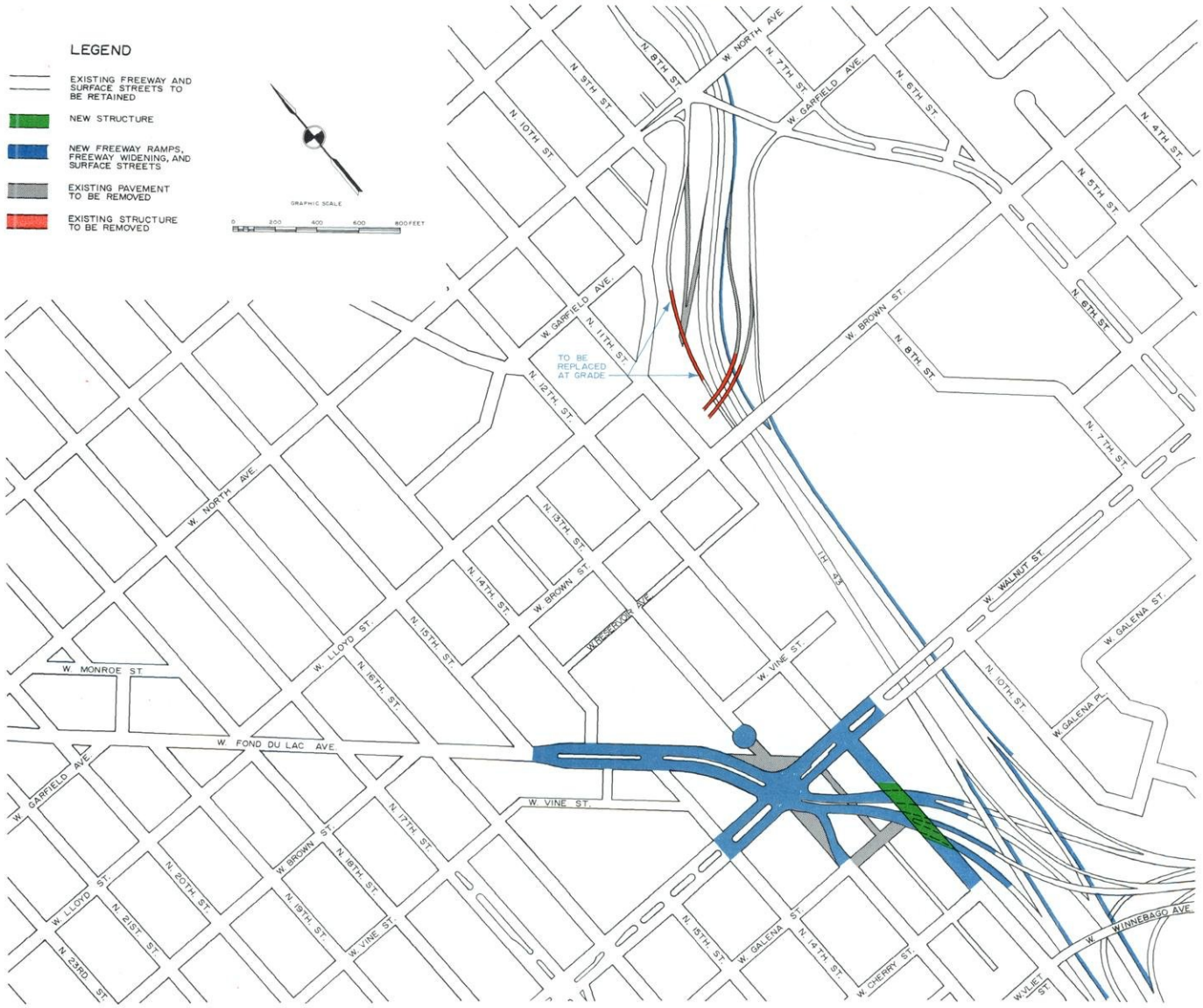
*Long-Range Plan*

As the first step in preparing a long-range transportation system plan for the study area, the transportation system problems and deficiencies which could be expected to exist under a "status quo" alternative—that is, an alternative which would entail no further major capital investment in transportation system improvements of any kind over the next 20 years in the study area—were identified. The principal deficiency of such a plan is substantially increased congestion on the arterial street system of the study area, and its attendant implications for user costs, air pollutant emissions, and motor fuel consumption.

In an attempt to abate this anticipated increase in traffic congestion with a minimum of disruption of existing development, and at minimum public cost, an alternative long-range plan was developed which would include the intensive, areawide application of traffic management measures such as those evaluated and recommended for the problem arterial street segments under the short-range plan, and substantial public transit improvement and expansion measures—specifically, those measures recommended to be implemented in the study area under the Commission-adopted, long-range, primary transit system plan for the greater Milwaukee area. Consideration of such a plan of extensive traffic management and public transit improvement measures was intended to ensure that such measures

Map 16

HILLSIDE INTERCHANGE "STUB END" FREEWAY PROJECT: IH 43




would be fully utilized prior to consideration of potentially more disruptive, and possibly more capital-intensive, arterial street improvements.

The third and final alternative long-range plan considered major arterial street and highway improvements in addition to the actions included in the second plan, as required to resolve the remaining identified arterial system capacity deficiencies. Under this plan, individual arterial street and highway improvements were designed and evaluated for each identified over-design-capacity arterial segment in the study area. Certain arterial improvements, although found to resolve existing and probable future traffic congestion, were not recommended by the Advisory Committee because of the disruption of existing development that the improvements would entail. Such improvements included, importantly, the improvement of W. Lisbon Avenue and W. Appleton Avenue, and improvements at the Stadium Freeway-North "stub end."

This third alternative long-range plan was selected as the preliminary recommended design year 2000 transportation system plan for the study area to be

Map 17

**RECOMMENDED STADIUM FREEWAY-NORTH "STUB END" PROJECT: USH 41**


taken to public hearing. The preliminary recommended plan for the study area consists of two major components: one dealing with arterial streets and highways and one dealing with public transit facilities and service.

*Preliminary Recommended Plan*

Under the preliminary recommended long-range transportation system plan for the study area, the arterial street and highway system included about 452 miles of facilities, an increase of about 11 miles of arterial facilities over the 1980 level.

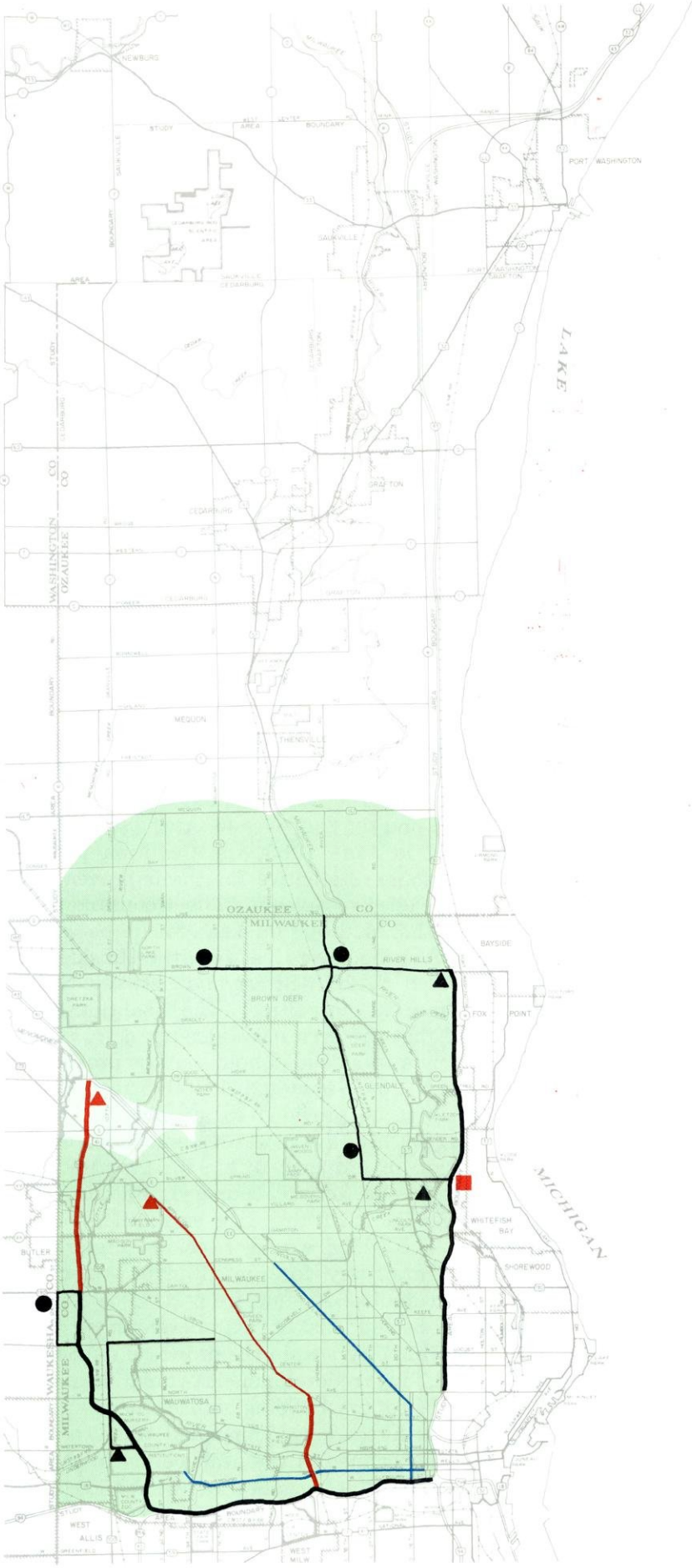
Two improvements were proposed for the freeway system of the study area under the preliminary recommended plan. The first was the addition of a new freeway interchange at IH 43 and Highland Road in the City of Mequon, and the second was the widening of IH 43 from two to three lanes either between Henry Clay Street and STH 167 in the City of Mequon, or between Henry Clay Street and W. Good Hope Road. Each of these improvements was as recommended in the adopted regional transportation system plan. In terms of surface arterial improvements, the preliminary recommended plan included 23 specific street widening projects and eight specific new facility construction projects. The preliminary recommended plan also included the prohibition of on-street parking during peak hours on an additional 13 street segments. A total of 86 miles of parking lanes would be required to carry traffic during peak hours.

The surface arterial improvements proposed under the preliminary recommended plan included no recommendation for the improvement of W. Fond du Lac Avenue from the Hillside Interchange to N. 35th Street. The Advisory Committee chose to make no recommendation for this segment of W. Fond du Lac Avenue prior to public hearing and, rather, proposed three alternatives. Two of the alternatives called for improving this segment of W. Fond du Lac Avenue from its present two traffic lanes and two parking lanes to three traffic lanes in each direction. One improvement alternative would widen this segment of W. Fond du Lac Avenue for its entire length. The other improvement alternative would carry the six-lane improved highway around the business district at W. Fond du Lac Avenue and W. North Avenue by way of a one-way pair routing. Either of these alternatives would have accomplished the staff-recommended improvement. The third alternative taken to public hearing called for improving this W. Fond du Lac Avenue segment only from the Hillside Interchange to approximately N. 23rd Street; thus, from N. 23rd Street to N. 35th Street a bottleneck would remain. Under this alternative, W. Fond du Lac Avenue from the Hillside Interchange to W. Garfield Avenue would be widened to six lanes along available right-of-way. The one-way pair around the business district would be constructed then to approximately N. 23rd Street to provide six traffic lanes. From N. 23rd Street to N. 35th Street, parking would be prohibited to provide two lanes in each direction.

The public transit system for the study area under the preliminary recommended transportation plan was defined to include the rapid, or primary, the express, or secondary, and the local, or tertiary, service as proposed to be provided in the study area under the newly adopted, long-range, primary transit system plan for the year 2000. This plan is more fully documented in SEWRPC Planning Report No. 33, A Primary Transit System Plan for the Milwaukee Area, and supporting reports.

Map 18

## RECOMMENDED SHORT-RANGE PLAN FOR PUBLIC TRANSIT IN THE MILWAUKEE NORTHWEST SIDE/ OZAUKEE COUNTY STUDY AREA




LEGEND

PRIMARY SERVICE

- EXISTING FREEWAY BUS LINE
- PROPOSED FREEWAY BUS LINE
- EXISTING NONFREEWAY EXTENSION
- PROPOSED NONFREEWAY EXTENSION

SECONDARY SERVICE

- PROPOSED EXPRESS BUS LINE

PARK AND RIDE LOTS

- EXISTING PUBLIC TRANSIT STATION
- PROPOSED PUBLIC TRANSIT STATION
- EXISTING SHOPPING CENTER LOT
- PROPOSED TRANSFER CENTER

TRANSIT SERVICE AREA

- EXISTING
- PROPOSED

GRAPHIC SCALE
0 1 2 MILES
0 4000 8000 12000 FEET

Specific details of this plan as it pertains to the study area can be obtained from these reports. Under the preliminary recommended plan, transit service would be extended to those parts of the study area expected to be developed at urban densities over the plan design period.

The rapid transit service would be provided by a rapid transit line—light rail or express bus—and 14 routes of motor buses operating in mixed traffic on freeways and over connecting surface arterials. The freeways would be operationally controlled by a ramp-metering system to permit the provision of a high level of transit service over the freeway system. The recommended rapid transit line would operate almost entirely at-grade over a transit mall, street medians, and existing railway right-of-way. Although the mode and final alignment of the rapid transit line was not determined in the system planning effort, three candidate alternative alignments were proposed in the planning effort.

The express level of transit service under the preliminary recommended plan would consist of express bus routes operated over surface arterial streets, with stops generally limited to intersecting transit routes. A total of seven express routes would be provided.

The local transit service under the preliminary recommended plan would consist of transit service provided over arterial and collector streets with frequent stops for passenger boarding and alighting. Under the plan, extensive additions to the local transit service routes would be provided where such services could be expected to recover at least 50 percent of the operating costs from farebox revenues. The plan envisions the ultimate extension of tertiary transit service to most of the urbanized parts of the study area, including areas of urban development in the southern half of Ozaukee County and northwestern Milwaukee County not now served.

The preliminary findings and recommendations of the northwest side transportation improvement study, including the preliminary recommended long-range transportation system plan, were presented at two public hearings held during February 1983. The reactions of interested citizens and public officials at the two public hearings to the study findings and preliminary recommendations were found to be related to three general areas of concern: 1) the segment of W. Fond du Lac Avenue from N. 35th Street to the Hillside Interchange; 2) the segment of the North-South Freeway (IH 43) from Mequon Road to Henry Clay Street; and 3) the City of Mequon arterial street system.

The record of the public hearings indicated substantial opposition to the improvement of the segment of W. Fond du Lac Avenue from N. 35th Street to the Hillside Interchange, with nearly the entire audience at the Milwaukee County public hearing opposed to the W. Fond du Lac Avenue improvement. Concern was particularly expressed over the taking of existing residences and businesses through the proposed improvement of W. Fond du Lac Avenue; the expected increase in traffic on an improved W. Fond du Lac Avenue, and the perceived attendant increases in air pollution and noise; the perceived potential of a widened W. Fond du Lac Avenue to make pedestrian crossings difficult and unsafe; and the elimination of existing on-street parking. Similar comments were expressed by local citizens and elected public representatives at a special informational meeting held at the request of representatives of Bethel Baptist Church in March 1983 at the church.

Two meetings were held subsequently between the Commission staff and a group of Bethel Baptist Church members—the Community Action Coalition to Save Fond du Lac Avenue. At the second meeting, held in June 1983, the Coalition proposed a compromise alternative for the improvement of W. Fond du Lac Avenue. The Coalition recommended that W. Fond du Lac Avenue be widened to a divided boulevard between the Hillside Interchange and N. 20th Street and between N. 30th Street and N. 35th Street. The Coalition recommended that the eventual widening of W. Fond du Lac Avenue to a divided boulevard be provided for between N. 20th Street and N. 30th Street, but that no widening be provided for an indefinite period of time. Specifically, it was recommended that the acquisition of property within the proposed right-of-way not be actively pursued. Rather, it was recommended that the City establish a building setback line which would, over time, reserve adequate right-of-way for the ultimate widening of W. Fond du Lac Avenue from N. 20th Street to N. 30th Street. That is, as redevelopment of the existing property within the proposed right-of-way occurred, any redevelopment would be required to adhere to the building setback base line. The Coalition further recommended that on-street parking be banned in the peak period in the peak direction on this segment of W. Fond du Lac Avenue on weekdays until the segment is widened.

Finally, the Coalition recommended that, to replace the lost on-street parking, additional off-street parking be provided in the area on the following four land parcels: 2007-2019, 2443, 2401-2405, and 2636-2650 W. Fond du Lac Avenue. In addition, the Coalition recommended that, in the interim, W. Fond du Lac Avenue between N. 20th Street and N. 30th Street be repaved and the sidewalks repaired.

The record of the public hearings indicated both support for and opposition to the proposed improvement of the North-South Freeway (IH 43) between Mequon Road and Henry Clay Street. Some of those expressing opposition questioned the need for the improvement of the North-South Freeway north of W. Brown Deer Road to Mequon Road. The other comments opposing the improvement of IH 43 held that the improvement would largely serve suburban residents of northern Milwaukee County and southern Ozaukee County, and would encourage further urban sprawl. Comments supporting the improvement of the North-South Freeway noted the existing traffic congestion and safety problems along this freeway between W. Henry Clay Street and W. Brown Deer Road and the potential future traffic congestion north of W. Brown Deer Road.

Comments were also received at the public hearings concerning the proposed improvements to the arterial street system of the City of Mequon. In this regard, support was expressed for the construction of an interchange on the North-South Freeway at Highland Road, and both opposition to and support for the widening of Wauwatosa Road between County Line Road and STH 60 were expressed. Additional comments were received from the City of Mequon Plan Commission at a meeting held in May 1983 and attended by Commission staff. At the meeting, the Plan Commission requested that three proposed improvements in the preliminary plan—the proposed interchange at the North-South Freeway (IH 43) and Highland Road, the proposed widening of Mequon Road (STH 167) from Buntrock Avenue to Wauwatosa Road (STH 181), and the proposed widening of Wauwatosa Road (STH 181) from County Line Road to Mequon Road—be given the highest possible priorities for construction. The Plan Commission also requested that one facility, Donges Bay Road, be added to the plan as an arterial facility from Port Washington Road to River Road. Lastly, the Plan Commission requested that Lakeshore Drive, which is outside the Milwaukee Northwest Side/Ozaukee County study area, be considered as a collector street facility and no longer as an arterial facility.

Finally, other comments received at the public hearings addressed the extension of Falls Road in the Village of Grafton from STH 57 to Port Washington Road, including a new bridge over the Milwaukee River, and the improvement of STH 60 from STH 57 to the North-South Freeway (IH 43). Comments opposing the extension of Falls Road cited the potential impacts of increased traffic volumes resulting from the extension on residential neighborhoods, property values, and natural resources. Comments expressed at the public hearings concerning STH 60 between STH 57 and the North-South Freeway (IH 43) suggested the need to provide more than the recommended two lanes, and indicated that sufficient right-of-way was available to provide for these additional lanes.

Based upon the public reaction to the preliminary recommended system plan, the Commission staff concluded that the following recommendations should be made for Advisory Committee consideration in preparing the final recommended Milwaukee Northwest Side/Ozaukee County transportation system plan:

- W. Fond du Lac Avenue should be recommended to be widened from N. 35th Street to N. 30th Street and from N. 20th Street to the Hillside Interchange. Between N. 20th Street and N. 30th Street, no action should be taken toward widening W. Fond du Lac Avenue. However, a setback line should be established which would permit the widening to occur at some long-term future date. Redevelopment projects would be required to adhere to the setback line. In the interim, parking would be prohibited in the peak direction during peak travel periods on this segment of W. Fond du Lac Avenue, and off-street parking would be developed to replace the lost parking supply, possibly including lots on the following vacant parcels: 2007-2019, 2443, 2401-2405, and 2636-2650 W. Fond du Lac Avenue.

- Change the recommendation in the preliminary plan for STH 60 between STH 57 and the North-South Freeway (IH 43) from two to four traffic lanes.

- Reaffirm the recommendation in the preliminary plan to widen the North-South Freeway (IH 43) from W. Henry Clay Street to Mequon Road.

- Reaffirm the recommendation in the preliminary plan to widen Wauwatosa Road from two to four traffic lanes from W. County Line Road to STH 60.

- Reaffirm the recommendation in the preliminary plan to construct the Falls Road bridge in the Village of Grafton.

- Recommend adding Donges Bay Road from Port Washington Road to River Road to the local trunk arterial street system of the City of Mequon.

- Reaffirm the remainder of the preliminary plan recommendations.

On July 1, 1983, after the Commission staff determined its final recommendations for the Advisory Committee, but prior to the official transmittal of those recommendations, State legislation was enacted prohibiting the use of state and federal funds for the widening of the North-South Freeway (IH 43) between Bender Road and the north Ozaukee County line, and for the widening of W. Fond du Lac Avenue between N. 19th Street and N. 35th Street in the City of Milwaukee. The new State legislation necessitated that changes be made to the Commission staff recommendations to the Advisory Committee for the North-South Freeway (IH 43) and W. Fond du Lac Avenue. The recommendations for the North-South Freeway (IH 43) were revised to recommend widening that freeway only between Henry Clay Street and Bender Road; and, for W. Fond du Lac Avenue, to recommend widening only between the Hillside Interchange and N. 19th Street. W. Fond du Lac Avenue between N. 19th Street and N. 35th Street would not be widened. The Commission staff did, however, recommend that on-street parking be prohibited during peak traffic periods in the peak direction on W. Fond du Lac Avenue between N. 19th Street and N. 35th Street so that four lanes for moving traffic would be provided on this segment. The Commission staff further recommended that the City of Milwaukee establish a setback line on W. Fond du Lac Avenue between N. 19th Street and N. 35th Street so that, in the event that State legislation changed, the widening of W. Fond du Lac Avenue could occur without requiring right-of-way acquisition and significant disruption of homes, businesses, or industries.

The Advisory Committee to the Milwaukee Northwest Side/Ozaukee County transportation improvement study met on August 1, 1983, to consider the public reaction to the preliminary recommended transportation system improvement plan and the Commission staff recommendations for committee action. The Advisory Committee carefully considered the results of the public hearings and approved all of the recommendations of the Commission staff. The major highway improvements approved by the Advisory Committee under the recommended plan are presented in Table 11. The recommended transportation plan for the study area is shown on Map 19.

*Final Recommended Plan*

In summary, the recommended plan provides facilities and services intended to substitute, to the degree practicable, for the no-longer-planned Park Freeway-West and Stadium Freeway-North "gap closures." Major transportation facilities and measures provided for under the newly recommended plan which were not provided for under the previously adopted, regional, long-range transportation system plan include: 1) the completion of the Hillside Interchange, specifically providing a connection between the North-South Freeway (IH 43) and the Park Freeway-East and the surface arterial street system at the Hillside Interchange; 2) the widening of W. Fond du Lac Avenue between the Hillside Interchange and N. 19th Street; 3) the addition of a new N. 68th Street in north-central Milwaukee County between N. Industrial Road and W. Brown Deer Road; 4) extensive traffic management actions to increase the capacity of arterial intersections within the study area; and 5) a public transit system plan for the study area which will include expanded local and express bus service, and a substantially expanded primary transit system consisting of expanded bus-on-freeway service and a new light rail line in the Milwaukee County portion of the study area.

While the recommended plan, through these additional facilities, provides for the abatement of much of the traffic congestion which would be expected within the study area in the absence of the Park Freeway-West and Stadium Freeway-North, it does not and cannot provide for the complete replacement of the traffic-carrying capacity and level of transportation service which would have been provided by these two freeway facilities. This is due, in part, to the inherent efficiency of freeway facilities, and in part to the fact that, during the course of the study, the Advisory Committee determined not to recom-

Table 11

## RECOMMENDED HIGHWAY IMPROVEMENT AND EXPANSION ACTIONS UNDER THE NORTHWEST CORRIDOR TRANSPORTATION PLAN AND THE RECOMMENDED RESPONSIBLE UNITS OF GOVERNMENT

| Roadway Type | Recommended Highway Improvement Action | Existing Jurisdiction | Proposed Jurisdiction |
|---|---|---|---|
| Freeway | Freeway Expansion | | |
| | ● Completion of Hillside Interchange | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| | ● Ramp addition at Stadium Freeway-North "stub end" | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| | ● Construction of freeway interchange at IH 43 and Highland Road | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| | Freeway Widenings | | |
| | ● Widening of IH 43 from 4 lanes to 6 lanes through Hillside Interchange | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| | ● Widening of IH 43 from 4 lanes to 6 lanes from Henry Clay Street through W. Bender Road[c] | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| Standard Arterial[a,b] | Arterial Expansion | | |
| | ● Granville Road from Friestadt Road to Highland Road (new roadway with 2 travel lanes) | City of Mequon | Ozaukee County |
| | ● River Road from Mequon Road (STH 167) to Friestadt Road (new roadway with 2 travel lanes) | -- | City of Mequon |
| | ● River Road from Highland Road to Bonniwell Road (new roadway with 2 travel lanes) | -- | City of Mequon |
| | ● 1st Avenue from Rose Street to Cedar Creek Road (new roadway with 2 travel lanes) | -- | Village of Grafton |
| | ● Extended N. 124th Street from STH 145 to W. Brown Deer Road (new roadway with 4 travel lanes) | -- | Milwaukee County/ Waukesha County |
| | ● New N. 68th Street from Industrial Road to W. Brown Deer Road (new roadway with 2 travel lanes) | -- | City of Milwaukee |
| | ● Extended N. 124th Street from W. Greenfield Avenue to W. Watertown Plank Road (new roadway with 4 travel lanes) | -- | Milwaukee County/ Waukesha County |
| | ● Falls Road from STH 57 to Port Washington Road (new roadway with 2 travel lanes) | -- | Village of Grafton |
| | Arterial Widenings[a] | | |
| | ● Wauwatosa Road from W. County Line Road to STH 60 (from 2 travel lanes to 4 travel lanes) | Wisconsin Department of Transportation/ City of Mequon/ Ozaukee County | Wisconsin Department of Transportation |
| | ● STH 60 from STH 143 to STH 57 northbound (from 2 travel lanes to 4 travel lanes) | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| | ● STH 167 from Wausaukee Road to IH 43 (from 2 travel lanes to 4 travel lanes from Wausaukee Road to Swan Road and from 2 travel lanes to 4 travel lanes from Swan Road to IH 43) | Wisconsin Department of Transportation | Wisconsin Department of Transportation |

Table 11 (continued)

| Roadway Type | Recommended Highway Improvement Action | Existing Jurisdiction | Proposed Jurisdiction |
|---|---|---|---|
| Standard Arterial (continued) | ● W. Bradley Road from N. 124th Street to N. 91st Street (from 2 travel lanes to 4 travel lanes) | City of Milwaukee | City of Milwaukee |
| | ● W. Good Hope Road from N. 124th Street to N. 115th Street (from 2 travel lanes to 4 travel lanes) | -- | Milwaukee County/ Wisconsin Department of Transportation |
| | ● W. Good Hope Road from USH 45 to N. 107th Street (from 4 travel lanes to 6 travel lanes) | City of Milwaukee/ Wisconsin Department of Transportation | Milwaukee County |
| | ● STH 145 from W. Fond du Lac Avenue to the Waukesha/Milwaukee County line (from 2 travel lanes to 4 travel lanes) | Wisconsin Department of Transportation | Wisconsin Department of Transportation |
| | ● N. Boundary Road from W. Brown Deer Road to W. County Line Road (from 2 travel lanes to 4 travel lanes) | City of Milwaukee | Milwaukee County/ Waukesha County |
| | ● N. 91st Street from W. Good Hope Road to W. Bradley Road (from 2 lanes to 4 travel lanes) | City of Milwaukee | City of Milwaukee |
| | ● N. 43rd Street from W. Mill Road to W. Bradley Road (from 2 travel lanes to 4 travel lanes) | Milwaukee County | City of Milwaukee/ Village of Brown Deer |
| | ● N. Green Bay Avenue from W. Silver Spring Drive to N. Teutonia Avenue (from 2 travel lanes to 4 travel lanes) | Wisconsin Department of Transportation | Milwaukee County |
| | ● N. 107th Street and related segments of W. Fond du Lac Avenue (from 2 travel lanes to 4 travel lanes on STH 145 and N. 107th Street between the ramps to and from the southeast-bound lanes of the Fond du Lac Freeway and the northwest-bound off-ramp from the Fond du Lac Freeway; from 2 travel lanes to 4 travel lanes north to W. Greenwood Terrace; and from 2 travel lanes to 4 travel lanes north to W. Brown Deer Road) | Wisconsin Department of Transportation/ City of Milwaukee | Wisconsin Department of Transportation/ City of Milwaukee |
| | ● N. 76th Street from Harmonee Avenue to W. North Avenue (from 2 travel lanes to 4 travel lanes) | Wisconsin Department of Transportation | Milwaukee County |
| | ● W. Fond du Lac Avenue from N. 19th Street to the Hillside Interchange (from 2 travel lanes to 6 travel lanes)[d] | Wisconsin Department of Transportation/ City of Milwaukee | Wisconsin Department of Transportation/ City of Milwaukee |
| | ● N. 68th Street from IH 94 to W. Blue Mound Road (from 2 travel lanes to 4 travel lanes) | City of Milwaukee/ City of Wauwatosa | City of Milwaukee/ City of Wauwatosa |
| | ● N. 124th Street from W. Watertown Plank Road to W. North Avenue (from 2 travel lanes to 4 travel lanes) | City of Wauwatosa/ City of Brookfield | Milwaukee County/ Waukesha County |
| | ● N. 124th Street from W. North Avenue to W. Hampton Avenue (unimproved segments from 2 travel lanes to 4 travel lanes) | City of Wauwatosa/ City of Brookfield/ Village of Butler | Milwaukee County/ Waukesha County |
| | ● N. 124th Street from W. Hampton Avenue to W. Silver Spring Drive (from 2 travel lanes to 4 travel lanes) | City of Milwaukee/ City of Menomonee Falls | Milwaukee County/ Waukesha County |
| | ● STH 60 from STH 57 to IH 43 (from 2 travel lanes to 4 travel lanes)[e] | Wisconsin Department of Transportation/ Village of Grafton | Wisconsin Department of Transportation/ Village of Grafton |

Table 11 (continued)

| Roadway Type | Type of Traffic Management Action | Number of Recommended Actions by Proposed Jurisdictional Agency | | | |
|---|---|---|---|---|---|
| | | City of Milwaukee | Wisconsin Department of Transportation | Milwaukee County | City of Wauwatosa |
| Standard Arterial (continued) | ● Traffic Signal Modifications or Additions | 69 | 30 | 6 | 3 |
| | ● On-Street Parking Prohibition or Pavement Markings on Intersection Approach | 16 | 19 | 2 | 2 |
| | ● Left-Turn-Lane Lengthening or Expansion | 10 | 14 | 6 | 2 |
| | ● Left-Turn-Lane Addition | 1 | 2 | 0 | 5 |
| | ● Right-Turn-Lane Lengthening or Expansion | 1 | 2 | 0 | 0 |
| | ● Right-Turn-Lane Addition | 0 | 3 | 1 | 3 |

[a] *Arterial widening projects listed do not include those roadway improvement projects to be undertaken during the design period which would constitute the conversion of an arterial segment from a rural to an urban cross-section. Under the study it is assumed that all arterial segments located within the Milwaukee urbanized area will be converted to an urban cross-section by the year 2000. Under such conversion, it is typically proposed to convert a 24-foot-wide rural roadway to a 48-foot-wide urban pavement, the latter with two traffic lanes and two parking lanes, curb and gutter, and sidewalks. In areas of fringe urban or suburban development, however, where urban development would only back onto arterials, a 24-foot-wide pavement with six-foot-wide shoulders may be used as a minimum urban cross-section.*

[b] *The selection of the roadway cross section with which each recommended improvement will be provided will be made by the affected units of government during the preliminary engineering phase of plan implementation.*

[c] *Due to state legislation enacted July 1, 1983, the final plan—unlike the preliminary recommended plan—does not recommend widening of the North-South Freeway (IH 43) from Bender Road to Mequon Road.*

[d] *As a result of the public hearings held on the preliminary plan and state legislation enacted July 1, 1983, the final plan recommends that no action be taken towards widening W. Fond du Lac Avenue from N. 19th Street to N. 35th Street. It is, however, recommended that the City of Milwaukee establish a setback base line by official mapping to which all future redevelopment must adhere. This setback base line should be established along the arterial between N. 19th Street and N. 35th Street. Preliminary study indicates that the setback base line should be located along the south side of the street between N. 19th and N. 35th Streets and should be located 54 feet from the existing right-of-way line. The final location of the setback base line, however, should be determined by the City after further study and public hearing.*

[e] *As a result of the public hearings held on the preliminary plan, the final plan—unlike the preliminary plan—recommends that STH 60 from STH 57 to IH 43 be widened to provide four, rather than two, lanes.*

mend certain major improvements to the arterial street and highway system of the study area, and to the fact that during the course of the study State legislation was enacted that prohibited certain such improvements. Principal among such improvements would have been the more complete integration of the Stadium Freeway-North "stub end" into the surface arterial street system, as well as the improvement of the arterials which provide major access to the Stadium Freeway-North—W. Lisbon and W. Appleton Avenues. Without these improvements, the plan is unable to provide the traffic-carrying capacity, congestion abatement, and level of transportation service which the Park Freeway-West and Stadium Freeway-North would have provided.

At the meeting of the Regional Planning Commission held on September 8, 1983, the recommendations of the study Advisory Committee were considered and accepted and the final recommended transportation system plan for the Milwaukee Northwest Side/Ozaukee County study area was adopted. Subsequently, the adopted plan was certified to the various state and federal agencies, county governments, and local city, town, and village governments that can be expected to be directly involved with implementation of the plan elements. Additional copies of the plan were distributed to various other public offices and agencies, private concerns, and individuals and libraries with interest in the findings and recommendations of this study.

Map 19

# RECOMMENDED TRANSPORTATION PLAN FOR THE MILWAUKEE NORTHWEST SIDE/OZAUKEE COUNTY STUDY AREA: 2000


## LEGEND

**ARTERIAL STREET AND HIGHWAY SYSTEM**

JURISDICTIONAL CLASSIFICATION

- STATE TRUNK – FREEWAY
- STATE TRUNK – NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK
- FREEWAY – NONFREEWAY INTERCHANGE
- 4 — NUMBER OF TRAFFIC LANES (TWO LANES WHERE UNNUMBERED)
- 4 | 6 — CHANGE IN NUMBER OF TRAFFIC LANES

**AIRPORT CLASSIFICATION SYSTEM**

- GU - GENERAL UTILITY

**URBAN MASS TRANSIT SYSTEM**

- SERVICE AREA
- TRANSIT STATION
  - P - WITH PARKING
- PARK AND POOL LOT
- PRELIMINARY RAPID TRANSIT ROUTE (LIGHT RAIL ALTERNATIVE ALIGNMENTS TO BE EXAMINED ALONG WITH EXPRESS BUS ALTERNATIVES IN PHASE II STUDY.)

GRAPHIC SCALE
0 1 2 MILES
0 4000 8000 12000 FEET

Also during 1983, some important recommendations of the plan were implemented. With respect to the long-range recommendations made for the arterial street and highway system, work on the Hillside Interchange was completed during 1983, essentially as recommended under the plan. Specifically, ramp construction was completed which connected the North-South Freeway at the Hillside Interchange proper with W. Fond du Lac Avenue and W. Walnut Street. At the Hillside Interchange northern spur, the removal of existing ramps and ramp bridges was completed. With respect to the short-range recommendations of the plan for the arterial street and highway system, work was undertaken implementing the plan recommendations for improving the intersection of N. 76th Street and W. Good Hope Road. Plan recommendations which were implemented in the reconstruction of this intersection included all recommendations concerning closing and relocating median openings along 76th Street in proximity to W. Good Hope Road, the construction or modification of left-turn lanes, and the modification of traffic signals.

### Milwaukee Northwest Corridor Rapid Transit Study

In 1982, the recommendations proceeding from the Milwaukee area rapid transit study—also referred to as Phase I, or the initial phase, of the Milwaukee area primary transit system alternatives analysis—were issued. The findings, conclusions, and recommendations of this important study are documented in SEWRPC Planning Report No. 33, A Primary Transit System Plan for the Milwaukee Area and summarized in the Commission's 1982 Annual Report. One of the recommendations of this study was to consider further the construction of a light rail transit line in the northwest corridor of Milwaukee County. To facilitate the necessary facility planning and preliminary engineering work, Milwaukee County Executive William F. O'Donnell, in May 1982, requested that the Commission assist the County in the preparation of a prospectus which would set forth the need for a detailed corridor planning study and the general scope of the necessary work. The initial draft of this study prospectus, which was prepared by the Commission staff during the fourth quarter of 1982, was carefully reviewed and approved by the prospectus steering committee at the steering committee's first meeting in January 1983.

Following completion of the prospectus and at the request of the Milwaukee County Executive, the Commission filed on behalf of Milwaukee County an application with the U. S. Department of Transportation, Urban Mass Transportation Administration, for funds in partial support of the conduct of a detailed corridor planning study. The grant application was approved in October 1983 in the amount of $713,800, the full 80 percent federal share. The remaining $178,450 of the study budget is to be funded equally by the Wisconsin Department of Transportation and Milwaukee County.

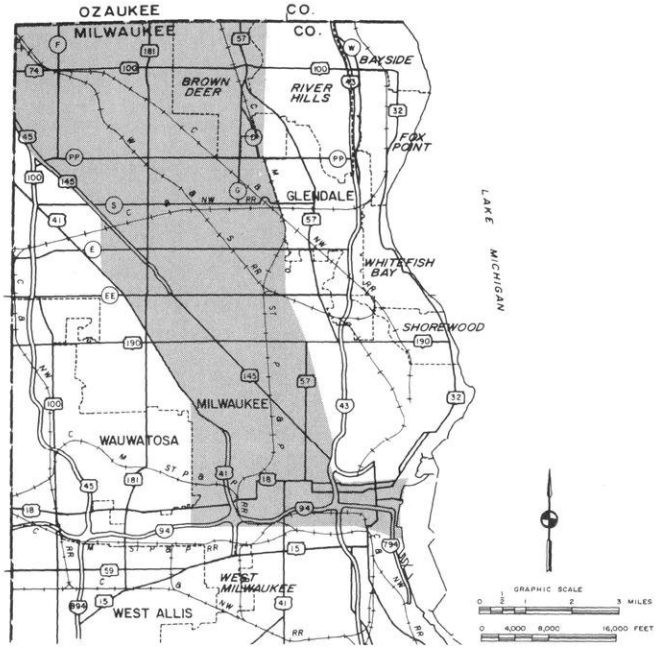
The scope of the detailed planning study consists of six major elements: program organization; a detailed analysis of express bus and light rail transit alternatives in the corridor; an assessment of the potential for light rail transit to influence urban land development and redevelopment in the northwest corridor; an environmental impact analysis; public involvement activities; and the selection of a locally preferred alternative. The rapid transit alternatives will be examined in detail, with consideration being given to an "existing system" alternative, express bus alternatives, and light rail transit alternatives, all within the northwest corridor. The boundaries of the Milwaukee northwest corridor are shown in generalized form on Map 20.

The findings and conclusions of the Milwaukee northwest corridor rapid transit study will be documented in two major study reports—one presenting the findings of the analysis of alternatives combined with the draft environmental impact statement, and the other presenting the locally recommended alternative. Other documentation will include a scoping report, a study design, technical methodology memoranda, and a series of technical staff memoranda presenting the findings of the different study tasks. The study will also include extensive public involvement activities. It is anticipated that the technical work of the study will be completed by the summer of 1985, and that a locally preferred alternative will be selected by the fall of 1985.

In September 1983, the Commission staff was notified by the Urban Mass Transportation Administration, Region V office, that the technical study grant for the detailed corridor planning had been approved and that actual work could begin. Program organization activities were begun, including conduct of the formal "scoping process," as required by the UMTA. The scoping process includes the preparation of official notices, the preparation of a draft scoping report—that is, a report outlining the proposed scope of the work—and the conduct of public scoping meetings. Activities necessary to select a consultant to perform the technical work of the study were also begun.

Map 20

THE MILWAUKEE NORTHWEST CORRIDOR




By December 31, 1983, the first meeting of the study advisory committee was held for the purpose of reviewing the initial draft of the study scoping report, together with the schedule for the entire scoping process and the consultant selection procedures. These items were then transmitted to the Mass Transit Committee of the Milwaukee County Board of Supervisors for its review and approval in January 1984.

## TRANSPORTATION SYSTEMS MANAGEMENT PLANNING

### City of Waukesha Transit System Operations Analysis

In 1983, the Commission completed a transit study for the City of Waukesha and published the recommendations in SEWRPC Community Assistance Planning Report No. 83, A Transit System Operations Analysis for the City of Waukesha Transit System. The study was an outgrowth of SEWRPC Community Assistance Planning Report No. 31, Waukesha Area Transit Development Program: 1981-1985, which was completed by the Commission in 1980, and which resulted in the initiation of a new fixed route bus system in the City of Waukesha in 1981. The study undertaken for the City of Waukesha had been initiated in mid-1982 and was designed to address specific operating questions which had arisen during the transit system's first year of operation. For the most part, these questions dealt with the fares, service hours, and scheduling techniques of the transit system. However, the study also determined whether transit service could be improved to major trip generators or expanded to unserved areas of the City; if the transit service satisfied the travel patterns of the residents of the City and environs; and whether the financial performance of the transit system could be improved. To provide guidance in conducting the study, Mayor Paul J. Keenan reactivated the Waukesha Mass Transit Citizens and Technical Coordinating and Advisory Committee in July 1982 and requested the Commission to assist that Committee in identifying potential service improvements.

The major analysis conducted under the study consisted of a two-level performance evaluation of the Waukesha transit system. At the first level, performance was assessed on a systemwide basis. This assessment not only examined the extent to which the existing system served the population and major land uses of the Waukesha area, but also compared the ridership and financial performance of the transit system during its first full year of operation with the ridership and financial projections set forth in the adopted transit development program. Under the second level of evaluation, the performance of each route in the transit system was evaluated based upon its operating characteristics, ridership, and financial performance at the beginning of the second year of operation.

This analysis indicated that, while the transit system had been successfully implemented and had generally exceeded the ridership projections for its first year of operation, operational improvements could be implemented which would further enhance system performance levels. Accordingly, the recommended program of transit service improvements prepared under the study includes routing changes for individual routes as well as changes in route schedules.

The most significant routing change recommended was the elimination of one route, Route 10—a route with very low performance levels. Other recommended changes in routing included the extension of two routes—Route 2 and Route 6—from their present route termini to the K-Mart/South High School area of the City of Waukesha, which attracted a significant volume of trips from the areas served by these two routes; modification of one route—Route 8—to serve an elderly housing

complex served by Route 10; and the extension of regular route service over one route—Route 9—to The Windings and Pebble Valley residential areas of the City of Waukesha. No routing changes were recommended for the other four routes of the transit system. The revised route structure for the Waukesha transit system, with the recommended route changes, is shown on Map 21. Schedule changes included changes in the early morning and late afternoon pulsed arrival and departure times for buses at the central transfer location in downtown Waukesha to provide extra cycle time for some routes, and to provide departure times which better serve important transit trip generators in the downtown area. Changes were also recommended in individual route schedules to eliminate unproductive bus trips on some routes and to add needed service on other routes.

The analyses conducted during the course of the study also indicated that it would be desirable for the Waukesha transit system to consider additional actions to bring the ridership and financial performance of the transit system closer to that observed on Wisconsin transit systems of similar size. Accordingly, a change in the student transportation policy of the Waukesha Unified School District basically to eliminate yellow school bus service within the service area of the Waukesha transit system was proposed because it would significantly increase student ridership on the Waukesha transit system. However, the Advisory Committee recommended that the Waukesha Transit System Utility Board continue to examine this proposal before making a final decision on whether the proposed service would be beneficial to the City and should be recommended for implementation. While not including the proposed policy change, the recommended program of transit service improvements did include two additional bus routes directed at improving the level of transit service provided to Waukesha secondary schools, as shown on Map 22.

Other service improvements which were considered to increase total system ridership included a reduction of the midday service frequency from 60 minutes to 30 minutes on the four shorter routes of the transit system; the provision of transit service in the evening; and the provision of Saturday transit service. Of these three service improvements, Saturday transit service was found to have the best potential ridership and financial performance characteristics. However, because of the significant increases in local financial commitment that could be required to implement these improvements, no recommendations were made concerning these services other than that they be considered in the future by the City of Waukesha.

Finally, a fare increase, to be implemented in 1984, was also proposed for the Waukesha transit system to raise the proportion of operating expenses recovered from farebox revenues. However, the Advisory Committee did not make any recommendation concerning a specific amount or the timing of a fare increase. Rather, the Committee suggested that a policy directly relating increases in fares to increases in the costs of providing transit service be established as a guide to the timing and amount of fare increases.

At year's end, the transit system had implemented most of the routing and scheduling changes recommended in the transit service improvement program.

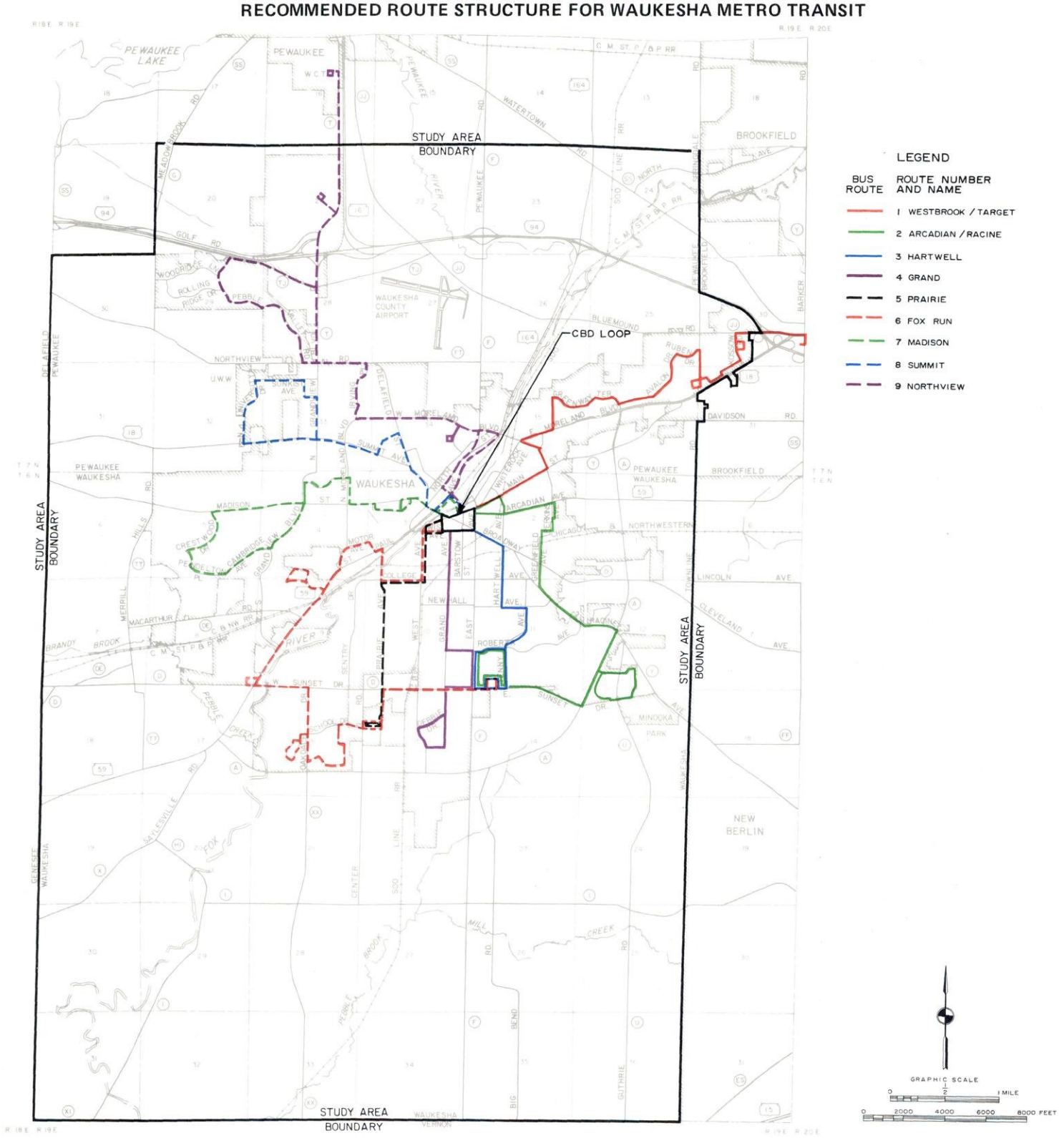
### Freeway Traffic Management Study

During 1983, 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 including those which would otherwise be congested and subject to stop-and-go traffic. Buses and carpool and vanpool vehicles would be

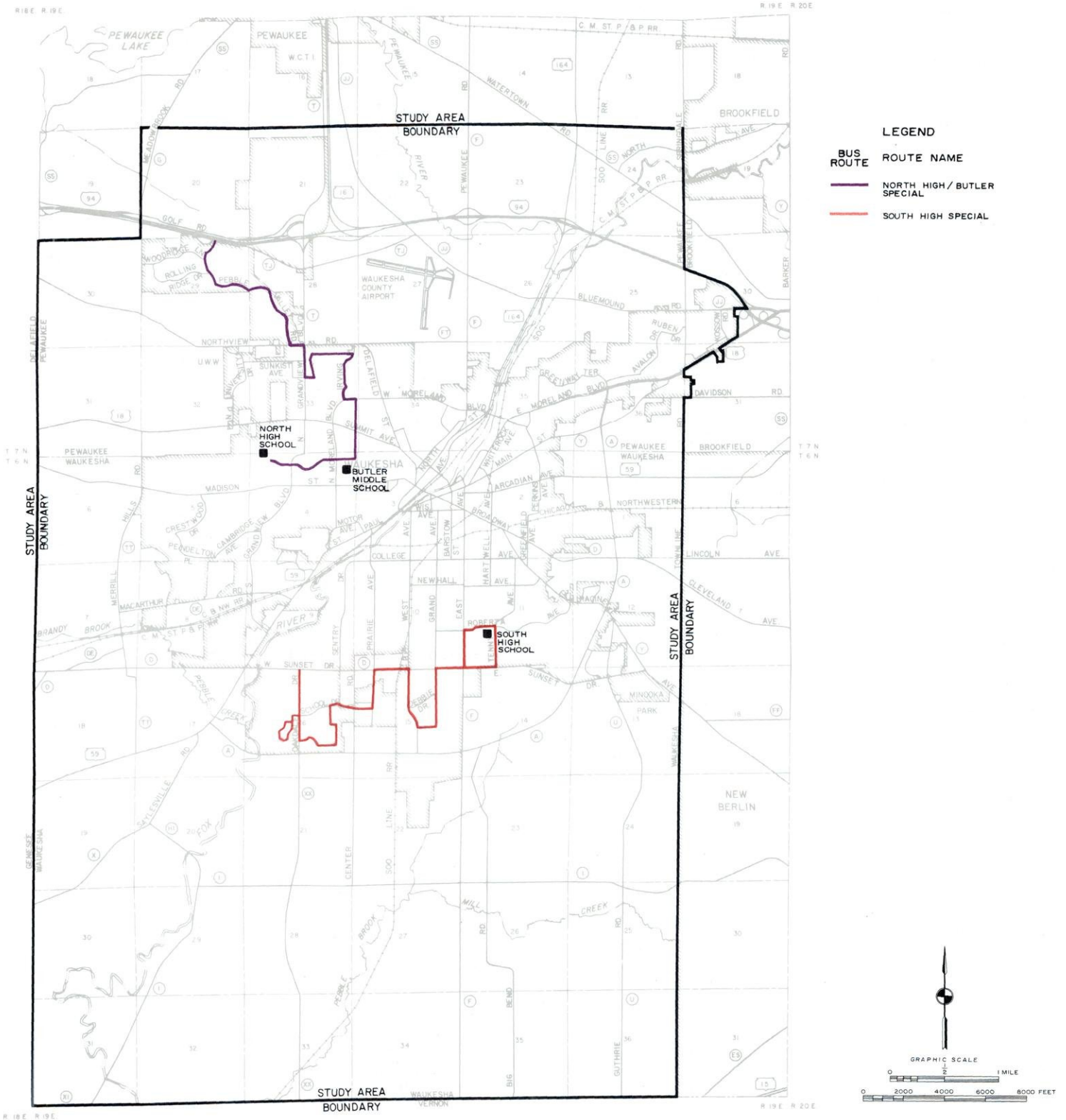
## Map 21

## RECOMMENDED ROUTE STRUCTURE FOR WAUKESHA METRO TRANSIT



Map 22

## RECOMMENDED SCHOOL TRIPPER ROUTES FOR WAUKESHA METRO TRANSIT



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 received by buses and carpool and vanpool vehicles on area freeways will substantially increase. The peak-period level of service received by 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 1983, the Commission staff began the collection and collation of the physical and operational characteristics of the Milwaukee area freeway system. In order to better understand freeway travel habits and patterns, and particularly to determine which freeway on- and off-ramps were used by vehicles traveling through congested segments of the freeway system, this work element included the conduct of a series of license plate surveys at freeway on- and off-ramps. In addition to the license plate itself, vehicle occupancy and vehicle type information were recorded for each observation. The Milwaukee area freeway system was broken into seven segments, and each segment was surveyed during the a.m. and p.m. peak travel periods. The segments were delineated so as to facilitate the combining of segment license plate data, thus building areawide travel pattern information. Wisconsin Department of Transportation personnel collected travel time data concurrently with the license plate surveys for each segment.

The license plate data were transcribed and keypunched to facilitate electronic data processing. The computer software required to process the license plate data was developed, and the nearly 690,000 recorded observations were processed. In addition to the license plate surveys, an inventory was conducted of the physical characteristics of standard arterials that parallel the freeways, and to which a part of existing freeway demand may be diverted as a result of the implementation of an areawide freeway traffic management system. The physical characteristics of the freeway system were collated from data banks of the Commission, the Wisconsin Department of Transportation, and Milwaukee County.

### 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 had been conducted by Milwaukee County from April 1975 to April 1976. The Commission assisted in that effort, including the conduct of an evaluation of the effectiveness of the carpooling project and determination of 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 carpooling 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 again conducted an assessment of the program directed toward determining the changes in the extent of ridesharing over the duration of the three-year program; the characteristics of existing 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 and published 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. The Commission will continue to assist in this effort by providing the computer facilities necessary to conduct the matching program.

### City of Burlington/Chestnut Street Design and Improvement Study

At the request of the City of Burlington, the Commission completed in 1983 a study of the feasibility of removing a substantial volume of traffic from Chestnut Street between Milwaukee Avenue and Pine Street by rerouting the marked and traveled ways for STH 11 eastbound and STH 83 southbound through the central business district of the City. The existing routings for STH 11, STH 36, and STH 83 through the City of Burlington central business district are shown on Map 23.

The primary purpose of removing traffic from the segment of Chestnut Street was to permit the redevelopment of this segment of this street, providing improved on-street parking, wider pedestrian walks, and related amenities.

Six rerouting alternatives were considered, of which three were found by the Commission staff to be practicable and of reasonable cost, providing for a significant reduction of traffic on the segment of Chestnut Street concerned and permitting implementation of the desired parking and sidewalk improvements. In addition, three alternatives for site and landscape development compatible with these routing realignments were prepared.

On July 13, 1983, the City of Burlington Plan Commission adopted one of the three rerouting alternatives, shown on Map 24, and an alternative site plan, shown in Figure 31. At year's end, no further formal action had been taken to implement these plans.

### Transit System Plans and Programs

During 1983 the Commission began preparation of new transit system development plans and programs for the transit systems serving the Racine and Kenosha metropolitan areas. 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 in the same way as previous plans and programs provided direction to these two cities during the mid-1970's after they had acquired the old, privately operated bus systems serving each area. 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. To advise and assist the Commission staff in the preparation of the new plans, a public transit planning advisory committee was established for each metropolitan area.

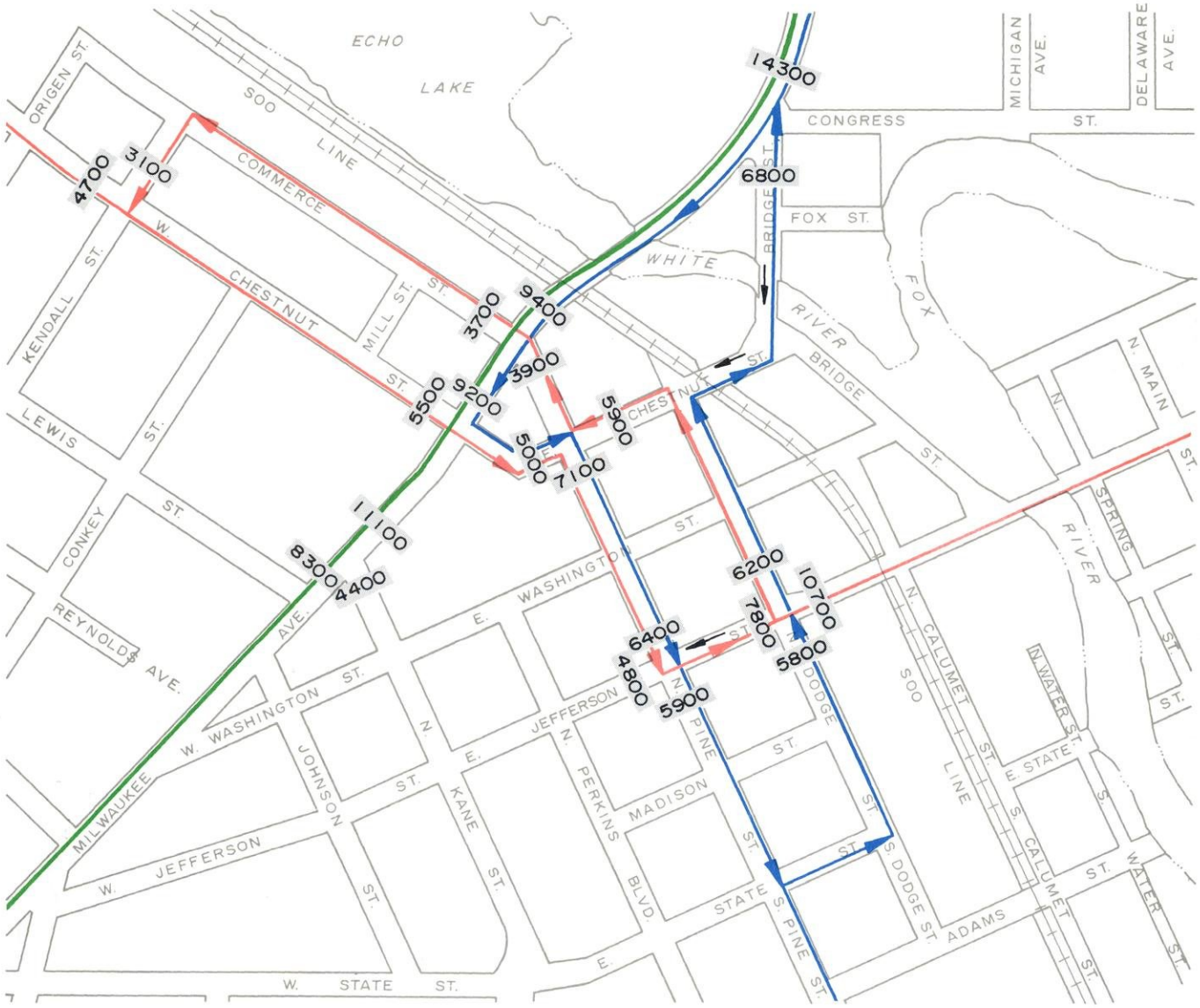
At year's end, work completed on both plans had progressed to the point where the transit service objectives and standards had been defined and inventories of the socioeconomic and land use characteristics of each study area, and the operating and service characteristics of each public transit system, had been completed. An analysis of the performance of the existing transit systems had also been completed for the Racine transit system and was underway for the Kenosha transit system. Both plans will be completed by mid-1984.

### Hartford Area Traffic Management Plan

There has been growing concern on the part of elected officials and citizens of the City of Hartford over traffic congestion, arterial street and highway system operating efficiency, motor vehicle accident problems, and the potential impact on traffic patterns of the newly constructed N. Grand Avenue crossing of the Rubicon River. This concern resulted in a request by the Common Council of the City of Hartford for the assistance of the Regional Planning Commission in the conduct of a traffic management study of the Hartford area. An advisory committee consisting of public officials and concerned citizens was created by the City to assist the Commission in the conduct of

Map 23

## STATE TRUNK HIGHWAY SYSTEM ROUTING AND AVERAGE WEEKDAY TRAFFIC VOLUMES IN THE CITY OF BURLINGTON CENTRAL BUSINESS DISTRICT: 1982




**LEGEND**

5500 AVERAGE WEEKDAY TRAFFIC VOLUME (COUNT)

STATE TRUNK HIGHWAY–CONNECTING HIGHWAY MARKED AND SIGNED TRAVEL WAY

- STH 11 ROUTING
- STH 36 ROUTING
- STH 83 ROUTING

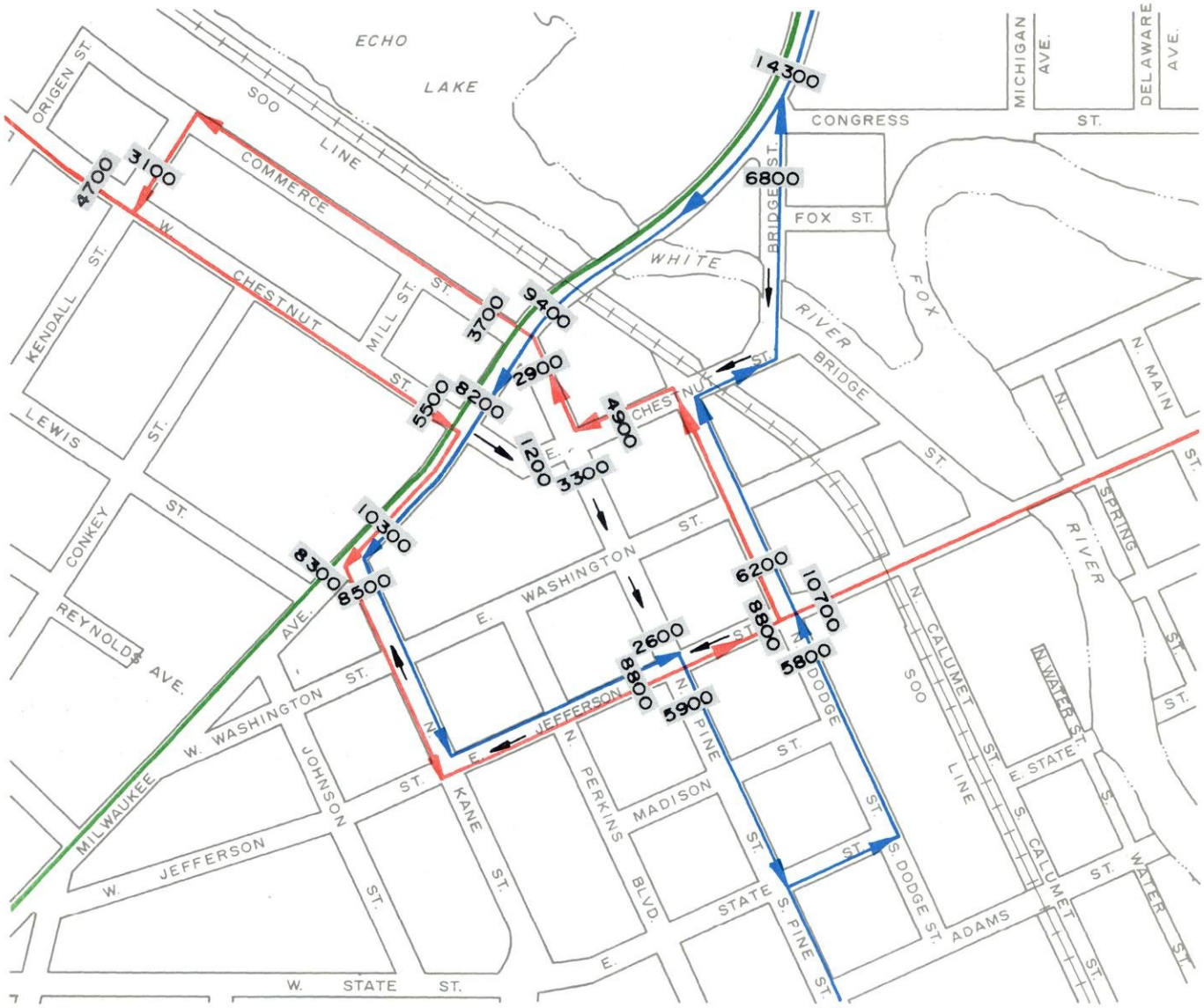
DIRECTION OF TRAFFIC FLOW

- STH 11 ROUTING
- STH 83 ROUTING
- NON-STH ROUTING

GRAPHIC SCALE
0 100 200 400 FEET

Map 24

## KANE STREET ALTERNATIVE ROUTING AND ESTIMATED AVERAGE WEEKDAY TRAFFIC VOLUMES: 1982




**LEGEND**

5500 AVERAGE WEEKDAY TRAFFIC VOLUME (ESTIMATED)

STATE TRUNK HIGHWAY– CONNECTING HIGHWAY MARKED AND SIGNED TRAVEL WAY

- STH 11 ROUTING
- STH 36 ROUTING
- STH 83 ROUTING

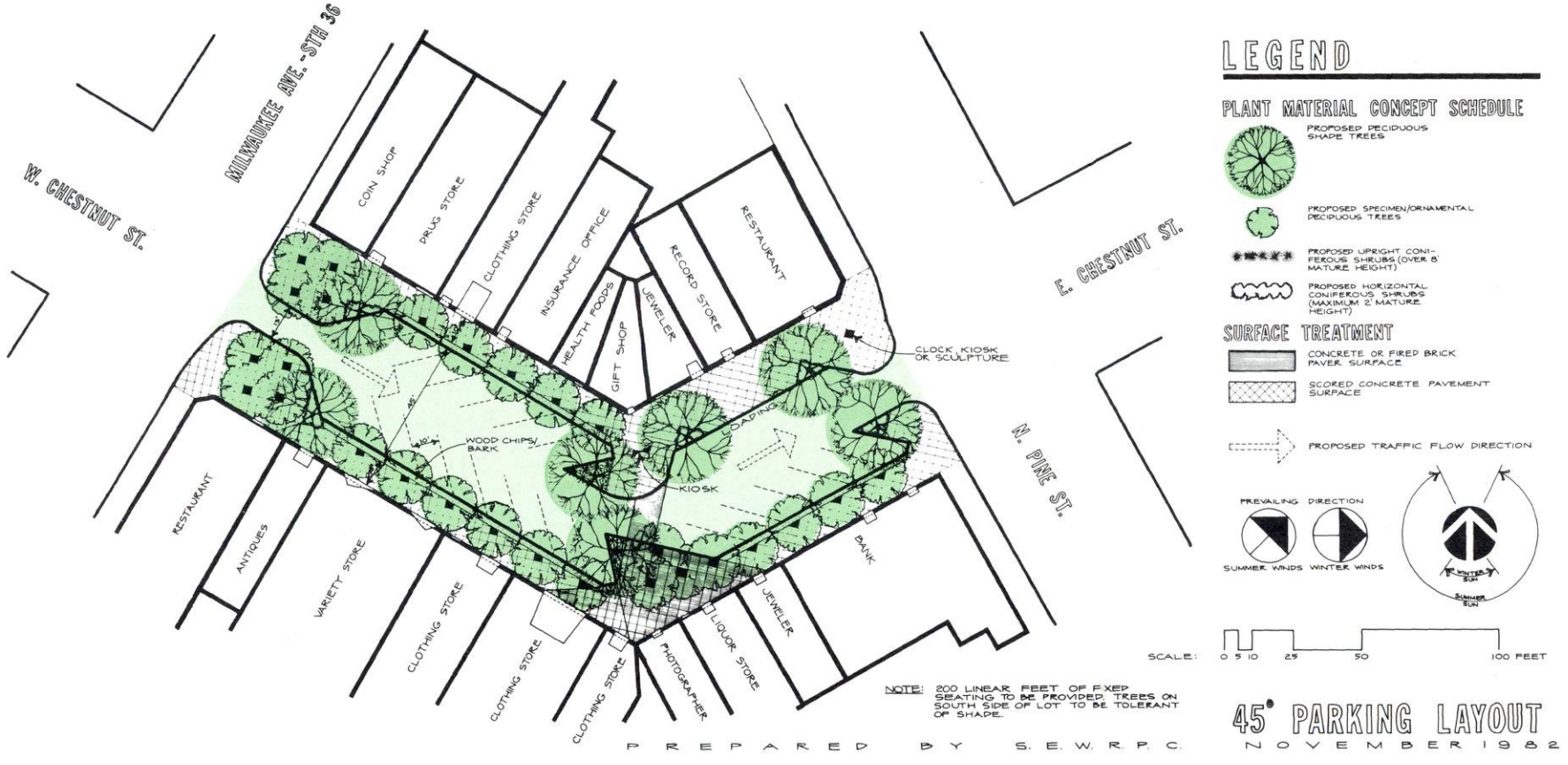
DIRECTION OF TRAFFIC FLOW

- STH 11 ROUTING
- STH 83 ROUTING
- NON-STH ROUTING

GRAPHIC SCALE 0 100 200 400 FEET

Figure 31

ADOPTED ALTERNATIVE SITE PLAN: E. CHESTNUT STREET PARKING DEVELOPMENT DESIGN



the study, which was initiated in March 1982. The study was completed in June 1983 with the publication of SEWRPC Community Assistance Planning Report No. 81, Hartford Area Traffic Management Plan, which sets forth the findings and recommendations of the study.

The primary purpose of the study was to develop a traffic management plan for the Hartford area, a plan directed at providing for the more efficient and safer operation of the existing arterial street and highway system. The plan emphasizes short-range, low-capital traffic management actions such as changes in traffic signal timing, signing, pavement markings, isolated roadway improvement projects, and work time rescheduling. The short-range traffic management actions were to be consistent with the long-range transportation system plan for the Hartford area so that such short-range actions would not foreclose implementation of the long-range plan elements when the practical limits of the operational traffic management measures had been reached, and long-range plan implementation became necessary.

Recognizing that traffic problems do not begin or end at the Hartford city limits, the geographic area of the study was defined to include the immediate environs of the City, as shown on Map 25. The study area, therefore, encompassed an approximately 20-square-mile area, of which about three square miles are within the city limits. The study: 1) inventoried the physical characteristics and operating conditions of the existing arterial street and highway system; 2) developed arterial street and highway system performance objectives, principles, and standards; 3) identified existing arterial street and highway system problems and potential problems attendant to the probable impact of planned new urban development in the area; 4) designed and evaluated alternative traffic management actions to alleviate the identified problems; 5) recommended a set of coordinated traffic management actions to alleviate the identified problems; 6) recommended priorities for the implementation of the recommended traffic management actions; and 7) described the sources from which technical and financial assistance for implementing the recommended actions may be obtained.

The traffic management actions recommended for implementation in the Hartford study area are listed in Table 12. Each problem location identified in Table 12 is shown on, and keyed to, Map 25. The Hartford area traffic management plan recommends that 36 traffic management actions be implemented to solve or mitigate the traffic problems at 23 locations in the study area. The majority of the alternative traffic management actions recommended are of a low-capital, short-range, operational nature. The total investment, in 1983 dollars, required to implement those actions is estimated at $267,900, with the cost of individual actions ranging from $100 for the installation of a "No Parking" sign, to $90,000 for the construction of gravel shoulders along a segment of roadway. Many of the recommended traffic management actions require no capital investment whatsoever, and approximately 60 percent of the low-capital, short-range actions require an investment of less than $10,000.

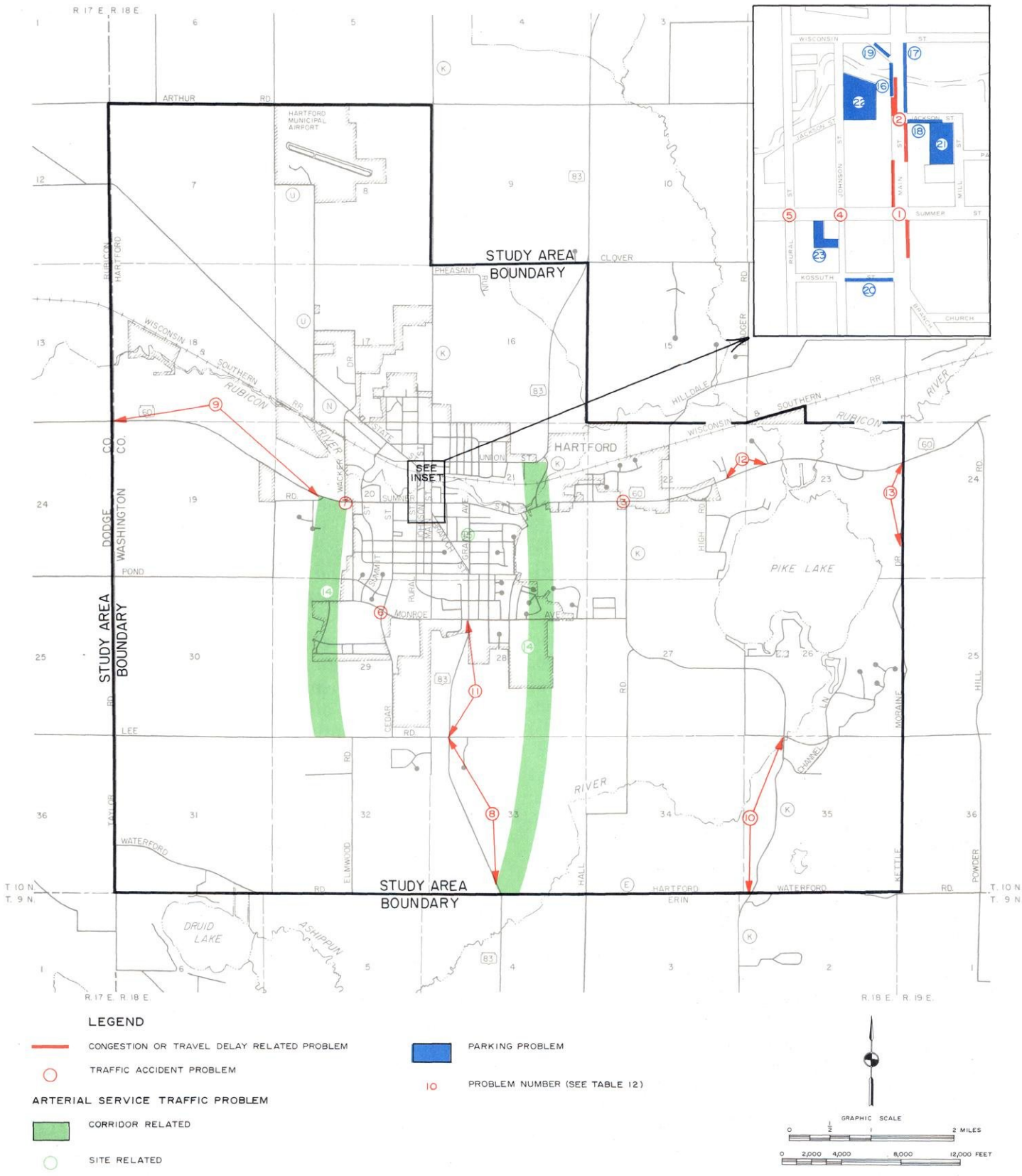
It is recognized that the ability to improve the level of transportation service through traffic management actions has a definite limit. Therefore, certain long-range, high-capital-investment measures will have to be taken eventually in order to achieve ultimate solutions to certain of the existing, as well as probable future, traffic problems in the Hartford area as that area continues to develop. Accordingly, four long-range, high-capital, investment recommendations, estimated to have a total capital cost of $3.78 million in 1983 dollars, are recommended in the plan. The total capital investment required to implement the recommendations contained in the plan is, therefore, estimated at $4,047,100.

The Hartford traffic management plan set forth an implementation priority for the recommended traffic management actions within each transportation system problem category, as shown in Table 12. This prioritization is based on the degree of improvement in operating conditions on the existing arterial street and highway system that may be expected to be achieved by implementation of each traffic management action. In addition, the governmental agency responsible for implementation of each recommended traffic management action is set forth in Table 12. Of the 36 traffic management actions recommended in the plan, the Wisconsin Department of Transportation is the agency responsible for the implementation of 8 actions; Washington County is responsible for 2 actions; the City of Hartford is responsible for 24 actions; and the Town of Hartford is responsible for 2 actions.

A review of each traffic management action listed in Table 12 indicates that 18 actions, or 50 percent of all the recommended actions, should be eligible

Map 25

## LOCATION OF TRAFFIC MANAGEMENT ACTIONS RECOMMENDED TO MITIGATE OR SOLVE TRANSPORTATION SYSTEM PROBLEMS IN THE HARTFORD TRAFFIC MANAGEMENT STUDY AREA: 1982




LEGEND

- CONGESTION OR TRAVEL DELAY RELATED PROBLEM
- TRAFFIC ACCIDENT PROBLEM
- PARKING PROBLEM
- 10 PROBLEM NUMBER (SEE TABLE 12)

ARTERIAL SERVICE TRAFFIC PROBLEM

- CORRIDOR RELATED
- SITE RELATED

GRAPHIC SCALE

0 1/2 1 2 MILES

0 2,000 4,000 8,000 12,000 FEET

Table 12

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

| Traffic Problem Category | Number on Map 25 | Problem Location | Recommended Traffic Management Actions | Capital Cost (1983 dollars) | Implementation | |
|---|---|---|---|---|---|---|
| | | | | | Agency | Priority |
| Accident/ Congestion Problems | 1 | Intersection Main Street and Sumner Street | ● Modify traffic signal sequence | $ 5,000 | City of Hartford | 1 |
| | | | ● Install lane-use control sign | 200 | City of Hartford | |
| | | | ● Implement work time rescheduling | -- | City of Hartford | 14 |
| | | | ● Construct north-south bypass on east side of study area | --[a] | Wisconsin Department of Transportation/ City of Hartford | 16 |
| | | | ● Construct north-south bypass on west side of study area | --[a] | City of Hartford | 16 |
| | | | Subtotal | $ 5,200 | | |
| | 2 | Intersection Main Street and E. Jackson Street | ● Modify traffic signal sequence | $ 5,000 | City of Hartford | 2 |
| | | | ● Change traffic signal offsets with traffic signals at intersection of Main Street and Sumner Street | -- | City of Hartford | |
| | | | Subtotal | $ 5,000 | | |
| | 3 | Intersection E. Sumner Street and CTH K | ● Install flashing red beacon | $ 600 | Washington County | 3 |
| | | | ● Install edgeline pavement markings | 200 | Wisconsin Department of Transportation | |
| | | | ● Widen roadway | 46,000 | Wisconsin Department of Transportation | |
| | | | Subtotal | $ 46,800 | | |
| | 4 | Intersection W. Sumner Street and Johnson Street | ● Designate N. Johnson Street between W. Sumner Street and W. Jackson Street as one-way northbound | $ 400 | City of Hartford | 9 |
| | | | ● Vacate S. Johnson Street for between W. Sumner Street and Kussoth Street parking lot reconstruction | -- | City of Hartford | |
| | | | Subtotal | $ 400 | | |
| | 5 | Intersection W. Sumner Street and Rural Street | ● Prohibit parking on west-bound approach of W. Sumner Street | $ 100 | City of Hartford | 8 |
| | | | ● Install traffic signals | 35,000 | City of Hartford | |
| | | | ● Install stop-line pavement markings | 100 | City of Hartford | |
| | | | Subtotal | $ 35,200 | | |
| | 6 | Intersection W. Monroe Avenue and S. Cedar Street and S. Cedar Street | ● Install warning signs | $ 100 | City of Hartford | 10 |
| | | | Subtotal | $ 100 | | |
| | 7 | Intersection W. Sumner Street and N. Wacker Drive | ● Strictly enforce speed limit | $ -- | City of Hartford | 13 |
| | | | Subtotal | $ | | |
| | 8 | STH 83—CTH E to Lee Road | ● Construct north-south bypass on east side of study area | --[a] | Wisconsin Department of Transportation | 5 |
| | | | ● Install edgeline pavement markings | 2,000 | Wisconsin Department of Transportation | |
| | | | Subtotal | $ 2,000 | | |
| | 9 | W. Sumner Street—Dodge County Line to Pond Road | ● Install edgeline pavement markings | $ 2,500 | Wisconsin Department of Transportation | 4 |
| | | | Subtotal | $ 2,500 | | |
| | 10 | CTH K—Waterford Road to CTH E | ● Install "Deer Crossing" signs | $ 400 | Washington County | 12 |
| | | | Subtotal | $ 400 | | |

## Table 12 (continued)

| Traffic Problem Category | Number on Map 25 | Problem Location | Recommended Traffic Management Actions | Capital Cost (1983 dollars) | Implementation | |
|---|---|---|---|---|---|---|
| | | | | | Agency | Priority |
| Accident/ Congestion Problems (continued) | 11 | STH 83—Lee Road to Monroe Avenue | ● Construct north-south bypass on east side of study area | $ --[a] | Wisconsin Department of Transportation | 6 |
| | | | ● Widen gravel shoulders | 55,000 | Wisconsin Department of Transportation | |
| | | | ● Install edgeline pavement markings | 1,400 | Wisconsin Department of Transportation | |
| | | | Subtotal | $ 56,400 | | |
| | 12 | STH 60—Teri Lane to Franklin Lane | ● Install edgeline pavement markings | $ 900 | Wisconsin Department of Transportation | 7 |
| | | | Subtotal | $ 900 | | |
| | 13 | Kettle Moraine Drive—STH 60 to Pike Lake State Park | ● Construct gravel shoulders | $ 90,000 | Town of Hartford | 11 |
| | | | ● Install edgeline pavement markers | 900 | Town of Hartford | |
| | | | Subtotal | $ 90,900 | | |
| Arterial Service Problems | 14 | Continuous North-South Arterial Street Deficiency | ● Construct north-south arterial on east side of study area | $2.0 million | Wisconsin Department of Transportation/ City of Hartford | 1 |
| | | | ● Construct north-south arterial on west side of study area | 1.5 million | City of Hartford | 4 |
| | | | Subtotal | $3.5 million | | |
| | 15 | Penetration of Residential Neighborhood by Arterial Street | ● Construct north-south arterial on east side of study area | --[a] | Wisconsin Department of Transportation/ City of Hartford | 1 |
| | | | ● Reclassify S. Grand Avenue as a land access street | -- | City of Hartford | 2 |
| | | | ● Reconstruct intersection of S. Grand Avenue and Branch Street | 20,000 | City of Hartford | 3 |
| | | | Subtotal | $ 20,000 | | |
| Parking Problems | 16 | West Side of N. Main Street Between Wisconsin Street and E. Jackson Street | ● Change two one-hour parking restrictions to 30-minute restrictions | $ 200 | City of Hartford | 6 |
| | 17 | East Side of N. Main Street Between Wisconsin Street and E. Jackson Street | ● Change three one-hour parking restrictions to 30-minute restrictions | $ 200 | City of Hartford | 4 |
| | 18 | South Side of E. Jackson Street Immediately East of N. Main Street | ● Change two one-hour parking restrictions to 30-minute restrictions | $ 200 | City of Hartford | 5 |
| | 19 | South Side of E. Wisconsin Street Immediately West of N. Main Street | ● Change 10 one-hour parking restrictions to two-hour restrictions | $ 200 | City of Hartford | 3 |
| | 20 | South Side of Kossuth Street Between S. Main Street and S. Johnson Street | ● Change all-day parking restrictions to allow one-hour parking | $ 100 | City of Hartford | 1 |
| | 21 | Lower Mill Street Public Parking Facility | ● Change 12 two-hour parking restrictions to one-hour restrictions | $ 200 | City of Hartford | 2 |
| | | | ● Construct a parking structure with a partial deck over existing surface lot | $ 180,000 | City of Hartford | 9 |
| | 22 | City Hall Public Parking Facility | ● Remove 10 two-hour parking restrictions to allow all-day unrestricted parking | $ 200 | City of Hartford | 7 |
| | 23 | S. Johnson Street Public Parking Facility | ● Vacate S. Johnson Street Between W. Sumner Street and Kossuth Street and reconstruct existing surface lot | $ 100,000 | City of Hartford | 8 |
| | | | Total | $4,047,100 | | |

[a] *The capital cost of constructing the proposed north-south arterial bypass routes on the east and west sides of the study area, which would be approximately $2.0 million and $1.5 million, respectively, has been included in the continuous north-south arterial street deficiency problem costs.*

for federal funding. Assuming that adequate funds will become available in each federal aid program concerned, and that the Wisconsin Department of Transportation will approve each recommended action for funding, the federal funds could pay up to 70 percent of the total amount required to implement all the recommendations of the plan. The Wisconsin Department of Transportation could, similarly, be expected to fund about 12 percent of the total plan cost; Washington County less than 1 percent; the City of Hartford about 18 percent; and the Town of Hartford less than 1 percent. It is important to note that the funding recommendations in the plan are subject to specific program limitations and statewide transportation improvement priorities.

The traffic management plan was prepared under the direction of the Citizens and Technical Advisory Committee for the Hartford Area Traffic Management Study. The membership on the Committee, which worked intensively for a period of more than a year to formulate its recommendations, is set forth in Appendix B. The work of the Study Committee for the Hartford traffic management study represents an excellent example of citizen participation in the planning process. Upon adoption, the traffic management plan for the Hartford area should provide a valuable guide for optimizing the operating efficiency and increasing the safety of the arterial street and highway system in the Hartford area. The implementation of the plan should also provide the direction necessary to ensure that future transportation needs are more readily and economically met in the Hartford area.

### Milwaukee County Short-Range Transit Planning

During 1983, 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:

- An analysis of peak-period passenger loads to determine which transit system routes should be considered for service with high-capacity, articulated buses. An important factor in considering routes for such service was the minimization of service level changes.

- Development of a methodology for the seasonal scheduling of drivers at each of the operating stations to reduce costs brought about by absenteeism and service level changes.

- An effort to provide for the coordination of public information. This task started with an inventory of bus destination signs, and will improve the consistency of reporting route names, route destinations, and transfer points on informational materials such as timetables, bus stop signs, transit system maps, and brochures.

- An analysis of the use of taxis to provide transit service in low-population-density areas of Milwaukee County. This analysis found that extension of transit service to new areas of the County could be provided by taxi at a lower cost than by conventional bus. The provision of such new service was not recommended, however, because the cost of providing taxi service was greater than service provision criteria permitted.

- Preparation of required reports such as 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.

### Energy Conservation Planning

At its meeting on December 1, 1983, the Regional Planning Commission approved a prospectus for an energy emergency contingency plan for the Southeastern Wisconsin Region. This prospectus, which considered whether or not a need exists to conduct an energy emergency contingency planning effort for all energy sources and for all energy uses within southeastern Wisconsin, was prepared with the assistance of a steering committee composed of representatives of county, municipal, state, and federal governmental agencies; agricultural interests; and natural gas and electric power utilities. Energy "contingency" planning involves identifying in advance those actions that can be taken to abate the effects of possible severe energy shortages and attendant price increases.

U. S. Department of Transportation guidelines call for each major metropolitan area of the United States to prepare a motor fuel emergency contingency plan. These guidelines recognize that, given the current instability in international affairs, future curtailment of petroleum imports is a very real possibility. Such curtailment has the potential to severely disrupt the transportation of people and goods so essential to the effective operation, if not the very existence, of the large metropolitan areas of the United States. Accordingly, the U. S. Department of Transportation has urged that the Southeastern Wisconsin Regional Planning Commission prepare a contingency plan for the Region which could be followed to abate the adverse impacts of interruptions in the supply of motor fuel on the transportation system of the Region.

Milwaukee County Executive William F. O'Donnell, in considering this issue, noted that while the curtailment of motor fuel supplies should be an important concern in any energy emergency contingency planning effort for the greater Milwaukee area, major social and economic problems could also result from the curtailment of supplies of space heating oil and natural gas. The County Executive accordingly suggested that the problem be more broadly defined to include all energy sources and uses within the Region. The prospectus as prepared by the Commission thus considers the need for, and desirable scope and content of, an energy emergency contingency plan for all energy sources and for all energy uses within southeastern Wisconsin. The prospectus concluded that there is no need to prepare plans for natural gas and electric power shortages as contingency plans for these important sources of energy have already been prepared by the public utilities. However, the prospectus did establish a need for the conduct of a transportation contingency plan for southeastern Wisconsin in the event of a petroleum fuel shortage. In addition, the prospectus established a need for counties to consider the preparation of energy emergency operations plans which would permit them to maintain essential services in the event of petroleum fuel shortages, and to consider the preparation of a contingency plan for space heating and process use by the residential, commercial, industrial, and agricultural sectors in the event of petroleum fuel shortages.

The transportation contingency plan element of the energy emergency plan would identify measures that can be taken to respond to different levels and durations of a gasoline or diesel motor fuel emergency, the emergency being defined in terms of an actual supply shortage, rapidly escalating prices, or both. 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.

Contingency plans for counties are considered necessary because the provision of essential services by counties during an energy emergency is no longer assured through a federal allocation program. In the event of an emergency, counties, like all other energy users, will be able to obtain only as much energy as they can afford, or is available. County contingency plans for essential services would provide for a rational distribution of the available energy resources among essential public services in the event that such services cannot obtain or afford all of their normal consumption amounts. County contingency plans for residential, business, and agricultural sectors would recommend actions to be taken in the event of different levels of emergencies, including providing information, making proposed state set-aside fuel supplies available, and providing emergency "warm" shelters. The prospectus recommends that county emergency contingency plans, as well as contingency plans for a county's homes, businesses, and industries, be prepared by the Commission upon the specific request of a county.

The transportation contingency plan for the Region would require 12 to 18 months to complete, at a total cost of about $87,500. The plan could be funded by the U. S. Department of Transportation, Federal Highway Administration (40 percent); the U. S. Department of Transportation, Urban Mass Transportation Administration (40 percent); the Wisconsin Department of Transportation (10 percent), and the Southeastern Wisconsin Regional Planning Commission (10 percent). County energy emergency operations plans or plans for a county's residential, industrial, and commercial sectors would require between three and nine months to prepare at a cost of between $2,500 and $15,000 each. At the end of 1983, neither the counties within the Region nor the State or U. S. Department of Transportation had acted to approve the prospectus.

The completion of a transportation contingency plan for the Region, and of county energy emergency operations plans, would provide residents

of southeastern Wisconsin with a greater sense of security in the event of an energy emergency. Although energy contingency plans do not guarantee that there will be no hardships during an energy emergency, they do provide for organized, agreed-upon responses from local governments that will help minimize those hardships. The completed plans will help avoid panic reactions to energy emergencies, because everybody will have known, assigned responsibilities.

## ELDERLY AND HANDICAPPED TRANSPORTATION PLANNING

During 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, 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 to provide transportation that handicapped persons can effectively use are being made in their service area. The new regulation also eliminates the requirement regarding 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 1983 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 dual 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 1983, approximately 11,700 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. In 1983, as in past years, the popularity and high use of the program caused concern that budgeted funds would be insufficient to cover operating expenses. Milwaukee County, consequently, has continued to review possible actions for restricting eligibility for, or use of, the program to maintain expenditures within the program budget for 1983 and subsequent years. At year's end, no such actions had been taken by the County. During 1983, about 240,000 one-way trips had been made on the program by mobility-restricted residents of Milwaukee County.

  Waukesha County continued to support specialized transportation services for elderly and handicapped persons during 1983. 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 1983, about 51,300 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 1983, about 6,000 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 of Racine 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 1983, approximately 29,900 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 and abandonments and by providing technical assistance to local communities as requested on railway issues. During 1983, staff activities included review

of the regional railway system facilities and services, the continuing reorganization efforts by the Milwaukee Road, proposals for abandonment of railway line segments within the Southeastern Wisconsin Region, and shortline railroad activities.

### Regional Railway System

As of December 31, 1983, 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 26. The extent of railway mileage in each of the seven counties is presented in Table 13.

Intercity passenger service is provided by the National Railroad Passenger Corporation (Amtrak) between Chicago and Minneapolis-St. Paul over Milwaukee Road trackage, 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 Milwaukee Road continues to remain an important issue in most midwestern states as well as in the Southeastern Wisconsin Region. In 1977, the Milwaukee Road declared bankruptcy and was placed under the protection and control of a federal bankruptcy court in Chicago. Since that time, the court-appointed trustee has significantly changed the structure of the company, transforming it from a transcontinental railway carrier connecting the Midwest with the Pacific Northwest with a large number of branch lines to a regional carrier consisting primarily of important main lines, principally located in the States of Wisconsin, Minnesota, Iowa, and Illinois.

The Milwaukee Road's reorganization efforts have been aimed at creating an efficient but smaller regional railway carrier that will be attractive to other railroad companies as a merger partner. Activities which were begun by other midwestern railroads during 1982 to acquire the Milwaukee Road were accelerated during 1983. By the end of 1983, four companies were pursuing acquisition of the Milwaukee Road. These include:

1. The Grand Trunk Corporation, which operates the Grand Trunk Western Railroad and the Duluth, Winnipeg & Pacific Railroad, and is a subsidiary of the Canadian National Railway Company.

2. The Chicago & North Western Transportation Company, which operates throughout the Midwest and parallels many of the Milwaukee Road existing routes.

3. The Chicago Milwaukee Corporation, which currently owns 96 percent of the Milwaukee Road Company's stock and is involved in other, nontransportation, businesses.

4. The Soo Line Railroad Company, another major railroad in the Midwest which parallels many of the Milwaukee Road's existing routes, the majority of its common stock being owned by Canadian Pacific, Ltd.

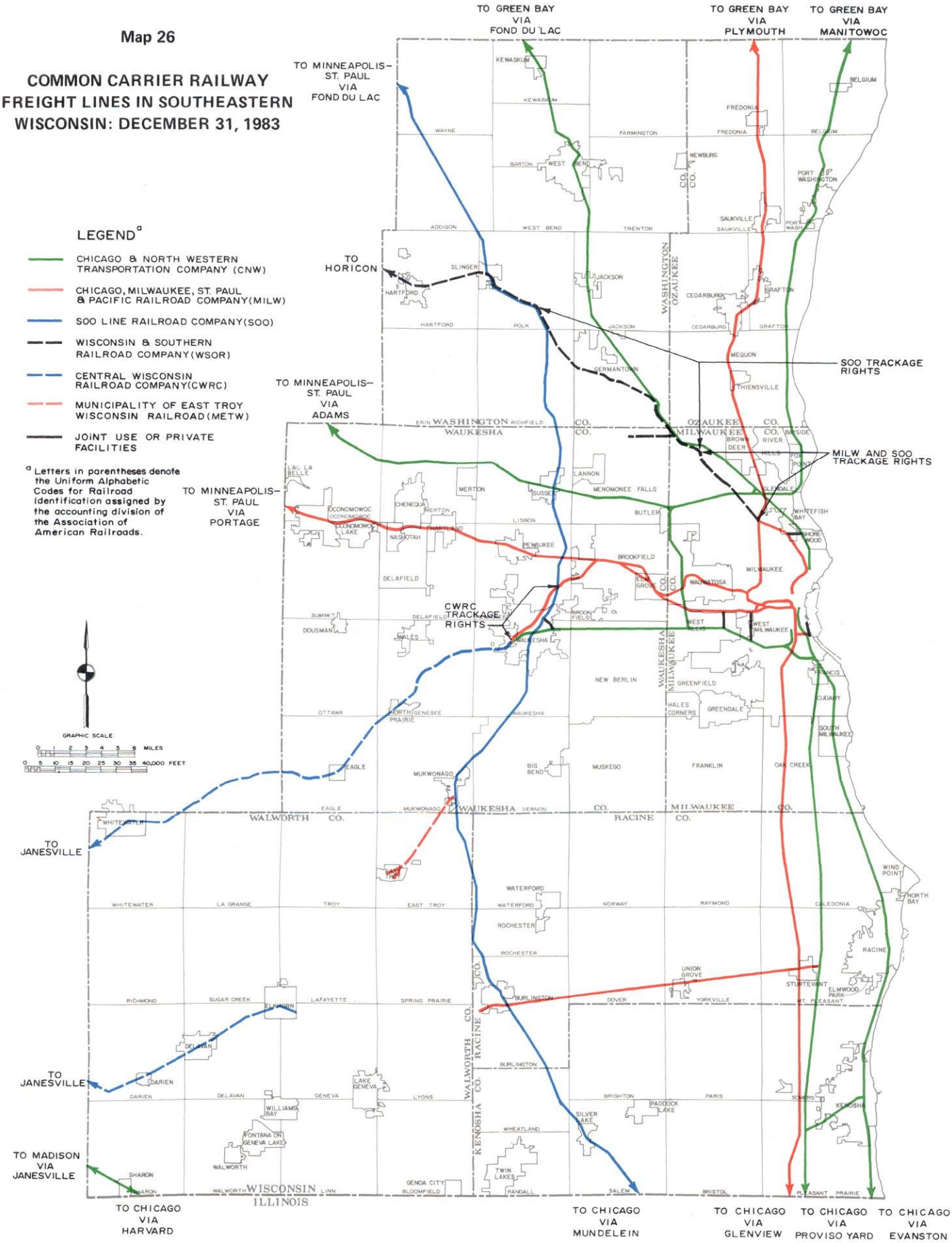
It is the intent of the trustee to complete the court-supervised reorganization of the railroad by December 31, 1984.

### Abandonments and Shortline Railroad Activities

Another major railway planning issue of continuing concern within southeastern Wisconsin is the status of railway branch lines which are being abandoned by major railroad companies. In some instances, there is interest by local communities and shortline railroads to continue service over these lines. Those railway line segments which were being abandoned or scheduled for possible abandonment during 1983 are described below.

Map 26

# COMMON CARRIER RAILWAY FREIGHT LINES IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1983



## Table 13

## COMMON CARRIER RAILWAY MAINLINE MILEAGE IN SOUTHEASTERN WISCONSIN: DECEMBER 31, 1983

| 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.

*Waukesha to Cottage Grove*

In March 1983, the Chicago & North Western Transportation Company (C&NW) filed an application before the Interstate Commerce Commission (ICC) to abandon 48.2 miles of its railway line between the communities of Waukesha and Cottage Grove in Dane County. A total of 15.5 miles of this railway line was located within the Region. By a decision issued in May 1983, the C&NW was authorized by the ICC to abandon this railway segment. As of December 31, 1983, the C&NW had not completed reconstruction of another segment of track located in central Wisconsin to permit the discontinuance of operations over the Waukesha-Cottage Grove line and, therefore, was still providing service over the line. The Wisconsin Department of Transportation and Wisconsin Department of Natural Resources expressed their intent during 1983 to acquire the entire right-of-way that is to be abandoned.

*Lake Geneva to Ringwood*

By its decision served in November 1982, the ICC authorized the abandonment of the former C&NW railway line between the communities of Lake Geneva, Wisconsin, and Ringwood, Illinois, under the condition that the right-of-way be kept intact for 120 days. This railway segment was 17.4 miles long, of which 9.9 miles were located within the Region. This final decision by the ICC brings to a conclusion a long-standing abandonment proceeding initiated by the C&NW in February 1980, which included several postponements of the final decision by the ICC to allow the Geneva Lakes Area Joint Transit Commission (CLAJTC) to make an offer to purchase the line. The GLAJTC did not complete negotiations for acquisition of the railway line segment within the specified time period and the line was subsequently dismantled.

*Burlington to Beloit*

In June 1982, the trustee of the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (Milwaukee Road) filed an application before the ICC in connection with its proposal to abandon the railway line between the communities of Burlington and Beloit in Rock County. The total length of this line is 37.9 miles, of which 26.7 miles are located within the Region. This line was approved for abandonment by the ICC in January 1983, with service provided by the Milwaukee Road ending in February 1983. Following cessation of service by the Milwaukee Road, the Central Wisconsin Railroad Company (CWRC) began operations over the segment between Elkhorn and Bardwell Junction, and then over former Milwaukee Road track already owned by the Wisconsin Department of Transportation to Janesville. The CWRC has been providing service under a temporary lease agreement with the Milwaukee Road. The Commission staff provided assistance to the Walworth County Board of Supervisors and the Walworth County Planning, Zoning and Sanitation Department in the preparation of a grant application to the Wisconsin Department of Transportation for acquisition of the railway line between Bardwell Junction and Elkhorn, as well as between Bardwell Junction and the Village of Walworth. The application was submitted to the Department in March 1983. As of December 31, 1983, approval of the application was still pending.

## TRANSPORTATION IMPROVEMENT PROGRAM

In December 1983, 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: 1984-1988. 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 1984-1988 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 1984-1988 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 1, 1983.

The 1984-1988 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 replacement of the E. Capitol Drive viaduct over the Milwaukee River; and the reconstruction of the structure on the North-South Freeway (IH 43) between W. Hampton Avenue and W. Silver Spring Drive. The TIP also authorizes funding for key transit maintenance projects, including the complete rehabilitation of 70 buses and the construction of an administration and fleet maintenance facility for the Milwaukee County Transit System.

In addition, the TIP authorizes projects essential to the improvement of the highway and transit systems; for example, the purchase of 40 articulated, high-capacity buses which will reduce labor costs per passenger on the Milwaukee County Transit System; the reconstruction of the W. Silver Spring Drive interchange with IH 43; the construction of ramps connecting the Park Freeway-East to N. Jefferson Street; and the reconstruction of portions of the Lake Interchange to provide improved access between IH 794 and N. Harbor Drive.

Within the three urbanized areas of the Region, the program contains 423 projects for the five-year programming period, representing a total potential investment in transportation improvement and services of about $732 million. Of this total, $376 million, or about 51 percent, is proposed to be provided in federal funds; $175 million, or about 24 percent, in state funds; and $181 million, or about 25 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, 1984. 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 1984 and the federal 1985 fiscal year beginning October 1, 1984, and extending through September 30, 1985. For federally funded transit projects involving transit system operating assistance, the annual element consists of a 24-month period, calendar years 1984 and 1985. All other federally assisted transit projects within the transportation improvement program have an annual element consisting of a 12-month period of calendar year 1984.

A cost summary for these projects is shown in Table 14. Cost data presented in this table represent the proposed annual element expenditures for a total of 439 projects.

In order to provide a basis for a better understanding of the types of transportation improvements proposed to be undertaken in the three urbanized areas, projects have been gathered into 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 32 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 1984 annual element: over 53 percent in the Milwaukee urbanized area, about 73 percent in the Racine urbanized area, and over 38 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 4 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 44 percent of the resources in the Milwaukee urbanized area annual element, about 32 percent of the resources in the Racine urbanized area

Table 14

COST SUMMARY OF PROJECTS WITHIN ANNUAL ELEMENT BY URBANIZED AREA

| Funding | Kenosha | Milwaukee | Racine | Total |
|---|---|---|---|---|
| Federal . . . . . | $6,302,400 | $176,473,600 | $10,240,800 | $193,016,800 |
| State. . . . . | 1,820,500 | 63,288,700 | 3,746,600 | 68,855,800 |
| Local . . . . . | 1,480,100 | 73,870,300 | 1,956,900 | 77,307,300 |
| Total | $9,603,000 | $313,632,600 | $15,944,300 | $339,179,900 |

annual element, and nearly 39 percent of the resources in the Kenosha urbanized area annual element.

A comparison of the 1984 annual element of the TIP with the 1983 annual element of the 1983-1987 TIP as reported in the Commission's 1982 Annual Report indicated the following:

- In the Kenosha urbanized area, total expenditures are proposed to decrease by about 3 percent—from about $9.9 million to about $9.6 million. Expenditures for highways, which comprised about 63 percent of total expenditures in 1983, are proposed to comprise about 61 percent of total expenditures in 1984. Expenditures for transit comprised about 37 percent of total expenditures in 1983, and are proposed to account for about 39 percent of expenditures in 1984.

- In the Milwaukee urbanized area, total expenditures are proposed to increase by about 7 percent—from about $292.1 million to about $313.6 million. Expenditures for highways, which comprised about 56 percent of total expenditures in 1983, are proposed to comprise about 56 percent of total expenditures again in 1984. Expenditures for transit comprised about 44 percent of total expenditures in 1983, and are proposed to account for about 44 percent of expenditures again in 1984.

- In the Racine urbanized area, total expenditures are proposed to increase by about 37 percent—from about $11.6 million to $15.9 million. Expenditures for highways, which comprised about 67 percent of total expenditures in 1983, are proposed to comprise about 68 percent of total expenditures in 1984. Expenditures for transit comprised about 33 percent of total expenditures in 1983, and are proposed to account for about 32 percent of expenditures in 1984.

## AIRPORT TRANSPORTATION PLANNING

During 1983, Commission activities in air transportation and airport planning included the continued monitoring of aviation activities within the Region through secondary data sources, initiation of 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.

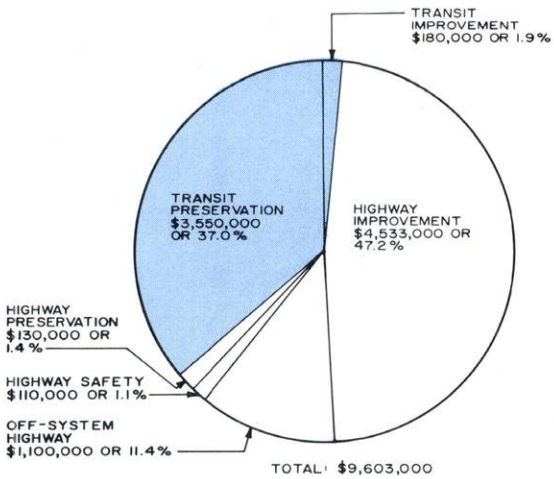
### Aviation Activity

The Commission staff continued to monitor aviation activity within the Region during 1983. 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 33, in 1983 aircraft operations of all types at General Mitchell Field totaled about 166,000, an increase of about 5,600 operations, or 3 percent, over the 160,000 operations that occurred during 1982. This total is, however, 40 percent below the 275,000 operations forecast to occur at Mitchell Field during 1983 under the original regional airport system plan, a condition attributable, in part, to the continued economic recession being expressed within the Region in 1983; in part to the effects of federal deregulation

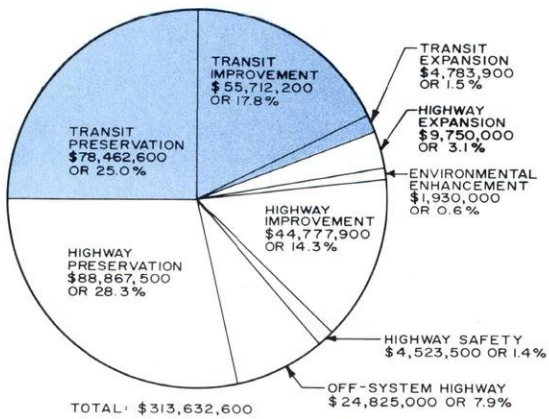
Figure 32

**DISTRIBUTION OF EXPENDITURES IN THE ANNUAL ELEMENT OF THE 1984-1988 TRANSPORTATION IMPROVEMENT PROGRAM BY PROJECT CATEGORY**

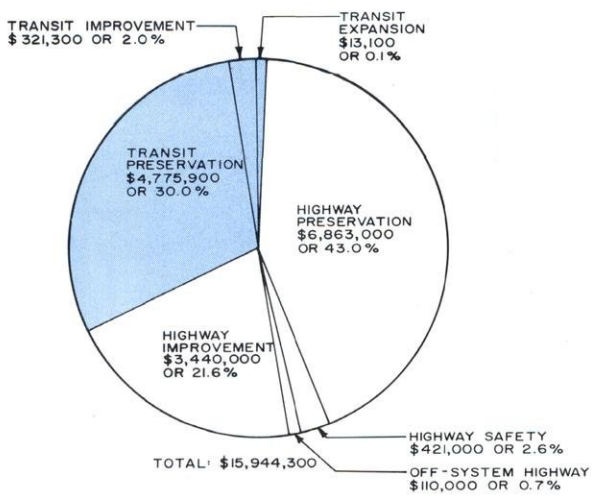
KENOSHA URBANIZED AREA




MILWAUKEE URBANIZED AREA




RACINE URBANIZED AREA




of commercial air service; and in part 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 of operations: air carrier, general aviation, and military. Air carrier operations during 1983 totaled about 81,000, an increase of 9 percent over the 1982 level of about 74,000 operations. General aviation operations at General Mitchell Field totaled about 80,000 during 1983, reflecting a slight decrease from the 1982 level of operations. Military aircraft operations at General Mitchell Field during 1983 totaled about 5,400, a decrease of about 9 percent from the 1982 level of about 5,900 operations.

From 1982 to 1983, air carrier enplaning and deplaning passengers at General Mitchell Field decreased by about 373,000 passengers to about 2.9 million such passengers per year, about 11 percent below the 1982 level. The 1983 level was about 0.7 million, or 20 percent, less than the 3.7 million passengers forecast for the year 1983 in the original regional airport system plan, as shown in Figure 34. This is due primarily to the continued economic recession being experienced within the Region in 1983, and to the impacts of federal deregulation of commercial air service. A total of 1,148 aircraft were registered and based in the Region during 1983, a decrease of 2 percent from the 1,172 aircraft registered during 1982, as shown in Figure 35 and in Table 15. The number of aircraft registered as based within the Region during 1983 was 39 percent lower than the 1983 total of 1,875 aircraft forecast under the original regional airport system plan. The continuing depressed economy together with the increased costs of purchasing and operating private aircraft have contributed to this decline.

### Regional Airport System Plan Update

During 1983, work was begun 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 salient forecasts; 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

Figure 33

ANNUAL AIRCRAFT OPERATIONS AT GENERAL MITCHELL FIELD, MILWAUKEE

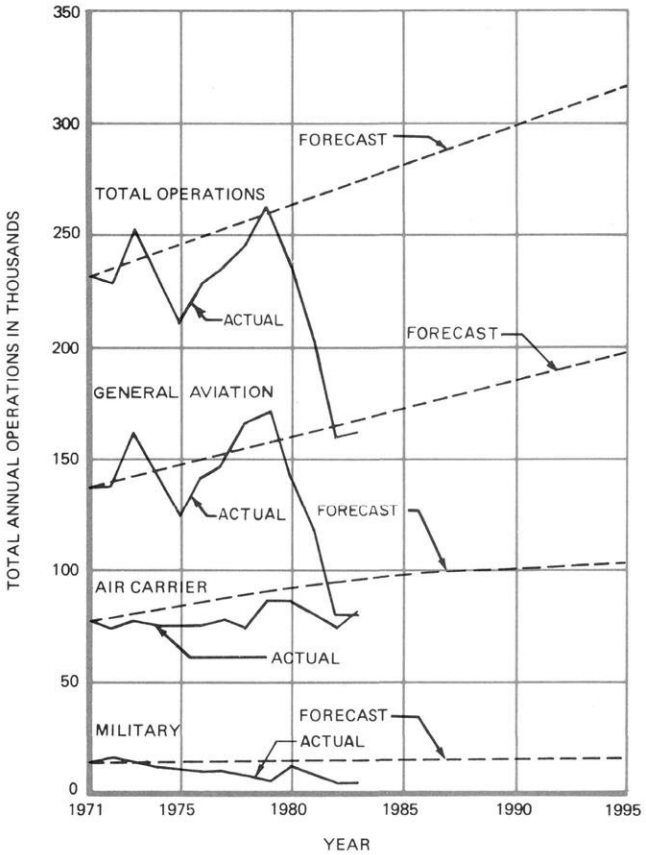
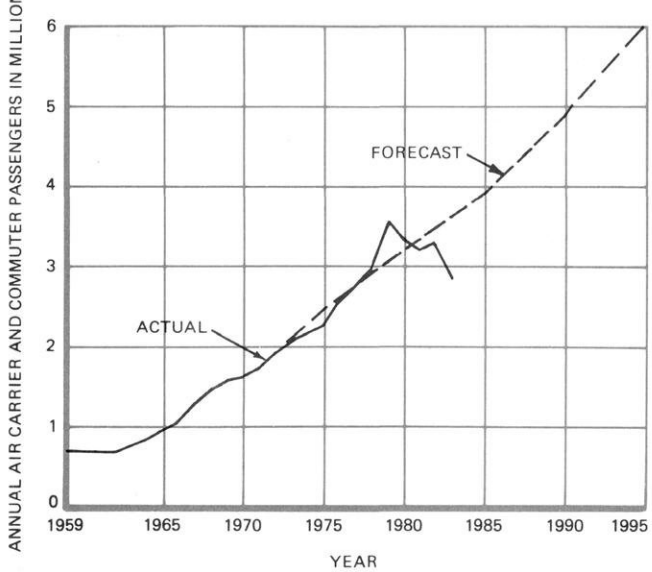



Figure 34

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



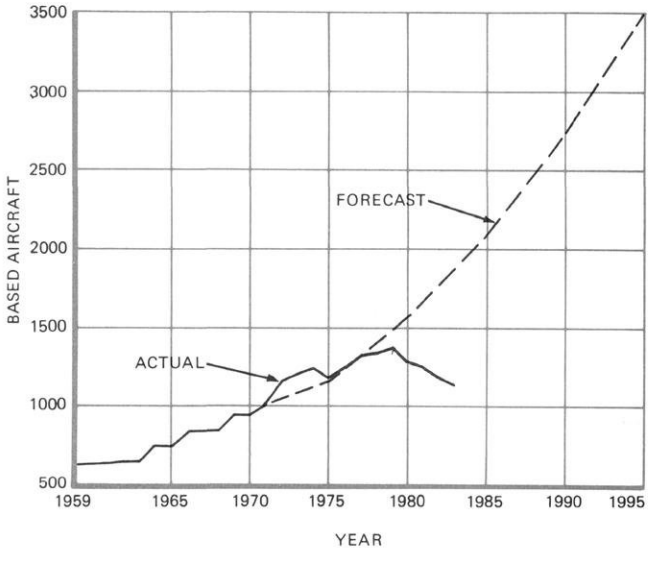

travel demand. It is anticipated that this planning program will require a three-year work effort to be conducted as a coordinated and cooperative work effort with the Wisconsin Department of Transportation, which is conducting a similar work effort for the balance of the State of Wisconsin. The study will be documented in an updated and revised version of Planning Report No. 21, A Regional Airport System Plan for Southeastern Wisconsin.

During 1983, the Commission staff initiated work on this project by beginning detailed study design activities for each major study element. Efforts were made to ensure close coordination and consistency between the regional and state airport system plan update efforts. Data collection efforts and preparation of the initial planning report chapters were begun. In March 1983, the Technical Coordinating and Advisory Committee on Regional Airport System Planning was reactivated to provide guidance to the study.

Much of the work during 1983 involved necessary data collection efforts. A significant portion of the data collection effort consisted of five surveys: 1) an enplaning passenger survey at General Mitchell Field; 2) an origin-destination survey at 21 selected general aviation airports within the Region; 3) license plate survey of Wisconsin residents using O'Hare International Airport in Chicago; 4) an on-board bus survey of Wisconsin residents using O'Hare Airport; and 5) a corporate

Figure 35

ACTIVE REGISTERED AIRCRAFT BASED IN THE REGION



aviation survey. Prior to the actual conduct of the surveys, the necessary survey forms were prepared, temporary survey personnel were recruited and trained, and logistical arrangements for the survey were undertaken. In addition to the surveys, inventory efforts included acquisition of necessary background information and data concerning national air traffic forecasts, aircraft technology, and the current status of both the scheduled airline industry and corporate aviation activity.

The purpose of the enplaning passenger survey was to collect travel demand information from passengers using scheduled airline flights at Milwaukee's General Mitchell Field. The survey itself was conducted for a seven-day period from August 11 through August 17, 1983, and included all scheduled passenger flights departing during this period. All enplaning passengers were handed a postcard survey form and asked to fill it out, and to either return the form to one of the survey personnel or drop it in a mailbox at the end of their trip. During each of the seven days, about 4,200 enplaning passengers were handed surveys. The completed survey yielded a 41 percent return and provided information on the trip origin and destination, trip purpose, employment, mode of travel to the airport, and various socioeconomic characteristics.

The purpose of the general aviation origin-destination survey was to collect travel demand information from pilots and other flight-making users at 19 of the 24 general aviation airports within southeastern Wisconsin open to public use. In addition, two airports outside the Region—at Palmyra and Watertown—were surveyed. The survey was conducted from 6:00 a.m. to 8:00 p.m. at each of the general-purpose aviation airports for a specific three-day period during August 1983. Pilots and passengers were interviewed by survey personnel at the airports. In addition, classification counts of all aircraft operations during the survey period at each airport were conducted. The information collected included the number and type of aircraft operations, trip purpose, trip origin and destination, size of crew and number of passengers, and socioeconomic characteristics of the crew and passengers. About 2,600 pilots and passengers were surveyed during this effort.

The purpose of the license plate survey and on-board bus survey at O'Hare International Airport was to collect data on the number and distribution of Wisconsin residents using O'Hare Airport instead of General Mitchell Field or other Wisconsin airports. These surveys were conducted during October and included a postcard survey for the on-board bus passengers and a count, including occupancy, of the registered Wisconsin automobiles and trucks arriving, departing, or parked at O'Hare Airport.

Work was also begun on the corporate aviation survey, including preparation of the survey form and a list of those corporate aviation users to be surveyed. This survey will be a mail-out/mail-back

Table 15

ACTIVE REGISTERED AIRCRAFT BASED IN THE REGION

| County | 1960 | 1965 | 1970 | 1975 | 1980 | 1983 |
|---|---|---|---|---|---|---|
| Kenosha | 28 | 60 | 76 | 148 | 123 | 73 |
| Milwaukee | 338 | 362 | 356 | 371 | 388 | 346 |
| Ozaukee | 19 | 13 | 32 | 28 | 29 | 26 |
| Racine | 65 | 89 | 108 | 151 | 179 | 157 |
| Walworth | 23 | 31 | 48 | 82 | 98 | 86 |
| Washington | 45 | 63 | 118 | 136 | 158 | 146 |
| Waukesha | 118 | 163 | 243 | 255 | 304 | 314 |
| Total | 636 | 781 | 981 | 1,171 | 1,279 | 1,148 |

NOTE: Registered aircraft counts for 1983 include the registration categories of: active, antique, amateur built, municipal, air carrier, pending, and FAA match; counts for 1983 represent total aircraft registered at the end of the registration year (September). Counts for years prior to 1983 represent aircraft registered in March of the specified year.

format and is intended to provide information not only on actual corporate aviation activity within southeastern Wisconsin, but on the economic benefits of corporate aviation activity, and the perceived importance of general aviation facilities to the business community.

By the end of 1983, the data collected from the first four surveys had been coded and converted to an electronically processible format. Also, contingency checks to verify the accuracy of the data were initiated, and work was begun on preparing summaries of the data.

### 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. During 1977, all technical work was completed on the airport master plan for General Mitchell Field in Milwaukee, but the plan has yet to be adopted by the Milwaukee County Board of Supervisors. During 1983, an update of the master plan for Waukesha County Airport was completed and subsequently adopted by the Waukesha 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 received late in 1983, 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 1983, the Cities of Brookfield and Elkhorn, the Villages of Elm Grove and Shorewood, and the Washington County Park and Planning Department 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 1983:

- The Commission staff provided data concerning interregional travel to a consultant to the U. S. Department of Transportation.
- The Commission staff provided current and forecast aviation data for the Kenosha Municipal Airport to the Wisconsin Department of Transportation in support of a grant application for airport improvement.
- The Commission provided guidance and technical assistance to the Advisory Committee for the Park Freeway-East and Lake Freeway-North Stub-End Design. This Committee recommended "stub end" connections for the Park Freeway-East and the Lake Freeway Interchange that were nearly unanimously accepted by all interested and affected levels of government, community groups, and businesses.
- The Commission staff provided guidance, as requested, to the Wisconsin Department of Transportation's Milwaukee County Transit System management audit.

- The Commission staff, at the request of the Wisconsin Department of Transportation, conducted a review of a Wisconsin state highway plan preliminary special report entitled "Alternative Plan Directions"; and a review of the proposed state highway plan alternatives and a determination of their consistency with the adopted regional transportation system plan.

- At the request of local governments, businesses and industries, and private citizens, the Commission provided throughout the year traffic volume forecasts for selected arterial facilities. For example, the Commission provided Walworth County with existing and forecast traffic volumes for three highway segments for which Walworth County is programming improvements; and provided the Wisconsin Department of Transportation with traffic forecasts and supporting data for a preliminary engineering study of STH 50 in Kenosha and Walworth Counties.

- The Commission, at the request of the Wisconsin Department of Transportation, briefed the Department Secretary concerning proposed transit plans for the Milwaukee area. A similar briefing was presented to the Transportation Committee of the Wisconsin State Legislature.

- At the request of the City of Brookfield, the Commission staff conducted a major review of an analysis of traffic impacts for a proposed commercial development to be located adjacent to the existing Brookfield Square Shopping Center. This review was documented in a letter report.

- At the request of the Village of Elm Grove, the Commission staff conducted an analysis of the traffic impacts of a proposed condominium development. Traffic generation and patterns were estimated, and the impacts on arterial traffic volumes and level of service were projected. A staff memorandum was prepared to document the analysis and findings.

- The Commission staff, at the request of the Washington County Park and Planning Department, analyzed the traffic impact of a proposed planned residential development in the Town of Erin, Washington County. Recommendations for roadway improvements and traffic engineering measures were made to maintain the safe and efficient flow of traffic on the streets and highways directly impacted by the traffic expected to be generated by the proposed development. The analyses and recommendations were documented in a letter report.

- The Commission staff, at the request of the City of Elkhorn, analyzed the need to install traffic signals at the intersection of N. Wisconsin Street and E. Court Street in the City. A set of traffic engineering actions was recommended to improve vehicular operating conditions and safety at the intersection. The analyses and recommendations were documented in a letter report.

- The Commission staff, at the request of the Village of Shorewood, began a study of the residential traffic problems in the Village. Upon completion of the analyses, potential traffic management solutions for the Village will be set forth. The analyses and recommendations will be documented in a community assistance planning report to be published in mid-1984.

- Commission staff provided detailed data and technical assistance in response to requests from a consultant to the Wisconsin Department of Transportation to analyze various Lake Freeway arterial alternative. The analysis was to include a series of traffic assignments to forecast traffic volumes on the arterial system within the Lake Arterial Corridor under various alternative roadway cross-sections.

- Commission staff, in response to a request from the Milwaukee County Department of Professional Services, provided assistance in encoding a 1982 transit network for the Milwaukee County Transit System and utilized the Commission's in-house computer programs to measure the accessibility provided by the transit system to minority population groups, per UMTA guidelines governing compliance with Title VI of the Civil Rights Act of 1964.

- Commission staff, at the request of the Wisconsin Department of Transportation, reviewed changes to highway jurisdiction within southeastern Wisconsin proposed by the Department.

# 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 is the existing air quality in the Region? Is air quality getting better or worse over time?
- What are the sources of air contaminants? What can be done to control the emissions of these contaminants?
- Will future emissions of air contaminants result in air clean enough to meet the air quality standards? If not, what strategies can be employed to ensure that the standards are met?
- What needs to be done to ensure a continued ample supply of safe drinking water?
- How can solid wastes best be managed for recycling and disposal in an environmentally safe and energy-efficient manner?

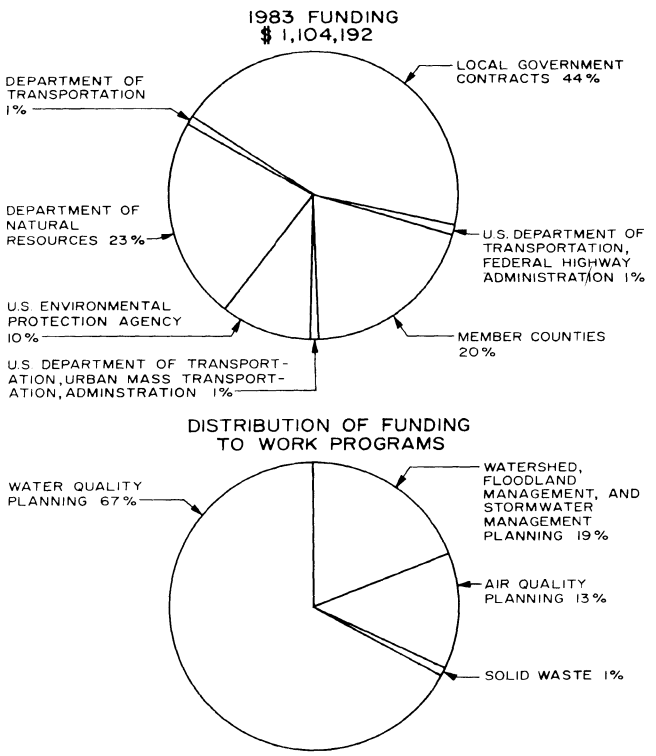
In attempting to find sound answers to these and related questions, develop recommendations concerning environmental protection and enhancement, monitor levels of environmental quality in the Region, and respond to requests for data and technical assistance, activities were conducted in 1983 in four identifiable program areas: water quality planning; watershed, floodland management, and stormwater management planning; air quality 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 1983.

## WATER QUALITY PLANNING

During 1983, Commission water quality planning efforts again were focused primarily on activities relating to the implementation of the adopted

Figure 36

ENVIRONMENTAL PLANNING DIVISION



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 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.

Prior to 1983, the Commission staff had prepared detailed nonpoint source pollution abatement plans for the direct drainage areas tributary to Ashippun Lake, Lac La Belle, North Lake, and Okauchee Lake. These plans—prepared in the form of staff memoranda—identified and quantified the principal sources of nonpoint source water pollution within the direct drainage area tributary to each lake and set forth recommended actions for reducing the pollutant loading from these sources. During 1983, one additional plan was completed—that for Friess Lake. All of these plans have been transmitted for consideration and implementation to the inland lake districts or other lake organizations established for these lakes.

In 1980, the Commission assisted the former Racine County Soil and Water Conservation District and 22 other concerned nonpoint source management agencies in completing and publishing SEWRPC Community Assistance Planning Report No. 37, A Nonpoint Source Water Pollution Control Plan for the Root River Watershed. This plan contains specific nonpoint source pollution abatement recommendations for urban areas, including construction site erosion control, improved street sweeping and vegetative debris collection and disposal, installation of oil disposal stations, roadside and stream bank erosion control, and landfill site runoff control. Rural nonpoint source practices recommended in the plan include improved

cropping practices, livestock waste management, and stream bank erosion control. By the end of 1983, two oil disposal stations, 35,795 feet of stream bank protection measures, vegetation on 121 acres of erosion-prone areas, 73 acres of grassed waterways, 10,645 feet of diversion structures, 33 grade stabilization structures, one stream bank crossing, 36,900 feet of terraces, 705 acres of conservation tillage, 73 acres of contour strips, 277 acres of contour farming, and two manure runoff control facilities had been installed in conformance with the plan recommendations. These actions had a total contract cost of about $1.72 million. State funding for the implementation of nonpoint source water pollution control projects and practices in the Root River watershed is provided on a cost-sharing basis under the Wisconsin Fund Nonpoint Source Pollution Abatement Grant Program, so that of this total cost, approximately $1.21 million, or 71 percent, was provided by state funds; $245,000, or 14 percent, was provided by county and local municipal funds, and $264,000, or 15 percent, was provided by private funds.

In 1982, the Wisconsin Department of Natural Resources designated Turtle Creek as a priority watershed (see Map 27). As such, state funds for implementation of nonpoint source water pollution control practices in the Turtle Creek watershed will, on a cost-share basis, also be provided under the Wisconsin Fund Nonpoint Source Pollution Abatement Grant Program. During 1983, the Commission staff continued to provide technical assistance to Walworth County in the on-going conduct of detailed inventories, data analyses and evaluation, public information dissemination efforts, and other planning activities necessary to the preparation of a sound and comprehensive nonpoint source pollution control plan. A preliminary draft of this comprehensive nonpoint source pollution control plan was completed by the Wisconsin Department of Natural Resources in cooperation with the Walworth County and Rock County Land Conservation Committees. That nonpoint source pollution control plan—as set forth in the report entitled, Turtle Creek Priority Watershed Plan—is a prerequisite to the installation of cost-shared nonpoint source control measures. Implementation of the nonpoint source control measures in the Turtle Creek watershed is expected to begin during 1984.

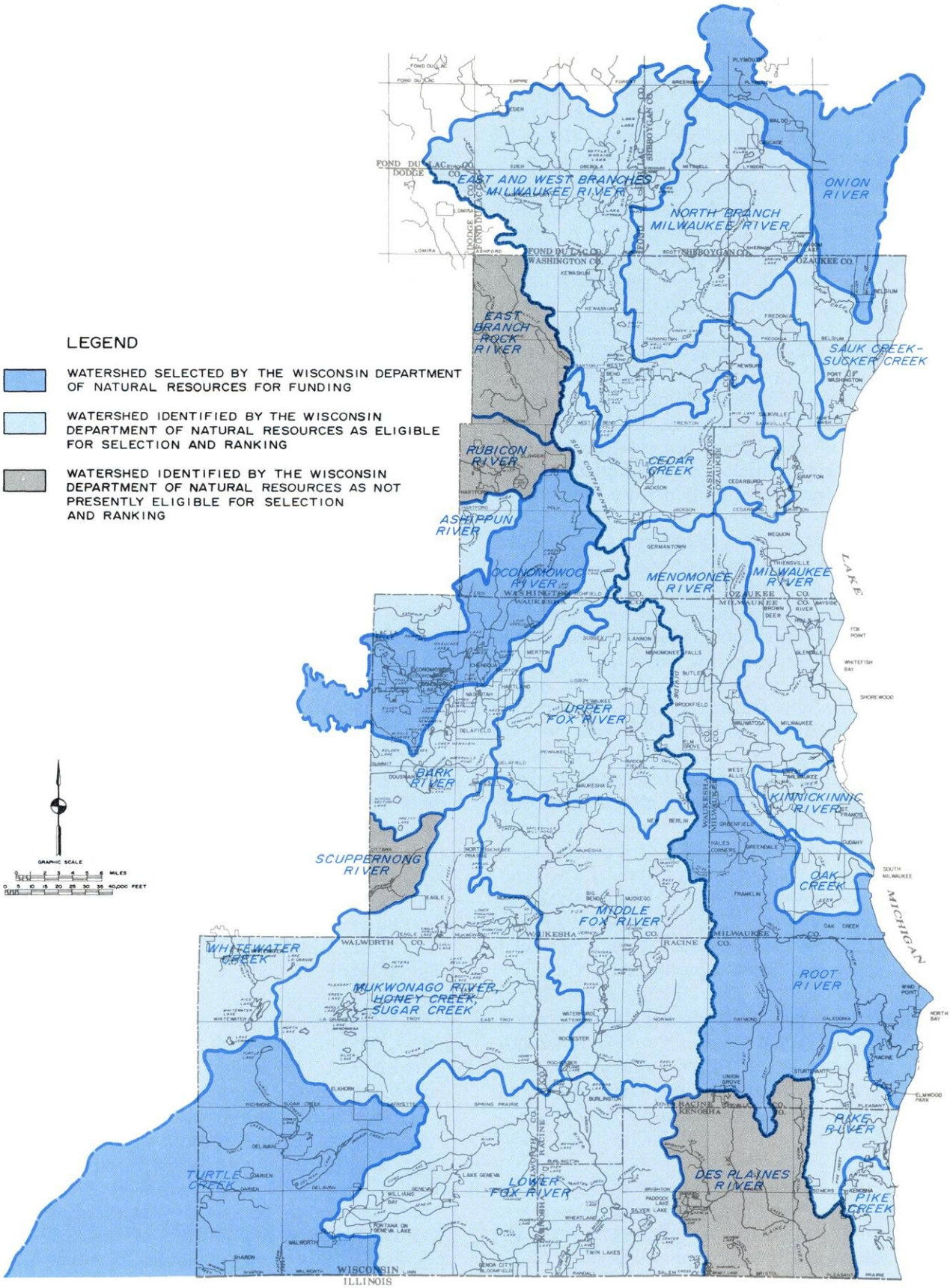
In 1983, the Wisconsin Department of Natural Resources designated the Oconomowoc River area as a priority watershed. As already noted, the priority watershed program provides state funds, on a cost-share basis, for the implementation of urban and rural nonpoint source pollution control practices. In 1983, the Commission, in cooperation with the Wisconsin Department of Natural Resources and the County Boards of Supervisors of Jefferson, Washington, and Waukesha Counties, established the Oconomowoc River Priority Watershed Plan Development Advisory Committee. The purpose of this Committee, which is comprised of local and state officials and concerned citizen leaders from throughout the watershed, is to provide guidance in the preparation of a nonpoint source pollution abatement plan for the Oconomowoc River watershed. Also during 1983, the Commission staff assisted the Wisconsin Department of Natural Resources in the preparation of a study design for the conduct of the Oconomowoc River nonpoint source water pollution abatement study. The Commission staff also participated in four public informational meetings held throughout the watershed. The Commission, in cooperation with the Wisconsin Department of Natural Resources, will prepare the nonpoint source pollution control plan for the Oconomowoc River watershed during 1984.

Finally, with respect to priority watershed plans, the Commission adopted in 1983 an amendment to the regional water quality management plan to include nonpoint source water pollution abatement recommendations, developed jointly by the Wisconsin Department of Natural Resources and the Ozaukee and Sheboygan County Boards of Supervisors pertaining to the Onion River watershed. The plan amendment pertains within the Region only to lands in the Village and Town of Belgium that drain to Belgium Creek. Implementation of the recommended nonpoint source pollution control measures in this watershed is now underway.

During 1983, the Commission, in cooperation with the U. S. Geological Survey and the Wisconsin Department of Natural Resources, completed an urban nonpoint source runoff study in Milwaukee County. The purpose of this study—which was part of a larger, nationwide urban runoff research program—was to evaluate the potential effects of increased street-sweeping practices on the quality of urban stormwater runoff. The experimental design of the study consisted of monitoring pollutant loadings in eight paired catchment areas in the Cities of Milwaukee and West Allis, with one control area in each pair subjected to normal existing street-sweeping practices and the complementary study area subjected to more intensive

Map 27

## STATUS OF PRIORITY WATERSHEDS IN SOUTHEASTERN WISCONSIN: 1983



street-sweeping practices. Also as a part of this study, stormwater detention and retention basins and catch basin cleaning were evaluated as urban nonpoint source control alternatives. During 1983, the Commission staff analyzed the data collected during the experimental period and, with the aid of pollutant loading simulation models, evaluated the effectiveness of these alternative urban nonpoint source pollution control measures. The results of the evaluations indicated that intensive street-sweeping practices and catch basin cleaning could be expected to provide only a very modest level of water pollution runoff control, whereas the use of stormwater detention and retention basins could be expected to provide a relatively high level of pollution runoff control. The Commission staff also estimated the cost and economic feasibility of implementing these alternative urban nonpoint source pollution controls. Unit costs, together with the simulation modeling results, were applied to three selected subwatersheds in the Region—Noyes Creek in the Menomonee River watershed, Lincoln Creek in the Milwaukee River watershed, and the Upper Root River watershed—in order to evaluate the cost-effectiveness of applying the various techniques on a widespread basis.

The results of this research effort are set forth in a three-volume report entitled, Evaluation of Urban Nonpoint Source Pollution Management in Milwaukee County, Wisconsin, which was prepared jointly by the U. S. Geological Survey, the Wisconsin Department of Natural Resources, and the Commission. This report provides information important to the design of comprehensive urban nonpoint source pollution abatement programs.

### Lake Water Quality Management Planning

One of the major recommendations of the adopted regional water quality management plan relates to the preparation of in-depth lake water quality management plans for the direct tributary drainage areas to the 100 major lakes in southeastern Wisconsin. A total of 13 of the 100 major lakes were selected for initial studies: George and Paddock Lakes in Kenosha County, Eagle Lake in Racine County, Geneva and Wandewega Lakes in Walworth County, Friess and Pike Lakes in Washington County, and Ashippun, La Belle, North, Oconomowoc, Okauchee, and Pewaukee Lakes in Waukesha County. The study efforts are intended to result in recommendations for the better management of the lake water quality, and represent a joint effort by the Commission, the Wisconsin Department of Natural Resources, the lake protection and rehabilitation districts concerned, and other lake-oriented organizations.

The findings and recommendations of each of the 13 lake studies are being set forth in a series of SEWRPC community assistance planning reports. Each report describes 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; required land management and land use measures in each lake watershed; and required point and nonpoint source pollution abatement measures. For four of the 13 lakes—Ashippun, La Belle, North, and Okauchee—the management plans had been completed and adopted as amendments to the regional water quality management plan prior to 1983. During 1983, the Commission completed a detailed lake water quality management plan for Friess Lake. This lake management plan is set forth in SEWRPC Community Assistance Planning Report No. 98, A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin. At year's end, this report had been transmitted to the local governments concerned for their consideration and adoption.

By the end of 1983, the Commission had also completed all technical work on a lake management plan for Pewaukee Lake. The report documenting this plan is to be published in 1984. During 1983, the Commission also initiated work on a lake management plan for Pike Lake. The studies and final reports for the remaining six lakes—George, Paddock, Eagle, Geneva, Wandawega, and Oconomowoc—are scheduled to be completed over the next few years as budget and work program conditions permit.

### Local Sewerage Facilities Planning

During 1983, 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 Department of Natural Resources in support of the administration of the Wisconsin Fund established by the State Legislature in 1978, and good preliminary engineering practice. Work activities during 1983 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 1983, such local sewerage facilities plans were completed for the Village of Menomonee Falls, the Town of Pleasant Prairie Sewer Utility District D, and the Wallace Lake Sanitary District. These three reports set forth final recommendations for the construction of new sewerage facilities in accordance with the recommendations of the adopted regional water quality management plan. As such, the three reports were recommended by the Commission to the Wisconsin Department of Natural Resources for approval. Similar facilities plans were under development at year's end for the Allenton Sanitary District, the Village of Lac La Belle and the Town of Oconomowoc, and the Town of Waterford Sanitary District No. 1.

Also in 1983, a detailed sewerage facilities plan was completed for the Geneva Lake area in Walworth County. This area encompasses the City of Lake Geneva; the Villages of Fontana, Walworth, and Williams Bay; the Lake Como area in the Town of Geneva; and Geneva Lake shoreline development in the Town of Linn.

This detailed sewerage facilities planning resulted in a request to the Commission for an amendment to the regional water quality management plan. The request was presented jointly by the Villages of Fontana, Walworth, and Williams Bay. In responding to this request, the Commission conducted its own analyses attendant to the plan amendment proposal. The results of these analyses were set forth in a memorandum entitled "Response to Request by Western Geneva Lake Area Communities to Amend the Regional Water Quality Management Plan," dated December 1, 1983. After reviewing a number of alternatives attendant to the configuration of public sewage treatment plants and trunk sewers in the western Geneva Lake area, including an alternative that would provide sanitary sewer service to the Villages of Fontana, Walworth, and Williams Bay through a connection to the Walworth County Metropolitan Sewerage District system, the Commission's Technical Advisory Committee on Regional Water Quality Management Planning recommended that the Commission formally amend the regional water quality management plan in the manner requested by the western Geneva Lake communities. The plan was amended on December 1, 1983, to provide for the retention and reconstruction of the existing Williams Bay sewage treatment facility; to remove from the plan the proposed trunk sewer that would convey sewage from Williams Bay to the proposed Fontana/Walworth sewage treatment plant; and to provide for the retention of the Kikkoman Foods Company, Inc., and Interlaken Resort private sewage treatment facilities so long as the discharge of sewage effluent from those plants to the groundwater remains a viable method of disposal.

During 1983, the Commission also responded to requests by the Villages of Germantown and Thiensville to amend the regional water quality management plan so as to permit those two villages to construct new sewage treatment facilities rather than connect their local sewerage systems to the Milwaukee Metropolitan Sewerage District (MMSD) system as currently recommended in the plan. In response to these requests, the Commission conducted its own analyses. The results of these analyses were set forth in two memoranda completed during the year. One, dated September 16, 1983, was entitled, "Response to Request by Village of Thiensville to Amend the Regional Water Quality Management Plan." The second, dated November 10, 1983, was entitled, "Response to Request by Village of Germantown to Amend the Regional Water Quality Management Plan." In both the Germantown and Thiensville situations, the economic analyses of the local treatment plant versus MMSD connection alternatives proved to be inconclusive; i.e., it was not possible to conclude that either the construction of a new local treatment plant or the connection of the community to the MMSD system was clearly more cost-effective. In addition, it was concluded that there were no significant differences in the alternatives with respect to primary and secondary environmental impacts. The analyses did conclude, after examining the potential fiscal impacts of the alternatives on the residents of the two villages involved and of the MMSD, that it should be possible to negotiate service agreements between the Villages of Germantown and Thiensville and the MMSD that would be fiscally advantageous to all. Given these findings, the Commission recommended that the Villages of Germantown and Thiensville and the MMSD negotiate such fiscally advantageous service contracts. At year's end, such negotiations were in progress.

Finally, during 1983 the Commission received a request from the Town of Bristol Utility District No. 3 to amend the regional water quality management plan so as to permit that district to construct a new sewage treatment facility that would discharge effluent to the Des Plaines River. The presently adopted plan calls instead for the Bristol Utility District No. 3 to contract with the Town of Pleasant Prairie Sewer Utility District D for sewage treatment services. At year's end, technical work attendant to the analysis of alternatives in response to this plan amendment request was underway.

### 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.

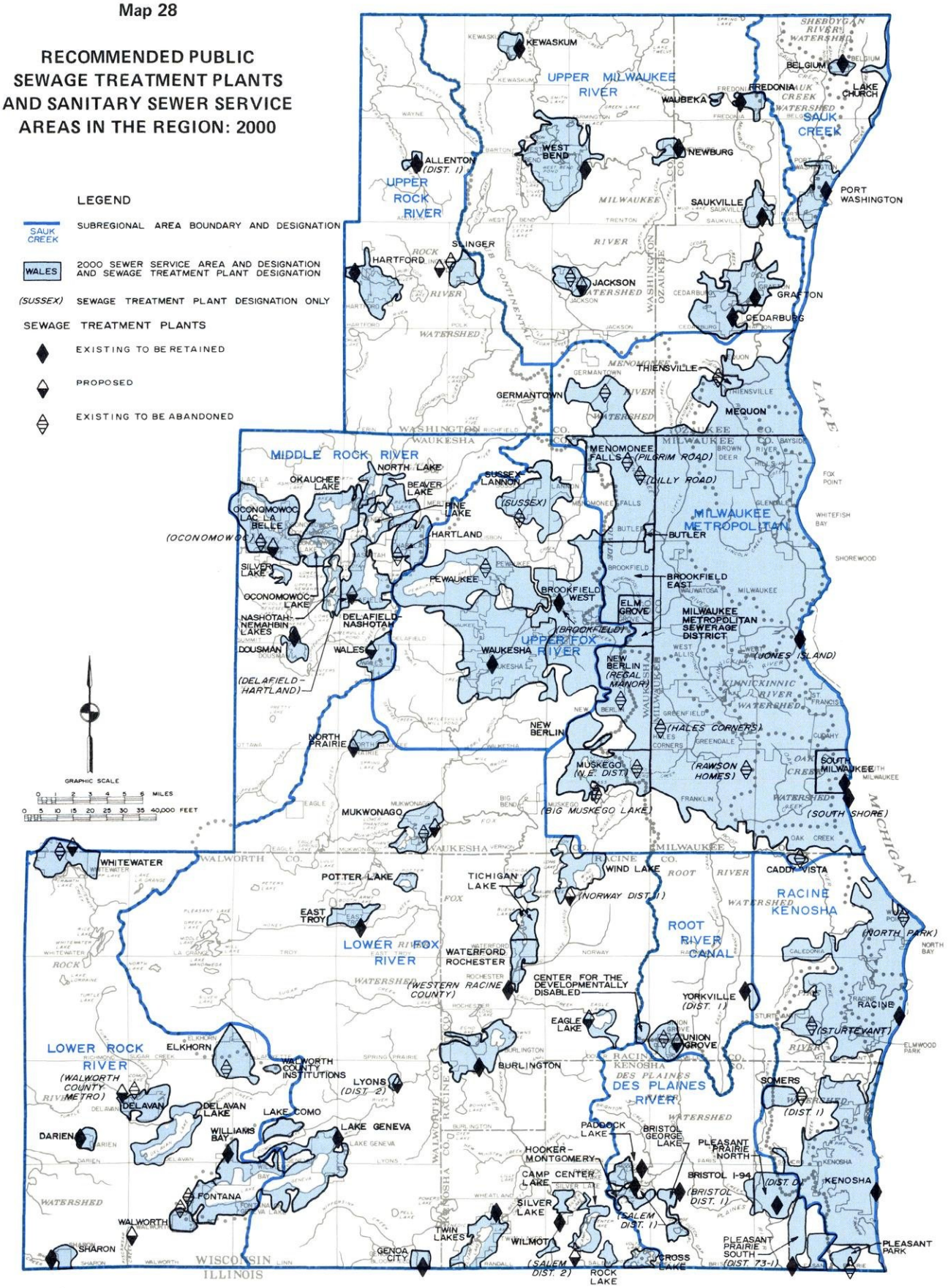
The adopted regional water quality management plan includes preliminary recommended sanitary sewer service areas tributary to each recommended public sewage treatment facility in the Region. There are in the adopted plan a total of 85 such sanitary sewer service areas (see Map 28). These recommended 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 service area map would identify the location and extent of the primary environmental corridors lying within the service area, such primary environmental 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 not only is important to the maintenance of the overall quality of the environment, but helps avoid the creation of serious and costly developmental problems. Accordingly, the service area plan should recognize that urban development should be discouraged from occurring within the corridors, 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 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 1983, the recommended plan refinement process had been completed for 10 sanitary sewer service areas. Six of these 10 refinements—those for the City of Muskego, the City of West Bend, and the areas served by the Walworth County Metropolitan Sewerage District, including the Cities of Delavan and Elkhorn, the Delavan Lake Sanitary District, and the Walworth County Institutions—were completed prior to 1983. During 1983, refined sanitary sewer service area plans were completed and adopted by the Commission for the City of Port Washington and the Villages of Germantown, Saukville, and Sussex. These four plans are documented in SEWRPC Community Assistance Planning Reports No. 70, Sanitary Sewer Service Area for the Village of Germantown; No. 84, Sanitary Sewer Service Area for the Village of Sussex; No. 90, Sanitary Sewer Service Area for the Village of Saukville; and No. 95, Sanitary Sewer Service Area for the City of Port Washington. The plans for the Villages of Saukville and Germantown were adopted by the Commission as amendments to the regional water quality management plan on June 16, 1983, and September 8, 1983, respectively, while the plans for the City of Port Washington and the Village of Saukville were adopted on December 1, 1983. The final sewer service area plan for Germantown is shown on Map 29.

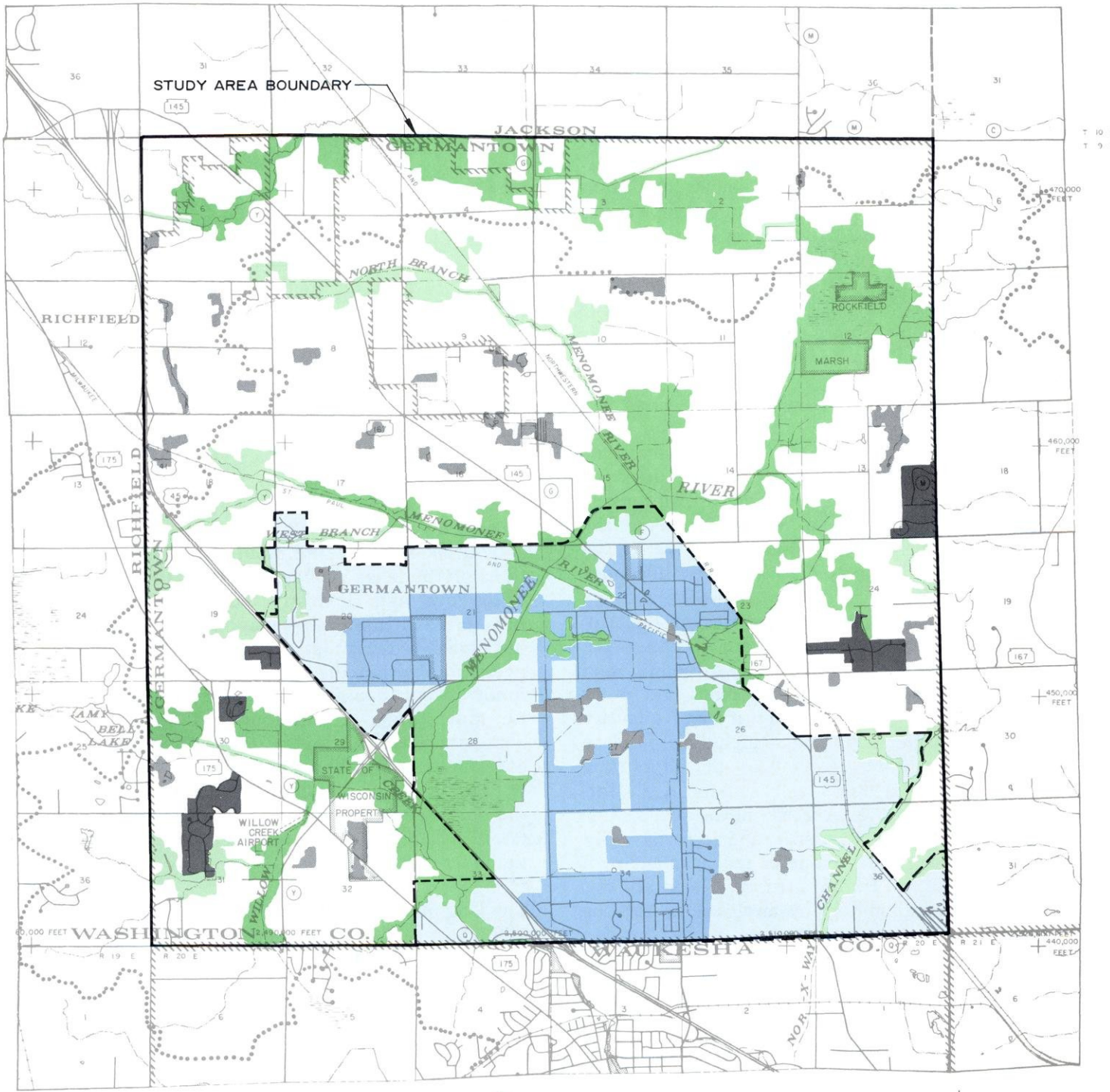
Map 28

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



Map 29

## RECOMMENDED GERMANTOWN SANITARY SEWER SERVICE AREA



Sewer service area refinement reports were in various stages of completion during 1983 for the Allenton, Belgium, Butler, Cedarburg-Grafton, Fredonia, Hartford, Mequon, Oak Creek, Thiensville, Waukesha, and Whitewater service areas. Pending the completion of such plan refinement process 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 1983, such review comments were provided on 120 extensions as indicated in Table 16.

Table 16

SANITARY SEWER EXTENSION REVIEWS: 1983

| County | Number |
|---|---|
| Kenosha | 11 |
| Milwaukee | 38 |
| Ozaukee | 5 |
| Racine | 11 |
| Walworth | 13 |
| Washington | 7 |
| Waukesha | 35 |
| Total | 120 |

### Milwaukee Harbor Estuary Comprehensive Water Resources Planning Program

In 1983 the Commission completed the second year of work under the three-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 1983, extensive field data collection efforts were continued by the agencies concerned. The MMSD data collection effort principally involved weekly water quality sampling at all sampling sites in the study area; continuous water quality monitoring at five sites; primary productivity measurements within the estuary; and extensive bottom sediment data collection, including sediment core chemistry, sediment gas production, sediment oxygen demand, and interstitial water chemistry. The MMSD laboratory conducted the bulk 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; groundwater level and chemistry data collection at six sites in the Menomonee Valley; weekly sampling of suspended sediment at 16 sites on the tributary rivers and within the inner harbor; and intensive runoff event quality sampling at these 16 sites for four storms in the months of April, August, September, and October 1983. The USGS also constructed and calibrated a one-dimensional flow simulation model for the inner harbor estuary for the purpose of estimating mean daily flows and the flood and ebb flow impacts of Lake Michigan on the inner harbor.

The Commission field data collection effort during 1983 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 developed and maintained a computerized data management system to facilitate the analysis of the water quality and suspended sediment data required during the study.

During 1983, the Commission, in consultation with the Technical Advisory Committee for the Milwaukee Harbor Estuary Comprehensive Water

Resources Management Plan, retained a consultant to perform needed water quality simulation modeling analyses of the inner and outer harbors and adjacent Milwaukee Bay. The Commission staff provided data management and analytical services throughout the year to the consultant in order to facilitate the simulation modeling effort for the estuary. The Commission staff also initiated a simulation modeling effort to determine water quality conditions in the rivers tributary to the estuary using an updated, state-of-the-art hydrologic and water quality numerical simulation model. Simulation modeling of combined sewer overflows into the estuary was also begun during 1983 utilizing a computer program made available by the Milwaukee Metropolitan Sewerage District.

The Technical Advisory Committee overseeing the conduct of the study met twice during 1983 to review five draft chapters of the final report. The chapters reviewed by the Committee presented introductory material; set forth the basic principles and concepts underlying the study; provided an overview of the natural resource and demographic features of the study area; discussed the probable growth and change in the study area; and summarized the existing monitoring network and available data base pertinent to the preparation of a comprehensive water resources management plan for the Milwaukee Harbor estuary.

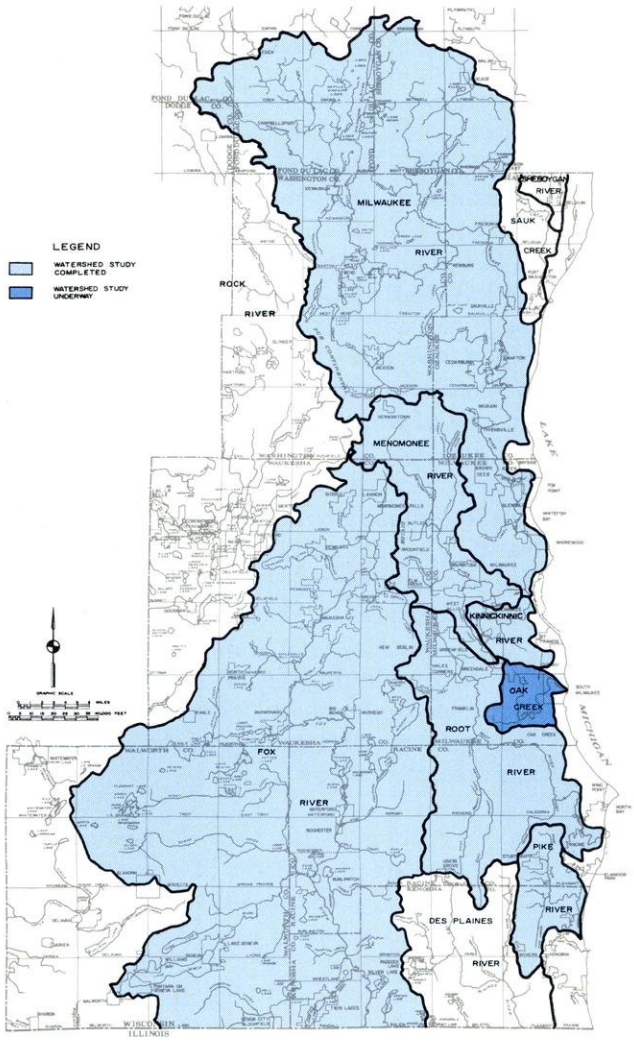
## WATERSHED, FLOODLAND, AND STORMWATER MANAGEMENT PLANNING

During 1983, Commission efforts in watershed, floodland, and stormwater management planning were focused primarily on the completion of the comprehensive plan for the Pike River watershed. In addition, the Commission began preparation of a comprehensive plan for the Oak Creek watershed. Map 30 indicates the status of comprehensive watershed studies conducted by the Commission through the end of 1983.

Other work conducted during 1983 included the provision of hydrologic and hydraulic data—including flood flow and stage data—to consulting engineers and governmental agencies for use in the development of federal flood insurance rate studies. The Commission also provided technical assistance during 1983 to state and local governmental agencies in the development and implementation of stormwater management policies and practices. Finally, the Commission continued to promote the conduct of a cooperative stream gaging program.

**Map 30**

**SEWRPC WATERSHED STUDY STATUS: 1983**




### Stormwater Management Planning

During 1983, the Commission staff provided technical assistance to state and local governmental agencies attendant to 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 1983:

- At the request of the Town of Somers, the Commission analyzed stormwater problems attendant to the proposed expansion of the Kenosha Municipal Airport. As a part of this work effort, an intergovernmental meeting was held and agreements were reached to design the airport improvements so as not to exacerbate stormwater problems in the vicinity of the airport.

- At the request of the Town of Pewaukee, the Commission conducted a study of stormwater and groundwater problems in the Hill 'n Dale Subdivision of the Town. Alternative measures to abate problems associated with a poor surface water drainage system and high groundwater levels were evaluated, and recommendations were presented to abate storm- and groundwater problems in this area of the Town.

- At the request of the City of Oconomowoc, an evaluation was made of the stormwater drainage impacts expected to result from the development of a site in the City's industrial park which drains to an area with stormwater drainage problems adjacent to Lac La Belle.

- Technical work was completed during the year on the preparation of a detailed stormwater management system plan for the Village of Sussex.

In 1984 it is expected that the Commission will become increasingly involved in stormwater management planning activities. A stormwater management plan for the Village of Sussex will be completed and a similar plan undertaken for the Village of Hales Corners. In addition, the Commission will remain responsive to ad hoc requests for stormwater planning assistance from local governmental units.

**Pike River Watershed Study**

During 1983, all work was completed on a comprehensive plan for the Pike River watershed. This work effort was undertaken by the Commission at the request of the county boards of the Counties of Kenosha and Racine, and was guided by the Pike River Watershed Committee, a committee comprised of local, state, and federal officials and concerned citizen leaders from throughout the watershed. The findings and recommendations of the study are set forth in SEWRPC Planning Report No. 35, A Comprehensive Plan for the Pike River Watershed, published in June 1983, following a public hearing on the plan held on December 16, 1982.

The recommended comprehensive plan for the Pike River watershed is comprised of three major elements: a land use plan element, a floodland management plan element, and a water quality management plan element. The major recommendations under each of these plan elements are summarized herein.

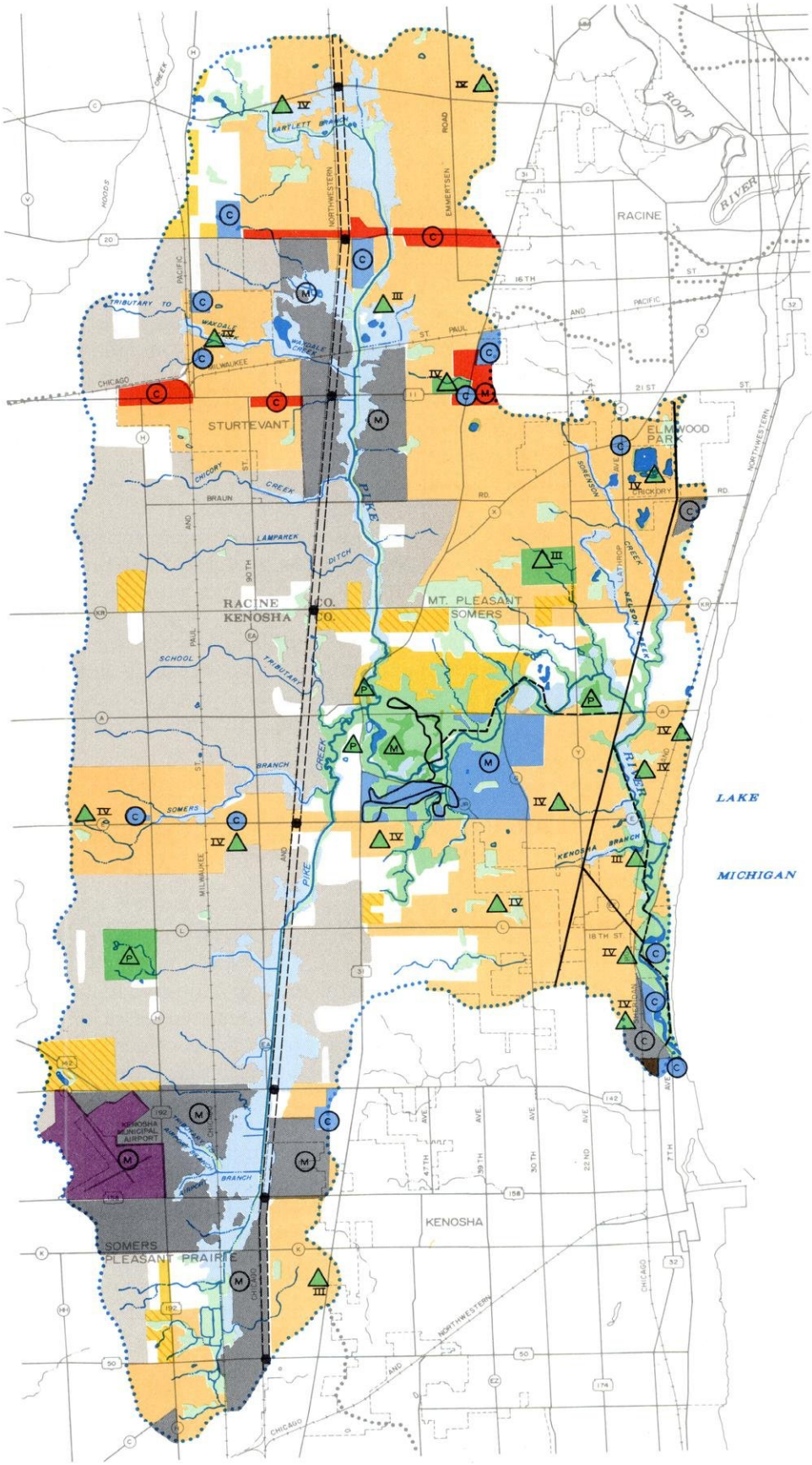
*Land Use Plan Element*

The land use plan element is summarized on Map 31 and contains the following major proposals:

- The guidance of future land use development in the watershed through locally exercised land use controls into a more orderly and economic pattern. By so guiding future development, the intensification of existing, and the creation of new, developmental and environmental problems would be avoided. The primary environmental corridors of the watershed, together with the remaining undeveloped floodlands, would be protected from incompatible urban development, thereby assuring continuing enjoyment of the recreational, aesthetic, ecological, and cultural values associated with the riverine areas, while avoiding intensification of flood damage and water pollution problems. In addition, the plan would seek to preserve, to the greatest extent possible, the prime agricultural lands in the watershed. The recommended plan would accommodate a plan year 2000 population in the watershed of about 56,300 persons, an increase of 32,100 persons over the 1970 level; and a planned employment of about 25,200 jobs, an increase of 16,900 jobs over the 1970 level. To accommodate the increase in population and employment, an additional 15.1 square miles of land would be converted from rural to urban use between 1975 and 2000, bringing the total urban land to 29.3 square miles, or 57 percent of the total area of the watershed. New urban

Map 31

## RECOMMENDED LAND USE AND PARK AND OPEN SPACE PLAN FOR THE PIKE RIVER WATERSHED: 2000




LEGEND

- PREDOMINANTLY SUBURBAN DENSITY RESIDENTIAL (0.2-0.6 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- PREDOMINANTLY LOW DENSITY RESIDENTIAL (0.7-2.2 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- PREDOMINANTLY MEDIUM DENSITY RESIDENTAL (2.3-6.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- PREDOMINANTLY HIGH DENSITY RESIDENTIAL (7.0-17.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
- RETAIL AND SERVICE CENTER M – MAJOR C – COMMUNITY
- INDUSTRIAL CENTER M – MAJOR C – COMMUNITY
- TRANSPORTATION CENTER M – MAJOR AIRPORT
- GOVERNMENT AND INSTITUTIONAL CENTER M – MAJOR C – COMMUNITY
- OUTDOOR RECREATION M – MAJOR PUBLIC III – COMMUNITY PUBLIC IV – LOCAL PUBLIC P – PRIVATE (25 ACRES AND LARGER)
- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR AND ISOLATED NATURAL AREA
- WATER
- OTHER AGRICULTURAL AND RURAL LAND
- PRIME AGRICULTURE LAND
- EXISTING RECREATIONAL CORRIDOR (TRAILS)
- PROPOSED RECREATIONAL CORRIDOR (TRAILS)
- 100 YEAR RECURRENCE INTERVAL FLOODLAND UNDER PLANNED LAND USE AND EXISTING CHANNEL CONDITIONS OUTSIDE PRIMARY AND SECONDARY CORRIDOR
- PROPOSED LAKE ARTERIAL

GRAPHIC SCALE
0 1/2 1 MILE
0 2000 4000 6000 8000 FEET

development in the watershed is proposed to occur primarily at medium population densities, with gross residential population densities ranging from about 3,000 to about 8,000 persons per square mile. The new urban development would be located in areas served, or proposed to be served, by a full range of public utilities and essential urban services, particularly public sanitary sewer and water supply services.

- The eventual public acquisition through purchase, dedication, or gift of the remaining primary environmental corridor lands in the watershed. The primary environmental corridors of the Pike River watershed total about 1,189 acres located generally along the Pike River from the mouth upstream to and within Petrifying Springs County Park; along Sorenson Creek from the confluence with the Pike River upstream to the Kenosha-Racine County line; and along Pike Creek from the confluence with the Pike River upstream to CTH E. Of the total corridor lands, 439 acres, or about 37 percent, are already in public ownership and consist largely of lands on the University of Wisconsin-Parkside Campus and in Petrifying Springs County Park. An additional 138 acres, or about 12 percent, consist of lands held in compatible nonpublic open space and outdoor recreational uses, including lands lying on the grounds of the Kenosha Country Club and the Hawthorne Hollow Nature Preserve along Pike Creek west of STH 31. Accordingly, the plan recommends that the remaining 612 acres, or 51 percent of the total corridor lands, be acquired for public use over time through purchase, dedication, or gift as urbanization in the watershed proceeds.

- The development of a seven-mile recreation trail along the main stem of the Pike River from Petrifying Springs County Park to Lake Michigan. This trail would be linked to an existing five-mile Kenosha-Racine County bike trail. After the public hearing, the alignment of the trail was adjusted to avoid the grounds of the Kenosha Country Club.

- The continued provision of park and outdoor recreational facilities throughout the watershed, including the maintenance of the Petrifying Springs County Park as the largest, most significant park in the watershed; the expansion of Sanders Park in the Town of Mt. Pleasant through the acquisition of 40 additional acres; the development of additional facilities at Sam Poerio Park in the City of Kenosha; and the acquisition and development of 12 new local neighborhood parks as the need for such parks becomes evident over time.

*Floodland Management Plan Element*

The floodland management plan element for the Pike River watershed is summarized on Map 32 and contains the following major proposals for each of the three subwatersheds within the Pike River watershed:

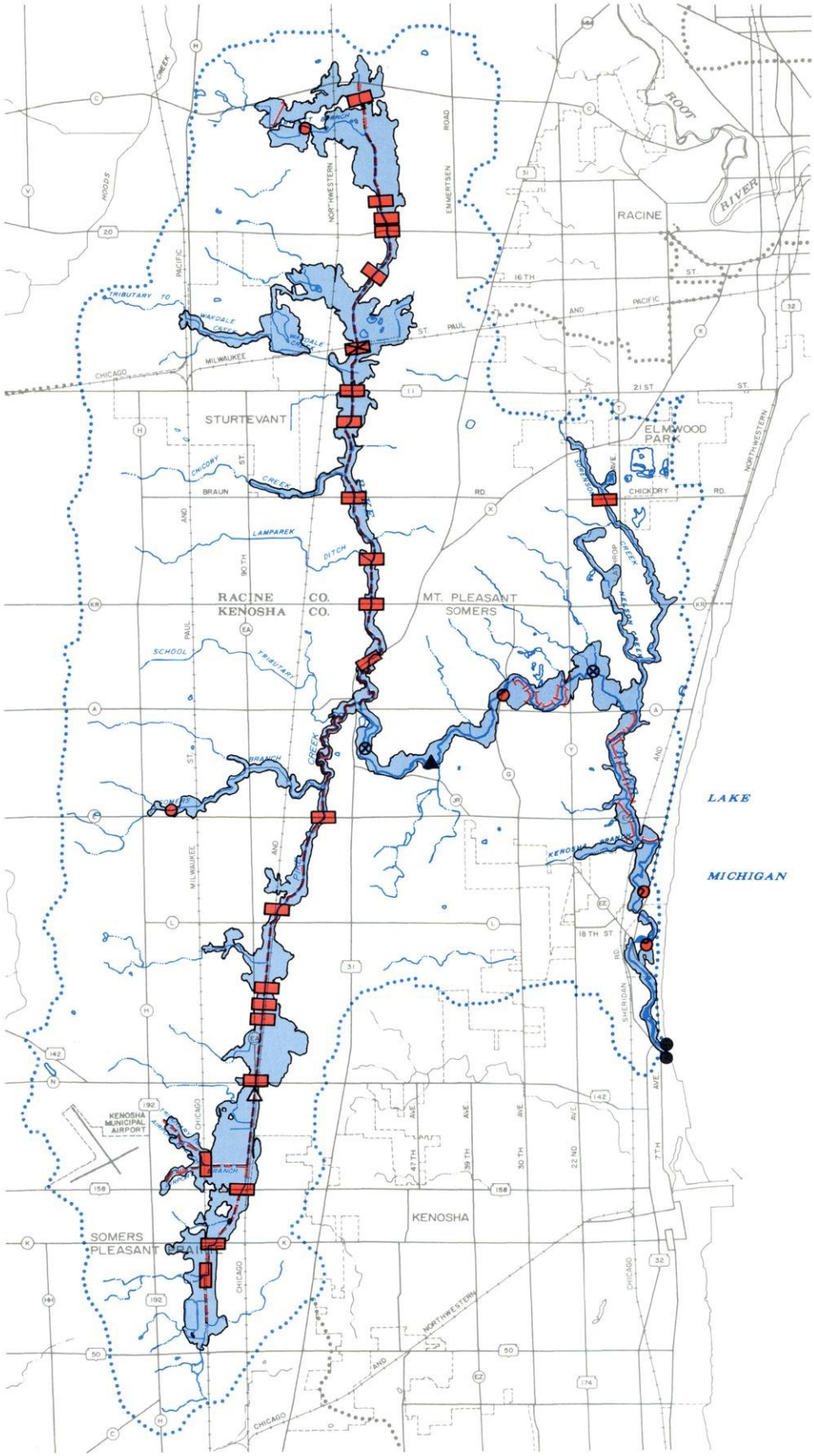
Pike Creek Subwatershed

- Channel cleaning and debrushing activities along the 1.8-mile reach of the Pike Creek extending from the confluence with the Pike River in Petrifying Springs County Park upstream to the confluence with Somers Branch. Such cleaning and debrushing activities should be undertaken in a manner compatible with preserving, to the maximum extent practicable, the natural environment along that reach of the Creek.

- Major channel improvements, consisting of channel widening and deepening, along Pike Creek extending from the confluence with Somers Branch upstream for about 5.7 miles to a point just north of STH 50. The proposed channel would be turf lined; would have bottom widths ranging from five feet to 20 feet; and would have side slopes of one on three. The proposed improvements lie along reaches of Pike Creek that have been previously channelized and along which there exist no significant wetlands, woodlands, or wildlife habitat areas. The proposed improvements would be designed to carry within the new channel all floods up to and including the 100-year recurrence interval flood. The proposed improvements would resolve existing and potential agricultural and structural flooding problems along Pike Creek. The channel improvements would require the replacement of nine existing bridges across Pike Creek: STH 142, STH 158; CTH E; CTH K; the Chicago, Milwaukee, St. Paul & Pacific railroad bridge

Map 32

## RECOMMENDED FLOODLAND MANAGEMENT PLAN ELEMENT FOR THE PIKE RIVER WATERSHED: 2000




LEGEND

RECOMMENDED FLOODLAND MANAGEMENT PLAN ELEMENT

- 100-YEAR RECURRENCE INTERVAL FLOODLAND--PLANNED LAND USE AND EXISTING CHANNEL CONDITIONS
- DIKE
- JETTY
- BRIDGE OR CULVERT MODIFICATION OR REPLACEMENT
- BRIDGE OR CULVERT REMOVAL
- CONTINUOUS RECORDER STREAM GAGE
- CREST STAGE GAGE

CHANNEL MODIFICATIONS

- CHANNEL CLEANING AND DEBRUSHING
- CHANNEL ENLARGEMENT
- STRUCTURE FLOODPROOFING

DAM MODIFICATION TO PROVIDE FISH LADDER OR RIFFLE AREA

GRAPHIC SCALE

0 1 MILE

0 2000 4000 6000 8000 FEET

downstream of CTH K; the Town of Somers solid waste transfer station bridge upstream of CTH L; and three farm bridges upstream of STH 142. After the public hearing, a recommendation was included in the plan to reestablish, and possibly enhance, the aquatic habitat in the stream and along the stream banks in conjunction with the proposed channelization project along Pike Creek from the confluence with the Somers Branch upstream to CTH L.

- The floodproofing of three structures and the elevation of two additional structures along the Somers Branch upstream of the Chicago, Milwaukee, St. Paul & Pacific railroad crossing.

- Major channel improvements, including channel widening and deepening, along both the Airport Branch and the Tributary to Airport Branch, including replacement of the Chicago, Milwaukee, St. Paul & Pacific railroad crossing of the Airport Branch. This recommendation is conditioned, however, on a finding in the design phase of the proposed industrial park along these branches between STH 31 and the Kenosha Municipal Airport north of STH 158 that the channel improvements are desirable. It may be possible through good industrial park design to develop the remaining area along the Airport Branch and the Tributary to Airport Branch for industrial use without filling of the floodplain, retaining the floodlands in open uses, in which case none of the structural flood control measures would be required. The conditionally proposed channel improvements would consist of new turf-lined channels, with the existing drainageways being deepened by an average of about five feet, and a maximum of about eight feet; with the new channels having a bottom width ranging from 10 feet to 15 feet; and with the new channels having side slopes of one on three. Should it be ultimately determined to be desirable to undertake these channel improvements to facilitate the expansion of the industrial land use complex in this area, the analyses in the watershed plan indicate that such improvements would not significantly change any of the recommended downstream structural flood control on Pike Creek. Conversely, however, it would not be possible to undertake the tentatively proposed channel improvements on the Airport Branch and the Tributary to Airport Branch without first having implemented the channelization recommendations on Pike Creek downstream from the confluence with the Airport Branch.

Upper Pike River Subwatershed

- Major channel improvements, consisting of channel widening, deepening, and partial realignment, along the Upper Pike River extending from CTH C downstream to the confluence with Pike Creek in Petrifying Springs County Park, a distance of about 6.9 miles. The proposed channel would be turf lined; would be lowered by an average of about four feet and a maximum of about six feet; would have bottom widths ranging from 10 feet to 20 feet; and would have side slopes of one on three. With the exception of the southernmost portion of the reach proposed to be improved, these channel improvements lie along reaches of the Pike River that have been previously channelized and along which there exist no significant wetlands, woodlands, or wildlife habitat areas. An environmental corridor does exist, however, within the Petrifying Springs County Park at the confluence of the Pike River and Pike Creek and extends upstream along the Pike River to STH 31. The recommended intrusion of channel improvements into the primary environmental corridor is unavoidable, however, if the flooding problems along the Pike River from STH 31 to the confluence with Lamparek Ditch are to be abated. The proposed improvements would be designed to carry within the new channel all floods up to and including the 100-year recurrence interval flood, and would resolve the existing and potential agricultural and structural flooding problems along the Upper Pike River. The channel improvements would include the replacement or modification of 11 existing bridges across the Upper Pike River: STH 11, STH 20, STH 31, CTH KR, Oakes Road, Spring Street, Braun Road, two private bridges upstream of STH 20, a farm bridge downstream of STH 11, and a farm bridge downstream of the confluence with Lamparek Ditch. In addition, the Chicago, Milwaukee, St. Paul & Pacific railroad crossing upstream of STH 11 would be removed since the line

has been abandoned. After the public hearing, a recommendation was included in the plan to reestablish, and possibly enhance, the aquatic habitat in the stream and along the stream banks in conjunction with the proposed channelization project along the Upper Pike River from the confluence with Pike Creek upstream to STH 20.

- The construction of a dike upstream of Spring Street to protect existing residential development from flooding along the Bartlett Branch. The dike would have a total length of about 500 feet, an average height of about four feet, and a maximum height of about six feet. Water impounded behind the dike from local drainage would be permitted to be dissipated slowly through infiltration into the groundwater reservoir.

- The floodproofing of two structures and the elevation of four additional structures along the Bartlett Branch downstream of Spring Street.

Lower Pike River Subwatershed

- The floodproofing of the Carthage College Field House and the former Valley Restaurant and Supper Club and the elevation of a residence located just upstream of CTH G.

- The improvement of local drainage on the golf course at the Kenosha Country Club so as to minimize the adverse effects caused by flooding along the Pike River. This recommendation followed a preliminary recommendation taken to the public hearing that the Kenosha Country Club membership consider the construction of a system of low-level dikes along the Pike River through the Country Club grounds. Those dikes would have been designed to provide protection from floods up to and including the 10-year recurrence interval flood. It was recognized in making this recommendation that frequent flooding of the Pike River disrupts normal use of the golf course; damages tees, greens, and traps; and causes maintenance problems over the course. After carefully considering this preliminary recommendation, the membership of the Kenosha Country Club indicated that the construction of the dike system as envisioned would be too costly to undertake and would likely have a detrimental effect on the layout of the golf course. Accordingly, the membership requested that the final plan as it pertains to the Kenosha Country Club grounds be limited to proposals to improve local drainage on the golf course grounds. While such improvements would not eliminate the flooding events, they would serve to facilitate play on the golf course after flood events.

- The modification of the dams located on the Kenosha Country Club grounds and within Petrifying Springs County Park by providing fish ladders or creating riffle areas at each dam.

- The possible construction of a series of low-level dikes along the main stem of the Lower Pike River, both upstream and downstream of the Kenosha Country Club, in order to abate agricultural crop damages. The plan does not specifically recommend that these dike systems be constructed because of a long-term commitment to convert the lands affected from rural to urban use. However, such a long-term commitment to urban land use development should not be construed to prohibit farmers along these stream reaches from individually or collectively undertaking the construction of low-level dikes to abate agricultural flood damage problems so long as the land continues to be farmed. Such a system of dikes could be designed to prevent flooding from up to and including the 10-year recurrence interval flood. In the long-term, however, the plan envisions that the entire 100-year recurrence interval floodplain will be maintained in essentially natural open uses as the lands adjacent to the Lower Pike River become urbanized over the next several decades. In some cases, the nature of the floodplain is such that wetlands will be reestablished along the stream system and the primary environmental corridor along the Lower Pike River will be consequently enriched. Whether or not to construct the low-level dikes in the interim for agricultural land protection would be a decision to be made by the farmers involved either individually or collectively.

- The replacement of the existing Chicory Road crossing of Sorenson Creek with a new clear span bridge having an opening of about 30 feet. The new bridge would eliminate the

backwater effects of the existing hydraulically inadequate crossing and thereby resolve upstream structure flooding problems.

- The construction of two parallel jetties and the periodic dredging of the channel bottom between the jetties to maintain channel flow capacity at the mouth of the Pike River on the Lake Michigan shoreline. These measures would abate the flooding problems that are caused by the formation of a sandbar across the mouth of the Pike River.

In addition to the foregoing structural measures, the floodland management element of the plan includes recommended standards relative to bridge replacement to ensure that major streets and highways remain operable during flood events. The plan also includes several supplemental measures intended to minimize the monetary losses associated with flooding, including participation in the Federal Flood Insurance Program and continuation of desirable lending institution and realtor policies concerning the sale of riverine properties. Maintenance of a basic cooperative stream gaging program is also recommended.

Finally, the plan recommends that each of the units of government in the watershed carefully review their floodland zoning regulations to ensure that such regulations complement the recommended watershed land use plan element and are coordinated with the structural flood control measures recommended in the plan. In general, those floodlands lying within the 100-year recurrence interval flood hazard lines under year 2000 planned land use conditions that are presently neither developed for urban use nor committed to such development by the recordation of land subdivision plats and the installation of municipal improvements should be zoned so as to prohibit incompatible future urban development. Those existing urban land uses in the floodlands scheduled to be floodproofed, elevated, or protected through future structural flood control measures should be placed in a flood hazard district until implementation of the recommended flood control measures, at which time the lands should be appropriately rezoned.

*Water Quality Management Plan Element*

The water quality management plan element of the Pike River watershed plan contains the following major proposals:

- The abandonment of the single remaining sewage treatment plant in the watershed, which is serving the Town of Somers Utility District No. 1. Abandonment of this treatment plant and connection of its service area to the Kenosha sanitary sewerage system would be effected by an interim connection using a combination gravity flow sewer and pumping station and force main system.

- The elimination of three of the five sewage flow relief devices in the City of Kenosha that permit the discharge of raw sewage from the sanitary sewer system to the storm sewer system and the Pike River. The remaining two flow relief devices would be maintained to function as emergency overflow outlets for pumping stations, but would only be utilized in extreme emergencies when the pumping station would be inoperable.

- The elimination of the direct or indirect discharge of industrial wastes to the Pike River and its tributaries while allowing the continued discharge of clear water, such as spent cooling water, to the stormwater drainage system.

- The abatement of pollution from nonpoint sources throughout the Pike River watershed through implementation of a combination of the following land management measures: proper material storage and runoff control on industrial and commercial sites; control of sediment and debris during demolition and construction activities; septic tank system management; public education programs to promote proper use of fertilizers and pesticides; litter and pet waste control; the application of soil conservation practices on rural land; improved timing and efficiency of street sweeping, leaf collection, and catch basin cleaning; and stream bank erosion control.

- The undertaking of a cooperative, continuing water quality monitoring program.

*Plan Adoption*

On June 16, 1983, the Pike River watershed plan was adopted by the Commission and certified to the local, state, and federal units and agencies concerned. By the end of 1983, the Pike River watershed plan had been formally adopted by the

U. S. Department of Agriculture, Soil Conservation Service; the Boards of Supervisors of the Counties of Kenosha and Racine; the Common Council of the City of Kenosha; Mt. Pleasant Sewer Utility District No. 1; and Mt. Pleasant Storm Water District No. 1.

### Oak Creek Watershed Study

During 1983, work was initiated on a comprehensive plan for the Oak Creek watershed. This work effort, which is being conducted by the Commission at the request of the Milwaukee Metropolitan Sewerage District, is being guided by the Oak Creek Watershed Committee, a committee comprised of local and state officials and concerned citizen leaders from throughout the watershed. Funding for this study is being provided by the Milwaukee Metropolitan Sewerage District and the City of South Milwaukee.

During 1983, the Oak Creek Watershed Committee met once to review materials prepared by the Commission staff for inclusion in the final planning report. The Committee reviewed and approved two chapters of the final planning report—one chapter presenting introductory materials, and one chapter setting forth the basic principles and concepts underlying the study. At year's end, the Commission staff had completed an inventory of the natural resource base—including a special inventory of the fishery—and of the man-made features in the watershed, and had initiated the hydrologic and hydraulic studies necessary for the design and evaluation of alternative floodland management measures in the Oak Creek watershed. Detailed field surveys of structures believed to be hydraulically significant were completed during the year. The Oak Creek watershed study is scheduled for completion at the end of 1984.

### Floodplain Data Availability

The status of existing flood hazard data in the Region is shown on Map 33. 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 350 miles of major stream channel for which the Commission and the Federal Emergency Management Agency have developed flood hazard data.

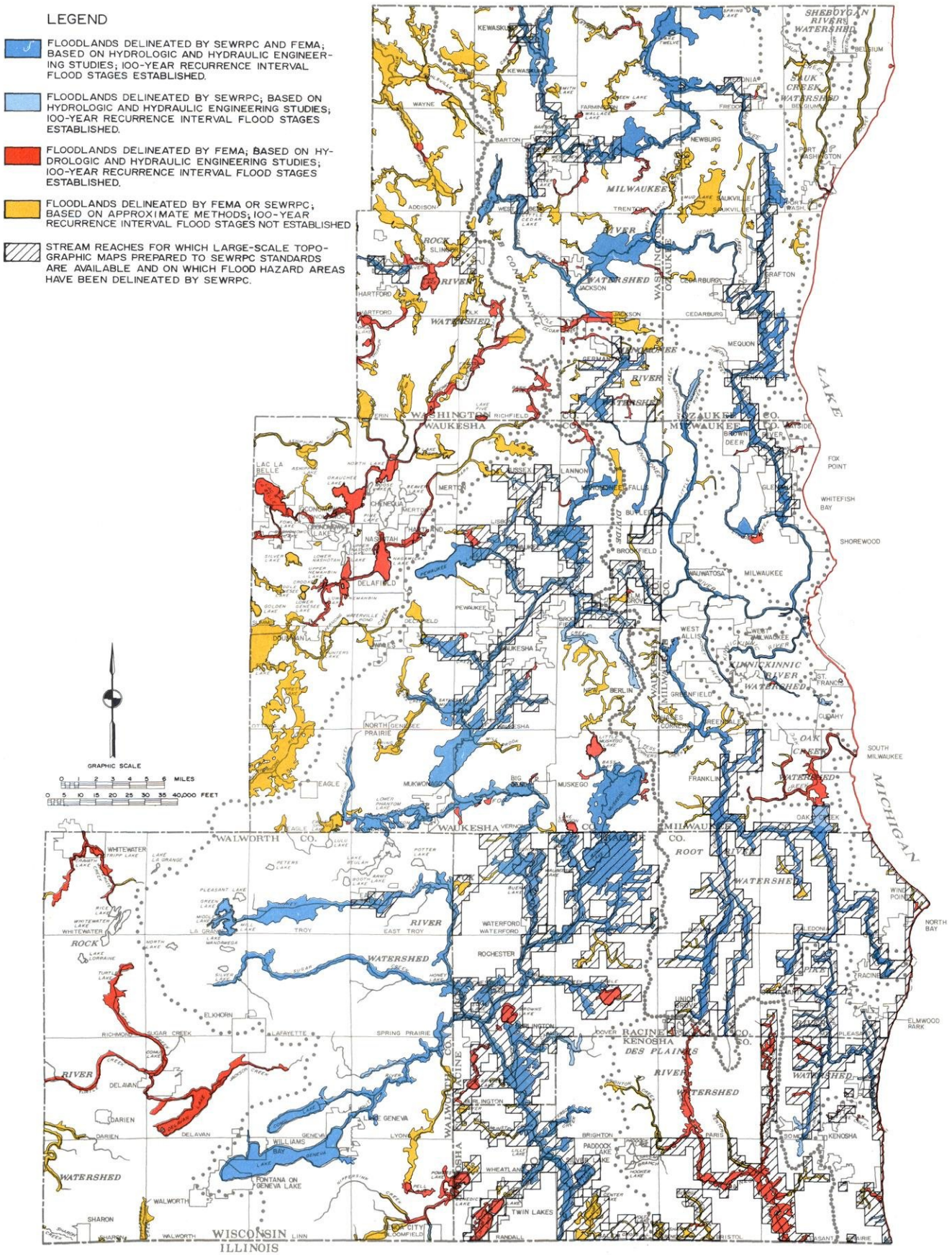
### Flood Insurance Rate Studies

Under the National Flood Insurance Act of 1968, the U. S. Department of Housing and Urban Development was given authority to conduct studies to determine the location and extent of floodlands and the monetary damage risks related to the insurance of urban development in floodland areas. The Department is proceeding with the conduct of such studies on a community-by-community basis throughout the United States. While the Commission has not directly contracted with the Department for the conduct of such studies, the Commission does cooperate with all of the engineering firms and federal agencies involved in the conduct of such studies, particularly in the provision of basic floodland data already developed by the Commission in a more comprehensive 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 the Department to carry out the flood insurance rate studies more efficiently and at considerably less cost than if such data had to be developed on 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 1983, federal flood insurance rate studies had been completed and were underway, respectively, for 56 and 7 civil divisions in the Region (see Map 34). Of the 7 studies in progress, reports presenting the findings of 3 studies were in draft form by the end of 1983. 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

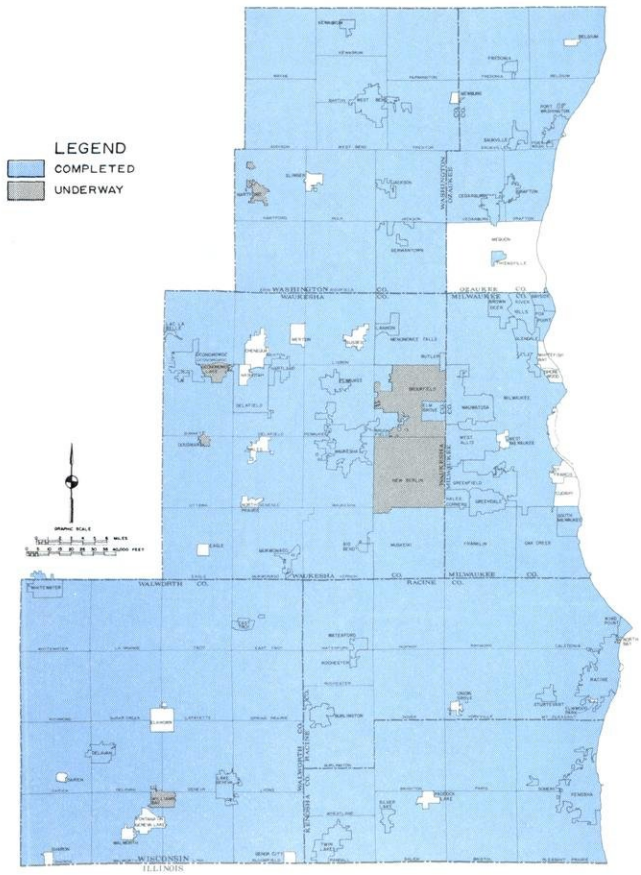
Map 33

## DELINEATION OF FLOODLANDS: 1983



Map 34

STATUS OF FLOOD INSURANCE RATE STUDIES




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.

In a special work effort during 1983, the Commission assisted the Village of Pewaukee in developing floodland data needed to revise a federal flood insurance study prior to the enactment by the Village of local zoning regulations. This work effort involved a hydraulically very complex situation in the central business district area of the Village where the outlet from Pewaukee Lake joins the Pewaukee River. The Village was concerned that the preliminary flood insurance study report did not accurately reflect topographic conditions along the Pewaukee Lake outlet and therefore reported flood stages that were unrealistically high. The Village therefore asked the Commission to assist in a review of the situation and the development, as necessary, of new information. The Village committed monies to prepare a special 1 inch equals 50 feet scale, one-foot contour interval, topographic map of the central area of the Village to specifications provided by the Commission in an effort to provide precise and up-to-date topographic information. Based upon this information, the Commission developed new hydrologic and hydraulic data attendant to the Pewaukee Lake outlet and the Pewaukee River, culminating in the determination of a revised regulatory 100-year recurrence interval flood profile and attendant floodway and floodplain fringe delineations on the new large-scale topographic map (see Map 35). At year's end, revisions to the federal flood insurance study had been requested by the Village and local adoption of the Floodland Zoning Ordinance based upon the new information was pending.

### Stream Gaging Program

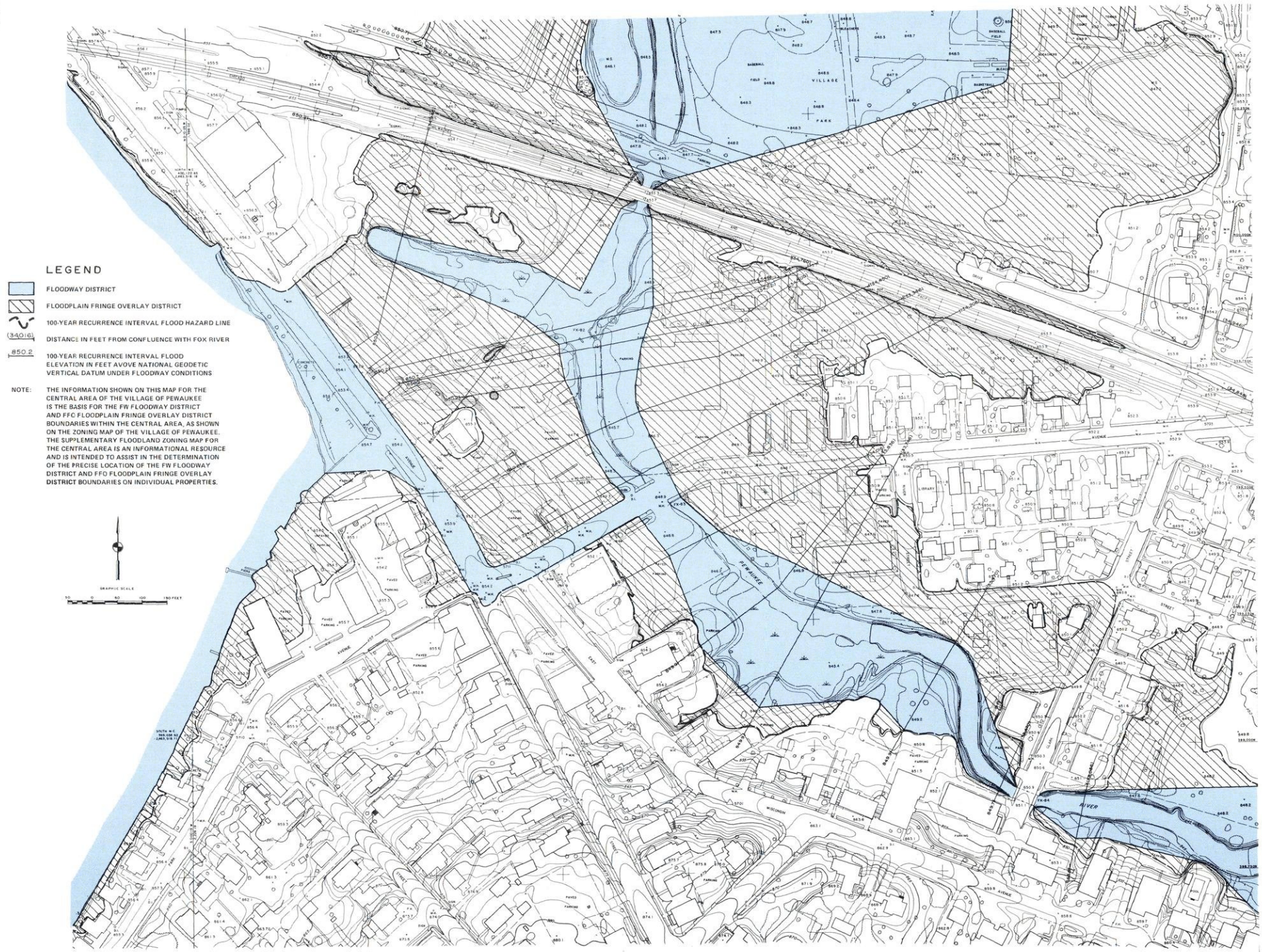
Streamflow data are essential to the sound management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous recording streamflow gages were in operation on the entire regional stream network. Since that time, the Commission has been instrumental in establishing, through cooperative, voluntary intergovernmental action, a more comprehensive streamflow gaging program (see Map 36). In 1983 there were a total of 18 continuous recording streamflow gages in operation in the Region. Of that total, 14 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, one was supported by the U. S. Army Corps of Engineers, one was supported by the Illinois Department of Transportation, and one was supported by the Illinois Environmental Protection Agency, Division of Water Resources. The U. S. Geological Survey annually publishes the data collected under this streamflow monitoring program.

## REGIONAL AIR QUALITY PLANNING

During 1983, the regional air quality planning effort was focused on the preparation of an amendment to the regional air quality attainment and maintenance plan which was adopted by the Commission in June 1980. This amendment, which relates to the establishment of a formal emission reduction credit banking and trading system in

## Map 35

## LARGE-SCALE TOPOGRAPHIC MAP SHOWING PEWAUKEE RIVER FLOODPLAIN BOUNDARIES



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

## LEGEND

- 1▲ CONTINUOUS STAGE RECORDER GAGE – COOPERATIVELY MAINTAINED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (1)
- 2▲ CONTINUOUS STAGE RECORDER GAGE – COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY; WAUKESHA COUNTY BOARD; MILWAUKEE METROPOLITAN SEWERAGE DISTRICT; KENOSHA WATER UTILITY; AND SEWRPC (15)
- 3▲ CONTINUOUS STAGE RECORDER GAGE – OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE U.S. ARMY, CORPS OF ENGINEERS (1)
- 4▲ CONTINUOUS STAGE RECORDER GAGE – OPERATED BY THE U.S.G.S. FOR THE ILLINOIS DIVISION OF WATER RESOURCES (1)
- ◉ CONTINUOUS STAGE RECORDER GAGE – NO LONGER IN OPERATION (17)
- 1△ CREST STAGE GAGE – COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF TRANSPORTATION (11)
- ◎ CREST STAGE GAGE – NO LONGER IN OPERATION (5)

1962 PERIOD OF RECORD

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

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

GRAPHIC SCALE
0 1 2 3 4 5 6 MILES
0 5 10 15 20 25 30 35 40,000 FEET

CONTINUOUS STAGE RECORDER GAGE 1968-1981 4-0862 NEW FANE (EAST BRANCH MILWAUKEE RIVER)

CONTINUOUS STAGE RECORDER GAGE 1973-1981 4-0861.5 KEWASKUM (MILWAUKEE RIVER)

CONTINUOUS STAGE RECORDER GAGE 1968-1981 4-0863.6 WAUBEKA (MILWAUKEE RIVER)

CONTINUOUS STAGE RECORDER GAGE 1968-1981 4-0863.4 FILLMORE (NORTH BRANCH MILWAUKEE RIVER)

1962-1981 4-0864 FREDONIA (MILWAUKEE RIVER TRIBUTARY)

1960- 5-4238 SLINGER (EAST BRANCH ROCK RIVER)

CONTINUOUS STAGE RECORDER GAGE 1973-1981 4-0865 CEDARBURG (CEDAR CREEK)

2 1981- 4-0866 NEAR CEDARBURG (MILWAUKEE RIVER)

1974-1977 4-0870.18 GERMANTOWN (MENOMONEE RIVER)

1976-1978 4-0870.19 GERMANTOWN (JEFFERSON PARK DRAINAGEWAY)

1958- CONTINUOUS STAGE RECORDER GAGE 1974-1979 4-0870.5 FREISTADT (LITTLE MENOMONEE RIVER)

2 1975-1977 1979- 04-0870.3 MENOMONEE FALLS (MENOMONEE RIVER)

1974-1979 4-0870.60 MILWAUKEE (NOYES CREEK)

1914- CONTINUOUS STAGE RECORDER GAGE SINCE 1934 4-0870 MILWAUKEE (MILWAUKEE RIVER)

1974-1979 04-0870.40 BUTLER (MENOMONEE RIVER)

1974- 04-0871.19 WAUWATOSA (HONEY CREEK)

1961- CONTINUOUS STAGE RECORDER GAGE SINCE 1974 4-0871.20 WAUWATOSA (MENOMONEE RIVER)

1974-1979 1980- 04-0870.88 WAUWATOSA (UNDERWOOD CREEK)

1974-1979 04-0871.25 WAUWATOSA (SCHOONMAKER CREEK)

1982- 4-0870.10 MILWAUKEE (MILWAUKEE RIVER)

2 1979- 05-4262.50 ROME (BARK RIVER)

1962-1981 5-4261 WALES (SCUPPERNONG CREEK)

2 1963- 5-5438.3 WAUKESHA (FOX RIVER)

1974-1977 04-0871.40 MILWAUKEE (MENOMONEE RIVER)

1976- 4-0871.6 7TH ST. (KINNICKINNIC RIVER)

1975-1977 04-0871.30 MILWAUKEE (HAWLEY RD. STORM SEWER)

1959- 4-0871 MILWAUKEE (HONEY CREEK)

1979-1980 4-0871.38 MILWAUKEE (MENOMONEE RIVER)

1963- 4-0872.04 SOUTH MILWAUKEE (OAK CREEK)

1927-1930 5-5440 MUKWONAGO (FOX RIVER)

1973- 5-5442 MUKWONAGO (MUKWONAGO RIVER)

1958- 4-0872 SOUTH MILWAUKEE (OAK CREEK)

1963- 4-0872.2 FRANKLIN (ROOT RIVER)

1927-1928 1947-1954 5-4270 WHITEWATER (WHITEWATER CREEK)

1978-1981 05-4270 WHITEWATER (WHITEWATER CREEK)

1978-1981 05-4269 WHITEWATER (WHITEWATER CREEK)

1960- 5-5443 MUKWONAGO (MUKWONAGO RIVER TRIBUTARY)

1963- 4-0872.33 FRANKLIN (ROOT RIVER CANAL)

1926-1927 1947-1954 5-4265 WHITEWATER (WHITEWATER CREEK)

1962- 4-0872.3 NORTH CAPE (WEST BRANCH ROOT RIVER CANAL)

1963- CONTINUOUS STAGE RECORDER GAGE SINCE 1964 4-0872.4 RACINE (ROOT RIVER)

1962- 5-5451 ELKHORN (SUGAR CREEK)

1958 5-5452 BURLINGTON (WHITE RIVER TRIBUTARY)

1958-1964 1967- CONTINUOUS STAGE RECORDER GAGE SINCE 1973 5-5453 BURLINGTON (WHITE RIVER)

1971- 4-0872.57 U.W. PARKSIDE (PIKE RIVER)

3 1939- 5-4315 CLINTON (TURTLE CREEK)

1960- 4-0872.5 KENOSHA (PIKE CREEK)

1961- 5-4314 ALLENS GROVE (LITTLE TURTLE CREEK)

1962- 5-5481.5 GENOA CITY (NORTH BRANCH NIPPERSINK CREEK)

1939- CONTINUOUS STAGE RECORDER GAGE SINCE 1956 5-5465 WILMOT (FOX RIVER)

4 1962- CONTINUOUS STAGE RECORDING GAGE SINCE 1967 5-5278 RUSSELL (DES PLAINES RIVER)

southeastern Wisconsin, was prepared at the request of the County and City of Milwaukee, and was funded under a grant provided by the U. S. Environmental Protection Agency (EPA).

The EPA developed the concept of emission reduction credits as a mechanism to accommodate industrial growth in nonattainment areas while accelerating the attainment of the ambient air quality standards in such areas. In general, a source may obtain an emission reduction credit if it reduces its pollutant emissions below the level established in the State Implementation Plan (SIP) as necessary to attain the ambient air quality standards, and if the Department of Natural Resources certifies that the emission reduction is surplus, quantifiable, permanent, and enforceable. If the emission reduction is so confirmed and certified, it may be credited to the source for future use, trade, or sale. The source may then use the credit to meet emission offset requirements for its own expansion plans, or it may sell or trade the credit to another source seeking to develop or expand in the area. A formal emission reduction credit banking and trading system may be expected to encourage the generation of such credits and facilitate both economic development and the attainment of the ambient air quality standards in the Region.

The plan, which is set forth in a SEWRPC staff memorandum entitled, "A Recommended Institutional Mechanism for Implementing An Emission Reduction Credit Banking and Trading System in Southeastern Wisconsin," contains the following recommendations:

- That either the Wisconsin Department of Natural Resources (DNR) or the Wisconsin Department of Development (DOD) accept responsibility as the public banking authority.

- That the responsibility for negotiating all emission reduction credit trading transactions reside in the private sector.

- That the responsible public banking authority, either the DNR or DOD, establish and maintain a public registry of available emission reduction credits, and that such information be disseminated or otherwise made available to potential buyers in the private sector.

- That local units of government purchase, register, and accumulate a reserve of available emission reduction credits in order to provide a stable market for such credits by assuring potential producers of a buyer, and in order to accelerate economic development by using such reserves to attract new industry or encourage expansion of existing industry.

- That the DNR or the DOD establish a mechanism to solicit and incorporate public comment on the ultimate use of available emission reduction credits.

The recommended plan thus requires the cooperation of both the public and private sectors: a public banking authority—either the DNR or the DOD—acting within a private trading system. Such a public banking and private trading system may be expected to yield the most stable market for emission reduction credits at the least cost, with the greatest expediency, and with a minimum of government intervention. Ultimately, implementation of the recommended emission reduction credit banking and trading system may be expected to accommodate and encourage economic growth in the Region while ensuring the prompt attainment and long-term maintenance of the ambient air quality standards in the Region.

The emission reduction credit banking and trading system was adopted by the Commission as an amendment to the regional air quality maintenance plan on December 1, 1983. By year's end, the amendment had been certified to the Wisconsin Department of Natural Resources and the local units of government concerned for consideration and implementation.

During 1983, the Wisconsin Department of Natural Resources informed the Commission that neither federal nor state funds would be available to support a continuing regional air quality planning function by the Commission after December 31, 1983. As a result of such federal and state funding shortfalls, and budgetary constraints on the Commission itself, the Commission regretfully was compelled to cease all regional air quality planning activities at year's end. The Commission, as the metropolitan transportation planning organization, will be able to carry on a limited work effort confined to the evaluation of the air quality implications of alternative regional transportation system

plans and implementation programs, but all activities relating to the implementation of the regional air quality attainment and maintenance plan for southeastern Wisconsin, as that plan has been incorporated into the State Implementation Plan, should now be considered the responsibility of the Department of Natural Resources.

## SOLID WASTE MANAGEMENT

During 1983, the Commission continued to provide assistance to counties within the Region in the preparation of locally developed, county-oriented, solid waste management plans. Specifically, the Commission continued to provide assistance during 1983 to Racine County in the implementation of the previously completed solid waste management plan. Such assistance was provided by the Commission staff primarily through participation on a technical advisory committee established by the County. The Commission also assisted in the organization of a meeting to prioritize sludge management educational activities, and participated in a meeting on the promotion of solid waste recycling in Waukesha County.

The Commission co-sponsored and participated in a symposium on sludge management during 1983. This symposium was attended by local officials, sewage treatment plant operators, contract sludge haulers, and concerned landowners. Also during 1983, the Commission staff participated in a University of Wisconsin-Extension program presentation of a Kenosha County research site designed to monitor the potential movement of contaminants from sludge through agricultural tile drainage systems. The Commission staff also provided technical assistance to Walworth County staff in preparing exhibits on solid waste disposal and the potential for utilization of solid waste as a fuel for use at an energy exhibit.

## PUBLIC PARTICIPATION EFFORTS

During 1983, 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, air 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 informational meeting pertaining to the Turtle Creek priority watershed; a meeting of the Hoy Nature Club, a club active in Kenosha and Racine Counties; a meeting of the citizen-based Oconomowoc River Task Force; and a meeting of UWEX agriculture and resource agents from throughout southeastern Wisconsin.

- Participation in a series of meetings designed to facilitate public involvement in the initial phases of the priority watershed planning effort for the Oconomowoc River, including appearances before the Waukesha County Agriculture and Extension Education Committee, the Waukesha and Washington County Land Conservation Committees, and the Town Boards of Erin, Merton, Oconomowoc, Richfield, and Summit.

- The preparation of informational materials designed to promote an understanding of water quality problems and recommended pollution abatement strategies, including a brochure entitled, "A Clean Water Plan for Friess Lake," and individualized fact sheets for local governments aimed at site-specific situations. Four fact sheets were produced on the means by which landscaping practices can help to abate pollution of inland lakes: one each for Kenosha and Washington Counties, and one each for the Oconomowoc River and Turtle Creek watersheds.

- The development of a tour of the Milwaukee Harbor estuary. Members of the Commission's Technical Advisory Committee for the Milwaukee Harbor Estuary Comprehensive Water Resources Management Plan were given a boat tour of the estuary area, enabling them to become more familiar with the Milwaukee Harbor estuary area and its water resources management problems.

- The preparation and dissemination of a joint University Extension Service/Commission "Update" publication concerning air quality, focusing on nitrogen oxide, hydrocarbon, and ozone issues.

- The provision of assistance to the Wisconsin Department of Natural Resources in developing materials for use in an exhibit on air quality at the 1983 Wisconsin State Fair.

- The making of arrangements for the 13th Regional Planning Conference held by the Commission in November 1983. This Conference, entitled "Planning for Land and Water Resources Protection," was attended by more than 300 persons, and featured a keynote luncheon address by Governor Anthony S. Earl.

- The co-sponsorship with Marquette University, Department of Civil Engineering, of a one-day course entitled "Low Cost Methods for Urban Runoff Control." This course was designed to familiarize engineers, planners, soil conservationists, and other technicians with the need for, and means of implementing, low-cost methods to abate nonpoint source water pollution.

- Staff participation in and Commission co-sponsorship of a Spring Sludge Symposium for sewage treatment plant operators, wastewater sludge-hauling contractors, county sanitarians, consulting engineers, and town and county public officials.

- The preparation and distribution of a fact sheet entitled, "The Farmland Preservation Program in Southeastern Wisconsin: Questions and Answers." This fact sheet was widely distributed throughout Ozaukee and Waukesha Counties during the year, and at the request of the Wisconsin Department of Agriculture, Trade and Consumer Protection, was made available for distribution throughout the State.

- The development of a slide program with script to describe the Wisconsin Wetlands Inventory Program jointly carried out in southeastern Wisconsin by the Commission and the Wisconsin Department of Natural Resources.

# PLANNING RESEARCH DIVISION

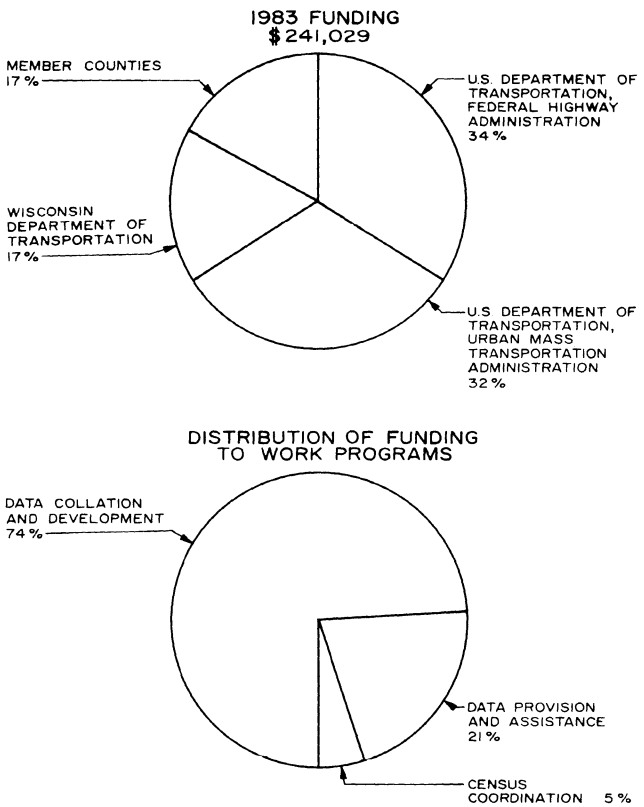
## DIVISION FUNCTIONS

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?

Figure 37

PLANNING RESEARCH DIVISION




In an attempt to find sound answers to these and other questions, the Planning Research Division during 1983 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 1983, 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.

### Population

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. Based upon the design year 2000 population forecast developed in 1974 by Commission staff and advisory committees and used in the preparation of the adopted regional land use and transportation system plans, the overall population level of the Region was anticipated to reach 1.87 million persons by 1980. The actual 1980 population level of 1.76 million noted above was about 6 percent below this forecast level.

The shortfall in the 1980 stage of the design year 2000 population forecast was not unexpected. By 1977, the monitoring of this forecast, as documented yearly in the Commission's Annual Report, had indicated that significant socio-economic changes were occurring within the Region. In particular, the apparent stagnation of population growth in conjunction with the continued increase in both jobs and housing units was noted by the Commission staff. Consequently, a special study of regional population change was undertaken in 1978 which culminated in the publication in 1979 of SEWRPC Technical Report No. 22, Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977. One of the major conclusions of this report was that the 1980 stage of the Commission year 2000 population forecast probably would not be met. The 1980 census figures confirmed the expected shortfall in the 1980 stage of the design year 2000 population forecast.

As the probability of a population shortfall became increasingly apparent during the closing years of the 1970's, Commission attention became focused upon alternative long-range planning processes that might provide better guidance regarding regional change in a period of social and economic instability and change. One such process, known as "alternative futures," was recommended by the Commission staff for use in the Milwaukee area primary transit system alternatives analysis, a planning study initiated by the Commission during 1979. Under the alternative futures approach, the "analysis and forecasts" step of a traditional planning process is replaced by an "alternative futures analysis." The alternative futures analysis has three phases. The first phase of the analysis is the development of alternative future scenarios of factors which, while external to the Region, affect the growth or decline of the Region and, therefore, the physical facility and service needs of the Region. These factors are considered external to the Region because they are variables over which public and private decision-makers within the Region have little or no influence, but to which the Region must respond in the future. Examples of such external factors are the future price and availability of energy and future population lifestyles. The second phase of the alternative futures analysis is the determination of the amount of regional growth or decline—including population change—likely under the alternative external factor scenarios developed under the first phase. The third phase is the development of alternative land use plans to accommodate the regional change expected under each scenario of future change in external factors.

The use of the alternative futures planning approach resulted in the identification of two alternative future scenarios of regional change through the year 2000. The scenarios provide for a range of anticipated growth and change for the Region, with one future scenario pointing toward moderate growth in the Region and the other toward stability or moderate decline. A 1983 resident population level in the Region of between 1.73 and 1.92 million was anticipated based upon the two alternative scenarios.

In 1983, the resident population of the Region was estimated by the Wisconsin Department of Administration (DOA) to be 1,748,200 persons—about 16,600, or about 1 percent, fewer persons than were enumerated in the 1980 federal census, and about 7,900, or about one-half of 1 percent, fewer persons than were enumerated in the 1970 federal census. Between 1980 and 1983, the Region gained about 38,900 persons through natural increase, or the excess of births over deaths. The 1979 to 1983 economic downturn in the Region, with four consecutive years of depressed employment levels, has thus resulted in an estimated net out-migration of 55,500 persons from the Region between 1980 and 1983.

The Wisconsin Department of Administration estimates of 1983 resident population levels are set forth in Table 17. The DOA has statutory responsibility for preparing intercensal population estimates as a basis for distributing state-shared taxes to local units of government. The estimates are based upon symptomatic indicators of population change, including automobile registrations, the number of persons filing state income tax returns, and the dollar value of exemptions for depen-

Table 17

REGIONAL POPULATION: 1970, 1980, AND 1983

| County | Population | | | Difference | | | |
|---|---|---|---|---|---|---|---|
| | | | | 1970-1980 | | 1980-1983 | |
| | 1970 | 1980 | 1983 | Number | Percent | Number | Percent |
| Kenosha . . . . . | 117,900 | 123,100 | 121,200 | 5,200 | 4.43 | - 1,900 | - 1.54 |
| Milwaukee . . . . | 1,054,300 | 965,000 | 945,000 | - 89,300 | - 8.47 | - 20,000 | - 2.07 |
| Ozaukee . . . . . | 54,500 | 67,000 | 67,100 | 12,500 | 22.99 | 100 | 0.15 |
| Racine. . . . . | 170,800 | 173,100 | 169,000 | 2,300 | 1.34 | - 4,100 | - 2.37 |
| Walworth. . . . . | 63,500 | 71,500 | 73,000 | 8,000 | 12.71 | 1,500 | 2.10 |
| Washington . . . | 63,800 | 84,900 | 86,500 | 21,100 | 32.91 | 1,600 | 1.88 |
| Waukesha[a] . . . . | 231,300 | 280,200 | 286,400 | 48,900 | 21.14 | 6,200 | 2.21 |
| Region | 1,756,100 | 1,764,800 | 1,748,200 | 8,700 | 0.50 | - 16,600 | - 0.94 |

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

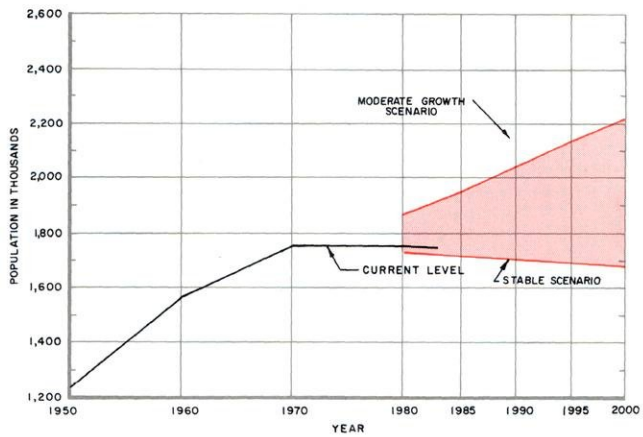
dents on state income tax returns. According to the DOA estimates, Kenosha, Milwaukee, and Racine Counties have experienced small population declines—about 2 percent in each county -since the 1980 federal census was taken. These three counties together have experienced an aggregate loss of population of about 26,000 persons. The resident population of Ozaukee County has remained essentially static between 1980 and 1983. The remaining three counties have experienced an increase of about 9,400 persons, with Waukesha County accounting for about 6,200 of this gain.

Under the moderate growth scenario, the population level of the Region was anticipated to be 1.92 million in 1983. The estimated 1983 population level of 1.75 million is about 9 percent below this anticipated level. Under the stable or declining growth scenario, the population level of the Region was anticipated to be 1.73 million in 1983. The estimated 1983 population level is about 1 percent above this anticipated level. The relationship between historic population levels and the levels anticipated under the alternative future scenarios of population change is shown graphically in Figure 38.

For each of the two alternative future scenarios, a centralized population distribution and decentralized population distribution were postulated, and a land use plan was prepared for each of these four alternative distributions. The 1983 planned

Figure 38

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR THE REGION: 1950-2000




population levels for these four alternative land use plans and the 1983 estimated population levels for the seven counties comprising the Region are set forth in Table 18 and Figures 39 through 45.

## Employment

During 1983, employment in the Region was estimated at 826,100 jobs, a decrease of about 58,100 jobs, or about 7 percent, from the 1980 level of

Table 18

## EXISTING AND PLANNED POPULATION LEVELS BY COUNTY: 1983

| County | Existing Population | Planned Populations | | | |
|---|---|---|---|---|---|
| | | Stable Scenario | | Moderate Growth Scenario | |
| | | Decentralized | Centralized | Decentralized | Centralized |
| Kenosha . . . . . | 121,200 | 121,600 | 122,500 | 150,400 | 145,500 |
| Milwaukee . . . . | 945,000 | 901,900 | 957,900 | 960,000 | 1,014,800 |
| Ozaukee . . . . . | 67,100 | 74,800 | 63,200 | 92,900 | 82,600 |
| Racine . . . . . | 169,000 | 174,100 | 175,200 | 188,900 | 191,500 |
| Walworth. . . . . | 73,000 | 70,400 | 66,800 | 79,900 | 78,200 |
| Washington . . . | 86,500 | 85,400 | 76,500 | 127,100 | 98,700 |
| Waukesha . . . . | 286,400 | 298,800 | 264,900 | 322,600 | 310,500 |
| Region | 1,748,200 | 1,727,000 | 1,727,000 | 1,921,800 | 1,921,800 |

Figure 39

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR KENOSHA COUNTY: 1950-2000

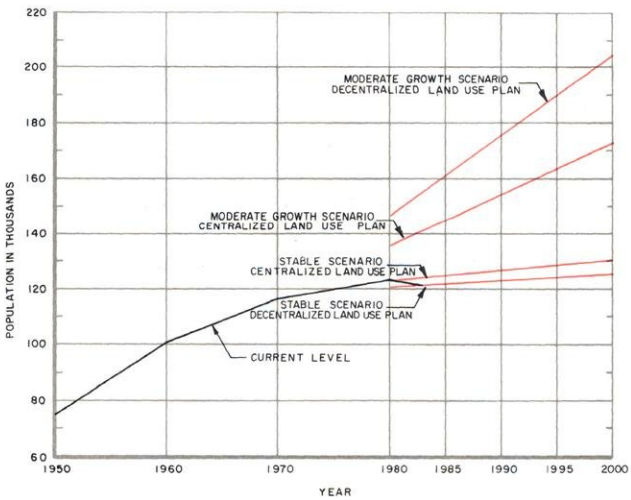



Figure 40

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR MILWAUKEE COUNTY: 1950-2000

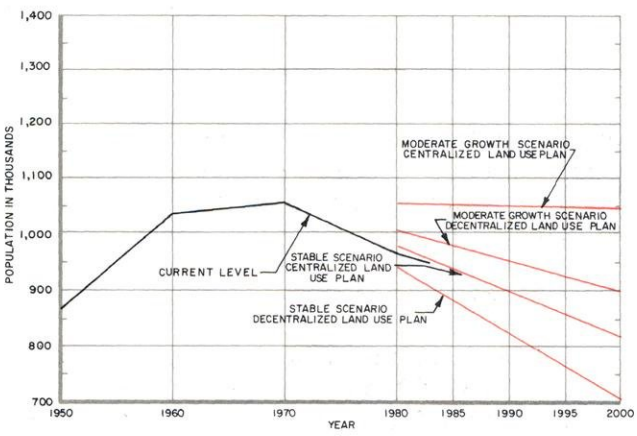



Figure 41

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR OZAUKEE COUNTY: 1950-2000

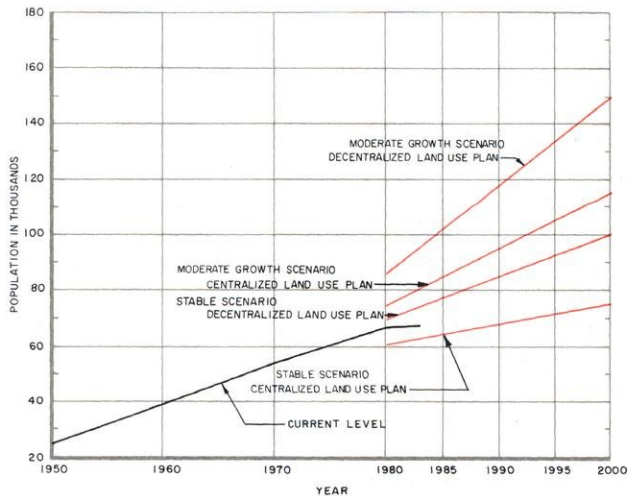



Figure 42

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR RACINE COUNTY: 1950-2000

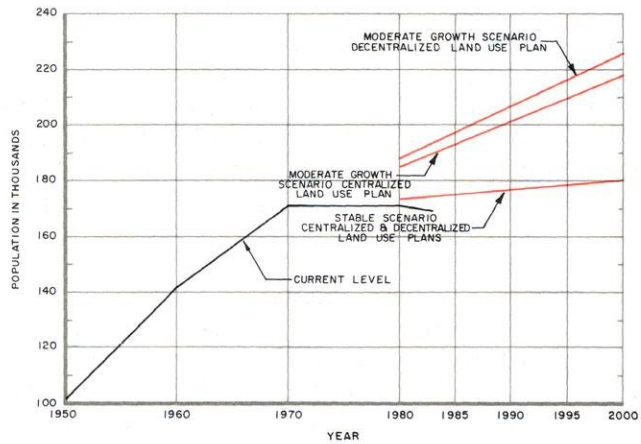


Figure 43

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR WALWORTH COUNTY: 1950-2000

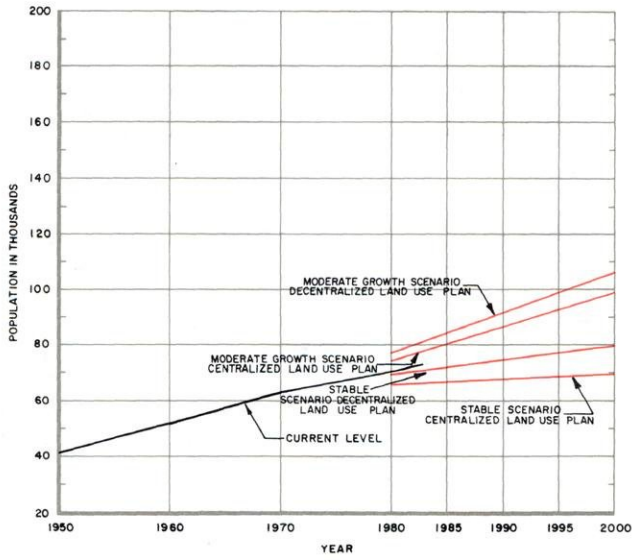
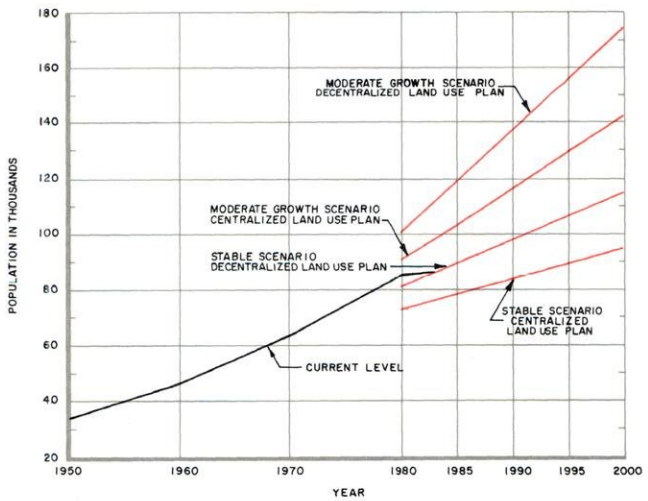



Figure 44

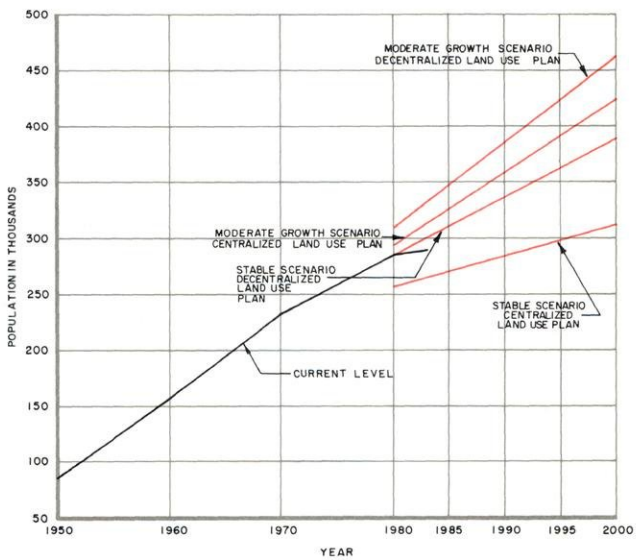
CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR WASHINGTON COUNTY: 1950-2000




884,200 jobs. Following the economic downturn of 1975, the Region showed significant economic growth during the latter years of the 1970's, with regional employment reaching an historic high of about 901,700 jobs in 1979. However, the severe economic recession that began about the middle of 1980, and that continued into 1983, resulted in sharply decreased employment levels in the

Figure 45

CURRENT AND ALTERNATIVE FUTURE POPULATION LEVELS FOR WAUKESHA COUNTY: 1950-2000




Region, and an attendant increase in the level of unemployment. Unemployment in the Region during 1983 was estimated at 96,500 persons—only a slight improvement over the 1982 estimate of 99,800 unemployed persons. The estimated unemployment rate in the Region during 1983 was 10.6 percent, compared with 10.8 percent in 1982. Both the numbers of unemployed and the unemployment rates in the Region in 1982 and 1983 were the highest that have occurred since the Commission began monitoring yearly unemployment levels in 1960.

As set forth in Table 19, employment decreased between 1980 and 1983 in virtually all employment categories. Increases occurred only in transportation equipment; finance, insurance, and real estate; services; and self-employment. Manufacturing employment declined by about 54,000 jobs, or about 20 percent, with over one-half of this decline occurring in the nonelectrical machinery manufacturing sector, where the number of jobs is estimated to have declined by 26,000 between 1980 and 1983. The construction, primary metals, fabricated metals, electrical machinery, and retail trade industries are each estimated to have experienced losses of between 6,000 and 8,000 jobs between 1980 and 1983.

Between 1980 and 1983, employment is estimated to have decreased in all seven counties in the Region. As set forth in Table 20, the largest abso-

Table 19

REGIONAL EMPLOYMENT BY CATEGORY: 1970, 1980, AND 1983

| Employment Category | Jobs (in thousands) | | | Difference | | | |
|---|---|---|---|---|---|---|---|
| | | | | 1970-1980 | | 1980-1983 | |
| | 1970 | 1980 | 1983 | Number | Percent | Number | Percent |
| Agriculture | 11.9 | 12.8 | 12.2 | 0.9 | 7.6 | - 0.6 | - 4.7 |
| Construction | 27.2 | 25.8 | 18.2 | - 1.4 | - 5.2 | - 7.6 | - 29.5 |
| Manufacturing | | | | | | | |
| Food and Kindred Products | 18.9 | 20.9 | 18.1 | 2.0 | 10.6 | - 2.8 | - 13.4 |
| Printing and Publishing | 14.9 | 16.3 | 15.9 | 1.4 | 9.4 | - 0.4 | - 2.5 |
| Primary Metals | 22.5 | 16.6 | 10.0 | - 5.9 | - 26.2 | - 6.6 | - 39.8 |
| Fabricated Metals | 24.6 | 31.8 | 25.2 | 7.2 | 29.3 | - 6.6 | - 20.8 |
| Nonelectrical Machinery | 68.1 | 73.1 | 46.9 | 5.0 | 7.3 | - 26.2 | - 35.8 |
| Electrical Machinery | 36.5 | 40.1 | 33.2 | 3.6 | 9.9 | - 6.9 | - 17.2 |
| Transportation Equipment | 22.0 | 21.5 | 21.7 | - 0.5 | - 2.3 | 0.2 | 0.9 |
| Other Manufacturing | 44.8 | 41.5 | 36.9 | - 3.3 | - 7.4 | - 4.6 | - 11.1 |
| Manufacturing Subtotal | 252.3 | 261.8 | 207.9 | 9.5 | 3.8 | - 53.9 | - 20.6 |
| Transportation, Communication, and Utilities | 36.7 | 39.6 | 36.1 | 2.9 | 7.9 | - 3.5 | - 8.8 |
| Wholesale Trade | 35.3 | 43.5 | 42.3 | 8.2 | 23.2 | - 1.2 | - 2.8 |
| Retail Trade | 115.7 | 131.9 | 125.0 | 16.2 | 14.0 | - 6.9 | - 5.2 |
| Finance, Insurance, and Real Estate | 32.8 | 46.4 | 48.9 | 13.6 | 41.5 | 2.5 | 5.4 |
| Services | 119.6 | 178.0 | 189.9 | 58.4 | 48.8 | 11.9 | 6.7 |
| Government and Education | 83.3 | 95.7 | 93.0 | 12.4 | 14.9 | - 2.7 | - 2.8 |
| Self-Employed, Except Farm | 37.2 | 46.2 | 50.1 | 9.0 | 24.2 | 3.9 | 8.4 |
| Miscellaneous[a] | 1.7 | 2.5 | 2.5 | 0.8 | 47.0 | 0.0 | 0.0 |
| Total Jobs | 753.7 | 884.2 | 826.1 | 130.5 | 17.3 | - 58.1 | - 6.6 |

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

Table 20

REGIONAL EMPLOYMENT: 1970, 1980, AND 1983

| County | Jobs | | | Difference | | | |
|---|---|---|---|---|---|---|---|
| | | | | 1970-1980 | | 1980-1983 | |
| | 1970 | 1980 | 1983 | Number | Percent | Number | Percent |
| Kenosha | 40,000 | 49,500 | 43,000 | 9,500 | 23.8 | - 6,500 | - 13.1 |
| Milwaukee | 507,100 | 547,900 | 509,700 | 40,800 | 8.0 | - 38,200 | - 7.0 |
| Ozaukee | 19,800 | 24,800 | 23,100 | 5,000 | 25.3 | - 1,700 | - 6.8 |
| Racine | 62,700 | 78,700 | 71,900 | 16,000 | 25.5 | - 6,800 | - 8.6 |
| Walworth | 24,500 | 32,100 | 31,400 | 7,600 | 31.0 | - 700 | - 2.2 |
| Washington | 23,100 | 31,800 | 29,700 | 8,700 | 37.7 | - 2,100 | - 6.6 |
| Waukesha | 76,500 | 119,400 | 117,300 | 42,900 | 56.1 | - 2,100 | - 1.8 |
| Region | 753,700 | 884,200 | 826,100 | 130,500 | 17.3 | - 58,100 | - 6.6 |

lute decrease—about 38,200 jobs—occurred in Milwaukee County. The largest percentage decrease—about 13 percent—occurred in Kenosha County.

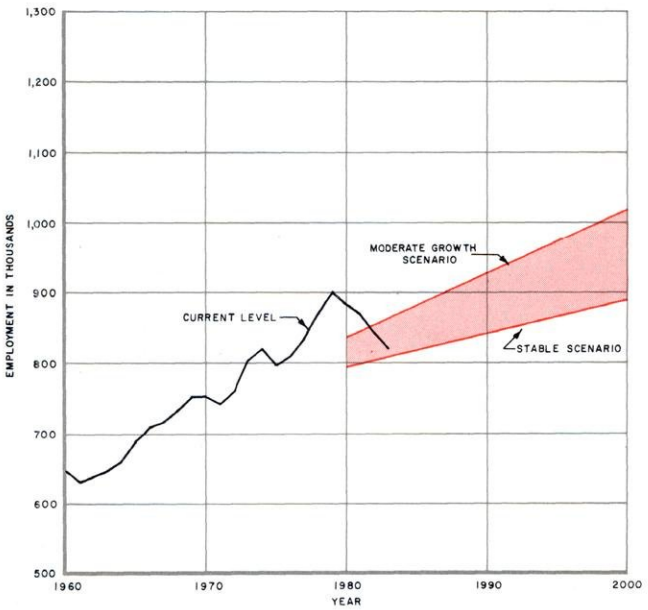
Under the moderate growth scenario, the employment level of the Region was anticipated to be 859,600 jobs in 1983. Despite the severest economic recession since the Great Depression of the 1930's, this estimated 1983 employment level is only about 4 percent below this anticipated level. Under the stable or declining growth scenario, the employment level of the Region was anticipated to be 804,100 jobs in 1983. The estimated 1983 employment level is about 3 percent above this level. In spite of the job losses that have occurred in the Region since 1979, the higher than antici-

pated growth in the number of jobs between 1975 and 1979 has served to partially offset the employment declines recorded between 1979 and 1983 (see Figure 46).

For each of the two alternative future scenarios, a centralized employment distribution and a decentralized employment distribution were postulated, and a land use plan was prepared to accommodate each of these four alternative distributions. The 1983 planned employment levels for these four alternative land use plans and the 1983 estimated employment levels for the Region's seven counties are set forth in Table 21.

Figure 46

CURRENT AND ALTERNATIVE FUTURE EMPLOYMENT LEVELS FOR THE REGION: 1960-2000




## School Enrollment

School enrollment within the Region continued to decline during 1983, as shown in Table 22. The decline of about 23,600 students represents a decrease of about 6 percent between 1980 and 1983. Public school enrollment declined by approximately 20,800 students, or about 7 percent—from about 294,900 students in 1980 to about 274,100 students in 1983. Nonpublic school enrollment decreased by approximately 4,700 students, or about 6 percent—from about 74,300 in 1980 to about 69,600 in 1983. Public school and nonpublic school enrollments decreased in all seven counties between 1980 and 1983.

Map 37 shows public school enrollment changes between 1980 and 1983 for high school districts operating wholly or partially within the Region. Union high school districts and their constituent feeder K-8 school districts have been combined into a single "district" for the purpose of preparing this map. About 82 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 one district has 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.

Table 21

EXISTING AND PLANNED EMPLOYMENT LEVELS BY COUNTY: 1983

| County | Existing Employment | Planned Employment | | | |
|---|---|---|---|---|---|
| | | Stable Scenario | | Moderate Growth Scenario | |
| | | Decentralized | Centralized | Decentralized | Centralized |
| Kenosha | 43,000 | 40,900 | 40,900 | 55,300 | 45,700 |
| Milwaukee | 509,700 | 517,100 | 528,700 | 516,300 | 546,500 |
| Ozaukee | 23,100 | 26,200 | 22,800 | 33,100 | 26,500 |
| Racine | 71,900 | 69,000 | 69,000 | 75,900 | 76,300 |
| Walworth | 31,400 | 28,100 | 27,200 | 33,900 | 31,500 |
| Washington | 29,700 | 26,000 | 23,800 | 37,000 | 27,100 |
| Waukesha | 117,300 | 96,800 | 91,700 | 108,100 | 106,000 |
| Region | 826,100 | 804,100 | 804,100 | 859,600 | 859,600 |

Table 22

REGIONAL SCHOOL ENROLLMENT: 1970, 1980, AND 1983

| County | School Enrollment | | | Difference | | | |
|---|---|---|---|---|---|---|---|
| | | | | 1970-1980 | | 1980-1983 | |
| | 1970 | 1980 | 1983 | Number | Percent | Number | Percent |
| Kenosha | 32,300 | 26,700 | 24,400 | - 5,600 | - 17.5 | - 2,300 | - 8.6 |
| Milwaukee | 267,900 | 184,900 | 175,000 | - 83,000 | - 31.0 | - 9,900 | - 5.4 |
| Ozaukee | 15,900 | 15,000 | 13,600 | - 900 | - 5.6 | - 1,400 | - 9.3 |
| Racine | 48,600 | 38,800 | 35,700 | - 9,800 | - 20.2 | - 3,100 | - 8.0 |
| Walworth | 15,600 | 13,700 | 12,600 | - 1,900 | - 12.0 | - 1,100 | - 8.0 |
| Washington | 19,200 | 21,500 | 20,000 | 2,300 | 12.2 | - 1,500 | - 7.0 |
| Waukesha | 73,100 | 68,700 | 64,400 | - 4,400 | - 6.0 | - 4,300 | - 6.3 |
| Region | 472,600 | 369,300 | 345,700 | - 103,300 | - 21.9 | - 23,600 | - 6.4 |

## 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 1983, the Division prepared letter responses to 178 requests for population, economic, and related information from the Commission data files. In addition, 230 requests were handled by telephone and 102 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 1983 in performing this function.

- Provision of geocoding services to the State of Wisconsin, Department of Health and Social Services, Division of Health, Bureau of Health Statistics, to determine the location by census tract of approximately 8,200 Milwaukee area health service providers. This material was used by the Bureau to assess the geographic distribution of health care locations relative to population distribution.

- Provision of estimates of 1980 population by race for all Traffic Analyzis Zones in Milwaukee County to the Milwaukee County Department of Public Works. These estimates, along with additional 1980 census data for Milwaukee County, were used by the county staff in updating Milwaukee County's Title VI (civil rights compliance) assessment which was filed with the U. S. Department of Transportation. The assessment must be periodically updated by the County in order to remain eligible to receive federal funds for transit system operation and capital improvements expenditures.

- Provision of 1980 Census data by census block group areas to the Village of Hales Corners for use in a library relocation study.

- Provision of 1980 Census data to the Kenosha Unified School District for use in district planning activities.

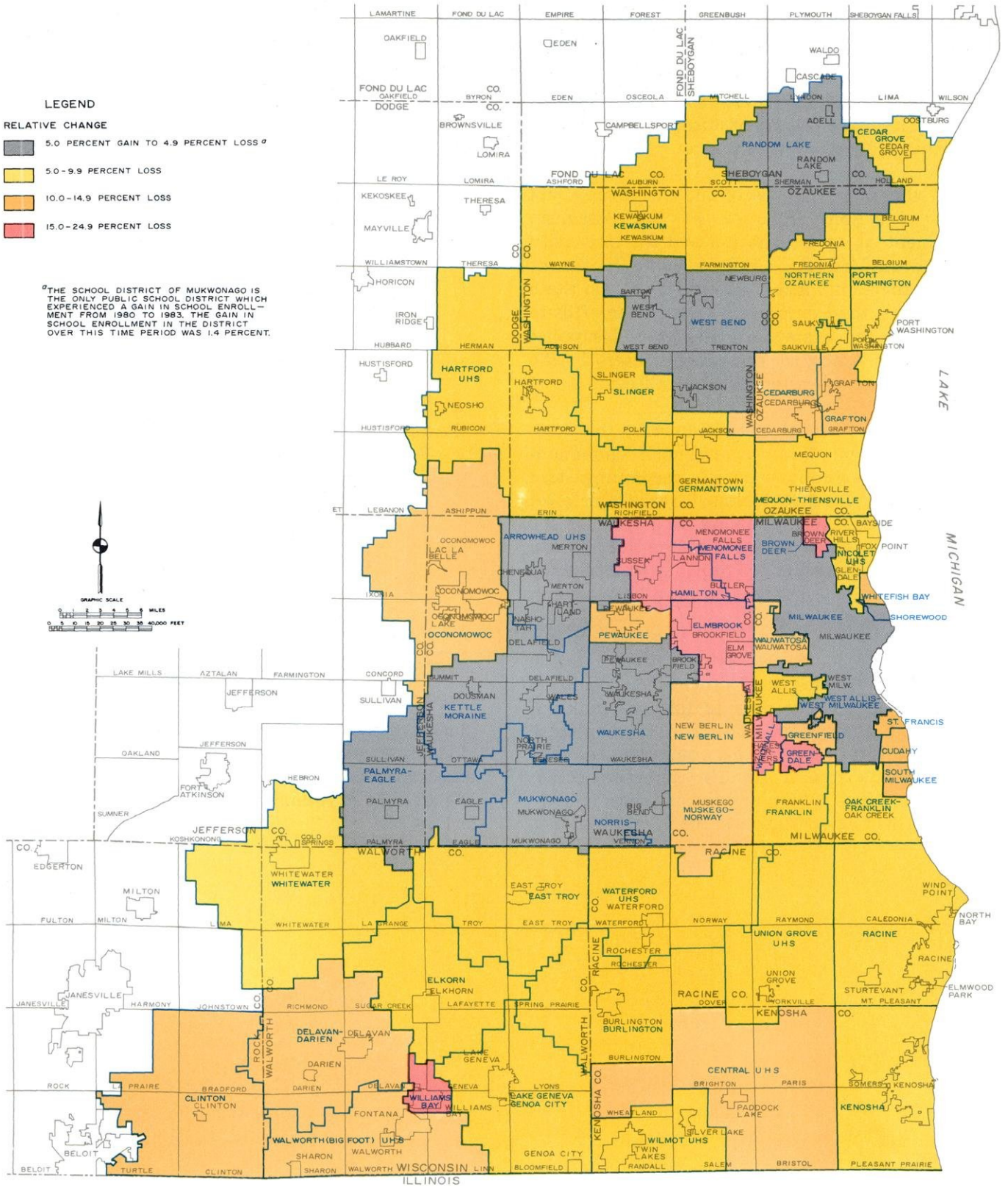
- Provision of general demographic information to local hospitals and retail companies for market research.

## CENSUS COORDINATION

The Commission serves a coordinating function for the U. S. Bureau of the Census in the seven-county Southeastern Wisconsin Region. Under agreements between the Commission and the U. S. Bureau of the Census, the Commission provides staff services to Census Statistical Areas Committees in each county. The Commission also provides technical services directly to the Bureau in the form of base map preparation and maintenance, and geographic base file development and maintenance. The geographic base file is a computer-readable description of the block faces, street address ranges, and census statistical tabulating and reporting unit boundaries of an area.

Map 37

## RELATIVE PUBLIC SCHOOL ENROLLMENT CHANGES IN THE REGION: 1980-1983



As part of this coordination activity, the Commission serves as a clearinghouse and central repository for a wide variety of census data holdings through its participation in the Census Bureau's State Data Center Program. This is 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.

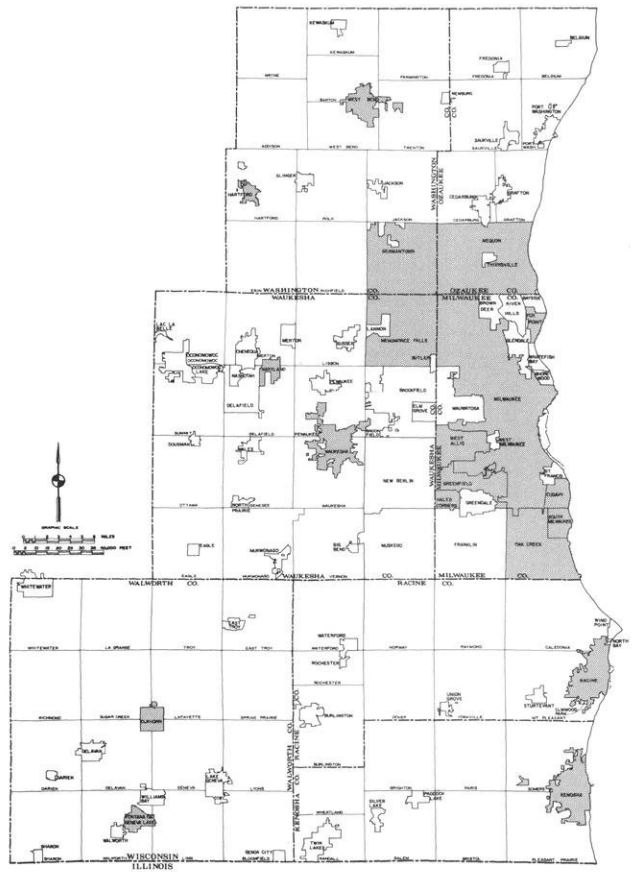
Within the State of Wisconsin, the State Data Center is a joint function of the Wisconsin Department of Administration and the University of Wisconsin-Madison. Under a joint agreement between the Commission and the Wisconsin State Data Center, the Commission serves as an affiliate member of the State Data Center and supplies 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 microfiche cards which contain data for the Southeastern Wisconsin Region. Also included is a complete set of computer-readable summary tape files for the State of Wisconsin as produced by the 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 1983, Division staff provided assistance in accessing 1980 census data to the local units of government shown on Map 38. This assistance was in the form of providing computer-generated reports of data from the summary tape files, copies of published data tables, and census maps. In addition to providing assistance to the 13 cities and six villages identified on Map 38, Division staff provided assistance to Kenosha, Milwaukee, Racine, and Waukesha Counties; the staff of the Wisconsin Department of Administration; and the U. S. Army at Fort McCoy.

**Map 38**

**CIVIL DIVISIONS RECEIVING COMMISSION STAFF ASSISTANCE DURING 1983 FOR ACCESSING 1980 CENSUS MATERIALS**



# COMMUNITY ASSISTANCE PLANNING DIVISION

## DIVISION FUNCTIONS

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

## EDUCATIONAL SERVICES

Educational services are provided by the Division staff to local units of government and citizen groups on request, and are directed at explaining the need for, and purposes of, continuing local, regional, and state planning programs, and the relationships that should exist between those different levels of planning. In addition, these efforts are directed at encouraging the creation, organization, staffing, and financing of local planning programs. During 1983, educational efforts included the following:

- Presentations regarding the general scope of work done by the Commission and the details of specific work programs to local governmental, civic, and professional groups, such as the plan commissions of the Cities of Franklin and Muskego, the Villages of Eagle and Williams Bay, and the Towns of Cedarburg, Grafton, and Port Washington; classes at the University of Wisconsin-Milwaukee and the Waukesha County Technical Institute; the Wisconsin Automobile Technicians Association; the Beaver Lake Access Committee; the Wisconsin Society of Real Estate Appraisers; the Kenosha Environmental Control Commission; and the Southeastern Wisconsin County Park Directors.

- Presentations on wetland preservation and other environmental matters to classes at Waukesha-North High School and Cardinal Stritch College, the Midwest Chapter of the Society of Wetland Scientists, the Lakeland Audubon Society, the Milwaukee Chapter of the Izaak Walton League, the Wisconsin Environmental Network, and the Waukesha Environmental Action League.

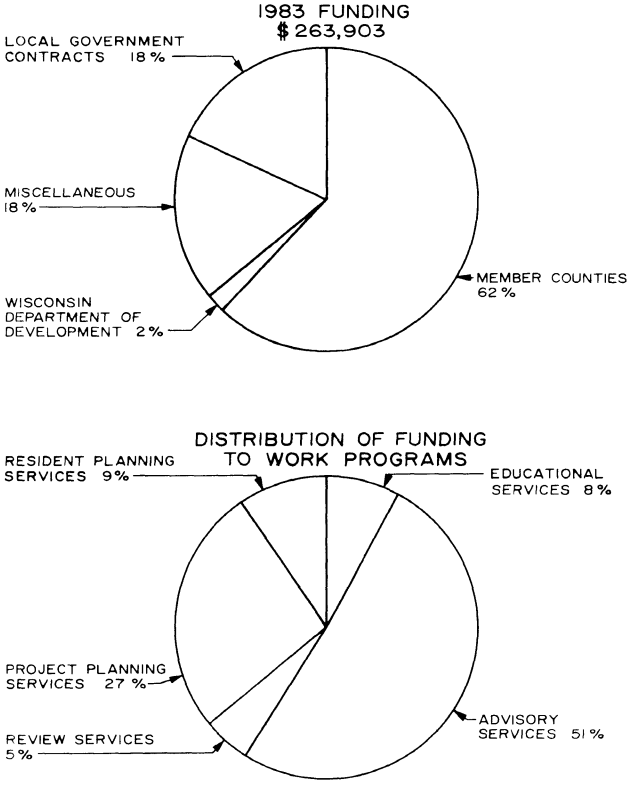
- Conduct of three wetland management field trips for the Midwest Chapter of the Society of Wetland Scientists and the Kettle Moraine Audubon Society.

- 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.

- Preparation and distribution to newspapers and to radio and television stations of four news releases during the year, concerning the conduct of a general aviation survey of airports in southeastern Wisconsin, the con-

Figure 47

COMMUNITY ASSISTANCE PLANNING DIVISION



duct of a passenger survey at Milwaukee's General Mitchell Field, the conduct of the Commission's thirteenth Regional Conference regarding planning for land and water resource conservation, and the cooperative preparation by the Commission and the Wisconsin Electric Power Company of a regional industrial land inventory and county and community economic development profiles.

- The conduct of a Regional Planning Conference on November 9 on the subject of land and water resources protection. This conference, held in Milwaukee, was attended by about 300 persons. The conference included sessions on the control of point and nonpoint sources of water pollution, groundwater protection, wetland management, soil erosion control planning, inland lake management, farmland preservation, stormwater management planning, and environmental corridor protection and sewer service area planning. The conference included a keynote address by Governor Anthony S. Earl, who spoke to the conferees on the important relationships which exist between protecting Wisconsin's land and water resources and fostering sound economic development. The proceedings of the conference were published by the Commission.

- Preparation of the Commission's 1982 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 1983 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, Hartford, and New Berlin, and the Villages of Big Bend, Lac La Belle, and Oconomowoc Lake.

- Provision of data and advice concerning floodland-related development proposals for the Cities of Brookfield, Milwaukee, and Waukesha; the Villages of Elm Grove, Genoa City, Grafton, Hartland, Menomonee Falls, and Williams Bay; the Towns of Brookfield, Caledonia, Merton, Mt. Pleasant, Mukwonago, Norway, Pewaukee, Waukesha, and Wheatland, and Kenosha and Racine Counties.

- Conduct of site-specific wetland and wildlife inventories in the Cities of Mequon and Oak Creek.

- Provision of technical assistance to the Office of Kenosha Area Economic Development in its ongoing economic development activities. Such assistance included providing technical advice to the staff, attending meetings, and providing data from Commission files as requested.

- Provision of technical assistance to the Racine County Executive in the development of a countywide economic development organization with the mission of promoting the economic development of the County.

- Provision of technical assistance to the City of Whitewater Community Development Authority in the preparation of an economic development program.

- Provision of technical assistance to the Sherman Park Community Association, in the City of Milwaukee, in the development and implementation of a neighborhood housing maintenance program.

- Dissemination of information to eligible local governmental units on the rules and regulations governing the operation of the Wisconsin Small Cities Block Grant Program, with emphasis on individualized instruction to local government officials to establish community development technical and institutional capacity.

- Provision of assistance to the following communities in the preparation of community development block grant applications: the Cities of Delavan, West Bend, and Whitewater for economic development projects; the Villages of Jackson, Saukville, Slinger, and Sussex for economic development projects; and Kenosha County for a housing rehabilitation program.

- Provision of assistance to Kenosha County in the design of an industry retention study.

## 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 under the U. S. Office of Management and Budget Circular A-95 [1]; review of environmental impact statements, reports, and assessments; and review of flood hazards affecting individual properties.

The following represent typical review services completed in 1983 by the Division staff in the first review category:

- Review of and comment on eight preliminary plats at the request of the Cities of Delafield and Waukesha, the Village of Elm Grove, and Kenosha and Walworth Counties.

- Review of and comment on six petitions to rezone lands and three proposed zoning text amendments for the Cities of Burlington and Milwaukee; the Villages of Menomonee Falls and Sussex; the Town of Somers; and Racine County.

- Review of and comment on floodplain zoning ordinances for the City of Delavan, the Village of Menomonee Falls, and Walworth and Washington Counties.

- Review of and comment on master plans for the New Munster Wildlife Area in Kenosha County and the Allenton Wildlife Area in Washington County at the request of the Wisconsin Department of Natural Resources.

- Review of and comment on the state Implementation Plan for Air Quality Management—1983 at the request of the Wisconsin Department of Natural Resources.

- Review of and comment on 19 land development proposals at the request of the City of Franklin; the Villages of Butler, Germantown, Pewaukee, Saukville, Sussex, and Twin Lakes; the Towns of Caledonia, Geneva, Randall, Salem, and Wayne; and Racine County.

Division activities regarding the review of federal and state grant applications are summarized in Table 23 . In total, review comments were provided for 249 applications for federal and/or state grants, loans, or mortgage insurance guarantees, requesting in the aggregate nearly $409 million in federal and state financial assistance. Of the total 249 requests, 73 were found to be in conformance with and serving to implement the adopted regional plan elements, and 176 were found to be not in conflict with the adopted regional plan elements. None were found to be in conflict with the adopted regional plan elements.

Division activities regarding the review of environmental impact statements, reports, and assessments are summarized in Table 24 . Comments are provided by the Commission relating the 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 1983, the Division staff conducted a total of 193 flood hazard reviews distributed by county, as shown in Table 25.

## PROJECT PLANNING SERVICES

Project planning services involve the conduct for local member units of government, at cost, of detailed planning studies resulting in the preparation of local plans and plan implementation devices. During 1983, the following representative project planning efforts were conducted:

- Completion of a joint land use plan for the Town and Village of Pewaukee and a land use plan for the Village of Eagle. These plans, set forth in SEWRPC Community Assistance Planning Report No. 76, A Land Use Plan for the Town and Village of Pewaukee: 2000, and in SEWRPC Community Assistance Planning Report No. 85, A Land Use Plan for the Village of Eagle: 2000, refine, detail, and implement the adopted regional land use plan. Each plan, in addition to providing guidelines for land use development in the

[1] *On October 1, 1983, the federal A-95 Circular was withdrawn. In its place, Governor Anthony S. Earl issued Executive Order 29 establishing a state-sponsored grant review process.*

Table 23

STATE AND FEDERAL GRANT REVIEWS: 1983

| Review Category | Number of Reviews | Aggregate Amount of Federal and/or State Grant, Loan, or Mortgage Insurance Requests |
|---|---|---|
| Air Quality | 2 | $ 4,397,125 |
| Community Action | 97 | 245,758,662 |
| Community Development | 5 | 1,996,000 |
| Conservation | 24 | 19,277,133 |
| Historic Preservation | 3 | 1,095,705 |
| Housing | 15 | 25,946,398 |
| Park and Open Space | 11 | 1,582,750 |
| Law Enforcement | 16 | 693,097 |
| Sanitary Sewerage | 6 | 6,504,384 |
| Solid Waste | 2 | 341,000 |
| Transportation | 60 | 93,871,322 |
| Community Facilities | 8 | 7,380,409 |
| Total | 249 | $408,843,985 |

Table 24

ENVIRONMENTAL IMPACT STATEMENTS REVIEWED 1983

| Document Reviewed | Requesting Agency |
|---|---|
| EIS for Improvements at the Kenosha Municipal Airport | U. S. Department of Transportation, Federal Aviation Administration |
| Environmental Assessment for the Lake Comus Rehabilitation Project | Wisconsin Department of Natural Resources |

Table 25

FLOOD HAZARD REVIEWS: 1983

| County | Number of Reviews |
|---|---|
| Kenosha | 0 |
| Milwaukee | 57 |
| Ozaukee | 15 |
| Racine | 14 |
| Walworth | 3 |
| Washington | 22 |
| Waukesha | 82 |
| Total | 193 |

community, addresses special needs unique to each community. The Pewaukee plan includes a phasing plan which identifies four, five-year stages of incremental development. A subsequent staff memorandum entitled The Joint Capital Improvement Program for the Town and Village of Pewaukee also was prepared, and relates directly to the first phase of the land use plan. The Eagle plan is unusual in that the Village of Eagle is one of the few urban communities in the Region where public sanitary sewer service is not

envisioned. Accordingly, the development densities recommended in the plan are lower than in a typical urban land use plan.

- Preparation of a precise neighborhood unit development plan for the Forest Hills Neighborhood in the City of Franklin. 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 Forest Hills Neighborhood plan is set forth in SEWRPC Community Assistance Planning Report No. 57, A Development Plan for the Forest Hills 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 zoning ordinances and accompanying zoning district maps for the Villages of Eagle and Slinger and the Towns of Cedarburg, Grafton, Polk, and Port Washington. These ordinances were adopted in 1983 and serve to implement land use, floodplain management, and farmland preservation objectives set forth in regional plan elements. The Cedarburg, Grafton, and Port Washington ordinances will qualify farmers in those towns for income tax credits allowed by the Wisconsin Farmland Preservation Program.

- Completion of an employment training plan for the Southeast Wisconsin Private Industry Council, Inc., for implementation of Job Training Partnership Act (JTPA) employment training services in the Counties of Kenosha, Racine, and Walworth.

- Preparation of a number of ad hoc planning studies to address special planning problems. These studies included the design of an office park site in the City of Franklin; preparation of a building needs analysis for the Village of Sussex; preparation of an industrial park site design and a promotional brochure for the City of Burlington; and design of a "mini-mall" for the central business district of the City of Burlington. The Commission staff also prepared a number of zoning amendments for various cities, villages, and towns in the Region, addressing such issues as sign control, open space requirements, and wind energy conversion systems. These ad hoc studies were documented in Community Assistance Planning 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 1983, resident planning assistance was provided on a contractual basis to the Cities of Burlington and Delavan; 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 68 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. Finally, a major Division function involves final report production, including editing, type composition, proofreading, illustration preparation, offset printing, and binding.

## BASE MAPPING

During 1983, 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 1983, 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 also 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 39 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 48 and Table 26, this area totals 1,135 square miles, or over 42 percent of the total area of the Region. A total of 6,032 U. S. Public Land Survey corners in the Region have been or are being relocated, monumented, and coordinated, representing over 51 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 320 inquiries for such data during 1983 alone.

## 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 3,643 prints of aerial photographs of portions of the Region were reproduced, along with 52 soil map prints and 356 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 1983 the Division was responsible for the production of the following Commission publications:

### PROSPECTUSES

- Prospectus for an Energy Emergency Contingency Plan for Southeastern Wisconsin, December 1983, 72 pages
- Overall Work Program—1984 Southeastern Wisconsin Regional Planning Commission, November 1983, 190 pages

### PLANNING REPORTS

- No. 34, A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area, August 1983, 849 pages
- No. 35, A Comprehensive Plan for the Pike River Watershed, June 1983, 678 pages

### ANNUAL REPORTS

- 1982 Annual Report, July 1983, 186 pages

### TECHNICAL REPORTS

- No. 28, Evaluation of the Milwaukee Area Rideshare Program: 1979-1982, May 1983, 62 pages

### COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 13 (2nd Edition), Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1983, 207 pages
- No. 57, A Development Plan for the Forest Hills Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1983, 81 pages
- No. 70, Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983, 34 pages
- No. 77, A Wetland Protection and Management Plan for the City of Waukesha and Environs, February 1983, 89 pages
- No. 81, Hartford Area Traffic Management Plan, June 1983, 239 pages
- No. 83, A Transit System Operations Analysis for the City of Waukesha Transit System, February 1983, 206 pages
- No. 84, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, February 1983, 43 pages
- No. 85, A Land Use Plan for the Village of Eagle: 2000, Waukesha County, Wisconsin, September 1983, 139 pages
- No. 87, A Farmland Preservation Plan for Ozaukee County, Wisconsin, May 1983, 213 pages
- No. 89, A Stormwater Management Plan for the Village of Sussex, Waukesha County, Wisconsin, October 1983, 230 pages
- No. 90, Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983, 35 pages
- No. 95, Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983, 29 pages
- No. 98, A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin, August 1983, 131 pages

Map 39

# LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1983

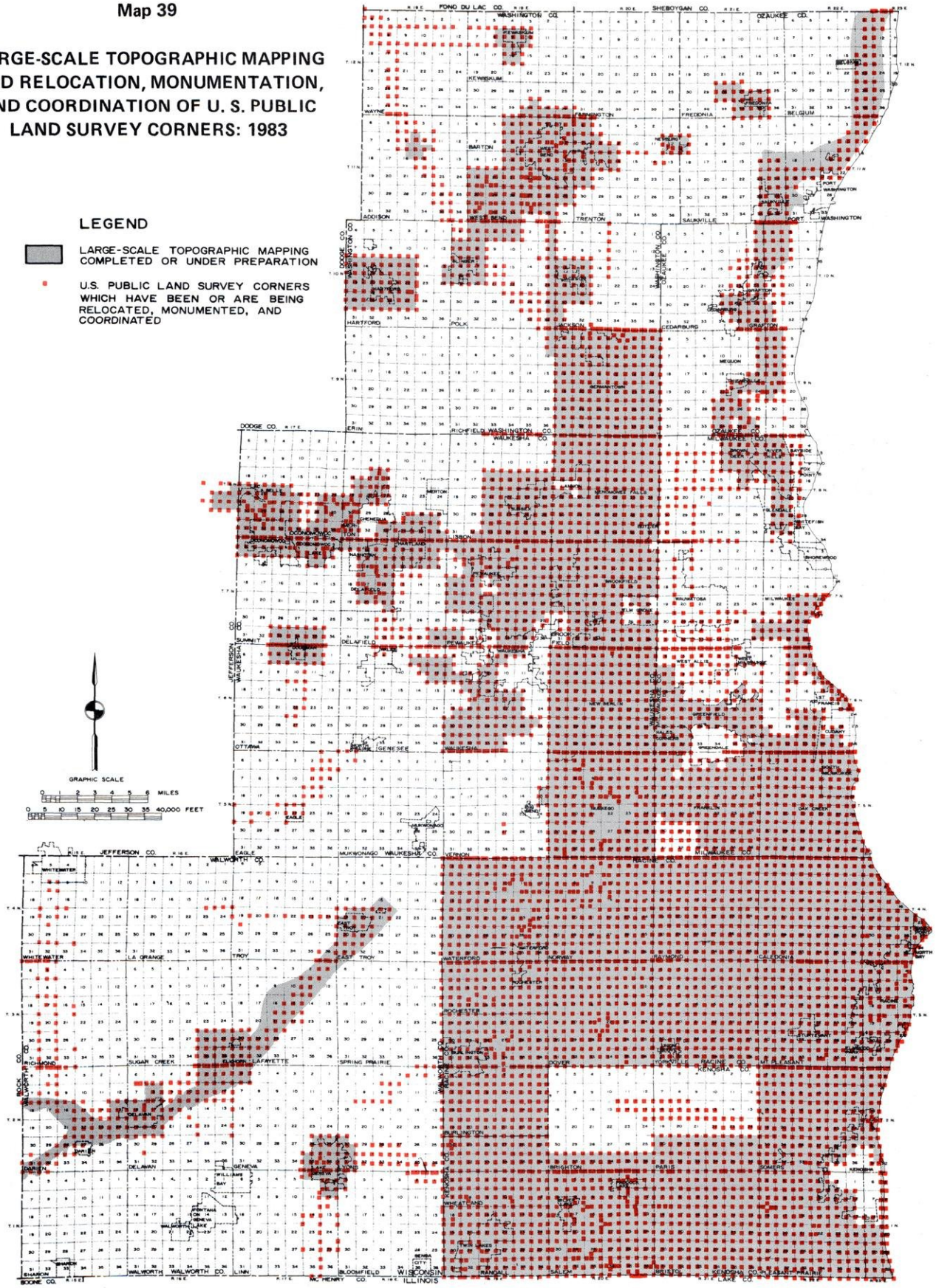
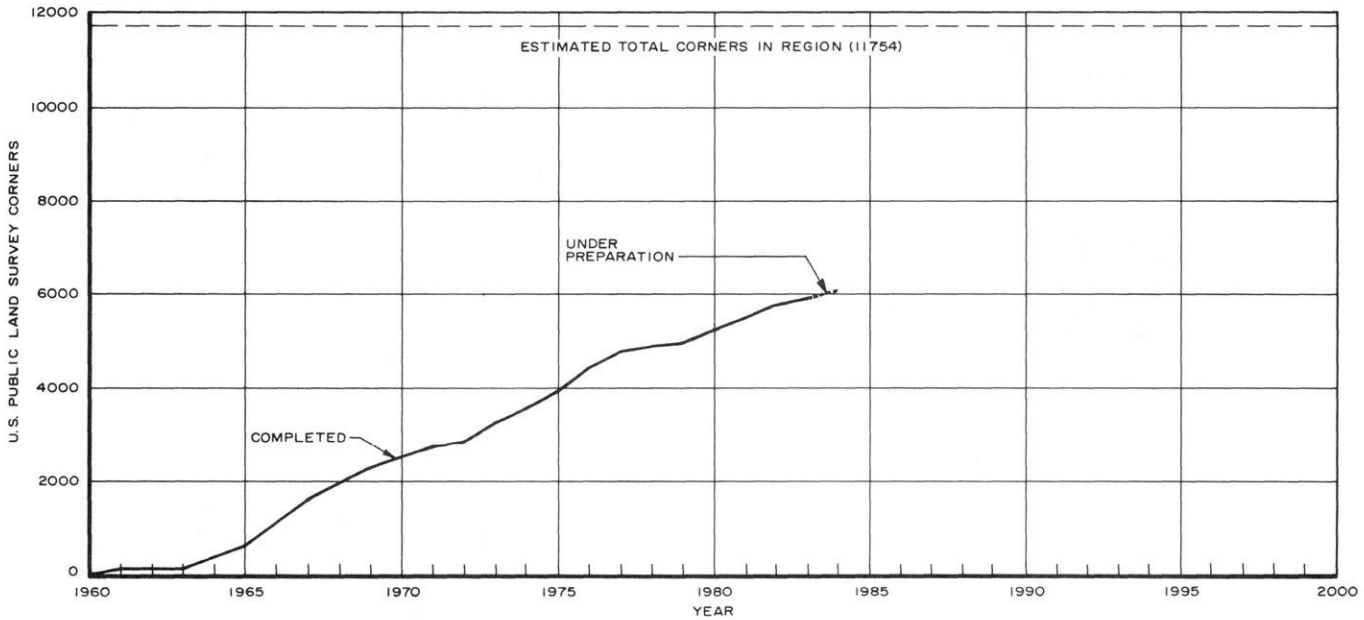
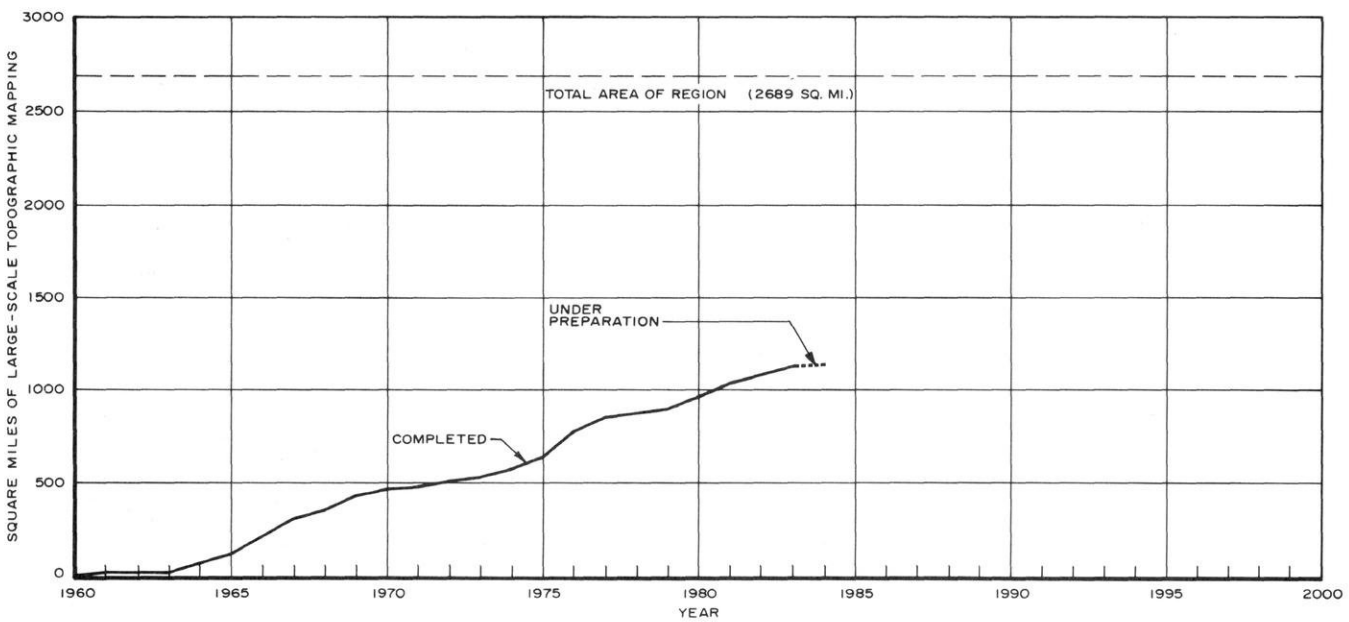


Figure 48

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




## CONFERENCE PROCEEDINGS

- Proceedings of the Thirteenth Regional Planning Conference, November 9, 1983, 204 pages

## NEWSLETTERS

- Volume 23, Nos. 1-6, 174 pages

TYPICAL SEWRPC MONUMENT

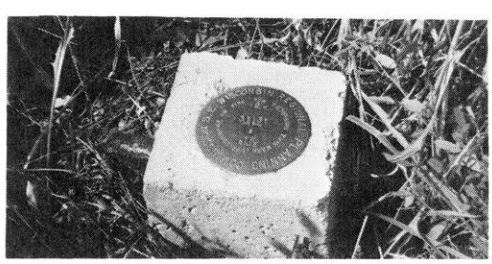


Table 26

## LARGE-SCALE TOPOGRAPHIC MAPPING AND RELOCATION, MONUMENTATION, AND COORDINATION OF U. S. PUBLIC LAND SURVEY CORNERS: 1983

| 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 | -- | 27.75 | 173.50 | 14.00 | 215.25 | 77.43 |
| Milwaukee | 242 | -- | 25.50 | 5.75 | 77.75 | 109.00 | 45.04 |
| 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 | 78.75 | 46.50 | 129.50 | 256.00 | 44.06 |
| Region | 2,689 | 59.75 | 204.32 | 540.04 | 331.00 | 1,135.11 | 42.21 |

*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 | 729 | 63 | 1,015 | 84.30 |
| Milwaukee | 1,065 | 71 | 113 | 63 | 501 | 748 | 70.23 |
| 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 | 128 | 142 | 23 | 405 | 698 | 36.64 |
| Waukesha | 2,535 | 84 | 463 | 236 | 596 | 1,379 | 54.40 |
| Region | 11,754 | 741 | 1,227 | 2,357 | 1,707 | 6,032[c] | 51.32 |

[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 6,034 U. S. Public Land Survey corners, including the centers of the sections, are marked by 6,107 monuments.*

## OTHER

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1984-1988, December 1983, 269 pages
- Amendment to the Regional Transportation Plan—2000, Lake Freeway North/Park Freeway East, December 1983, 46 pages
- Amendment to the Regional Water Quality Management Plan—2000, Geneva Lake Area Communities, December 1983, 28 pages
- Amendment to the Regional Air Quality Attainment and Maintenance Plan—2000, Emission Reduction Credit Banking and Trading System, December 1983, 59 pages
- Amendment to the Regional Water Quality Management Plan—2000, Onion River Priority Watershed Plan, December 1983, 7 pages

# DATA PROCESSING AND SYSTEMS ENGINEERING DIVISION

## DIVISION FUNCTIONS

The Commission's Data Processing and Systems Engineering Division provides basic support to all other Commission divisions. The Division is responsible for maintaining a regional planning data bank that has been developed over a 22-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 7,800 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 1983, the Commission used an IBM Model 3031 central processing unit. The Model 3031 has 8,000,000 bytes of main memory storage. Attached to the Model 3031 are six high-speed magnetic tape drives, a 1,200-line-per-minute printer, and 6 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 27 IBM Model 3178 and 3278 display station terminals 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 85 "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 1983 averaged approximately 40,000 teleprocessing tasks and 450 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 1983 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 3031 computer via telephone lines. These terminals give the community the power of a large computer system at the price of a small computer.

During 1983, 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.

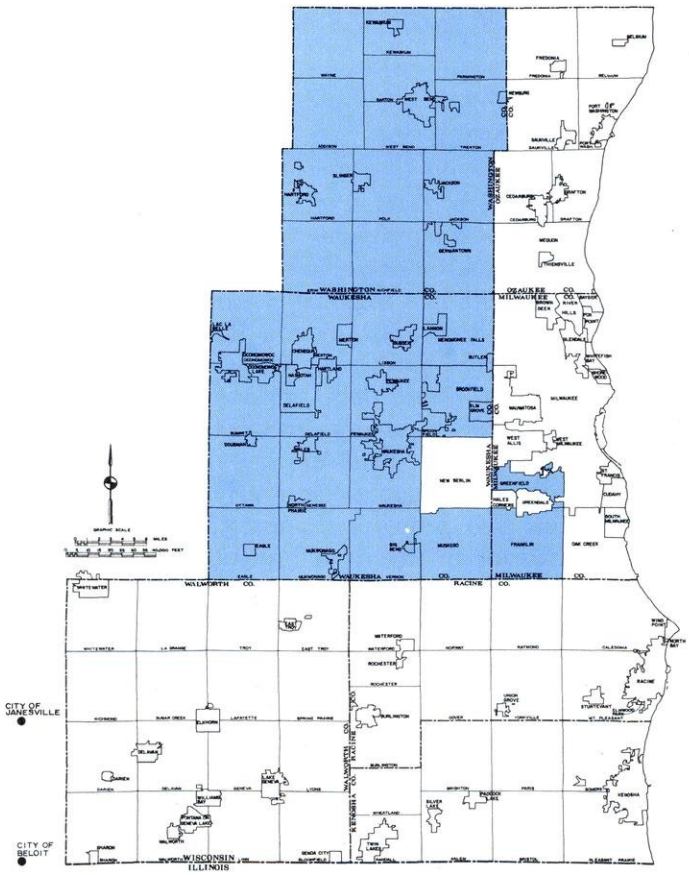
One of the services provided in the "batch" mode is the tax bill processing system, which provides communities with property tax assessment rolls and tax bills. Throughout 1983 these property tax-related services were provided at cost to 60 communities, as shown on Map 40 . Another service provided in 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 41 . In addition, payroll services were provided to 10 school districts outside the Region. Map 42 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 and the City of Delafield 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 welfare check processing.

In the "on-line" processing mode, the Commission has installed computer terminals in four counties, nine cities, and one village. Map 43 shows the locations of the terminals and the applications which were processed from those terminals during 1983.

**Map 40**

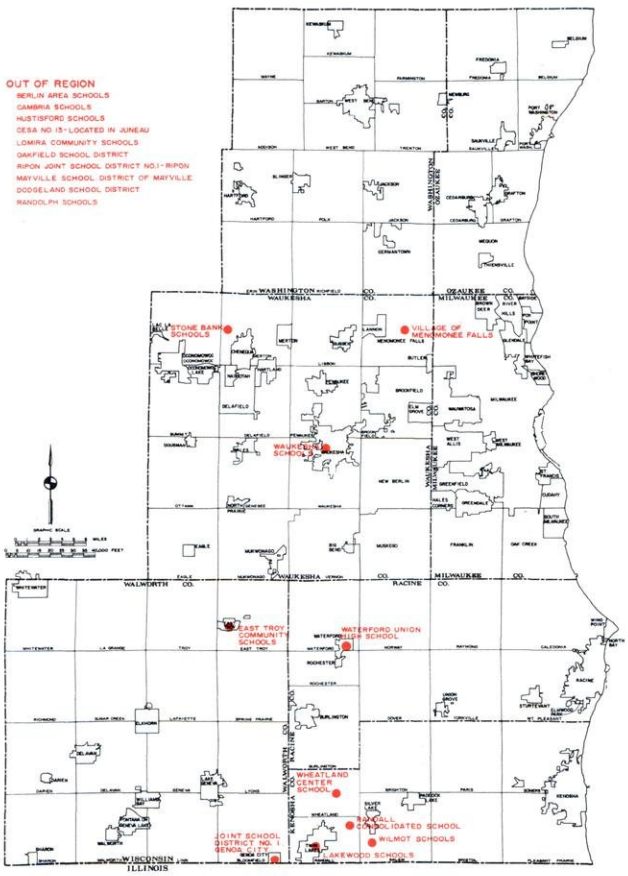
**LOCAL COMMUNITIES USING SEWRPC FOR PROPERTY TAX DATA PROCESSING**




Finally, the Commission began offering stand-alone micro computer systems for use by smaller units of government. The recommended micro system available through the Commission is the IBM Datamaster and appropriate application software supported by the Commission data processing staff. Software that is available includes: payroll, accounts payable, accounts receivable, general ledger, utility billing, and voter registration. Custom computer programming of the Datamaster is also available.

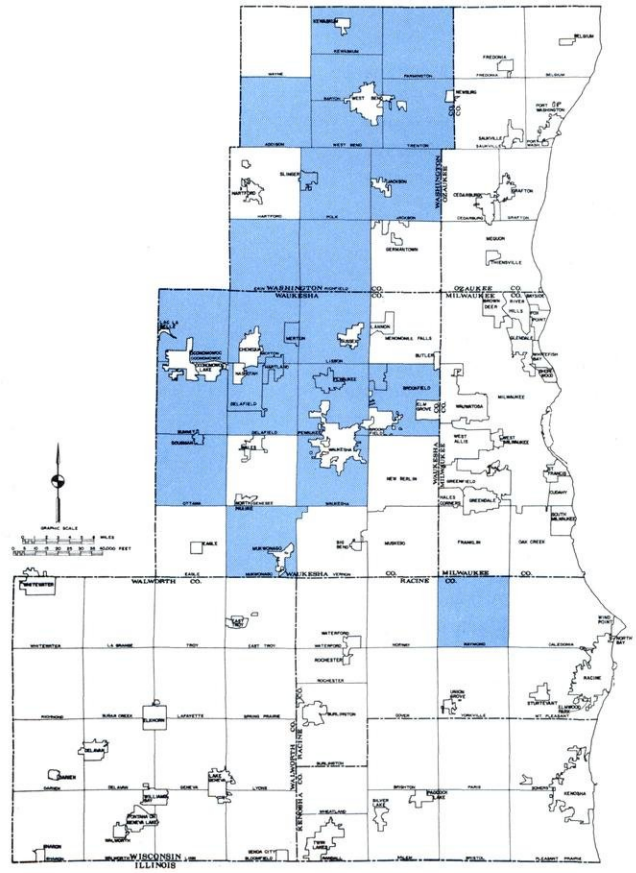
Map 41

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




Map 42

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

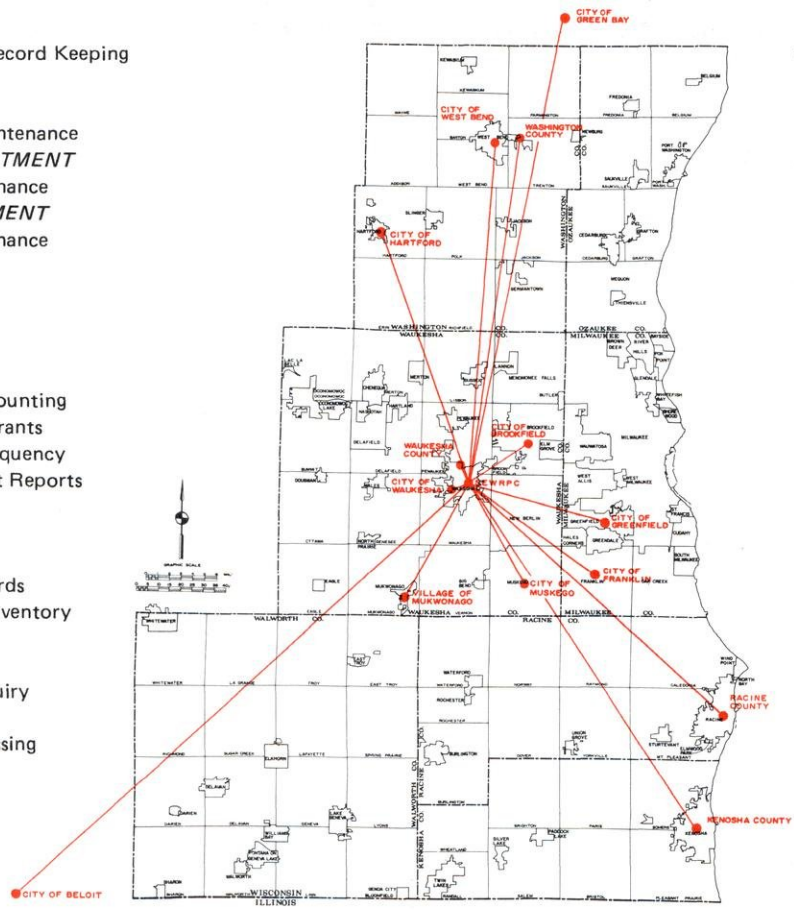


## Map 43

## 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 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

CITY OF BELOIT

- *ASSESSOR*
  - Property Tax File Maintenance
  - Computer-Aided Mass Appraisal
  - Mobile Home Billing
  - Delinquent Personal Property
  - Special Assessments
- *TREASURER*
  - Tax Payment Inquiry
- *BUILDING INSPECTOR*
  - Dwelling Description Inquiry

VILLAGE OF MUKWONAGO

- *CLERK*
  - Utility Billing and Accounting
  - Payroll
  - Accounts Payable
  - General Ledger
  - Receipts
- *ASSESSOR*
  - Property Tax File Maintenance

CITY OF HARTFORD

- *ASSESSOR*
  - Property Tax File Maintenance
  - Computer-Aided Mass Appraisal

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

CITY OF MUSKEGO

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

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

KENOSHA COUNTY

- *SOCIAL SERVICES*
  - General Relief
  - Foster Care
  - General Case Tracking
  - Client Profile
  - Access (Hot Line) 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 1983 by maintaining a trust account with a minority-controlled bank within the Commission's service area. In addition, the Commission has established a minority business enterprise program, commencing with the generation of a list of minority businesses which were contacted as potential Commission vendors.

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

## PERSONNEL ADMINISTRATION

Personnel recruitment, testing, and selection are centered in the Administrative Services Division. During 1983 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 overall working capital required to carry out the Commission's overall work program.

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

The Commission's annual overall work program, a document, as already noted, required by federal regulation, is also prepared with the assistance of the Division. This report is an important vehicle for securing federal and state grants-in-aid, and serves as a guide to the financial management of the Commission. In addition, under the overall work program, the Commission serves as a "pass through" agency to provide federal and state planning monies directly to certain local units of government. For example, transportation planning funds are provided in this way to the County of Milwaukee. The Division administers these "pass through" funds, which in 1983 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 1983 the Division distributed a total of 3,525 copies of Commission reports. These included: 80 prospectuses, 6 study designs, 393 planning reports, 2 planning guides, 175 technical reports, 1,932 community assistance planning reports, 48 technical records, 486 annual reports, 6 conference proceedings, 4 community profiles, 4 lake use reports, 150 public hearing minutes, 203 transportation improvement programs, and 36 overall work programs. In addition, the Division distributed 3,643 aerial photographs, 52 soils maps, 181 topographic maps, 277 control survey station dossiers and control survey summary diagrams, and 175 maps from the Commission's base map series.

# APPENDICES

## Appendix A

# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
# COMMISSIONERS AND COMMITTEES: 1983

## COMMISSIONERS

| | Term Expires |
|---|---|
| **KENOSHA COUNTY** | |
| ***Mary A. Plunkett | 1988 |
| **Sheila M. Siegler | 1986 |
| *Francis J. Pitts | 1986 |
| **MILWAUKEE COUNTY** | |
| **Irene M. Brown | 1986 |
| ***Richard W. Cutler, Secretary | 1984 |
| *Harout O. Sanasarian, Vice-Chairman | 1978 |
| **OZAUKEE COUNTY** | |
| ***Sara L. Johann | 1988 |
| *Allen F. Bruederle | 1984 |
| **Alfred G. Raetz, Chairman | 1984 |
| **RACINE COUNTY** | |
| *Raymond J. Moyer | 1984 |
| **Earl G. Skagen | 1988 |
| ***Michael W. Wells | 1986 |
| **WALWORTH COUNTY** | |
| **John D. Ames | 1984 |
| ***Anthony F. Balestrieri | 1988 |
| *Allen L. Morrison | 1988 |
| **WASHINGTON COUNTY** | |
| **Thomas J. Sackett | 1986 |
| *Harold F. Ryan | 1984 |
| ***Frank F. Uttech | 1988 |
| **WAUKESHA COUNTY** | |
| *Robert F. Hamilton | 1988 |
| **William D. Rogan, Treasurer | 1986 |
| ***Paul G. Vrakas | 1986 |

*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
Richard W. Cutler
Robert F. Hamilton
Allen L. Morrison
Raymond J. Moyer
Francis J. Pitts
William D. Rogan
Harold F. Ryan
Frank F. Uttech

### 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

### INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE
Robert F. Hamilton, Chairman
Harold F. Ryan, Vice-Chairman
Allen F. Bruederle
Allen L. Morrison
Raymond J. Moyer
Francis J. Pitts
Alfred G. Raetz
William D. Rogan
Harout O. Sanasarian

### PLANNING AND RESEARCH COMMITTEE
Anthony F. Balestrieri, Chairman
Michael W. Wells, Vice-Chairman
John D. Ames
Irene M. Brown
Sara L. Johann
Allen L. Morrison
Raymond J. Moyer
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: 1983

### 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 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
Vencil F. Demshar (2) . . . . . Highway Commissioner, Waukesha County
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
J. William Little (2,6) . . . . . Administrator, City of Wauwatosa
James J. Lynch (1) . . . . . Village Planner, Village of Shorewood
Patrick Marchese (4,6) . . . . . Manager of Planning and Contract Engineering, 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 of Planning, 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) . . . . . Assistant to Senior Vice-President, 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
Glenn A. Unger . . . . . District Staff Manager, Switching Planning, Wisconsin Telephone Company
Floyd W. Usher (2) . . . . . City Engineer, City of Oconomowoc
Rodney W. Vanden Noven (6) . . . . . Director of Public Works, City of Waukesha
John P. Varda (7) . . . . . General Counsel, Wisconsin Motor Carriers Association, Madison
Ernst 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
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| Marvin J. Schaeffer | Administrator, Division of Transportation Districts, Wisconsin Department of Transportation |
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| Clair W. Jenn | Traffic Engineer, City of Racine |
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## INTERGOVERNMENTAL COORDINATING AND ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE MILWAUKEE URBANIZED AREA

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Michael J. Glasheen . . . . . Transit Planner, City of Racine
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Richard A. Rechlicz . . . . . Executive Secretary, School Bus Contractors Association
John W. Schmitt . . . . . President, State of Wisconsin AFL-CIO
Thomas F. Schrader . . . . . Vice-President, Market Service, Wisconsin Gas Company
Harvey Shebesta . . . . . District Director, Wisconsin Department of Transportation
James J. Wolak . . . . . Manager, Electric Systems Operations, Wisconsin Electric Power Company

## TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON FREEWAY TRAFFIC MANAGEMENT

Vencil F. Demshar . . . . . Highway Commissioner, Waukesha County
William R. Drew . . . . . Commissioner, Department of City Development, City of Milwaukee
Arne L. Gausmann . . . . . Director, Bureau of Systems Planning, Wisconsin Department of Transportation
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 . . . . . Director of Parks, Recreation and Culture, Milwaukee County Park Commission, Chairman
Thomas N. Wright . . . . . Director of Community Development, City of Racine, Vice-Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission, Secretary
John M. Bennett . . . . . City Engineer, City of Franklin

## ROOT RIVER WATERSHED COMMITTEE (Continued)

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 . . . . . Manager of Planning and Contract Engineering, 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

William D. Rogan . . . . . Commissioner, Southeastern Wisconsin Regional Planning Commission, Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission, Secretary
Edmund Brick . . . . . Assistant Director, Bureau of Water Regulation and Zoning, Wisconsin Department of Natural Resources
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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
H. Copeland Greene . . . . . Citizen Member, Genesee Depot
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
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Raymond J. Moyer, Jr. . . . . Supervisor, Racine County; Commissioner, Southeastern Wisconsin Regional Planning Commission
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Cloyd A. Porter . . . . . Wisconsin State Assemblyman
Richard G. Rehberg . . . . . Chairman, Town of Rochester
Herbert E. Ripley . . . . . Health Officer, Waukesha County Health Department
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
Karl Schroeder . . . . . Horticultural/Natural Resource Agent, Racine County
Arthur Stratton . . . . . Commissioner, Hoosier Creek Drainage District
Walter J. Tarmann . . . . . Executive Director, Waukesha County Park and Planning Commission
Rodney W. Vanden Noven . . . . . Director of Public Works, City of Waukesha
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, Chairman — Attorney, Quarles and Brady, Milwaukee; Member, Village of Fox Point Plan Commission; Commissioner, Southeastern Wisconsin Regional Planning Commission
Kurt W. Bauer, Secretary — Executive Director, Southeastern Wisconsin Regional Planning Commission
Vaughn H. Brown — Chairman, Town of Farmington
Lawrence Brumm — President, Milwaukee River Restoration Council, Inc.
Delbert J. Cook — Chairman, Cedar Creek Restoration Council
Jody Mark Cronin — Director, Ozaukee County Department of Environmental Health
Arthur G. Degnitz — Supervisor, Washington County
Arthur D. Doll — Director, Bureau of Planning, Wisconsin Department of Natural Resources
Edward Frauenheim — County Board Chairman, Sheboygan County
Michael C. Harrigan — Administrator, Village of Saukville
Lawrence W. Hillman — Vice-President of Quality Assurance and Facilities Planning, West Bend Company
John Justen — Citizen Member
Ronald W. Kazmierczak — Assistant District Director, Southeast District, Wisconsin Department of Natural Resources
Robert L. Konik — Planner, Fond du Lac County
David A. Kuemmel — Commissioner of Public Works, City of Milwaukee
Patrick Marchese — Manager, Planning and Contract Engineering, 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
Donald A. Roensch — Administrator, City of Mequon
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

## KINNICKINNIC RIVER WATERSHED COMMITTEE

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Edwin J. Laszewski, Jr., Vice-Chairman — City Engineer, City of Milwaukee
Kurt W. Bauer, Secretary — Executive Director, Southeastern Wisconsin Regional Planning Commission
Raymond T. Dwyer — City Engineer, City of Greenfield
Patrick Marchese — Manager, Planning and Contract Engineering, 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

## MENOMONEE RIVER WATERSHED COMMITTEE

David A. Kuemmel, Chairman — Commissioner of Public Works, City of Milwaukee
J. William Little, Vice-Chairman — Administrator, City of Wauwatosa
Kurt W. Bauer, Secretary — Executive Director, Southeastern Wisconsin Regional Planning Commission
Arthur D. Doll — Director, Bureau of Planning, Wisconsin Department of Natural Resources
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 — Manager, Planning and Contract Engineering, 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

## PIKE RIVER WATERSHED COMMITTEE

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Jerome Konicek, Vice-Chairman — Chairman, Mt. Pleasant Drainage District
Kurt W. Bauer, Secretary — Executive Director, Southeastern Wisconsin Regional Planning Commission
Les Aspin — Congressman, 1st District
Eual W. Bodenbach — Coordinator, Town of Mt. Pleasant
Peter Boscha — Supervisor, Town of Mt. Pleasant
Mary M. Carrington — Chairman, Town of Mt. Pleasant
Arnold L. Clement — Planning Director and Zoning Administrator, Racine County
Myron L. Herman — Natural Resources Agent, Kenosha County
Jerry Hibbard — District Conservationist, U. S. Soil Conservation Service, Racine County
Donald K. Holland — Director of Public Works, City of Kenosha
Karl B. Holzwarth — Park Director, Racine County
Gerald J. Jarmuz — Planning Analyst, Southeast District, Wisconsin Department of Natural Resources
Abe Kirkorian — President, Village of Sturtevant
Niels E. Ladine — Director of Parks, Kenosha County
Leverett F. Leet — Retired Farmer, Town of Somers
Richard J. Lindl — Chairman, Town of Somers
Chelvadurai Manogaran — Associate Professor, Department of Geography, University of Wisconsin-Parkside
Raymond J. Moyer — Supervisor, Racine County; Commissioner, Southeastern Wisconsin Regional Planning Commission
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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Chairman
Paul E. Milewski . . . . . Director of Planning, City of Oak Creek
Vice-Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern
Secretary Wisconsin Regional Planning Commission
John M. Bennett . . . . . City Engineer, City of Franklin
Thomas D. Borgwardt . . . . . Airport Engineer, Milwaukee
County Department of Public Works
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 . . . . . Manager, Planning and Contract Engineering,
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 Metropolitan Sewerage District
Raymond J. Kipp . . . . . Dean, College of Engineering,
Vice-Chairman Marquette University
Robert P. Biebel . . . . . Chief Environmental Engineer, Southeastern
Secretary Wisconsin Regional Planning Commission
Vinton W. Bacon . . . . . Professor, College of
Applied Science and Engineering,
University of Wisconsin-Milwaukee
Kurt W. Bauer . . . . . Executive Director, Southeastern
Wisconsin Regional Planning Commission
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
Michael T. Phillips . . . . . Project Officer, Planning Branch,
U. S. Environmental Protection Agency

## TECHNICAL ADVISORY COMMITTEE ON REGIONAL WATER QUALITY MANAGEMENT PLANNING (continued)

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 . . . . . Executive Director, Waukesh County
Park and Planning Commissionon
Rodney W. Vanden Noven . . . . . Director of Public Works,
City of Waukesha
Udo L. Wilharm . . . . . City Engineer, City of Oak Creek

## TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON REGIONAL AIR QUALITY PLANNING

Richard A. Keyes . . . . . Environmental Engineer, Professional Services Division,
Chairman Milwaukee County Department of Public Works
Barbara J. Becker . . . . . President, Southeastern
Vice-Chairman Wisconsin Coalition for Clean Air
Richard F. Pierce . . . . . Principal Specialist, Environmental
Secretary Planning Division, Southeastern
Wisconsin Regional Planning Commission
Alice G. Altemeier . . . . . League of Women Voters, Ozaukee County
Kurt W. Bauer . . . . . Executive Director, Southeastern
Wisconsin Regional Planning Commission
Wesley J. Beaton . . . . . Director of Environmental
Health, City of Racine
Gerald D. Bevington . . . . . Assistant Director, Bureau of Air
Management, Southeast District, Wisconsin
Department of Natural Resources
David W. Dettman . . . . . Environmental Engineer, Bureau of
Environmental Analysis and Review,
Wisconsin Department of Transportation
John C. Hanson . . . . . Director, Racine County
Department of Environmental Control
Paul Koziar . . . . . Deputy Director, Bureau of Air Management,
Wisconsin Department of Natural Resources
Carlton Nash . . . . . U. S. Environmental Protection Agency, Region V
John H. Paige . . . . . Transportation Officer,
Regional Development Department,
Northeastern Illinois Planning Commission
Kenneth W. Ragland . . . . . Associate Professor,
Department of Mechanical Engineering,
University of Wisconsin-Madison
Fred R. Rehm . . . . . Director, Professional Services Division,
Milwaukee County Department of Public Works
Herbert E. Ripley . . . . . Health Officer, Waukesha
County Health Department
Rodolfo N. Salcedo . . . . . Environmental Scientist,
Department of City Development,
City of Milwaukee
Harvey Shebesta . . . . . District Director, Wisconsin
Department of Transportation
Mark P. Steinberg . . . . . Superintendent, Air Quality, Environmental
Planning and Policy Division,
Wisconsin Electric Power Company
Herbert R. Teets . . . . . Division Administrator,
U. S. Department of Transportation
Federal Highway Administration
George A. Zimmer . . . . . Supervisor, Environmental Health,
City of Kenosha Health Department

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

| | |
|---|---|
| Dr. Norman P. Lasca, Chairman | Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee; Representative of Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin |
| Robert J. Mikula, Vice-Chairman | Director of Parks, Recreation and Culture, Milwaukee County Park Commission |
| Donald M. Reed, Secretary | Principal Specialist-Biologist, Southeastern Wisconsin Regional Planning Commission |
| 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 Chairman, Kenosha County |
| David A. Kuemmel | Commissioner of Public Works, City of Milwaukee |
| George O. Lampert | Mayor, City of Port Washington |
| Patrick Marchese | Manager, Planning and Contract Engineering, 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, Chairman | Director of Parks, Recreation and Culture, Milwaukee County |
| 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 |
| Richard W. Cutler | Attorney, Quarles and Brady, Milwaukee; Commissioner, Southeastern Wisconsin Regional Planning Commission |
| 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 |

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

| | |
|---|---|
| Frederick G. Schmidt | Izaak Walton League; Member, Sierra Club |
| Mrs. John D. Squier | Member, Riveredge Nature Center, Inc. |
| Walter J. Tarmann | Executive Director, Waukesha County Park and Planning Commission |
| Edgar W. Trecker | Supervisor of Forestry, Wildlife, and Recreation, Southeast District, Wisconsin Department of Natural Resources |
| Elwood R. Voigt | Park 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, Chairman | Commissioner, Public Works Department, City of Milwaukee |
| Helen M. Jacobs, Vice-Chairman | Member, Milwaukee River Restoration Council |
| Kurt W. Bauer, Secretary | Executive Director, Southeastern Wisconsin Regional Planning Commission |
| Earl K. Anderson | Harbor Engineer, Port of Milwaukee |
| Jeannette Bell | Member, League of Women Voters |
| Harold P. Cahill | 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

William E. Bartel . . . . . Supervisor, Town of Ixonia
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

Arnold L. Clement . . . . . Planning and Development Director, Racine County
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Paul Milewski . . . . . Director of Community Development, City of Oak Creek
Vice-Chairman
Kurt W. Bauer . . . . . Executive Director, Southeastern Wisconsin Regional Planning Commission
Secretary
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 ADVISORY COMMITTEE ON FARMLAND PRESERVATION FOR OZAUKEE COUNTY

Harold C. Dobberpuhl . . . . . County Clerk, Ozaukee County
Chairman
Philip C. Evenson . . . . . Assistant Director, Southeastern Wisconsin Regional Planning Commission
Secretary
William A. Baker, Jr. . . . . Ozaukee County Executive Director, U. S. Department of Agriculture, Agricultural Stabilization and Conservation Service
Morgan R. Butler, III . . . . . Corporation Counsel, Ozaukee County
Jody Mark Cronin . . . . . Environmental Health Director, Ozaukee County
Daniel Lynch . . . . . District Conservationist, U. S. Department of Agriculture, Soil Conservation Service
Daniel J. O'Neil . . . . . Agricultural Agent, Ozaukee County
Lee Schlenvogt . . . . . Farmer, Town of Port Washington
Harold Schoessow . . . . . Farmer, City of Mequon
Elwood R. Voigt . . . . . Park Commissioner, Ozaukee County

## 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
Sharon K. Meier . . . . . Planning Analyst, Water Quality Planning Section, Wisconsin Department of Natural Resources
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
Dr. Forest Stearns . . . . . Professor, Department of Botany, University of Wisconsin-Milwaukee
Russel Van Herik . . . . . Director, The Nature Conservancy

## TECHNICAL COORDINATING AND ADVISORY COMMITTEE ON COMPREHENSIVE PLANNING FOR THE KENOSHA PLANNING DISTRICT

| | |
|---|---|
| Robert E. Prange<br>Chairman | Clerk, Town of Pleasant Prairie |
| Donald Andreoli<br>Vice-Chairman | Alderman and Member, City Plan Commission, City of Kenosha |
| Achille F. Infusino | Citizen Member, City of Kenosha |
| Ernest R. Klees | Member, Plan Commission, Town of Somers |
| Richard J. Lesko | Member, Plan Commission, Town of Somers |
| John Papan | Chairman, Town of Pleasant Prairie Plan Commission |
| Francis J. Pitts | Supervisor, Kenosha County |
| James M. Smith | Supervisor, Town of Somers |
| Douglas Stanich | Citizen Member, City of Kenosha |

### Nonvoting Members

| | |
|---|---|
| Philip C. Evenson | Assistant Director, Southeastern Wisconsin Regional Planning Commission |
| Ray Forgianni | Director of City Development, City of Kenosha |
| Dr. John J. Hosmanek | Superintendent of Schools, Kenosha Unified School District No. 1 |
| Russell Knetzger | Town Planner, Town of Pleasant Prairie |
| George E. Melcher | Zoning Administrator, Kenosha County |

## JOINT PLANNING COMMITTEE FOR THE TOWN AND VILLAGE OF PEWAUKEE

| | |
|---|---|
| James C. Engman<br>Co-Chairman | Member, Plan Commission, Town of Pewaukee |
| Darryl Judson<br>Co-Chairman | Member, Plan Commission, Village of Pewaukee |
| Eugene Ackley | Citizen Member, Village of Pewaukee |
| Les Engle | Citizen Member, Village of Pewaukee |
| Robert Flemming | Member, Plan Commission, Town of Pewaukee |
| Arnold F. Meyer | Chairman, Lake Pewaukee Sanitary District Board |

Appendix C

# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 1983

## 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

## TRANSPORTATION PLANNING DIVISION

Donald R. Martinson
Chief Transportation Engineer

Kenneth H. Voigt, PE
Principal Engineer

Robert E. Beglinger
James J. Hoegler
Senior Engineers

Albert A. Beck
Principal Planner

Otto P. Dobnick
Andrew L. Schwartz, AICP
Senior Planners

Michael J. Maierle
Planner

## LAND USE PLANNING DIVISION

Bruce P. Rubin
Chief Land Use Planner

Gordon M. Kacala
William J. Stauber
Principal Planners

Gerald H. Emmerich, Jr.
Senior Planner

Kathleen M. Hazen
Dennis K. LeFevre
Planners

Lon M. Scott
Research Analyst

Joyce G. Pariseau
Research Aide

Joan M. Starr
Secretary I

## ENVIRONMENTAL PLANNING DIVISION

Robert P. Biebel, PE
Chief Environmental Engineer

Roger A. Baumann, PE
Richard S. Grant
Curtis R. Hulterstrum, PE
Principal Engineers

Richard F. Pierce
Donald M. Reed
Principal Specialists

Joseph E. Stuber, PE
Senior Engineer

David B. Kendziorski
Principal Planner

James R. D'Antuono
Senior Planner

Cynthia V. DeBruine, PE
Ronald J. Printz
Engineers

Timothy R. Bauserman
Research Aide

Irene A. Brown
Secretary I

## ADMINISTRATIVE SERVICES DIVISION

Joan A. Zenk
Administrative Officer

Rita L. Rolfson
Bookkeeper

Luella M. Fredrickson
Barbara A. Poff
Secretary II

Lena B. Caracci
Clerk

## PLANNING RESEARCH DIVISION

Thomas D. Patterson
Chief of Planning Research

Donald G. Dittmar
John L. Zastrow
Senior Specialists

Karen J. Goralski
Phillip D. House
Nancy M. Kresse
Digitizer Operators

## COMMUNITY ASSISTANCE PLANNING DIVISION

Roland O. Tonn, AICP
Chief Community Assistance Planner

Patrick J. Meehan
Richard B. Untch, AICP
Principal Planners

Betty Haideman
Clerk-Typist

## 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 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 1983

## 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
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. 11 - The Population of Southeastern Wisconsin, December 1972
No. 12 - A Short-Range Action Housing Program for Southeastern Wisconsin: 1972 and 1973, June 1972
No. 13 - A Survey of Public Opinion in Southeastern Wisconsin, September 1974
No. 14 - An Industrial Park Cost-Revenue Analysis in Southeastern Wisconsin: 1975, June 1975
No. 15 - Household Response to Motor Fuel Shortages and Higher Prices in Southeastern Wisconsin, August 1976
No. 16 - Digital Computer Model of the Sandstone Aquifer in Southeastern Wisconsin: April 1976
No. 17 - Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975, June 1978
No. 18 - State of the Art of the Water Pollution Control in Southeastern Wisconsin
Volume 1 - Point Sources, July 1977
Volume 2 - Sludge Management, August 1977
Volume 3 - Urban Storm Water Runoff, July 1977
Volume 4 - Rural Storm Water Runoff, December 1976
No. 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

## 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

COMMUNITY ASSISTANCE PLANNING REPORTS—continued

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. 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. 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. 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. 95 - Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983
No. 98 - A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin, August 1983

## 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- Lauderdale Lakes
  - 17, (Green Lake,
  - 20, Middle Lake,
  - 18, Mill Lake)
- No. FX-39, Lulu Lake
- No. FX-21, North Lake
- No. FX-37, Pell Lake
- No. FX-43, Peters Lake
- No. FX-25, Pleasant Lake
- No. FX-24, Potters Lake
- No. FX-38, Silver Lake
- No. FX-30, Wandawega Lake

Waukesha County
- No. FX-3, Big Muskego Lake
- No. FX-23, Denoon Lake
- No. FX-19, Eagle Spring Lake
- No. FX-10, Little Muskego Lake
- No. FX-14, Lower Phantom Lake
- No. FX-2, Pewaukee Lake
- No. FX-34, Spring Lake
- No. FX-33, Upper Phantom Lake

## LAKE USE REPORTS—MILWAUKEE RIVER WATERSHED

Fond du Lac County
- No. ML-2, Long Lake
- No. ML-9, Auburn Lake
- No. ML-21, Forest Lake
- No. ML-12, Mauthe Lake
- No. ML-18, Mud Lake
- No. ML-5, Kettle Moraine Lake

Ozaukee County
- No. ML-4, Mud Lake
- No. ML-17, Spring Lake

Sheboygan County
- No. ML-6, Random Lake
- No. ML-10, Crooked Lake
- No. ML-7, Lake Ellen

Washington County
- No. ML-3, Little Cedar Lake
- No. ML-14, Green Lake
- No. ML-19, Lake Twelve
- No. ML-13, Lucas Lake
- No. ML-11, Smith Lake
- No. ML-20, Wallace Lake
- No. ML-15, Barton Pond
- No. ML-1, Big Cedar Lake
- No. ML-8, Silver Lake
- No. ML-16, West Bend Pond

## TECHNICAL RECORDS

Volume 1 - No. 1, October-November 1963

Regional Planning in Southeastern Wisconsin
by Kurt W. Bauer, Executive Director
The SEWRPC Land Use-Transportation Study
by J. Robert Doughty, Study Director
Home Interview Sample Selection - Part I
by Kenneth J. Schlager, Chief Systems Engineer
Truck and Taxi Sample Selection
by Thomas A. Winkel, Urban Planning Supervisor
A Backward Glance: Early Toll Roads in Southeastern Wisconsin
by Richard E. Rehberg, Editor

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

Arterial Network and Traffic Analysis Zones
by Richard B. Sheridan, Chief Transportation Planner
Conducting the Household Postal Questionnaire Survey
by Wade G. Fox, Cartography and Design Supervisor
Conducting the Home Interview Survey
by Sheldon W. Sullivan, Administrative Officer
Aerial Photographs and Their Use in the Land Use Inventory
by 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—Part 1
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—Part 2
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, and 1982

## 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

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## 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

WALKOWICZ & YOUNG, S.C.
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EDWARD J. WALKOWICZ, C P A
VICTOR L. YOUNG, C P A

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

June 19, 1984

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

Gentlemen:

We have examined the accompanying Balance Sheets and the related Statements of Revenues, Expenditures, and Changes in Fund Balances for the year 1983 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 Fund
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, 1983, 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,

Walkowicz & Young S. C.

Walkowicz & 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, 1983, 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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contributions from Counties | | $758,360.00 | |
| Other Income | | | |
| Service Agreements | $ 18,757.18 | | |
| Interest on Invested Funds | 18,923.49 | | |
| Other Income | 44,573.59 | | |
| Total Other Income | | 82,254.26 | |
| Total Revenues | | | $840,614.26 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $458,274.94 | |
| Office and Other Expenses | | | |
| Technical Consultants | $ 42,129.38 | | |
| Services by Other Public Agencies | 4,067.49 | | |
| Outside Salaries and Services | 8,674.38 | | |
| Data Processing Services | 65,210.07 | | |
| Office Drafting and DP Supplies | 1,143.77 | | |
| Library Acquisition and Dues | 615.14 | | |
| Reproduction and Publication | 630.50 | | |
| Publication of Report | 2,172.00 | | |
| Printing Cost | 210.95 | | |
| Travel Expense | 6,072.07 | | |
| Digitizer Services | 32,792.60 | | |
| Other Operating Expenses | 341.04 | | |
| Unemployment Compensation Expense | 4,189.00 | | |
| Automobile/Office Equipment Maintenance | 4,289.40 | | |
| Depreciation of Automobile/ Equipment | 14,992.92 | | |
| Total Office and Other Expenses | | 187,530.71 | |
| Indirect Expense | | 333,487.01 | |
| Total Expenditures | | | 979,292.66 |
| Excess Expenditures over Revenues | | | $138,678.40 |
| Fund Balance - Beginning of Year | | | 505,143.34 |
| Fund Balance - Adjustments (Note 2) | | | (56,976.74) |
| Fund Balance - End of Year | | | $309,488.20 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Cash and Grants Available | $208,910.94 | $555,734.62 |
| Furniture, Fixtures, Equipment, Autos, etc. (Schedule A-B-1) | 84,561.65 | 69,984.14 |
| Service Agreement Receivable | 300.00 | -- |
| Prepaid Expense | 2,841.35 | -- |
| Due From Data Processing Fund (Note 3) | 166,875.00 | -- |
| Total Assets | $463,488.94 | $625,718.76 |
| Liabilities | | |
| Fringe Benefits | $ 452.10 | $ 373.49 |
| State Sales Tax | 429.16 | 94.66 |
| Accounts Payable | 67,810.30 | 116,288.61 |
| Annuity | 5,997.44 | 3,818.66 |
| Vacation Accrual | 79,311.74 | -- |
| Total Liabilities | 154,000.74 | 120,575.42 |
| Fund Balance | | |
| Unappropriated Fund Balance | 309,488.20 | 505,143.34 |
| Total Liabilities and Fund Balance | $463,488.94 | $625,718.76 |

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, 1983 and 1982

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 |

December 31, 1982

| Description | Cost | Accumulated Depreciation | Net Book Value |
|---|---|---|---|
| Desks | $ 13,420.55 | $11,231.09 | $ 2,189.46 |
| Chairs | 10,764.83 | 7,431.92 | 3,332.91 |
| Calculators and Adding Machines | 12,132.36 | 8,967.73 | 3,164.63 |
| Filing Cabinets | 31,087.69 | 18,929.64 | 12,158.05 |
| Typewriters | 19,661.70 | 11,578.04 | 8,023.66 |
| Book Cases | 13,910.04 | 8,526.21 | 5,383.83 |
| Tables | 6,368.56 | 5,213.27 | 1,155.29 |
| Data Processing Equipment | 9,164.02 | 2,408.39 | 6,755.63 |
| Major Equipment | 18,152.40 | 12,375.15 | 5,777.25 |
| Automobiles | 42,567.10 | 26,214.13 | 16,352.97 |
| Miscellaneous | 11,259.42 | 5,568.96 | 5,690.46 |
| | $188,428.67 | $118,444.53 | $69,984.14 |

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, 1983

1. The revenues reflected in the SEWRPC Fund are used to partially support the following continuing planning programs: land use, transportation, planning research; air quality; floodland management; water quality; community assistance, 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.

2. Fund Balance - Adjustments - 1983

| | |
|---|---|
| $22,335.00 of the fund balance from the Kenosha County Mapping Fund was transferred to the SEWRPC Fund in calendar year 1983 to correct the receipt of revenues in calendar year 1980 that were for expenditures paid out of the SEWRPC Fund during that year. | $22,335.00 |
| During calendar year 1983, the Commission established a vacation liability account. As of December 31, 1983, this liability amounted to $79,311.74. | (79,311.74) |
| | $(56,976.74) |

3. Due From Data Processing Fund
   During calendar year 1983, the SEWRPC Fund advanced $166,875.00 to the Data Processing Fund for the retirement of debt.

EXHIBIT B-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Housing and Urban Development Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1983

| | |
|---|---|
| Revenues | $ -- |
| Expenditures | -- |
| Excess Revenues over Expenditures | $ -- |
| Fund Balance - Beginning of Year | 31,852.64 |
| Fund Balance - Adjustment (Note 2) | (22,971.65) |
| Fund Balance - End of Year | $ 8,880.99 |

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

EXHIBIT B-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Housing and Urban Development Fund (Note 1)

Balance Sheets

December 31, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $ 8,880.99 | $35,004.72 |
| Total Assets | $ 8,880.99 | $35,004.72 |
| Liabilities | | |
| Accounts Payable | $ -- | $ 3,152.08 |
| Total Liabilities | -- | 3,152.08 |
| Fund Balance | | |
| Fund Balance (Note 2) | 8,880.99 | 31,852.64 |
| Total Liabilities and Fund Balance | $ 8,880.99 | $35,004.72 |

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Department of Housing and Urban Development Fund
(HUD Fund)
Notes to Financial Statements
December 31, 1983

1. The revenues reflected in the HUD Fund are used to partially support administration of the Univeristy of Wisconsin-Parkside Work-Study Project.

   Receipt of the revenues in the HUD Fund is obtained by the Commission in accordance with U. S. Department of Treasury letter of credit procedures.

2. Fund Balance - Adjustment - 1983
   During calendar year 1983, a fund balance adjustment was made in the amount of $22,971.65 to reflect a prior year's adjustment for "pass-through" funds that were recorded as revenues.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Grant Revenue | | $521,097.98 | |
| Total Revenues | | | $521,097.98 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $191,359.75 | |
| Office and Other Expenses | | | |
| Technical Consultants | $ 692.35 | | |
| Services by Other Public Agencies | 1,802.49 | | |
| Outside Salaries and Services | 39,906.94 | | |
| Data Processing Services | 89,906.00 | | |
| Office Drafting and DP Supplies | 2,915.90 | | |
| Digitizer Services | 110,290.00 | | |
| Library Acquisition and Dues | 417.38 | | |
| Travel Expense | 3,164.70 | | |
| Other Operating Expenses | 364.09 | | |
| Automobile/Office Equipment Maintenance | 633.35 | | |
| Total Office and Other Expenses | | 250,093.20 | |
| Indirect Expense | | 139,291.77 | |
| Total Expenditures | | | 580,744.72 |
| Excess Expenditures over Revenues | | | $ 59,646.74 |
| Fund Balance - Beginning of Year | | | 411,179.05 |
| Fund Balance - End of Year | | | $351,532.31 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $424,083.55 | $416,122.11 |
| Total Assets | $424,083.55 | $416,122.11 |
| Liabilities | | |
| Accounts Payable | $ 72,551.24 | $ 4,943.06 |
| Total Liabilities | 72,551.24 | 4,943.06 |
| Fund Balance | | |
| Fund Balance | 351,532.31 | 411,179.05 |
| Total Liabilities and Fund Balance | $424,083.55 | $416,122.11 |

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, 1983

1. The revenues reflected in the UMTA Fund are used to partially support the continuing planning programs of: transportation; planning research; and air quality. 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 1983 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, 1983

| | | | |
|---|---|---|---|
| **Revenues** | | | |
| Grant Revenue | | $429,907.00 | |
| Total Revenues | | | $429,907.00 |
| **Expenditures** | | | |
| Salaries and Fringe Benefits | | $109,646.57 | |
| Office and Other Expenses | | | |
| Technical Consultants | $ 595.37 | | |
| Services by Other Public Agencies | 1,548.10 | | |
| Data Processing Services | 61,540.00 | | |
| Digitizer Services | 102,754.00 | | |
| Library Acquisition and Dues | 460.94 | | |
| Travel Expense | 2,183.85 | | |
| Other Operating Expenses | 337.06 | | |
| Total Office and Other Expenses | | 169,419.32 | |
| Indirect Expense | | 79,812.32 | |
| Total Expenditures | | | 358,878.21 |
| Excess Revenues over Expenditures | | | $ 71,028.79 |
| Fund Balance - Beginning of Year | | | (57,807.08) |
| Fund Balance - End of Year | | | $ 13,221.71 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| **Assets** | | |
| Grant Receivable | $29,585.44 | $ -- |
| Total Assets | $29,585.44 | $ -- |
| **Liabilities** | | |
| Accounts Payable | $ 57.39 | $ 4,891.59 |
| Grant Balance | 16,306.34 | 52,915.49 |
| Total Liabilities | 16,363.73 | 57,807.08 |
| **Fund Balance** | | |
| Fund Balance | 13,221.71 | (57,807.08) |
| Total Liabilities and Fund Balance | $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, 1983

1. The revenues reflected in the FHWA Fund are used to partially support the continuing planning programs of: transportation; planning research; and air quality.

   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-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency Section 175 Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1983

| | | | |
|---|---|---|---|
| **Revenues** | | | |
| Grant Revenue | | $102,441.00 | |
| Total Revenues | | | $ 102,441.00 |
| **Expenditures** | | | |
| Salaries and Fringe Benefits | | $ 30,676.14 | |
| Office and Other Expenses | | | |
| Services by Other Public Agencies | $ 8,433.24 | | |
| Data Processing Services | 19,030.00 | | |
| Digitizer Services | 31,761.00 | | |
| Travel Expense | 36.18 | | |
| Total Office and Other Expenses | | 59,260.42 | |
| Indirect Expense | | 22,329.33 | |
| Total Expenditures | | | 112,265.89 |
| Excess Expenditures over Revenues | | | $ 9,824.89 |
| Fund Balance - Beginning of Year | | | (189,648.62) |
| Fund Balance - End of Year | | | $(199,473.51) |

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

EXHIBIT E-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency Section 175 Fund (Note 1)

Balance Sheets

December 31, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| **Assets** | | |
| Total Assets | $ -- | $ -- |
| **Liabilities** | | |
| Accounts Payable | $ -- | $ 4.97 |
| Grant Balance | 199,473.51 | 189,643.65 |
| Total Liabilities | 199,473.51 | 189,648.62 |
| **Fund Balance** | | |
| Fund Balance | (199,473.51) | (189,648.62) |
| 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, 1983

1. The revenues reflected in the EPA - 175 Fund are used to partially support the continuing air quality planning program.

   For the referenced continuing planning program, receipt of the EPA revenues is obtained by the Commission in accordance with the terms and conditions of the U. S. Department of Treasury letter of credit procedures.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $48,504.89 | |
| Total Revenues | | | $ 48,504.89 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $17,388.65 | |
| Office and Other Expenses | | | |
| Technical Consultants | $19,842.57 | | |
| Office Drafting and DP Supplies | 66.17 | | |
| Travel Expense | 657.52 | | |
| Total Office and Other Expenses | | 20,566.26 | |
| Indirect Expense | | 12,657.29 | |
| Total Expenditures | | | 50,612.20 |
| Excess Expenditures over Revenues | | | $ 2,107.31 |
| Fund Balance - Beginning of Year | | | (8,622.18) |
| Fund Balance - End of Year | | | $(10,729.49) |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $ -- | $ 243.60 |
| Contract Receivable | 10,248.91 | -- |
| Total Assets | $ 10,248.91 | $ 243.60 |
| Liabilities | | |
| Accounts Payable | $ 9,817.16 | $ 8,865.78 |
| Grant Balance | 11,161.24 | -- |
| Total Liabilities | 20,978.40 | 8,865.78 |
| Fund Balance | | |
| Fund Balance | (10,729.49) | (8,622.18) |
| Total Liabilities and Fund Balance | $ 10,248.91 | $ 243.60 |

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, 1983

1. The revenues reflected in the DOA Fund are used to partially support the continuing Coastal Zone Management Program and the Milwaukee County Coastline Topographic Mapping Project.

   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 Coastline Topographic Mapping Project is provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Fund, the Milwaukee Metropolitan Sewerage District (MMSD) Fund, and the City of Milwaukee Fund.

   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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Grant Revenue | | $165,482.77 | |
| Contract Revenue | | 113,810.08 | |
| Total Revenues | | | $279,292.85 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 73,412.57 | |
| Office and Other Expenses | | | |
| Technical Consultants | $ 161.14 | | |
| Services by Other Public Agencies | 417.68 | | |
| Outside Salaries and Services | 43,683.68 | | |
| Data Processing Services | 29,786.80 | | |
| Digitizer Services | 32,682.00 | | |
| Office Drafting and DP Supplies | 464.86 | | |
| Library Acquisition and Dues | 166.34 | | |
| Travel Expense | 1,187.86 | | |
| Other Operating Expenses | 139.62 | | |
| Automobile/Office Equipment Maintenance | 589.77 | | |
| Total Office and Other Expenses | | 109,279.75 | |
| Indirect Expense | | 53,437.40 | |
| Total Expenditures | | | 236,129.72 |
| Excess Revenues over Expenditures | | | $ 43,163.13 |
| Fund Balance - Beginning of Year | | | (35,140.15) |
| Fund Balance - End of Year | | | $ 8,022.98 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Receivable | $22,533.92 | $ -- |
| Total Assets | $22,533.92 | $ -- |
| Liabilities | | |
| Accounts Payable | $ 18.58 | $ 1,243.79 |
| Grant Balance | 14,492.36 | 33,896.36 |
| Total Liabilities | 14,510.94 | 35,140.15 |
| Fund Balance | | |
| Fund Balance | 8,022.98 | (35,140.15) |
| Total Liabilities and Fund Balance | $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, 1983

1. The revenues reflected in the WISDOT Fund are used to partially support the continuing planning programs of: transportation, planning research; and air quality. 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 patterned after the U. S. Department of Treasury letter of credit system.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $268,787.20 | |
| Other Revenue | | 258.00 | |
| Total Revenues | | | $269,045.20 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $100,303.20 | |
| Office and Other Expenses | | | |
| Services by Other Public Agencies | $ 5,573.20 | | |
| Data Processing Services | 33,340.26 | | |
| Reproduction and Publication | 136.01 | | |
| Printing Costs | 210.95 | | |
| Travel Expense | 476.71 | | |
| Total Office and Other Expenses | | 39,737.13 | |
| Indirect Expense | | 73,011.23 | |
| Total Expenditures | | | 213,051.56 |
| Excess Revenues over Expenditures | | | $ 55,993.64 |
| Fund Balance - Beginning of Year | | | (65,070.03) |
| Fund Balance - End of Year | | | $ (9,076.39) |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Contract Receivable | $135,412.20 | $ -- |
| Total Assets | $135,412.20 | $ -- |
| Liabilities | | |
| Accounts Payable | $ 11,410.80 | $ 11,301.06 |
| Grant Balance | 133,077.79 | 53,768.97 |
| Total Liabilities | 144,488.59 | 65,070.03 |
| Fund Balance | | |
| Fund Balance | (9,076.39) | (65,070.03) |
| Total Liabilities and Fund Balance | $135,412.20 | $ -- |

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, 1983

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.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Grant Revenue | | $32,941.73 | |
| Total Revenues | | | $ 32,941.73 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $25,289.43 | |
| Office and Other Expenses | | | |
| Travel Expense | $ 306.17 | | |
| Total Office and Other Expenses | | 306.17 | |
| Indirect Expense | | 18,408.31 | |
| Total Expenditures | | | 44,003.91 |
| Excess Expenditures over Revenues | | | $ 11,062.18 |
| Fund Balance - Beginning of Year | | | (43,257.23) |
| Fund Balance - End of Year | | | $(54,319.41) |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Receivable | $ 30,248.00 | $ -- |
| Total Assets | $ 30,248.00 | $ -- |
| Liabilities | | |
| Accounts Payable | $ 125.79 | $ 105.54 |
| Grant Balance | 84,441.62 | 43,151.69 |
| Total Liabilities | 84,567.41 | 43,257.23 |
| Fund Balance | | |
| Fund Balance | (54,319.41) | (43,257.23) |
| Total Liabilities and Fund Balance | $ 30,248.00 | $ -- |

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Wisconsin Department of Development Fund
(DOD Fund)

Notes to Financial Statements
December 31, 1983

1. The revenues reflected in the DOD Fund are used to partially support the continuing community assistance 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 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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $2,052.61 | |
| Total Revenues | | | $ 2,052.61 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 431.89 | |
| Office and Other Expenses | | | |
| Travel Expense | $5.99 | | |
| Total Office and Other Expenses | | 5.99 | |
| Indirect Expense | | 314.38 | |
| Total Expenditures | | | 752.26 |
| Excess Revenue over Expenditures | | | $ 1,300.35 |
| Fund Balance - Beginning of Year | | | (19,171.42) |
| Fund Balance - End of Year | | | $(17,871.07) |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Total Assets | $ -- | $ -- |
| Liabilities | | |
| Accounts Payable | $ 1.10 | $ -- |
| Grant Balance | 17,869.97 | 19,171.42 |
| Total Liabilities | 17,871.07 | 19,171.42 |
| Fund Balance | | |
| Fund Balance | (17,871.07) | (19,171.42) |
| Total Liabilities and Fund Balance | $ -- | $ -- |

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, 1983

1. The revenues reflected in the Milwaukee County Fund are used to partially support the Milwaukee Area Carpool/Vanpool Study.

   For the referenced study, receipt of the revenues is obtained by the Commission from Milwaukee County 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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $7,737.55 | |
| Total Revenues | | | $ 7,737.55 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 653.15 | |
| Office and Other Expenses | | | |
| Technical Consultants | $3,105.75 | | |
| Office Drafting and DP Supplies | 9.06 | | |
| Travel Expense | 6.21 | | |
| Total Office and Other Expenses | | 3,121.02 | |
| Indirect Expense | | 475.43 | |
| Total Expenditures | | | 4,249.60 |
| Excess Revenues over Expenditures | | | $ 3,487.95 |
| Fund Balance - Beginning of Year | | | (5,765.20) |
| Fund Balance - End of Year | | | $(2,277.25) |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Total Assets | $ -- | $ -- |
| Liabilities | | |
| Accounts Payable | $ 9.06 | $ 3,093.62 |
| Grant Balance | 2,268.19 | 2,671.58 |
| Total Liabilities | 2,277.25 | 5,765.20 |
| Fund Balance | | |
| Fund Balance | (2,277.25) | (5,765.20) |
| Total Liabilities and Fund Balance | $ -- | $ -- |

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

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

City of Milwaukee Fund

Notes to Financial Statements
December 31, 1983

1. The revenues reflected in the City of Milwaukee Fund are used to partially support the Milwaukee County Coastline Topographic 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 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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $114,601.02 | |
| Service Agreements | | 100,243.16 | |
| Total Revenues | | | $214,844.18 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 77,032.31 | |
| Office and Other Expenses | | | |
| Technical Consultants | $8,220.55 | | |
| Services by Other Public Agencies | 1,085.53 | | |
| Data Processing Services | 5,100.79 | | |
| Travel Expense | 1,023.48 | | |
| Other Operating Expenses | 9.51 | | |
| Total Office and Other Expenses | | 15,439.86 | |
| Indirect Expense | | 56,072.23 | |
| Total Expenditures | | | 148,544.40 |
| Excess Revenues over Expenditures | | | $ 66,299.78 |
| Fund Balance - Beginning of Year | | | (45,104.56) |
| Fund Balance - End of Year | | | $ 21,195.22 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Service Agreements Receivable | $22,533.92 | $ -- |
| Total Assets | $22,533.92 | $ -- |
| Liabilities | | |
| Accounts Payable | $ -- | $ 98.20 |
| Grant Balance | 1,338.70 | 45,006.36 |
| Total Liabilities | 1,338.70 | 45,104.56 |
| Fund Balance | | |
| Fund Balance | 21,195.22 | (45,104.56) |
| Total Liabilities and Fund Balance | $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, 1983

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; 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 rarely 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-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency 208 Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1983

| | | |
|---|---|---|
| Revenues | | |
| Grant Revenue | $9,050.00 | |
| Total Revenues | | $ 9,050.00 |
| Expenditures | | |
| Total Expenditures | | -- |
| Excess Revenues over Expenditures | | $ 9,050.00 |
| Fund Balance - Beginning of Year | | 103,862.78 |
| Fund Balance - End of Year | | $112,912.78 |

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

EXHIBIT M-B

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

U. S. Environmental Protection Agency 208 Fund (Note 1)

Balance Sheets

December 31, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $112,912.78 | $103,862.78 |
| Total Assets | $112,912.78 | $103,862.78 |
| Liabilities | | |
| Total Liabilities | $ -- | $ -- |
| Fund Balance | | |
| Fund Balance | 112,912.78 | 103,862.78 |
| Total Liabilities and Fund Balance | $112,912.78 | $103,862.78 |

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, 1983

1. The revenues reflected in the EPA 208 Fund are used to partially support the Continuing Water Quality Management Planning Program.

   The Wisconsin Department of Natural Resources - Water (DNR - Water) Fund, in concert with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Fund, provide the required local match for the EPA 208 Fund.

   For the referenced continuing planning program, receipt of the revenues in the EPA 208 Fund is obtained by the Commission in accordance with the terms and conditions of the U. S. Federal Reserve Bank letter of credit procedures.

EXHIBIT N-A

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Data Processing Fund (Note 1)

Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Year Ended December 31, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Service Agreements | | $1,709,663.59 | |
| Total Revenues | | | $1,709,663.59 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 559,690.62 | |
| Office and Other Expenses | | | |
| Outside Salaries and Services | $ 6,063.59 | | |
| Data Processing Machine Rental | 1,085,418.62 | | |
| Telephone Expense | 1,291.93 | | |
| Office Drafting and DP Supplies | 6,463.20 | | |
| Library Acquisition and Dues | 98.00 | | |
| Rent | 54,000.00 | | |
| Errors and Omissions Insurance | 10,000.00 | | |
| Travel Expense | 3,792.19 | | |
| Data Processing Software | 21,765.00 | | |
| Other Operating Expenses | 74.22 | | |
| Total Office and Other Expenses | | 1,188,966.75 | |
| Total Expenditures | | | 1,748,657.37 |
| Excess Expenditures over Revenues | | | $ 38,993.78 |
| Fund Balance - Beginning of Year | | | (333,091.84) |
| Fund Balance - End of Year | | | $ (372,085.62) |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Due from Service Agreements | $ 254,043.42 | $ 230,365.71 |
| Total Assets | $ 254,043.42 | $ 230,365.71 |
| Liabilities | | |
| Accounts Payable | $ 73,484.10 | $ 82,797.62 |
| Sales Tax | 69.76 | 7.50 |
| Grant Balance Deficit | 385,700.18 | 480,652.43 |
| Due to SEWRPC Fund (Note 2) | 166,875.00 | -- |
| Total Liabilities | 626,129.04 | 563,457.55 |
| Fund Balance | | |
| Fund Balance Deficit | (372,085.62) | (333,091.84) |
| Total Liabilities and Fund Balance | $ 254,043.42 | $ 230,365.71 |

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, 1983

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.

   Excess expenditures over revenue are absorbed by the SEWRPC Fund.

2. During calendar year 1983, the SEWRPC Fund advanced $166,875.00 to the Data Processing Fund for the retirement of debt.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $596,565.13 | |
| Total Revenues | | | $596,565.13 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $154,127.74 | |
| Office and Other Expenses | | | |
| Technical Consultants | $ 54,964.87 | | |
| Services by Other Public Agencies | 118,461.39 | | |
| Outside Salaries and Services | 1,503.41 | | |
| Data Processing Services | 43,703.52 | | |
| Office Drafting and DP Supplies | 44.88 | | |
| Library Acquisition and Dues | 58.25 | | |
| Travel Expense | 2,390.35 | | |
| Other Operating Expenses | 192.54 | | |
| Total Office and Other Expenses | | 221,319.21 | |
| Indirect Expense | | 112,190.40 | |
| Total Expenditures | | | $487,637.35 |
| Excess Revenues over Expenditures | | | $108,927.78 |
| Fund Balance - Beginning of Year | | | (58,836.84) |
| Fund Balance - End of Year | | | $ 50,090.94 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $ 33,974.93 | $ -- |
| Contract Receivable | 51,088.08 | -- |
| Total Assets | $ 85,063.01 | $ -- |
| Liabilities | | |
| Accounts Payable | $ 34,972.07 | $ 1,419.71 |
| Grant Balance | -- | 57,417.13 |
| Total Liabilities | 34,972.07 | 58,836.84 |
| Fund Balance | | |
| Fund Balance | 50,090.94 | (58,836.84) |
| Total Liabilities and Fund Balance | $ 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, 1983

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, 1983

| | | |
|---|---|---|
| Revenues | | |
| Contract Revenue | $46,725.00 | |
| Total Revenues | | $ 46,725.00 |
| Expenditures | | |
| Office and Other Expenses | | |
| Services by Other Public Agencies | $28,450.00 | |
| Total Expenditures | | 28,450.00 |
| Excess Revenues over Expenditures | | $ 18,275.00 |
| Fund Balance - Beginning of Year | | (10,398.09) |
| Fund Balance - End of Year | | $ 7,876.91 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Contract Receivable | $8,175.00 | $ -- |
| Total Assets | $8,175.00 | $ -- |
| Liabilities | | |
| Grant Balance | $ 298.09 | $ 10,398.09 |
| Total Liabilities | 298.09 | 10,398.09 |
| Fund Balance | | |
| Fund Balance | 7,876.91 | (10,398.09) |
| Total Liabilities and Fund Balance | $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, 1983

1. The revenues reflected in the SG Fund are used to partially support the continuing stream flow gaging station operations in calendar year 1983. During calendar year 1983, the Commission administered the stream gaging program for the United States Geological Survey (USGS) and the local participants.

   During 1983, 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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $21,130.30 | $23,313.77 |
| Total Assets | $21,130.30 | $23,313.77 |
| Liabilities | | |
| Accounts Payable | $21,130.30 | $23,313.77 |
| Total Liabilities | 21,130.30 | 23,313.77 |
| Fund Balance | | |
| Fund Balance | -- | -- |
| Total Liabilities and Fund Balance | $21,130.30 | $23,313.77 |

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, 1983

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 1983 were $977,789.46.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $88,960.40 | |
| Total Revenues | | | $88,960.40 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 281.58 | |
| Office and Other Expenses | | | |
| Technical Consultants | $86,862.40 | | |
| Total Office and Other Expenses | | 86,862.40 | |
| Indirect Expense | | 204.96 | |
| Total Expenditures | | | 87,348.94 |
| Excess Revenues over Expenditures | | | $ 1,611.46 |
| Fund Balance - Beginning of Year | | | 30,031.94 |
| Fund Balance - Adjustments (Note 2) | | | (22,335.00) |
| Fund Balance - End of Year | | | $ 9,308.40 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| **Assets** | | |
| Grant Available | $ 9,308.40 | $30.031.94 |
| Contract Receivable | 6,985.80 | -- |
| Total Assets | $16,294.20 | $30,031.94 |
| **Liabilities** | | |
| Accounts Payable | $ 6,985.80 | $ -- |
| Total Liabilities | 6,985.80 | -- |
| Fund Balance | | |
| Fund Balance | 9,308.40 | 30,031.94 |
| Total Liabilities and Fund Balance | $16,294.20 | $30,091.94 |

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, 1983

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.

2. Fund Balance - Adjustment - 1983
$22,335.00 of the fund balance from the Kenosha County Mapping Fund was transferred to the SEWRPC Fund in calendar year 1983 to correct the receipt of revenues in calendar year 1980 that were for expenditures paid out of the SEWRPC Fund during that year.

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Contract Revenue | | $75,403.20 | |
| Total Revenues | | | $ 75,403.20 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $ 271.90 | |
| Office and Other Expenses | | | |
| Technical Consultants | $48,107.40 | | |
| Office Drafting and DP Supplies | 899.50 | | |
| Total Office and Other Expenses | | 49,006.90 | |
| Indirect Expense | | 197.92 | |
| Total Expenditures | | | 49,476.72 |
| Excess Revenues over Expenditures | | | $ 25,926.48 |
| Fund Balance - Beginning of Year | | | (23,945.19) |
| Fund Balance - End of Year | | | $ 1,981.29 |

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, 1983 and 1982

| | 1983 | 1982 |
|---|---|---|
| Assets | | |
| Grant Available | $1,981.29 | $ 975.81 |
| Total Assets | $1,981.29 | $ 975.81 |
| Liabilities | | |
| Accounts Payable | $ -- | $ 24,921.00 |
| Total Liabilities | -- | 24,921.00 |
| Fund Balance | 1,981.29 | (23,945.19) |
| Total Liabilities and Fund Balance | $1,981.29 | $ 975.81 |

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, 1983

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, 1983

| | | | |
|---|---|---|---|
| Revenues | | | |
| Service Agreements | | $310,279.60 | |
| Total Revenues | | | $310,279.60 |
| Expenditures | | | |
| Salaries and Fringe Benefits | | $104,271.09 | |
| Office and Other Expenses | | | |
| Office Drafting and DP Supplies | $ 3,162.38 | | |
| Digitizer Maintenance | 35,780.33 | | |
| Digitizer Lease | 81,452.72 | | |
| Installation Expense | 847.80 | | |
| Travel Expense | 918.00 | | |
| Automobile/Office Equipment Maintenance | 7,947.80 | | |
| Total Office and Other Expenses | | 130,109.03 | |
| Indirect Expense | | 75,899.48 | |
| Total Expenditures | | | 310,279.60 |
| 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 Sheet

December 31, 1983

| | 1983 |
|---|---|
| Assets | |
| Grant Available | $3,623.75 |
| Total Assets | $3,623.75 |
| Liabilities | |
| Accounts Payable | $3,623.75 |
| Total Liabilities | 3,623.75 |
| Fund Balance | -- |
| Total Liabilities and Fund Balance | $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, 1983

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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