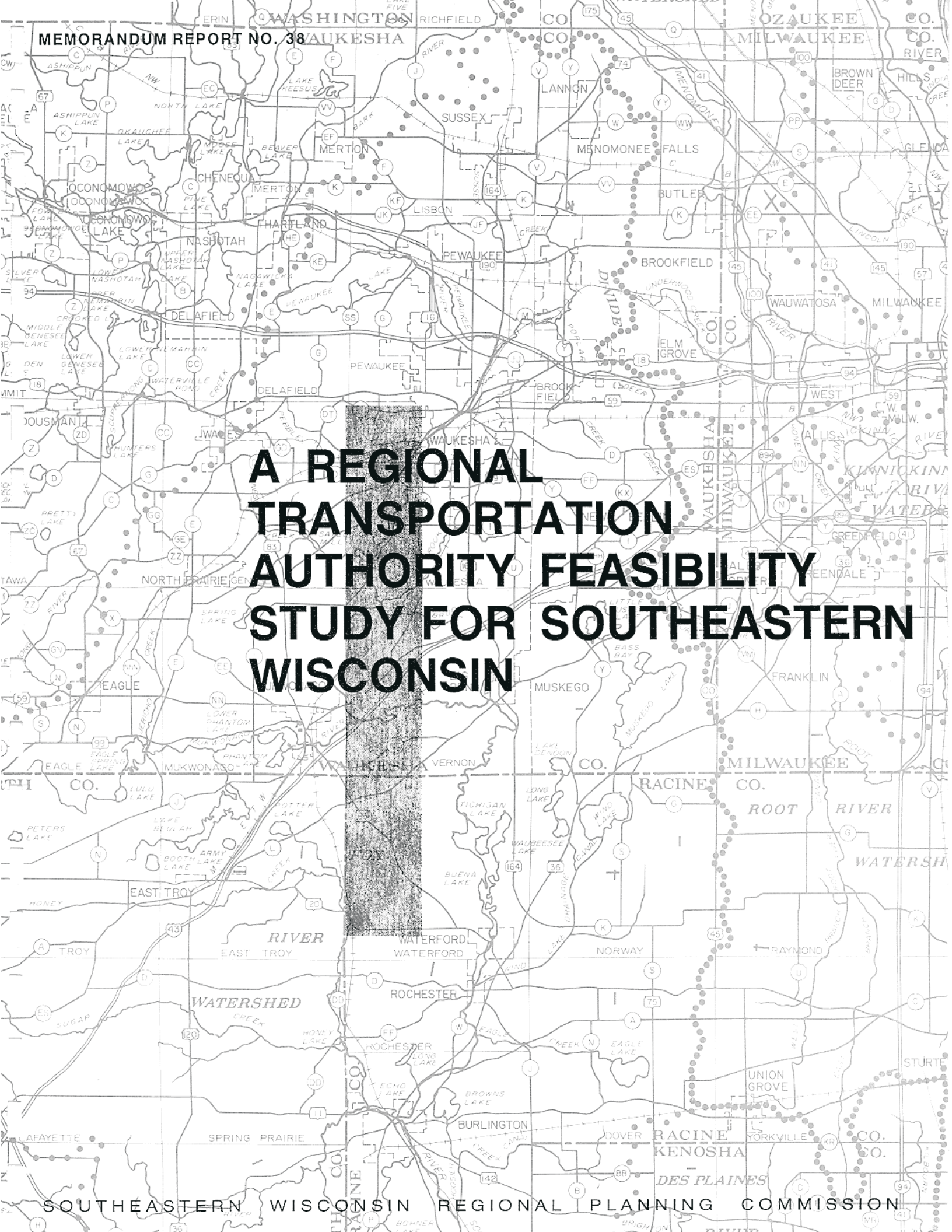
MEMORANDUM REPORT NO. 38



A REGIONAL TRANSPORTATION AUTHORITY FEASIBILITY STUDY FOR SOUTHEASTERN WISCONSIN

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Special acknowledgement is due Mr. David C. Hoeh and Ms. Susan C. Weistrop for their efforts in the conduct of the case studies summarized in this report.

MEMORANDUM REPORT
NUMBER 38

A REGIONAL TRANSPORTATION AUTHORITY FEASIBILITY STUDY FOR SOUTHEASTERN WISCONSIN

Prepared by the

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TABLE OF CONTENTS

LIST OF APPENDICES

LIST OF TABLES

LIST OF FIGURES

LIST OF MAPS

Map

Page

Chapter V

Chapter I

INTRODUCTION

BACKGROUND

On June 14, 1990, the Milwaukee County Executive forwarded to the Commission, with his support, a resolution introduced by Supervisor Richard D. Nyklewicz and others and adopted by the Milwaukee County Board on May 17, 1990, requesting that the Regional Planning Commission undertake a feasibility study relative to the possible creation of a regional transportation authority.[1] The Board's resolution cited, in particular, the difficulty in developing a truly regional mass transit system that would provide effective and efficient areawide transit service as envisioned in the adopted regional transportation system plan. The Milwaukee County Executive not only supported the Board's position with respect to mass transit, but suggested that any feasibility study begin with a broad multi-modal approach to the regional transportation system, taking into account not only mass transit, but highways, airports, and seaports as well. In addition, the Milwaukee County Executive suggested that the feasibility study focus on potential non-property tax sources of support for the continued development, operation, and maintenance of the areawide transportation systems.

The County request was supported by a similar request from the Commissioner of Public Works of the City of Milwaukee. More specifically, the City requested the Southeastern Wisconsin Regional Planning Commission to conduct a study that would examine the feasibility of creating a regional transportation authority in southeastern Wisconsin to provide metropolitan transportation services, particularly including rapid transit, airports, and seaports.[2] Speaking for the Mayor of the City of Milwaukee, the Commissioner of Public Works noted that the proper consideration of such an authority needs to be on a multi-county basis in southeastern Wisconsin, since the major transportation systems in the Milwaukee, Kenosha, and Racine urbanized areas are areawide in scope and beyond the capabilities of any individual municipality or county to cope with, particularly in terms of fiscal impact. The Commissioner further noted that implementation of the rapid transit element of the regional transportation system plan for southeastern Wisconsin was lagging, particularly with respect to commuter rail and light rail systems, with a consequent detrimental effect on meeting the air quality standards established for the Region.

These companion requests by the County and City of Milwaukee were considered by the Regional Planning Commission at meetings on June 13 and July 18, 1990. Noting that there appeared to be a growing consensus that the economic vitality of southeastern Wisconsin was heavily dependent upon a good regional transportation system and that the property tax can no longer be relied upon by counties and municipalities to provide key elements of that system, the Commission responded favorably to the two requests and directed that its staff work with the County and City of Milwaukee, the other six counties in southeastern Wisconsin, and the Wisconsin Department of Transportation in carrying out the requested regional transportation authority feasibility study. The Commission further directed that the study be conducted in the fall of 1990 so that the study results would be available for possible consideration by the County Executives, County Boards, and other local elected officials in the Region late in the year. This would permit the possible creation of a regional transportation authority to be considered during the State Legislative session scheduled to begin early in 1991.

STUDY PURPOSE

The basic purpose of the regional transportation authority feasibility study is to develop the information required to permit the citizens of the Southeastern Wisconsin Region and their elected local, county, and state officials to consider the possible creation of a regional transportation authority for the southeastern portion of the

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[1] *A copy of the County Board resolution and related letter is set forth in Appendix A-1.*

[2] *A copy of the letter is set forth in Appendix A-2.*

State. More particularly, the study is to examine the need for a regional transportation authority based upon considerations relating to any fiscal, equity, and governance problems that may be associated with the current structure for providing those elements of the regional transportation system important to the economic development of the Region. If it appears that there is a need for creating a regional transportation authority for southeastern Wisconsin, then the study is intended to address the following basic questions relating to such an authority:

1. What should be the geographic scope of such an authority?
2. What modes of transportation—highways, transit, airports, and/or seaports—should come within the jurisdiction of such an authority?
3. Should such an authority own or operate key elements of the regional transportation system? Or, in the alternative, should such an authority simply provide an institutional mechanism for funding from non-property tax based revenues certain elements of the regional transportation system provided by other units and agencies of government?
4. What sources of revenue should be made available to such an authority?
5. On what basis should such an authority expend and/or distribute available revenues?
6. What is the preferred governance structure for such an authority?
7. What should the relationship be between such an authority and the Southeastern Wisconsin Regional Planning Commission as the officially designated areawide comprehensive planning agency for southeastern Wisconsin?

If the feasibility study results in a determination that there is no compelling need to create a regional transportation authority in southeastern Wisconsin, then the study should identify any important shortfalls in the funding of important elements of the regional transportation system and propose for consideration by all parties concerned additional sources of non-property tax based revenue to address those shortfalls.

STUDY ORGANIZATION

In authorizing the conduct of the feasibility study, the Regional Planning Commission followed the recommendation of the Milwaukee County Board of Supervisors—as well as its own past practice—to create an Advisory Committee to guide the conduct of the study. The Milwaukee County Board specifically requested that each of the seven southeastern Wisconsin counties have two representatives of their choosing on the Advisory Committee, and that the Commission appoint a chairman for the Committee. Accordingly, the Commission requested the County Executive, or in the absence of such an Executive, the County Board Chairman of each of the seven counties comprising the Southeastern Wisconsin Region, to appoint two representatives to the Advisory Committee. The Commission appointed as Committee Chairman Mr. Richard W. Cutler, an attorney and former Regional Planning Commissioner from Milwaukee County. The Commission also acted to expand the Advisory Committee to include a member to be appointed by the Mayor of the City of Milwaukee, and a member to be appointed by the Governor. This action was taken to recognize the City of Milwaukee's request to conduct the feasibility study and the importance of involving State government directly in the study, since any proposal to create a regional transportation authority would be apt to require new State legislation.

The Advisory Committee so appointed consists of 17 members. The membership roster is reproduced on the inside front cover of this report. The Commission appointed Mr. Chris Crawley, Executive Director, Congress for a Working America, as Vice-Chairman of the Committee. The Executive Director of the Regional Planning Commission served as the ex-officio, nonvoting Secretary of the Committee.

The Commission also directed that the feasibility study be carried out by its own staff, supplemented as may be necessary by the retention of part-time staff to conduct field work associated with case studies of other regional transportation authorities in the United States. Funding for the study was provided from the Commis-

sion's ongoing regional transportation planning program. That program is funded jointly by the seven southeastern Wisconsin counties, the Wisconsin Department of Transportation, the Federal Highway Administration, and the Federal Urban Mass Transportation Administration.

REPORT ORGANIZATION

Following this introductory chapter, the results of the feasibility study are presented in six additional chapters. Chapter II provides an overview of the existing regional transportation systems, including highways, public transit, airports, and seaports, and presents data relative to those systems pertinent to a determination of the potential need for a regional transportation authority. Chapter III presents information attendant to the case studies of regional transportation authorities conducted as a part of the feasibility study, synthesizing from those case studies principles to be followed in organizing a regional transportation authority. Chapter IV identifies potential revenue sources and amounts that would support a regional transportation authority for southeastern Wisconsin. Chapter V presents the variables explored by the Advisory Committee in the structuring of a regional transportation authority for southeastern Wisconsin. Based upon the Committee's determinations, Chapter VI sets forth a potential structure for a regional transportation authority for southeastern Wisconsin. Finally, Chapter VII summarizes the study findings and the recommendations of the Advisory Committee.

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Chapter II

NEED FOR A REGIONAL TRANSPORTATION AUTHORITY IN SOUTHEASTERN WISCONSIN

INTRODUCTION

The underlying reasons why Milwaukee County and the City of Milwaukee requested that a study be undertaken of the feasibility of the establishment of a regional transportation authority in southeastern Wisconsin relate primarily to the following three questions: 1) Are local fiscal resources adequate to build and maintain key elements of the regional transportation system, given the increasing demands on the property tax resource to fund programs relating to the protection of persons and property and to human services? 2) Is the distribution of costs among the various levels of government associated with providing areawide transportation facilities equitable? and 3) Can the existing governance structure respond so that key areawide transportation facilities are built in a timely manner and properly maintained?

Drawing largely from the work of the cooperative regional transportation planning program for southeastern Wisconsin, this chapter addresses those questions both quantitatively and qualitatively with respect to four transportation modes: the arterial street and highway system, the public mass transit system, the airport system, and the seaport system. Each of these four modes of transportation in southeastern Wisconsin is truly areawide in nature. The configuration and physical extent and the economic impact of these systems extend beyond the boundaries of a single municipality or single county to encompass the entire seven-county Region.

To explore these questions, this chapter presents summary information attendant to each of the four regional transportation modes, including—as appropriate—a definition of each system; a description of each system; a report on the status of each system, particularly in terms of the extent to which needed improvements in each system are being carried out; and a description of the costs and revenues associated with the construction, operation, and maintenance of each system. As appropriate, equity and governance considerations are discussed.

For each transportation mode addressed in this chapter except seaports, the possible need for a regional transportation authority is measured by comparing the recommendations of the regional highway, transit, and airport system plans with their implementation.

The recommended regional transportation plans represent a collective vision of what is necessary to sustain a good quality of life in the Region and remain competitive with other large metropolitan regions of the United States. The movement of people and goods over a safe and relatively congestion free transportation system is essential to the economic well being of the Region and its people. The improvements included in the regional plan are needed to meet that goal. The plan recommendations seek to improve the balance between highways and transit in the Region by investing in transit and thereby doubling transit trips. Furthermore, the planned improvements and services can be accomplished in an environmentally sound manner and, indeed, can contribute to achieving clean air goals by reducing congestion and shifting trips to transit. Finally, the transportation plan recommendations seek to serve and promote a sound urban land use pattern, one that can be efficiently served with essential public utilities. For example, the location of a major new highway beyond areas readily served with sanitary sewerage and water supply does two things. The highway attracts commercial and other development to abutting lands. In turn, communities must eventually extend very costly sewerage and water supply facilities to serve that development.

In considering the regional plans as the basis for a needs determination, the following should be taken into account:

1. The Southeastern Wisconsin Regional Planning Commission is the officially designated comprehensive planning agency for the seven-county Region. The Commission was established in 1960, and for 30 years has worked closely with local

and county units of government, state and federal agencies, and private sector interests in cooperatively preparing and adopting areawide plans that emphasize environmental protection and the sound development of land use and supporting transportation, utility, and community facility systems. The level of political support enjoyed by the Commission is indicated by the fact that all seven counties and 147 cities, villages, and towns are actively participating members of the Commission.

2. The regional plans are founded upon one of the most extensive planning data bases available anywhere attendant to such characteristics as population, employment, land use, soils, topography, parks and open spaces, woodlands, wetlands, wildlife habitat areas, prime agricultural lands, streamflows and stages, floodplains, water quality, travel habits and patterns, and transportation system capacity and utilization. The Commission's work is marked by the application of advanced mathematical simulation modeling and operations research techniques, as well as more conventional planning techniques.

3. The Commission's approach to regional land use and transportation planning has been an integrated one that recognizes that the sound planning of transportation and other public works facilities cannot be separated from land use planning. The land use pattern determines the amount and spatial distribution of travel within an urban area and, consequently, the loadings on the transportation system. At the same time, whatever transportation system is planned and built becomes an important determinant of the future land use pattern. The Commission's approach to land use planning does not rely on projections based upon past trends. Rather, the Commission's land use plans are designed to meet agreed-upon objectives supported by quantifiable standards. In that way, the regional land use plan is designed to help shape future urban development into a safer, more healthful, and more attractive and efficient pattern while preserving and protecting the underlying and sustaining natural resource base. The land use plan becomes the basis for the design of supporting transportation and other systems of public works. This serves not only to provide a sound basis for system plans for transportation and other public works, but to coordinate the development of the individual systems of public works with each other and reinforce the influence of those systems on shaping land use development in the public interest.

4. Each one of the regional plans has been prepared under the guidance of an advisory committee representing diverse interests from throughout the Region. The plans are formally adopted by the Regional Planning Commission and then transmitted to the local and county governmental units and state and federal agencies for their consideration and implementation. The Commission's plans are updated periodically and in the process are refined and detailed. In the transportation area, the plan elements are all second or third generation. In each generation the plans undergo intensive public review. In addition, each succeeding generation of planning takes into account the extent to which a previous generation plan has been implemented. In this way, the Commission's regional plans are kept current and relevant.

5. Plan adoption is considered by the Commission to be very important. In particular, adoption of a plan by the implementing governmental agencies represents an important means of achieving a common understanding of, and agreement on, needed courses of action. This common understanding and agreement enables the staffs of the many units and agencies of government concerned with land use, public works and development, and environmental protection to program the necessary plan implementation work in a cooperative manner. Perhaps to a greater degree than any other areawide planning agency in the nation, the Commission has been successful in securing plan adoption or endorsement. The highway and transit plan has been adopted or endorsed by all seven County Boards of Supervisors in the Region, by the state and federal transportation agencies, by the state and federal environmental protection agencies, and by

40 of the 147 local governing bodies, including Milwaukee and many of the largest cities in the Region. The regional land use plan has been adopted by six of the seven county boards, by key state and federal agencies concerned with land development, and again by 40 of the 147 local units of government. The regional airport system plan has been adopted by those counties having responsibility for public airports and by the City of Milwaukee, as well as by the state agency responsible for aviation.

6. Commission transportation system planning has from its inception been multimodal and balanced in nature. The original regional transportation plan adopted in 1966 contained not only an arterial street and highway element, but an equally important mass transit element. The planning for these two elements recognized that, to the extent it was possible to accommodate travel on mass transit facilities, the need to provide highway facilities would be reduced. This integrated approach to highway and mass transit planning was at that time unprecedented in the United States.

7. The Commission's arterial street and highway plan element has been refined and detailed on a county-by-county basis. Working closely with the individual county transportation committees and representatives of each local government in the county, the Commission has not only prepared detailed schedules of capital improvements required to implement the highway plan, but has set forth in detail proposed changes in responsibilities for highways so that the costs of highway development can be more equitably distributed.

8. The Commission coordinates, through a federally required annual effort, the programming of transportation improvements in the seven-county Region. Working with three advisory committees and focusing on the Milwaukee, Kenosha, and Racine urbanized areas, the Commission prepares annually a program of projects for both arterial highways and transit proposed to be undertaken during the forthcoming calendar year and over the next four additional years. No projects are admitted to the regional transportation improvement program unless they are consistent with the adopted transportation plan. No federal funds can be spent for any project not in the approved program.

ARTERIAL STREET AND HIGHWAY SYSTEM

System Description

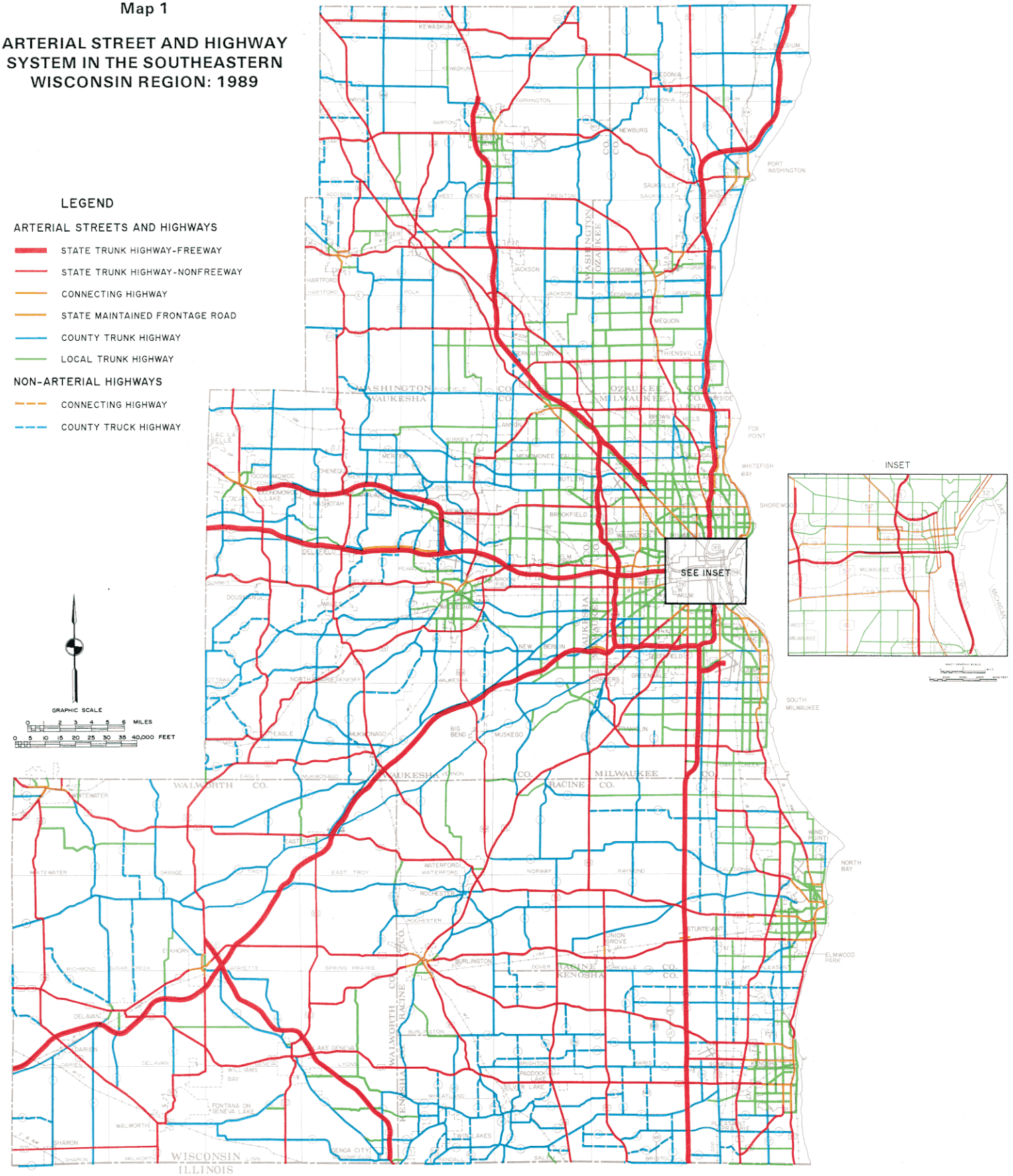
In the regional comprehensive planning effort, three functional classifications of streets are recognized: arterial, collector, and land access. Arterials are defined as those streets and highways intended to primarily serve the through movement of heavy traffic and provide transportation service between two or more major subareas of the Region, between such subareas and areas outside the Region, or through the Region. Together, the arterials should form an integrated areawide system located and designed to carry the imposed traffic loadings. The arterial system typically includes freeways, expressways, and certain parkways, as well as "standard" surface arterial streets and highways. The primary function of arterials should be to facilitate the expeditious movement of vehicular traffic. Access to abutting property may be a secondary function for certain arterial streets and highways, but it should always be subordinate to the primary function of traffic movement.

Collector streets are defined as those streets and highways intended to serve as connections between the arterial system and the land access street system. In addition to collecting and distributing traffic from and to the land access streets, collector streets usually perform a secondary function of providing access to abutting property. Land access streets are defined as those streets and highways intended to serve primarily as a means of access to abutting property.

The regional transportation planning program for southeastern Wisconsin has focused on the arterial street and highway system. The 1989 arterial street and highway system for the Region, as defined in the regional planning program, is shown on Map 1. That system totals 3,415 miles, or about 31 percent of the 10,954 miles of all streets and highways in the Region. The distribution of the arterial mileage within the seven counties comprising the Region,

Map 1

ARTERIAL STREET AND HIGHWAY SYSTEM IN THE SOUTHEASTERN WISCONSIN REGION: 1989



Source: SEWRPC.

Table 1

EXISTING DISTRIBUTION OF ARTERIAL STREET AND HIGHWAY MILEAGE WITHIN SOUTHEASTERN WISCONSIN BY JURISDICTIONAL CLASSIFICATION: 1989

County	State				County		Local		Total	
	Trunk Highway (miles)	Connecting Street (miles)	Total (miles)	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent
Kenosha	111.2	12.7	123.9	37.5	166.7	50.5	39.6	12.0	330.2	100.0
Milwaukee	167.9	83.5	251.4	33.4	82.6	11.0	418.7	55.6	752.7	100.0
Ozaukee	90.4	10.3	100.7	33.6	125.6	41.8	73.7	24.6	300.0	100.0
Racine	139.7	19.2	158.9	38.8	133.8	32.7	116.4	28.5	409.1	100.0
Walworth	200.4	13.3	213.7	48.1	175.9	39.6	54.4	12.3	444.0	100.0
Washington	183.2	7.1	190.3	43.1	150.9	34.2	100.0	22.7	441.2	100.0
Waukesha	217.8	12.9	230.7	31.3	333.2	45.1	174.2	23.6	738.1	100.0
Region	1,110.6	159.0	1,269.6	37.2	1,168.7	34.2	977.0	28.6	3,415.3	100.0

Source: Wisconsin Department of Transportation and SEWRPC.

together with the present jurisdictional responsibility for the system—state, county, or local—is set forth in Table 1. State trunk and connecting highways[1] total about 1,270 miles and represent about 37 percent of the present regional arterial system. County trunk highways total about 1,169 miles, or an additional 34 percent, of the regional system.[2] Local arterial streets and highways total the remaining 977 miles, or 29 percent of the regional system.

The adopted regional transportation system plan recommends that the state, county, and local highway agencies concerned functionally improve, as may be necessary, and jurisdictionally realign the arterial street and highway system in the Region. Functional improvements may consist of the construction of new facilities, i.e., expansion of the system; of the reconstruction of existing facilities to provide additional traffic carrying capacity; and of the reconstruction of existing facilities for maintenance purposes without an attendant increase in the traffic-carrying capacity. Recommendations attendant to jurisdictional realignment grew out of Regional Planning Commission recommended county-based planning efforts and are intended to adjust existing jurisdictional highway systems to changes in land use development and in traffic patterns within the Region.

Jurisdictional realignments are intended to achieve an equitable distribution of arterial street and highway development and maintenance costs among the various levels and agencies of government concerned. The basis for the jurisdictional realignment recommendations are criteria related to the kinds of trips served by, the land uses connected and served by, and the operational characteristics of the facilities. The application of these criteria results in a jurisdictional highway system plan in which state trunk highways, which are supported by the taxpayers of the entire State, serve the longest trips and the most important land uses and carry the highest traffic volumes. Concomitantly, county trunk highways, which are supported by county taxpayers, serve trips of intermediate length and intermediate traffic volumes; while local trunk arterials, which are supported by municipal

[1] *Connecting highways are defined as the marked routes of state trunk highways over municipal streets and highways where the municipality has the responsibility for maintenance and operation.*

[2] *An additional 285 miles of county trunk highways throughout the Region are located on nonarterial streets and roads. The adopted regional plan recommends that the jurisdiction of these county trunk highways be returned to the local units of government.*

Table 2

PLANNED DISTRIBUTION OF ARTERIAL STREET AND HIGHWAY MILEAGE WITHIN SOUTHEASTERN WISCONSIN BY JURISDICTIONAL CLASSIFICATION: 2010

County	State		County		Local		Total	
	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent of Total	Miles	Percent
Kenosha	113.9	32.8	195.0	56.0	38.8	11.2	347.7	100.0
Milwaukee	247.0	32.0	195.0	25.3	329.0	42.7	771.0	100.0
Ozaukee	89.0	29.0	166.0	54.0	52.2	17.0	307.2	100.0
Racine	156.6	35.7	177.6	40.5	104.1	23.8	438.3	100.0
Walworth	224.1	46.4	244.2	50.5	14.9	3.1	483.2	100.0
Washington	158.6	33.4	239.7	50.6	76.1	16.0	474.4	100.0
Waukesha	226.0	29.2	436.4	56.4	111.0	14.4	773.4	100.0
Region	1,215.2	33.8	1,653.9	46.0	726.1	20.2	3,595.2	100.0

Source: Wisconsin Department of Transportation and SEWRPC.

taxpayers, serve the shortest trips and locally oriented land uses and carry the lightest traffic volumes. Importantly, the jurisdictional element of the plan also includes recommendations for abolishing the connecting street concept with respect to state trunk highways, thus providing for continuous state trunk highways—with attendant maintenance and traffic control responsibilities—through incorporated urban areas. Similarly, the plan recommends that county trunk highway systems penetrate incorporated communities and thereby provide continuous routes through those communities.

The recommended functional and jurisdictional highway system, as set forth in adopted county and regional plans, is shown on Map 2.[3] The planned arterial street and highway system for the Region totals 3,595 miles—about 180 miles, or about 5 percent, more than the present system. The recommended distribution of that mileage within the seven counties comprising the Region, together with the proposed jurisdictional responsibility for the system—state, county, or local—is set forth in Table 2. State trunk highways would total 1,215 miles, and represent about 34 percent of the planned regional arterial system. County trunk highways would total about 1,654 miles, or an additional 46 percent of the regional system. Local arterial streets and highways would total the remaining 726 miles, or 20 percent of the regional system. The planned state trunk highway system is about 55 miles less than the present state trunk highway and connecting street system; the planned county trunk highway system about 485 miles more than the present system—excluding from that present system county trunk highways on non-arterial streets; and local arterial streets and highways about 251 miles less than the present system.

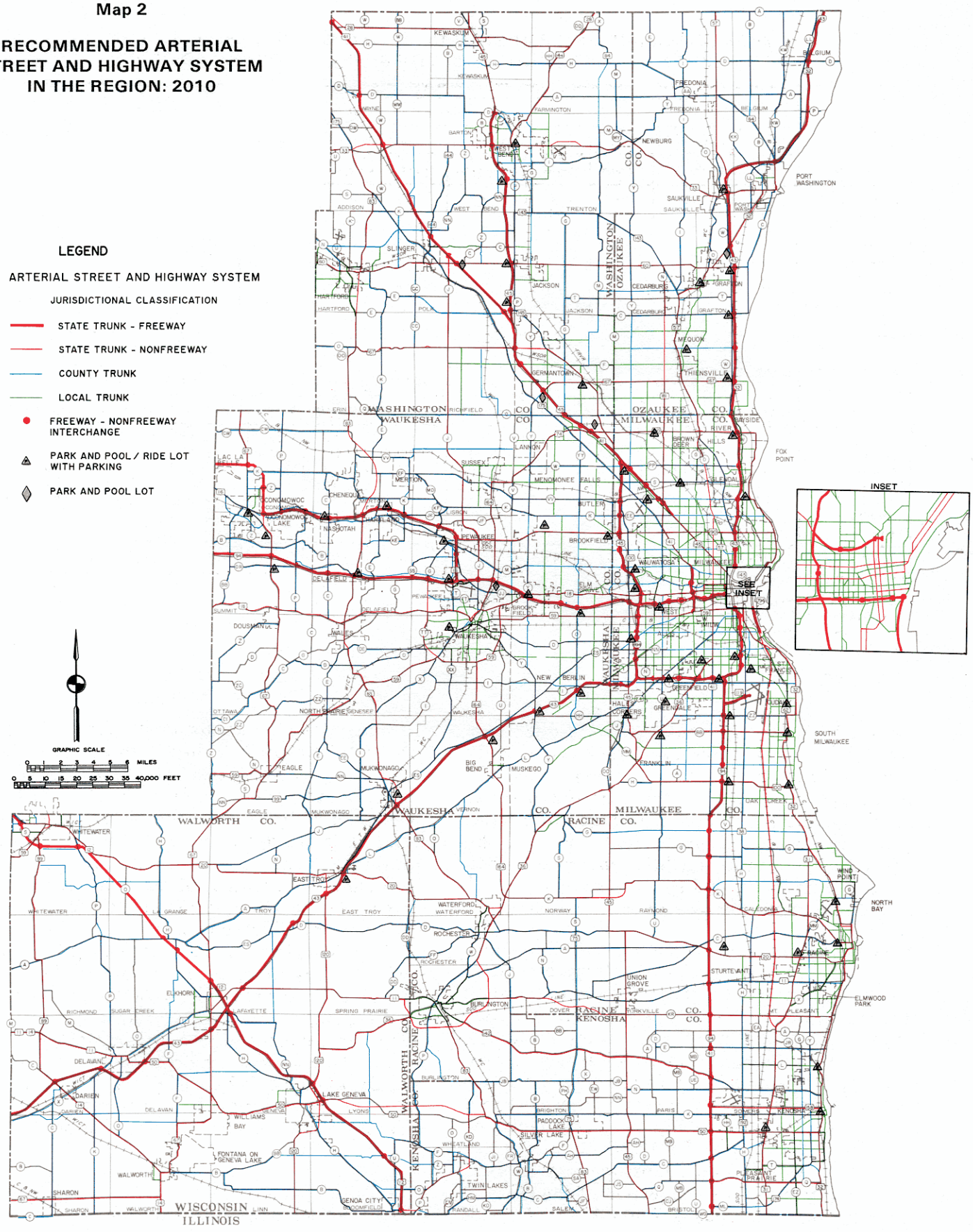
Plan Implementation

The functional improvements for arterial streets and highways set forth in the adopted regional plan are summarized in Table 3. The plan

[3] *See SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, as well as the seven county jurisdictional highway system plans set forth in SEWRPC Planning Reports No. 11, A Jurisdictional Highway System Plan for Milwaukee County; No. 15, A Jurisdictional Highway System Plan for Walworth County; No. 17, A Jurisdictional Highway System Plan for Ozaukee County; No. 18, A Jurisdictional Highway System Plan for Waukesha County; No. 22, A Jurisdictional Highway System Plan for Racine County; No. 23, A Jurisdictional Highway System Plan for Washington County; and No. 24, A Jurisdictional Highway System Plan for Kenosha County.*

Map 2

RECOMMENDED ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 2010



Source: SEWRPC.

Table 3

MILES OF PLANNED ARTERIAL STREETS AND HIGHWAYS IN THE REGION BY JURISDICTIONAL SYSTEM, FUNCTIONAL IMPROVEMENT TYPE[a], AND COUNTY

County	State Trunk Highways (miles)											
	Preservation			Improvement			Expansion			Subtotal		
	Freeway	Nonfreeway	Subtotal	Freeway	Nonfreeway	Subtotal	Freeway	Nonfreeway	Subtotal	Freeway	Nonfreeway	Total
Kenosha	0.0	49.7	49.7	12.0	44.8	56.8	0.0	7.4	7.4	12.0	101.9	113.9
Milwaukee	54.4	146.2	200.6	9.7	21.4	31.1	4.1	11.2	15.3	68.2	178.8	247.0
Ozaukee	26.4	42.9	69.3	0.0	19.4	19.4	0.0	0.3	0.3	26.4	62.6	89.0
Racine	0.0	72.3	72.3	12.1	44.3	56.4	0.0	27.9	27.9	12.1	144.5	156.6
Walworth	43.8	148.1	191.9	0.0	7.1	7.1	15.9	9.2	25.1	59.7	164.4	224.1
Washington	7.4	83.1	90.5	20.9	27.3	48.2	13.1	6.8	19.9	41.4	117.2	158.6
Waukesha	41.6	108.0	149.6	11.9	37.2	49.1	13.2	14.1	27.3	66.7	159.3	226.0
Region	173.6	650.3	823.9	66.6	201.5	268.1	46.3	76.9	123.2	286.5	928.7	1,215.2

County	County Trunk Highways (miles)				Local Arterials (miles)				Entire Arterial System (miles)			
	Preservation	Improvement	Expansion	Subtotal	Preservation	Improvement	Expansion	Subtotal	Preservation	Improvement	Expansion	Total
Kenosha	176.2	10.5	8.3	195.0	33.0	3.3	2.5	38.8	258.9	70.6	18.2	347.7
Milwaukee	158.2	33.8	3.0	195.0	300.5	23.5	5.0	329.0	659.3	88.4	23.3	771.0
Ozaukee	164.0	0.0	2.0	166.0	48.0	0.0	4.2	52.2	281.3	19.4	6.5	307.2
Racine	154.5	21.1	2.0	177.6	92.8	3.3	8.0	104.1	319.6	80.8	37.9	438.3
Walworth	240.0	0.0	4.2	244.2	4.9	1.1	8.9	14.9	436.8	8.2	38.2	483.2
Washington	224.5	4.4	10.8	239.7	64.6	2.0	9.5	76.1	379.6	54.6	40.2	474.4
Waukesha	362.5	60.8	13.1	436.4	103.2	5.9	1.9	111.0	615.3	115.8	42.3	773.4
Region	1,479.9	130.6	43.4	1,653.9	647.0	39.1	40.0	726.1	2,950.8	437.8	206.6	3,595.2

[a]*The functional improvement types are defined as follows:*

1. *Preservation—Resurfacing or reconstruction for same capacity.*
2. *Improvement—Widening for additional capacity.*
3. *Expansion—New facility construction.*

Source: SEWRPC.

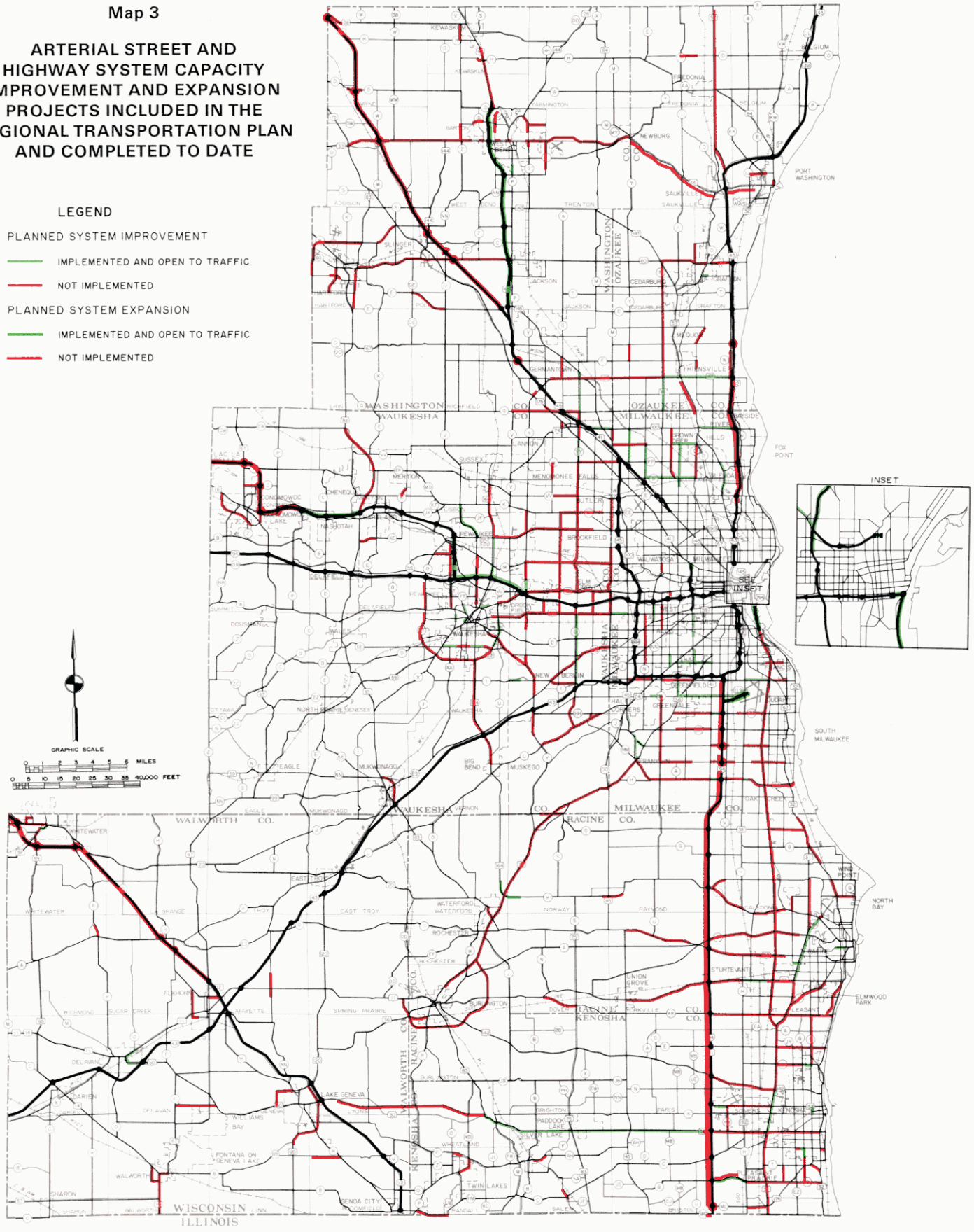
recommendations may be characterized as those involving system preservation—that is, only such resurfacing and reconstruction as may be necessary to maintain the existing arterial roadways and without providing additional capacity; system improvement—that is, the widening of existing facilities to provide additional traffic lanes; and system expansion—that is, the construction of new arterial facilities.

Under the recommended plan, about 2,951 miles, or 82 percent, would require only preservation. About 438 miles, or about 12 percent, would require improvement—that is, significant widening to provide additional traffic lanes. About 207 miles, or 6 percent, would entail system expansion and represent the construction of new arterial facilities. The freeway improvements recommended under the adopted plan include the West Bend Freeway—USH 45[4]; the conversion of USH 41 in Washington County from an expressway to a freeway; the completion of the USH 16 freeway to, and bypass around, the City of Oconomowoc; the extension of USH 12 northerly through Walworth County, with a bypass of the City of Whitewater and to an eventual connection outside the Region with IH 90-94; the widening of IH 43 from the Silver Spring interchange to Bender Road; and freeway widening projects coming out of current planning efforts, including the addition of lanes to IH 94 South from the Mitchell interchange to the Illinois state line, and the addition of lanes to IH 94 west from STH 100 to the Goerke's Corners interchange. New freeway interchanges recommended in the plan include Highland Road on IH 43 in the City of Mequon; Drexel Avenue and Puetz Road on IH 94 in the City of Oak Creek; Calhoun Road on IH 94 in the City of Brookfield; and CTH ML on IH 94 in the Village of Pleasant Prairie. The arterial improvement and expansion projects identified in the plan are shown on Map 3.

[4]*This project was recently completed.*

Map 3

ARTERIAL STREET AND HIGHWAY SYSTEM CAPACITY IMPROVEMENT AND EXPANSION PROJECTS INCLUDED IN THE REGIONAL TRANSPORTATION PLAN AND COMPLETED TO DATE



Source: SEWRPC.

The status of implementation of the arterial street expansion and widening projects in the Region is summarized by jurisdictional system and by county in Table 4. Viewing the entire arterial system, about 130 miles, or 20 percent, of the 644 miles of capacity improvement and expansion projects have been completed. By jurisdictional system, the percents completed are: state trunk highways—21 percent; county trunk highways—13 percent; and local arterials—32 percent. Commission studies have shown that the pace of improving and expanding the arterial street and highway system of the Region has fallen behind schedule—about one-half of the improvements should have been completed by 1990 based on the plan schedules—while traffic on that system continues to exceed forecast levels. As a result, arterial traffic in the Region has reached a level not anticipated to occur until the turn of the century, resulting in growing traffic congestion problems, particularly on the freeway system and on suburban arterial streets.[5] The historical and current levels of traffic congestion in the Region are shown on Maps 4 and 5 and in Table 5.

The implementation status of the jurisdictional realignment element of the regional transportation plan is summarized on Table 6. The jurisdictional changes completed to date are shown on Map 6. Of the nearly 292 miles of either new state trunk highway facilities or transfers to the state trunk highway system from the county and local systems, about 121 miles, or nearly 41 percent, have been completed. Of the nearly 752 miles of either new county trunk highways or transfers to the county trunk highway system from the state trunk system or the local system, about 113 miles, or nearly 15 percent, have been completed. Of the nearly 235 miles of either new local arterials or transfers from the state and county trunk highway systems to the local system, about 131 miles, or nearly 56 percent, have been completed. Finally, of the approximately 370 miles of additions to the local nonarterial system to come about via transfers from the state and county trunk systems, nearly 83 miles, or about 22 percent, have been completed. Again, about one-half of the transfers should have been completed by 1990 based on plan schedules. The most significant progress in jurisdictional realignments has occurred in Waukesha County, where implementation of the jurisdictional highway system plan was aggressively pursued for a period of time. The jurisdictional changes yet to be made are shown on Map 7.

System Finance

Capital improvements on the regional arterial street and highway system are funded through a combination of federal, state, county, and local monies. An analysis was conducted of the three planned jurisdictional highway systems—state, county, and local—in order to determine the extent to which state, county, and local governments may be expected to be able to implement the regional plan for arterial highways given the present level of available funds. The results of this analysis may be summarized as follows:

1. The total cost of implementing the state trunk highway element of the recommended plan is estimated at $1.4 billion (see Table 7). Of this total, about $336 million, or 24 percent, would be required for system expansion projects; $528 million, or 37 percent, for system improvement projects; and the remaining $551 million, or 39 percent, for system preservation projects. Over the next 20 years, this amounts to about $70.8 million annually to fully implement the recommended plan. Over the past six years, about $55.4 million annually in state and federal funds have been spent in southeastern Wisconsin on state trunk highways. Assuming continuation of these trends, there would be an average annual shortfall of about $15.4 million, and a total shortfall over the 20-year period 1990-2010 of about $308 million. Eliminating that shortfall will require about a 28 percent increase in state and federal funds allocated to the Region.

2. The total cost of implementing the county trunk highway element of the recommended plan is estimated at $572.7 million (see Table 8). Of this total, about $60.5 million, or 11 percent, would be required for system expansion projects; $179.1 million, or 31 percent, for system improvement projects; and the remaining $333.1 million, or 58 percent, for system preservation projects. Over the next 20 years, this amounts to about $28.6 million annually

[5] *For a more detailed discussion on this matter, see SEWRPC Newsletter, Vol. 30, No. 3, May-June 1990.*

Table 4

IMPLEMENTATION STATUS OF ARTERIAL STREET AND HIGHWAY PROJECTS IN THE REGION BY JURISDICTIONAL SYSTEM AND COUNTY

County	State Trunk Highways								
	Improvement								
	Freeway			Nonfreeway			Subtotal		
	Planned Miles	Completed		Planned Miles	Completed		Planned Miles	Completed	
		Miles	Percent		Miles	Percent		Miles	Percent
Kenosha	12.0	0.0	0.0	44.8	16.9	37.7	56.8	16.9	29.8
Milwaukee	9.7	1.1	11.3	21.4	8.2	38.3	31.1	9.3	29.9
Ozaukee	0.0	0.0	- -	19.4	5.5	28.4	19.4	5.5	28.4
Racine	12.1	0.0	0.0	44.3	7.1	16.0	56.4	7.1	12.6
Walworth	0.0	0.0	- -	7.1	1.6	22.5	7.1	1.6	22.5
Washington	20.9	0.0	0.0	27.3	0.0	0.0	48.2	0.0	0.0
Waukesha	11.9	6.7	56.3	37.2	6.5	17.5	49.1	13.2	26.9
Region	66.6	7.8	11.7	201.5	45.8	22.7	268.1	53.6	20.0

County	State Trunk Highways								
	Expansion								
	Freeway			Nonfreeway			Subtotal		
	Planned Miles	Completed		Planned Miles	Completed		Planned Miles	Completed	
		Miles	Percent		Miles	Percent		Miles	Percent
Kenosha	0.0	0.0	- -	7.4	2.0	27.0	7.4	2.0	27.0
Milwaukee	4.1	4.1	100.0	11.2	0.2	1.8	15.3	4.3	28.1
Ozaukee	0.0	0.0	- -	0.3	0.0	0.0	0.3	0.0	0.0
Racine	0.0	0.0	- -	27.9	2.4	8.6	27.9	2.4	8.6
Walworth	15.9	0.0	0.0	9.2	0.0	0.0	25.1	0.0	0.0
Washington	13.1	13.1	100.0	6.8	0.0	0.0	19.9	13.1	65.8
Waukesha	13.2	3.7	28.0	14.1	2.3	16.3	27.3	6.0	22.0
Region	46.3	20.9	45.1	76.9	6.9	9.0	123.2	27.8	22.6

County	State Trunk Highways								
	Subtotal								
	Freeway			Nonfreeway			Total		
	Planned Miles	Completed		Planned Miles	Completed		Planned Miles	Completed	
		Miles	Percent		Miles	Percent		Miles	Percent
Kenosha	12.0	0.0	0.0	52.2	18.9	36.2	64.2	18.9	29.4
Milwaukee	13.8	5.2	37.7	32.6	8.4	25.8	46.4	13.6	29.3
Ozaukee	0.0	0.0	- -	19.7	5.5	27.9	19.7	5.5	27.9
Racine	12.1	0.0	0.0	72.2	9.5	13.2	84.3	9.5	11.3
Walworth	15.9	0.0	0.0	16.3	1.6	9.8	32.2	1.6	5.0
Washington	34.0	13.1	38.5	34.1	0.0	0.0	68.1	13.1	19.2
Waukesha	25.1	10.4	41.4	51.3	8.8	17.2	76.4	19.2	25.1
Region	112.9	28.7	25.4	278.4	52.7	18.9	391.3	81.4	20.8

Table 4 (continued)

County	County Trunk Highways								
	Improvement			Expansion			Subtotal		
	Planned Miles	Completed		Planned Miles	Completed		Planned Miles	Completed	
		Miles	Percent		Miles	Percent		Miles	Percent
Kenosha	10.5	0.5	4.8	8.3	0.0	0.0	18.8	0.5	2.7
Milwaukee	33.8	10.1	29.9	3.0	0.0	0.0	36.8	10.1	27.4
Ozaukee	0.0	0.0	- -	2.0	0.0	0.0	2.0	0.0	0.0
Racine	21.1	2.6	12.3	2.0	0.0	0.0	23.1	2.6	11.3
Walworth	0.0	0.0	- -	4.2	0.0	0.0	4.2	0.0	0.0
Washington	4.4	0.5	11.4	10.8	0.0	0.0	15.2	0.5	3.3
Waukesha	60.8	8.1	13.3	13.1	1.0	7.6	73.9	9.1	12.3
Region	130.6	21.8	16.7	43.4	1.0	2.3	174.0	22.8	13.1

County	Local Arterials								
	Improvement			Expansion			Subtotal		
	Planned Miles	Completed		Planned Miles	Completed		Planned Miles	Completed	
		Miles	Percent		Miles	Percent		Miles	Percent
Kenosha	3.3	0.3	9.1	2.5	0.9	36.0	5.8	1.2	20.7
Milwaukee	23.5	15.5	66.0	5.0	1.4	28.0	28.5	16.9	59.3
Ozaukee	0.0	0.0	- -	4.2	0.7	16.7	4.2	0.7	16.7
Racine	3.3	0.6	18.2	8.0	0.4	5.0	11.3	1.0	8.8
Walworth	1.1	1.1	100.0	8.9	0.0	0.0	10.0	1.1	11.0
Washington	2.0	2.0	100.0	9.5	0.4	4.2	11.5	2.4	20.9
Waukesha	5.9	2.0	33.9	1.9	0.0	0.0	7.8	2.0	25.6
Region	39.1	21.5	55.0	40.0	3.8	9.5	79.1	25.3	32.0

County	Entire Arterial System								
	Improvement			Expansion			Total		
	Planned Miles	Completed		Planned Miles	Completed		Planned Miles	Completed	
		Miles	Percent		Miles	Percent		Miles	Percent
Kenosha	70.6	17.7	25.1	18.2	2.9	15.9	88.8	20.6	23.2
Milwaukee	88.4	34.9	39.5	23.3	5.7	24.5	111.7	40.6	36.3
Ozaukee	19.4	5.5	28.4	6.5	0.7	10.8	25.9	6.2	23.9
Racine	80.8	10.3	12.7	37.9	2.8	7.4	118.7	13.1	11.0
Walworth	8.2	2.7	32.9	38.2	0.0	0.0	46.4	2.7	5.8
Washington	54.6	2.5	4.6	40.2	13.5	33.6	94.8	16.0	16.9
Waukesha	115.8	23.3	20.1	42.3	7.0	16.5	158.1	30.3	19.2
Region	437.8	96.9	22.1	206.6	32.6	15.8	644.4	129.5	20.1

Source: SEWRPC.

Table 5

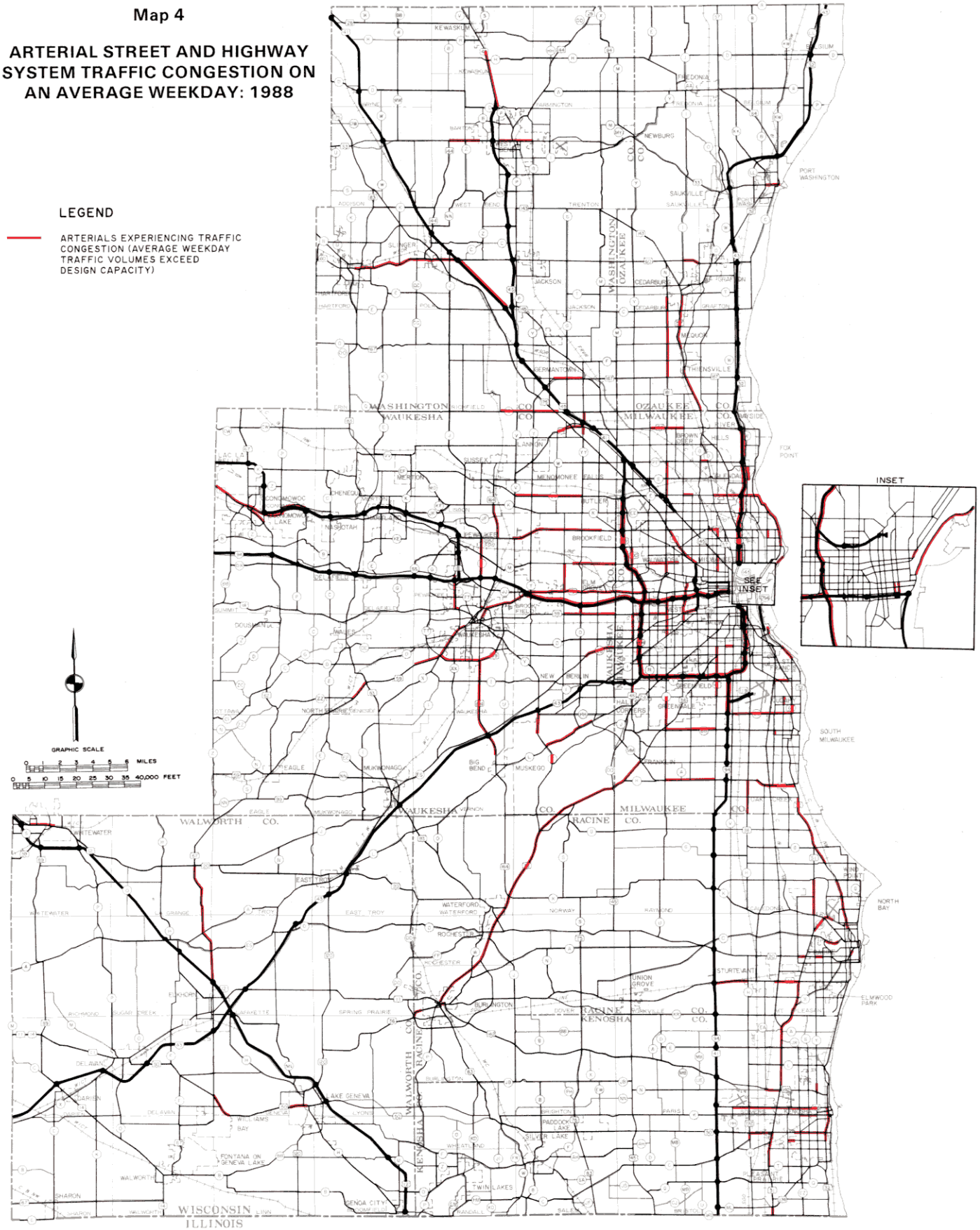
ARTERIAL STREET AND HIGHWAY SYSTEM TRAFFIC CONGESTION ON AN AVERAGE WEEKDAY: HISTORICAL AND PLANNED SYSTEMS

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

Source: SEWRPC.

Map 4

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

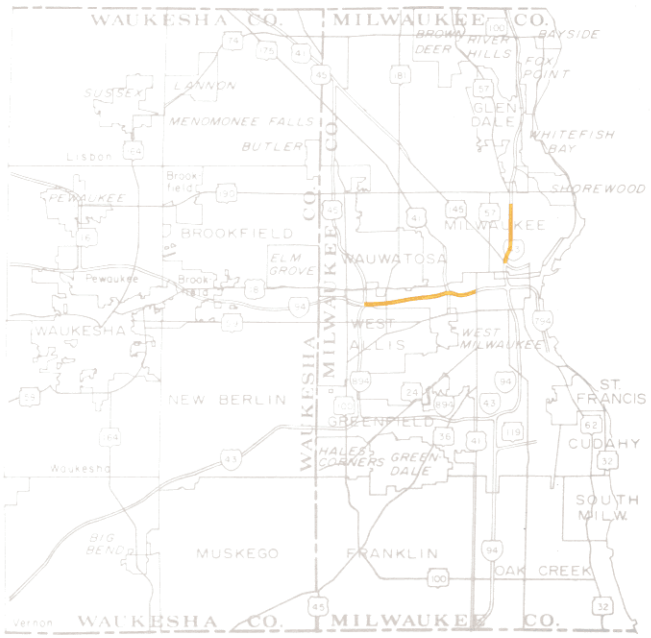


Source: SEWRPC.

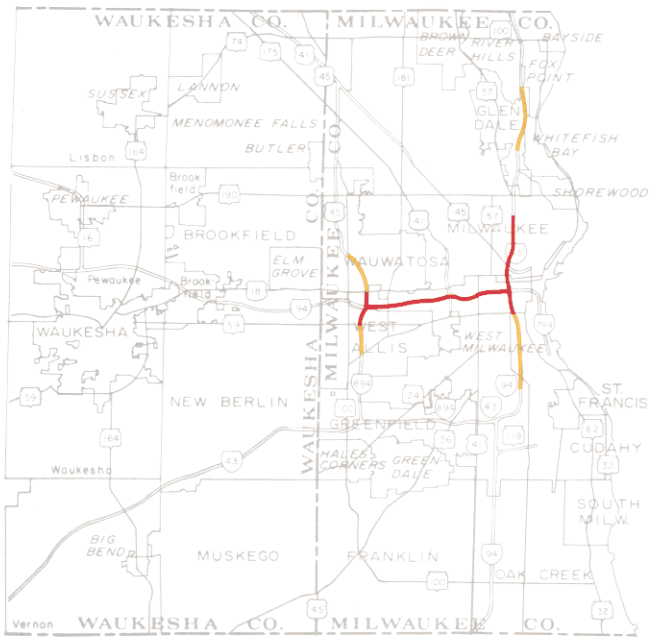
Map 5

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

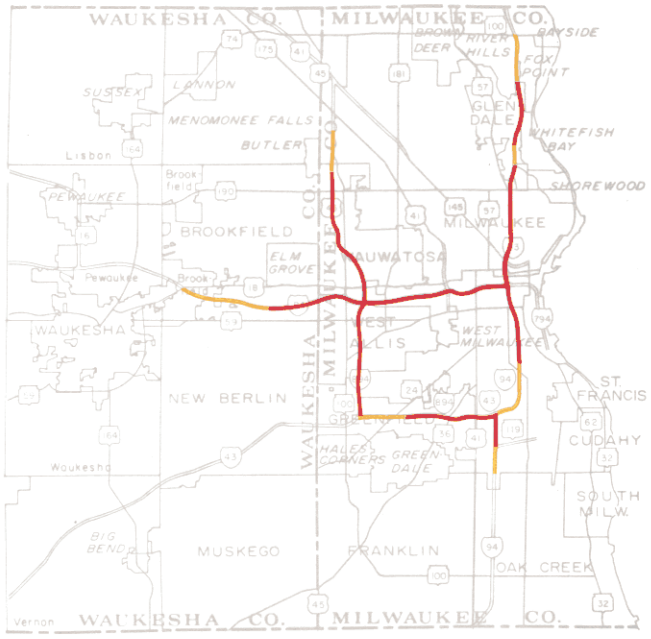
1972



1980



1988



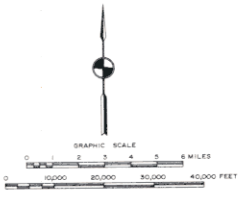
LEGEND

TRAFFIC CONGESTION

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

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

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



Source: SEWRPC.

Table 6

IMPLEMENTATION STATUS OF JURISDICTIONAL REALIGNMENTS AND CHANGES RECOMMENDED IN THE REGIONAL TRANSPORTATION PLAN BY COUNTY

Type of Transfer	County							Region Total
	Kenosha	Milwaukee	Ozaukee	Racine	Walworth	Washington	Waukesha	
Additions to State Trunk System								
New Facilities								
Planned (miles)	5.4	15.6	19.2	25.5	56.4	19.9	26.3	168.3
Completed (miles)	0.0	4.6	18.9	0.0	31.3	13.1	5.0	72.9
Percent Completed	0.0	29.5	98.4	0.0	55.5	65.8	19.0	43.3
Transfers from County Trunk System								
Planned (miles)	6.5	11.0	4.3	28.2	19.0	8.0	18.9	95.9
Completed (miles)	0.0	0.0	1.6	5.6	18.3	0.0	16.1	41.6
Percent Completed	0.0	0.0	37.2	19.9	96.3	0.0	85.2	43.4
Transfers from Local System								
Planned (miles)	0.8	10.2	4.0	4.4	2.6	4.2	1.2	27.4
Completed (miles)	0.0	1.9	0.0	1.3	0.1	2.7	0.3	6.3
Percent Completed	0.0	18.6	0.0	29.5	3.8	64.3	25.0	23.0
Total								
Planned (miles)	12.7	36.8	27.5	58.1	78.0	32.1	46.4	291.6
Completed (miles)	0.0	6.5	20.5	6.9	49.7	15.8	21.4	120.8
Percent Completed	0.0	17.7	74.5	11.9	63.7	49.2	46.1	41.4
Additions to County Trunk System								
New Facilities								
Planned (miles)	10.3	3.0	2.0	3.2	4.2	10.8	16.8	50.3
Completed (miles)	2.0	0.0	0.0	1.2	0.0	0.0	4.7	7.9
Percent Completed	19.4	0.0	0.0	37.5	0.0	0.0	28.0	15.7
Transfers from State Trunk System								
Planned (miles)	22.2	54.7	86.4	40.6	30.3	46.9	53.4	334.5
Completed (miles)	0.0	0.0	20.0	2.3	21.9	7.8	22.3	74.3
Percent Completed	0.0	0.0	23.1	5.7	72.3	16.6	41.8	22.2
Transfers from Local System								
Planned (miles)	20.0	86.4	29.5	39.8	59.2	53.9	78.6	367.4
Completed (miles)	0.0	9.0	1.5	0.1	0.0	0.0	20.5	31.1
Percent Completed	0.0	10.4	5.1	0.3	0.0	0.0	26.1	8.5
Total								
Planned (miles)	52.5	144.1	117.9	83.6	93.7	111.6	148.8	752.2
Completed (miles)	2.0	9.0	21.5	3.6	21.9	7.8	47.5	113.3
Percent Completed	3.8	6.2	18.2	4.3	23.4	7.0	31.9	15.1
Additions to Local Arterial System								
New Facilities								
Planned (miles)	1.6	4.4	4.2	8.0	8.9	9.3	1.9	38.3
Completed (miles)	0.0	0.8	0.7	0.4	0.0	0.2	0.0	2.1
Percent Completed	0.0	18.2	16.7	5.0	0.0	2.2	0.0	5.5
Transfers from State Trunk System								
Planned (miles)	0.0	12.8	0.0	15.0	1.2	8.7	18.5	56.2
Completed (miles)	0.0	6.5	0.0	1.5	0.6	4.9	18.5	32.0
Percent Completed	--	50.8	--	10.0	50.0	56.3	100.0	56.9
Transfers from County Trunk System								
Planned (miles)	13.0	15.1	2.9	11.3	1.0	5.4	91.6	140.3
Completed (miles)	0.0	3.2	2.1	2.5	0.0	0.0	88.6	96.4
Percent Completed	0.0	21.2	72.4	22.1	0.0	0.0	96.7	68.7
Total								
Planned (miles)	14.6	32.3	7.1	34.3	11.1	23.4	112.0	234.8
Completed (miles)	0.0	10.5	2.8	4.4	0.6	5.1	107.1	130.5
Percent Completed	0.0	32.5	39.4	12.8	5.4	21.8	95.6	55.6

Table 6 (continued)

Type of Transfer	County							Region Total
	Kenosha	Milwaukee	Ozaukee	Racine	Walworth	Washington	Waukesha	
Additions to Local Nonarterial System								
Transfers from State Trunk System								
Planned (miles)	0.0	1.1	0.0	2.1	9.0	3.7	4.1	20.0
Completed (miles)	0.0	0.0	0.0	0.0	0.6	0.6	0.4	1.6
Percent Completed	--	0.0	--	0.0	6.7	16.2	9.8	8.0
Transfers from County Trunk System								
Planned (miles)	97.2	3.3	13.7	21.4	26.6	52.8	134.5	349.5
Completed (miles)	0.0	0.0	0.0	2.5	0.0	0.0	78.5	81.0
Percent Completed	0.0	0.0	0.0	11.7	0.0	0.0	58.4	23.2
Total								
Planned (miles)	97.2	4.4	13.7	23.5	35.6	56.5	138.6	369.5
Completed (miles)	0.0	0.0	0.0	2.5	0.6	0.6	78.9	82.6
Percent Completed	0.0	0.0	0.0	10.6	1.7	1.1	56.9	22.4

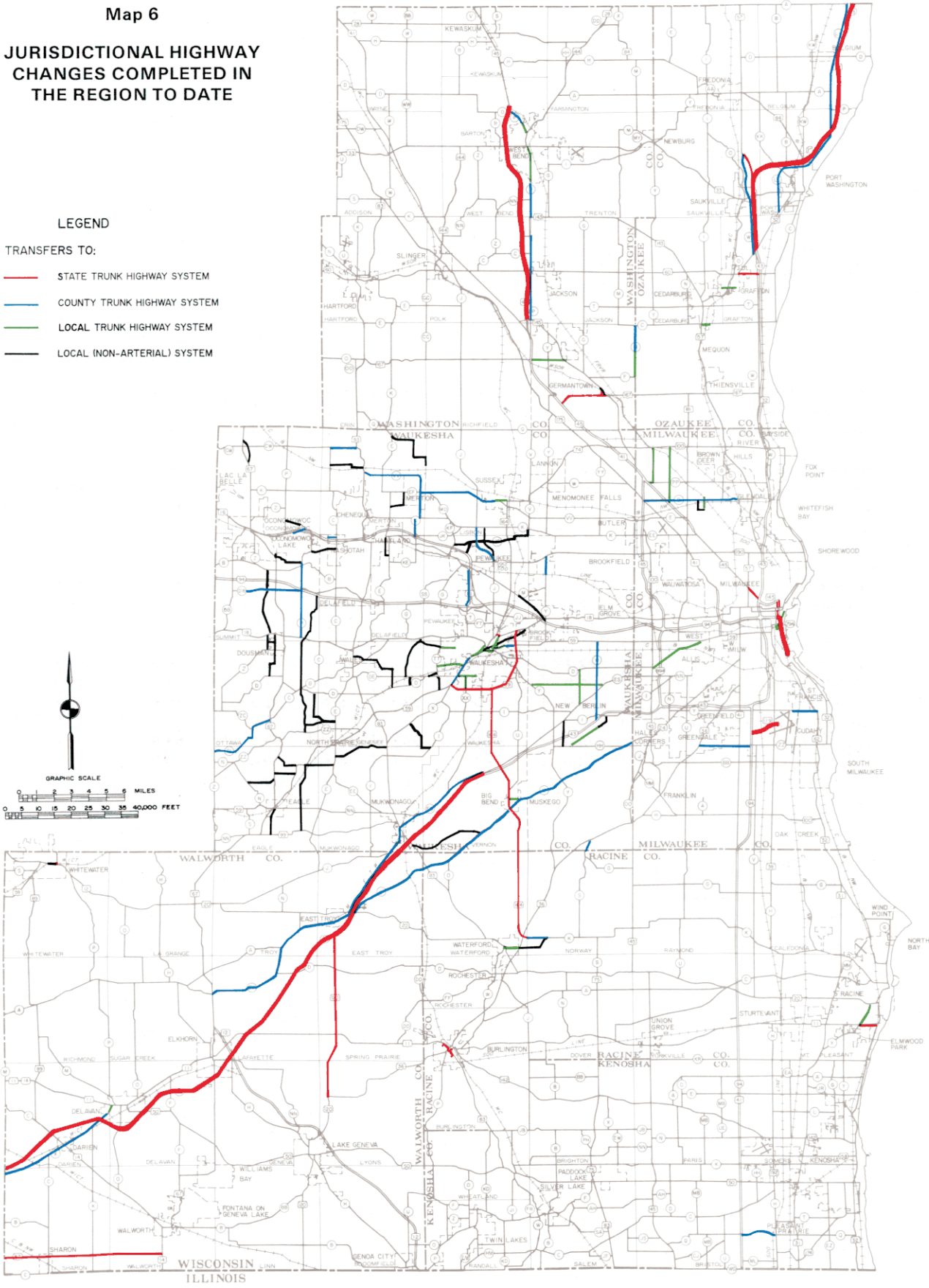
Source: SEWRPC.

required to fully implement the recommended plan. The distribution of this cost ranges from a low of about $1.6 million annually in Ozaukee County, to a high of about $9.2 million annually in Waukesha County. As shown in Table 9, the current funding level for county trunk highways is estimated at $9.5 million. This includes county property tax monies, state highway aids, and federal secondary and urban system funds made available to the counties. Assuming continuation of these trends, there would be an average annual shortfall of about $19.1 million, and a total shortfall over the 20-year period 1990-2010 of about $382 million. The distribution of that shortfall on an average annual basis by county is shown in Table 10, and ranges from a low of about $850,000 in Ozaukee County to a high of about $7.6 million in Waukesha County. Eliminating that shortfall will require about a 200 percent increase in funding for county trunk highways.

3. The total cost of implementing the local arterial street and highway element of the recommended plan is estimated at $277.8 million (see Table 11). Of this total, about $58.7 million, or about 21 percent, would be required for system expansion projects; $27.6 million, or 10 percent, for system improvement projects; and the remaining $191.5 million, or 69 percent, for system preservation projects. Over the next 20 years, this amounts to about $13.9 million annually required to fully implement the recommended plan. The distribution of this cost ranges from a low of about $700,000 annually to the municipalities in Ozaukee County, to a high of about $6.8 million annually to the municipalities in Milwaukee County. As shown in Table 12, the current funding level for local arterial streets and highways is estimated at $14.6 million. This includes municipal property tax monies, state highway aids, and federal secondary and urban system funds made available to the municipalities. A comparison of costs and available revenues for the local arterial street system (see Table 13) indicates that for the Region as a whole, there would be an average annual surplus of $0.7 million over the next 20 years. This comes about in large part because of an estimated significant reduction in local arterial system needs in Milwaukee County, owing to the underlying system plan recommendation of jurisdictional realignment and a consequent shifting of

Map 6

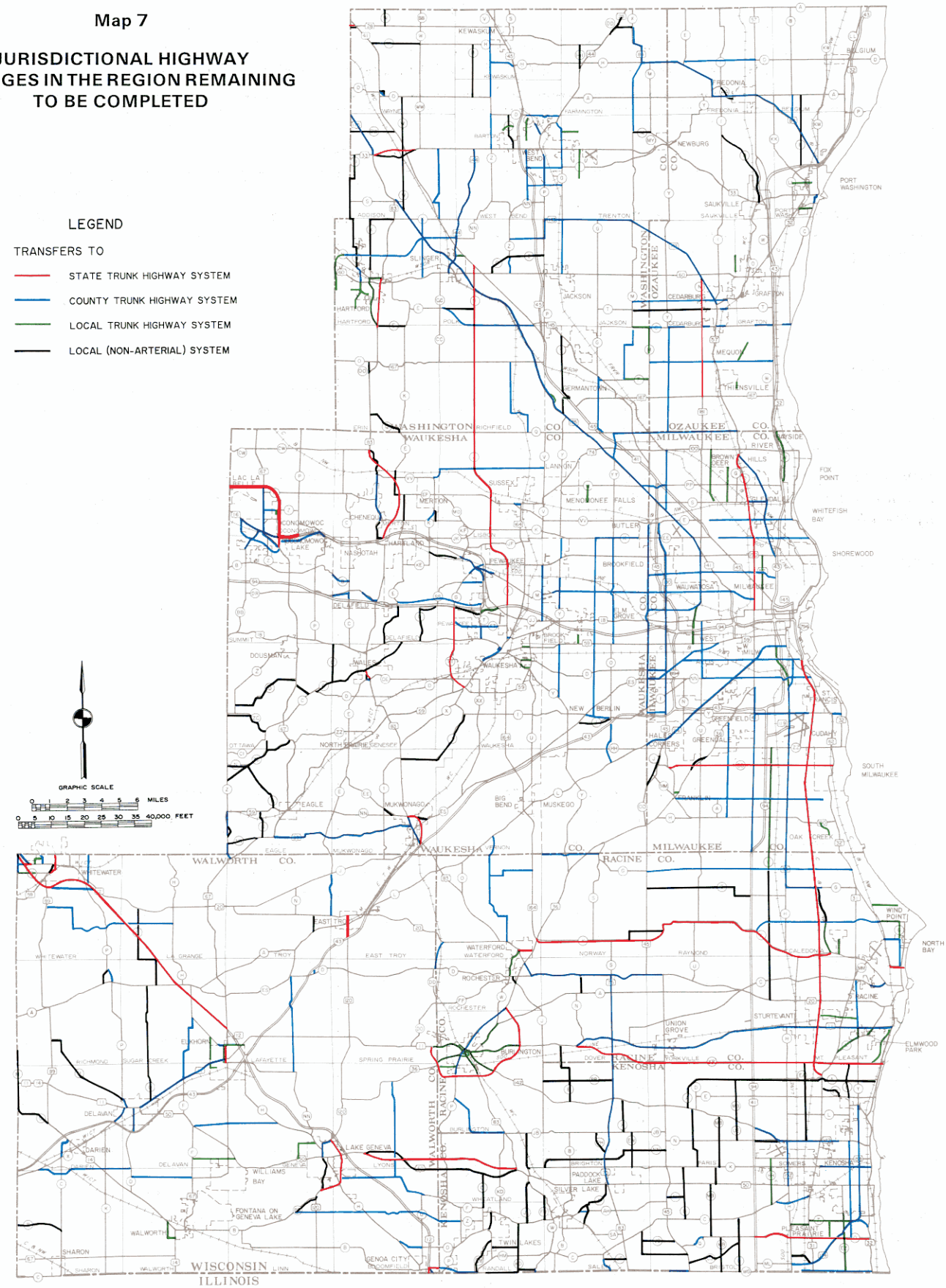
JURISDICTIONAL HIGHWAY CHANGES COMPLETED IN THE REGION TO DATE



Source: SEWRPC.

Map 7

JURISDICTIONAL HIGHWAY CHANGES IN THE REGION REMAINING TO BE COMPLETED



Source: SEWRPC.

Table 7

ESTIMATED CAPITAL COSTS OF IMPLEMENTING THE STATE TRUNK HIGHWAY ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

County	State Trunk Highway System Plan Costs (millions of dollars)				
	Preservation[a]	Improvement	Expansion	Total	Average Annual 1990-2010
Kenosha	15.0	108.0	10.0	133.0	6.7
Milwaukee	277.0	123.0	101.0	501.0	25.0
Ozaukee	27.0	27.0	6.0	60.0	3.0
Racine	19.0	101.0	48.0	168.0	8.4
Walworth	55.0	7.0	76.0	138.0	6.9
Washington	30.0	69.0	11.0	110.0	5.5
Waukesha	128.0	93.0	84.0	305.0	15.3
Region	551.0	528.0	336.0	1,415.0	70.8

[a]*Includes one resurfacing for 85 percent of the planned state trunk highway system and one reconstruction for the remaining 15 percent, except for the regional freeway system, where detailed studies attendant to reconstruction conducted by the Wisconsin Department of Transportation were used as a basis for cost estimating.*

Source: SEWRPC.

Table 8

ESTIMATED CAPITAL COSTS OF IMPLEMENTING THE COUNTY TRUNK HIGHWAY ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

County	County Trunk Highway System Plan Costs (millions of dollars)				
	Preservation[a]	Improvement	Expansion	Total	Average Annual 1990-2010
Kenosha	39.1	17.1	10.8	67.0	3.4
Milwaukee	61.5	48.6	6.7	116.8	5.8
Ozaukee	30.3	0.0	2.2	32.5	1.6
Racine	35.7	28.0	2.1	65.8	3.3
Walworth	39.5	0.0	4.7	44.2	2.2
Washington	42.6	3.7	15.2	61.5	3.1
Waukesha	84.4	81.7	18.8	184.9	9.2
Region	333.1	179.1	60.5	572.7	28.6

[a]*Includes one resurfacing for 85 percent of the planned county trunk highway system and one reconstruction for the remaining 15 percent.*

Source: SEWRPC.

Table 9

ESTIMATED REVENUES AVAILABLE TO IMPLEMENT THE COUNTY TRUNK HIGHWAY ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

County	County[a]	Annual Funds Available (millions of dollars)		
		Federal Aid[b]		
		Secondary System	Urban System	Total
Kenosha	0.76	0.14	0.12	1.02
Milwaukee	1.63	0.00	1.59	3.22
Ozaukee	0.41	0.09	0.25	0.75
Racine	0.33	0.16	0.21	0.70
Walworth	0.54	0.27	0.04	0.85
Washington	0.91	0.18	0.23	1.32
Waukesha	0.19	0.30	1.11	1.60
Region	4.77	1.14	3.55	9.46

[a]*Based on estimated annual county expenditures reported by each county to the Wisconsin Department of Revenue for the years 1986 through 1988. Milwaukee County expenditures have been reduced by 45 percent to reflect expenditures on park roads. Currently, about 30 percent of the annual county expenditures are reimbursed by the State of Wisconsin in the form of state transportation aids.*

[b]*Based on current levels of funding; assumes realignment of federal aid systems as recommended in the jurisdictional highway system plans.*

Source: SEWRPC.

Table 10

COMPARISON OF COSTS AND REVENUES ATTENDANT TO THE COUNTY TRUNK HIGHWAY SYSTEM IN THE REGION

County	Average Annual Cost-Revenue Comparison: 1990-2010 (millions of dollars)		
	County Trunk Highway Plan Capital Costs	Available Revenues	Shortfall
Kenosha	3.40	1.02	2.38
Milwaukee	5.80	3.22	2.58
Ozaukee	1.60	0.75	0.85
Racine	3.30	0.70	2.60
Walworth	2.20	0.85	1.35
Washington	3.10	1.32	1.78
Waukesha	9.20	1.60	7.60
Region	28.60	9.46	19.14

Source: SEWRPC.

Table 11

ESTIMATED CAPITAL COSTS OF IMPLEMENTING THE LOCAL ARTERIAL HIGHWAY ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

County	Local Arterial Highway System Plan Costs (millions of dollars)				
	Preservation[a]	Improvement	Expansion	Total	Average Annual 1990-2010
Kenosha	7.6	4.8	3.8	16.2	0.8
Milwaukee	116.0	13.8	6.8	136.6	6.8
Ozaukee	9.0	0.0	5.8	14.8	0.7
Racine	21.3	2.9	11.2	35.4	1.8
Walworth	1.0	0.0	14.2	15.2	0.8
Washington	12.7	0.0	13.7	26.4	1.3
Waukesha	23.9	6.1	3.2	33.2	1.7
Region	191.5	27.6	58.7	277.8	13.9

[a]*Includes one resurfacing for 85 percent of the planned local arterial highway system and one reconstruction for the remaining 15 percent.*

Source: SEWRPC.

Table 12

ESTIMATED REVENUES AVAILABLE TO IMPLEMENT THE LOCAL ARTERIAL HIGHWAY ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

County	Annual Funds Available (millions of dollars)			
		Federal Aid[b]		
	Municipal[a]	Secondary System	Urban System	Total
Kenosha	0.25	0.01	0.12	0.38
Milwaukee	6.90	0.00	2.85	9.75
Ozaukee	0.20	0.00	0.36	0.56
Racine	1.07	0.02	0.20	1.29
Walworth	0.06	0.02	0.02	0.10
Washington	0.96	0.02	0.21	1.19
Waukesha	0.69	0.00	0.60	1.29
Region	10.13	0.07	4.36	14.56

[a]*Based on estimated annual municipal expenditures reported by each municipality to the Wisconsin Department of Revenue for the years 1986 through 1988. Reported costs were adjusted to reflect expenditures on local arterials based on projects programmed and completed, as well as the percentage of local street systems which are arterial roadways. Currently, about 24 percent of the annual municipal expenditures are reimbursed by the State of Wisconsin in the form of state transportation aids.*

[b]*Based on current levels of funding; assumes realignment of federal aid systems as recommended in the jurisdictional highway system plans.*

Source: SEWRPC.

Table 13

COMPARISON OF COSTS AND REVENUES ATTENDANT TO THE LOCAL ARTERIAL SYSTEM IN THE REGION

County	Average Annual Cost-Revenue Comparison: 1990-2010 (millions of dollars)		
	Local Arterial Plan Capital Costs	Available Revenues	(Surplus) or Shortfall
Kenosha	0.80	0.38	0.42
Milwaukee	6.80	9.75	(2.95)
Ozaukee	0.70	0.56	0.14
Racine	1.80	1.29	0.51
Walworth	0.80	0.10	0.70
Washington	1.30	1.19	0.11
Waukesha	1.70	1.29	0.41
Region	13.90	14.56	(0.66)

Source: SEWRPC.

costs to the county and state levels of government. In the other six counties of the Region, there would be shortfalls ranging from a low of about $140,000 annually in Ozaukee County to a high of about $700,000 annually in Walworth County.

In addition to capital costs, an attempt was made to estimate the operation and maintenance costs associated with the county and local arterial street and highway systems in order to give some perspective as to the local property tax burden attendant to such costs. No uniform cost accounting takes place to permit the isolation of county and local operation and maintenance costs associated with arterial streets and highways. What uniform cost accounting there is has been structured to the needs of the state transportation aids program. That program does not differentiate between arterial and nonarterial systems.

It was necessary, then, to find a surrogate for actual county and local arterial street operation and maintenance costs. The best surrogate available appears to be the cost reimbursement formulas attendant to the connecting streets and highways aids program administered by the Wisconsin Department of Transportation. That program seeks to reimburse cities and villages for the actual costs incurred in maintaining traffic lanes on those local street and highways over which state trunk highways are routed. The cost reimbursement formula for the connecting highway aids varies by the population size of the community and the number of traffic lanes on a given facility. For example, in 1989, small communities under 10,000 population were reimbursed by the State a total of $10,200 per mile for a two-lane arterial, $17,850 per mile for a four-lane arterial, and $22,950 per mile for a six-lane arterial. Comparable reimbursement rates for the very largest communities—over 500,000 in population—were $17,880, $31,290, and $40,230. Assuming that these reimbursement rates fairly reflect actual costs on an average basis of maintaining county and local arterial streets and highways, such rates were applied to the planned county and local trunk highway systems. The results of this analysis are summarized in Table 14. In total, the seven counties in the Region expend about $16.7 million annually maintaining the planned county trunk highway system, while local governments expend about $10.9 million annually maintaining the planned local arterial streets and highways.

Findings—Arterial Street and Highways System

The following findings may be drawn from the foregoing analyses with respect to the arterial street and highway system:

1. As measured by center line miles, only about 20 percent, or about 130 miles, of the 644 miles of planned arterial street capacity improvement and expansion projects in the Region have been completed. Based on plan schedules, about one-half of the improvements should now be in place. The most relative progress has been made on the local arterial system, where 32 percent of the projects have been completed, followed by the state trunk highway system, where 21 percent of the projects have been completed, and the county trunk highway system, where only 13 percent of the projects have been completed. The pace of improving and expanding the arterial street and highway system of the Region has fallen behind schedule. Yet traffic on the system continues to exceed forecast levels, with the result that the Region faces growing traffic congestion problems, particularly on the freeway system and on suburban arterial streets.

2. Equity in distribution of the costs associated with expanding, improving, and maintaining and operating the Region's arterial street and highway system is a major objective of the system realignment recommendations set forth in jurisdictional highway system plans prepared for each county in the Region. While significant progress has been made in carrying out these system realignment recommendations, particularly with respect to additions to the state trunk highway system and to the local arterial system, relatively little progress has been made in carrying out those recommendations attendant to additions to the county trunk system and to transfers from the state and county trunk systems to local nonarterial streets. Overall, only about 27 percent of the jurisdictional changes have been made. Political difficulties should be expected to be encountered in implementing the jurisdictional plans because those plans are intended to address inequities, and those political subgroups benefiting from a current inequity are unlikely to support the recommended change.

Table 14

ESTIMATED OPERATION AND MAINTENANCE COSTS OF THE PLANNED COUNTY AND LOCAL ARTERIAL STREET AND HIGHWAY SYSTEMS IN THE REGION

County	Estimated Annual Cost (millions of dollars)[a]	
	County Trunk Highway System	Local Arterial System
Kenosha	1.5	0.5
Milwaukee	4.1	6.3
Ozaukee	1.2	0.5
Racine	1.9	1.3
Walworth	1.8	0.1
Washington	1.7	0.8
Waukesha	4.5	1.4
Region	16.7	10.9

[a]Cost estimate based on the application of the Wisconsin connecting highway aids program reimbursement rates to the planned county and local arterial systems, adjusted downward to reflect state transportation aids in the amount of 30 percent for county trunk highways and 24 percent for local arterials.

Source: SEWRPC.

3. Significant shortfalls in funding the needed major improvements to the state and county trunk highway systems in the Region are expected over the next two decades. On an average annual basis, that shortfall is expected to total about $15.4 million on the state trunk highway system and about $19.1 million on the county trunk highway system. To eliminate those shortfalls will require a 28 percent increase in state and federal funds allocated to the state trunk highway system in the Region, and a 200 percent increase in funding for county trunk highways. For the Region as a whole, assuming that the jurisdictional plans are implemented, there should be no such shortfall at the local government level taking into account current spending levels for arterial street improvements. However, on an individual county basis, shortfalls from $140,000 to $700,000 annually at the municipal level can be expected in all but Milwaukee County. The average annual shortfall for arterial highways irrespective of jurisdiction is estimated at $36.8 million.

PUBLIC TRANSIT SYSTEM

System Description

The existing public transit system for southeastern Wisconsin is herein defined as the fixed-route public transit services provided through six separate systems operated by two counties and three municipalities within the Region.[6] The approximate areal extent of the local service areas of these six systems is shown on Map 8. Selected characteristics attendant to the six systems are summarized in Table 15. Each of the six systems may be briefly characterized as follows:

1. City of Kenosha Transit System

   The City of Kenosha provides four types of transit services: regular fixed-route service for the general public, special-purpose routes serving the Kenosha school system, special shuttle bus service to newly developed outlying commercial and employment centers, and essentially parallel specialized demand-responsive services for handicapped persons. The general public service is provided over seven fixed routes that are radial in design, emanating from downtown Kenosha, and that provide direct nontransfer bus service to all portions of the City and its immediate environs, including the University of Wisconsin-Parkside. The system has an active fleet of 31 buses providing service from 6:00 a.m. to 6:00 p.m. every day except Sunday, with approximate 30-minute peak-period headways and 60-minute headways at all other times. The system carried about 1.2 million revenue passengers in 1989, a level that has been relatively stable throughout the 1980's. The basic bus fare is $0.60.

   In 1989, about 22 percent of the operating expenses were recovered through farebox and related revenues. Of the total operating deficit of about $1.67 million, about $580,000, or 35 percent, was covered by federal funds; $820,000, or 49 percent, by state funds; and the remaining $270,000, or 16 percent, by city funds. Of the local total, $235,000 represented local property taxes levied for this purpose. The remaining $45,000 was generated by service contracts or obtained from city parking utility revenue. In addition, about $2,000 annually in local property tax monies are expended for capital projects, bringing the average annual total of local property tax subsidy in Kenosha for transit operations to about $237,000. This subsidy amounts to about $13.09 annually on a single-family home having an equalized value of about $90,000.

2. City of Racine Transit System

   The City of Racine provides two types of transit services: regular fixed-route services for the general public and essentially parallel specialized demand-responsive services for handicapped persons. The general public service is provided over 10 fixed routes. Eight of the 10 routes are radial in design, emanating from downtown Racine, and provide direct nontransfer bus service to all portions of the City and immediate environs. The ninth route is a cross-town route located to the west of downtown Racine. The tenth route is a feeder route serving the Town of Caledonia and connecting to two of the eight radial routes. The system has an active fleet of 42 buses providing service from 5:30 a.m. to 7:00 p.m. on weekdays and from 7:00 a.m. to 6:00 p.m. on Saturdays. Headways approximate 20 to 30 minutes during peak periods and 30 to 45 minutes at all other times. The system carried about 2.0 million revenue passengers in 1989, down about 17 percent from a peak ridership level of about 2.4 million in the early 1980's. The basic bus fare is $0.60.

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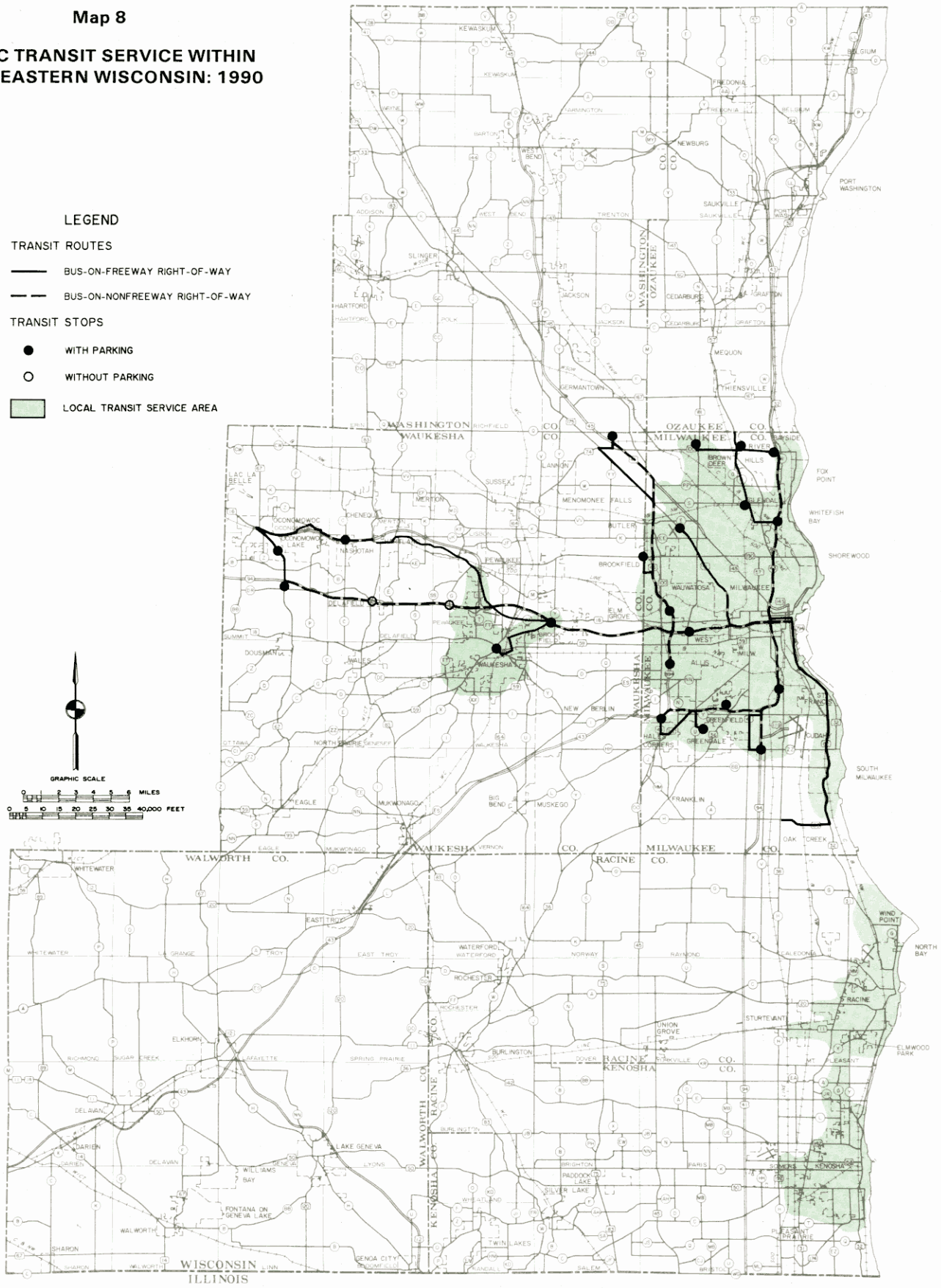
[6] *This definition excludes the following relatively specialized public transit services currently operating in the Region: the taxi-based demand-responsive service sponsored by the City of Whitewater; the taxi-based demand-responsive service and special commuter shuttle bus service sponsored by the City of Hartford; and the specialized services for elderly and handicapped people operated by each of the seven counties in the Region, except, however, certain such services, e.g., the user-side subsidy program in Milwaukee County, that are provided on a parallel basis with the fixed-route transit service and which meet federal requirements for such service.*

Map 8

PUBLIC TRANSIT SERVICE WITHIN SOUTHEASTERN WISCONSIN: 1990



Source: SEWRPC.

Table 15

SELECTED CHARACTERISTICS OF TRANSIT SYSTEM WITHIN SOUTHEASTERN WISCONSIN: 1989

Characteristic	Kenosha Transit System	Milwaukee County Transit System[a]	Belle Urban System (City of Racine)
Regular Fixed-Route Services			
Number of Bus Routes[b]			
Local	7	35	8
Express	--	3	--
Freeway Flyer	--	11	--
Schoolday-Industrial	10	14	--
Contract	--	2	2[d]
Total	17	65	10
Total Active Bus Fleet	31[e]	535	42
Peak Vehicle Requirements	28	452	33
Annual Revenue Vehicle Miles	683,300	16,989,100	1,249,900
Annual Ridership[c]	1,192,200	48,878,000	1,962,700
System Administration			
Policy	City of Kenosha Common Council	Milwaukee County Board of Supervisors and County Executive	Racine Transit and Parking Commission
Management and Operation	City of Kenosha Department of Transportation	Milwaukee Transport Services, Inc.	Taylor Enterprises, Inc.
Financial Performance			
Annual Revenue	$ 479,100	$29,730,100	$ 848,500
Annual Operating Expenses	2,144,900	67,342,400	3,301,700
Percentage Operating Expenses Recovered by Revenue	22.3	44.1	25.7
Deficit	1,665,800	37,612,300	2,453,200
Local Share of Deficit	271,300	6,778,400	230,700
Specialized Services for Handicapped Persons			
Service Provider	Kenosha Achievement Center	18 private taxicab and van carriers	Jelco of Wisconsin, Inc.
Name of Service	Care-A-Van	User-side subsidy program	--
Type of Service	Door-to-door lift-equipped vans	User choice	Door-to-door lift-equipped vans
Annual Ridership	13,600	367,600	18,900

In 1989, about 26 percent of the operating expenses were recovered through farebox and related revenues. Of the total operating deficit of about $2.45 million, about $970,000, or 40 percent, was covered by federal funds; $1.25 million, or 51 percent, by state funds; and the remaining $230,000, or 9 percent, by the City of Racine. Of the local total cost, $191,000 represented local property taxes levied for this purpose. The remaining $39,000 was generated by service contracts. In addition, about $90,000 annually of local funds are expended by the City of Racine for transit capital projects, bringing the average annual total of local property tax subsidy in the City of Racine for the transit system to about $281,000. This subsidy amounts to about $15.87 annually on a single-family home having an equalized value of $90,000.

3. City of Waukesha Transit System

The City of Waukesha provides three types of transit services: regular fixed-route services for the general public, special-purpose "tripper" routes serving the Waukesha school system, and essentially parallel specialized demand-responsive

Table 15 (continued)

Characteristic	Milwaukee-Racine-Kenosha Commuter Bus Service[a]	Waukesha Metro Transit (City of Waukesha)	Waukesha County Transit System
Regular Fixed-Route Services			
Number of Bus Routes[b]			
Local	--	8	2
Express	1	--	1
Freeway Flyer	--	--	3
Special Purpose	--	--	--
Contract	--	--	--
Total	1	8	6
Total Active Bus Fleet	3	14	15
Peak Vehicle Requirements	3	11	15
Annual Revenue Vehicle Miles	213,900	400,100	351,300
Annual Ridership[c]	68,300	376,900	288,400
System Administration			
Policy	Cities of Racine and Kenosha, and Counties of Racine and Kenosha	Waukesha Transit System Utility Board	Waukesha County Highway and Transportation Commission
Management and Operation	Wisconsin Coach Lines, Inc.	ATE Management and Service Company, Inc.	Wisconsin Coach Lines, Inc., and Milwaukee Transport Services, Inc.
Financial Performance			
Annual Revenue	$208,100	$ 182,900	$ 392,400
Annual Operating Expenses	557,500	1,040,400	1,299,700[f]
Percentage Operating Expenses Recovered by Revenue	40.2	17.0	30.1
Deficit	349,400	857,500	907,300
Local Share of Deficit	145,600	280,700	127,000[g]
Specialized Services for Handicapped Persons			
Service Provider	--	Dairyland Buses, Inc.	Waukesha County Department of Aging
Name of Service	--	Metrolift	Ride-Line; PM Ride-Line
Type of Service	--	Door-to-door lift-equipped buses	Door-to-door lift-equipped buses
Annual Ridership	--	6,200	1,300

[a] *Ridership and/or financial data estimated.*

[b] *Weekday service during school year.*

[c] *Linked passenger trips.*

[d] *Contract services also include extensions of three of the regular local routes.*

[e] *Excludes four buses which are undergoing rehabilitation to extend their useful service life and are not available for daily service.*

[f] *Includes $131,300 in capital depreciation and overhead expenses for competitively procured contract transit service provided by a private operator. Such expenses were considered as operating expenses eligible for 38 percent state funds under the state operating assistance program during 1989. Such expenses were also eligible for 80 percent capital assistance funds under the UMTA Section 9 formula assistance program during 1989.*

[g] *Includes the portion of total operating expenses that is expected to be absorbed by the private transit operator under its current contract with Waukesha County.*

Source: Transit system operators and SEWRPC.

services for handicapped persons. The general public service is provided over nine fixed routes that are radial in design, emanating from downtown Waukesha, and that provide direct nontransfer bus service to all portions of the City and immediate environs. Two of the routes serve important traffic generators located outside the City: the Waukesha County Technical College in the Village of Pewaukee and the Goerke's Corners transit station in the Town of Brookfield. The system has an active fleet of 17 buses providing service from 6:00 a.m. to 6:00 p.m. on weekdays and from 9:00 a.m. to 6:00 p.m. on Saturdays. Headways approximate 30 to 60 minutes at all times. The system carried about 383,000 revenue passengers in 1989, a level that has been relatively stable since 1985. The basic bus fare is $0.60.

In 1989 about 17 percent of the operating expenses were recovered through farebox and related revenues. Of the total operating deficit of about $857,500, about $181,400, or 21 percent, was covered by federal funds; $395,400, or 46 percent, by state funds; and the remaining $280,700, or 33 percent, by the City of Waukesha. All of the local funds came from the property tax levy. In addition, about $20,000 annually of local funds are expended by the City of Waukesha for capital projects, bringing the average annual total of local property tax subsidy in the City of Waukesha for the transit system to about $300,000. This subsidy amounts to about $15.73 annually on a single-family home having an equalized value of $90,000.

4. Milwaukee County Transit System

Milwaukee County provides five types of transit services: regular local fixed-route services for the general public, regular express fixed-route services for the general public, regular "freeway flyer" fixed-route services for the general public, special purpose fixed-route services for the general public, and the specialized demand-responsive—user-side subsidy—services for handicapped persons. The general public services are provided over 65 regular fixed routes, of which 35 routes are local in nature. The remaining 30 routes are express, freeway flyer, and special school routes. Of the 35 local routes, 15 are radial, emanating from downtown Milwaukee; 16 are crosstown routes outside downtown Milwaukee; and four are feeder bus routes which connect to the radial and crosstown routes. The local routes normally operate seven days a week from about 5:00 a.m. to 1:00 a.m. Headways on most local routes approximate 10 to 20 minutes during peak periods and 15 to 30 minutes at other times. There are three express bus routes operating over arterial streets. The subsystem of local and express routes forms a grid pattern over the local transit service area and is designed so that no passenger needs to transfer more than once to get to most destinations.

Milwaukee County also operates 11 "freeway flyer" routes from outlying park-ride lots to downtown Milwaukee, primarily during weekday peak periods. The remaining 16 routes consist of special school day and industrial work day routes designed to provide enhanced service to certain junior and senior high schools, the University of Wisconsin-Milwaukee, and certain major industrial areas.

Finally, Milwaukee County operates up to nine special-purpose routes in connection with sporting and other events at Milwaukee County Stadium or at the Bradley Center, and a guided sightseeing tour route during the summer months.

The Milwaukee County system has an active fleet of 535 buses. The system carried about 48.9 million revenue passengers in 1989, a level that has been relatively stable throughout the 1980's. The basic bus fare is $1.00, with substantial discounts provided for passengers who purchase weekly passes or ticket packs.

In 1989, about 44 percent of the operating expenses were recovered through fare-box and related revenues. Of the total operating deficit of about $37.6 million, about $5.2 million, or 14 percent, was covered by federal funds; about $25.6 million, or 68 percent, by state funds; and the remaining $6.8 million, or 18 percent, by Milwaukee County. In addition, about $640,000 annually of local funds are expended in

Milwaukee County for capital projects, bringing the average annual total of local property tax subsidy in Milwaukee County for transit operations to about $7.4 million. This subsidy amounts to about $27.94 annually on a single-family home having an equalized value of $90,000.

5. Waukesha County Transit System

Waukesha County contracts with a private operator and with Milwaukee County to provide local, express, and "freeway flyer" regular fixed-route services for the general public. In addition, Waukesha County provides essentially parallel specialized demand-responsive services for handicapped persons.

Regular service is provided over six fixed routes and primarily constitutes commuter-oriented service between the City of Milwaukee central business district and selected locations in Waukesha County in the Cities of Waukesha, Brookfield, and Oconomowoc and the Village of Menomonee Falls. Since the service is purchased by contract, Waukesha County does not maintain a bus fleet. The Waukesha County system carried about 288,000 revenue passengers during 1989, a level that is about 20 percent below a peak ridership level of 360,000 revenue passengers achieved in the early 1980's. The bus fare is distance based, ranging from $1.25 to $2.50.

In 1989, about 30 percent of the operating expenses were recovered through farebox and related revenues. Of the total operating deficit of about $907,300, about $286,400, or 32 percent, was covered by federal funds; $493,900, or 54 percent, by state funds; $41,000, or 5 percent, by Waukesha County; and the remaining $86,000, or 9 percent, by the private transit operator. This local Waukesha County subsidy amounts to about $0.31 annually on a single-family home having an equalized value of $90,000.

6. Milwaukee-Racine-Kenosha Commuter Bus System

The City of Racine is the public sponsor for the operation of a commuter bus service between Milwaukee, Racine, and Kenosha. Under this service, express bus transit is provided over a single fixed route between downtown Milwaukee and the Cities of Racine and Kenosha. Eight round trips are operated on an average weekday, with reduced service on weekends and holidays. The system is provided under contract by a private operator. The system carried about 68,000 revenue passengers in 1989, a level that is about 56 percent lower than the 1980 ridership of 156,000 revenue passengers. The bus fare is distance based and ranges from $1.70 to $4.20.

In 1989, about 37 percent of the operating expenses were recovered through fare-box revenues. Of the total operating deficit of about $349,400, $203,800, or 58 percent, was covered by state funds. The remainder of the deficit—estimated at $145,600—was borne by the private operator. No federal funds or local property tax monies are used to subsidize this service.

Collectively, the six public transit systems described above carried about 52.8 million revenue passengers in 1989, 93 percent of which was carried on the Milwaukee County transit system.[7] It is estimated that 4 percent of all trips made in southeastern Wisconsin on an average weekday are made by transit. In Milwaukee County that percentage increases to about 7 percent. An estimated 23 percent of all trips made to the Milwaukee central business district are made by transit. On certain major arterials in the Milwaukee area, transit trips have the effect of reducing vehicle traffic on an average weekday by up to 30 percent, and during the peak hour in the peak direction by up to 40 percent.

Commission travel surveys document the importance of the transit system, particularly to subgroups of the regional population—the low income, the young and the aged, minorities, and those who do not have access to an automobile. As shown on Table 16, transit provides mobility to low-income people, in particular, mobility to travel to and from work and school. Depending

[7] *On an average daily basis, public transit ridership in the Region totals 182,000 passengers. By comparison, the school districts in the Region collectively provide "yellow" school bus service to about 190,000 passengers daily.*

upon the particular system, from 30 to 60 percent of all transit riders come from homes with household incomes of $15,000 or less. The transit trips made by individuals from these low-income households for work purposes represents from 35 to 60 percent of all trips made on the transit system. Without public transit, many of the existing transit riders from low-income households would find it extremely difficult to travel, including to and from work, since 40 to 50 percent of transit passengers do not own an automobile.

System Plan

The adopted regional transportation system plan includes specific recommendations for strengthening and expanding public transit service within the Region.[8] Recommendations are provided for rapid and express elements of the transit system, as well as for local elements of the system. The rapid transit elements are intended to link the major regional activity centers—commercial, industrial, institutional, and recreational—to each other and to the various residential communities. Rapid transit services are characterized by relatively high operating speeds—regardless of transit mode—and preferential treatment such as the provision of exclusive rights-of-way or reserved lanes. Rapid transit service generally has relatively low accessibility—that is, wide station spacings, which may vary from one-half to two miles or more. Local transit service is provided over arterial, collector, and local streets, generally by a grid system of lines at one-half-mile to one-mile spacing, with stops every one-eighth to one-quarter mile to accommodate passenger boarding and alighting.

The key elements of the adopted regional plan with respect to public transit are identified on Map 9 and may be summarized as follows:

1. The development of a system of about 56 miles of rapid transit routes substantially—but not necessarily exclusively—within Milwaukee County. The plan suggests that such service could begin by instituting limited stop, express bus service on these routes, with eventual upgrading to light rail transit. These express bus or light rail rapid transit routes are intended to provide a significantly improved public transit service and provide an attractive alternative mode of travel to the personal automobile.

2. The institution of a commuter rail line from downtown Milwaukee through St. Francis, Cudahy, South Milwaukee, Oak Creek, Racine, and Kenosha, and thence into the Chicago area. Such commuter service is proposed to be provided over the Chicago & North Western Transportation Company lakefront railway line. The plan also envisions potential commuter rail service in the Milwaukee-Oconomowoc and Milwaukee-Grafton travel corridors.

3. The significant expansion and improvement of express bus-on-freeway rapid transit services. The plan envisions extending such services into all seven southeastern Wisconsin counties. The expanded service would operate from the outlying areas both to and from downtown Milwaukee, thus providing for "reverse" commuting. The service is proposed to operate with a limited number of intermediate stops to provide connections with the proposed express bus and light rail routes, as well as local bus service. Importantly, under the plan buses would receive preferential treatment in accessing the freeway system as called for under the Commission's recommended freeway traffic management system.

4. The expansion of local transit service to all of the greater Milwaukee area, including

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[8]*See SEWRPC Planning Report No. 7, The Land Use-Transportation Study; No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, and No. 33, A Primary Transit System Plan for the Milwaukee Area; also see SEWRPC Community Assistance Planning Report No. 79, Racine Area Transit System Plan and Program: 1984-1988; No. 83, A Transit System Operations Analysis for the City of Waukesha Transit System; No. 101, Kenosha Area Transit System Plan and Program: 1984-1988; No. 105, Waukesha County Transit Plan: 1988-1992; No. 150, A Rapid Transit Facility Plan for the Milwaukee Northwest Corridor; and No. 154, A Transit System Development Plan for the City of Waukesha: 1988-1992.*

Table 16

CHARACTERISTICS OF EXISTING TRANSIT USE AND AUTOMOBILE OWNERSHIP BY EXISTING TRANSIT PASSENGERS IN SOUTHEASTERN WISCONSIN

Annual Household Income of Existing Transit Passengers	Percent of Total Transit System Trips by Income Group	Percent of Total Work Purpose Transit System Trips by Income Group	Percent of Transit Passengers Within Each Income Group with No Automobile Available for Travel
City of Kenosha			
$14,999 or Less	63	55	54
$15,000 to $24,999	17	18	17
$25,000 to $39,999	14	20	4
$40,000 or More	6	7	0
Milwaukee County			
$14,999 or Less	50	42	50
$15,000 to $24,999	21	24	25
$25,000 to $39,999	20	23	8
$40,000 or More	9	11	4
City of Racine			
$14,999 or Less	61	63	43
$15,000 to $24,999	16	20	12
$25,000 to $39,999	16	13	4
$40,000 or More	7	4	2
City of Waukesha			
$14,999 or Less	41	36	42
$15,000 to $24,999	20	32	9
$25,000 to $39,999	23	27	1
$40,000 or More	16	5	0
Waukesha County			
$14,999 or Less	29	14	12
$15,000 to $24,999	11	21	8
$25,000 to $39,999	47	38	1
$40,000 or More	13	27	0

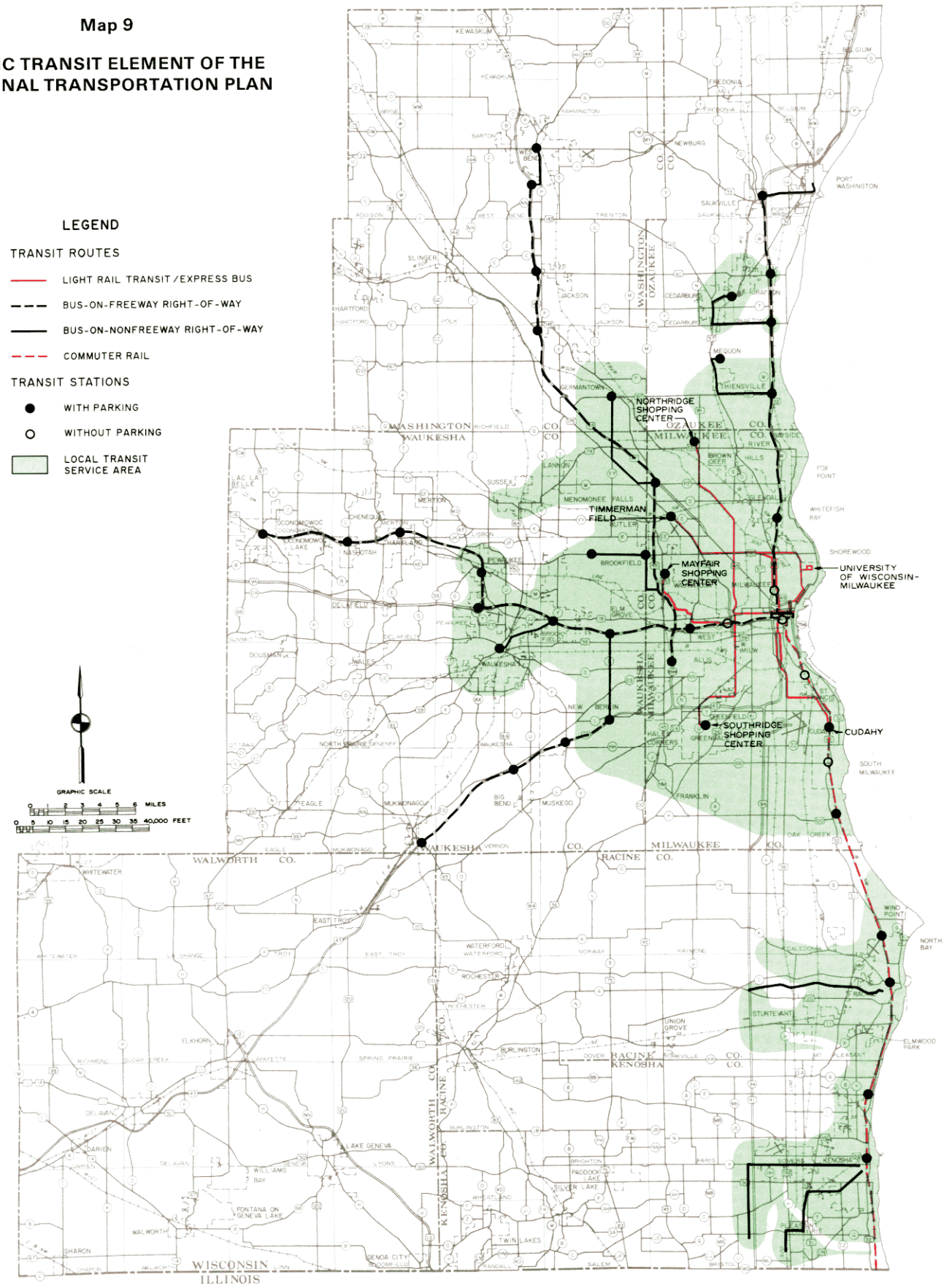
Source: SEWRPC.

northwestern and southern Milwaukee County, southern Ozaukee County, southeastern Washington County, and eastern Waukesha County, together with the expansion of the existing local transit services in the Kenosha, Racine, and Waukesha areas to serve existing and planned urban development.

The above regional plan recommendations would provide the Southeastern Wisconsin Region with a substantially expanded and improved transit system. The plan envisions the development of a true areawide transit system that ignores municipal and county boundaries, with a rapid transit element to serve a wide variety of trips and providing a competitive and attractive alternative to the automobile. Selected operating characteristics of the planned public transit system in southeastern Wisconsin are set forth in Table 17. Planned transit service levels—as measured by the vehicle miles of transit service provided and the average speed of a transit trip—are proposed to be nearly twice as good as existing levels. Implementing the plan could be expected to approximately double the existing level of transit use in the Region, increasing such use by 183,000 to 361,000 pas-

Map 9

PUBLIC TRANSIT ELEMENT OF THE REGIONAL TRANSPORTATION PLAN



Source: SEWRPC.

Table 17

SELECTED OPERATING CHARACTERISTICS OF PUBLIC TRANSIT SERVICE WITHIN THE SOUTHEASTERN WISCONSIN REGION: 1989 AND 2010 PLANS

Characteristics	Existing 1989[a]				2010 Plan			
	Milwaukee Area	Racine	Kenosha	Total	Milwaukee Area	Racine	Kenosha	Total
Round-Trip Route Miles								
Bus								
Freeway Flyer	473	--	--	473	764	--	--	764
Express	61	--	--	61	200	--	--	200
Local[b]	1,302	152	171	1,625	1,851	173	181	2,205
Subtotal	1,836	152	171	2,159	2,815	173	181	3,169
Light Rail	--	--	--	--	29	--	--	29
Commuter Rail	--	--	--	--	66	--	--	66
Total	1,836	152	171	2,159	2,910	173	181	3,264
Daily Vehicle Miles								
Bus								
Freeway Flyer	3,100	--	--	3,100	24,600	--	--	24,600
Express	3,400	--	--	3,400	14,500	--	--	14,500
Local[b]	56,300	4,400	2,100	62,800	71,900	6,300	6,200	71,900
Subtotal	62,800	4,400	2,100	69,300	111,000	6,300	6,200	111,000
Light Rail	--	--	--	--	3,600	--	--	3,600
Commuter Rail	--	--	--	--	5,500	--	--	5,500
Total	62,800	4,400	2,100	69,300	120,100	6,300	6,200	132,600
Daily Vehicle Requirements[c]								
Bus								
Freeway Flyer	50	--	--	50	158	--	--	158
Express	23	--	--	23	98	--	--	98
Local[b]	494	42	35	571	615	42	46	703
Subtotal	567	42	35	644	871	42	46	959
Light Rail	--	--	--	--	27	--	--	27
Commuter Rail	--	--	--	--	30	--	--	30[d]
Total	567	42	35	644	928	42	46	1,016

[a] *Estimated based on UMTA Section 15 transit operator reports, state transit operating assistance applications, and travel simulation network data.*

[b] *Includes special school tripper, University of Wisconsin-Milwaukee, and industry-oriented transit services.*

[c] *Includes spare vehicles.*

[d] *Commuter rail service in the Milwaukee-Racine-Kenosha corridor would require 30 bi-level gallery coaches and six diesel-electric locomotives.*

Source: SEWRPC.

sengers per average weekday; or from 4 to nearly 8 percent of the total person trips generated within the Region on an average weekday.

The importance of strengthening and improving the public transit system in the Region can be demonstrated by examining the potential increase in vehicular traffic if transit riders were to have to use personal automobiles. The potential impacts on the freeways and selected standard arterials in Milwaukee County under current transit ridership conditions are shown on Map 10. Particularly significant increases in vehicular traffic could be expected if there were no transit service on such important—and often heavily congested during the peak hours—arterials as the east-west and north-south freeways and Capitol Drive, North Avenue, and 27th Street.

The currently adopted plan envisions that the recommended public transit system improvements would come about via the cooperative action of the local governments concerned. Particular emphasis in this respect is placed on the role of counties in providing public transit service. Cooperative action at the county level would be essential to bringing about the rapid transit element of the plan, where many trips would be made across county lines.

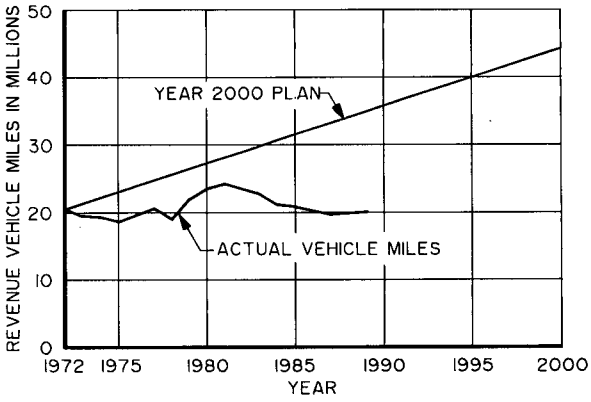
Plan Implementation

Only relatively modest steps have been taken to implement the transit recommendations included in the adopted plan. As shown in Figure 1, only about 20.0 million bus miles of urban public transit service were provided annually in the Region in 1989. This represents a decrease of about 0.5 million bus miles of service, or 2.3 percent, from the 20.5 million bus miles operated in 1972, the base year for the regional transit plan. By 1989, the plan had envisioned that transit service would increase by about 60 percent to 34.9 million transit bus miles per year, with a further increase to about 44.2 million transit vehicle miles annually upon full implementation of the plan. As measured by bus miles provided, public transit service in the Region peaked at about 24.2 million miles per year in 1981. Public funding constraints since that time have resulted in a significant decline of service.

With respect to the recommended rapid transit service, significant steps were taken early in the plan implementation period in instituting the

Figure 1

SOUTHEASTERN WISCONSIN URBAN PUBLIC TRANSIT SYSTEM VEHICLE MILES OF SERVICE PROVIDED: 1972 TO 2000



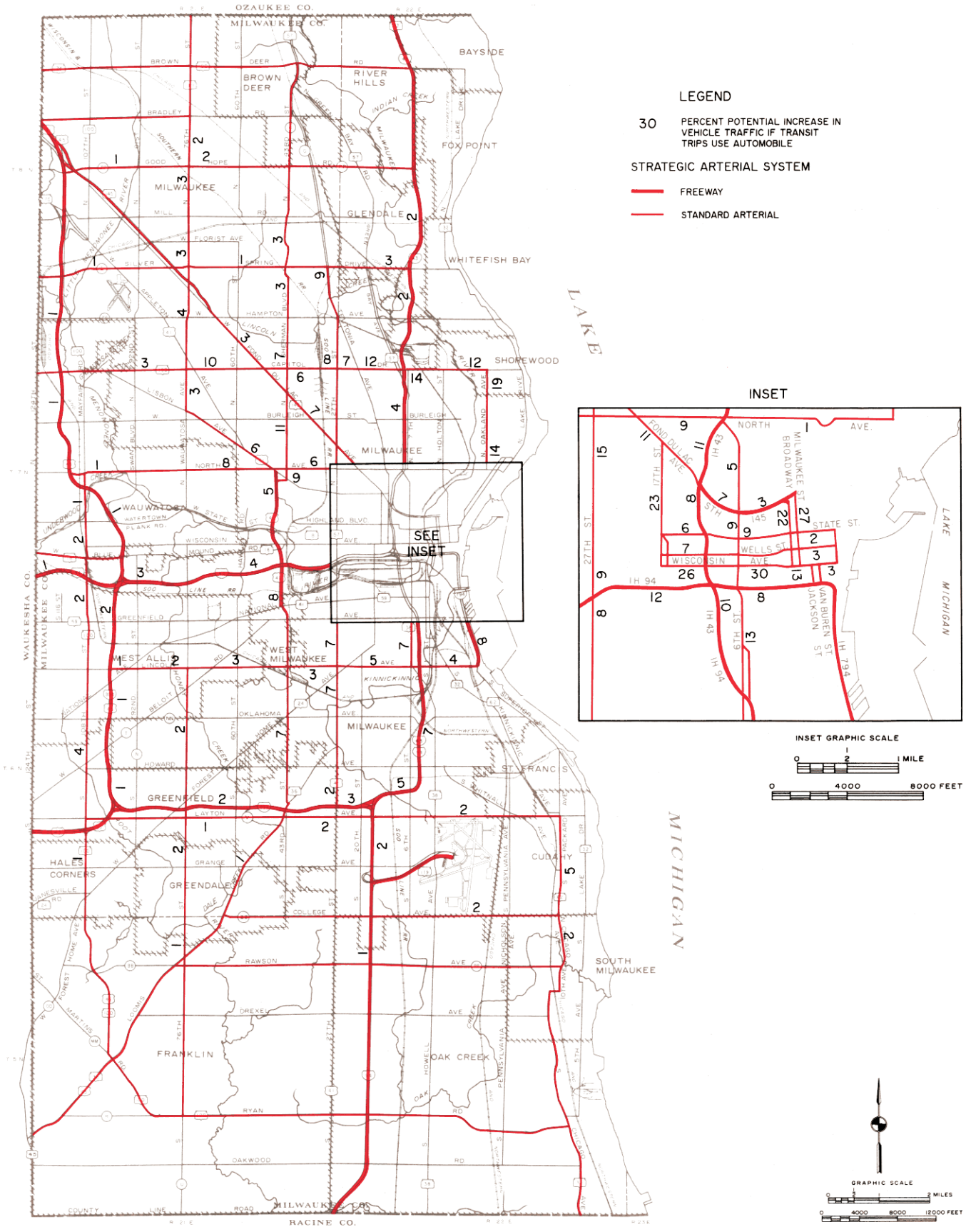
Source: SEWRPC.

freeway flyer bus system in the greater Milwaukee area. By 1989, freeway flyer service was provided over about 473 round-trip route miles servicing 14 outlying transit stations. Ridership on the freeway flyer service totaled about 1.27 million revenue passengers in 1989, down from a peak ridership level in 1980 of about 1.98 revenue passengers. In addition, Milwaukee County has taken significant steps in recent years to implement recommended express bus service in the northwestern corridor of Milwaukee County where previously planned freeways have been abandoned. Following completion of the major rapid transit service plan by the Commission in 1982, Milwaukee County undertook a facilities planning effort that examined in detail both light rail and express bus service in the northwestern corridor.[9] The Milwaukee County Board chose the express bus alternative, and directed that implementation of that alternative proceed. Milwaukee County subsequently received a $25.5 million federal grant to carry out the express bus alternative. Preliminary engineering work attendant to that implementation effort is now underway. In addition, the City of Milwaukee and the Wisconsin Department of Transportation currently are conducting

[9]*See SEWRPC Community Assistance Planning Report No. 150, A Rapid Transit Facility Plan for the Milwaukee Northwest Corridor.*

Map 10

POTENTIAL INCREASE IN AVERAGE WEEKDAY VEHICLE TRAFFIC IF EXISTING TRANSIT RIDERS USED AUTOMOBILE: 1988



Source: SEWRPC.

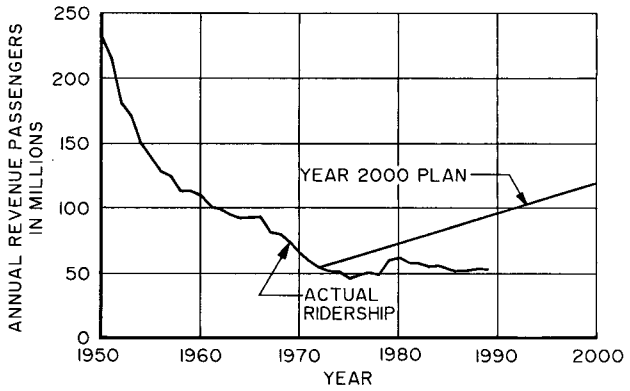
a study to reconsider light rail service in three of the rapid transit corridors identified in the adopted plan, as well as the commuter rail service recommended in the plan for the Kenosha-Racine-Milwaukee corridor.

With respect to the recommended local transit service, major efforts have been taken to re-establish mass transit service in the Kenosha, Racine, and Waukesha areas as recommended in Commission plans. In two of those communities—Kenosha and Waukesha—there were periods of time when there was no public transit service following discontinuance of the privately owned and operated systems. As noted earlier, ridership levels on these three systems have been relatively stable in recent years.

In part because of the lack of full implementation of the public transit element of the adopted regional transportation plan, public transit ridership in southeastern Wisconsin in 1989 totaled about 52.8 million trips—about 1.1 million, or about 2 percent, less than in 1972 (see Figure 2); and about 41.0 million trips per year less than envisioned by 1989 in the plan. Moreover, the 1989 level of ridership was 8.9 million trips fewer than the 1980 level of 61.7 million trips—the highest level achieved since 1970.

Figure 2

SOUTHEASTERN WISCONSIN URBAN PUBLIC TRANSIT SYSTEM RIDERSHIP: 1950-2000



Source: SEWRPC.

System Finance

Capital expenditures on the regional transit system are funded through a combination of federal, county, and local monies. Operating expenses attendant to the regional transit system are funded through a combination of farebox revenues and federal, state, county, and local monies. An analysis was conducted of recent trends in regional transit system capital and operating expenditures and revenues, and of the costs and revenues associated with implementing the regional plan for public transit. The results of this analysis may be summarized as follows:

1. Capital expenditures on the regional transit system over the five-year period 1985 through 1989 are summarized on Table 18. Collectively, the public transit operators in the Region expended about $18.1 million on an average annual basis over that period. Of that total, about $15.2 million came from federal grants. The remaining $2.9 million came from local funds.

2. Operating expenditures for the regional transit system over the five-year period 1985 through 1989 are summarized in Table 19. Collectively, the public transit operators in the Region have expended about $75.7 million on an average annual basis in operating and maintaining the regional transit system. Of this total, $31.5 million, or 42 percent, came from farebox and miscellaneous revenues. The remaining $44.2 million, or 58 percent, constituted the average annual public transit operating subsidy over that period. That public subsidy was shared by the various governmental levels as follows: $7.9 million, or 18 percent, federal; $28.4 million, or 64 percent, state; and the remaining $7.9 million, or 18 percent, county and local.

3. The estimated capital expenditures required to implement the transit element of the regional transportation plan over the 20-year period 1990-2010 are summarized in Table 20. The average annual capital investment required over that period to simply maintain the existing level of transit service, i.e., primarily replace existing buses, is estimated at $14.0 million. In order to implement the regional plan recommendations, however—including substantial improvement and expansion of express and local bus services, development of an approximately 14-mile light rail transit line, and institution of the recommended commuter rail service in the

Milwaukee-Racine-Kenosha corridor—an additional $23.4 million would be required annually over the 20-year period. Given the current level of capital funding noted above—but adjusting that level to reflect the spenddown of previously accumulated federal monies—the estimated average annual shortfall in capital funding to implement the regional transit plan is about $23.5 million, or a total of $470.9 million over the 20-year period.

4. The estimated operating costs of implementing the transit element of the regional transportation plan over the 20-year period 1990 through 2010 are summarized in Table 21. The average annual operating cost required over that period to fully implement the plan is estimated at $122.7 million. Of that total, $45.5 million, or 37 percent, may be expected to come from farebox revenues. An additional $44.9 million can be expected to come from maintaining the 1989 levels of federal, state, county, and local public subsidies for transit operating purposes. This leaves an anticipated average annual shortfall for transit operating purposes of about $32.3 million, or about $647.4 million over the 20-year period. Given current program provisions, it may be expected that the State would fund about $16.8 million annually. The remainder of that shortfall, about $15.5 million annually, would have to come from county and local sources or increased fares.

Findings—Public Transit System

The following findings may be drawn from the foregoing analysis of the public transit system:

1. Responsibility for public transit in the Region is presently being assumed by Milwaukee and Waukesha Counties and the Cities of Kenosha, Racine, and Waukesha. Collectively, these five public transit operators are finding it difficult to implement the transit element of the regional transportation plan. Under that plan, there would be significantly improved public transit service provided throughout the Region, including new and improved rapid transit and express bus routes, an approximately 14-mile light rail transit line, a commuter rail line in the Milwaukee-Racine-Kenosha corridor, and improved local transit service in all of the Milwaukee, Racine, and Kenosha urbanized areas. Under the recommended plan, transit would become a competitive and attractive alternative to the automobile, and the level of transit use in the Region could be expected to about double, rising from about 4 to nearly 8 percent of the total person trips generated in the Region on an average weekday.

2. Local costs associated with funding the public transit system in the Region fall on the property taxpayers of Milwaukee and Waukesha Counties, and the Cities of Kenosha, Racine, and Waukesha. Even among these five units of government, there is a significant differential in the level of local tax effort—ranging from a low of about $0.31 annually on a typical single-family home in Waukesha County, to a high of about $27.94 annually on a comparable home in Milwaukee County. In the City of Waukesha where residents pay for both city and county transit services, the level of effort is $16.04 annually.

3. The reasons for the lack of implementation of the transit element of the regional plan relate in part to the escalating costs of providing transit service; declining public transit ridership, as ridership tends to rise and fall with motor fuel prices; and a lack of strong public commitment to the improvement of public transportation as an element of both a balanced transportation system for the Region and of the air quality attainment and maintenance plan for the Region. In recent years, federal funding for operating costs for public transit have declined both relatively with respect to general price inflation and in absolute dollar amounts; transit service levels have been reduced; transit fares increased; and state and local transit subsidies increased. Further increases in local subsidies for transit service will be very difficult to achieve. Significant additional increases in base transit fares can be expected to adversely affect transit ridership.

4. The public transit system should be viewed as an integral part of the regional transportation system, since its continued operation and improvement benefit the

Table 18

CAPITAL PROJECT EXPENDITURES BY FUNDING SOURCE FOR THE PUBLIC TRANSIT SYSTEM WITHIN SOUTHEASTERN WISCONSIN: 1985-1989

Transit System	Source of Funds	Capital Expenditures by Year[a]					Five-Year Average
		1985	1986	1987	1988	1989	
Kenosha County	Federal						
	UMTA Section 3	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	UMTA Section 5/9	38,500	1,200	642,800	422,400	444,600	309,900
	Subtotal	$ 38,500	$ 1,200	$ 642,800	$ 422,400	$ 444,600	$ 309,900
	Local						
	Property Tax	$ 9,600	$ 300	$ 0	$ 0	$ 0	$ 2,000
	Other[b]	0	0	160,700	105,600	111,100	75,500
	Subtotal	$ 9,600	$ 300	$ 160,700	$ 105,600	$ 111,100	$ 77,500
	Total	$ 48,100	$ 1,500	$ 803,500	$ 528,000	$ 555,700	$ 387,400
Milwaukee County	Federal						
	UMTA Section 3	$ 0	$ 0	$ 0	$25,500,000	$ 1,757,000	$ 5,451,400
	UMTA Section 5/9	10,507,000	8,969,000	8,943,000	6,989,000	8,749,000	8,831,400
	Subtotal	$10,507,000	$ 8,969,000	$ 8,943,000	$32,489,000	$10,506,000	$14,282,800
	Local						
	Property Tax	$ 425,000	$ 821,000	$ 644,000	$ 918,000	$ 400,000	$ 641,600
	Other[b]	2,202,000	944,000	1,502,000	3,348,000[c]	2,423,000	2,083,800
	Subtotal	$ 2,627,000	$ 1,765,000	$ 2,146,000	$ 4,266,000	$ 2,823,000	$ 2,725,400
	Total	$13,134,000	$10,734,000	$11,089,000	$36,755,000	$13,329,000	$17,008,200
Racine County	Federal						
	UMTA Section 3	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	UMTA Section 5/9	0	0	21,200	1,146,200	771,200	387,700
	Subtotal	$ 0	$ 0	$ 21,200	$ 1,146,200	$ 771,200	$ 387,700
	Local						
	Property Tax	$ 100	$ 8,000	$ -1,000	$ 306,300	$ 134,800	$ 89,600
	Other[b]	0	0	0	0	58,000[d]	11,600
	Subtotal	$ 100	$ 8,000	$ -1,000	$ 306,300	$ 192,800	$ 101,200
	Total	$ 100	$ 8,000	$ 20,200	$ 1,452,500	$ 964,000	$ 488,900
City of Waukesha	Federal						
	UMTA Section 3	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	UMTA Section 5/9	254,200	26,700	13,900	46,400	517,400	171,700
	Subtotal	$ 254,200	$ 26,700	$ 13,900	$ 46,400	$ 517,400	$ 171,700
	Local						
	Property Tax	$ 63,600	$ 6,700	$ 3,500	$ 11,600	$ 13,500	$ 19,800
	Other[b]	0	0	0	0	115,800	23,200
	Subtotal	$ 63,600	$ 6,700	$ 3,500	$ 11,600	$ 129,300	$ 43,000
	Total	$ 317,800	$ 33,400	$ 17,400	$ 58,000	$ 646,700	$ 214,700
Waukesha County	Federal						
	UMTA Section 3	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	UMTA Section 5/9	0	0	0	81,200	105,000	37,200
	Subtotal	$ 0	$ 0	$ 0	$ 81,200	$ 105,000	$ 37,200
	Local						
	Property Tax	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Other	0	0	0	0	0	0
	Subtotal	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
	Total	$ 0	$ 0	$ 0	$ 81,200	$ 105,000	$ 37,200

Table 18 (continued)

Transit System	Source of Funds	Capital Expenditures by Year[a]					Five-Year Average
		1985	1986	1987	1988	1989	
Region	Federal						
	UMTA Section 3	$ 0	$ 0	$ 0	$25,500,000	$ 1,757,000	$ 5,451,400
	UMTA Section 5/9	10,799,700	8,996,900	9,620,900	8,685,200	10,587,200	9,737,900
	Subtotal	$10,799,700	$ 8,996,900	$ 9,620,900	$34,185,200	$12,344,200	$15,189,300
	Local						
	Property Tax	$ 498,300	$ 836,000	$ 646,500	$ 1,235,900	$ 548,300	$ 753,000
	Other	2,202,000	944,000	1,662,700	3,453,600	2,707,900	2,194,100
	Subtotal	$ 2,700,300	$ 1,780,000	$ 2,309,200	$ 4,689,500	$ 3,256,200	$ 2,947,100
	Total	$13,500,000	$10,776,900	$11,930,100	$38,874,700	$15,600,400	$18,136,400

[a] *Expenditures based on year of obligation of federal transit assistance grants.*

[b] *Unless otherwise noted, the source of other local funds was bonding.*

[c] *Excludes $6.5 million in land used as the local share for a federal Urban Mass Transportation Administration Section 3 capital assistance grant for improved express bus services in the northwest corridor of Milwaukee County.*

[d] *Consists of funds contributed by the private sector for the purchase of trolley buses.*

Source: SEWRPC.

arterial street and highway system, particularly during peak periods of travel. If there were no public transit service, even under current ridership levels, certain major arterials in the Milwaukee area would have to carry up to 40 percent more traffic, thus worsening traffic congestion.

5. The public transit system is particularly important to certain subgroups of the regional population, including the low income, the young and the aged, minorities, and those without access to an automobile. For many of these individuals, transit is critical for making trips to and from work and school.

6. Significant shortfalls in funding the needed improvements to the transit system in the Region are expected over the next two decades. If the regional plan recommendations are to be carried out, an additional $23.5 million annually will have to be expended for capital improvements in the transit system. In addition, the anticipated shortfall for transit operating purposes totals about $32.3 million. Thus, the total shortfall for transit is estimated at $55.8 million annually, or about $1.1 billion over the 20-year period.

REGIONAL AIRPORT SYSTEM

System Description

The regional airport system of southeastern Wisconsin is herein defined as consisting of those airports in southeastern Wisconsin that have been found in the adopted regional airport system plan to be essential to meeting the current and future air transportation needs of the seven-county Region.[10] While there are 103 officially recognized airports in the seven-county Southeastern Wisconsin Region, the adopted plan identified only 11 for inclusion in the regional airport system. Of those 11 airports, eight are publicly owned and three are privately owned. The 11 airports are identified on Map 11.

Each airport in the regional system is classified as prescribed by the Federal Aviation Administration based upon the size and performance of

[10] *The adopted plan is set forth in SEWRPC Planning Report No. 38, A Regional Airport System Plan for Southeastern Wisconsin: 2010, May 1987, and replaces an initial regional airport system plan adopted in 1976.*

Table 19

ANNUAL TRANSIT SYSTEM OPERATING EXPENDITURES WITHIN SOUTHEASTERN WISCONSIN: 1985-1989

Transit Operator	Source of Funds	Operating Expenditures by Year[a]					Average Annual
		1985	1986	1987	1988	1989[b]	
City of Kenosha	Operating Revenues	$ 420,000	$ 415,700	$ 431,200	$ 453,600	$ 479,100	$ 439,900
	Operating Assistance						
	Federal Aid	$ 743,500	$ 821,000	$ 628,400	$ 618,200	$ 579,400	$ 678,100
	State Aid	593,400	711,650	703,300	722,400	815,100	709,200
	Local Aid						
	Property Taxes	0	-50,650	49,900	70,300	236,300	61,200
	Other	--	--	62,600	62,000	35,000	--
	Subtotal	$ 0	$ -50,650	$ 112,500	$ 132,300	$ 271,300	$ 61,200
	Subtotal	$ 1,336,900	$ 1,482,000	$ 1,444,200	$ 1,472,900	$ 1,665,800	$ 1,448,500
	Total	$ 1,756,900	$ 1,897,700	$ 1,875,400	$ 1,926,500	$ 2,144,900	$ 1,888,400
Milwaukee County	Operating Revenues	$29,004,500	$29,707,200	$29,533,400	$29,986,100	$29,730,100	$29,592,300
	Operating Assistance						
	Federal Aid	$ 6,016,800	$ 6,171,400	$ 5,864,900	$ 5,347,600	$ 5,291,100	$ 5,738,400
	State Aid	22,947,800	25,906,200	25,269,000	26,688,900	27,408,900	25,644,200
	Local Aid						
	Property Taxes	9,178,900	5,907,500	5,375,300	7,752,900	8,291,400	7,301,200
	Other	53,200	63,000	62,100	60,600	62,100	60,200
	Subtotal	$ 9,232,100	$ 5,970,500	$ 5,437,300	$ 7,813,400	$ 8,353,400	$ 7,361,400
	Subtotal	$38,196,700	$38,048,100	$36,571,200	$39,849,900	$41,053,400	$38,744,000
	Total	$67,201,200	$67,755,300	$66,104,600	$69,836,000	$70,783,500	$68,336,300
City of Racine	Operating Revenues	$ 774,600	$ 736,000	$ 702,500	$ 895,800	$ 848,500	$ 791,500
	Operating Assistance						
	Federal Aid	$ 1,037,100	$ 1,169,300	$ 1,121,600	$ 1,149,600	$ 967,900	$ 1,089,100
	State Aid	943,700	1,097,400	1,141,600	1,168,600	1,254,600	1,121,200
	Local Aid						
	Property Taxes	-108,400	-98,600	52,200	-150,400	191,600	-22,700
	Other	49,300	22,300	26,300	52,600	39,100	37,900
	Subtotal	$ -59,100	$ -76,300	$ 78,500	$ -97,800	$ 230,700	$ 15,200
	Subtotal	$ 1,921,700	$ 2,190,400	$ 2,341,700	$ 2,220,400	$ 2,453,200	$ 2,225,500
	Total	$ 2,696,300	$ 2,926,400	$ 3,044,200	$ 3,116,200	$ 3,301,700	$ 3,017,000
Milwaukee-Racine-Kenosha Commuter Bus	Operating Revenues	N/A	$ 228,000	$ 209,500	$ 214,000	$ 215,500	$ 173,400
	Operating Assistance						
	Federal Aid	$ --	$ --	$ --	$ --	$ --	$ 0
	State Aid	107,000	137,700	166,100	177,400	203,800	158,400
	Local Aid						
	Property Taxes	--	--	--	--	--	0
	Other	--	1,600	67,400	109,700	117,100	59,200
	Subtotal	$ --	$ 1,600	$ 67,400	$ 109,700	$ 117,100	$ 59,200
	Subtotal	$ 107,000	$ 139,300	$ 233,500	$ 287,100	$ 320,900	$ 217,600
	Total	N/A	$ 367,300	$ 443,000	$ 501,100	$ 536,400	$ 391,000

Table 19 (continued)

Transit Operator	Source of Funds	Operating Expenditures by Year[a]					Average Annual
		1985	1986	1987	1988	1989[b]	
City of Waukesha	Operating Revenues	$ 169,200	$ 176,100	$ 159,600	$ 175,000	$ 182,900	$ 172,600
	Operating Assistance						
	Federal Aid	$ 267,000	$ 206,000	$ 226,900	$ 183,300	$ 181,400	$ 212,900
	State Aid	300,300	348,900	355,300	371,000	395,400	354,200
	Local Aid						
	Property Taxes	121,500	200,600	206,200	259,900	280,700	213,800
	Other	--	--	--	--	--	0
	Subtotal	$ 121,500	$ 200,600	$ 206,200	$ 259,900	$ 280,700	$ 213,800
	Subtotal	$ 688,800	$ 755,500	$ 788,400	$ 814,200	$ 857,500	$ 780,900
	Total	$ 858,000	$ 931,600	$ 948,000	$ 989,200	$ 1,040,400	$ 953,500
Waukesha County	Operating Revenues	$ 409,400	$ 359,700	$ 348,900	$ 363,500	$ 392,400	$ 374,800
	Operating Assistance						
	Federal Aid	$ 167,700	$ 199,500	$ 226,900	$ 264,500	$ 286,400	$ 229,000
	State Aid	328,200	364,500	369,900	459,000	493,900	403,100
	Local Aid						
	Property Taxes	40,000	48,400	40,700	41,000	41,000	42,200
	Other	--	--	--	34,900	86,000	24,200
	Subtotal	$ 40,000	$ 48,400	$ 40,700	$ 75,900	$ 127,000	$ 66,400
	Subtotal	$ 535,900	$ 612,400	$ 637,500	$ 799,400	$ 907,300	$ 698,500
	Total	$ 945,300	$ 972,100	$ 986,400	$ 1,162,900	$ 1,299,700	$ 1,073,300
Region	Operating Revenues	$30,777,700	$31,622,700	$31,385,100	$32,088,000	$31,848,500	$31,544,500
	Operating Assistance						
	Federal Aid	$ 8,232,100	$ 8,567,200	$ 8,068,700	$ 7,563,200	$ 7,306,200	$ 7,947,500
	State Aid	25,220,400	28,566,350	28,005,200	29,587,300	30,571,700	28,390,300
	Local Aid						
	Property Taxes	9,232,000	6,007,250	5,724,300	7,973,700	9,041,000	7,595,700
	Other	102,500	86,900	218,400	319,800	339,300	181,500
	Subtotal	$ 9,334,500	$ 6,094,150	$ 5,942,700	$ 8,293,500	$ 9,380,300	$ 7,777,200
	Subtotal	$42,787,000	$43,227,700	$42,016,600	$45,444,000	$47,258,200	$44,115,000
	Total	$73,564,700	$74,850,400	$73,401,700	$77,532,000	$79,106,700	$75,659,500

NOTE: N/A indicates data not available.

[a] *Based on Wisconsin Department of Transportation definitions under the state urban mass transportation operating assistance program. Includes expenditures for specialized transit services for the handicapped provided by transit operators to meet federal guidelines.*

[b] *Unaudited.*

Source: SEWRPC.

the aircraft intended to use the airport. That classification system is summarized in Table 22. General Mitchell International Airport is the only regional airport classified as a Transport (T) airport providing scheduled air transportation services. General Mitchell Airport is owned, operated, and maintained by Milwaukee County.

Four additional airports in the system are recommended to be classified as General Utility-Stage II (GU-II) airports, although at present only three of the four—Kenosha Regional Airport, Waukesha County-Crites Field, and Racine-John H. Batten Field—are sufficiently improved to warrant that classification. West Bend

Table 20

ESTIMATED CAPITAL EXPENDITURES REQUIRED TO IMPLEMENT THE PUBLIC TRANSIT ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

Item	Capital Dollars Required Over the Period 1991-2010 (millions)					
	To Maintain Existing Service		To Implement Plan		Total[a]	
	20-Year Total	Average Annual	20-Year Total	Average Annual	20-Year Total	Average Annual
Total Capital Projects	$279.4	$14.0	$469.5	$23.4	$748.9	$37.4
Available Revenues						
Federal	$120.0	$ 6.0[b]	$100.0	$ 5.0[c]	$220.0	$11.0
Local	58.0	2.9	0.0	0.0	58.0	2.9
Total	$178.0	$ 8.9	$100.0	$ 5.0	$278.0	$13.9
Shortfall	$101.4	$ 5.1	$369.5	$18.4	$470.9	$23.5

[a]*Includes $429 million for improved bus services; $250 million for a single 14-mile light rail line; and $70 million for a commuter rail line in the Milwaukee-Racine-Kenosha corridor.*

[b]*This figure has been adjusted substantially downward from the trends shown in Table 18 to reflect declining federal capital aids and the anticipated spenddown of previously accumulated federal capital funds.*

[c]*This figure assumes additional discretionary federal capital funds for planned system expansion and represents approximately a 25 percent federal share of the light rail, commuter rail, and bus capital costs.*

Source: SEWRPC.

Municipal Airport is the fourth facility proposed to be so classified once recommended improvements are in place. The Kenosha Airport is owned, operated, and maintained by the City of Kenosha; the Waukesha Airport by Waukesha County; and the West Bend Airport by the City of West Bend. The Racine Airport is privately owned and operated.

Three additional airports in the system are recommended to be classified as General Utility-Stage I (GU-I) airports, although at present only two of the three—East Troy Municipal Airport and Lawrence J. Timmerman Field—are sufficiently improved to warrant that classification. Hartford Municipal Airport is the third facility proposed to be so classified once recommended improvements are in place. Hartford Airport is owned, operated, and maintained by the City of Hartford; Lawrence J. Timmerman Field by Milwaukee County; and East Troy Municipal Airport by the Village of East Troy.

The remaining three airports in the regional system are recommended to be classified as Basic Utility-Stage II (BU-II) airports, although at present only two—Burlington Municipal Airport and Capitol Airport in the City of Brookfield—are sufficiently improved to warrant that classification. Sylvania Airport in the Town of Yorkville, Racine County, is the third facility proposed to be so classified once recommended improvements are in place. Burlington Airport is owned, operated, and maintained by the City of Burlington. Capitol and Sylvania Airports are privately owned and operated.

The 11 airports identified in the plan do indeed function as a true system over the entire seven-county Region. The 10 general aviation airports

Table 21

ESTIMATED OPERATING EXPENDITURES REQUIRED TO IMPLEMENT THE PUBLIC TRANSIT ELEMENT OF THE REGIONAL TRANSPORTATION PLAN

Item	Operating Dollars Required Over the Period 1991-2010 (millions)					
	To Maintain Existing Service		To Implement Plan		Total	
	20-Year Total	Average Annual	20-Year Total	Average Annual	20-Year Total	Average Annual
Annual Operation and Maintenance Cost	$1,582.0	$79.1	$871.0	$43.6	$2,453.0	$122.7
Available Revenues						
Farebox	$ 524.1	$26.2[a]	$384.9	$19.3	$ 909.0	$ 45.5
Federal	99.9	5.0[a]	--	--	99.9	5.0
State	609.1	30.5	--	--	609.1	30.5
Local	187.6	9.4	--	--	187.6	9.4
Total	$1,420.7	$71.1	$384.9	$19.3	$1,805.6	$ 90.4
Shortfall						
State	$ --	$ --	$335.4	$16.8	$ 335.4	$ 16.8
Local	161.3	8.0	150.7	7.5	312.0	15.5
Total	$ 161.3	$ 8.0	$486.1	$24.3	$ 647.4	$ 32.3

[a]*The federal and farebox revenues shown in this table are less than existing revenues from these sources for the year 1989 shown in Table 19. The figures in this table represent adjusted estimates of the future value of such revenues given the historical differential impact of general price inflation on transit operating costs and revenues, the ridership effect of increasing fares, and the policy of the federal government to reduce in real terms federal transit operating aids.*

Source: SEWRPC.

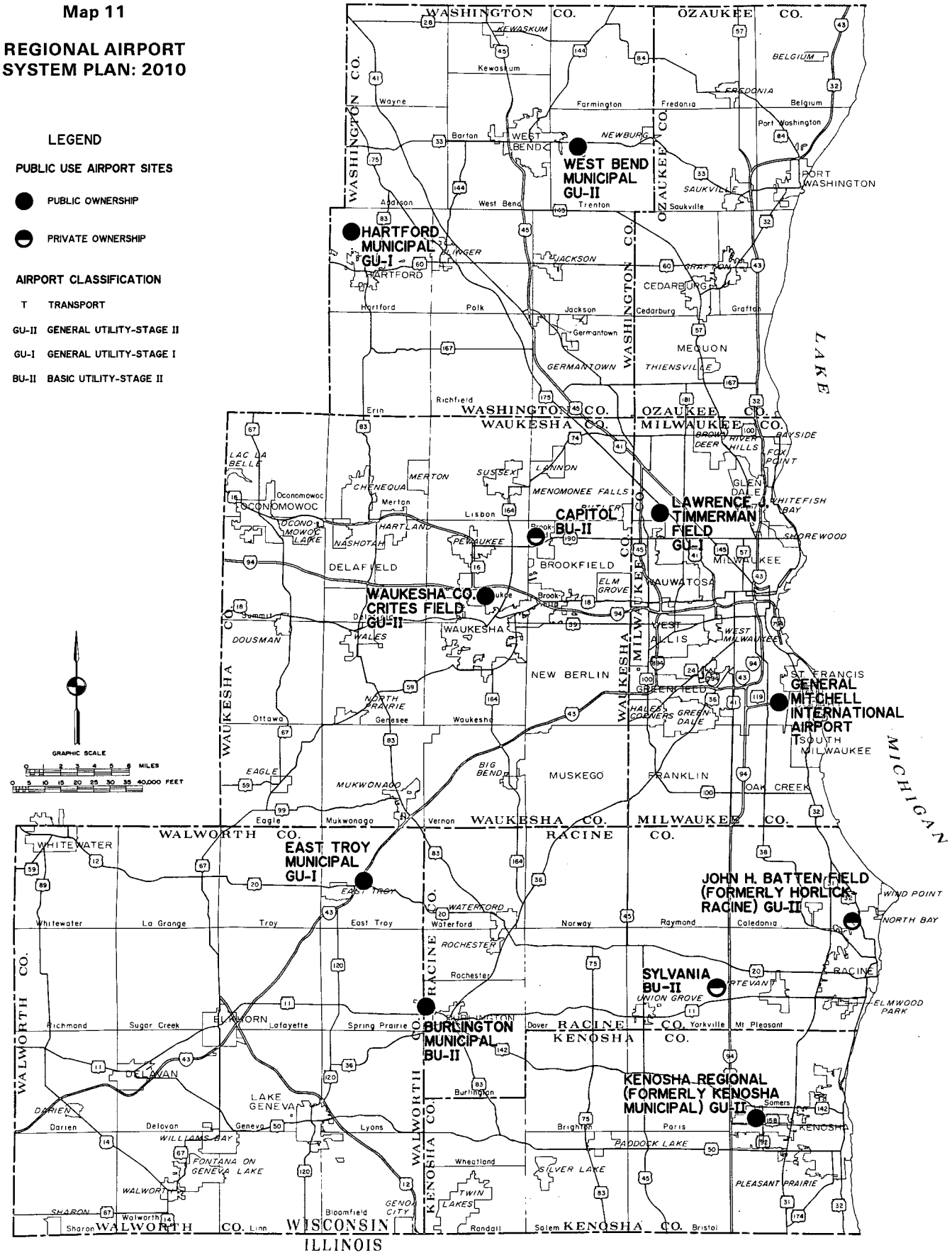
perform a crucial function of relieving demand at General Mitchell International Airport, and thereby permit continued commercial airline growth without attendant congestion, excessive delays, and potential safety hazards. Recognizing this interrelationship, the adopted regional airport system plan recommends that the federal government grant reliever status to all 10 of the general aviation airports included in the regional system, thereby making such facilities available for special federal funding considerations. By mid-1990, five of the 10 airports had been so designated: Timmerman Field, John H. Batten Field, Kenosha Regional, West Bend Municipal, and Capitol.

The areawide nature of the 10 general aviation airports is also evidenced by the service areas of each airport as measured by the location of the home or the business of registered aircraft. Analyses conducted by the Regional Planning Commission demonstrate that the geography of the locus of the airport users is far more expansive than the geography of the public agency responsible for the airport. Service areas were found to extend for many miles around each airport. The areawide nature of General Mitchell Airport is unquestioned; a November 1989 survey conducted by the Regional Planning Commission found that only 43 percent of enplaning passengers had trip origins in Milwaukee County.

The adopted regional airport system plan recommends that public funding be directed at the improvement and maintenance of the 11 airports in the system. The plan accommodates continued private ownership of John H. Batten Field, Capitol Airport, and Sylvania Airport. Public acquisition of any or all of these three

Map 11

REGIONAL AIRPORT SYSTEM PLAN: 2010



Source: SEWRPC.

Table 22

AIRPORT CLASSIFICATIONS USED BY THE FEDERAL AVIATION ADMINISTRATION FOR AIRPORT PLANNING AND DESIGN

Airport Class	Description
BU-I	A Basic Utility-Stage I airport is intended to serve all small single-engine, propeller-driven aircraft and the smallest of the twin-engine, propeller-driven aircraft. These aircraft typically seat one to four people, and are generally used for personal and sport flying, and for training and agricultural purposes. Within southeastern Wisconsin, such an airport would have a primary runway with a minimum length of 2,800 feet
BU-II	A Basic Utility-Stage II airport is intended to serve all small single-engine, propeller-driven aircraft and most of the twin-engine, propeller-driven aircraft. Only the largest twin-engine, propeller-driven aircraft—those that typically seat 6 to 14 people—cannot be accommodated. This type of airport accommodates not only those aircraft typically used for personal and sport flying, but also many of the smaller aircraft used for business and charter purposes. Within southeastern Wisconsin, such an airport would have a primary runway with a minimum length of 3,300 feet
GU-I	A General Utility-Stage I airport is intended to serve all single-engine and twin-engine propeller-driven aircraft. In addition to the smaller aircraft, these airports can accommodate many of the larger twin-engine piston and turboprop aircraft, including those that typically seat 6 to 14 passengers. Within southeastern Wisconsin, such an airport would have a primary runway with a minimum length of 3,900 feet
GU-II	A General Utility-Stage II airport is intended to serve all single-engine aircraft; virtually all twin-engine piston and turboprop aircraft, including propeller-driven aircraft used by commuter airlines; and most business and corporate jets. Such an airport usually would have the capability to accommodate precision instrument approach operations. Within southeastern Wisconsin, such an airport would have a primary runway with a minimum length of 4,800 feet
T	A Transport airport is intended to serve all aircraft up to and including large jet airliners and military transports. Transport airports are primarily designed to handle scheduled air carrier operations and traffic, but frequently also serve significant levels of general aviation activity. Within southeastern Wisconsin, such an airport would have a primary runway with a minimum length of 5,500 feet

Source: Federal Aviation Administration and SEWRPC.

airports is recommended, however, only if the airports are proposed to be closed or if improvements are not undertaken as recommended in the plan and the failure to undertake such improvements adversely impacts the performance of the regional aviation system. The plan recommends that Racine and Waukesha Counties assume any needed responsibility for public ownership of these private airports.

Commercial aviation activity at General Mitchell International Airport has increased significantly in recent years (see Table 23). By 1990, about 2.1 million passengers enplaned at this major airport, nearly double the number in 1975. By the year 2010, the number of enplaning passengers at this airport may be expected to range from 3.8 million to 6.0 million annually. General aviation activity in the Region is summarized in Table 24. Collectively, the number of annual general aviation operations at the 11 system airports in the Region increased from about 660,000 in 1984 to nearly 850,000 in 1989. By the year 2010, the 11 airports may be expected to handle about 1,052,000 such operations, with the total potentially reaching

1,310,000 depending upon the extent to which the nonsystem public use airports in the Region remain in operation.

Commission studies have documented the importance of the regional airport system to the economic vitality of the Region. Surveys show that over 50 percent of all travel at General Mitchell International Airport is business related. Convenient commercial flight schedules and convenient access to a commercial airport is often cited as one of the important considerations in business location and expansion decision-making. Moreover, about one-third of all general aviation activity in the Region is business related. Over 300 general aviation aircraft based in southeastern Wisconsin are owned and operated by businesses. Access to general aviation airports is also often cited as an important consideration in decision-making regarding business location and expansion.

System Plan Implementation

Many of the major improvements recommended in the regional airport system plan have been implemented over the past 15 years. At General Mitchell International Airport, for example, the terminal building and parking facilities have been significantly reconstructed and expanded, air cargo facilities have been constructed, taxiway extensions have been completed, and land acquired for clear zone protection. At Kenosha Regional Airport, major land acquisition for improvements and clear zone protection has been completed, a new primary runway and taxiway constructed, an instrument landing system installed, and a new terminal and access road completed. At Waukesha County-Crites Field, the primary runway and taxiway have been extended, the cross-wind runway strengthened, and airfield lighting improved. At John H. Batten Field in Racine, the primary and cross-wind runways have been strengthened, an instrument landing system installed, major obstructions relocated, and land acquired for safety areas and clear zone protection. Similar improvements have been made at West Bend Municipal, East Troy Municipal, Hartford Municipal, and Burlington Municipal Airports, and at Timmerman Field.

The planned major improvements remaining to be carried out at the 11 airports in the regional system are summarized in Table 25. Particularly significant improvements are required at West Bend Municipal Airport and at the privately owned Capitol and Sylvania Airports.[11]

Collectively, the capital improvements specified in the regional airport system plan—starting with the first system plan adopted in 1976—total about $175.1 million expressed in 1988 dollars. To date, it is estimated that $84.6 million, or about 48 percent of that total, has been expended. This significant progress may be attributed to a number of factors, most impor-

Table 23

NUMBER OF ANNUAL ENPLANING PASSENGERS AT GENERAL MITCHELL INTERNATIONAL AIRPORT 1970-1989 AND FORECAST 2010

Year	Number of Enplaned Passengers
1970	887,047
1975	1,170,063
1980	1,642,532
1981	1,558,549
1982	1,618,995
1983	1,463,332
1984	1,287,663
1985	1,530,169
1986	1,682,739
1987	1,798,679
1988	2,019,960
1989	2,132,541
2010	3.8 to 6.0 million

Source: General Mitchell International Airport.

[11] *The improvements identified in Table 25 do not include a potential additional runway now under consideration as part of master facilities planning for General Mitchell International Airport. The need for such a major new facility is being examined because of the significant recent growth in passenger traffic. Should the growth trends continue or accelerate, the passenger activity at General Mitchell Airport forecast for the year 2010 in the regional airport system plan could be reached before the turn of the century.*

Table 24

TOTAL ANNUAL AIRCRAFT OPERATIONS AT AIRPORTS IN THE REGIONAL AIRPORT SYSTEM PLAN: 1984, 1989, AND FORECAST 2010

Airport	Annual Operations (thousands)		
	1984	1989	2010 Range
General Mitchell International	171.0	198.4	201.4-214.6
John H. Batten Field	28.0	40.5	47.0-70.0
Kenosha Regional	83.5	110.3	106.0-119.0
Waukesha County-Crites Field	73.9	72.3[a]	127.9-152.2
West Bend Municipal	84.0	125.0[b]	135.2-156.1
East Troy Municipal	3.0	11.3	41.8-84.5
Hartford Municipal	19.7	25.9	76.8-140.7
Lawrence J. Timmerman Field	83.1	123.4	116.3-134.1
Burlington Municipal	45.4	60.4	68.0-75.0
Capitol	50.8	48.8	93.0-109.0
Sylvania	16.3	30.3	39.0-55.0
Total	658.7	846.6	1,052.4-1,310.2

[a]*Level of operations decreased because of major airfield construction in progress during 1989.*

[b]*1990.*

Source: Wisconsin Department of Transportation and SEWRPC.

tantly among them a continued strong federal grant program for aviation system development and a strong commitment on the part of local public and private airport sponsors in the Region to undertake the needed system improvements.

System Finance

Capital improvements at the system airports in southeastern Wisconsin are funded through a combination of federal, state, and local—mostly public, but some private—funding. For most airport improvement projects, federal participation can amount to up to 90 percent of total costs, with the remaining 10 percent being divided equally between the State and the local airport sponsor. Where federal funds are unavailable, state funds normally cover 80 percent of the total costs. The major exception to the foregoing is General Mitchell International Airport, such large airports being eligible only for up to 75 percent federal funding for improvement projects.

The local cost share of capital improvements at the two Milwaukee County-owned airports—General Mitchell International Airport and Lawrence J. Timmerman Field—must be viewed differently from that of the other nine airports in the regional system. Under a cooperative agreement with the air carriers, all local costs associated with capital improvements at these two airports, as well as all operating costs, are paid for by the air carriers through terminal and land rentals, concession fees, and landing fees. Consequently, there is no property tax burden on Milwaukee County taxpayers attendant to improvements and operations at the two airports.[12]

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[12]*From time to time, Milwaukee County provides advance monies required to make improvements through contractual arrangements between the air carriers and Milwaukee County. These monies are repaid by the air carriers over time. The time value of the monies concerned is not factored into the contract arrangements. Hence, there may be indirect property tax subsidies for airport improvements.*

Table 25

PLANNED MAJOR IMPROVEMENTS ELIGIBLE FOR PUBLIC FUNDING ASSISTANCE AT ESSENTIAL AIRPORTS IN SOUTHEASTERN WISCONSIN TO THE YEAR 2010

Airports	Improvements
General Mitchell International[a]	Extend primary north-south runway and parallel taxiway Extend east-west primary runway and parallel taxiway Construct E. College Avenue subway for runway and taxiway extension Realign east-west general aviation runway and taxiway Relocate circular taxiway around terminal apron Expand terminal and cargo aprons Perform airfield pavement repair and reconstruction
John H. Batten Field	Construct parallel taxiway for crosswind runway Complete installation of instrument landing system Relocate N. Green Bay Road around runway protection zones Install air traffic control tower Perform airfield pavement repair and reconstruction
Kenosha Regional	Extend crosswind runway and parallel taxiway Install air traffic control tower Perform airfield pavement repair and reconstruction
Waukesha County-Crites Field	Expand terminal apron area Relocate selected terminal hangar and parking facilities Construct service roads Perform airfield pavement repair and reconstruction
West Bend Municipal	Extend primary runway and parallel taxiway Relocate STH 33 Acquire additional land and easements Install instrument landing system Install air traffic control tower Perform airfield pavement repair and reconstruction
East Troy Municipal	Pave crosswind runway Construct taxiway system Install navigation aids Perform airfield pavement repair and reconstruction
Hartford Municipal	Construct new primary runway and parallel taxiway Acquire additional land and easements Extend existing runway and parallel taxiway Install and improve airfield lighting and navigation aids Perform airfield pavement repair and reconstruction
Lawrence J. Timmerman Field	Widen primary runway Acquire selected easements Install instrument landing system Perform airfield pavement repair and reconstruction
Burlington Municipal	Pave crosswind runway and construct parallel taxiway Improve airfield lighting Expand apron Construct service roads Perform airfield pavement repair and reconstruction

Table 25 (continued)

Airports	Improvements
Capitol	Acquire additional land and easements Extend and widen existing paved runway Construct new east-west runway and parallel taxiway Add additional connecting taxiways Improve airfield lighting Perform airfield pavement repair and reconstruction
Sylvania	Acquire additional land Extend and widen existing paved runway Construct new crosswind and paved runway Improve airfield lighting Perform airfield pavement repair and reconstruction

[a]*The improvements listed herein for General Mitchell International Airport do not include a potential runway and taxiway now under consideration as part of a master facilities planning process. Such an additional improvement may be necessary to accommodate growth in passenger traffic beyond that forecast in the regional system plan prepared in 1987.*

Source: SEWRPC.

At the remaining nine airports, the local airport sponsor—either public or private—must provide the local share of funds required for airport improvements. In addition, there may be local public subsidies of operating costs at the publicly owned airports.

The historic capital expenditures made at the 11 airports in the system over the period 1976 through 1988 are summarized in Table 26.[13] In addition, Table 26 provides the estimated cost of additional capital improvements through the year 2010 as identified in the adopted regional airport system plan. Over the 13-year historical period, capital improvements totaled $84.6 million at the 11 airports, representing an average annual capital investment of about $6.5 million. Of this total, about 87 percent was federally funded, 5 percent state funded, and the remaining 8 percent funded by the local airport sponsor. The average annual capital cost to local property taxpayers for major system improvements over that period is estimated at $120,000.

Implementation of the remaining improvements recommended in the adopted regional airport system plan would require an average annual investment until the year 2010 of about $4.1 million, substantially less than the average annual capital investment made over the past 13 years. Eliminating General Mitchell International Airport from the analysis, the average annual capital investment required to implement the plan is estimated at $2.0 million, again less than the $2.5 million invested annually at these 10 airports over the 13-year period 1976 through 1988.

Estimated operating expenses and revenues at the publicly owned airports in the regional system for 1989 are summarized in Table 27. The local tax levy monies shown in this table for Milwaukee County represent the advance of monies by the County for bond repayment. These monies, however, as noted earlier, are to be repaid by the air carriers in future years. Hence, there should be no long-term property tax impact associated with operating General Mitchell International Airport and Lawrence J. Timmerman Field.

[13]*The capital expenditures reported are those associated with improvements that are eligible for state and federal aid. Noneligible improvements are those, like hangers, that frequently are paid for by fees and other special revenues.*

Table 26

HISTORICAL CAPITAL EXPENDITURES AND ESTIMATED COST OF PLANNED IMPROVEMENTS AT AIRPORTS INCLUDED IN THE REGIONAL AIRPORT SYSTEM PLAN

Airport	Millions of 1988 Dollars	
	Estimated Cost of Improvements 1976-1988[a]	Total Cost of Planned Improvements 1989-2010[b]
Commercial Aviation Airport		
General Mitchell International	52.6	47.6
General Aviation Airports		
John H. Batten Field[c]	7.4	11.2
Kenosha Regional	12.0	3.2
Waukesha County-Crites Field	7.4	2.9
West Bend Municipal	2.1	7.4
East Troy Municipal	1.7	1.7
Hartford Municipal	--	4.1
Lawrence J. Timmerman Field	0.8	4.6
Burlington Municipal	0.6	2.0
Capitol[c]	--	3.6
Sylvania[c]	--	2.2
Subtotal	32.0	42.9
Total	84.6	90.5

[a]Totals represent only those improvements funded through the Federal Airport Improvement Program or the State of Wisconsin's Airport Development Aid Program.

[b]Based on SEWRPC year 2010 regional airport system plan. Includes improvements typically eligible to receive federal and state capital grants such as land acquisition; runway, taxiway, and apron construction, expansion, and preservation; installation of airfield lighting; navigational aids; and obstruction removal. Improvements not eligible for federal and state capital grants such as construction of hangars, automobile parking, buildings not related to safety of persons at the airport, and land required for nonairport purposes are not included.

[c]Airport assumed to remain privately owned, but open to public. Therefore, potential cost of acquiring existing site and facilities not included.

Source: Wisconsin Department of Transportation and SEWRPC.

With the exception of West Bend Municipal Airport, where airport operating revenues approximately equal operating expenses, the publicly owned airports in the regional system require local property tax support for operations. Support ranges from a low of $23,300 at the Hartford airport to a high of about $432,500 at the Waukesha County airport. A part of the Waukesha County subsidy is required to cover operational costs of the air traffic control tower. That tower does not now qualify for operation by the Federal Aviation Administration. Activity levels are expected to increase, and the airport may become a candidate for federal operation and responsibility for the tower. This would significantly reduce the property tax levy required to operate that airport. In addition, about $300,000 of the Waukesha County operating subsidy in 1989 consisted of nonoperating costs for short-term debt service on an extraor-

Table 27

FINANCIAL PERFORMANCE OF PUBLICLY OWNED AIRPORTS IN SOUTHEASTERN WISCONSIN: 1989

Airport	Operating Expenses	Operating Revenues (thousands of dollars)	
		From Airport Operations	From Local Tax Levies
Milwaukee County			
General Mitchell International	$22,109.9	$20,009.7	$ --
Lawrence J. Timmerman Field	575.2	371.1	--
System Total	$22,685.1	$20,326.8	$2,358.3[a]
Other General Aviation Airports			
Kenosha Regional	$ 259.7	$ 90.5	$ 169.2
Waukesha County-Crites Field	552.5	120.0	432.5
West Bend Municipal	47.0-52.0[b]	47.0-52.0[b]	--
East Troy Municipal	77.2	37.3	39.9
Hartford Municipal	38.8	15.5	23.3
Burlington Municipal	41.4	10.9	30.5

[a]*Shown as revenues from tax levy for accounting purposes only. Amount to be reimbursed by airlines.*

[b]*Estimate of typical budget.*

Source: Southeastern Wisconsin Airports, Wisconsin Department of Transportation, and SEWRPC.

dinary expense associated with the required replacement of the fuel farm at the airport. Such significant expenses should not frequently recur.

Findings—Regional Airport System

The following findings may be drawn from the foregoing analyses of the regional airport system:

1. As a functional transportation system, the 11 facilities comprising the regional airport system truly have an areawide impact that extends well beyond the geographic jurisdictions of the individual public governing bodies concerned. This is true not only of General Mitchell International Airport, where less than one-half of the passenger traffic is generated by Milwaukee County—the geographic jurisdiction of the governing body—but also of the 10 general aviation airports in the system. Residents and businesses base their aircraft throughout the system without regard to the relationship between the location of their homes or businesses and the geographic jurisdiction of the governing body of the airport.

2. Using the adopted regional airport system plan as a basis for investment decision-making, the public and private owners of the 11 airports in the regional system collectively have made significant progress toward implementation of the system plan recommendations for airport expansions and improvements. Nearly one-half of all planned improvements, as measured by the collective capital costs of such improvements, have been made to date. Maintaining the present annual rate of capital expenditure over the next two decades will ensure implementation of the remaining improvements specified in the system plan.

3. The contractual agreements that exist between the air carriers operating in the Region and Milwaukee County ensure that there is no significant burden on the

Milwaukee County taxpayer in terms of improvements and operations at General Mitchell International Airport and Lawrence J. Timmerman Field. While Milwaukee County frequently expends local tax monies to ensure timely and coordinated improvements, such monies are repaid over time by the air carriers through various user fees.

4. The average annual capital investment burden on the property taxpayers at the six other publicly owned airports in the Region for major system improvements is estimated at $120,000, a relatively modest amount. This is to be expected considering strong federal and state commitments to, and funding of, airport improvements. While all residents of the Region benefit from such improvements, the local property tax burden for this purpose differentially falls on the taxpayers of Waukesha County; the Cities of Kenosha, Burlington, Hartford, and West Bend; and the Village of East Troy.

5. Local property tax subsidies for operating costs at the non-Milwaukee County publicly owned airports in the regional system appear to be relatively small, except in Waukesha County, where there are extraordinary expenses at present associated with the replacement of the fuel farm and with operation of a control tower. It may be possible in future years to shift the control tower costs to the federal government. Overall, such costs average $115,000 annually.

6. Equity and governance considerations do not appear to have been a significant problem in implementing the regional airport system plan. Even though airport facilities serve an areawide function, the local property taxpayers in Waukesha County; the Cities of Burlington, Kenosha, Hartford, and West Bend; and the Village of East Troy—as evidenced by the actions of their local elected officials—have to date willingly and aggressively assumed the local cost burden attendant to improving and operating the airports in accordance with the adopted regional system plan. This is quite likely true because of the strong funding programs for capital improvements at the federal and state levels and because of local perceptions that airports are important to business location and expansion decision-making.

7. The regional airport system is important to the economic vitality of the Region. Over 300 general aviation aircraft owned by businesses are based at airports in the Region. Maintaining and improving commercial schedules at General Mitchell International Airport is essential to the continued economic development of the Region.

COMMERCIAL SEAPORT SYSTEM

System Description[14]

Commercial shipping activity from seaports in the Region has declined from a historic peak during the 1950's. During that peak period, the Cities of Kenosha, Milwaukee, Port Washington, and Racine operated commercial seaports. In 1950, waterborne commerce using both public and private facilities at Milwaukee—without question the largest and busiest port in the Region—totaled about 8.9 million tons, an all-time record. Another peak occurred in 1959, when about 8.8 million tons were handled. In 1989, 2.5 million tons were handled through the harbor. Navigation channels attendant to those four seaports were maintained by the U. S. Army Corps of Engineers.

In 1990, only the Milwaukee seaport remained in operation for commercial shipping purposes. The Kenosha, Port Washington, and Racine seaports have all been converted to recreational marinas.[15] Consequently, the Port of Milwaukee constitutes the commercial seaport "system" for southeastern Wisconsin.

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[14]*The Southeastern Wisconsin Regional Planning Commission has not prepared a plan for the commercial seaports in the Region. Accordingly, all data in this section of the chapter are drawn from secondary sources and personal interviews with Port of Milwaukee and City of Milwaukee personnel.*

[15]*The Port Washington Harbor continues to be used on a limited basis by the Wisconsin Electric Power Company for bringing coal to a private dock at the electric power generation plant in Port Washington.*

The Port of Milwaukee may be defined in two different ways. Under one definition, the Port of Milwaukee is the aggregation of publicly and privately owned physical facilities situated in the outer Milwaukee Harbor, in the inner Milwaukee Harbor, and to a lesser degree along the Kinnickinnic River, the Menomonee River, and Burnham Canal upstream of the inner harbor.

Under the second definition, the Port of Milwaukee is the aggregation of those waterways and publicly owned facilities administered by the Board of Harbor Commissioners of the City of Milwaukee. Under this definition, the Port of Milwaukee consists of an outer harbor protected by four miles of rock breakwater; an inner harbor entrance protected by parallel piers; and docks, slips, and publicly owned warehouse facilities. The outer harbor and channels leading to the Milwaukee Port facilities are maintained at 28 feet deep, the same depth as the St. Lawrence Seaway which links Milwaukee and other Great Lakes ports with the Atlantic Ocean. The upper reaches of the inner harbor are maintained at 21 feet deep. The most active harbor facilities in the Port are situated on or around Jones Island, a peninsula that separates the outer and inner harbor areas.

The City of Milwaukee, through its Board of Harbor Commissioners, owns and operates the public harbor facilities in the Port of Milwaukee. The Board exercises powers to make harbor improvements, repairs, or alterations, and to participate in leasing and operation of harbor facilities.

The facilities at the Port of Milwaukee are geared toward serving a variety of traffic. Piers for handling general cargo, bulk cargo, and liquid cargo are located along the outer harbor side of Jones Island. A "heavy lift" wharf is located on the basin side of Jones Island and includes specialized apparatus for handling heavy oversize cargos too large or heavy to move long distances over land. On the mainland side of the inner harbor are several waterfront facilities for handling bulk traffic, the principal installations being privately owned. An important one is the three million bushel Continental grain elevator, the only waterfront elevator currently in regular use in the Port. Other bulk loading facilities in the inner harbor and on the Kinnickinnic and Menomonee Rivers are designed for handling scrap metals, cement, and salt, mostly through privately owned docks. The municipal mooring basin, which is part of the inner harbor, is used for storage and to perform maintenance on some of the largest commercial lake boats between shipping seasons.

Much of the land area in and around the Port is devoted to nontransportation uses or transportation uses not necessarily involving direct water-borne movements. For example, the north end of Jones Island is occupied by a large metropolitan sewage treatment plant. The area known as the North Harbor Tract, separated from Jones Island by the inner harbor channel entrance, is used for recreational and festival purposes. Also, a major regional intermodal terminal, operated by the Soo Line Railroad for loading and unloading containers and piggyback trailers, is situated on Jones Island. Only a small portion of this intermodal traffic involves shipments by water.

The Port of Milwaukee has been undergoing a dramatic transition throughout the past three decades. During the nineteenth and much of the twentieth centuries, the Port played a major and traditional role in the economic base of Milwaukee and the Midwest, handling vast quantities of raw materials, fuels, manufactured goods, and agricultural goods. Most of this was transloaded to and from railways. Following the opening of the St. Lawrence Seaway system in 1959, medium-size ocean-going ships were able to access the Great Lakes and added significant traffic to the already extensive domestic and Canadian intra-Great Lakes traffic.

During the 1970's and early 1980's, Milwaukee's port traffic declined significantly as a result of the changing economy of the Region and the changing nature of freight transportation. The level of general cargo traffic shipped through Milwaukee's port was affected by the greatly reduced activity in heavy industry in the Region, by competition for manufactured products from other regions in the United States and foreign countries, and by major changes in the way many goods are shipped. The advent of containerization for the transport of general cargo traffic has resulted in such traffic being shipped by railway or highway to ocean ports such as Montreal. The recent deregulation of the trucking and railway industries has allowed those carriers to adopt a wider variety of marketing innovations with fewer constraints, thus allowing them to be more competitive in shipping

Table 28

TOTAL WATERBORNE COMMERCE HANDLED AT THE MILWAUKEE HARBOR: 1970-1989

Commodity	Thousands of Net Tons				
	1970	1975	1980	1985	1989
Coal	845.0	827.8	1,005.8	528.0	543.5
Cement	314.8	392.2	447.3	366.8	603.1
Sand	54.5	77.4	66.0	22.8	75.1
Slag	20.4	--	--	--	--
Limestone	273.7	12.7	--	--	31.6
Clinker	114.7	32.8	51.5	--	--
Shale	51.2	--	--	--	--
Gypsum	7.3	--	--	--	--
Salt	209.3	308.1	254.7	493.1	525.6
Paper Products	39.5	--	2.8	--	--
Grain	608.8	249.9	1,383.7	333.3	415.2
Petroleum	908.5	464.9	446.7	63.1	--
Liquid Cargo	23.9	--	17.6	32.7	186.1
Scrap	269.1	160.8	179.1	143.3	10.1
Pig Iron	35.2	46.0	31.2	33.4	17.2
Steel	137.1	77.6	13.0	33.8	62.1
General Cargo	362.3	348.9	201.8	265.5	83.6
Other Dry Bulk	--	37.8	--	180.0	--
Automobiles	1,881.0	547.3	144.9	--	--
Total	6,156.4	3,584.1	4,246.1	2,495.7	2,553.3

NOTE: Includes tonnage handled by both Port of Milwaukee and private facilities.

Source: Port of Milwaukee and SEWRPC.

general cargo and bulk commodities within the United States and also to seaports for international consignments. Improvements in the operation and marketing of railways have resulted in faster and more reliable service and more competitive pricing. The result of these actions is that most of the high-value general freight, and even some of the bulk commodities that formerly moved through the Great Lakes, now move over land. In addition, railway car ferries on Lake Michigan—which historically accounted for a substantial portion of the Port's activity—have been rendered obsolete as a result of the technological and regulatory changes affecting railways.

Nevertheless, the Port of Milwaukee continues to handle a significant cargo tonnage, with the years 1987 through 1989 seeing a resurgence in tonnage and port activity. Like many other Great Lakes ports, the Port of Milwaukee's role has become one of a specialized port, handling large amounts of bulk commodities to and from other Great Lakes ports, and internationally offering specialized heavy lift services, and becoming more involved in port activities that do not necessarily include the handling of waterborne traffic. As is the case at most other Great Lakes ports, substantial increases in general cargo or containerized traffic do not appear likely in the future.

A summary of Port activity is presented in Tables 28 and 29. Table 28 summarizes the total waterborne commerce handled at the Milwaukee harbor by both public and private port facilities. Beginning in 1986, the Port of Milwaukee has reported tonnage handled predominantly by public port facilities (see Table 29). These figures include the intermodal tonnage and pipeline tonnage handled by the public port facilities, most of which is not waterborne.

Table 29

TONNAGE HANDLED BY THE PORT OF MILWAUKEE: 1986-1989

Category	Thousands of Net Tons			
	1986	1987	1988	1989
General Cargo[a]	125.0	408.2	388.2	398.3
Liquid Cargo[b]	631.6	678.4	849.1	852.9
Dry Bulk Cargo[a]	449.8	469.1	715.8	1,081.5
Metal Products	213.6[c]	108.2	85.5	62.1
Grain in Bulk	62.7	493.2	556.5	415.2
Total	1,482.6	2,157.0	2,595.0	2,810.0

[a] *Includes intermodal tonnage.*

[b] *Includes pipeline tonnage.*

[c] *Includes iron and steel scrap.*

Source: Port of Milwaukee and SEWRPC.

System Planning

The City of Milwaukee Board of Harbor Commissioners adopted a strategic plan for the future of the Port in October 1988.[16] The objectives of that plan are as follows:

1. The development of the Port of Milwaukee into a major regional transportation and distribution center, integrating into Port operations water, rail, and truck transportation modes.

2. Reducing the local property tax subsidies required for Port operations, ideally relying on local government only for capital improvement funds.

3. Developing a sensitivity and responsiveness to the needs of current and potential Port customers.

4. Instituting a program of planned maintenance, renewal, and upgrading of Port infrastructure and facilities.

5. Developing a business team of entrepreneurial and cooperative participation in the areas of dry and liquid bulk, intermodal and terminal operations, and vessel owning.

In general, the plan calls for the marketing emphasis to shift from the traditional types of general cargo traffic to the promotion of innovative goods movements, with the marketing effort particularly directed to domestic and internal Great Lakes traffic which is not affected by the physical limitations of the St. Lawrence Seaway. Greater emphasis is to be placed upon intermodal transportation handling, which does not necessarily involve direct waterborne movements.

While governed by the City of Milwaukee through its Board of Harbor Commissioners, the Port of Milwaukee represents an economic asset of importance not only to the City and the Southeastern Wisconsin Region, but to areas beyond the Region as well. An economic impact study of the Port of Milwaukee was completed by the Port staff in 1988. The study indicated that Port of Milwaukee activity directly and indirectly generated about 1,430 jobs, $48.1 million annually in wages and salaries, and $5.1 million annually in state and local taxes. In addition, there were almost 2,000 related jobs created by local Port users in manufacturing and wholesale trade, many of which are located beyond the City of Milwaukee, as are many of the business firms served by the Port.

System Finances

Operating revenues and expenses of the Port of Milwaukee over the period 1985 through 1989 are summarized in Table 30. Over the five-year period represented in the table, the Port, which has been operated as a public enterprise since 1985, posted net operating losses—even prior to depreciation considerations—in two of the five years, such losses ranging from a low of about $95,000 in 1986 to a high of about $124,000 in 1980, and net operating income in three years ranging from a low of $65,000 in 1987 to a high of $289,000 in 1989. As a City of Milwaukee enterprise operation, operating income from one year is accumulated to compensate for any operating losses in future years. Since 1985, the total operating income has been greater than the total operating loss. So long as this continues—as is the stated objective at the Port—the operations of the Port should not represent a burden on the local property tax levy.

[16] *See Port of Milwaukee Strategic Plan 1988-1993, October 1988.*

Table 30

FINANCIAL PERFORMANCE OF THE PORT OF MILWAUKEE: 1985-1989

Year	Thousands of Dollars		
	Total Operating Revenues	Total Operating Expenses[a]	Operating Income
1985	2,168.1	2,029.7	138.4
1986	1,792.2	1,886.9	-94.7
1987	1,951.8	1,886.7	65.1
1988	1,889.7	2,014.1	-124.4
1989	2,177.0	1,888.0	289.0

[a]*Does not include depreciation, "other operating expenses" which largely consists of debt service interest expense, or nonoperating expenses which consist largely of interest expense.*

Source: City of Milwaukee Office of the Controller and SEWRPC.

Table 31

CAPITAL EXPENDITURES AT THE PORT OF MILWAUKEE: 1985-1992

Year	Thousands of Dollars		
	Local Share	State Share	Total
Actual			
1985	516.9	52.1	569.0
1986	119.6	- -	119.6
1987	667.1	145.4	812.5
1988	636.5	- -	636.5
1989	797.3	812.9	1,610.2
Budgeted			
1990	451.0	1,064.0	1,515.0
1991	2,305.0	520.0	2,825.0
1992	2,675.0	3,120.0	5,795.0

Source: City of Milwaukee Office of the Controller, Port of Milwaukee, and SEWRPC.

Total capital expenditures in Port of Milwaukee facilities over that same five-year period ranged from $119,000 in 1986 to $1.6 million in 1985, and averaged $750,000 annually, as summarized in Table 31. The Port is eligible for state funding under the Wisconsin Harbor Assistance Program administered by the Wisconsin Department of Transportation. That program provides 80 percent state funds for specified improvements and facilities. Over the five-year period studied, such state funds have been used occasionally and have averaged $202,000 annually. The local share of capital expenditures is funded from a combination of borrowing proceeds and direct cash levies, both sources ultimately being derived from local property taxes. Over the five-year period, the average annual property tax burden for capital improvements at the Port is estimated at $547,000.

The capital improvements budget for the period 1990 through 1992 is also summarized in Table 31. Under this budget the Port expects to spend over the three-year period about $3.4 million annually for infrastructure and facility improvements, of which about $1.6 million annually is expected to come from state grants and the remaining $1.8 million annually from the City of Milwaukee through property taxes or bonding. The Wisconsin Harbor Assistance Program has had, and can be expected to continue to have, an appropriation of $500,000 per year for use as the state share of harbor projects. Milwaukee is one of a number of ports in Wisconsin that competes for this assistance. The anticipated average annual investment of $1.6 million from state sources is $1.1 million greater than the entire annual appropriation for the state assistance program.

Findings—Commercial Seaport System

The following findings may be drawn from the foregoing analyses of the commercial seaport system:

1. The City of Milwaukee owns and operates the only remaining commercial seaport in southeastern Wisconsin. While Port traffic has declined significantly as a result of the changing economy of the Region and of the changing nature of freight transportation, the Port remains an important economic asset of value to the entire Region.

2. The average annual capital investment burden for Port improvements on City of Milwaukee property taxpayers is estimated at $547,000. Because the Port is a City of

Milwaukee enterprise operation, operations costs do not represent a burden on the local tax levy.

3. State funds are anticipated to become increasingly important to finance Port infrastructure and facility improvements. Over the past five years, such funds have averaged $202,000 annually. The need for state funds, however, could increase to $1.6 million annually over the next three years. This amount is greater than the entire state funding available under the harbor assistance program in Wisconsin.

4. It is the objective of the Milwaukee Board of Harbor Commissioners to operate the Port so as not to require a local property tax subsidy for Port operations. Continued local property tax subsidies will be required, however, to fund infrastructure and facility improvements at the Port. The Port is also counting on an increasing state commitment to help fund such improvements.

5. Equity considerations have not been raised as a significant problem in maintaining and developing the Port of Milwaukee. The City of Milwaukee has assumed the local cost burden attendant to Port activity. This is true even though it is clear that the Port of Milwaukee serves an areawide function.

SUMMARY AND CONCLUSIONS

This chapter has presented information concerning the four modes of transportation in southeastern Wisconsin that are considered to be regional in significance: the arterial street and highway system, the public mass transit system, the airport system, and the seaport system. In order to examine the potential need for a regional transportation authority in southeastern Wisconsin, pertinent information was presented with respect to each of these modes on the available fiscal resources and any potential funding shortfalls; the distribution of the cost burden attendant to providing each transportation mode, focusing in particular on how the local share of the cost burden is distributed among local governments in the Region; and the governance structure that currently is in place for each mode.

The following paragraphs summarize for each the local fiscal resources that will be required over the next 20 year to build and maintain the regional transportation system:

- Significant shortfalls in funding needed improvements to the state and county trunk highway systems in the Region may be expected over the next two decades based upon current spending levels. On the state trunk highway system, that shortfall is expected to total about $15.4 million annually, for a total shortfall over the 20-year analysis period of about $308 million. Eliminating that shortfall would require a 28 percent increase in state and federal funds allocated to the Region. On the county trunk highway system, that shortfall is expected to total about $19.1 million annually, for a total shortfall over the 20-year analysis period of about $382 million. Eliminating that shortfall would require about a tripling of funding for county trunk highways over present levels. In total, then, there is a need over the next 20 years for about $690 million, or about $34.5 million annually, in additional monies for the state and county trunk highway systems if needed improvements are to be brought about.

- Significant shortfalls in funding the needed improvements to the regional transit system in the Region may also be expected over the next two decades based upon current spending levels and a decreasing federal presence in funding public transit. If the regional plan recommendations are to be carried out—including substantially improved express and local bus service over broader areas, the development of a light rail line, and the development of a commuter rail line in the Milwaukee-Racine-Kenosha corridor—an additional $23.5 million annually would have to be expended for capital improvements. On the operating side, the additional transit subsidy required would total about $32.3 million annually. In total, then, the shortfall for public transit is estimated at $55.8 million annually, or about $1.1 billion over the 20-year period.

- Strong federal and state financial aid programs, a local willingness to provide matching funds for federal and state aids, and user fees at General Mitchell Interna-

tional Airport have combined to bring about significant progress in implementing the regional airport system plan. Maintaining the present annual rate of capital expenditures over the next two decades would ensure implementation of the remaining improvements specified in the system plan. Hence, no shortfall in funding for airport improvements and operations is foreseen.

- The regional seaport system consists of the Port of Milwaukee. At present, the Port of Milwaukee is operated as a public enterprise, and operating revenues are sufficient to cover operating costs. Local government investment in capital improvements at the Port of Milwaukee averaged $547,00 annually. Over the past several years, state grants for Port improvements have averaged $202,000 annually. The capital budget for the Port of Milwaukee envisions significantly increased state funding to a level of $1.6 million annually over the next three years. This level exceeds the entire annual appropriation for the Wisconsin Harbor Assistance Program.

The following paragraphs summarize for each mode the equity in the distribution of the local cost burden in providing that mode:

- If the jurisdictional realignments recommended in the regional transportation plan are carried out, substantial equity would be achieved in the distribution of costs attendant to the arterial street and highway system. At present, however, progress in bringing about jurisdictional realignments is lagging, with only about 27 percent of the recommended realignments in place. At this point in the plan implementation period, about 50 percent of the jurisdictional realignments should have been made.

- The local cost burden attendant to the regional transit system falls differentially on the taxpayers of the Counties of Milwaukee and Waukesha and the Cities of Kenosha, Racine, and Waukesha. The current local tax effort ranges from a low of about $0.31 annually on a typical single-family home in Waukesha County, to a high of nearly $28 annually on a comparable home in Milwaukee County. While there are different levels of transit service available throughout the Region, the public transit system should not be viewed in isolation, but rather as an integral part of the regional transportation system, providing benefits to nontransit riders from throughout the Region in terms of reducing vehicle travel during peak periods on arterial streets, and thereby congestion on key arterials.

- The local cost burden attendant to the regional airport system falls in part on all residents of the Region through user fees at General Mitchell International Airport, and in part differentially on those residents in the Region who reside in Waukesha County; the Cities of Burlington, Kenosha, Hartford, and West Bend; and the Village of East Troy—the local governments that sponsor public airports where subsidies are required. Local property taxpayers in those areas collectively expend about $120,000 annually in capital improvements at public airports. Local property tax subsidies for operating costs at those airports average $115,000 annually.

- The local cost burden at the Port of Milwaukee is borne entirely by the property taxpayers of the City of Milwaukee. In recent years, that burden has been confined to capital costs, which have averaged $547,000 annually. If sufficient state funds are not forthcoming, that burden could significantly increase.

The following paragraphs summarize for each mode the governance structure currently in place to build and maintain the regional transportation system:

- State, county, and local highway agencies are in place and have the responsibility to implement the recommendations contained in transportation system plans. The regional transportation system plan provides the basis for coordinated highway development across municipal and county lines, and across the borders of the Region. No weaknesses in the existing governance structure are apparent.

- At present, the regional public transit system is governed by two counties and three cities. Again, the regional transportation system plan provides the basis for coordinated development. Unlike highways, however, where there is a state agency to

bring about major improvements on facilities that serve predominately cross-county travel, there is no agency to bring about major transit improvements to serve cross-county travel movements. In particular, the development of commuter rail service or light rail facilities that cross county boundaries is unlikely given the present governance. What modest progress has been made to date in serving cross-county movements has been the result of cooperative efforts by the five local governments currently providing public transit service.

- The public agencies that are currently responsible airports in the Region—Milwaukee and Waukesha Counties; the Cities of Burlington, Hartford, Kenosha, and West Bend; and the Village of East Troy—have met relatively well their responsibilities to bring about needed airport system improvements.

- The City of Milwaukee is currently responsible for seaport operations in the Region. The City has assumed that responsibility even though it is clear that the Port of Milwaukee serves an areawide function.

Findings and Determinations of Advisory Committee as to Need

The information presented in this chapter was carefully considered by the Advisory Committee at their meeting of September 25, 1990. At the end of that meeting, the Committee made the following findings:

1. All four transportation modes considered—arterial streets and highways, mass transit, airports, and seaports—are regional in scope and essential to the continued sound social, economic, and physical development of the entire seven-county Region.

2. The adopted regional plans for arterial streets and highways, mass transit, and airports have been cooperatively prepared and carefully refined over a long period of time. Moreover, such plans have been widely accepted by federal, state, and local units and agencies of government as evidenced by adoption, approval, and endorsement actions. Consequently, such plans provide a sound basis against which to measure transportation needs.

3. The available fiscal resources needed to improve and operate the regional airport and seaport systems appear to be adequate, with substantial State and federal fiscal support available. Implementation of the adopted regional airport system plan is proceeding on schedule. Improvements at the Milwaukee seaport likely will need increased State financial assistance.

4. While airports and seaports are of truly regional import, the counties and local units of government presently responsible for those functions are exhibiting good stewardship and should be encouraged to continue pursuit of those functions.

5. The available fiscal resources needed to improve and operate the regional arterial street and highway and transit systems are inadequate and are imposing a heavy burden on the county and local property tax bases; as a result, implementation of the adopted regional transportation system plan for highway and transit, and in particular county trunk arterial highways and those facilities needed to make transit a truly competitive mode to the automobile, is lagging significantly behind the pace recommended in the plan. The continued failure to implement the adopted plan in a timely manner could have significant adverse affects on the Region in future years. These affects could include significant congestion on the arterial highway system, significant mobility limitations for those who are transit dependent, continuing decentralization of land use contrary to the adopted regional land use plan, and significant constraints on the Region's ability to continue to develop in an economically and environmentally sound manner. Accordingly, one or more new revenue sources are needed to support arterial highway and mass transit systems and to relieve the current property tax burden attendant thereto.

6. There is some evidence to indicate that issues beyond fiscal resources may prevent the existing governance structure for county and local arterial highways and transit from implementing improvements of areawide importance that are included in the adopted regional plan. In addition, there may be equity questions associated

with the burden of local costs, particularly with respect to mass transit. These potential problems are deserving of further examination.

Given the foregoing findings, the Committee made the following determinations:

1. No further consideration should be given at this time to including airports and seaports within the purview of a potential regional transportation authority for southeastern Wisconsin. This determination should be reviewed periodically, such as every five years.

2. The study should proceed to give further consideration to the possibility of creating a regional transportation authority for southeastern Wisconsin with respect to arterial highways and transit.

3. Regardless of whether or not the Committee may ultimately recommend the creation of a regional transportation authority, the study should proceed to give further consideration to finding non-property tax revenue sources for arterial streets and highways and for transit.

Chapter III

CASE STUDIES OF REGIONAL TRANSPORTATION AUTHORITIES

INTRODUCTION

In designing the regional transportation authority feasibility study for southeastern Wisconsin, the Advisory Committee directed that case studies be undertaken of regional transportation authorities in the United States. By examining the organizational structure of, and functions provided by, a number of regional transportation authorities, it was hoped that an information base would be developed that could help the Advisory Committee structure a regional transportation authority for southeastern Wisconsin, should the Committee ultimately deem it desirable to recommend the creation of such an authority. The purpose of this chapter is to present in summary form the findings of the case studies. The individual case studies are documented in a separate report provided to the Committee members and kept on file at the Commission offices.

SELECTION OF CASE STUDIES

At its meeting on August 30, 1990, the Advisory Committee gave consideration to the selection of cases to be studied. The Committee examined the 35 largest urbanized areas in the United States—those having a resident population of at least 800,000—based upon information included in the 1987 U. S. Census of Governments. The Committee found that, excluding the Milwaukee area, only three of the 35 largest urbanized areas did not have some form of regional transportation authority. Upon consideration of the information drawn from the Census of Governments, the Committee selected a total of 13 cases to be studied, drawing 12 from the list of 35, and adding one from an area not on that list. The 12 selected from the list were: Chicago, Illinois; Boston, Massachusetts; Cleveland, Ohio; Denver, Colorado; Buffalo, New York; Portland, Oregon; Minneapolis-St. Paul, Minnesota; San Diego, California; Seattle, Washington; Sacramento, California; Atlanta, Georgia; and Dallas, Texas. The 13th area—the Raleigh-Durham-Chapel Hill (Research Triangle) area of North Carolina—was added by the Committee as an example of an area with a newly established regional transportation authority in a rapidly growing area, one that at present has some local but no regional transit service.

Given the time and resource limitations associated with the feasibility study, the Committee directed that the case study effort begin with a search of available literature supplemented by telephone interviews of knowledgeable key officials of the areas concerned. The Committee also directed, however, that as many as five cases be identified for supplemental field visits in an attempt to ascertain through structured personal interviews the perceptions of key individuals as to the effectiveness of the regional transportation authority, including—where feasible within the time contraints—interviews with appropriate representatives of central cities, counties, and suburban municipalities; transit operators; state departments of transportation; comprehensive areawide planning agencies; representatives of the business community; and newspaper editors. Such supplemental field work was completed with respect to the Chicago, Boston, Cleveland, Denver, and Buffalo cases.

Finally, the Committee directed that to the extent possible a determination be made as to how large urban areas in foreign countries—particularly Western Europe and Japan—are organizing to provide urban transportation services. This chapter briefly reports the results of that effort as well.

OVERVIEW OF CASE STUDY FINDINGS

Summary profiles of the 13 regional transportation authorities in the United States selected for case study are set forth in Table 32. A review of the information provided in this table leads to the following findings:

1. The geographic "building blocks" for regional transportation authorities are either counties, or counties and large agglomerations of contiguous incorporated municipalities.

2. The 13 cases involve the creation of agencies over about a 40-year period beginning shortly after World War II. In at least two

Table 32

SUMMARY CASE STUDY PROFILES OF SELECTED REGIONAL TRANSPORTATION AUTHORITIES IN THE UNITED STATES

Item	Chicago Illinois	Boston Massachusetts	Cleveland Ohio	Denver Colorado	Buffalo New York	Portland Oregon	Minneapolis-St. Paul Minnesota	San Diego California	Seattle Washington	Sacramento California	Atlanta Georgia	Raleigh-Durham-Chapel Hill North Carolina	Dallas Texas
Name of Agency	Chicago Regional Transportation Authority (RTA)	Massachusetts Bay Transportation Authority (MBTA)	Greater Cleveland Regional Transportation Authority (RTA)	Denver Regional Transportation District (RTD)	Niagara Frontier Transportation Authority (NFTA)	Tri-County Metropolitan District of Oregon (Tri-Met)	Regional Transportation Board (RTB)	Metropolitan Transit Development Board (MTDB)	Metro Seattle (METRO)	Sacramento Regional Transit (RT)	Metro Atlanta Rapid Transportation Authority (MARTA)	Regional Transportation Authority Raleigh-Durham (RTA)	Dallas Area Rapid Transit (DART)
Area Served	Six-county region 3,700 square miles 7.2 million population	78 cities and towns 1,038 square miles 2.6 million population	Cuyahoga County; portions of three adjacent counties 515 square miles 1.6 million population	Cities of Boulder and Denver; Jefferson County; portions of three adjacent counties 2,304 square miles 1.8 million population	Niagara and Erie Counties 463 square miles 1.2 million population	Three-county region 605 square miles 1.4 million population	Seven-county region 300 square miles 1.8 million population	San Diego County 570 square miles 1.8 million population	King County 2,128 square miles 1.0 million population	Sacramento County 340 square miles 930,000 population	Four-county region 2,200 square miles 1.8 million population	Three-county region 1,094 square miles 630,000 population	City of Dallas; three adjacent communities 900 square miles 1.7 million population
Year Created	1974	1948 Substantially changed 1964	1974	1969	1967	1969	1967 Substantially changed 1984	1975	1972	1973	1964	1989	1983
Modal and Other Responsibilities	Transit only (bus, heavy rail, commuter rail)	Transit only (bus, light rail, heavy rail, commuter rail, ferry)	Transit only (bus, heavy rail, light rail)	Transit only (bus)	Transit (bus, light rail) Airports Harbor	Transit only (bus, light rail)	Transit only (bus)	Transit only (bus, light rail)	Transit (bus) Sewage conveyance and treatment	Transit only (bus, light rail)	Transit only (bus, heavy rail)	Transit only (bus)	Transit only (bus)
Functions	Distributes revenue to operating agencies (CTA, METRA, Pace)	Operates all public transit	Operates all public transit	Operates all public transit	Operates all public transit, plus two airports and harbor	Operates all public transit	Distributes revenue to operating agencies	Operates certain public transit facilities; coordinates and distributes revenue to other transit operators	Operates all public transit; sewage disposal	Operates all public transit	Operates all public transit	Proposed to establish a regional public transit system; ultimately could operate local transit	Operates all public transit
Governance Structure	13-member appointed board—four by City of Chicago; four by Cook County; one by DuPage County; two by other counties; chair of CTA; chair of RTA elected by 12 appointees	Seven-member appointed board—chair is State Secretary of Transportation; six by governor Also an advisory board of local officials which approves budget	10-member appointed board—four by City of Cleveland; three by Cuyahoga County; three by suburbs	15-member board elected by districts	11-member board appointed by governor	Seven-member board appointed by governor from districts proportioned by population	11-member board appointed by Metropolitan Council and local government units	15-member appointed board, all of whom must be local elected officials—chair by governor; four by City of San Diego; one each by nine individual municipalities; one by San Diego County	41-member board—all local elected officials	Seven-member appointed board—four by city; three by county	17-member appointed board—four by City of Atlanta; 10 by counties; State DOT representative; State Revenue representative; State Properties representative	13-member appointed board—10 voting members, five from Wake County, three from Durham County, and two from Orange County; three nonvoting members by state	25-member appointed board—one by county; 24 by local governments
Sources of Revenue (other than farebox and state and federal grants)	Sales tax 1.0 percent Cook County; 0.25 percent other counties	Local property tax	1.0 percent regional sales tax	0.6 percent regional sales tax	County property tax historically; recent shift to 0.125 percent sales tax and real estate transfer tax	0.6 percent regional payroll tax	Regional property tax	0.5 percent county sales tax	0.6 percent county sales tax	0.5 percent county sales tax	1.0 percent regional sales tax	Under consideration	1.0 percent regional sales tax
Methods of Distributing Revenue	RTA apportions revenue on basis of need as expressed through CTA, METRA, and Pace budgets	All revenue is held by MBTA to support transit operations	All revenue is held by RTA to support transit operations	All revenue is held by RTD to support transit operations	All revenue is held by NFTA to support transit operations	All revenue is held by Tri-Met to support transit operations	RTB distributes revenues to Metropolitan Transit Commission and para-transit operators	MTDB retains some revenues for transit services it directly operates, and distributes remaining revenue to other operators	All revenue is held by METRO to support transit operations	All revenue is held by RT to support transit operations	All revenue is held by MARTA to support transit operations	Under consideration	All revenue is held by DART to support transit operations
Planning Relationships	Chicago Area Transportation Study (CATS) does transportation system planning; Northeastern Illinois Planning Commission (NIPC) does land use planning; RTA contracts with both CATS and NIPC as needed	Metropolitan Area Planning Commission does regional land use and transportation planning; MBTA carries out the system plan	Northeast Ohio Areawide Coordinating Agency (NOACA) does land use and transportation system planning; RTA works with NOACA to implement system plan	Denver Regional Council of Governments (DRCOG) does land use and transportation system planning; RTD works with DRCOG under a memorandum agreement to implement system plan	Niagara Frontier Transportation Commission is responsible for transportation system planning; NFTA carries out the system plan	Tri-Met works closely with the Metropolitan Services Board, an agency that performs all planning functions and provides certain metropolitan services, including solid waste disposal, a zoo, and limited land use control	Metropolitan Council does regional land use and transportation planning	San Diego Association of Governments (SANDAG) does regional land use and transportation planning; MTDB works with SANDAG to implement plans	Puget Sound Council of Governments does regional land use and transportation planning; METRO implements transit plan	Sacramento Area Council of Governments is the transportation systems planning agency	Atlanta Regional Commission (ARC) does regional land use and transportation planning; MARTA works with ARC to implement plans	The new authority likely will be given transit system planning responsibilities	DART does its own transit system planning
Comments	Interviews report widespread satisfaction with present organization	The "advisory" board of local officials has budgetary approval power and therefore significant influence over decisions; local governments individually provide the local revenues necessary on a negotiated basis	A citizens advisory council provides important guidance to board of trustees	Colorado Legislature has created a separate commission to propose changes in the way in which transit services are planned and delivered; one change may be elimination of an independently elected board	The lack of a sustaining non-property tax revenue at the local level is cited as the reason why NFTA has a continuing fiscal crisis; State continues to provide supplemental funds to overcome crises	Change to make Tri-Met Board directly elected being considered	Change in 1984 separated the transit operating functions from the transit policy and planning function	Strong planning relationship between regional planning agency and MTDB appears to have helped implement transit plans	Governing structure to change given recent court decision requiring proportional representation	A relatively new transit system which is expanding to serve a rapidly growing area	Strong planning relationship between regional planning commission and MARTA; local influence in MARTA very strong since local governments must agree to buy land and build facilities within their jurisdictions on behalf of MARTA	Primary emphasis is to create an institution to provide transit between urbanized areas in a region	DART is cooperating with Fort Worth in evaluating a rail transit link between the two urban areas

Source: SEWRPC.

cases—Boston and Minneapolis-St. Paul—there have been substantial changes in the organizational structure following the initial creation. In Boston the major change primarily involved adding substantial additional area. In Minneapolis-St. Paul the major change involved separating the policy making and planning functions from the transit operation functions. A major structural change is now under consideration in Denver. In the Portland area changes which would involve the election rather than the appointment of the governing board apparently are being considered.

3. All but three of the 13 cases—Buffalo, Portland, and Seattle—involve regional transportation authorities that were created for the single purpose of dealing with public mass transit. In the case of Buffalo, the authority has responsibility for airports and the harbor in addition to mass transit. In Portland, the authority is an arm of a metropolitan services district that has responsibility for solid waste disposal and for limited land use control in addition to mass transit. The land use control is exercised through the establishment of urban growth boundaries in a manner similar to SEWRPC's sewer service area delineations. In the case of Seattle where the authority has a water quality mission, the authority has responsibility for sewage disposal in addition to mass transit. None of the cases involved agencies with responsibility for highways. It is believed that special authorities for highways are relatively rare and are usually associated with toll roads on a statewide basis or with special bridges and tunnels in the very largest metropolitan areas.

4. In two of the 13 cases—Chicago and Minneapolis-St. Paul—the regional transportation authority operates in a revenue collection and distribution mode only, having the responsibility to distribute revenue to one or more agencies and entities that are responsible for operating mass transit systems. In all other cases, the authority operates the public transit system as well, generally retaining all revenue to cover the cost of transit operations. In San Diego, the authority retains some revenue for its own transit operations, but distributes additional revenue to other transit operators in the Region.

5. The size of the governing bodies of the 13 regional transportation authorities studied ranged from 7 to 41 members.

6. In all but one case—Denver—the board of the regional transportation authority is appointed. In the case of Denver, the 15-member board is elected by districts.

7. Where the governing bodies are chosen by appointment, the tendency is either to have all appointments made by the governor, or all appointments made in some fashion by the county and local governments concerned. Various techniques are used to distribute membership throughout a region, most of which tend to seek proportional representation based upon population. In some cases, state involvement comes about through ex officio membership on the governing body of key state officials. Usually, that membership is nonvoting. One unusual situation is in Chicago, where the chairman of a 13-member board is selected at large by the other 12 appointees, who come from various districts. Another unusual situation occurs in Boston, where a seven-member board appointed by the governor governs the authority, but where an "advisory" board of elected local officials has a veto over budget matters. Another technique used to involve local elected officials occurs in Atlanta, where the regional transportation authority is not empowered to acquire land but must rely upon the local governmental unit in which a major transit facility is located to act to acquire such land.

8. Nearly all of the regional transportation authorities studied have some relatively stable dedicated source of revenue to supplement revenues made available through the fare box and through state and federal grants and aids. An exception is Buffalo, where a historic reliance on annual local appropriations from property taxes has led to serious recurring fiscal crises. In the majority of cases, a regional or county sales tax is the preferred dedicated source of local revenue to support public transit. Portland is unique in levy-

ing a regional payroll tax. None of the cases studied secure any revenue from a motor fuel tax.

9. In at least one case—Dallas—the regional transportation authority independently performs its own long-range transit system planning. In most other cases, however, there appear to be strong working relationships between the comprehensive regional planning agency and the regional transportation authority that result in the latter working to carry out the transit plans prepared by the former.

SELECTED FOREIGN APPROACHES TO METROPOLITAN TRANSPORTATION SERVICES

A brief literature review was made to ascertain the basic characteristics associated with providing mass transportation within urbanized areas in Europe and Japan. The results of this literature research are as follows:

1. In England and Wales the predominant providers of urban mass transit services are counties. London, however, is served by a regional transportation authority. Commuter rail service is provided by the nationally-owned British Rail system.

2. In Scotland the predominant providers of urban mass transit services are regional councils—in effect, regional transportation authorities—made up of local elected officials in the metropolitan area.

3. In France the predominant providers of urban mass transit services are regional authorities. In some cases, there are two separate regional authorities in a metropolitan area, one for policy and plan making and one for transit operations. In addition, the regional authorities may provide services other than transit, in some cases extending to highways and land development control.

4. In Germany urban mass transit services are provided either by municipally-owned enterprises or by metropolitan transport authorities.

5. In Japan urban mass transit services are provided in part by municipalities, sometimes in a joint venture with private enterprise, and in part by the nationally-owned Japan Railways.

SUMMARY AND CONCLUSIONS

Case studies of regional transportation authorities were conducted in 13 metropolitan areas throughout the United States. For the most part, these special regional transportation authorities have been created exclusively to provide public mass transit services. In addition, in most cases there is a dedicated non-property tax regional revenue source that is relatively stable and provides a continuing source of funding. Most of the regional transportation authorities retain the revenue collected and directly provide mass transit services. Nearly all of the regional transportation authorities are governed by appointed bodies. While some of these bodies are appointed by the governor, the predominant form involves participation in the appointment process by local elected officials.

Chapter IV

POTENTIAL REVENUE SOURCES AND AMOUNTS TO SUPPORT TRANSPORTATION SERVICES IN SOUTHEASTERN WISCONSIN

INTRODUCTION

The data included in Chapter II of this report identified significant potential shortfalls within southeastern Wisconsin over the next 20 years in funding for planned arterial street and highway improvements and for planned transit improvements and operating subsidies throughout the Region. In Chapter III, case studies were presented of selected regional transportation authorities within the United States, including an identification of the sources of revenue used to provide needed transportation services on an areawide basis in selected major metropolitan regions. The purpose of this chapter is to examine potential revenue sources that—assuming proper State enabling legislation—could be used to support transportation services in southeastern Wisconsin.

The chapter begins with a determination of revenue need based on the data set forth in Chapter II. The potential revenue sources examined are discussed, and the potential revenue amounts that could be expected from each source are estimated. For perspective, the chapter concludes with a comparative analysis of the extent to which the neighboring states of Illinois, Indiana, Michigan, Minnesota, and Iowa impose motor fuel taxes, sales taxes on motor fuel, and wheel taxes or vehicle property taxes in efforts to fund transportation improvements and services.

The material included in this chapter was drawn, in part, from studies conducted for the Governor's Metro 2020 Policy Board. Those studies related primarily to needs on state trunk highways and transit and potential sources of revenue to meet those needs.

In considering the material included in this chapter, the following underlying assumptions should be kept in mind:

1. That southeastern Wisconsin will over time receive its "fair share" of the state and federal funds available for highways and transit.
2. That the Governor's Metro 2020 Policy Board may recommend additional revenues be raised statewide for transportation purposes and that the Southeastern Wisconsin Region will also receive its "fair share" of any such potential new revenues.
3. That, even if new revenues become available statewide, there may be a need to consider raising additional revenue from a tax that would be uniquely levied in southeastern Wisconsin for the purpose of funding county and local arterial highways and mass transit and for providing property tax relief attendant thereto.

IDENTIFICATION OF REVENUE NEED

In reviewing the data provided in Chapter II of this report, the Advisory Committee directed that revenue need be identified as follows:[1]

1. Proper development of the regional transportation system in southeastern Wisconsin will require continuation of the historic federal-state-local partnership in the funding of transportation facilities. The determination of revenue need set forth in this chapter assumes that the federal government will continue to fund transportation improvements in the Region at least at current levels. As federal aids pertain to county and local arterials and to transit within the seven-county Region, those current levels are approximately: federal aid secondary, $1.2 million annually; federal aid urban, $7.9 million annually; federal aid for transit capital investment, $6.0 million annually; and federal aid for transit operating assistance, $5.0 million annually.

[1] *All revenue data set forth in this chapter are expressed in constant 1990 dollars.*

2. Revenue need should include the anticipated shortfalls identified in Chapter II attendant to the preservation, improvement, and expansion of county and local arterial highways. Those shortfalls are: county highways, $19.1 million annually; local highways, $2.3 million annually. The identified shortfall of $15.4 million annually attendant to state trunk arterial highways was not included, the Committee concluding that that shortfall properly should be addressed at the state level by redirecting available resources to the Region from elsewhere in the State or by generating additional revenues on a statewide basis.[2]

3. Revenue need should include the existing county and local property tax monies used for capital improvements and for operation and maintenance of county and local arterial highways as set forth in Chapter II. These amounts are: county highways, $21.5 million annually; local highways, $21.0 million annually. The Committee's determination in this respect was based on the conclusion that the property tax could not and should not be relied upon to fund state, county, and local arterial highways even in part. Rather, the property tax should be relieved in that respect and be replaced with some other source of revenue perhaps more directly related to the use of arterial streets and highways. The only street and highway costs intended to remain on the property tax, then, would be those associated with collector and land access streets, the responsibility for which rests at the local level and more appropriately supported by property tax revenues.

4. Revenue need should include the total capital shortfall for the planned public transit system, including the proposed light rail, high speed bus, and commuter rail facilities, as identified in Chapter II. That shortfall is $23.5 million annually.

5. Revenue need should include the local operating shortfall for public transit identified in Chapter II. That shortfall is $15.5 million annually. The shortfall of state funding in support of public transit operating and maintenance cost of $16.8 million annually was not included, the Committee again concluding that that shortfall should be addressed at the state level.

6. Revenue need should include existing county and local property tax monies used for capital improvements for transit—estimated at $2.9 million annually—as well as the county and local share of the public subsidy required to operate the transit system—estimated at $9.4 million annually. The Committee considered the transit system to be an integral part of the regional transportation system, helping to reduce traffic congestion on key arterial streets. Accordingly, the Committee believed it inappropriate to fund the transit system with property tax monies.

Based upon the foregoing Advisory Committee direction, the need for transportation revenue is summarized in Table 33. In total, that need at the county and local level is $115.2 million annually over the 20-year period 1990 through 2010. Of that total, about $54.8 million, or 48 percent, represents the property tax relief attendant to removing public transit and county and local arterial highways as services supported by property taxes. The remaining $60.4 million annually, or 52 percent, represents the county

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[2]*The total cost of adding capacity to the planned state trunk highway system in the Region through the widening of existing facilities and the construction of new facilities in accordance with the adopted regional plan is about $43.0 million annually for the total planned 310 miles of state trunk highway improvement and expansion. The State of Wisconsin has a local cost-sharing policy that may be imposed when capacity expansion projects are undertaken. That policy requires a 25 percent local participation rate if it is demonstrated that at least 40 percent of the traffic on the facility is local in nature; that is, has at least one trip-end within one-quarter mile of the facility. A review of the state trunk highway improvement projects included in the plan indicates that the application of the policy very likely would be limited to about 60 miles of new and widened facilities. Thus, an estimate of the potential maximum local liability attendant to these state trunk highway improvements is about $2.0 million annually.*

Table 33

DETERMINATION OF AMOUNT OF REVENUE REQUIRED TO FUND SHORTFALLS IN TRANSPORTATION AND PROVIDE TRANSPORTATION-RELATED PROPERTY TAX RELIEF IN SOUTHEASTERN WISCONSIN BY TRANSPORTATION MODE AND LEVEL OF GOVERNMENT

Transportation Mode and Level of Government	Amount of Revenue Required Annually (millions of dollars)								
	Shortfall			Property Tax Relief			Total		
	Capital	Operation and Maintenance	Subtotal	Capital	Operation and Maintenance	Subtotal	Capital	Operation and Maintenance	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Arterial Highways									
State	15.4	--	15.4	--	--	--	15.4	--	15.4
County	19.1	--	19.1	4.8	16.7	21.5	23.9	16.7	40.6
Local	2.3	--	2.3	10.1	10.9	21.0	12.4	10.9	23.3
Subtotal	36.8	--	36.8	14.9	27.6	42.5	51.7	27.6	79.3
Transit									
State	--	16.8	16.8	--	--	--	--	16.8	16.8
County/Local	23.5	15.5	39.0	2.9	9.4	12.3	26.4	24.9	51.3
Subtotal	23.5	32.3	55.8	2.9	9.4	12.3	26.4	41.7	68.1
Total									
State	15.4	16.8	32.2	--	--	--	15.4	16.8	32.2
County/Local	44.9	15.5	60.4	17.8	37.0	54.8	62.7	52.5	115.2
Total	60.3	32.3	92.6	17.8	37.0	54.8	78.1	69.3	147.4

Instructions for reading this table:

1. Columns (1) and (2) present the estimated annual shortfalls in funding for arterial highways and transit at the state, county, and local levels. The subtotals in column (3) show that the total shortfall is $92.6 million annually, of which $36.8 million is for highways and $55.8 million is for transit.

2. Columns (4) and (5) present the estimated annual property tax relief at the county and local levels if present transit and arterial highway costs were to be covered by a non-property tax revenue source. The subtotals in column (6) show that the total relief would be $54.8 million annually, of which $42.5 million is highway related and $12.3 million is transit related.

3. Column (7) is the sum of columns (1) and (4).

4. Column (8) is the sum of columns (2) and (5).

5. Column (9) is the sum of columns (3) and (6) or (7) and (8). The total fiscal need is $147.4 million annually, including $32.2 million at the state level and $115.2 million at the county and local level.

Source: SEWRPC.

and local share of the anticipated shortfall in the funding of county and local arterial highways and public transit as identified in Chapter II. Table 33 also identifies the need at the state level for an additional $32.2 million annually within the Region for highways and transit operational support. Table 34 provides county and local revenue need and property tax relief by county.

POTENTIAL REVENUE SOURCES

In considering the array of potential revenue sources that might be used to support transportation services in southeastern Wisconsin, the Committee selected the following to be examined:

1. An add-on motor fuel tax expressed in cents per gallon

Table 34

DISTRIBUTION BY COUNTY OF THE AMOUNT OF REVENUE REQUIRED TO FUND TRANSPORTATION SHORTFALLS AND PROVIDE TRANSPORTATION-RELATED PROPERTY TAX RELIEF AT THE COUNTY AND LOCAL GOVERNMENT LEVEL

Item	Amount of Revenue Required Annually (millions of dollars)							
	County							Total
	Kenosha	Milwaukee	Ozaukee	Racine	Walworth	Washington	Waukesha	
County Arterial Highways								
Shortfall from Prior Analysis	2.3	2.9	0.6	2.6	1.3	1.8	7.6	19.1
Property Tax Relief								
Capital	0.8	1.6	0.4	0.3	0.6	0.9	0.2	4.8
Operations	1.5	4.1	1.2	1.9	1.8	1.7	4.5	16.7
Subtotal	4.6	8.6	2.2	4.8	3.7	4.4	12.3	40.6
Local Arterial Highways								
Shortfall from Prior Analysis	0.5	--	0.1	0.5	0.7	0.1	0.4	2.3
Property Tax Relief								
Capital	0.2	6.9	0.2	1.0	0.1	1.0	0.7	10.1
Operations	0.5	6.3	0.5	1.3	0.1	0.8	1.4	10.9
Subtotal	1.2	13.2	0.8	2.8	0.9	1.9	2.5	23.3
Total Arterial Highways	5.8	21.8	3.0	7.6	4.6	6.3	14.8	63.9
Public Transit[a]								
Total Capital Shortfall from Prior Analysis	1.3	17.6	0.7	1.4	--	0.2	2.3	23.5
Local Operating Shortfall from Prior Analysis	0.9	11.6	0.4	1.0	--	0.2	1.4	15.5
Property Tax Relief								
Capital	0.1	2.7	--	0.1	--	--	--	2.9
Operations	0.3	8.4	--	0.3	--	--	0.4	9.4
Total Transit	2.6	40.3	1.1	2.8	--	0.4	4.1	51.3
Total Need	8.4	62.1	4.1	10.4	4.6	6.7	18.9	115.2
Total Property Tax Relief Provided	3.4	30.0	2.3	5.0	2.5	4.4	7.2	54.8

NOTE: The total column on this table is consistent with the total column in Table 33. Unlike Table 33, however, this table does not include state shortfall amounts.

[a]*Costs associated with "regional" transit services, i.e., transit services largely accommodating trips across county lines, have been distributed by county based on the vehicle miles of such service within each county.*

Source: SEWRPC.

2. An add-on general sales tax expressed in percent
3. An add-on sales tax applied only to motor vehicle sales expressed in percent
4. A sales tax on motor fuel sales expressed in percent
5. An add-on wheel tax expressed as a flat fee
6. A payroll tax expressed in percent

The Committee's selection of the foregoing sources for examination was based in part upon the relationship of the potential sources to the use of the transportation system; in part upon

the findings of the case studies of regional transportation authorities elsewhere in the Nation; in part upon practical considerations relating to the ease of administration of add-on taxes; and in part upon the collective judgment and experience of the Committee members. The Committee rejected any consideration of property taxes or income taxes, the former because of the expressed objective of relieving the property tax, and the latter because of Wisconsin's already relatively high income tax.[3]

An overview of the six potential revenue sources is set forth in Tables 35 and 36. Included in the overview are the generally perceived advantages and disadvantages associated with each tax, as well as comments concerning the potential variations that might be applied should a particular tax be recommended. For example, the wheel tax was examined as a flat add-on fee to the current state motor vehicle registration fee. As a flat fee, that tax may be considered regressive in nature in that it affects all income groups equally. Variations of this tax include differentially treating vehicles by age or value, with the newest and most expensive vehicles paying a higher registration fee than the oldest and least expensive vehicles.

[3]*The Committee also briefly examined the revenue potential of a development impact fee for transportation purposes. Using the impact fee adopted by the City of Loveland, Colorado, as a basis for revenue estimation—Loveland being cited in the literature as a good example of a community that has imposed rational impact fees based upon coordinated land use and public facilities planning—only about $3.5 million annually would be generated in southeastern Wisconsin over the next 20 years, assuming growth takes place in accordance with the forecasts underlying the regional land use plan. This estimate is derived from transportation impact fees of about $230 per incremental residential dwelling unit, $0.65 per incremental square foot of commercial floor space, $0.59 per incremental square foot of institutional floor space, and $1,600 per incremental acre of industrial land.*

POTENTIAL REVENUE AMOUNTS

Add-On Motor Fuel Tax

Present motor fuel taxes consist of a nine cent per gallon federal tax and a 21.5 cent per gallon state tax. The estimated revenue in southeastern Wisconsin from an additional regional motor fuel tax is summarized by county in Table 37. Over the next 20 years, a four cent per gallon additional motor fuel tax could be expected to yield about $31.3 million annually; an eight cent tax about $62.5 million annually; a 12 cent tax about $94.1 million annually; and a 16 cent tax about $125.3 million annually. To meet the total county and local highway and transit need of about $115.2 million annually would require an additional regional motor fuel tax of 15 cents per gallon. These figures assume that this tax would be indexed to future changes in the average fuel efficiency of the vehicle fleet. That fleet efficiency nationally is now at about 20.0 miles per gallon.

Add-On General Sales Tax

Present sales taxes consist of a 5 percent state tax and an optional 0.5 percent county tax. To date, Walworth and Kenosha Counties in southeastern Wisconsin have acted to impose the additional county tax. The estimated revenue in southeastern Wisconsin from an additional regional general sales tax is summarized by county in Table 38. Over the next 20 years, a 0.25 percent additional regional general sales tax could be expected to yield about $43.5 million annually; a 0.50 percent tax about $86.8 million annually; a 0.75 percent tax about $130.4 million annually; and a 1 percent tax about $173.9 million annually. To meet the need of about $115.2 million annually would require an additional general sales tax of about 0.7 percent.

Add-On Motor Vehicle Sales Tax

Motor vehicles are presently subject to the state and county optional sales tax. The estimated revenue in southeastern Wisconsin from an additional sales tax that would be applied only to new and used motor vehicle sales is summarized by county in Table 39. Over the next 20 years, a 1 percent additional motor vehicle sales tax could be expected to yield about $19.8 million annually; a 2 percent tax about $39.1 million annually; a 3 percent tax about $58.9 million annually; a 4 percent tax about $78.7 million annually; and a 5 percent tax about $98.3

Table 35

OVERVIEW OF POTENTIAL REVENUE SOURCES TO SUPPORT TRANSPORTATION SERVICES IN THE SOUTHEASTERN WISCONSIN REGION

Potential Revenue Source	Generally Perceived Advantages	Generally Perceived Disadvantages	Potential Variations in Application
Add-On Motor Fuel Tax	• Tax directly related to system use • Nonresidents of Region would help pay for system • Easy to understand	• Revenue decline with increased motor fuel efficiency of the motor vehicles fleet • Unless indexed, real revenues decline with inflation • At margins of Region, may lead to border crossing to buy fuel • Difficult to administer by county since Wisconsin levies tax at wholesale level	• Can be indexed to offset price inflation and increases in motor fuel efficiency of the vehicle fleet
Add-On General Sales Tax	• Easy to understand • Simple to administer • Nonresidents of Region would help pay for system	• Not related to system use • Revenue fluctuates with economy • Regressive in nature • May lead to border crossing to avoid payment	--
Add-On Motor Vehicle Sales Tax	• Easy to understand • Simple to administer • Revenue increases with price inflation	• Revenue fluctuations owing to sensitivity of automobile sales to changes in economy • Tax not directly related to system use	• System can be designed to ensure that Region residents cannot border-cross to avoid tax • Automobile title tax at time of new car purchase
Motor Fuel Sales Tax	• Easy to understand • Revenue increases with price inflation • Tax directly related to system use • Nonresidents of Region would help pay for system	• Rapid revenue fluctuations are possible owing to fuel price instability • Relatively complex to administer; must be administered at retail level	• Apply tax only to base price of fuel • Apply tax to base price plus federal motor fuel tax • Apply tax to base price plus federal and state motor fuel taxes
Add-On Flat-Fee Wheel Tax	• Easy to understand • Simple to administer	• Regressive in nature • Fee not directly related to system use • Nonresidents of Region escape payment but use system • Unless indexed, real revenues decline with inflation • If high enough, may lead to schemes to improperly register vehicles outside Region	• Vary the registration fee by age of vehicle to reduce regressivity • Vary the registration fee by value of vehicle to reduce regressivity • Vary the registration fee by fuel efficiency of vehicle to encourage purchase of the most fuel efficient vehicles
Payroll Tax	• Easy to understand • Simple to administer • Nonresidents of Region would help pay for system • Not paid directly by worker	• Viewed by some as "anti-business" in nature • Regressive in nature since it excludes nonwage income • Not related to system use	• Add earned income of self-employed persons • Add-on local income tax

Source: SEWRPC.

million annually. To meet the need of about $115.2 million would require a sales tax on motor vehicle sales of about 6 percent.

Motor Fuel Sales Tax

At the present time, Wisconsin excludes motor fuel sales from the state and county optional sales tax. The estimated revenue in southeastern Wisconsin from a sales tax that would be applied to motor fuel is summarized by county in Table 40. Over the next 20 years, a 1 percent motor fuel sales tax could be expected yield about $8.9 million annually; a 2 percent tax $17.7 million annually; a 3 percent tax $26.5 million annually; a 4 percent tax $35.3 million annually; and a 5 percent tax $44.2 million

Table 36

SELECTED CHARACTERISTICS OF POTENTIAL REVENUE SOURCES TO SUPPORT TRANSPORTATION SERVICES IN THE SOUTHEASTERN WISCONSIN REGION

Potential Revenue Source	Characteristic							
	Easy to Administer	Simple to Understand	Nonresidents Pay	Related to Amount of Transportation System Use	Resistant to Inflation	Resistant to Economic Changes	Promotes Transit Use, Ridesharing, and Energy Efficiency	Potential Positive Impact on Air Quality
Additional Motor Fuel Tax	Yes	Yes	Yes	Yes	No[a]	No	Yes	Yes
Additional General Sales Tax	Yes	Yes	Yes	No	Yes	No	No	No
Additional Motor Vehicle Sales Tax	Yes	Yes	No	No	Yes	No	No[b]	No[b]
Motor Fuel Sales Tax	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Additional Flat-Fee Wheel Tax	Yes	Yes	No	No	No[a]	Yes	No[b]	No[b]
Payroll Tax	Yes	Yes	No	No	Yes	No	No	No

[a] *Can be offset by legislatively indexing tax to rate of inflation.*

[b] *Additional motor vehicle sales taxes and flat-fee wheel taxes may have a modest impact on the potential to promote transit use and improve air quality.*

Source: SEWRPC.

Table 37

ESTIMATED REVENUE FROM AN ADD-ON MOTOR FUEL TAX IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY

County	Estimated Annual Revenue (millions of dollars)							
	Based on Current Use[a]				Based on Plan Conditions[b]			
	Add-On Tax per Gallon				Add-On Tax per Gallon[c]			
	$0.04	$0.08	$0.12	$0.16	$0.04	$0.08	$0.12	$0.16
Kenosha	2.0	3.9	5.9	7.9	2.2	4.3	6.5	8.6
Milwaukee	13.7	27.4	41.2	54.9	13.7	27.4	41.2	54.9
Ozaukee	1.5	3.1	4.6	6.1	1.7	3.4	5.2	6.9
Racine	2.5	5.0	7.5	10.1	2.7	5.4	8.2	10.9
Walworth	1.5	3.0	4.5	6.0	1.8	3.6	5.4	7.2
Washington	1.8	3.7	5.5	7.3	2.2	4.4	6.6	8.8
Waukesha	6.1	12.1	18.2	24.3	7.0	14.0	21.0	28.0
Total	29.1	58.2	87.4	116.6	31.3	62.5	94.1	125.3

[a] *Motor fuel sales on a county basis not available; vehicle miles of travel by county in 1989 used as a surrogate to apportion state sales to counties.*

[b] *Increment from current use based on forecast change in average annual vehicle registrations by county over the period 1990 through 2010.*

[c] *It would be necessary to index the tax rate to the change in the vehicle fleet average fuel efficiency and to general price inflation in order to raise the revenues estimated in this table.*

Source: SEWRPC.

Table 38

ESTIMATED REVENUE FROM AN ADD-ON GENERAL SALES TAX IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY

County	Estimated Annual Revenue (millions of dollars)							
	Based on Current Sales[a]				Based on Plan Conditions[b]			
	Add-On Tax in Percent				Add-On Tax in Percent			
	0.25	0.50	0.75	1.00	0.25	0.50	0.75	1.00
Kenosha	2.4	4.8	7.2	9.6	2.6	5.3	7.9	10.6
Milwaukee	21.7	43.5	65.2	87.0	23.3	46.5	69.8	93.1
Ozaukee	1.4	2.8	4.2	5.6	1.7	3.5	5.2	6.9
Racine	3.3	6.5	9.8	13.1	3.6	7.1	10.7	14.3
Walworth	1.5	3.0	4.5	6.0	1.9	3.8	5.8	7.7
Washington	1.3	2.6	4.0	5.3	1.8	3.5	5.3	7.1
Waukesha	6.5	13.0	19.6	26.1	8.6	17.1	25.7	34.2
Total	38.1	76.2	114.5	152.7	43.5	86.8	130.4	173.9

[a]*Estimates based on data by R. L. Stauber as published in Wisconsin Counties, May 1990.*

[b]*Assumes that growth in sales tax revenues would be proportional to forecast growth in households over the period 1990 through 2010.*

Source: SEWRPC.

Table 39

ESTIMATED REVENUE FROM AN ADD-ON MOTOR VEHICLE SALES TAX IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY

County	Estimated Annual Revenue (millions of dollars)									
	Based on Current Sales[a]					Based on Plan Conditions[b]				
	Add-On Tax in Percent					Add-On Tax in Percent				
	1.0	2.0	3.0	4.0	5.0	1.0	2.0	3.0	4.0	5.0
Kenosha	0.6	1.2	1.8	2.4	2.9	0.6	1.2	1.8	2.4	3.0
Milwaukee	8.9	17.7	26.6	35.4	44.3	8.9	17.7	26.6	35.5	44.4
Ozaukee	0.9	1.8	2.7	3.7	4.6	1.1	2.1	3.2	4.2	5.3
Racine	1.9	3.9	5.8	7.8	9.7	2.0	3.9	5.9	7.9	9.8
Walworth	0.6	1.1	1.7	2.2	2.8	0.7	1.3	2.0	2.7	3.4
Washington	0.6	1.3	1.9	2.6	3.2	0.8	1.6	2.4	3.3	4.1
Waukesha	4.5	9.0	13.5	18.0	22.5	5.7	11.3	17.0	22.7	28.3
Total	18.0	36.0	54.0	72.1	90.0	19.8	39.1	58.9	78.7	98.3

[a]*Estimates based on 1987 revenues of new and used automobile dealerships as reported by the U. S. Bureau of the Census in the 1987 Census of Retail Trade; revenues reduced by 14.3 percent to account for sales of services and parts.*

[b]*Assumes that growth in automobile sales would be proportional to forecast growth in households over the period 1990 through 2010.*

Source: SEWRPC.

Table 40

ESTIMATED REVENUE FROM A MOTOR FUEL SALES TAX
IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY

County	Estimated Annual Revenue (millions of dollars)									
	Based on Current Sales[a]					Based on Plan Conditions[b]				
	Tax in Percent					Tax in Percent[c]				
	1.0	2.0	3.0	4.0	5.0	1.0	2.0	3.0	4.0	5.0
Kenosha	0.6	1.1	1.7	2.2	2.8	0.6	1.2	1.8	2.4	3.1
Milwaukee	3.9	7.8	11.6	15.5	19.4	3.9	7.8	11.6	15.5	19.4
Ozaukee	0.4	0.9	1.3	1.7	2.2	0.5	1.0	1.5	1.9	2.4
Racine	0.7	1.4	2.1	2.8	3.6	0.8	1.5	2.3	3.1	3.8
Walworth	0.4	0.8	1.3	1.7	2.1	0.5	1.0	1.5	2.0	2.5
Washington	0.5	1.0	1.5	2.1	2.6	0.6	1.2	1.9	2.5	3.1
Waukesha	1.7	3.4	5.1	6.9	8.6	2.0	4.0	5.9	7.9	9.9
Total	8.2	16.4	24.6	32.9	41.3	8.9	17.7	26.5	35.3	44.2

[a]Motor fuel sales on a county basis not available; vehicle miles of travel by county in 1989 used as a surrogate to apportion state sales to counties.

[b]Increment from current use based on forecast change in average annual vehicle registrations by county over the period 1990 through 2010.

[c]It would be necessary to index the tax rate to the change in the vehicle fleet average fuel efficiency in order to raise the revenues estimated in this table.

Source: SEWRPC.

annually. To meet the need of about $115.2 million would require a motor fuel sales tax of 13 percent. As in the case of the additional motor fuel tax, it would be necessary to index the motor fuel sales tax rate to future changes in the average fuel efficiency of the vehicle fleet in order to yield the estimated revenue amounts.

Add-On Flat-Fee Wheel Tax

Wisconsin presently levies a $25 annual flat motor vehicle registration fee on automobiles and light trucks. Heavy trucks pay a fee which varies with weight and number of axles. The estimated revenue in southeastern Wisconsin from an additional regional flat-fee wheel tax levied on automobiles, light trucks, and heavy trucks is summarized by county in Table 41. Over the next 20 years, a $25 additional registration fee could be expected to yield about $30.1 million annually; a $50 fee $59.9 million annually; a $75 fee $89.9 million annually; and a $100 fee $119.6 million annually. To meet the need of about $115.2 million annually would require an additional wheel tax of about $96 per year.

Payroll Tax

The case study findings indicate that the payroll tax is a particularly important source of revenue used to support the regional transportation authority in the Portland, Oregon area. Portland has been frequently cited by the Wisconsin Department of Transportation as a leading example of coordinated land use and transportation planning and plan implementation. The estimated revenue in southeastern Wisconsin from a payroll tax is summarized by county in Table 42. Over the next 20 years, a 0.25 percent payroll tax could be expected to yield about $53.8 million annually; a 0.50 percent tax about $107.8 million annually; a 0.75 percent tax about $161.3 million annually; and a 1 percent tax about $215.3 million annually. To meet the need of about $115.2 million would require a payroll tax of about 0.5 percent. The payroll tax in Portland is 0.6 percent.

Table 41

ESTIMATED REVENUE FROM AN ADD-ON FLAT-FEE WHEEL TAX IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY

County	Estimated Annual Revenue (millions of dollars)							
	Based on Current Registrations[a]				Based on Plan Conditions[b]			
	Add-On Registration Fee				Add-On Registration Fee			
	$25	$50	$75	$100	$25	$50	$75	$100
Kenosha	2.1	4.2	6.2	8.3	2.3	4.5	6.8	9.0
Milwaukee	13.3	26.5	39.8	53.0	13.3	26.5	39.8	53.0
Ozaukee	1.3	2.6	3.8	5.1	1.4	2.9	4.4	5.8
Racine	2.9	5.7	8.6	11.4	3.1	6.2	9.2	12.3
Walworth	1.4	2.8	4.2	5.6	1.7	3.4	5.0	6.7
Washington	1.6	3.3	4.9	6.5	2.0	3.9	5.9	7.8
Waukesha	5.5	11.0	16.4	21.9	6.3	12.5	18.8	25.0
Total	28.1	56.1	83.9	111.8	30.1	59.9	89.9	119.6

NOTE: To raise the revenues set forth in this table, it would be necessary to index the registration fee to general price inflation.

[a]*Based on 1989 vehicle registrations by county.*

[b]*Based on estimated average annual vehicle registrations over the period 1990 through 2010.*

Source: SEWRPC.

Table 42

ESTIMATED REVENUE FROM A PAYROLL TAX IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY

County	Estimated Annual Revenue (millions of dollars)							
	Based on Current Payroll[a]				Based on Planned Conditions[b]			
	Tax in Percent				Tax in Percent			
	0.25	0.50	0.75	1.00	0.25	0.50	0.75	1.00
Kenosha	2.0	4.0	5.9	7.9	2.6	5.2	7.8	10.5
Milwaukee	28.5	56.9	85.4	113.8	30.7	61.4	92.0	122.7
Ozaukee	1.1	2.3	3.4	4.6	1.5	3.0	4.4	5.9
Racine	3.9	7.8	11.6	15.5	4.6	9.2	13.8	18.4
Walworth	1.2	2.4	3.6	4.9	1.6	3.2	4.7	6.3
Washington	1.5	3.1	4.6	6.2	2.1	4.3	6.4	8.6
Waukesha	8.0	16.1	24.1	32.1	10.7	21.5	32.2	42.9
Total	46.2	92.6	138.6	185.0	53.8	107.8	161.3	215.3

[a]*Estimates based on 1989 total wages of all persons included in the Wisconsin Unemployment Compensation Program. Payroll of persons not covered by the Unemployment Compensation Program and earnings of self-employed are not included.*

[b]*Assumes that growth in payroll would be proportional to forecast growth in jobs over the period 1989 through 2010.*

Source: SEWRPC.

STATE AND LOCAL MOTOR FUEL AND SALES TAXES, MOTOR VEHICLE REGISTRATION FEES, AND VEHICLE PROPERTY TAXES IN NEIGHBORING STATES

An analysis was made of the state and local motor fuel taxes, sales taxes on motor fuel, motor vehicle registration fees, and vehicle property taxes in the neighboring states of Illinois, Michigan, Minnesota, Iowa, and Indiana. The results of that analysis are set forth in Table 43 and in Figures 3 and 4, and may be summarized as follows:

1. Motor Fuel Taxes
   Like Wisconsin, the States of Michigan, Minnesota, Iowa, and Indiana do not currently permit counties and local governments to add on to the state motor fuel tax. The State of Illinois permits counties and municipalities to levy such taxes under home rule authority; in addition, three counties in northeastern Illinois—DuPage, Kane, and McHenry—are authorized to levy motor fuel taxes by special legislation. As shown in Table 43, Cook County levies an additional six cents per gallon motor fuel tax; and the City of Chicago, which lies in Cook County, levies an additional five cents per gallon motor fuel tax.

2. Sales Taxes on Motor Fuel
   Wisconsin does not apply the state sales tax to motor fuel. Neither do the States of Minnesota and Iowa. The States of Michigan, Indiana, and Illinois, however, do apply a sales tax to motor fuel at the state level. The State of Illinois permits county and local governments to levy an additional sales tax on motor fuel. At present such taxes range from 0.25 to 2 percent. In addition, the Chicago Regional Transportation Authority is authorized to levy a sales tax on motor fuel equal to 1 percent in Cook County, and 0.25 percent in the five surrounding counties served by the Authority.

3. Effect of Additional Taxes per Gallon of Motor Fuel
   The combined impact of the additional motor fuel and sales taxes is shown in Figure 3. In terms of total state and local taxes, Wisconsin, Michigan, Iowa, and Indiana are at about the same level, ranging from 19.5 to 21.5 cents per gallon. In neighboring Illinois, however, the state and local taxes constitute a total ranging from 26.1 cents per gallon in Boone County to 39.1 cents per gallon in the City of Chicago.

4. Motor Vehicle Registration Fees/Vehicle Property Taxes/Vehicle Sticker Fees
   Wisconsin's motor vehicle registration fee of $25 per vehicle is low compared to all of the neighboring states. Indiana, Minnesota, and Iowa, in particular, charge substantially higher motor vehicle registration fees and/or vehicle property taxes ranging from $105 to $425 annually. Even in Illinois where taxes on motor fuel sales are significantly higher than in the other states considered, the motor vehicle registration fee—including required municipal vehicle stickers—ranges up to $98 annually.

SUMMARY AND CONCLUSIONS

This chapter has examined potential revenue sources to meet transportation needs in southeastern Wisconsin over the next 20 years. The following conclusions may be drawn based upon the data presented in this chapter:

1. In order to meet transportation needs as measured by: 1) the county and local costs associated with needed improvements and services included in the regional transportation plan; and 2) the removal from the property tax of all costs associated with county and local arterial highways and public transit; about $115.2 million annually would have to be raised over the period 1990 through 2010. Of this total, $60.4 million represents needed improvements and $54.8 represents property tax relief. Thus, nearly one-half of that amount would provide direct property tax relief, while the other one-half would fund shortfalls attendant to county and local arterial highways and public transit. In addition, the highway and transit shortfall in southeastern Wisconsin at the state level is $32.2 million annually.

2. There are a number of non-property tax revenue sources that could be used to support transportation services in southeastern Wisconsin. The sources examined in the chapter—all assumed to be applied at the regional level—are an additional

Table 43

STATE AND LOCAL MOTOR FUEL AND SALES TAXES IN SELECTED MIDWESTERN STATES: 1990

State	Motor Fuel Tax (cents per gallon)				Sales Tax on Motor Fuel (percent)				
	State	County	Local	Total	State	County	Local	Regional Transportation Authority	Total
Wisconsin	21.5	--	--	21.5	--	--	--	--	--
Illinois									
Lake County	19	--	--	19	5.00	0.25	1.00	0.25	6.50
Cook County	19	6	--	25	5.00	--	1.00	1.00	7.00
City of Chicago	19	6	5	30	5.00	--	2.00	1.00	8.00
McHenry County	19	--	--	19	5.00	0.25	1.00	0.25	6.50
Boone County	19	--	--	19	5.00	0.25	1.00	--	6.25
Michigan	15	--	--	15	4.00	--	--	--	4.00
Minnesota	20	--	--	20	--	--	--	--	--
Iowa	20	--	--	20	--	--	--	--	--
Indiana	15	--	--	15	5.00	--	--	--	5.00

NOTE: Figures do not include federal motor fuel tax.

Source: SEWRPC.

motor fuel tax, an additional general sales tax, an additional sales tax applied only to motor vehicle sales, a new sales tax on motor fuel sales, an additional wheel tax, and a payroll tax.

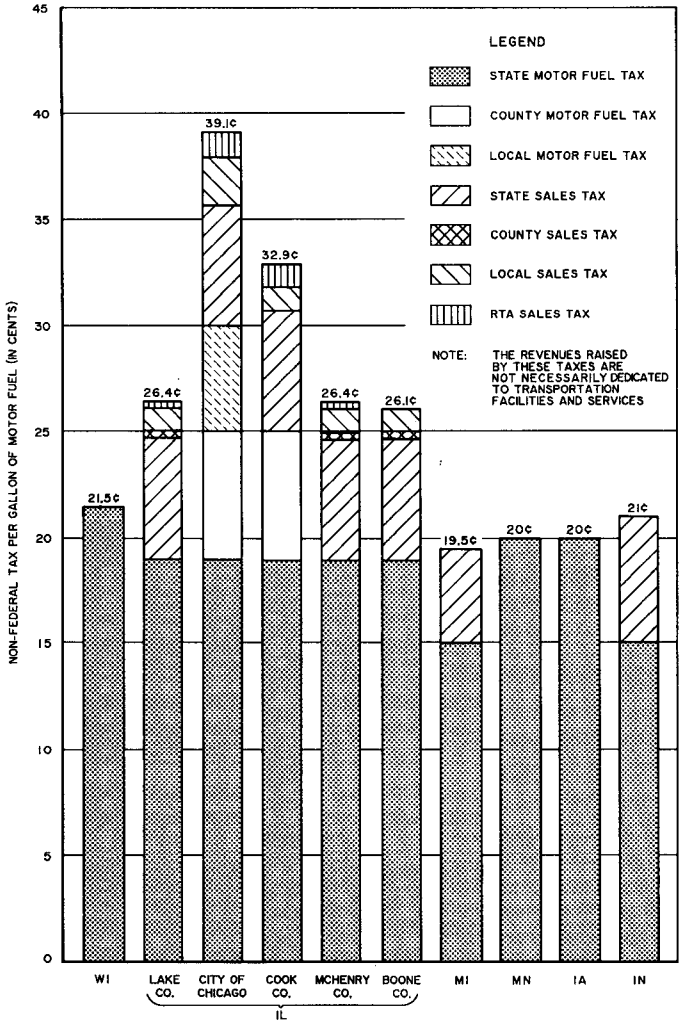
3. In order to raise sufficient revenue to fund the county and local need of about $115.2 million annually, there would be required in southeastern Wisconsin about a 15 cent per gallon additional motor fuel tax; or about a 0.7 percent additional general sales tax; or about a 6 percent additional sales tax applied to motor vehicle sales; or about a 13 percent sales tax applied to motor fuel; or about a $96 additional wheel tax; or about a 0.5 percent tax on employee payrolls. Various combinations of such taxes would be possible. If one sought to fund only the county and local shortfall of $60.4 million annually and not provide property tax relief, the comparable figures would be: about an eight cent per gallon additional motor fuel tax; or about a 0.4 percent additional general sales tax; or about a 3 percent additional sales tax applied to motor vehicle sales; or about a 7 percent sales tax applied to motor fuel; or about a $50 additional wheel tax; or about a 0.3 percent tax on employee payrolls. By way of comparison, adding an eight cent per gallon motor fuel tax or a $50 wheel tax would still rank southeastern Wisconsin below neighboring northeastern Illinois in terms of transportation user fees.

   The identified state need of about $32.2 million annually would have to be met through an additional flow of state and federal funds to southeastern Wisconsin.

4. The neighboring states of Illinois, Michigan, Minnesota, Iowa, and Indiana rely much more heavily than Wisconsin on sales taxes and motor vehicle registration fees to raise revenues, although not all such revenues raised are used for transportation purposes. In Illinois, the state permits county and local motor fuel taxes and sales taxes on motor fuel sales. This results in a total state and local tax of from 26.1 to 39.1 cents per gallon in northeastern Illinois, as compared to 21.5 cents per gallon in Wisconsin. Motor vehicle registration fees and/or vehicle property taxes

Figure 3

COMPARISON OF ADD-ON TAXES PER GALLON OF MOTOR FUEL IN SELECTED MIDWESTERN STATES: 1990[a]

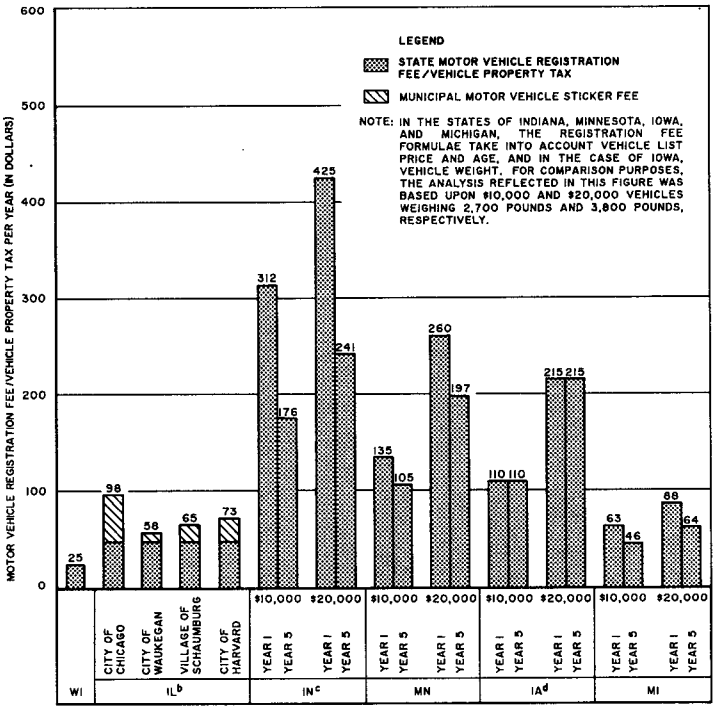


[a]INCLUDES STATE AND LOCAL MOTOR FUEL AND SALES TAXES; BASED ON AN ASSUMED PRODUCT PRICE AND FEDERAL TAX OF $1.13 PER GALLON.

Source: SEWRPC.

Figure 4

COMPARISON OF COMBINED MOTOR VEHICLE REGISTRATION FEES AND TAXES IN SELECTED MIDWESTERN STATES: 1990[a]



[a]INCLUDES STATE MOTOR VEHICLE REGISTRATION FEES AND VEHICLE PROPERTY TAXES AND, FOR THE STATE OF ILLINOIS, SELECTED MUNICIPAL VEHICLE STICKER FEES.

[b]THE ILLINOIS STATE MOTOR VEHICLE REGISTRATION FEE IS A FLAT $48.

[c]THE INDIANA STATE MOTOR VEHICLE REGISTRATION FEE IS A FLAT $12.75. THE ADDITIONAL REVENUE IS GENERATED BY A VEHICLE PROPERTY TAX.

[d]IN IOWA THE AGE DIFFERENTIAL STARTS IN THE 6TH YEAR.

Source: SEWRPC.

are much higher in neighboring states ranging up to $425 in Indiana for a typical family automobile. Even in Illinois, motor vehicle registration fees—including municipal stickers—can approach four times Wisconsin's $25 annual fee.

5. The estimated annual cost imposed by state, county, local, and regional motor fuel and motor fuel sales taxes plus state and local wheel and property taxes of operating the same motor vehicle—assumed to be a new automobile costing about $20,000, weighing about 3,800 pounds, having a combined city-highway fuel efficiency rating of 21.0 miles per gallon, and driven 10,000 miles annually—based upon the above data, is as follows: Wisconsin, $127; Illinois (City of Chicago), $284; Indiana, $525; Minnesota, $355; Iowa, $310; and Michigan, $181.

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Chapter V

ALTERNATIVES FOR STRUCTURING A REGIONAL TRANSPORTATION AUTHORITY FOR SOUTHEASTERN WISCONSIN

INTRODUCTION

In considering the possible creation of a regional transportation authority for southeastern Wisconsin, a number of variables attendant to the structure of such an authority should be taken into account. These variables include: the geographic scope, governance structure, organizational type, functional scope, sources of revenues, and distribution of revenues. Revenue sources were examined in Chapter IV. This chapter briefly addresses each of the remaining variables. The chapter concludes with a discussion of the relationship that should exist between any regional transportation authority that may be created for southeastern Wisconsin and comprehensive, areawide planning.

GEOGRAPHIC SCOPE

As demonstrated in the case studies summarized in Chapter III, regional transportation authorities typically are geographically structured either along county boundaries or along the boundaries of aggregations of local governments that largely represent either entire metropolitan areas or the contiguous urbanized areas within such metropolitan regions. Several basic geographic alternatives may be considered in structuring any potential regional transportation authority for southeastern Wisconsin, including, among others:

1. The entire seven-county Southeastern Wisconsin Region.
2. The four-county Milwaukee Metropolitan Statistical Area.
3. The Milwaukee urbanized area.

A summary description of these particular three alternatives, together with a listing of the advantages and disadvantages of each alternative, is set forth in Table 44. The three alternatives are graphically shown on Map 12. A measure of the 1985 daily cross-county travel movements for work purposes in southeastern Wisconsin is shown on Map 13, while the forecast future cross-county movements are shown on Map 14.

The following conclusions may be drawn from the material presented:

1. There is substantial daily travel across county lines for work and other purposes in southeastern Wisconsin. Regional Planning Commission studies show that this daily interdependence among counties is increasing with time. The strongest interdependence in this respect is between Milwaukee and Waukesha Counties, but interdependence exists between all of the counties and may be expected to increase with time.

2. The Milwaukee urbanized area approximates the intensive local transit service area identified in the regional transportation system plan; however, the selection of that area for a single-purpose, transit function only, regional transportation authority would not relate well to the daily cross-county tripmaking that occurs between outlying urban areas not included within the U. S. Census defined urbanized area—such as Hartford, West Bend, Port Washington, Oconomowoc, Mukwonago, East Troy, and Mount Pleasant—and the intensively developed Milwaukee urbanized area. The urbanized area also does not relate well to the areas of responsibility for highway development at the county level.

3. The selection of the four-county Milwaukee Metropolitan Statistical Area—Milwaukee, Ozaukee, Washington, and Waukesha Counties—as a basis for a regional transportation authority would also ignore the relatively strong daily travel movements that occur between Racine and Kenosha Counties and the four-county greater Milwaukee area.

4. The seven-county Southeastern Wisconsin Region would be the most appropriate jurisdictional area for a regional transportation authority if that authority were to be initially assigned functions relating to both arterial highways and transit, and ultimately to airports and seaports.

Table 44

SELECTED ALTERNATIVE GEOGRAPHIC AREAS FOR A REGIONAL TRANSPORTATION AUTHORITY IN SOUTHEASTERN WISCONSIN

Geographic Alternatives	Summary Description	Transit and Arterial Highway Systems		Comments
		Perceived Advantages	Perceived Disadvantages	
Milwaukee Urbanized Area	1.21 million population[a] 503 square miles Civil divisions: Counties: Whole 1, Part 4 Cities: Whole 15, Part 1 Villages: Whole 19, Part -- Towns: Whole --, Part 10	• Closely approximates local transit service area • Excludes rural landowners and farmers that do not use transit and that do not commute to work	• Excludes some proposed rapid transit service areas, particularly those in northern Ozaukee, northwestern Washington, western Waukesha, northeastern Walworth, all of Racine, and eastern Kenosha Counties • Boundary changes with time • Boundary largely unrelated to county and local government boundaries	• Probably useful only for a single-purpose transit operating agency
Milwaukee Metropolitan Statistical Area	1.42 million population[b] 1,494 square miles Civil divisions: Counties: Whole 4, Part -- Cities: Whole 20, Part 1 Villages: Whole 37, Part -- Towns: Whole 32, Part --	• Includes majority of proposed local and rapid transit service areas • Relates well to certain counties and local agencies responsible for arterial highways • Better represents the socio-economic unit that is the greater Milwaukee area than urbanized area	• Excludes some proposed rapid transit service areas, particularly those proposed to be served by commuter rail in Kenosha-Racine-Milwaukee corridor • Includes some rural landowners and farmers that do not contribute to peak period travel demand	• Probably useful only if political support for a regional transportation authority is lacking in Kenosha, Racine, and Walworth Counties
Southeastern Wisconsin Region	1.80 million population[b] 2,689 square miles Civil divisions: Counties: Whole 7, Part -- Cities: Whole 26, Part 2 Villages: Whole 57, Part -- Towns: Whole 64, Part --	• Includes all of proposed local and rapid transit service areas • Relates well to all counties and local agencies responsible for arterial highways • Encompasses entirety of the socioeconomic unit that is the greater Milwaukee area • Encompasses sound comprehensive planning area	• Includes more rural landowners and farmers that do not contribute to peak period travel demand	--

[a] *Based on 1980 U. S. Census of Population. An urbanized area is a central city of at least 50,000 persons plus contiguous developed urban area having a population density of at least 1,000 persons per square mile.*

[b] *Based on preliminary 1990 U. S. Census of Population.*

Source: SEWRPC.

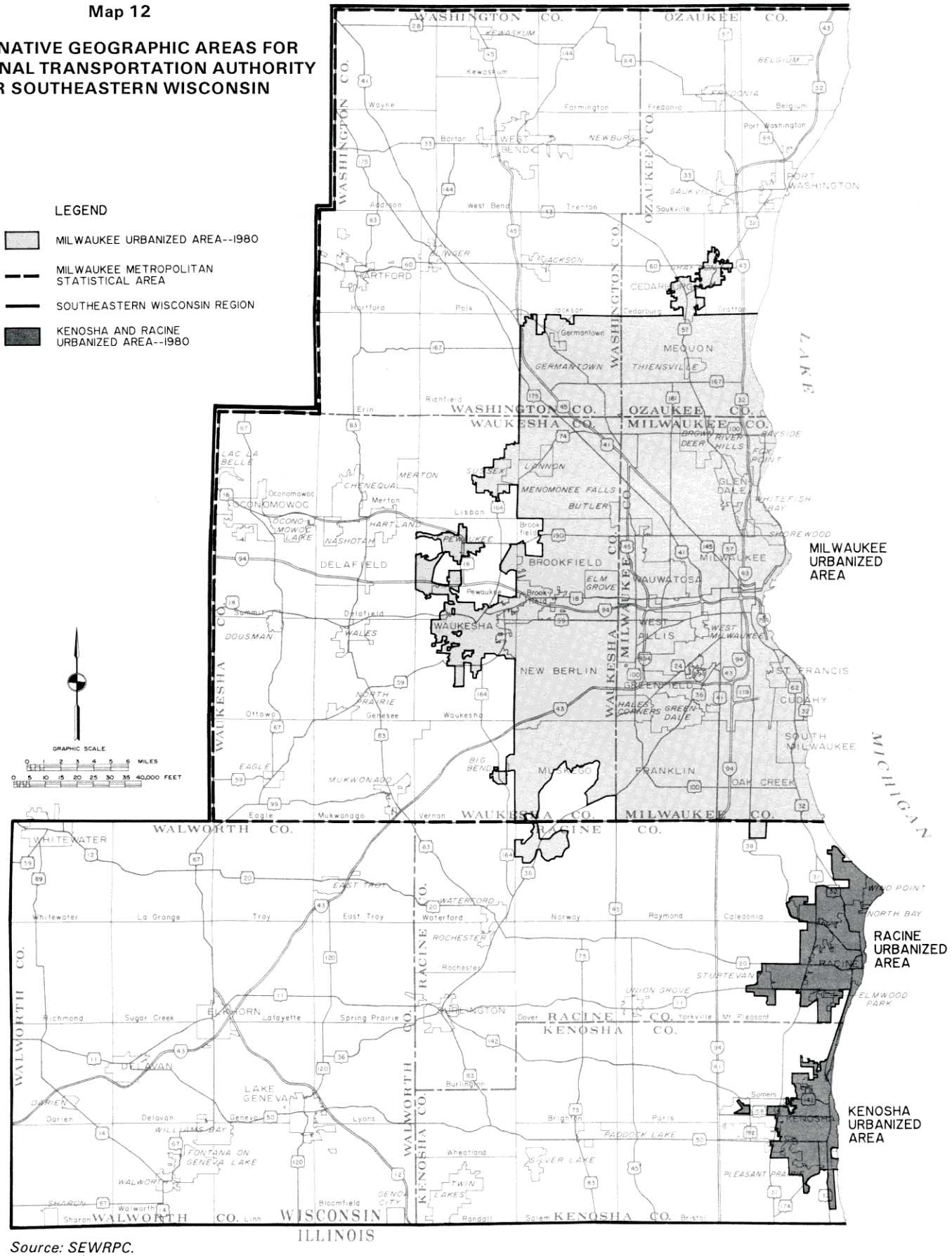
GOVERNANCE STRUCTURE

The key variables attendant to the governance structure for a potential regional transportation authority for southeastern Wisconsin relate to the size of the governing body, the geographic representation of the members of the governing body, and the method of selection of the members of the governing body. With respect to size, the case studies indicate that regional transportation authorities across the United States have governing bodies that range from seven to 25 members. A five- to seven-member body would probably represent the minimum desirable size. Anything more than a 21-member body may become cumbersome in operation. The size of the governing body may be expected to increase in proportion to the number of appointing authorities.

Members of the governing body of a potential regional transportation authority can either be chosen geographically at large from the entire area of the authority, or by district within that overall authority area. The members of the governing body can either be elected or appointed. The generally perceived advantages and disadvantages attendant to these alterna-

Map 12

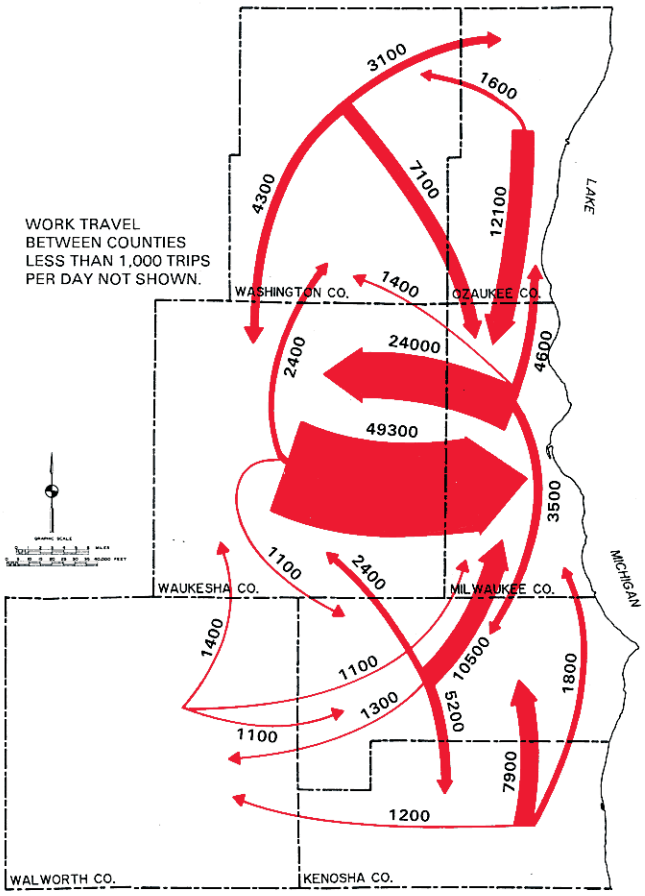
ALTERNATIVE GEOGRAPHIC AREAS FOR A REGIONAL TRANSPORTATION AUTHORITY FOR SOUTHEASTERN WISCONSIN



Source: SEWRPC.

Map 13

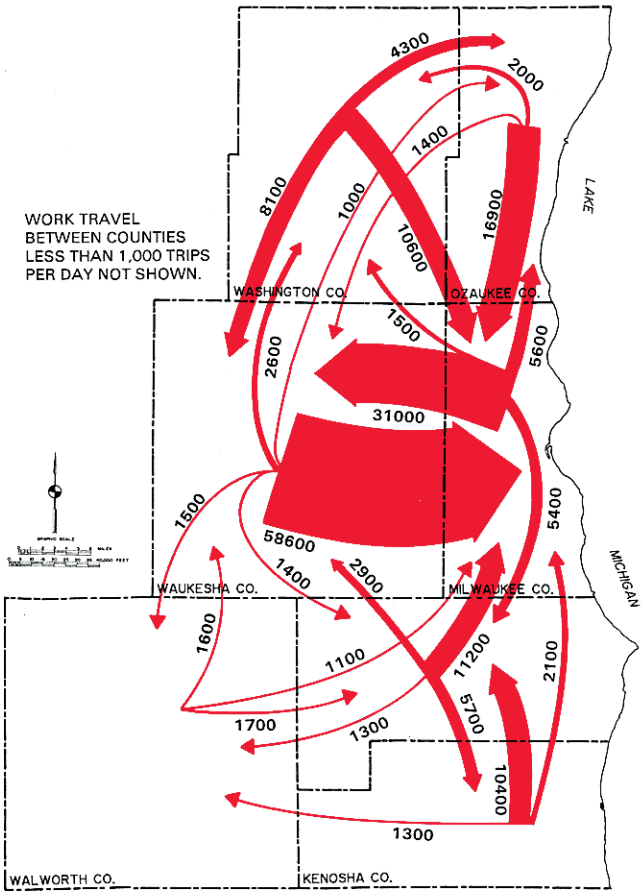
SELECTED CROSS-COUNTY DAILY TRAVEL FOR WORK PURPOSES IN SOUTHEASTERN WISCONSIN: 1985



Source: SEWRPC.

Map 14

FORECAST SELECTED CROSS-COUNTY DAILY TRAVEL FOR WORK PURPOSES IN SOUTHEASTERN WISCONSIN: 2000



Source: SEWRPC.

tives are summarized in Table 45. The following conclusions may be drawn from the material included in the table and from the case study material summarized in Chapter III:

1. Because of the large geographic area concerned, representation on the governing body of regional transportation authorities is usually by some sort of district. The case studies indicate that typically the members of the governing body usually represent large cities and groups of smaller suburban municipalities, or counties, or groups of counties.

2. The direct election of members to the governing body of a regional transportation authority, while assuring proportional representation on the governing body, and while theoretically ensuring responsiveness to the electorate, is an arrangement rarely used for special purpose units of government like regional transportation authorities, although the arrangement is commonly used for school districts. County and local governments have a large stake in the condition and development of the transportation infrastructure, and use of a directly elected body to govern a transportation authority may result in conflicts between local and regional objectives, plans, and programs.

3. It is possible to provide a surrogate for direct proportional representation by delineating geographic subareas—districts—so

Table 45

SELECTED ALTERNATIVE WAYS TO STRUCTURE THE GOVERNANCE OF A REGIONAL TRANSPORTATION AUTHORITY FOR SOUTHEASTERN WISCONSIN

Governance Structure		Perceived Advantages	Perceived Disadvantages	Comments
Variable	Alternatives			
Representation of Members of Governing Body	At large	• Provides greatest freedom to electorate or appointing authority to elect or select "best" individuals for governing body, i.e., most knowledgeable and least parochial individuals	• Does not ensure representation from all subgeographic areas	• Rarely used in American political structure for relatively large "communities"
	By district	• Ensures that all subgeographic areas receive consideration	• Depending on size of subgeographic area, may have difficulty identifying qualified individuals to run for office or accept appointment	• Normally used when geographic area is relatively large and consists of many different local governments
Selection of Members of Governing Body	Direct election	• Ensures direct proportional representation on governing body	• May be difficult to attract qualified individuals to run for a relatively obscure office	• Rarely used technique for special purpose units of government greater than a single-county in area
	Appointment by Governor	• Provides best chance for obtaining appointments of individuals most knowledgeable and least parochial	• Does not give local elected officials a direct role in making appointments	• Appointments could be made subject to State Senate confirmation
	Appointment by counties	• Ensures that local elected officials who are closest to the county and local transportation systems make the selections	• May lead to appointment of individuals with parochial viewpoints	• Appointments can be made by county executives or county board chairman subject to county board confirmation
	Shared appointments	• Balances state and local viewpoints in the appointment process	• Somewhat more cumbersome, since actions to appoint must be made at both local and state levels	• Difficult to use where representation is by district and only a single representative is required

Source: SEWRPC.

as to have approximately equal population, and requiring that appointments be made of individuals residing in those geographic areas. Alternatively, such a surrogate for direct proportional representation can be achieved by giving, for example, a county with twice the population of an adjoining county twice the number of representatives. Weighted voting by members represents yet another technique to achieve proportional representation.

4. A state-local shared approach to appointments is an alternative approach to the selection of members of a governing body of a regional transportation authority that is also frequently used. Such an approach ensures that state, county, and local concerns are taken into account in the appointment process. There are a number of techniques that can be used in the shared appointment process, including some appointments made directly by the Governor and some by county and/or local officials. In addition, it is possible to share an appointment by having the Governor select an individual from a list provided by county and/or local officials.

ORGANIZATION TYPE AND FUNCTIONAL SCOPE

A regional transportation authority may take on one of the following organizational types:

Table 46

ALTERNATIVE ORGANIZATIONAL TYPES AND FUNCTIONAL SCOPES OF REGIONAL TRANSPORTATION AUTHORITIES CONSIDERED FOR SOUTHEASTERN WISCONSIN

Type	Scope	Brief Description	Perceived Advantages	Perceived Disadvantages	Comments
Revenue Distribution	Arterial highways	• RTA would be created to distribute non-property tax based revenues to designated county and local highway agencies based upon predetermined formulas	• RTA could focus attention on lack of regional plan implementation; funding could be used as a lever to encourage county and local highway agencies to initiate projects considered to be especially critical from a regional perspective	• Creates another layer of government • Views and priorities of RTA governing body might conflict with those of county and local governments	• The revenue distribution function could also be carried out by a state agency • Would relate well to a RTA structured along county boundaries because existing highway agencies are organized that way
	Transit	• RTA would be created to distribute non-property tax based revenues to designated transit agencies based upon predetermined formulas	• RTA could focus attention on lack of regional plan implementation; funding could be used as a lever to encourage county and local transit agencies to initiate projects that would provide for cross-county travel movements and be competitive with the automobile	• Creates another layer of government • Views and priorities of RTA governing body might conflict with those of county and local transit agencies	• The revenue distribution function could also be carried out by a state agency • Would not relate well to an RTA structured along county boundaries, because transit service areas are not necessarily countywide in scope; might lead to pressures to provide transit service to geographic areas of the Region where service is not warranted
	Arterial highways and transit	• RTA would be created to distribute non-property tax based revenues to designated county and local highway agencies and designated transit agencies based upon predetermined formulas or upon the discretion of the RTA	• RTA could focus attention on lack of regional plan implementation; funding could be used as a lever to encourage county and local transit agencies to initiate projects considered to be especially critical from a regional perspective, including cross-county movements by transit	• Creates another layer of government • Views and priorities of RTA governing body might conflict with those of county and local transit agencies	• The revenue distribution function could also be carried out by a state agency • Could focus on both highways and transit, thereby appropriately meeting needs throughout the entire Region, while avoiding pressures to provide transit service to areas where it is not warranted

1. An organization devoted exclusively to the collection and distribution of non-property tax based revenues from state specified sources. The revenues would be distributed to designated transportation operating agencies.

2. An organization devoted to the collection of revenues and the actual delivery of transportation services, typically mass transit services.

3. An organization that both collects and distributes revenue to designated operating agencies and delivers certain transportation services using retained revenue.

In considering the type of organization appropriate for a regional transportation authority, it should be recognized that revenues may be raised, collected, and distributed in a number of different ways. A regional transportation authority could be given the authority by the State Legislature to levy a tax within certain limits and guidelines. Alternatively, the State could levy a tax statewide or within a region and provide some of the statewide or all of the regional revenue to a regional authority to be

Table 46 (continued)

Type	Scope	Brief Description	Perceived Advantages	Perceived Disadvantages	Comments
Revenue Distribution and/or Service Provision	Arterial highways	• RTA would be created to assume responsibility for constructing and maintaining county and/or local arterial highways; non-property tax based revenues would be provided to the RTA for this purpose	• A single regional agency to determine implementation priorities could better assure that needed areawide improvements are made in a timely manner	• Creates another layer of government • Would diminish local decision making responsibility for arterial highways	• This approach would change a long established and well respected system for the improvement and operation and maintenance of county and local arterial highways
	Transit	• RTA would be created to assume responsibility for rapid and/or local transit; non-property tax based revenues would be provided to the RTA for this purpose	• Would fill a void in governance structure that now exists since there is no agency akin to the WisDOT in the highway field to assume responsibility for transit improvements that would serve largely cross-county travel	• Creates another layer of government	• Cross-county transit function could also be carried out by a state agency • Would not relate well to an RTA structured along county boundaries, because transit service areas and agencies are not necessarily county-wide in scope; might lead to pressures to provide transit service to geographic areas of the Region where service is not warranted
	Arterial highways and transit	• RTA would be created to assume responsibility for county and/or local arterial highways and/or for rapid and/or local transit; non-property tax based revenues would be provided to the RTA for these purposes	• Would enable an approach to be taken whereby RTA would perform a revenue distribution function with respect to county and local arterial highways and perhaps for local transit, but provide direct service with respect to rapid transit for cross-county travel movements	• Creates another layer of government	• Revenue distribution could focus on both highways and transit, thereby meeting appropriate needs throughout the Region, while avoiding pressures to provide transit service in areas where it is not warranted

Source: SEWRPC.

used and/or distributed by that authority on the basis of either its own discretion or in accordance with specified guidelines.

The functional scope of a regional transportation authority can extend across the entire spectrum of transportation modes. For the purposes of the feasibility study, the Advisory Committee determined that the potential functional scope of a regional transportation authority for southeastern Wisconsin would be confined, at least initially, to county and local arterial streets and highways and mass transit.

Considering this range of organizational types and functional scopes, the perceived advantages and disadvantages associated with the alternatives considered are summarized in Table 46. The following conclusions may be drawn from the material set forth in that table:

1. A regional transportation authority that would be created only to collect and distribute revenue to support county and local arterial highways as a practical matter would have to be structured along county boundaries. Alternatively, however, that revenue collection and distribution func-

tion could be carried out by a state agency, thus avoiding creation of another layer of government.

2. A regional transportation authority that would be created only to collect and distribute revenue to support mass transit could be structured along county boundaries; however, such a structure might lead to pressures to provide transit service to geographic portions of the Region where such service is not warranted. Again, the revenue collection and distribution function could be carried out by a state agency, thus avoiding the creation of another layer of government.

3. A regional transportation authority that would be created to collect and distribute revenue to support both county and local arterial highways and to provide county and local mass transit facilities and services could be structured along county boundaries, could help meet areawide needs in a timely manner, and could avoid pressures to provide transit service in areas where such service is not warranted by trading off highway for transit facilities and services.

4. A regional transportation authority that would be created solely to assume operating responsibilities for county and/or local arterial highways is not needed. Given a framework of regionally coordinated county jurisdictional highway system plans, county and local governments have a sound and equitable basis upon which to make highway investment and operational decisions.

5. A regional transportation authority that would have operational responsibility for rapid and/or local transit is feasible, but would create another layer of government. Such an authority could not be structured well along county boundaries because such a structure might lead to pressures to provide transit services in areas where such service is not warranted. An alternative approach would be to assign the rapid transit responsibilities—that is, those transit facilities and services that tend to serve cross county travel—to the Wisconsin Department of Transportation in much the same way as that agency has responsibility for state trunk highways. Under such an approach, local transit services could continue to be provided by county and local agencies.

6. A regional transportation authority that would be bifunctional—with responsibilities for both arterial highways and transit—and that would both distribute revenue to county and local highway agencies and provide direct mass transit operations is feasible. Such an authority could focus revenue distribution on highways where needed while at the same time providing an appropriate governing structure to provide mass transit in those portions of the Region where needed.

REVENUE DISTRIBUTION

There are many different alternatives possible with respect to revenue distribution. Three basic alternatives were examined in the feasibility study:

1. Distribution of revenue based upon geographic source.

2. Distribution of revenue based upon need.

3. Distribution of revenue based upon selected measures of transportation and socioeconomic activity.

The various revenue sources considered to be available to support transportation facilities and services in southeastern Wisconsin were identified in Chapter IV. An approximate distribution of the revenues concerned by county of generation is provided in Table 47 for each of the six revenue sources considered: motor fuel tax, general sales tax, motor vehicle sales tax, motor fuel sales tax, wheel tax, and payroll tax. If geographic source of revenue were used as the basis for the distribution of revenue by a regional transportation authority in southeastern Wisconsin, Kenosha County could expect to receive from about 3 percent to about 8 percent of the revenue, or from $3.5 million to $8.7 million annually, depending upon the particular tax being considered; Milwaukee County from about 44 percent to about 57 percent, or from $51.0 million to $56.8 million annually; Ozaukee County from about 3 percent to about 6 percent, or from $3.2 million to $6.3 million annually;

Table 47

REVENUE DISTRIBUTION ON BASIS OF REVENUE SOURCE IN SOUTHEASTERN WISCONSIN BY COUNTY

County	14.7 Cent per Gallon Additional Motor Fuel Tax		0.66 Percent Additional General Sales Tax		5.86 Percent Additional Motor Vehicle Sales Tax		13.02 Percent Motor Fuel Sales Tax		$96.16 Flat-Fee Wheel Tax		0.54 Percent Payroll Tax	
	Annual Amount (millions of dollars)	Percent of Total	Annual Amount (millions of dollars)	Percent of Total	Annual Amount (millions of dollars)	Percent of Total	Annual Amount (millions of dollars)	Percent of Total	Annual Amount (millions of dollars)	Percent of Total	Annual Amount (millions of dollars)	Percent of Total
Kenosha	8.0	6.9	7.0	6.1	3.5	3.0	7.9	6.9	8.7	7.5	5.6	4.9
Milwaukee	50.5	43.9	61.6	53.5	52.0	45.1	50.5	43.8	51.0	44.3	65.6	56.8
Ozaukee	6.3	5.5	4.6	4.0	6.2	5.4	6.3	5.5	5.6	4.9	3.2	2.8
Racine	10.0	8.7	9.5	8.2	11.6	10.1	10.0	8.7	11.8	10.2	9.8	8.5
Walworth	6.6	5.7	5.1	4.4	3.9	3.4	6.6	5.7	6.4	5.6	3.4	3.0
Washington	8.1	7.0	4.7	4.1	4.8	4.2	8.1	7.0	7.5	6.5	4.6	4.0
Waukesha	25.7	22.3	22.7	19.7	33.2	28.8	25.8	22.4	24.2	21.0	23.0	20.0
Total	115.2	100.0	115.2	100.0	115.2	100.0	115.2	100.0	115.2	100.0	115.2	100.0

Source: SEWRPC.

Racine County from about 8 percent to about 10 percent, or from $9.5 million to $11.8 million annually; Walworth County from about 3 percent to about 6 percent, or from $3.4 million to $6.6 million annually; Washington County from about 4 percent to about 7 percent, or from $4.6 million to $8.1 million annually; and Waukesha county from about 20 percent to about 29 percent, or from $22.7 million to $33.2 million annually.

An arguably better basis of revenue distribution would be transportation system improvement need. The total amount of such need attendant to county and local arterial highways and mass transit was determined in Chapter IV at about $115.2 million per year. The distribution of that need by county is shown in Table 48. On this basis, Kenosha County could expect to receive about 7 percent of the total revenues, or about $8.4 million annually; Milwaukee County about 54 percent, or about $62.1 million; Ozaukee County about 4 percent, or about $4.1 million; Racine County about 9 percent, or about $10.5 million; Walworth County about 4 percent, or about $4.6 million; Washington County about 6 percent, or about $6.6 million; and Waukesha County about 16 percent, or about $18.9 million.

Other potential methods for distributing available revenue relate to various measures of transportation and socioeconomic activity. The relative distribution of revenue on this basis is summarized in Table 49 for selected measures of transportation activity and Table 50 for selected measures of socioeconomic activity. If revenues were to be made available through a regional transportation authority for county and local trunk arterials, for example, one possible way to distribute that revenue would be by average weekday vehicle miles of travel on county and local trunk arterials. On that basis, Kenosha County would receive about 7 percent of the revenue, or about $7.6 million annually; Milwaukee County about 50 percent, or about $57.3 million annually; Ozaukee County about 4 percent, or about $5.2 million annually; Racine County about 8 percent, or about $8.9 million annually; Walworth County about 4 percent, or about $5.2 million annually; Washington County about 3 percent, or $3.9 million annually; and Waukesha County about 24 percent, or $27.1 million annually.

If planned future population levels were to be used as a basis for the distribution of revenue, Kenosha County would receive about 7 percent, or about $7.6 million annually; Milwaukee County about 50 percent, or about $57.4 million annually; Ozaukee County about 4 percent, or about $5.0 million annually; Racine County about 9 percent, or about $10.6 million annually; Walworth County about 5 percent, or about 5.4 million annually; Washington County about

Table 48

REVENUE DISTRIBUTION ON BASIS OF TRANSPORTATION NEED IN SOUTHEASTERN WISCONSIN BY COUNTY

County	Annual Need[a] (millions of dollars)			
	Arterial Highways	Transit[b]	Total	Percent Distribution
Kenosha	5.81	2.55	8.36	7.3
Milwaukee	21.78	40.35	62.13	53.9
Ozaukee	3.03	1.06	4.09	3.5
Racine	7.71	2.80	10.51	9.1
Walworth	4.55	0.02	4.57	4.0
Washington	6.26	0.38	6.64	5.8
Waukesha	14.79	4.14	18.93	16.4
Total	63.93	51.30	115.23	100.0

[a]Need is defined as the fiscal resources required to implement the regional transportation plan and to remove from the county and local property taxes those present costs associated with building and maintaining arterial streets and highways and operating public transit systems.

[b]Costs associated with "regional" transit services, i.e., transit services largely accommodating trips across county lines, have been distributed by county based on the vehicle miles of such service within each county.

Source: SEWRPC.

6 percent, or about $6.9 million annually; and Waukesha County about 19 percent, or about $22.3 million annually.

If transit vehicle miles of travel were to be used as a basis for the distribution of revenues, Kenosha County would receive about 6 percent, or about $6.3 million annually; Milwaukee County about 75 percent, or about $86.6 million annually; Ozaukee County about 3 percent, or about $3.1 million annually; Racine County about 6 percent, or about $7.1 million annually; Washington County about 1 percent, or about $1.2 million annually; and Waukesha County about 10 percent, or about $10.9 million annually. Under the adopted plan, the only recommended transit service in Walworth County is peak hour commuter-oriented service from East Troy through Mukwonago to Milwaukee. Accordingly, Walworth County would receive virtually no revenue under this measure.

In considering the alternatives with respect to the distribution of revenue, several considerations should be kept in mind. First, transportation needs may be expected to change over time by geographic area as older facilities wear out and need to be replaced, and as urban growth and change take place. Thus, it should be expected that the relationship between the geographic source of the revenue and the distribution of that revenue to meet needs will also change over time. In addition, a direct correlation cannot always be made between the geographic place—for example, a county—where an individual pays a tax and the place or places where that same individual realizes benefits from the expenditure of tax monies. This is particularly true in a metropolitan region, where daily travel patterns reveal substantial crossing of county lines. Finally, in any consideration of a revenue distribution formula, probably some discretion should be given to the distributing agency to use some of the monies as an incentive to encourage an operating agency to carry out a project that has particularly significant areawide benefits.

PLANNING CONSIDERATIONS

In considering the creation of any regional transportation authority for southeastern Wisconsin, it will be important to properly relate such an authority not only to the state, county, and local agencies responsible for the delivery of

Table 49

REVENUE DISTRIBUTION ON BASIS OF SELECTED MEASURES OF TRANSPORTATION ACTIVITY IN SOUTHEASTERN WISCONSIN BY COUNTY

County	Measure of Transportation Activity (percent)						
	Average Weekday Vehicle Miles of Travel[a]		Average Weekday Person Trip Ends[b]		Transit Vehicle Miles of Travel[b]	Centerline Miles of Arterial Highways[b]	
	On Total Arterial System	On County and Local Trunk Arterials	Total	On Transit		Total	County and Local
Kenosha	6.8	6.6	8.8	5.6	5.5	9.7	9.8
Milwaukee	47.4	49.8	50.3	81.3	75.1	21.4	22.0
Ozaukee	5.3	4.5	4.8	1.6	2.7	8.5	9.2
Racine	8.6	7.7	10.0	6.2	6.2	12.2	11.8
Walworth	5.0	4.5	3.7	--[c]	--[c]	13.4	10.9
Washington	6.2	3.4	4.9	0.7	1.0	13.3	13.3
Waukesha	20.7	23.5	17.5	4.6	9.5	21.5	23.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

County	Annual Distribution of Revenue on Basis of Transportation Activity (millions of dollars)						
	Average Weekday Vehicle Miles of Travel[a]		Average Weekday Person Trip Ends[b]		Transit Vehicle Miles of Travel[b]	Centerline Miles of Arterial Highways[b]	
	On Total Arterial System	On County and Local Trunk Arterials	Total	On Transit		Total	County and Local
Kenosha	7.8	7.6	10.1	6.5	6.3	11.2	11.3
Milwaukee	54.7	57.3	58.0	93.7	86.6	24.6	25.3
Ozaukee	6.1	5.2	5.5	1.8	3.1	9.8	10.6
Racine	9.9	8.9	11.5	7.1	7.1	14.1	13.6
Walworth	5.8	5.2	4.3	--	--	15.4	12.6
Washington	7.1	3.9	5.6	0.8	1.2	15.3	15.3
Waukesha	23.8	27.1	20.2	5.3	10.9	24.8	26.5
Total	115.2	115.2	115.2	115.2	115.2	115.2	115.2

[a] *Existing 1988.*

[b] *Planned 2010.*

[c] *Less than 0.05.*

Source: SEWRPC.

transportation services, but also to the Southeastern Wisconsin Regional Planning Commission as the officially designated comprehensive regional planning agency in this portion of the State. To understand what that relationship properly should be requires an understanding of an efficient and effective approach to the public works development process. That approach is outlined in Figure 5.

In transportation facility development, as in any major public works project, there should be three successive stages in an orderly process. The first stage is termed "system planning." System planning is comprehensive in scope, relating transportation problems and alternative solutions to those problems to broad, areawide, land use, socioeconomic, and environmental considerations. System planning for transporta-

Table 50

RELATIVE DISTRIBUTION OF VARIOUS MEASURES OF SOCIOECONOMIC ACTIVITY IN SOUTHEASTERN WISCONSIN BY COUNTY

County	Measure of Socioeconomic Activity (percent)					
	Population		Employment			
	Existing[a]	Planned[b]	Existing[c]	Planned[b]	Equalized Valuation[d]	Retail Sales[e]
Kenosha	7.1	6.6	4.9	5.7	6.1	5.3
Milwaukee	52.8	49.8	58.6	55.0	46.0	54.3
Ozaukee	4.0	4.3	3.2	3.7	5.3	3.5
Racine	9.7	9.2	8.4	8.6	8.2	9.7
Walworth	4.2	4.7	3.7	3.6	5.9	3.6
Washington	5.3	6.0	4.1	4.4	5.4	3.9
Waukesha	16.9	19.4	17.1	19.0	23.1	19.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

County	Annual Distribution of Revenue on Basis of Socioeconomic Activity (millions of dollars)					
	Population		Employment			
	Existing[a]	Planned[b]	Existing[c]	Planned[b]	Equalized Valuation[d]	Retail Sales[e]
Kenosha	8.2	7.6	5.6	6.6	7.0	6.1
Milwaukee	60.8	57.4	67.5	63.3	53.1	62.6
Ozaukee	4.6	5.0	3.7	4.3	6.1	4.0
Racine	11.2	10.6	9.7	9.9	9.4	11.2
Walworth	4.8	5.4	4.3	4.1	6.8	4.1
Washington	6.1	6.9	4.7	5.1	6.2	4.5
Waukesha	19.5	22.3	19.7	21.9	26.6	22.7
Total	115.2	115.2	115.2	115.2	115.2	115.2

[a] *Preliminary 1990 Census of Population.*

[b] *Forecast year 2010 by SEWRPC.*

[c] *1989 Estimate by SEWRPC.*

[d] *1989 by Wisconsin Department of Revenue.*

[e] *1987 Census of Retail Trade.*

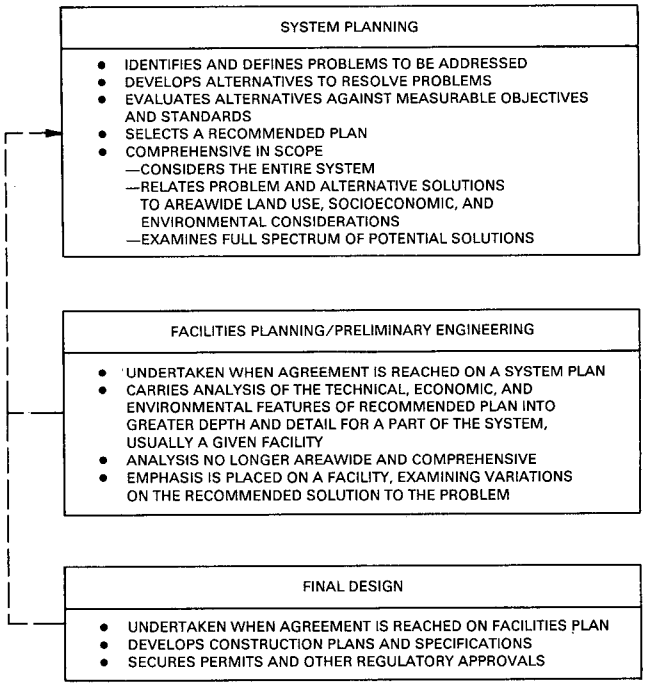
Source: SEWRPC.

tion results in the selection of a recommended system plan. That system plan should include elements relating to freeways, surface arterial streets and highways, and transit systems, all prepared in a coordinated and balanced manner; being designed to provide a desired level of transportation service and being based upon an underlying land use plan that is environmentally sound. The adopted regional transportation system plan for southeastern Wisconsin is such a plan.

The second stage in the process is termed either "facility planning" or "preliminary engineering." The analysis conducted in this stage is no longer areawide and comprehensive, but rather

Figure 5

OVERVIEW OF AN ORDERLY APPROACH TO THE PUBLIC WORKS DEVELOPMENT PROCESS



Source: SEWRPC.

relates to a single transportation facility that usually pertains to a single transportation mode—although individual projects can be bimodal as, for example, a transit facility in the median of a freeway—and is intended to examine in detail variations of the recommended facility. Such detailed work should not be undertaken until all concerned parties agree on a system plan.

This second stage is perhaps best understood by way of an example taken from the adopted regional transportation system plan. That example is the proposed Lake Arterial in Milwaukee, Racine, and Kenosha Counties. That new arterial facility was found in the systems planning step to be needed and in the public interest both as a new highway facility for autos and trucks extending from the south end of the Hoan Memorial Bridge, and as a basis for providing bus-based rapid transit service in the lakeshore corridor. With agreement on the system plan, it became the responsibility of the Wisconsin Department of Transportation to undertake the preliminary engineering step. Within the lakeshore corridor, the Department is now proceeding to examine in detail a number of alternative alignments and configurations for the recommended new facility. For each alignment, the advantages and disadvantages are identified. At the end of the preliminary engineering step, one alignment is selected and recommended for implementation.

The third stage in the orderly process is termed "final design." This stage is undertaken only when the second stage is completed and the decision-making governments involved agree on a detailed proposal. The third stage results in the preparation of construction plans and specifications, the taking of bids, and actual construction.

The orderly public works development process recognizes that it may be necessary to undertake successive iterations of the process before a final solution is found. Using the example of the proposed Lake Arterial noted above, if the preliminary engineering stage results in a determination that there is no acceptable alignment for the proposed facility, then that decision has to be reflected back at the system planning level and the ramifications of the decision attendant to the entire system ascertained and reported. This would result in a change in the system plan.

In southeastern Wisconsin, the Regional Planning Commission has the statutory responsibility for carrying out the system planning for major public works, including highways, transit, airports, sewerage facilities, flood control works and measures, and park facilities. The scope and complexity of areawide development problems prohibit the making and adopting of an entire comprehensive regional development plan at one time. The Regional Planning Commission has proceeded with the preparation of individual plan elements which together comprise the comprehensive plan. Each element is intended to deal with an identified areawide problem, e.g., transportation, water pollution, or flooding. The individual elements are coordinated by being related to an agreed-upon areawide land use plan. Thus, the land use plan comprises the most basic regional plan element, one on which all other elements are based.

The case studies have shown that in some metropolitan areas regional transportation authorities have been given the responsibility for conducting system planning for mass transit

facilities. This results in a disorderly and duplicative process, one that inevitably leads to confusing and conflicting public works planning for transportation. An orderly approach to relating the responsibilities of a regional transportation authority for southeastern Wisconsin to the existing regional planning program would include the following provisions:

1. Any regional transportation authority for Southeastern Wisconsin should have as its duty and responsibility implementation of the transportation element of the adopted regional plan agreed upon by State, county, and local governments. Such agreement exists today.

2. If a regional transportation authority is created as a mechanism only for the collection and distribution of revenue, then it should be the responsibility of that authority to focus the available revenue on projects proposed by highway and transit agencies and found to be consistent with the agreed-upon regional plan. Such an agency should also be able to use incentives to encourage needed projects of areawide importance in those instances where existing operating agencies have failed to implement the plan. This could be done through a combination of funding-based incentives or withholding of funding of other projects.

3. If a regional transportation authority is created and given operational responsibilities, e.g., for the provision of mass transit services, then the authority should be given the explicit responsibility for conducting the preliminary engineering and final design steps of the orderly public works process for all projects found to be consistent with the agreed-upon regional system plan.

SUMMARY AND CONCLUSIONS

This chapter has examined the variables that must be taken into account in structuring a potential regional transportation authority for southeastern Wisconsin. These variables relate to geographic scope, governance structure, organizational type, functional scope, revenue distribution, and planning relationships.

The material presented in this chapter was reviewed by the Advisory Committee at its meeting on October 11, 1990. The results of that review are reflected in the potential structure of a regional transportation authority set forth in the following chapter.

Chapter VI

A POSSIBLE STRUCTURE FOR A REGIONAL TRANSPORTATION AUTHORITY FOR SOUTHEASTERN WISCONSIN

INTRODUCTION

At meetings held on September 25 and October 11, 1990, the Advisory Committee considered the information presented in Chapters II through V of this report, which deal with transportation system needs in southeastern Wisconsin; case studies of regional transportation authorities in selected metropolitan areas in the United States; potential sources of revenue to meet transportation needs; and the variables that need to be considered should it be deemed desirable to propose the creation of a regional transportation authority for southeastern Wisconsin. Committee members had indicated that before considering whether or not the creation of a regional transportation authority for southeastern Wisconsin should be recommended, the possible structure, functions, and funding for such an authority should be identified. Committee members were accordingly polled by the Committee Chairman via a questionnaire as to their preferences with respect to the key issues involved in structuring a potential regional transportation authority for southeastern Wisconsin. The questionnaire (copy reproduced in Appendix B) dealt with potential revenue sources of a non-property tax nature to meet transportation needs; the geographic scope of a potential authority; the governance structure of a potential authority; and the functions that such an authority might be authorized to perform. The Committee members were asked to rank order their preferences with respect to the alternatives attendant to each question. The results of the poll are summarized in Table 51.

Based upon the results of that poll as set forth in Table 51, and taking into account the deliberations of the Advisory Committee at the October 11 meeting, this chapter outlines the key characteristics of a potential regional transportation authority for southeastern Wisconsin. The characteristics addressed include potential funding and the ways in which the use of such funding might be specified; the possible modal responsibilities of an authority; a possible geographic scope of an authority; a possible governance structure for an authority; and possible functions and duties of such an authority.

POTENTIAL FUNDING SOURCES AND SPECIFIED USE OF FUNDING SOURCES

Definition of Transportation Needs

Drawing from the information presented in Chapter II, and taking into account Committee deliberations, the following transportation needs in the seven-county Southeastern Wisconsin Region have been identified:

Transportation Need	Funds Required Annually Over the Period 1991-2010 (millions of constant 1990 dollars)
1. Maintain existing bus system	25.4
2. Expand existing bus system	13.4
3. Build light rail transit line	9.8
4. Build Milwaukee-to-Kenosha commuter rail line	2.7
5. Build, widen, and resurface county and local arterial highways	36.3
6. Operate and maintain county and local arterial highways	27.6
Total	115.2

Preferred Revenue Sources

Based upon the poll of Committee members, the following represents the collective preference of the Committee, in rank order, for the revenue sources that could be used to meet transportation needs:

1. Motor fuel sales tax
2-3. Motor vehicle sales tax
2-3. General sales tax
4. Wheel tax
5. Motor fuel tax

Table 51

SUMMARY OF COMMITTEE PREFERENCES AS TO POTENTIAL STRUCTURE OF A REGIONAL TRANSPORTATION AUTHORITY[a]

Item	Alternatives Considered	Rank Order
Preferred Source of Revenue	Motor fuel sales tax	1
	Motor vehicle sales tax	2-3
	General sales tax	2-3
	Wheel tax	4
	Motor fuel tax	5
	Impact fees	6
	Payroll tax	7
Geographic Scope	Seven-county Region	1
	Four-county Milwaukee Metropolitan Area	2
	Milwaukee transit service area	3
Method of Choosing Members of Governing Body	Appointed	1
	Elected by district	2
Method of Making Appointments	Shared between Governor and counties	1
	Shared between Governor, counties, and local governments	2
	By Governor alone with State Senate confirmation	3
	Shared between counties and local governments	4
Functions	Revenue collection and distribution for highways and transit	1
	Operating authority for transit with revenue collection and distribution for highways	2
	Revenue collection and distribution for transit only	3
	Operating authority for transit and highways	4
	Operating authority for transit only	5
Method of Revenue Distribution	By need in accordance with regional transportation plan	1
	By geographic source of revenue	2
	By a measure of transportation activity	3
	By need as determined by authority	4
	By a measure of socioeconomic activity	5

[a]*Based on results of an Advisory Committee questionnaire. The questionnaire is reproduced in Appendix B.*

Source: SEWRPC.

6. Impact fees

7. Payroll tax

In addition, the Committee noted the need to establish a state transit capital grant program to supplement federal and local monies for transit capital needs and to treat transit on an equal basis with highways in this respect.

Essential Elements of Any New Funding Proposal

Based upon Committee deliberations at the October 11, 1990, meeting, it may be concluded that the following elements should be present in any proposal for the funding of a regional transportation authority:

1. Funding for a regional transportation authority should draw upon multiple sources of revenue and not on a single source.

2. Funding for a regional transportation authority should include an element of county and local property tax relief, removing from the property tax all or a portion of the current burden attendant to the improvement, operation, and maintenance of county and local arterial highways and transit facilities.

3. Funding for a regional transportation authority should include a new transit capital grant program at the state level.

4. Funding for a regional transportation authority should dedicate each proposed revenue source to a defined transportation need.

A PROPOSAL FOR FUNDING A REGIONAL TRANSPORTATION AUTHORITY IN SOUTHEASTERN WISCONSIN

Matching of Needs and Revenue Sources

Based upon the foregoing direction, a set of potential revenues from the Committee's rank order list of preferred non-property tax-based revenue sources was matched to the six categories of defined transportation needs. This matching is summarized in Table 52. The recommendations implicit in this table are as follows:

1. A new state transit capital program would be created. That program would be funded at a level adequate to provide 50 percent of the nonfederal funds necessary to build and provide equipment for the light rail and commuter rail systems recommended in the agreed upon regional transportation system plan; to provide any fixed facilities for the development of the modified rapid transit and express bus lines recommended in the agreed upon regional transportation system plan; and to acquire new and replacement buses for local, as well as modified rapid transit and express, bus service, as recommended in the agreed upon regional transportation system plan. A total of $13.3 million annually would be required in southeastern Wisconsin over the next 20 years for these purposes under the assumptions stated above. Alternatively, if it were assumed that the State would provide all of the nonfederal funds necessary for the light rail and commuter rail systems, a total of $19.5 million would be required annually. A new source of state funding probably would be required to support this new capital grant program. A potential source for such new state revenue could be a dedicated statewide one cent per gallon motor fuel tax, since that tax relates directly to transportation system use and should serve to encourage transit use. By definition, this new revenue would be matched with only the capital related items of the four categories of transit need previously identified.

2. To fund the regional share of transit operating and capital costs, a 2 percent motor vehicle sales tax would be applied to sales of new and used motor vehicles within the Region and to any such sales outside of the Region and within Wisconsin to residents of the Region. This tax would raise an estimated $39.1 million annually, sufficient to meet all of the county and local transit capital and operating costs. This aspect of the proposal would also provide property tax relief of about $12.3 million annually. If the State were to fund all of the nonfederal costs associated with the rail transit systems, this tax could be reduced to yield $32.9 million annually.

3. To provide for new and improved county and local arterial streets and highways, a 4 percent motor fuel sales tax would be applied within the Region. This would meet the county and local highway capital needs and provide about $14.9 million annually in property tax relief.

4. To provide for the routine operation and maintenance of county and local arterial highways, a $23 average wheel tax would be applied to all motor vehicles registered in the Region. This would raise sufficient funds to allow counties and local governments in the Region to maintain and operate arterial streets and highways without using property tax monies, thus providing property tax relief of about $27.6 million annually. It should be noted that in order to raise the necessary revenues from a flat-fee wheel tax, it would be necessary to index that tax so that it kept pace with general price inflation.

In total, the taxes would meet the estimated need of $115.2 million annually for transportation system development and operation within the Region, while providing property tax relief of $54.8 million annually. The distribution of property tax relief by county is shown in Table 53. The total need of $115.2 million per

Table 52

A HIGHWAY AND TRANSIT FUNDING PROPOSAL FOR SOUTHEASTERN WISCONSIN

Transportation Item to be Funded	Brief Description	Annual Funds Required (millions of dollars)	Annual Proposed Revenue Source (millions of dollars)				Alternate Revenue Source
			2 Percent Motor Vehicle Sales Tax	4 Percent Motor Fuel Sales Tax	$23 Average Wheel Tax	New State Transit Capital Program[a]	0.7 Percent General Sales Tax
Bus Transit—Maintain Existing System	Maintain existing bus system; provide property tax relief of $12.3 million annually, the amount of local funds presently contributed by the local governments	25.4[b]	21.4	--	--	4.0	25.4
Bus Transit—Expand System	Expand bus system per agreed-upon regional plan	13.4[c]	10.4	--	--	3.0	13.4
Light Rail Transit	Build and operate a 14-mile light rail line as an initial step toward a light rail system	9.8[d]	4.9	--	--	4.9	9.8
Commuter Rail	Build and operate a 33-mile commuter rail line in the Milwaukee-Racine-Kenosha corridor	2.7[e]	1.3	--	--	1.4	2.7
County and Local Highways—Capital (new and widened highways; resurfacing projects)	Provide adequate funds to enable county and local governments to build projects identified in agreed-upon county highway plans; provide property tax relief of $14.9 million annually[f]	36.3	1.1	35.2	--	--	36.3
County and Local Highways—Operation and Maintenance (sealing, sanding, salting, plowing operations; traffic signals and signs)	Provide adequate funds to enable county and local governments to operate and maintain arterial highways without using property tax dollars, thus providing property tax relief of $27.6 million annually[g]	27.6	--	0.1	27.5	--	27.6
Total	Includes a total of $54.8 million in property tax relief	115.2[h]	39.1	35.3	27.5	13.3[i]	115.2

[a] *Assumes that the State of Wisconsin would pay 50 percent of nonfederal cost of bus and rail capital projects.*

[b] *Of this total, $8.0 million is for capital outlay and $17.4 for operating costs. Total already reflects an assumption (in Chapter II) that federal funds would be available at a level of $6 million annually for capital costs and at a level of $5 million annually for operating costs (see Tables 20 and 21 in Chapter II). In addition, it is assumed that the State would continue to fund 38.5 percent of operating costs.*

[c] *Of this total, $5.9 million is for additional capital outlay and $7.5 million for additional operating costs. Total already reflects an assumption (in Chapter II) that federal funds would be available to pay for 25 percent of capital costs, but none of the new operating costs. The State would contribute 38.5 percent of the additional operating costs.*

[d] *Total capital cost of light rail line estimated at $250 million. Of this, it has already been assumed (in Chapter II) that federal government would pay 25 percent, or $62.5 million. If federal funding is not obtained, state and local capital costs would increase by $1.6 million each annually. The entire anticipated operating deficit would be borne by the existing state transit aid program, because farebox revenues are anticipated to cover about 65 percent of the operating costs. Accordingly, additional state costs to are reflected in state transit operating shortfall identified in Chapter II.*

[e] *Total capital cost of commuter rail line estimated at $70 million, of which it is assumed (in Chapter II) that federal government would pay 25 percent, or $0.875 million per year. If federal funding is not obtained, state and local capital costs would increase by $0.44 million each annually. As in the case of light rail, the entire anticipated operating deficit would be borne by the existing state transit aid program. Accordingly, additional costs to the State are reflected in state transit shortfall identified in Chapter II.*

[f] *This assumes continued provision of federal aid secondary and federal aid urban funds at current levels of $1.21 million and $7.91 million annually, respectively. Assumes discontinuance of current state reimbursement of 30 percent of capital costs of county trunk highways and 24 percent of capital costs of local arterials through the state highway aids program.*

[g] *This assumes continued provision of state aids at current reimbursement levels.*

[h] *Under a cost-sharing policy established by the Wisconsin Department of Transportation, local governments may be required to fund 25 percent of the cost of projects to provide additional capacity on the state trunk highway system. This policy would apply where at least 40 percent of the traffic was found to be "local" in nature. The application of this policy could add up to $2.0 million annually in local transportation needs, thus raising the total need to $117.2 million annually.*

[i] *Under an alternate assumption that the State would provide all of the nonfederal funds required for the rail transit system, this amount would be increased to $19.5 million annually. Correspondingly, the $39.1 million from the 2 percent motor vehicle sales tax would be reduced to $32.9 million.*

Source: SEWRPC.

Table 53

SUMMARY OF PROPERTY TAX RELIEF INCLUDED IN HIGHWAY AND TRANSIT FUNDING PROPOSAL BY COUNTY

County	Annual Property Tax Relief (millions of dollars)						
	Highway Related			Transit Related			
	County	Local	Subtotal	County	Local	Subtotal	Total
Kenosha	2.3	0.7	3.0	--	0.4	0.4	3.4
Milwaukee	5.7	13.2	18.9	11.1	--	11.1	30.0
Ozaukee	1.6	0.7	2.3	--	--	--	2.3
Racine	2.2	2.3	4.5	--	0.4	0.4	4.9
Walworth	2.4	0.2	2.6	--	--	--	2.6
Washington	2.6	1.8	4.4	--	--	--	4.4
Waukesha	4.7	2.1	6.8	0.1	0.3	0.4	7.2
Total	21.5	21.0	42.5	11.2	1.1	12.3	54.8

Source: SEWRPC.

year would be met in part through a new state transit capital program that would provide $13.3 million annually; and in part through three new taxes to be applied at the regional level that would collectively raise the remaining $101.9 million annually. Alternatively, the entire required $115.2 million annually could be raised through a 0.7 percent general sales tax (see Table 52).

Comparison of Revenue Sources with Revenue Distribution Based on Needs

All of the work of the Committee related to needs determination has been predicated on the assumption that the adopted regional transportation system plan provides a sound basis for needs determination. Thus, the total estimated need of $115.2 million annually is directly related to implementation of the adopted plan. Since the amount of funds proposed to be raised is based upon the plan, it is logical that expenditures from the funds raised should be directed toward implementation of the plan on an areawide basis; that is, should be used to create an integrated transportation system that can serve the entire Region well.

The transportation needs throughout the seven counties vary significantly. In Walworth County, those needs may presently be almost exclusively highway oriented. In the other counties, the needs are both highway and transit oriented to varying degrees. Because there is substantially daily interaction among the seven counties in the Region, because this interaction may be expected to increase with time, and because the transportation systems within each county are at varying stages of development, it should not be expected that the transportation needs within a given county will necessarily match the amount of revenue that would be generated within each county under the proposal. Table 54 identifies by county the estimated revenues by source and the estimated expenditure needs by element of the transportation system.

Table 55 indicates that with respect to highway revenues, i.e., the proposed 4 percent motor fuel sales tax and the proposed $23 regional wheel tax, only Milwaukee County would raise more revenue than needed to implement the highway element of the regional plan in that county. Ozaukee County would raise about what is needed in that county to implement the plan. In the remaining five counties, monies raised within each county would be insufficient to fully implement the highway plan. In effect then, monies raised in Milwaukee County under the highway targeted taxes would be shifted under the proposal to Kenosha, Racine, Walworth, Washington, and Waukesha Counties so that the highway agencies in those counties would have sufficient revenues to implement the regional plan.

The opposite would be true for transit (see Table 56). Revenues raised for transit, i.e., the proposed 2 percent motor vehicle sales tax and an assumed statewide motor fuel tax to fund the

Table 54

DETAILED COMPARISON OF REVENUES AND EXPENDITURES BY COUNTY ASSUMING EXPENDITURES BASED UPON NEED AS DEFINED IN REGIONAL TRANSPORTATION PLAN

County	Annual Revenues (millions of dollars)					Annual Expenditures[b] (millions of dollars)						
	From 2 Percent Motor Vehicle Sales Tax	From 4 Percent Motor Fuel Sales Tax	From $23 Average Wheel Tax	To State for New Transit Capital Program[a]	Total	For Maintaining Existing Bus Transit	For Expanded Bus Transit	For Light Rail Transit	For Commuter Rail Transit	For County and Local Highway Capital Projects	For County and Local Highway Maintenance	Total
Kenosha	1.2	2.4	2.1	0.9	6.6	0.8	1.1	--	0.5	3.8	2.0	8.2
Milwaukee	17.6	15.5	12.2	5.8	51.1	22.6	8.1	9.8	1.2	11.1	10.4	63.2
Ozaukee	2.1	1.9	1.3	0.7	6.0	--	0.9	--	--	1.6	1.7	4.2
Racine	3.9	3.1	2.8	1.2	11.0	1.2	0.5	--	1.0	4.5	3.2	10.4
Walworth	1.3	2.0	1.5	0.8	5.6	--	--	--	--	2.6	1.9	4.5
Washington	1.7	2.5	1.8	0.9	6.9	--	0.3	--	--	3.8	2.5	6.6
Waukesha	11.3	7.9	5.8	3.0	28.0	0.8	2.5	--	--	8.9	5.9	18.1
Total	39.1	35.3	27.5	13.3	115.2	25.4	13.4	9.8	2.7	36.3	27.6	115.2

[a] *Assumes that the State would fund proposed transit capital program through state motor fuel taxes and that the Region would receive state transit capital grants in direct proportion to the amount of state motor fuel taxes paid by Region residents.*

[b] *Assumes that county and local governments would act to fully implement regional transportation plan.*

Source: SEWRPC.

Table 55

COMPARISON OF HIGHWAY REVENUES AND EXPENDITURES UNDER FUNDING PROPOSAL BY COUNTY

County	Annual Revenues Taxes Paid by County Residents (millions of dollars)	Annual Expenditures Costs Incurred Within Each County to Implement Regional Transportation Plan (millions of dollars)	Annual Excess (+) or Shortfall (-) of Expenditures as Compared to Revenues (millions of dollars)	Percent of Taxes Paid that Are Returned to County of Origin
Kenosha	4.5	5.8	+1.3	129
Milwaukee	28.2	21.5	-6.7	76
Ozaukee	3.3	3.3	--	100
Racine	6.0	7.7	+1.7	128
Walworth	3.5	4.5	+1.0	129
Washington	4.4	6.3	+1.9	143
Waukesha	14.0	14.8	+0.8	106
Total	63.9	63.9	--	--

Source: SEWRPC.

new state transit capital program, would be shifted under the proposal from Ozaukee, Racine, Walworth, and Waukesha Counties to Kenosha and Milwaukee Counties.

Table 57 compares both the highway and transit revenues and expenditures on a county-by-county basis. In terms of the percent of taxes paid that would be returned to the county of origin to meet transportation needs, the range is from a low of 65 percent in Waukesha County to a high of 124 percent in Kenosha and Milwaukee Counties.

In considering the information included in Table 57, it is important to note that the revenues raised from the proposed 2 percent motor vehicle sales tax, which total about $39.1 million annually and which would be targeted to transit needs, are distributed by county on the

Table 56

COMPARISON OF TRANSIT REVENUES AND EXPENDITURES UNDER FUNDING PROPOSAL BY COUNTY

County	Annual Revenues Taxes Paid by County Residents (millions of dollars)	Annual Expenditures Costs Incurred Within Each County to Implement Regional Transportation Plan (millions of dollars)	Annual Excess (+) or Shortfall (-) of Expenditures as Compared to Revenues (millions of dollars)	Percent of Taxes Paid that Are Returned to County of Origin
Kenosha	2.1	2.4	+0.3	114
Milwaukee	22.9	41.7	+18.8	182
Ozaukee	2.8	0.9	-1.9	32
Racine	5.0	2.7	-2.3	54
Walworth	2.1	--	-2.1	0
Washington	2.5	0.3	-2.2	12
Waukesha	13.9	3.3	-10.6	24
Total	51.3	51.3	--	--

Source: SEWRPC.

Table 57

COMPARISON OF TOTAL REVENUES AND EXPENDITURES UNDER FUNDING PROPOSAL BY COUNTY

County	Annual Revenues Taxes Paid by County Residents (millions of dollars)	Annual Expenditures Costs Incurred Within Each County to Implement Regional Transportation Plan (millions of dollars)	Annual Excess (+) or Shortfall (-) of Expenditures as Compared to Revenues (millions of dollars)	Percent of Taxes Paid that Are Returned to County of Origin
Kenosha	6.6	8.2	+1.6	124
Milwaukee	51.1	63.2	+12.1	124
Ozaukee	6.0	4.2	-1.8	70
Racine	11.0	10.4	-0.6	95
Walworth	5.6	4.5	-1.1	80
Washington	6.9	6.6	-0.3	96
Waukesha	28.0	18.1	-9.9	65
Total	115.2	115.2	--	--

Source: SEWRPC.

basis of available data related to the geographic location of the sale of the vehicle. This may result in some distortion in the distribution of revenue by the county of source, since automobile dealers tend to cluster at certain locations in a metropolitan region and yet serve a customer base widely dispersed over several counties. To the extent that such distortion exists, it results, for example, in overrepresenting the amount of revenue that would be paid through vehicle sales taxes by Waukesha County residents since Waukesha County happens to be the location for several vehicle dealer clusters. A better distribution of such revenue by county would be obtained if data were readily available on the dollar volume of vehicle sales by county of residence of the vehicle purchaser. It is believed that such data would tend to raise the relative rate of "return" of revenue to Waukesha County by reducing the amount of revenue

contributed by Waukesha County through the proposed vehicle sales tax.

Variables in the Proposal

There are a number of variables connected with the funding proposal which deserve consideration. These variables relate to revenue options, the extent of rail transit proposed to be constructed, and federal and state funding levels. The following briefly discusses these variables.

Revenue Options: The funding proposal summarized in Table 52 could be varied in a number of different ways. The three revenue sources included in the proposal—motor vehicle sales tax, motor fuel sales tax, and wheel tax—represent three of the top four Committee choices for new sources of revenue. The choice ranked fourth is the general sales tax. As an option, it would be possible, for example, to substitute a 0.25 percent general sales tax in the Region for the 2 percent motor vehicle sales tax and raise about the same amount of revenue. Similarly, the motor fuel tax, which ranked fifth in the Committee poll, could be substituted for the motor vehicle sales tax as the basis for funding highway capital needs. A five cent motor fuel tax would raise about the same amount of revenue as the 4 percent motor fuel sales tax included in the proposal described above.

Another option involves the wheel tax included in the proposal. The proposal envisions an average $23 regional wheel tax. It would be possible to vary that wheel tax according to selected characteristics of the vehicles, such as, for example, fuel efficiency. All of the information necessary to determine the fuel efficiency of each vehicle in the fleet is included in the data captured by the state in the titling of a motor vehicle. By way of illustration, Table 58 explicates how such a concept might be applied. In this example, the basic objective was to vary the wheel tax so that the least fuel efficient vehicles in the fleet would pay about 2.5 times the tax paid by the most fuel efficient vehicles. Overall, however, the wheel tax would average $23.

Rail Transit Considerations: The following special considerations attendant to the extent and funding of rail transit should be noted:

1. City of Milwaukee Study

   The City of Milwaukee is currently undertaking a facilities level study of rail transit within the Region. That study may be expected to support the development of the commuter rail line from Milwaukee to Kenosha, as recommended in the adopted regional transportation system plan, and the development of a light rail system that may be 19 miles in extent as opposed to the 14-mile system currently envisioned in the regional plan. In effect, the Milwaukee study would, in the short term rather than the long term, substitute in certain travel corridors light rail transit for bus rapid transit and express bus service. The capital costs associated with implementing the City proposed rail transit plan would be higher than the capital costs of the rail transit facilities presently included in the regional plan. At present, the extent of such an increase is not known, but it could range up to about $250 million, or up to about $12.5 million annually. Under such a proposal about $3.0 million annually would be "saved" by reduced bus capital costs. Thus, the net capital cost increase would approximate $9.5 million annually. Such an additional shortfall could be met in part by federal funds—25 percent, or about $2.4 million annually; in part by additional state transit capital funds—50 percent of the nonfederal share, or about $3.6 million annually; and in part by additional regional funds in the remaining amount of $3.5 million annually, the latter coming from an increase in the proposed motor vehicle sales tax to 2.2 percent.

   The City of Milwaukee study is also considering the proposed commuter rail line from Kenosha to Milwaukee. The regional plan contains a cost estimate for establishing that line of about $70 million. There are many variables associated with that proposed line, however, that could significantly affect the capital cost estimate. These variables include the number of miles of single and double track; the signal system to be used; the quality of the track, which would affect running speed and time; the number, type, and size of stations; and the type and number of cars and locomotives. It is conceivable that, depending upon the assumptions made attendant to those variables, the capital cost of this project could be as high as $150 million. Should such a level of facility and service

Table 58

ILLUSTRATIVE EXAMPLE OF PROPOSAL TO VARY WHEEL TAX BY FUEL EFFICIENCY RATINGS OF VEHICLES

Federal EPA Fuel Efficiency Range (city-highway composite rating, miles per gallon)	Examples of Vehicles Within Range	Percent of Vehicles Within Range	Proposed Annual Regional Wheel Tax[a]
30.0 or More	Plymouth Horizon Pontiac Sunbird Honda Civic	27	$18
25.1 to 29.9	Buick Regal Ford Mustang Chrysler LeBaron	54	$23
20.1 to 25.0	Cadillac Ford Crown Victoria Chrysler Fifth Avenue	17	$27
20.0 or Less	Chevrolet Caprice Plymouth Gran Fury Mercedes-Benz 420 SEL	2	$45

[a]*The proposed wheel tax would be set to yield an average of $23 per vehicle. This example is based upon the 1989 new car fleet and national sales. The tax would be scaled to the actual vehicle fleet in southeastern Wisconsin and would change yearly. The basic concept is to charge the least fuel efficient vehicles about twice as much as the most fuel efficient vehicles.*

Source: SEWRPC.

be agreed upon so that the higher costs are entailed, it will be necessary to adjust the revenue estimates contained herein.

2. Potential Federal Funding of Light Rail Transit

The analyses of funding shortfalls for transportation presented in Chapter II of the study report assumed that the federal government would fund 25 percent of all transit capital costs, including a total of $62.5 million over the 20-year period for the light rail facilities currently envisioned in the adopted regional plan. This assumption would require that the transit agency concerned complete the comprehensive alternatives analysis required by the federal government, and that such an alternatives analysis would provide a basis for favorable federal action. If such an analysis is not done, or if done and unsuccessful in demonstrating to the satisfaction of the federal government that light rail is more cost effective than express bus in the corridors concerned, then the federal funds would not be forthcoming. In that event, the state and regional shares for a 14-mile light rail system would each have to be increased by about $1.6 million annually, and, for a 19-mile system, each share would be increased by about $3.2 million annually.

3. Cash Flow Requirements for Rail Transit

The analyses set forth in this report assume an average annual funding requirement for rail transit over a 20-year period. Actually, more funds may be needed in the first five to ten years of the 20-year period, while the rail facilities are being constructed. The preferred approach to this cash flow problem would be to have the state borrow the monies required to finance the initial capital investment required. Currently the State borrows monies for highways, although there may

be some legal questions associated with the internal improvements clause of the State Constitution that would render it unlikely the state could borrow for transit. Alternatively, a regional transportation authority could be given bonding authority. Either way, the monies that would be raised as the local share of the rail transit capital requirements would then be repaid out of the proposed regional motor vehicle sales tax over a period of time. If the repayment period is to be set within the 20-year period of analysis, the tax would have to be higher to pay the interest charges that would be associated with the borrowing. How much higher would depend upon such factors as the amount to be borrowed, the timing of the loans and loan repayments, and the interest rate, among others.

Federal and State Funding Levels: An important variable in the foregoing proposal involves the assumptions attendant to federal and state funding levels. For the purpose of this analysis, it was assumed that federal funding levels for highway and transit would remain essentially at present levels. The present levels of federal funds for county and local highways and for transit total about $9.1 million annually and $11.0 annually, respectively. Any increases or decreases in those levels would affect the state and local funding required within the Region. Similarly, there may be legislation to provide new state monies to help county and local governments statewide to fund capital requirements for highways. This could change the local funding required. Presumably, however, the county and local governments could match any new state highway funding which might be required, from regional motor fuel sales taxes and wheel taxes.

A POTENTIAL STRUCTURE FOR A REGIONAL TRANSPORTATION AUTHORITY IN SOUTHEASTERN WISCONSIN

The following potential structure for a regional transportation authority for southeastern Wisconsin is intended to be broad and conceptual in nature, and is set forth for illustrative purposes only. It is recognized that any such proposal would require, for implementation, new state legislation. The potential structure as herein provided is intended to only address the broad principles that should be reflected in any proposed legislation.

Modal Responsibilities

Based upon Committee preferences, a regional transportation authority for southeastern Wisconsin would be dual mode in nature, having responsibilities both for highways and transit. The creation of such a dual mode authority would recognize that highways and transit both contribute to meeting the daily surface transportation needs of people and industries in southeastern Wisconsin and that, in fact, the two modes are highly interdependent. Not only does transit help reduce peak-hour vehicular traffic on key arterial streets, but, in most cases, the streets and highways provide the very basis for transit vehicle operation. This interdependence in the two surface transportation modes has for many years been recognized in the regional planning process, and should be reflected in any efforts to program and build surface transportation facilities. The specific responsibilities such an authority might have with respect to each mode are discussed below.

Geographic Scope

The preferred geographic scope of a potential regional transportation authority, based upon the Committee poll, is the seven-county Southeastern Wisconsin Region. This geographic scope is fully consistent with the preference for the dual mode authority, and would reinforce the long-standing practice in southeastern Wisconsin of planning for surface transportation facilities on a seven-county basis. While the seven-county Region might not be appropriate for a single mode authority dealing only with transit, all seven counties must deal with arterial street and highway needs. A dual mode authority can appropriately focus programming and implementation attention on highway and transit needs in a differential manner on a county-by-county basis throughout the entire Region.

Governance Structure

Based upon the Committee poll, the preferred structure for a potential regional transportation authority is one in which the membership of the board of the authority would be appointed. Nearly all Committee members favored having appointments made by the Governor. Committee members were divided, however, as to whether or not one or more of those appointments should be shared by the counties comprising the Region.

The Committee's last preferred method of appointment would be one in which the appointments are made on some basis by the county and local governments alone.

Given the preference expressed in the poll, a nine-member board could be created to govern the operations of a regional transportation authority for southeastern Wisconsin. The members would be appointed by the Governor; the appointments would be for staggered five-year terms; at least one such appointee should reside in each of the seven counties; and all appointments would be subject to confirmation of the State Senate after public hearing on the nominations.[1] The proposed structure is less cumbersome than one that would involve the seven counties attempting to agree upon a list of nominees, but would provide reasonable checks and balances on the appointment process by allowing local government officials the opportunity to comment on a proposed appointment before confirmation by the State Senate.

Functions and Responsibilities as to Highways

The existing governance structure for highways, consisting of the Wisconsin Department of Transportation, the seven-county highway and public works committees, and local highway and public works committees, is adequate for carrying out the recommendations for the improvement of the arterial street and highway system as recommended in the adopted regional transportation plan. The primary reasons for the observed lag in plan implementation with respect to both functional improvements and changes in jurisdictional responsibilities may be attributed to a lack of fiscal resources. Accordingly, the primary function of a potential regional transportation authority would be to provide needed fiscal resources to the county and local agencies responsible for highway development, operation, and maintenance. It is not intended that such an authority would have any direct responsibility or authority to build, operate, or maintain highway facilities.

More specifically, it is proposed that a potential regional transportation authority for southeastern Wisconsin have the following basic responsibilities and duties with respect to highways:

1. Revenue Collection
   The authority would be authorized to work with the Wisconsin Department of Revenue in developing mechanisms for the collection of the revenue targeted for highways. That revenue would have to be kept segregated from any revenue the authority might collect for the purpose of transit, recognizing, however, that the authority itself would need to use both some highway and some transit monies for the administration of the authority's affairs.

2. Programming of Projects
   The authority would participate in the existing regional transportation improvement programming process which now brings together the state, county, and local highway agencies to cooperatively develop and implement a multi-year improvement program focused on meeting regional priorities. That program would provide the basis for the coordinated multi-jurisdictional improvement of the regional highway system. The programming would provide the basis for distribution by the authority of those monies raised by the authority and targeted to highway capital improvement projects.

3. Distribution of Highway Improvement Related Revenue
   All revenues collected by the authority for the purpose of supporting highway improvement projects would be distributed to county and local governments in the Region to construct those highway projects found to be in accordance with the adopted regional transportation plan. The areawide transportation improvement programming process would determine the specific annual distribution of such monies. Based on the funding proposal described earlier in this chapter, it is expected that the authority would have available about $36.3 million annually for this purpose. It is proposed that 80 percent of this amount, or about $29.0 million annually, be distributed to county and local governments in the Region based upon needs as reflected in the adopted regional transportation

[1] *During Committee deliberations on this point, board sizes of five and seven members were also discussed before a consensus was reached on a nine-member board.*

Table 59

SUMMARY OF ARTERIAL HIGHWAY REVENUES PROPOSED TO BE PROVIDED TO COUNTIES BY AN RTA

County	Annual Highway Maintenance Based Upon 100 Percent of Need (millions of dollars)			Annual Highway Construction Based Upon 80 Percent of Need (millions of dollars)			Amount Retained Annually by RTA for Discretionary Distribution to Counties (millions of dollars)
	County Trunk Highways	Local Arterials	Total	County Trunk Highways	Local Arterials	Total	
Kenosha	1.5	0.5	2.0	2.5	0.5	3.0	--
Milwaukee	4.1	6.3	10.4	3.4	5.5	8.9	--
Ozaukee	1.2	0.5	1.7	1.0	0.2	1.2	--
Racine	1.9	1.3	3.2	2.3	1.3	3.6	--
Walworth	1.8	0.1	1.9	1.5	0.6	2.1	--
Washington	1.7	0.8	2.5	2.2	0.9	3.1	--
Waukesha	4.5	1.4	5.9	6.2	0.9	7.1	--
Total	16.7	10.9	27.6	19.1	9.9	29.0	7.3

Source: SEWRPC.

plan. The target amounts that would be distributed to county and local governments under this assumption is set forth in Table 59. It is proposed that the remaining 20 percent, or about $7.3 million annually, be retained by the regional transportation authority for discretionary distribution to county and local governments for those highway improvement projects determined by the authority to be of particularly areawide significance. In addition, it is proposed that, to the extent permitted by federal law, any federal highway funds allocated by formula to the Southeastern Wisconsin Region be placed at the discretion of the authority and be combined with the authority dollars in a single discretionary program. This would eliminate the current program whereby, for example, federal aid urban system funds are distributed to county and local governments by an allocation formula.

4. Distribution of Highway Maintenance Related Revenue

It is proposed that the authority distribute to county and local governments 100 percent of the monies raised for highway operation and maintenance proposed under the funding proposal described earlier in the chapter. These monies are expected to total about $27.6 million annually. The distribution of these monies to county and local governments in the Region is summarized in Table 59. This distribution assumes that the authority would develop a uniform formula whereby county and local governments would receive a specified amount per lane mile of arterial highway maintained. This procedure would be similar to the current procedure whereby the state reimburses local governments for the cost of maintaining connecting streets on the state trunk highway system.

Functions and Responsibilities as to Transit

The existing governance structure for transit in the Region is inadequate to fully carry out the recommendations for the adopted regional transportation plan. It will be particularly difficult, for example, for the existing governance structure to readily implement any proposed rail rapid transit, for example, the commuter rail line from Milwaukee to Kenosha. Accordingly, while lack of fiscal resources has hampered the county and local governments in implementing the transit recommendations contained in the adopted plan, the lack of an appropriate governance structure can also be cited as a plan implementation deficiency. Given this situation, it is proposed that a potential regional transportation authority be given the ability not only to provide needed fiscal resources to county and

local agencies responsible for transit, but also be given the ability to build, operate, and maintain transit systems.

More specifically, it is proposed that a potential regional transportation authority for southeastern Wisconsin have the following basic responsibilities and duties with respect to transit:

1. Revenue Collection
   The authority would be authorized to work with the Wisconsin Department of Revenue in developing mechanisms for collection of the revenue targeted for transit. That revenue would have to be kept segregated from any revenue the authority might collect with respect to highways, again recognizing that the authority itself would need to use a portion of both highway and transit monies for the administration of the authority's affairs.

2. Programming of Projects
   The regional transportation improvement programming process described above for highways would also apply to transit. The program developed would provide the basis for the distribution by the authority of those monies raised by the authority and targeted to transit projects.

3. Operation of Transit Systems
   The authority would be empowered to borrow money, buy land, build and maintain transit facilities, and operate transit systems, including contracting with private operators to provide services. Such authority would be limited to only those systems found to be in accordance with the adopted regional transportation plan. In addition to initiating transit projects and services on its own motion, the authority should also be empowered to assume the ownership and operation of any local public transit system. Any such takeover of local public transit systems would be initiated by the owner of the transit system and negotiated on a case-by-case basis between the local governmental unit concerned and the authority.

4. Distribution of Transit Related Revenue
   All revenues collected by the authority for the purpose of supporting transit would either be retained by the authority to support transit operations directly conducted by the authority or distributed to county and local transit agencies that provide transit service in a manner consistent with the adopted plan. The basis for the distribution of revenue would be annual plans of operations prepared cooperatively by the authority and any local public transit providers.

5. State and Federal Grant Applications
   The authority should be empowered to prepare and submit, on behalf of itself and any local public transit provider in the Region, a unified application annually for state transit capital grants under the proposed new state program. A unified application for state operating monies would also be desirable. It may be possible for the authority to also prepare a unified federal grant application for capital assistance and operating funds in the Region. Thus, the authority could become the focus for the funding and the coordination of all public transit operations in the Region.

SUMMARY AND CONCLUSIONS

This chapter has described a possible structure of a regional transportation authority for southeastern Wisconsin. The key elements of that structure are as follows:

1. A regional transportation authority would serve the entire seven-county Southeastern Wisconsin Region and have responsibilities for both arterial highways and transit. A nine-member governing board is envisioned, appointed by the Governor and subject to State Senate confirmation. All members of the board must reside in southeastern Wisconsin, and each county would have at least one representative. The members of the board would serve staggered five-year terms.

2. Funding for the authority would be achieved by imposing a set of three new taxes at the seven-county regional level. Revenues from these taxes would be matched to defined transportation needs. To fund the regional share of transit operating and capital costs, a 2 percent motor vehicle sales tax would applied. That tax would raise an estimated $39.1 million annually. Of that total, it would be

intended that $12.3 million annually supplant current property tax revenues used for this purpose. The remaining $26.8 million annually would be used to carry out the transit recommendations contained in the adopted regional plan, including bus and rail transit service.

3. To provide for new and improved county and local arterial streets and highways, a 4 percent motor fuel sales tax would be applied within the Region. This tax would raise about $35.3 million annually. Of this total, about $14.9 million annually would intended to supplant property tax monies now being used for this purpose.

4. To provide for the routine operation and maintenance of county and local arterial highways, a $23 wheel tax would be applied to all motor vehicles registered in the Region. All of the monies raised under this tax, about $27.6 million annually, would be directed toward property tax relief.

5. A new state transit capital program would be created. This program would be intended to provide at least $13.3 annually to support transit projects in the Region.

6. With respect to arterial highways, the functions of the proposed regional transportation authority would relate largely to coordination of the efforts of the existing highway agencies. Such coordination would come about through integrated highway improvement programming and through the funding by the authority of county and local arterial highway improvement projects. The authority would not be empowered to build, operate, and maintain highways.

7. With respect to transit, the authority would be empowered to provide needed transit services directly. The authority would coordinate the provision of all public transit services in the Region through an annual operations planning and programming process. The monies raised by the authority for transit would be kept in part by the authority to provide direct services, with the remainder granted to county and local transit agencies to support public transit services throughout the Region.

Chapter VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

STUDY REQUEST AND PURPOSE

In June 1990, Milwaukee County and the City of Milwaukee requested that the Southeastern Wisconsin Regional Planning Commission conduct a feasibility study relating to the possible creation of a regional transportation authority for southeastern Wisconsin. In response to these requests, the Commission created a 17-member Advisory Committee to oversee the study. Each of the seven counties in the Region appointed two representatives to the Committee. In addition, one representative was appointed by the Mayor of the City of Milwaukee and one by the Governor. As Chairman, the Commission appointed Mr. Richard W. Cutler, an attorney and former Regional Planning Commissioner from Milwaukee County. Working from August 30 through November 15, 1990, the Committee guided the Commission staff in conducting the requested feasibility study, the findings, conclusions, and recommendations of which are documented in this report.

The basic purpose of the feasibility study was to develop the information required to permit the residents of the Region and their elected representatives to consider the possible creation of a regional transportation authority. The study was designed to examine the potential need for such an authority as demonstrated by any fiscal, equity, or governance problems that the Committee might find existing in the current structure for the provision of transportation facilities and services. If the Committee determined that such an authority was needed, then the study was intended to permit the Committee to propose the creation of such an authority, giving due consideration to the potential geographic scope, governance structure, responsibilities, and source of financial support.

FINDINGS AND DETERMINATIONS AS TO THE NEED FOR A REGIONAL TRANSPORTATION AUTHORITY IN SOUTHEASTERN WISCONSIN

The Advisory Committee examined the four modes of transportation in southeastern Wisconsin that are considered to be of regional significance: the arterial street and highway system, the public mass transit system, the airport system, and the seaport system. The Committee found that all four modes are truly regional in scope and essential to the continued sound social, economic, and physical development of the entire seven-county Southeastern Wisconsin Region. The Committee also found that the regional plans for arterial streets and highways, mass transit, and airports, which have been cooperatively prepared and adopted and carefully refined over a long period of time, provided a sound basis against which to measure transportation needs.

The following specific findings were made by the Committee concerning each of the four modes considered based upon careful review of the available information:

1. Airports
   The planned regional airport system consists of 11 airports, eight of which are publicly owned and three are privately owned. At present, responsibility for the provision of public airports within the Region has been assumed by Milwaukee and Waukesha Counties; the Cities of Burlington, Hartford, Kenosha, and West Bend; and the Village of East Troy. The Committee found that the current owners of the 11 system airports have made significant progress in carrying out the capital improvements recommended in the adopted regional airport system plan—about one-half of those improvements being made to date—and that by maintaining the present rate of capital investment all of the improvements recommended in the plan should be completed over the next two decades. The Committee found that there are strong capital improvement funding programs at the federal and state levels for airport improvements, and that airport user fees provide substantial support for both improvements and operations. The Committee also found that the local property tax burden attendant to the maintenance and improvement of the regional airport system was relatively small; while that burden differentially falls on certain local taxpayer

groups in the Region, a public perception that the availability of, and proximity to, a good general aviation as well as commercial aviation airport is an important consideration in business location and expansion decisions has resulted in a local willingness to bear that modest burden. The Committee thus concluded that the present governance structure for airports provides an adequate and competent structure at this time for carrying out the regional airport system plan. Accordingly, the Committee determined that there was no need at this time for a regional transportation authority for southeastern Wisconsin, at least insofar as the continued development of the airport system was concerned.

2. Seaports
The regional seaport "system" consists solely of the Port of Milwaukee, since commercial seaports are no longer maintained at the former Ports of Kenosha, Racine, and Port Washington. The Port of Milwaukee is owned by the City of Milwaukee and operated through a Board of Harbor Commissioners. The Committee found that while commercial traffic at the Port of Milwaukee has declined significantly as a result of the changing economy of the Region and of the changing nature of freight transportation, the Port remains an important economic asset of value to the entire Region. The Committee also found that the Port of Milwaukee is operated as a public enterprise and that operation and maintenance costs are paid by user fees and do not represent a burden on the local tax levy. Finally, the Committee found that capital improvements at the Port of Milwaukee are being funded in part by the City of Milwaukee, with an increasing reliance on revenue from state harbor grants. The Committee concluded that the present governance structure for the regional seaport "system," consisting of the Milwaukee Board of Harbor Commissioners, provides an adequate and competent structure for managing the Port of Milwaukee. Based upon these findings, the Committee determined that there was no need at this time for a regional transportation authority for southeastern Wisconsin, insofar as the continued development of the seaport system was concerned.

3. Arterial Streets and Highways
The planned regional arterial street and highway system totals 3,595 miles. The Committee found that only about one-fifth of the 644 miles of new or widened street and highway projects called for in the adopted regional transportation system plan have been completed, whereas plan schedules call for about one-half of those improvements to now be in place. The Committee also found that only about one-quarter of the plan recommendations concerning changing the jurisdictional responsibilities for arterial streets and highways have been carried out, whereas, again, about one-half of those changes should now be in place. Such jurisdictional realignment is necessary in order to achieve equity in building and maintaining the Region's arterial street and highway system. Thus, the Committee concluded that the pace of improving, expanding, and jurisdictionally changing the arterial street and highway system in the Region has fallen behind schedule. Yet, traffic on the regional arterial system continues to exceed forecast levels, with the result that the Region faces growing traffic congestion problems, particularly on the freeway system and on suburban arterial streets.

In examining the current expenditure levels for arterial streets and highways, including federal, state, county, and local funds, the Committee found that a continuation of present expenditure trends will result in significant shortfalls in funding for needed improvements to the Region's arterial street and highway system over the next two decades.

On the planned state trunk highway system, about $70.8 million annually will be required over the next 20 years to carry out the plan. About $55.4 million is being invested annually in that system today. This results in a projected average annual shortfall of about $15.4 million. To eliminate that shortfall will require a 28 percent increase in state and

federal funds expended on state trunk highways in the Region.

On the planned county trunk arterial system, about $28.6 million annually will be required over the next 20 years to implement the plan. The present funding level for county trunk highways is $9.5 million annually. This results in a projected average annual shortfall of about $19.1 million. Eliminating that shortfall will require about a tripling of funding for county trunk highways.

Finally, about $13.9 million annually will be required over the next 20 years to implement the local arterial highway element of the plan. The present funding level for local arterial streets and highways is $14.6 million annually. On a regional basis, then, there would be no projected shortfall in local arterial funding. Shortfalls would, however, occur in all counties but Milwaukee County. Collectively, the shortfalls in the remaining six counties in the Region total about $2.3 million annually.

Given the significant lag in implementation of the regional arterial street and highway system plan, including a reluctance to make the jurisdictional changes necessary to bring about a more equitable distribution of the costs of the plan, the Committee concluded that there would be merit in considering the creation of a regional transportation authority for southeastern Wisconsin to provide the funding needed to meet county and local arterial street and highway improvement needs. The projected shortfall for state trunk highways, the Committee noted, would have to be addressed on a statewide basis.

The Committee also concluded that the present governance structure for arterial streets and highways, consisting of the Wisconsin Department of Transportation, the seven-county highway committees, and the individual local public works boards and committees, provided an adequate and competent structure for carrying out the arterial street and highway system plan. A regional transportation authority with responsibility for highways, could, however, not only provide county and local governments with the resources necessary to carry out the plan, but could provide substantial property tax relief by assuming the fiscal burden for building and maintaining county and local arterial streets. Through such an authority the approximately $42.5 million property tax dollars now being spent on county and local arterial highways could be replaced with revenues from non-property tax sources.

4. Transit

Presently, responsibility for the provision of public transit services within the Region has been assumed by Milwaukee and Waukesha Counties and by the Cities of Kenosha, Racine, and Waukesha. The Committee found that these five public transit operators are unable to fully implement the transit element of the regional transportation plan. Under that plan, there would be significantly improved public transit service provided throughout the Region, including new and improved bus rapid transit and express bus routes, an approximately 14-mile light rail transit line, a commuter rail line in the Milwaukee-Racine-Kenosha corridor, and improved and expanded local transit service throughout the Milwaukee, Racine, and Kenosha urbanized areas. If the recommended plan were to be fully implemented, transit would become a competitive and attractive alternative to the automobile and the level of transit use in the Region could be expected to about double, from about 4 to nearly 8 percent of the total person trips in the Region on an average weekday.

The Committee found that the reasons for the lack of implementation of the transit plan relate in part to the escalating costs of providing transit service; declining transit ridership, such ridership tending to rise and fall with motor fuel prices; and a lack of strong public commitment to the improvement of public transportation as an essential element of both a balanced transportation system for the Region and of the air quality attainment and maintenance plan for the Region. In recent years, federal

funding for operating costs for public transit has declined both relatively, in terms of general price inflation, and absolutely, in dollars; transit service levels have been reduced; transit fares increased; and state and local transit subsidies increased. Further increases in local transit subsidies from the property tax are unlikely. Furthermore, significant additional increases in base transit fares can be expected to adversely affect transit ridership.

The Committee found that local costs associated with funding the public transit system in the Region fall disproportionately on the property taxpayers in Milwaukee and Waukesha Counties and the Cities of Kenosha, Racine, and Waukesha. Even among these five local governments, there is a significant differential in the level of local tax effort, ranging from a low of about 31 cents annually on a typical single-family home in Waukesha County outside the City of Waukesha, to a high of nearly $28 annually on a comparable home in Milwaukee County.

The Committee concluded that the public transit system should properly be viewed as an integral part of the regional transportation system, since its continued operation and improvement benefit the arterial street and highway system, particularly during peak periods of travel. If there were no public transit service, even under current ridership levels certain major arterials in the Milwaukee area would have to carry up to 40 percent more traffic, thus significantly increasing traffic congestion and arterial improvement needs. The Committee also concluded that the public transit system is particularly important to certain subgroups of the regional population, including the low-income, the young and aged, minorities, and those without access to an automobile. For many of these individuals, transit is in effect the only means of transportation for making trips to and from work and school.

Finally, the Committee found that significant shortfalls in funding the needed improvements to the regional transit system over the next two decades are probable. In terms of capital costs, about $37.4 million annually will be required over the next 20 years to implement the plan. The present capital funding level for transit is about $13.9 million annually. Thus, a shortfall in capital funding of about $23.5 million annually exists. The average annual operation and maintenance cost for the public transit system in the Region is about $122.7 million. The present funding level, including farebox revenues and federal, state, and local monies, is about $90.4 million annually. Thus, a shortfall exists in operating funding of about $32.3 million annually. The total shortfall for transit is thus about $55.8 million annually.

In considering the foregoing findings with respect to transit, the Committee concluded that there would be merit in considering the creation of a regional transportation authority for southeastern Wisconsin to provide the funding needed to meet regional and local transit needs. Such an authority could also provide the governance structure now lacking to implement the rapid transit elements of the recommended plan, including the provision of transit by light rail, commuter rail, and express bus services operating over the regional freeway system. The Committee concluded that it was highly unlikely that the existing governance structure for transit would be adequate to implement those aspects of the regional transportation plan needed to make transit a truly competitive and attractive alternative to the automobile in the metropolitan area.

In summary, then, the Advisory Committee concluded that a regional transportation authority could meet certain transportation needs in southeastern Wisconsin. Initially, those needs relate to arterial streets and highways and public transit. Ultimately, those needs might extend to airports and seaports, although at this time there are no funding, equity, or governance considerations which would suggest that airports and seaports be included within the purview of a potential regional transportation authority.

CASE STUDY FINDINGS

In order to help the Committee consider the potential structure of a regional transportation authority for southeastern Wisconsin, case studies of such authorities in the United States were conducted. The Committee first examined the 35 largest urbanized areas in the United States, i.e., those having a resident population of at least 800,000 persons. The Committee found that, excluding the Milwaukee area, only three of the 35 largest urbanized areas did not have some form of regional transportation authority. The Committee then conducted case studies of 13 regional transportation authorities. These authorities were selected on the basis of the geographic and economic characteristics of the metropolitan areas concerned and the modes of transit services provided, and included the authorities serving the following: Chicago, Illinois; Boston, Massachusetts; Cleveland, Ohio; Denver, Colorado; Buffalo, New York; Portland, Oregon; Minneapolis-St. Paul, Minnesota; San Diego, California; Seattle, Washington; Sacramento, California; Atlanta, Georgia; Dallas, Texas; and Raleigh-Durham-Chapel Hill, North Carolina, metropolitan areas.

The following findings were drawn from these case studies:

1. Regional transportation authorities in the United States are not new. The oldest of the 13 agencies studied was created in 1948.

2. The predominant geographic "building blocks" for regional transportation authorities are counties. In some cases, however, the authorities serve agglomerations of contiguous incorporated municipalities.

3. In 10 of the 13 cases studied, the regional transportation authorities were created for the single purpose of dealing with public mass transit. In the other three cases—Buffalo, Portland, and Seattle—the authorities also serve other functions in addition to public transit, such as airports, harbors, and sewage disposal. None of the 13 agencies studied had responsibility for highways.

4. In all but one case, Denver, the governing body of the regional transportation authority is appointed. In Denver that body is elected by districts. Where the governing bodies are appointed, the practice is either to have all appointments made by the governor, or all appointments are made in some way by the county and local governments concerned.

5. In 11 of the 13 cases studied, the authority directly operates the regional public transit system. In the remaining two cases, Chicago and Minneapolis-St. Paul, the authority simply collects revenues allocated to the authority and distributes those revenues to one or more agencies and entities responsible for operating mass transit systems.

6. In almost all cases, the regional transportation authority had a relatively stable, dedicated source of revenue to supplement revenues made available through the transit farebox and through state and federal grants and aids. In the majority of cases, a regional or county sales tax is the preferred dedicated source of local revenue. Where an authority historically relied for local funds on the property tax, e.g., Buffalo, there have been serious recurring fiscal crises.

AN ILLUSTRATIVE STRUCTURE FOR A REGIONAL TRANSPORTATION AUTHORITY FOR SOUTHEASTERN WISCONSIN

The Advisory Committee gave careful consideration to the many variables that must be considered when structuring a regional transportation authority. These variables include the geographic scope, governance structure, functions, sources of revenue, and method of distribution of revenue. The Committee developed, for illustrative purposes only, the following possible structure for a regional transportation authority for southeastern Wisconsin:

1. Overall Mission
   A regional transportation authority for southeastern Wisconsin would have as its overall mission the responsibility to work with the Wisconsin Department of Transportation and the county and local governments concerned in implementing the

highway and transit elements of the adopted regional transportation plan. The creation of a dual mode authority would recognize that highways and transit must together form a balanced transportation system to meet the daily surface transportation needs of people and businesses in the Region and that, in fact, the two modes are highly interdependent. The authority would be intended to supplement the existing governmental structure, providing a basis for raising non-property tax based revenues dedicated to surface transportation needs. With respect to highways, the authority would be given no operational responsibilities, but rather would be structured to distribute dedicated revenues to existing highway agencies. With respect to transit, the authority would be empowered to distribute such dedicated revenues to local transit agencies, but would also be empowered to build and operate a regional transit system. In addition, the authority would be empowered to assume the ownership and operation of county and local public transit systems on a voluntary, negotiated transfer basis.

2. Geographic Scope
Recognizing the socioeconomic interdependence of the seven southeastern Wisconsin counties that have for 30 years cooperatively planned for the provision of surface transportation facilities and services through the Southeastern Wisconsin Regional Planning Commission, the preferred geographic scope of a regional transportation authority would be that seven-county Region. The authority would be able to focus appropriate attention on the unique needs of each of the seven counties in the Region, recognizing that highway and transit needs will vary both by county and also over time.

3. Governance Structure
The preferred governance structure for a regional transportation authority for southeastern Wisconsin would consist of a nine-member body appointed by the Governor. The appointments would be for staggered five-year terms; each county would be represented by at least one member residing in that county; and all appointments would be subject to confirmation of the State Senate after public hearing on the nominations. The authority would be empowered to employ a staff to help carry out its functions.

4. Funding
In considering the funding of a potential regional transportation authority, it is first necessary to define and quantify the transportation needs that should be addressed by such an authority. Recognizing that the authority would not be responsible for state trunk highways, the regional transportation needs would be defined as follows:

Regional Transportation Need	Funds Required Annually Over the Period 1991-2010 (millions of constant 1990 dollars)	Portion Representing Property Tax Relief	Portion Representing Increased Investment
a. Maintain existing bus system	25.4	12.3	13.1
b. Expand existing bus system	13.4	--	13.4
c. Build light rail transit line	9.8	--	9.8
d. Build Milwaukee-to-Kenosha commuter rail line	2.7	--	2.7
e. New, widened, and resurfaced county and local arterial highways	36.3	14.9	21.4
f. Operate and maintain county and local arterial highways	27.6	27.6	--
Total	115.2	54.8	60.4

In determining this need, the Committee recognized the desirability of removing from the property tax all costs associated with county and local arterial streets and highways and public transit. These costs presently total about $54.8 million annually. Consequently, the above determination of need reflects approximately $60.4 million in new monies required to implement the regional transportation system plan, plus an assumed replacement of $54.8 million in property tax monies that are currently devoted to meeting arterial street and highway and transit needs within the Region.

In considering the determination of need, the Committee also recognized that there are variables that could affect the total magnitude of the need. One such variable is the amount of property tax relief provided. To the extent that such relief is not provided, the total need of $115.2 million annually could be reduced by up to $54.8 million. Another variable is the extent to which the Wisconsin Department of Transportation imposes its new cost-sharing policy pertaining to the provision of additional capacity on the state trunk highway system. The imposition of that policy could result in an additional local need in southeastern Wisconsin of about $2.0 million annually. Thus, the total need might be as much as $117.2 million.

Another such variable is the extent of the light rail, commuter rail, and express bus facilities to be provided within the Region. The Committee recognized that the City of Milwaukee currently is undertaking a facilities level study of rail transit in the Region. That study may recommend more miles of light rail transit than currently envisioned in the regional plan. This would increase the need as defined above.

Finally, there are variables attendant to federal and state funding levels. The need identification assumes that federal funding levels for highway and transit would remain essentially at present levels. That may change, depending upon new federal legislation. In addition, there may be new state legislation to provide funding statewide for capital requirements of transit. Such a program could change the local funding required and affect the overall need. Any legislative consideration of the creation of a regional transportation authority for southeastern Wisconsin will have to take into account these variables and adjust the definition of need accordingly.

To fund the defined need, one approach would involve the following multiple sources of revenue combined with the dedication of each revenue source to a defined transportation need:

a. County and Local Arterial Construction
To construct new, widen existing, and resurface existing county and local arterial streets and highways, a 4 percent motor fuel sales tax would be applied within the Region. This would raise about $35.3 million annually, sufficient to fund the county and local highway construction program and provide about $14.9 million annually in property tax relief.

b. County and Local Arterial Highway Maintenance
To maintain county and local arterial streets and highways, i.e., sealing, sanding, salting and plowing operations, and traffic signaling and signage, a $23 average wheel tax would be applied to all motor vehicles registered in the Region. This would raise about $27.6 million annually. All of that money would represent property tax relief. It would be possible to apply that wheel tax differentially, so that the least fuel efficient vehicles in the regional fleet would pay significantly more than the most fuel efficient vehicles.

c. State Transit Capital Program
To help fund transit capital needs, a new statewide transit capital improvement funding program could be created. Depending upon the level of state participation in transit capital projects, which could range from 50 to 100 percent of the nonfederal share of such projects, from $13.3 million to $19.5 million annually would be provided in southeastern Wisconsin under such a program. One possible source for such new state revenue could be a dedicated statewide one cent per gallon motor fuel tax, since that tax relates directly to transportation system use and should serve to encourage transit use.

d. Local Transit Operating and Capital Costs
To meet the locally required transit operating and capital costs, a 2 percent sales tax would be applied to the sales of new and used motor vehicles in the Region. This tax would raise about $39.1

million annually, sufficient to meet all of the county and local transit capital and operating cost. Of that total, $12.3 annually would represent property tax relief.

5. Highway Functions and Responsibilities
The illustrative regional transportation authority for southeastern Wisconsin would have the following specific functions and responsibilities as to highways:

   a. Revenue collection, including working with the Wisconsin Department of Revenue in developing a mechanism for the collection of revenue targeted for highways.

   b. Programming of projects, including working with the Southeastern Wisconsin Regional Planning Commission and the state, county, and local highway agencies in the preparation of the annual Transportation Improvement Program (TIP) for southeastern Wisconsin. The TIP should be multi-year in nature and be focused on meeting regional priorities.

   c. The distribution of revenue related to highway improvement in accordance with the agreed-upon transportation improvement program. Since that program is designed to implement the adopted regional transportation plan, it should be expected that the monies will flow to the counties based upon needs as reflected in the adopted plan. While it is expected that 80 percent of the highway improvement revenue would be targeted annually to the counties based on those needs, the authority could be given discretion to distribute the remaining 20 percent of the monies to projects determined by the authority to be of particular areawide significance.

   d. The distribution of highway maintenance related revenue based upon a uniform formula whereby county and local governments would receive a specified amount per lane mile of arterial highway maintained.

6. Transit Functions and Responsibilities
The illustrative regional transportation authority for southeastern Wisconsin would have the following specific functions and responsibilities as to transit:

   a. Revenue collection, including working with the Wisconsin Department of Revenue to develop mechanisms for the collection of revenue targeted for transit.

   b. Programming of transit projects within the regional transportation improvement program previously noted.

   c. Transit system operation whereby the authority would be empowered to buy land, build and maintain transit facilities, and operate transit systems. The authority would also be empowered to negotiate with county and local transit agencies to assume the ownership and operation of any public transit system on a voluntary, cooperative basis.

   d. The distribution of transit related revenue to support transit services either provided directly by the authority or by county and local transit agencies. Annual plans for transit operations would be prepared cooperatively by the authority and the local public transit agencies, with such plans to provide the basis for the distribution of revenue.

   e. Preparing and submitting, on a coordinated basis, applications for federal and state transit grants both for itself and for the local transit agencies in the Region.

CONCLUSIONS AND RECOMMENDATIONS

At its meetings on November 9 and 15, 1990, the Advisory Committee gave final consideration to all of the information compiled as a part of the feasibility study. In considering that information, the Committee drew the following conclusions:

1. County and local governments currently provide approximately $54.8 million annually from property taxes to operate, maintain, and construct roads and provide public transit facilities and services. Given

current pressures on the property tax, there is a need to find an alternative source of funding to relieve some or all of this burden.

2. Development of highway and transit facilities and services is lagging behind the pace recommended in the adopted regional transportation plan by an amount equivalent to an annual additional expenditure of $60.4 million for highway and transit construction, operations, and maintenance. This is partially due to the present reliance of such development on the already overburdened property tax.

3. The lagging development of the regional highway and transit system is also due in part to problems encountered in extending transit services, and to a lesser degree highway facilities, in an integrated, coordinated manner across county and municipal boundaries. While cooperative planning and coordination with and by the Regional Planning Commission and the Wisconsin Department of Transportation have kept this problem from being even worse, as urban development continues beyond the historic urbanized areas, especially in previously predominately rural counties, there is a growing need for a multi-county transportation governance mechanism with financing and possibly construction and operating responsibilities.

4. Any multi-county transportation governance mechanism must be established in such a manner that it not only has a regional perspective but also is responsive to the needs of each county and local municipality.

5. Because of the lagging development of the highway and transit system in the Region, and because of the demonstrated interdependence between highways and transit, any multi-county mechanism should have responsibilities for both highways and transit. Because of evidence that development of the Region's airports and seaport is proceeding on schedule and in accordance with adopted plans, there is no need at this time to include airports and seaports in any multi-county transportation governance mechanism.

6. The exact role and responsibilities of a multi-county transportation governance mechanism need to be carefully planned at the outset, including its financing, possible construction and operational roles, and its relationship to the Regional Planning Commission.

7. No matter how derived, funds under the control of any multi-county transportation governance mechanism need to be allocated in a manner which is transparently fair and equitable to each county within the area served.

8. While understanding the need for some flexibility, funding for highways and funding for transit should be made available in separate modal-specific categories, possibly derived from separate revenue sources, to prevent prolonged disagreement over intermodal allocations, which seems inevitably to lead to insufficient funding for public transit.

9. The planned development of the regional public transit system has been retarded by the lack of adequate funding for both capital investment and operations, particularly with respect to intercounty transit services, and by a lack of a cross-jurisdictional governance structure.

10. Because of problems of inequity and "tax island" perceptions, any new taxes imposed to provide funds for a multi-county transportation mechanism preferably would be imposed statewide and returned to multi-county transportation agencies, or to counties, where such agencies do not exist, on a fair and equitable basis.

Based upon those conclusions, and drawing from the analyses summarized above, the Committee made the following recommendations without regard to priority order:

Recommendation No. 1: Increase STH Funding	**State government should increase significantly its investment of state and federal funds for state trunk highway development in the Southeastern Wisconsin Region.**

This recommendation is based upon a Committee finding that it will be necessary for state government to increase its level of expenditure in southeastern Wisconsin on state trunk highways if the improvements needed to serve the Region are to be made. Based upon the adopted regional transportation plan, about $70.8 million will be required annually over the next 20 years to improve and maintain the planned state trunk highway system. About $55.4 million annually in state and federal funds are being spent in southeastern Wisconsin on state trunk highways. This results in a projected average annual shortfall ranging from $13.4 to $15.4 million depending upon the extent to which the state policy on local cost-sharing is implemented. Eliminating the shortfall will require about a 28 percent increase in funds.

Recommendation No. 2: Create State Transit Capital Program

State government should establish a program to fund major transit capital projects in the Southeastern Wisconsin Region and perhaps elsewhere in the State.

This recommendation is based upon a finding by the Committee that, unlike highway transportation, where a state trunk highway program has long been in place, there is no existing state program to fund the capital investment necessary to provide transit facilities to serve travel movements across county lines in metropolitan areas. Accordingly, state government should recognize the need for the equivalent of a state trunk highway system in transit system development. The Committee suggests that the planned light rail and commuter rail transit systems in southeastern Wisconsin are the transit equivalent of the state trunk highway system. Like state trunk highways, the rail transit systems in southeastern Wisconsin should be funded by state government. In addition, state government should establish a 50 percent matching transit capital grant program to support bus transit systems. The cost of such a program as applied to southeastern Wisconsin over the next 20 years is estimated at from $13.3 million to $19.5 million annually, depending upon the extent of state participation in the rail system costs.[1]

Recommendation No. 3: Continue State Transit Operating Assistance Program

State government should continue its commitment to help fund the operating costs of urban transit systems, the expansion of such systems in the Southeastern Wisconsin Region being anticipated.

Presently, state government funds 38.5 percent of the operating costs of urban transit systems in Wisconsin. In southeastern Wisconsin that commitment presently amounts to about $30.5 million annually. As the transit element of the adopted regional plan is implemented over the next 20 years, including the rail transit systems referred to above, it should be expected that an additional $16.8 million annually in state funds will be required to meet transit system operating expenses. This estimate is based upon an assumption that the level of cost reimbursement by the State will be maintained at 38.5 percent.

Recommendation No. 4: Create an RTA

The county and local governments in the Southeastern Wisconsin Region should petition the State Legislature and the Governor to create a regional transportation authority.

This recommendation was based upon three important findings made by the Committee. First, there is an inordinate burden on the local property taxpayer for the support of county and local arterial highways and public transit. Second, the heavy reliance on the property tax has retarded the proper development of the

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[1] *Assumes a 14-mile light rail line at an estimated capital cost of $250 million; a 33-mile Milwaukee-to-Kenosha commuter rail line at an estimated capital cost of $70 million; and federal funding of 25 percent of those facilities. As noted in Chapter VI of this report, a study by the City of Milwaukee may propose a more extensive and costly rail transit system.*

county and local arterial highway and mass transit systems to the point where traffic congestion is increasing; where the mobility needs of many people are not being met; and where, therefore, the socioeconomic development of the Region is threatened. Third, the inherent geographic limitations of the current governance structure for transit, namely, selected counties and cities, makes it unlikely that needed areawide transit facilities and services can be thus provided. A regional transportation authority would furnish the basis for addressing both the non-property tax revenue needs of the county and local transportation system and the lack of a proper governance structure to bring about areawide transit system development.

Recommendation No. 5: RTA Transportation Mission

Initially, a regional transportation authority for southeastern Wisconsin should be dual mode in nature, having responsibilities for both arterial highways and transit. Ultimately, such an authority might become responsible also for airports and seaports.

While the Committee found that a need existed to create a regional transportation authority for southeastern Wisconsin, that need at present is confined to county and local arterial highways and public transit. No similar need exists at this time with respect to airports and seaports, the Committee having found that the counties and local governments presently responsible for those functions are exhibiting good stewardship, and that a variety of fiscal resources exist to ensure continued investment in such facilities according to adopted plans.

With respect to highways, it is not recommended that the authority be empowered with operational responsibilities. Rather, the authority would be structured solely to distribute dedicated non-property tax based revenues to existing county and local highway agencies. With respect to transit, it is envisioned that the authority would not only be empowered to distribute dedicated revenues to local transit agencies, but also to build and operate a regional transit system. The authority should also be enabled to assume the operational responsibilities of local transit agencies on a voluntary, negotiated basis.

With respect to both highways and transit, a regional transportation authority would become an important plan implementation agency, supplementing the state, county, and local highway and transit agencies. As such, the authority would be an important participant in the areawide planning and programming processes conducted by the Regional Planning Commission. Such planning and programming is done in a cooperative and collegial manner and, importantly, is fully coordinated with areawide land use planning and with planning for such other areawide public works systems as sanitary sewerage, water supply, and drainage and flood control.

Recommendation No. 6: RTA Geographic Scope

The geographic scope of a regional transportation authority for southeastern Wisconsin should be the entire seven-county Region.

This recommendation recognizes the socioeconomic interdependence of the seven southeastern Wisconsin counties that have for 30 years cooperatively planned for the provision of transportation facilities and services through the Southeastern Wisconsin Regional Planning Commission. Given the dual mode, highway and transit, nature of the proposed RTA (Regional Transportation Authority), the Committee believed that the authority would be able to focus appropriate attention on the unique needs of each of the seven counties, recognizing that highway and transit needs will vary by county and over time. The Committee thus concluded that the seven-county Region provides the best possible basis for the coordinated planning, programming, and development of transportation improvements, and would thereby best serve the future socioeconomic needs of southeastern Wisconsin.

Recommendation No. 7: RTA Governance

A regional transportation authority for southeastern Wisconsin should be governed by a nine-member board appointed by the Governor and subject to

State Senate confirmation; the members would serve staggered five-year terms; there shall be at least one member residing in each of the seven counties.

In making this recommendation, the Committee rejected other alternatives found to be wanting in one or more respects. These alternatives included appointment of the governing body by the county and local units of government; joint appointment by the county and local units of government and the Governor; and direct election by district. In the Committee's collective judgment, the recommended structure has the best chance of avoiding problems associated with other possible structures.

Recommendation No. 8: RTA Funding Levels **In establishing a regional transportation authority for southeastern Wisconsin, the following should be taken into consideration in setting target funding levels:**

1. **Funding levels should be sufficient to provide significant property tax relief, i.e., removal from the property tax of the current cost burden associated with county and local arterial highways and public transit. In southeastern Wisconsin, this is estimated at $54.8 million annually.**

2. **Funding levels should be sufficient to enable the RTA and county and local governments in southeastern Wisconsin to implement the agreed-upon regional transportation plan, given the assumed state and federal funding levels. In southeastern Wisconsin, this would amount to from $40.9 million to $47.1 million annually, depending upon the level of state funding for proposed rail transit systems.**

In making this recommendation, the Committee recognized that widespread support for any RTA funding proposal probably would come about only if there was a substantial element of property tax relief. The Committee was concerned, however, that the implementation of an RTA proposal in southeastern Wisconsin not only provide property tax relief, but also include the revenues necessary to overcome the present gap between current county and local transportation investment levels and the needs for transportation facilities expressed in the adopted regional plan.

Recommendation No. 9: RTA Funding Sources **The following considerations should be taken into account in selecting specific funding sources to support an RTA:**

1. **An RTA must have a stable, dedicated source or sources of revenue.**

2. **The revenue source or sources selected should be dynamic in nature, in order to offset such factors as economic cycles, general price inflation, and changing fuel efficiencies. To the extent necessary, automatic indexing should be provided to counter such effects.**

3. **The selection of revenue sources must ultimately be the responsibility of the Legislature. By way of illustration, however, if a user fee approach is taken the revenue sources required to support an RTA could be a motor fuel sales tax, a motor vehicle sales tax, and a wheel tax. The latter could be structured to penalize fuel inefficient vehicles. If the practices of RTAs in other areas of the United States are followed a general sales tax might be utilized.**

4. **To the extent possible, revenues to support an RTA should be derived from taxes or fees enacted on a statewide basis, with revenues generated by the seven-county Region returned to the regional trasnportation authority.**

5. **Every possible effort should be made to increase federal funds for arterial highways and transit in order to reduce the burdens at the state, county, and local levels.**

In making this recommendation, the Committee took note of the fact that the most successful RTAs in the United States have a stable, dedicated funding source, one that is dynamic in nature and that responds to economic cycles and price inflation without legislative intervention. The Committee also believes that it would be best to provide the needed new revenues on a statewide basis, reasoning that other areas of the State might also benefit from both property tax relief and an infusion of new funds for

transportation system development. Finally, the Committee recognized the desirability of securing from the federal government a fairer share of federal transportation funds for the State than Wisconsin has received in the past. To the extent that such additional federal funds can be obtained, it would be possible to reduce the burden imposed by new taxes and fees in Wisconsin.

Recommendation No. 10: RTA Allocation and Spending Principles **The following principles should be observed in constraining the allocation and spending of revenue by an RTA:**

1. **Revenues received by the RTA should be allocated fairly to meet both the arterial highway and transit needs in the Region. This could be accomplished either by creating a set of revenues scaled to meet a corresponding set of highway and transit needs and by dedicating such revenues to such needs, or by establishing a targeted percentage distribution of revenues to highways and transit. In either case, the RTA should have the ability at its discretion to shift some funds between the two modes. The Committee recommends that whatever method is chosen, 80 percent of the available revenue be allocated directly to the two transportation modes on the basis of need, 36 percent to transit and 44 percent to highways, with the remaining 20 percent of revenue to be disbursed between the two modes at the discretion of the RTA. The test of the intermodal funding allocation shall be determined on the basis of the allocations over any five-year period.**

2. **The geographic distribution of RTA revenues should be such that each county is guaranteed to receive annually no less than 80 percent of all revenue found to be generated within that county based upon the particular revenue source or sources selected.**

3. **All RTA revenues, whether expended directly by the RTA for transportation services or whether distributed by the RTA to county and local highway and transit agencies and spent by those agencies for transportation purposes, must be spent on projects found to be in accordance with the adopted regional transportation system plan.**

In making this recommendation, the Committee recognized the need to ensure that a regional transportation authority would be constrained in the distribution of available revenue between the two transportation modes, highways and transit. Such a constraint is believed by the Committee to be essential in avoiding inevitable internal allocation problems within an RTA. The suggested constraints assure the highway and transit agencies in the Region a steady revenue stream plus the ability to secure supplemental revenues on a discretionary basis. In addition, the Committee recognized the need to ensure that some reasonable minimum percentage of revenue raised for RTA purposes in any given county is returned to that county. The Committee suggested 80 percent as that minimum level. In so doing, the Committee also recognized that an RTA should be empowered to spend, at its discretion, either by itself on transit projects or through highway agencies on highway projects, up to 20 percent of available monies. This would allow an RTA to focus available funds on projects believed to have the most areawide significance. Finally, the Committee wanted to find a way to ensure that an RTA would be empowered to build and operate only those transportation facilities and services supported by county and local officials. The Committee addressed this need by recommending that all projects funded with RTA monies be found to be in accordance with the adopted regional transportation plan. The Committee's recommendation in this respect recognizes that the regional plan is prepared in a collegial and cooperative manner by the state, county, and local governments and that, therefore, the plan is based upon a strong intergovernmental consensus.

The foregoing recommendations were approved by the Advisory Committee on November 15, 1990. Not all committee members supported all of the recommendations. Committee votes on the recommendations are documented in the published minutes of that meeting. Those minutes are on file in the Regional Planning Commission offices. In addition, the findings and recommendations of the Committee are summarized in a separately published Executive Summary.

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APPENDICES

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Appendix A

REGIONAL TRANSPORTATION AUTHORITY STUDY REQUESTS

Appendix A-1

RESOLUTION OF MILWAUKEE COUNTY BOARD OF SUPERVISORS AND ACCOMPANYING LETTER FROM MILWAUKEE COUNTY EXECUTIVE

File No. 90-429

(Journal, April 12, 1990)

(ITEM 2) Resolution by Supervisors Nyklewicz, Mathews, Kuzminski, Czaja, Aldrich, and Zielinski, creating a multi-county study group to consider the formation of a regional transit authority, by recommending the following amended resolution:

WHEREAS, development practices over the last 20 years have resulted in the decentralization of the region's residential, commercial and industrial growth; and

WHEREAS, those development trends have made it more difficult to meet the transportation needs of the citizens of the region; and

WHEREAS, the current structure of local transportation systems make it difficult to maximize their effectiveness; and

WHEREAS, optimizing transit as a viable alternative to the automobile is limited by the local nature of transit systems located within the region; and

WHEREAS, travel trends within the region suggest a need to offer transportation services that cross established political boundaries; and

WHEREAS, the success of the State of Wisconsin's sponsored JOB-RIDE Program is an example of how a regional approach can best meet the transportation needs of the public; and

WHEREAS, METRO 2020 is developing a regionwide consensus on the southeast metro area economic development strategies including land use and transportation objectives; and

WHEREAS, Southeastern Wisconsin Regional Planning Commission is participating in METRO 2020 primarily in the fields of transportation, mass transit, land use planning and air quality; now therefore,

BE IT RESOLVED, that the Milwaukee County Board of Supervisors does hereby request the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to create a multi-county study group to consider the formation of a regional transportation authority; and

BE IT FURTHER RESOLVED, that SEWRPC and the multi-county study group coordinate its activities and cooperate with METRO 2020 whenever possible; and

BE IT FURTHER RESOLVED, that the scope of the study include but not be limited to the feasibility and potential benefits of a regional transportation system with an initial emphasis on mass transit, the development of an implementation plan, and identifying potential funding sources that are non-property tax based; and

BE IT FURTHER RESOLVED, that the Milwaukee County Board of Supervisors encourages the participation of Ozaukee, Waukesha, Washington, Walworth, Racine and Kenosha Counties; and

BE IT FURTHER RESOLVED, that the study group be made up of two representatives from each participating county; and

BE IT FURTHER RESOLVED, that the County Executive or the County Board Chairman, in counties that have no County Executive, be the appointing authority for their county's two representatives; and

BE IT FURTHER RESOLVED, that SEWRPC act as staff for the study group; and

BE IT FURTHER RESOLVED, that the Executive Director of SEWRPC or his designee act as a non-voting chairman of the study group; and

BE IT FURTHER RESOLVED, that the study group, after six months of deliberation, release an interim report, and that a final report be completed no later than one year from the study group's inception; and

BE IT FURTHER RESOLVED, that any and all recommendations resulting from the study group's deliberations be forwarded to the appropriate committee of each county for their review and consideration.

FISCAL NOTE: Adoption of this fiscal note will not require any additional county funds in the current or subsequent budget years. SEWRPC has sufficient regional transportation planning funds to conduct the study. Fiscal note was prepared by County Board Research Analyst/Mass Transit Committee in consultation with SEWRPC.

CERTIFICATION

I hereby certify that the foregoing resolution is a true, correct and complete copy of a resolution adopted by the Milwaukee County Board of Supervisors on the 17th day of May, 19 90 and that said resolution is now in full force and effect.

Dated this 10th day of September, 19 90.

DEPUTY MILWAUKEE COUNTY CLERK

OFFICE OF COUNTY EXECUTIVE

Milwaukee County

DAVID F. SCHULZ • COUNTY EXECUTIVE

June 14, 1990

Dr. Kurt W. Bauer, Executive Director
Southeastern Wisconsin Regional Planning Commission
916 N. East Avenue
Waukesha, WI 53187

Dear Kurt:

I am transmitting a copy of the adopted Milwaukee County Board resolution calling on the Regional Planning Commission to conduct a study of the potential for a regional transportation authority in Southeastern Wisconsin. Pursuant to our discussion Tuesday, I believe the Commission's examination of the possibility of such an authority should begin with the broadest possible multi-modal approach—highway, transit, airport, and seaport, together with detailed attention to possible non-property tax sources of support for the operation, maintenance, and construction of these transportation systems. I was pleased to read in this morning's Milwaukee *Sentinel* that the Commission is already moving to undertake this study, and look forward eagerly to working with you on it.

Very truly yours,

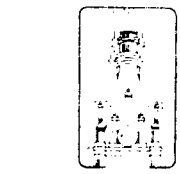
David F. Schulz
County Executive

DFS:dh

Enclosure

COURTHOUSE, ROOM 306 • 901 NORTH 9TH STREET • MILWAUKEE, WISCONSIN 53233 • TELEPHONE 278-4211

LETTER FROM CITY OF MILWAUKEE COMMISSIONER OF PUBLIC WORKS



City of Milwaukee

Department of Public Works

John R. Bolden
Commissioner of Public Works

Henry J. Balconi
Deputy Commissioner of Public Works

James C. Kaminski
Supervising Engineer

Mr. Kurt Bauer
Southeastern Wisconsin Regional
Planning Commission
916 North East Avenue
P.O. Box 1607
Waukesha, Wisconsin 53187-1607

May 21, 1990

Dear Kurt:

Following up on our Wednesday, May 16, 1990 discussion, I am requesting that the SEWRPC staff examine the current climate and the different options for creating a regional transportation authority to deal with rapid transit issues. Normally a proposed regional transportation authority would be responsible for the planning, design, operation, and financing of transit. Consideration can also be given to looking at the possibility of including airports and seaports in a proposed Southeastern Wisconsin transportation authority.

There certainly has been an increase in the number of discussions at the County level asking your agency to set up a multi-county study group to consider a transportation authority. I would like to see this item placed on our June meeting agenda for discussion and implementation.

From a broader perspective, several national transportation policies are dictating that we look at transportation from a regional point of view. First, the Skinner transportation policy clearly indicates that the highest transportation priority is clearly the aviation system. Mass transit and intercity rail are slated for decreased federal funding, while funding for highways and bridges would remain stable. This clearly is contrary to our goal of reducing air pollution in Southeastern Wisconsin because increased mass transit ridership reduces air pollution while more highways increase pollution.

Mayor John O. Norquist has been a proponent of both urban rail systems and a regional transit system because neither individual municipalities nor single county governments can afford to operate a transit system by themselves. Today, every light rail system in North America except one is operated and funded by some type of regional authority.

It is in that context that we are requesting that your staff begin a literature research of current regional transit authorities with emphasis on the funding mechanisms, the enabling legislation and the advantages and shortcomings of each RTA example.

Very truly yours,

John R. Bolden
Commissioner of Public Works

JRB/bt
RTABauer
cc: Supervisor Thomas Meaux
Supervisor Lawrence Kenny
Mayor John Norquist
City Engineer John Erickson

Appendix B

QUESTIONNAIRE CONCERNING KEY ISSUES IN STRUCTURING A POTENTIAL REGIONAL TRANSPORTATION AUTHORITY FOR SOUTHEASTERN WISCONSIN

I. WHICH REVENUE SOURCE OR SOURCES SHOULD BE PROPOSED TO HELP FUND TRANSPORTATION IMPROVEMENTS AND PROVIDE PROPERTY TAX RELIEF?

- ☐ Additional motor fuel tax
- ☐ Additional general sales tax
- ☐ Additional sales tax on motor vehicles
- ☐ Sales tax on motor fuel
- ☐ Additional wheel tax
- ☐ Payroll tax
- ☐ Impact Fees

II. WHAT SHOULD BE THE GEOGRAPHIC SCOPE OF A POTENTIAL REGIONAL TRANSPORTATION AUTHORITY?

- ☐ Milwaukee transit service area
- ☐ Seven-county Southeastern Wisconsin Region
- ☐ Four-county Milwaukee metropolitan area

III. HOW SHOULD THE MEMBERS OF THE GOVERNING BODY OF A REGIONAL TRANSPORTATION AUTHORITY BE CHOSEN?

- ☐ Elected by district
- ☐ Appointed

IV. IF GOVERNING BODY IS TO BE CHOSEN BY APPOINTMENT, THEN HOW SHOULD THE APPOINTMENTS BE MADE?

- ☐ By Governor alone with confirmation by State Senate
- ☐ Shared appointments between Governor and counties
- ☐ Shared appointments between Governor, counties, and local governments
- ☐ A combination of appointments by counties and local governments, e.g., all counties and all cities of 50,000 or more population

V. WHAT TYPE OF A REGIONAL TRANSPORTATION AUTHORITY SHOULD BE CREATED AND WHAT FUNCTIONS SHOULD IT BE GIVEN?

- ☐ Revenue collection and distribution for transit only
- ☐ Revenue collection and distribution for highways and transit
- ☐ Operating authority for transit only
- ☐ Operating authority for transit and highways
- ☐ Operating authority for transit with revenue collection and distribution for highways

VI. WHAT IS THE PREFERRED METHOD OF REVENUE DISTRIBUTION SHOULD A REGIONAL TRANSPORTATION AUTHORITY BE CREATED?

- ☐ By need as determined by regional transportation authority
- ☐ By need as determined by regional transportation authority in accordance with regional transportation plan
- ☐ By geographic source of revenue
- ☐ By a measure of transportation activity
- ☐ By a measure of socioeconomic activity