# 2012 ANNUAL REPORT

SOUTHEASTERN WISCONSIN REGIONAL PLANNING REGIC. PLANNING COMMISSION COMMISSION PLANNING COMMISSION PLANNING

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

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

#### **KENOSHA COUNTY**

Adelene Greene, Secretary Robert W. Pitts Michael J. Skalitzky

#### **MILWAUKEE COUNTY**

Marina Dimitrijevic William R. Drew, Vice Chairman John Rogers

### **OZAUKEE COUNTY**

Thomas H. Buestrin David W. Opitz Gus W. Wirth, Jr.

#### **RACINE COUNTY**

Gilbert B. Bakke David Eberle Peggy L. Shumway

### WALWORTH COUNTY

Charles L. Colman Nancy Russell, Treasurer Linda J. Seemeyer

### **WASHINGTON COUNTY**

Daniel S. Schmidt Daniel W. Stoffel David L. Stroik, Chairman

#### **WAUKESHA COUNTY**

Michael A. Crowley Jose Delgado James T. Dwyer

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF

Kenneth R. Yunker, PE Executive Director
Stephen P. Adams Public Involvement and Outreach Manager
Nancy M. Anderson, AICP Chief Community Assistance Planner
Michael G. Hahn, PE, PH Chief Environmental Engineer
Christopher T. Hiebert, PE Chief Transportation Engineer
Elizabeth A. Larsen
John G. McDougall Geographic Information Systems Manager
Dr. Donald M. Reed
Donald P. Simon, RLS
William J. Stauber

### FIFTY SECOND ANNUAL REPORT

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

Commission Offices W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, Wisconsin 53187-1607

> Telephone (262) 547-6721 Fax (262) 547-1103 www.sewrpc.org

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

October 2013

Inside Region \$2.00 Outside Region \$4.00 (This page intentionally left blank)

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N 1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

TELEPHONE (262) 547-6721 FAX (262) 547-1103

Serving the Counties of:

KENOSHA MILWAUKEE OZAUKEE RACINE WALWORTH WASHINGTON WAUKESHA



October 1, 2012

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

Preparing and certifying our Annual Report for the Wisconsin State Legislature, the seven counties, and the local units of government in our Region [as required by Section 66.0309(8)(b) of the Wisconsin Statutes], gives us the opportunity to review and reflect on our valuable partnerships and accomplishments of the past year. It gives county and local public officials, as well as other interested citizens, a comprehensive overview of current and proposed Commission activities, thereby encouraging active participation and ownership in the work of the Commission. The report also serves as an annual accounting to those State and Federal agencies that help fund our programs. Hence, this 52nd annual report not only summarizes our work in 2012, but it also contains a certified statement of our financial position as determined by an independent auditor.

The 2012 Annual Report is organized in three parts. Part One sets forth basic information about the Commission and a brief description of each of the elements that comprise the comprehensive regional plan. Part Two documents Commission work activities undertaken during 2012. Part Three documents the results of Commission monitoring efforts carried out during 2012 relative to various aspects of regional growth and change.

Please contact us if you have any questions or comments on the Commission's work. We look forward to continuing to serve our county and local governments, as well as the State and Federal agencies concerned, by providing the intergovernmental planning services required to address the areawide environmental, developmental, and infrastructure problems facing Southeastern Wisconsin and by promoting the intergovernmental cooperation needed to address those problems.

Very truly yours,

David L. Stroik Chairman (This page intentionally left blank)

### **TABLE OF CONTENTS**

	Page		Page
Part One—REGIONAL PLANNING		Rapid Transit	. 16
IN SOUTHEASTERN WISCONSIN	1	Express Transit	
About the Commission	3	Local Transit	
Authority	3	Paratransit	
Area Served	3	Intercity Rail	. 18
Basic Concepts	3	Bicycle and Pedestrian Facilities	
Basic Functions	6	Transportation Systems Management	
Organization	6	Freeway Traffic Management	
Staffing	6	Operational Control	
Funding	6	Advisory Information	
Documentation	7	Incident Management	
The Regional Comprehensive		Surface Arterial Street and	
Plan 2012: A Brief Overview	8	Highway Traffic Management	. 20
Plan Design Function	8	Major Activity Center Parking	
The Cyclical Nature of		Management and Guidance	. 20
the Planning Process	8	Travel Demand Management	
Regional Land Use Plan	9	Arterial Street and Highway Element	
Urban Land Development	9	Regional Water Quality Management Plan	
Sub-Urban Density Residential Land	9	Wastewater Treatment and	
Environmentally Significant Lands	9	Conveyance Facilities	. 22
Prime Agricultural Lands		Planned Sanitary Sewer Service Areas	
and Other Rural Lands	9	Runoff Pollution Abatement	
Regional Park and Open Space Plan	11	Instream Water Quality Measures	. 24
Open Space Preservation	11	Inland Lake Quality Water Measures	
Outdoor Recreation Sites and Facilities	11	Other Plan Recommendations	. 24
Major Parks	11	Regional Water Supply Plan	. 26
Areawide Recreation Trails	13	Sources of Supply	
Lake and River Access	13	Water Supply Facilities	
Regional Natural Areas and		Water Conservation Programs	
Critical Species Habitat Plan	13	Groundwater Recharge Areas Protection	
Natural Areas	14	Other Plan Recommendations	
Critical Species Habitat Sites	14	Other Regional Plans	. 30
Grassland Re-establishment Sites	14	Watershed Plans	
Forest Interior Re-establishment Sites	14	Regional Elderly-Handicapped	
Regional Transportation Plan	16	Transportation Plan	. 30
Public Transit	16	Transportation Systems Management Plan	

	Page		Page
Regional Bicycle and		Other Sites	38
Pedestrian Facilities Plan	30	Transportation Planning	40
Regional Wastewater		Short-Range Planning and Programming	
Sludge Management Plan	30	Transportation Improvement Program	40
Regional Sanitary		Public Transit Plans	
Sewerage System Plan	31	Kenosha County Public Transit Plan	43
Regional Housing Plan	31	Racine County Public Transit Plan	43
Regional Airport System Plan	31	Washington County	
Regional Telecommunications Plan	31	Transit Development Plan	43
Regional Air Quality Plan	31	City of Waukesha Public Transit Plan	
Urban District Plans	31	Public Transit-Human Services	
Regional Library Facilities		Transportation Coordination Plans	44
and Services Plan	31	Regional Transportation Operations Plan	
Report Availability	31	Long-Range Transportation Planning Adopted Year 2035 Regional	
Part Two—THE YEAR IN REVIEW	33	Transportation System Plan	45
Land Use Planning for		Amendments to Year 2035 Plan	
Development and Preservation	35	Year 2050 Regional	
Growth and Change Forecasts	35	Transportation System Plan	45
Land Use Planning	35	Regional Travel Survey	
Regional Land Use Plan	35	Household Travel Survey	
Land Use Inventory	35	Group-Quartered Travel Survey	
Environmental Corridor Inventory	35	External Travel Survey	
Inventory of Areas		Public Transit Travel Survey	
Served by Public Utilities	36	Commercial Truck Travel Survey	
Population and Household		Screenline Traffic Counts	
Quarter Section File	36	County Jurisdictional	
Employment Quarter Section File	36	Highway System Plans	47
Farmland Preservation Planning	36	Congestion Management Process	
Ozaukee County		Adjustments to 2010 U.S. Census-	
Farmland Preservation Plan	36	defined Urbanized Area Boundaries	47
Racine County		Data Provision and Technical Assistance	
Farmland Preservation Plan	37	Traffic Forecasts	48
Washington County		Technical Assistance for	
Farmland Preservation Plan	37	Transportation Projects	48
Park and Open Space Planning	37	Grant Application Review	49
Kenosha County		Other Data Requests	
Park and Open Space Plan	37	Environmental Planning	49
Racine County		Regional Water Quality Management Plan	49
Park and Open Space Plan	37	Plan Implementation Activities	49
Walworth County		Southeastern Wisconsin	
Park and Open Space Plan	37	Watersheds Trust	49
Natural Areas Planning	37	Southeast Fox River Partnership	49
Special Environmental Inventories,		Root River Watershed Restoration	49
Assessments, and Evaluations	38	Climate Change Effects	50
Private Development Parcels	38	Estabrook Dam Assessment	50
Large Private Development Sites	38	Milwaukee Harbor Estuary	
Transportation Sites and Corridors	38	Fox River Commission	
Utility and Public Facility Sites	38	State Watershed Plans	
Public Park Sites	38	Runoff Pollution Abatement Planning	50

	Page		Page
Watershed-Based		Economic Development Data	64
Permitting Framework	50	Federal and State Grant-In-Aid Support	65
Root River Watershed	50	Revolving Loan Fund Support	65
Root-Pike Watershed Initiative Network	51	Surveying, Mapping, and Land Information	65
Wastewater Facility Planning Activities	51	Background	65
Wastewater Treatment Plants	51	Regional Land Information	66
Sanitary Sewer Service Area Planning	51	County-Based Land Information Systems	73
Sanitary Sewer Extension Reviews	51	County Surveyor Activities	73
Lake Management Planning	52	Public Involvement and Outreach	73
Aquatic Plant Management Plans	52	SEWRPC Sponsored Public	
Lake Protection Plans	52	Informational Meetings and Hearings	74
Educational and Advisory Services	52	Involvement and Outreach Efforts	
Stream Management Planning	53	Targeted to Selected Population Groups	74
Bridge and Culvert		Partnership Building Activities	74
Replacement Projects	53	Urban Economic	
Stream Relocation Projects	53	Development Association	74
Dam Removal Project	53	Granville Area	76
Stream Protection Plans	54	Social Development Commission	76
Educational and Technical		Children's Environmental Health	76
Advisory Services	54	Regional Housing Study	76
Water Supply Planning	55	Watershed Educational Tours	76
Floodplain and Stormwater		Water Quality Field Education	76
Management Planning	55	Focused Networking Activities	76
Menomonee River Floodplain Revisions	55	Social Determinants of Health	76
Milwaukee Area Floodplain		Neighborhood	
Mapping Updates	55	and Community	
Des Plaines River Watershed Planning	57	Economic Development	77
FEMA RiskMAP Program	57	Workforce Development	
Stream Gaging Program	57	and Employment	77
Educational and Technical		Environmental Justice and	
Advisory Services	57	Quality of Life Enhancement	77
Coastal Management Planning	59	Education and Career Development	77
Housing Planning	60	SEWRPC Environmental	
Data and Analysis	60	Justice Task Force	77
Plan Recommendations	60	2012 SEWRPC Publications	78
Socio-Economic Impact Analysis	60		
Public Review of the		Part Three—REGIONAL	
Preliminary Draft Plan	61	MONITORING ACTIVITIES	81
Next Steps	61	Socioeconomic Trends	83
Local Planning Assistance	61	Population	83
Local Plans	61	Change in Regional Population	83
Local Ordinances	62	Comparison to Forecast	83
Review Services	62	Households	85
Data Provision-Socioeconomic	62	Change in Regional Households	85
Data Provision-Natural Resources	63	Comparison to Forecast	85
Data Provision-Housing	63	Employment	85
Data Provision-General	63	Change in Regional Employment	85
Economic Development	64	Comparison to Forecast	88
Program Planning	64	Change in Unemployment Rate	88

		Page		Page
Land Development Activity	7	90	Bus and Taxi Vehicle Miles of Service	102
Residential Subdivision F	latting	90	Bus Vehicle Age and Reliability	102
New Residential Lots		90	Transit Fares	103
Sewered/Unsewered		90	Operating Assistance	103
Residential Housing Unit	s	90	Park-Ride Facilities and Transit Stations	103
New Housing Construc	tion	90	Number and Location	103
Net Change in Housing	Units	90	Capacity and Use	107
Natural Resource Base			Pavement and Bridge Conditions	107
Preservation Activity		94	State Trunk Highway Pavements	107
Total Area Protected		94	County and Local	
Area Protected by Public	Agencies	94	Arterial Road Pavements	107
Area Protected by Private	Land Trusts	94	Bridge Structures	107
Natural Areas Protected		96	Traffic Congestion and Travel Times	107
Regional Transportation			Vehicular Crashes	123
System Performance		96	Number of Crashes	123
Vehicle Availability		96	Fatal Crashes	123
Personal-Use Vehicles			Serious Injury Crashes	123
Persons Per Personal-U	se-Vehicle	96	State Trunk Highway	
Commercial and Munic	ipal Trucks	96	Vehicular Crash Rates	127
Public Transit Operations	;	96	Aviation Activity	127
Transit Systems and Se			Change in GMIA Passenger Travel	127
Notable Changes to Ser	vices	98	Change in GMIA Major	
Fixed-Route Bus Riders			Aircraft Operations	127
Shared Ride Taxi Rider	_		Change in General Aviation	
Paratransit Vehicle Rid	ership	100	Aircraft Operations	127
Metra Ridership		101	Freight Rail Lines	
Amtrak Ridership			Active Main Lines	129
	LI	ST OF AP	PENDICES	
Appendix				Page
	Southeastern Wisconsin Regional Planning Commission Commissioners and Committees: December 2012			133
B Commission Ad	Commission Advisory Committees: 2012			135
C Southeastern Wi	sconsin Regional P	lanning Co	mmission Staff: 2012	141
D Report of Audit	Examination for Ye	ear Ending	2012	143
	he Southeastern Wi	sconsin Re	gional	147

### LIST OF TABLES

Table		Page
	Part Two	
1	Commission Sanitary Sewer Extension Reviews: 2012	. 52
	Part Three	
2	Population in the Southeastern Wisconsin Region by County: 2000, 2010, and 2012	. 83
3	Actual and Projected Population Levels in the Southeastern Wisconsin Region by County: 2012	. 85
4	Households in the Southeastern Wisconsin Region by County: 2000, 2010, and 2012	. 85
5	Actual and Projected Household Levels in the	
	Southeastern Wisconsin Region by County: 2012	
6	Employment in the Southeastern Wisconsin Region by Category: 2000, 2010, and 2012	
7	Employment in the Southeastern Wisconsin Region by County: 2000, 2010, and 2012	
8	Actual and Projected Employment in the Southeastern Wisconsin Region by County: 2012	
9	Residential Subdivision Platting Activity in the Region: 2012	
10	Change in Housing Units by Structure Type in the Region: 2012	
11	Personal-Use Vehicle Availability in the Region	. 97
12	Commercial Truck Availability in the Region	. 98
13	Reported Public Transit Revenue Ridership in the Region	. 100
14	Reported Paratransit Ridership for Fixed-Route Transit Systems in the Region	. 104
15	Reported Public Transit Revenue Vehicle Miles of Service in the Region	. 105
16	Base Adult Fares Charged by Public Transit Systems in the Region 2011 and 2012	. 105
17	Public Transit Operating Assistance within the Region: 2010-2011	. 106
18	Average Weekday Use of Park-Ride Lots and Transit Stations: 2012	. 109
19	State Trunk Highway Pavement Condition in the Region: 2006, 2009, and 2012	. 110
20	County and Local Arterial Street and Highway Pavement Condition in the Region: 2005, 2007, and 2011	. 113
21	Sufficiency Ratings for Bridge Structures in the Region: 2006, 2010, and 2012	. 113
22	Arterial Vehicle-Miles of Travel within the Region on an Average Weekday by County: 1963, 1972, 1991, 2001, 2005, and 2008	. 115
23	Average Annual Growth Rate of Average Weekday Vehicle-Miles of	
	Travel within Southeastern Wisconsin by County	. 116
24	Freeway and Surface Arterial Traffic Congestion	. 116
25	Traffic Congestion on the Arterial Street and Highway System in the Region by County: 2001, 2005, and 2008	. 117
26	Traffic Congestion on the Arterial Street and Highway System in the Region: 1963, 1972, 1991, 2001, 2005, and 2008	
27	Estimated Existing Southeastern Wisconsin Freeway System  Traffic Congestion on an Average Weekday: 1972, 1991, 2001, and 2005	120

Table		Page
28	Traffic Congestion on Designated Truck Routes and	
	the National Highway System in the Region: 2001 and 2005	123
29	Estimated Southeastern Wisconsin Region Transportation System	
	Air Pollutant Emission and Fuel Consumption: 2001 and 2010	123
30	Average Vehicular Crash Rate on State Trunk Highways by Arterial	107
0.4	Type by County in Southeastern Wisconsin: 2005-2009 and 2008-2012	127
31	Air Carrier Enplaning and Deplaning Passengers at	120
22	General Mitchell International Airport: 2003-2012	128
32	Air Carrier and Military Aircraft Operations at General Mitchell International Airport: 2003-2012	128
33	General Aviation Aircraft Operations at Airports in the	120
33	Southeastern Wisconsin Region with Control Towers: 2003-2012	129
	Southeastern Wisconsin Region with Control Towers. 2003 2012	12)
	LIST OF FIGURES	
Figure		Page
C		Č
	Part One	
1	SEWRPC Organizational Structure: 2012	5
2	SEWRPC Revenues and Expenditures: 2012	7
	Part Two	
3	Programmed Expenditures and Funding Sources for	
	Transportation Facilities and Services in the Southeastern Wisconsin Region	41
4	SEWRPC Regional Land Information Digital Data Sets: 2012	71
5	Record of U.S. Public Land Survey Control Station	71
6	Typical Control Survey Summary Diagram	72
7	Major Objectives of SEWRPC Targeted Public Involvement and Outreach Program	75
8	SEWRPC Primary Organizational Contacts for Outreach and Involvement Efforts	75
9	Purposes of the SEWRPC Environmental Justice Task Force	78
	Part Three	
10	Actual and Projected Regional and County Population Levels: 1950-2035	84
11	Actual and Projected Regional and County Household Levels: 1950-2035	
12	Actual and Projected Regional and County Employment Levels: 1970-2035	
13	Unemployment Rate in the Region: 1980-2012	
14	Residential Lots Platted in the Region and its Counties: 1960-2012	
15	New Housing Units in the Region and its Counties: 1990 to 2012	
16	Housing Units Losses in the Region by Structure Type: 1990-2012	93
17	Public Interest Acquisition of Environmental Corridors and	
	Isolated Natural Resource Areas in the Region: 2006-2012	94

Figure		Page
18	Persons Per Personal-Use Vehicle	97
19	Personal-Use Vehicle Availability	97
20	Commercial-Use Truck Availability	98
21	Transit Revenue Ridership City of Kenosha Transit System	101
22	Transit Revenue Ridership City of Milwaukee Transit System	101
23	Freeway Flyer Ridership: Milwaukee and Waukesha County Transit Systems	101
24	Transit Revenue Ridership City of Racine Transit System	101
25	Transit Revenue Ridership City of Waukesha Transit System	102
26	Transit Revenue Ridership: Kenosha-Racine-Milwaukee Area Transit System	102
27	Transit Revenue Ridership Ozaukee County Express Bus System	102
28	Transit Revenue Ridership Washington County Express Bus System	102
29	Transit Revenue Ridership Waukesha County Transit System	103
30	Transit Revenue Ridership City of Hartford Taxi System	103
31	Transit Revenue Ridership Ozaukee Taxi System	103
32	Transit Revenue Ridership Washington County Taxi System	103
33	Transit Revenue Ridership City of West Bend Transit System	104
34	Transit Revenue Ridership City of Whitewater Transit System	104
35	Historical Trend in Annual Public Transit Vehicle-Miles of Service in the Region	104
36	International Roughness Index Pavement Rating System	
	Used on State Trunk Highways in Wisconsin	110
37	Pavement Surface and Evaluation Rating (Paser) System	
	Used on County and Local Roads in Wisconsin	113
38	Bridge Structure Sufficiency Rating System Used in Wisconsin	113
39	Traffic Congestion on the Arterial Street and Highway	
	System in the Region: 1963, 1972, 1991, 2001, 2005, and 2008	119
40	Estimated Existing Southeastern Wisconsin Freeway System Traffic	
	Congestion on an Average Weekday: 1972, 1991, 2001, 2005, and 2008	120
41	Total, Property-Damage Only, and Injury and Fatal	100
	Vehicular Crashes Reported in the Region: 1994-2012	
42	Fatal Vehicular Crashes and Fatalities Reported in the Region: 1994-2012	
43	Selected Characteristics of Vehicular Crash-Related Fatalities in the Region: 2012	126
44	Total Number of Crashes Resulting in a Serious Injury Reported in the Region: 1994-2012	127
45	Air Carrier Enplaning and Deplaning Passengers at	
	General Mitchell International Airport: 2003-2012	128
46	Air Carrier and Military Aircraft Operations at	
	General Mitchell International Airport: 2003-2012	128
47	General Aviation Aircraft Operations at Airports in the	120
	Southeastern Wisconsin Region with Control Towers: 2003-2012	129
	LIST OF MAPS	
Map		Page
	Part One	
1	The Southeastern Wisconsin Region	4
2	Land Use Plan for the Southeastern Wisconsin Region: 2035	10
	<i>C</i>	-

Map		Page
3	Park and Open Space Plan for the Southeastern Wisconsin Region: 2035	12
4	Natural Areas and Critical Species Habitat Plan for the Southeastern Wisconsin Region	15
5	Public Transit Element of the Transportation Plan for the Southeastern Wisconsin Region: 2035	17
6	Existing and Planned Off-Street Bicycle Facilities  Located within the Southeastern Wisconsin Region	19
7	Arterial Street and Highway Element of the Transportation Plan for the Southeastern Wisconsin Region: 2035	21
8	Implementation Status of Regional Plan Recommendations Regarding Public Wastewater Treatment Plants in the Region: 2012	23
9	Planned Sanitary Sewer Service Areas Grouped by Wastewater Treatment Plant Operator in the Southeastern Wisconsin Region: 2012	25
10	Public Water Utility Service Area Plan for the Southeastern Wisconsin Region: 2035	27
11	Public Water Supply Facilities Plan for the Southeastern Wisconsin Region: 2035	28
12	Groundwater Recharge Protection Component of the Recommended Water Supply Plan for the Southeastern Wisconsin Region: 2035	29
	Part Two	
13	Locations of Special Environmental Inventories, Assessments, and Evaluations Involving SEWRPC Fieldwork: 2012	39
14	Nonattainment and Maintenance Areas within the Southeastern Wisconsin Region with Respect to National Ambient Air Quality Standards (NAAQS)	42
15	Major Watersheds in the Southeastern Wisconsin Region	56
16	Location of U.S. Geological Survey Stream-Gaging Stations: 2012	58
17	Designated Coastal Areas in Southeastern Wisconsin: 2012	59
18	Portion of Typical Topographic Map	67
19	Large-Scale Topographic Mapping Prepared to Commission-Recommended Specifications: 2012	68
20	Portion of Typical Cadastral Map	69
21	Large-Scale Cadastral Mapping Prepared to Commission-Recommended Specifications Under Programs Administered by the Commission: 2012	70
	Part Three	
22	Residential Platting Activity in the Region: 2012	90
23	Public Interest Acquisitions of Environmental Corridors and Isolated Natural Resource Areas in the Region: 2012	95
24	Public Transit Services in the Region: 2012	99
25	Existing and Proposed Park-Ride Lots and Transit Stations Located within Southeastern Wisconsin	108
26	State Trunk Highway Pavement Conditions in the Region: 2012	111
27	County and Local Arterial Pavement Conditions in the Region: 2011	112
28	Bridge Structure Conditions in the Region: 2011	114

Map		Page
29	Congestion on the Arterial Street and Highway	
	System in the Region: Years 2001 and 2008	118
30	Historic Traffic Congestion on the Southeastern Wisconsin Freeway System	121
31	Congestion on Designated Truck Routes and the	
	National Highway System in the Region: Years 2001 and 2008	122
32	Comparison of Estimated Year 2001 and 2005 Peak Hour Travel	
	Speeds for Selected Freeway and Surface Arterial Streets within the Region	124
33	Ratios of Overall Transit Travel Times to Overall	
	Automobile Travel Times between Selected Locations in	
	Milwaukee County for Weekday Peak and Off-Peak Periods: 2005	125
34	Common Carrier Rail Freight Lines in Southeastern Wisconsin December 31, 2012	130

(This page intentionally left blank)

## PART ONE: REGIONAL PLANNING IN SOUTHEASTERN WISCONSIN

This section of the 2012 SEWRPC Annual Report includes basic information about the Commission and its approach to the process of preparing and adopting regional plan elements that together comprise a comprehensive regional plan. Included also is a brief description of each of the elements of that plan, including the regional land use plan, the regional park and open space plan, the regional natural areas and critical species habitat plan, the regional transportation plan, the regional water

quality management plan, and the regional water supply plan. This section concludes with brief references to other regional plan elements that were prepared over the years.

Part Two of this Annual Report documents Commission work activities undertaken during 2012 and begins on page 31. Part Three documents the results of Commission monitoring efforts during the year and begins on page 81.



### **TABLE OF CONTENTS**

ABOUT THE COMMISSION	3
REGIONAL PLAN: Overview	8
REGIONAL PLAN: Land Use	9
REGIONAL PLAN: Park and Open Space	11
REGIONAL PLAN: Natural Areas	13
REGIONAL PLAN: Transportation	16
REGIONAL PLAN: Water Quality	22
REGIONAL PLAN: Water Supply	26
OTHER REGIONAL PLANS	30

(This page intentionally left blank)

### ABOUT THE COMMISSION

### **Authority**

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) was established in 1960 under Section 66.0309 of the *Wisconsin Statutes* as the official areawide planning agency for the highly urbanized southeastern region of the State. The Commission was created to provide the basic information and planning services necessary to solve problems which transcend the corporate boundaries and fiscal capabilities of the local units of government comprising the Southeastern Wisconsin Region. Those problems include traffic congestion, flooding, and water quality, among others. The Wisconsin regional planning enabling legislation may be found at <a href="https://www.sewrpc.org/about">www.sewrpc.org/about</a>.

### Area Served

The Commission serves the Southeastern Wisconsin Region, which consists of the seven counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha (see Map 1). These seven counties have an area of about 2,689 square miles, or about 5 percent of the total area of the State. These counties, however, have a resident population of over 2 million persons, or about 35 percent of the total population of the State, and contain about 1.2 million jobs, or about 35 percent of the total employment of the State. The Region contains real property worth about \$169.4 billion, or about 37 percent of all the tangible wealth of the State as measured by equalized valuation. There are 154 general-purpose local units of government in the Region, all of which participate in the work of the Commission.

### **Basic Concepts**

Regional, or areawide, planning has become recognized as a necessary governmental function in the large metropolitan areas of the United States. This recognition stems from an awareness that problems of physical and economic development and of environmental deterioration transcend the geographic limits and fiscal capabilities of the local units of government comprising such large areas, and that sound resolution of these problems requires the cooperation of all units and agencies of government and of private interests as well.

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

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

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

Map 1

### THE SOUTHEASTERN WISCONSIN REGION

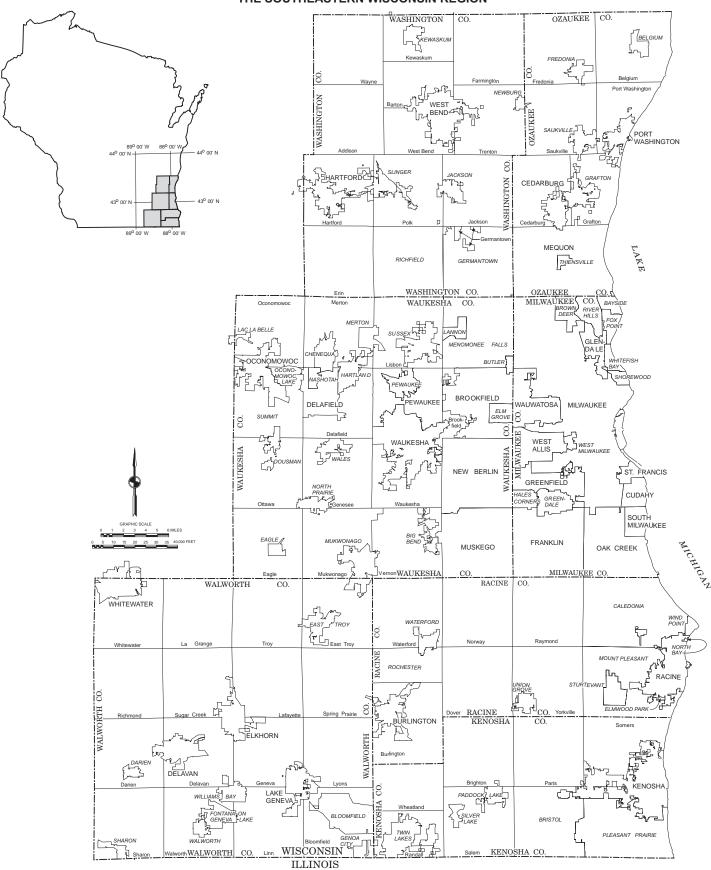
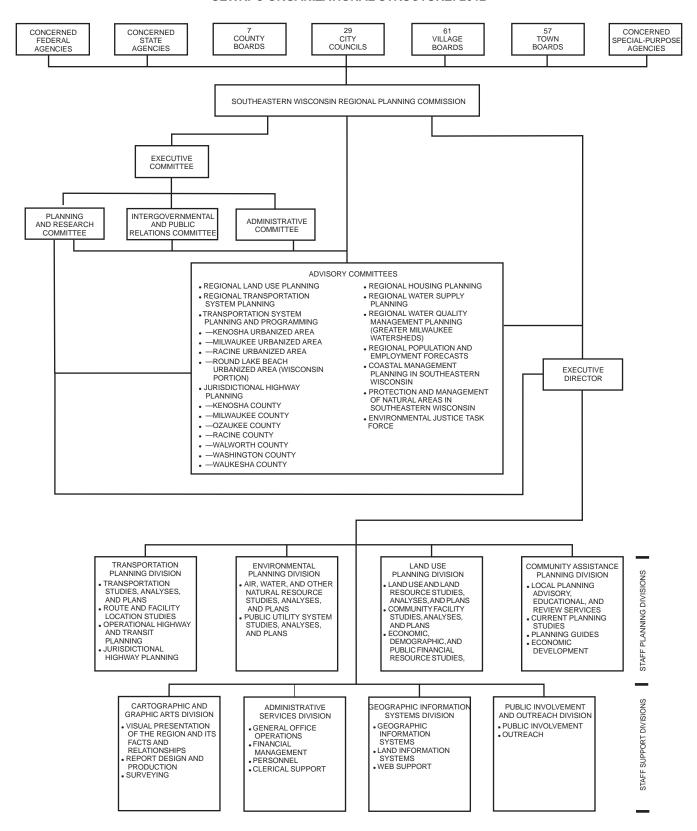


Figure 1
SEWRPC ORGANIZATIONAL STRUCTURE: 2012



#### **Basic Functions**

The Commission conceives regional planning as having the following three basic functions:

The collection, analysis, and dissemination of basic planning and engineering data on a uniform, areawide basis. The creation and use of such data can in and of itself contribute to better development decision-making in both the public and private sectors that operate in the Region.

The preparation of a framework of long-range areawide plans for the physical development of the Region. Mandated by the State planning enabling legislation, the Commission places emphasis on the preparation of plans for land use and supporting transportation, utility, and community facilities.

The provision of a center for coordinating day-to-day planning and plan implementation activities of all of the governments operating within the Region. Through this function, the Commission seeks to integrate regional and local plans and planning efforts and thereby to promote regional plan implementation.

### **Organization**

The Commission consists of 21 members, three from each of the seven member counties. One Commissioner from each county is appointed or, in those counties where a County Executive appoints, confirmed by the County Board and by custom is an elected County Board Supervisor. The remaining two from each county are appointed by the Governor, one from a list prepared by the County. All appointments are for six-year terms.

The full Commission is responsible for establishing overall policy, adopting the annual budget, and adopting regional plan elements. The Commission has four standing committees: Executive, Administrative, Planning and Research, and Intergovernmental and Public Relations. The Executive Committee oversees the work effort of the Commission and is empowered to act for the Commission in all matters except the adoption of the budget and the adoption of regional plan elements. The Administrative Committee oversees the financial and personnel matters of the Commission. The Planning and Research Committee reviews all of the technical work carried out by the Commission

staff and its consultants. The Intergovernmental and Public Relations Committee serves as the Commission's principal arm in communicating with the constituent county boards. Commission and committee rosters for 2012 are set forth in Appendix A.

The Commission is assisted greatly in its work by Advisory Committees. These Committees include both elected and appointed public officials and interested citizens with knowledge in the Commission work program areas. The Committees perform a significant function in both the formulation and the execution of those work programs. Advisory Committee rosters for 2012 are set forth in Appendix B.

### **Staffing**

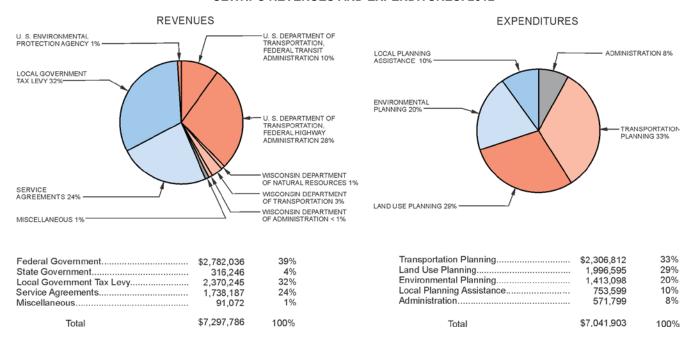
The Commission prepares an annual work program which is reviewed and approved by Federal and State funding agencies. This work program is then carried out by a core staff of full-time professional, technical, and clerical personnel, supplemented by additional temporary staff and consultants as required by the various work programs under way. At the end of 2012, the Commission staff totaled 70, including 65 full-time and five part-time employees. An organizational chart is shown on Figure 1. A list of Commission staff members for 2012 may be found in Appendix C.

### **Funding**

Basic financial support for the Commission's work program is provided by a special property tax charge levied on local governmental units by the counties and apportioned on the basis of equalized valuation. These basic funds are supplemented by State and Federal aids. County-levied special property tax charges in 2012 totaled about \$2.3 million. The County-levied special property tax charge has either declined or been held flat with no increase since 2007. A summary of revenues and expenditures in 2012 is presented in Figure 2.

The Commission has a complete financial audit performed each year by a certified public accountant. Under the Federal Single Audit Act of 1984, the Commission's audit is subject to the review and approval of the Commission's Federal cognizant agency, the Federal Highway Administration. The 2012 audit report is set forth in Appendix D.

Figure 2
SEWRPC REVENUES AND EXPENDITURES: 2012



### **Documentation**

Documentation in the form of published reports is essential to any public planning effort. Planning reports, made available in hard copy and digital form, represent the best means for disseminating inventory data that have permanent historical value and for promulgating plan recommendations. Published reports are intended to serve as important references for public officials at the Federal and State levels, as well as at the local level, when considering development decisions. Perhaps most importantly, however, published reports are intended to provide a focus for generating enlightened citizen interest in, and action on, plan recommendations.

The Commission has established the following series of published reports:

- <u>Planning Reports</u>, intended to document the adopted elements of the comprehensive plan for the physical development of the Region.
- <u>Planning Guides</u>, intended to constitute manuals of local planning practice.

- <u>Technical Reports</u>, intended to make available information assembled during the course of planning work on a work progress basis.
- Community Assistance Planning Reports, intended to document local plans prepared by the Commission at the request of one or more local governments.
- <u>Memorandum Reports</u>, intended to document the results of locally requested special studies.
- <u>Planning Program Prospectuses</u>, prepared as a matter of policy as the initial step in undertaking any major new planning program.
- <u>Annual Reports</u>, intended to summarize the activities of the Commission in any given year.

A partial list of Commission publications is set forth in Appendix E. A complete publication list may be found at <a href="https://www.sewrpc.org/publications">www.sewrpc.org/publications</a>. All publications are available from the Commission offices and through the on-line site.

### THE REGIONAL COMPREHENSIVE PLAN 2012: A BRIEF OVERVIEW

### **Plan Design Function**

The Commission is charged by law with the function and duty of "making and adopting a master plan for the physical development of the [R]egion." The scope and content of this plan may extend to all phases of regional development. Implicitly emphasized, however, are the preparation of alternative spatial designs for the use of land and for supporting transportation and utility facilities.

The scope and complexity of areawide development problems prohibit the making and adopting of an entire comprehensive development plan at one point in time. Accordingly, the Commission prepares individual plan elements that together can comprise the required comprehensive plan. Each element is intended to deal with an identified areawide developmental or environmental problem. The individual elements are coordinated by being related to an areawide land use plan. Thus, the land use plan comprises the most basic regional plan element, an element on which all other elements are based.

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

The Commission believes that the comprehensive plan is a concept essential to coping with the developmental and environmental problems generated by areawide urbanization. The comprehensive plan not only provides the necessary framework for coordinating and guiding growth and development within a multijurisdictional urbanizing region having essentially a single community of interest, but also provides the best conceptual basis available for the application of systems engineering skills to the problems of such a region. This is because systems engineering basically must focus upon a design of physical systems. It seeks to achieve good design by setting good objectives, determining the ability of alternative plans to meet those objectives through quantitative analyses, cultivating interdisciplinary team activity, and considering all of the relationships involved both within the system being designed and between the system and its environment.

### The Cyclical Nature of the Planning Process

The Commission views the planning process as cyclical in nature, alternating between systems, or areawide, planning, and project, or local, planning. Under this concept, for example, with respect to transportation planning, transportation facilities development and management proposals are initially advanced at the areawide systems level of planning and then an attempt is made to implement the proposals through local project planning. If, for whatever reasons, a particular facility construction or management proposal advanced at the areawide systems planning level cannot be implemented at the project level, that determination is taken into account in the next phase of systems planning.

In recognition of the cyclical nature of the planning process, the Commission carries out a series of continuing planning efforts designed to ensure—to the extent that fiscal resources permit—that the adopted plan elements are both kept current and extended in terms of design year. Thus, the Commission carries on a continuing regional land use planning program designed in part to update, amend, and extend the regional land use, regional park and open space, regional natural areas and critical species habitat, and regional housing plans; a continuing regional transportation planning program designed to update, amend, and extend the regional highway, transit, and bicycle and pedestrian system plans; and a continuing regional environmental planning program designed to update, amend, and extend the regional water quality management plan and the regional water supply plan, as well as the floodland management elements of comprehensive watershed plans.

### **REGIONAL LAND USE PLAN**

The regional land use plan, graphically shown on Map 2 and most recently documented in SEWRPC Planning Report No. 48, A Regional Land Use Plan for Southeastern Wisconsin 2035, June 2006, constitutes a long-range guide to both land use development and open space preservation in the Region. The plan not only provides underlying data used as the basis for preparing the other elements of the regional plan, but is also intended to serve as the framework for detailed county and local land use planning in the Region. Drawn from a series of alternative plan designs put forth for evaluation in the late 1960s, and confirmed and updated to new design years about every decade, the plan now has a design target year of 2035 and includes the following key recommendations:

### **Urban Land Development**

Under the plan, urban lands—including land devoted to high, medium, and low density residential uses as well as commercial, industrial, governmental, institutional, recreational, and transportation, communication, and utility uses—would increase by 93 square miles, or 13 percent, from 732 square miles in 2000 to 825 square miles in 2035. Urban development would occur within urban service areas served by public sanitary sewers and other public utilities and services. New urban development would be provided both through the infilling and renewal of existing urban service areas and through the orderly expansion of such areas. Urban residential development and redevelopment would occur in a variety of residential neighborhood types and in mixed-use settings. About 88 percent of all new housing would occur at a medium density, averaging about four dwelling units per acre. Growth and change in the economic base would be accommodated through the development and redevelopment of major economic activity centers (shown on Map 2) as well as community-level and neighborhoodlevel centers.

### **Sub-Urban Density Residential Land**

The regional plan discourages sub-urban density residential development, defined as a density of 0.2 to 0.6 dwelling unit per acre, with a typical lot size of two to three acres. Such development is neither truly urban nor rural in character. Development at this density generally precludes the provision of centralized sanitary sewer and water supply services.

Additional sub-urban density residential development should be confined to areas that have already been committed to such use through subdivision plats and certified surveys.

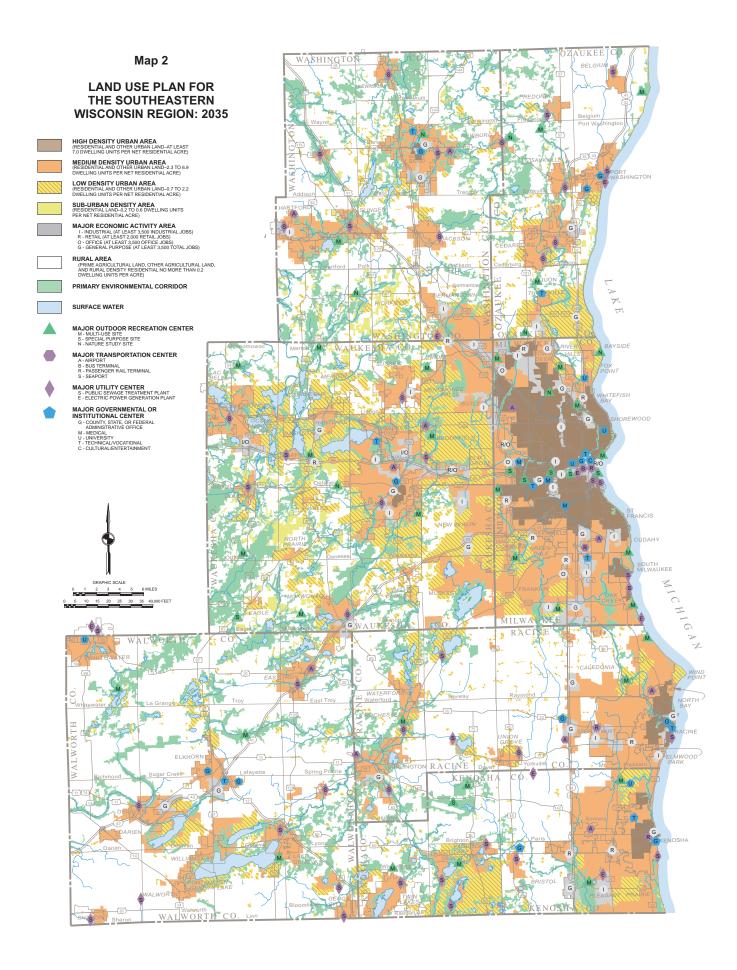
### **Environmentally Significant Lands**

Under the regional plan, the land development needs of the Region would be met while preserving the best remaining elements of the natural resource base—most of which are located within environmental corridors and isolated natural resource areas. The plan recommends the preservation of primary environmental corridors—large, elongated areas in the landscape encompassing many of the best remaining woodlands, wetlands, prairies, wildlife habitat, and surface water and associated shorelands and floodlands, along with many related historic, scenic, and recreational sites. The plan recommends that these corridors be preserved in essentially natural, open use, recognizing, however, that certain limited development may be accommodated in upland corridor areas without jeopardizing their overall integrity; guidelines in this respect are included in the plan. The planned primary environmental corridors encompass 18 percent of the Region.

In addition to primary environmental corridors, other smaller concentrations of natural resources—referred to as secondary environmental corridors and isolated natural resource areas—have been identified as warranting strong consideration for preservation. The planned secondary environmental corridors encompass 3 percent of the Region, while the planned isolated natural resource areas encompass 2 percent. The regional plan recommends that these areas be retained in natural, open use as determined in county and local plans.

### Prime Agricultural Lands and Other Rural Lands

The area shown in white on Map 2 is recommended to remain in essentially rural use—primarily agriculture and rural density residential use. Prime agricultural land in this area—the land best suited for agriculture—is recommended to be preserved for farming, with residential development generally limited to no more than one dwelling unit per 35 acres. The regional plan recommends that counties in the Region, in cooperation with the concerned local units of government, carry out planning programs to specifically identify prime agricultural



land. The regional plan holds out the preservation of the most productive soils—soils in U.S. Natural Resources Conservation Service Agricultural Capability Class I and Class II—as a key consideration in the identification of prime farmland, recognizing that other factors, such as farm size and the overall size of the farming area, may also be considered.

The regional plan also encourages the preservation of nonprime farmland for agricultural use. This could be in the form of traditional agriculture or alternative agricultural uses such as smaller hobby farms or specialty farms including community supported agricultural operations. The plan recognizes the potential for limited residential development on nonprime farmland in planned rural areas, recommending that any such development be limited to a density of no more than one dwelling unit per five acres. Where such development is accommodated, the plan encourages the use of conservation subdivision designs.

More information about the regional land use plan may be found at

www.sewrpc.org/regionallanduseplan.

### REGIONAL PARK AND OPEN SPACE PLAN

The regional park and open space plan was adopted by the Commission in 1977 and is documented in SEWRPC Planning Report No. 27, *A Regional Park and Open Space Plan for Southeastern Wisconsin:* 2000. Over time, the plan has been refined and updated on a county-by-county basis, with most of the county park plan updates prepared with the assistance of the Commission and adopted as amendments to the initial plan. The regional park and open space plan as amended is graphically summarized on Map 3. The key recommendations of the plan are:

### **Open Space Preservation**

The plan provides recommendations for the preservation of environmentally significant open space lands throughout the Region, focusing on the environmental corridors and isolated natural

resource areas identified as part of the regional land use plan, and incorporating as well the findings and recommendations of the regional natural areas protection and management plan. Like the regional land use plan, the regional park and open space plan recommends the preservation of primary environmental corridors in essentially natural, open use. The plan identifies portions of the primary environmental corridors that are recommended to be preserved through public interest ownership—that is, through public acquisition or acquisition by a non-profit conservancy organization—and identifies other portions of the primary corridor that are recommended to remain in private ownership and be preserved through public land use regulation. Similar recommendations are made with respect to the smaller secondary environmental corridors and isolated natural resource areas. The plan recognizes that conservation easements may be as effective as outright ownership as a means of permanently protecting environmentally significant areas.

### **Outdoor Recreation Sites and Facilities**

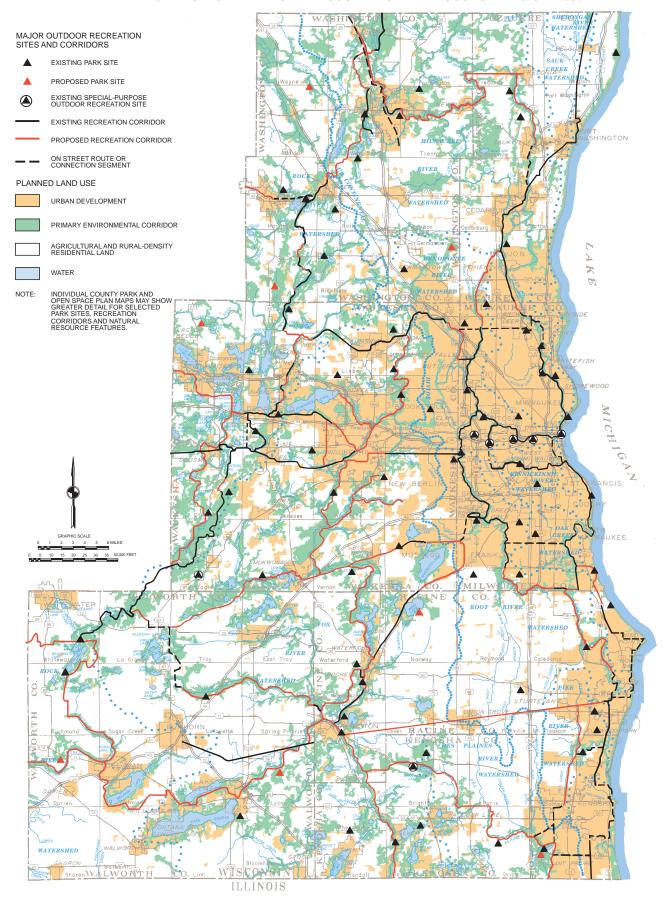
The plan includes recommendations regarding sites and facilities that are needed to meet existing and anticipated future outdoor recreation needs within the Region. The plan focuses on sites and facilities needed for "resource-oriented" activities—activities like beach swimming, nature study, camping, picnicking, hiking, and golf—which depend upon, or are significantly enhanced by, the presence of natural resource amenities. The plan includes recommendations for large parks, areawide recreation trails, and lake and river access sites, which provide opportunities for such activities.

### **Major Parks**

The plan recommends a system of 78 major parks within the Region. Major parks are large, publicly-owned outdoor recreation sites which contain significant natural resource amenities and which provide facilities for resource-oriented activities. Major parks are generally 100 acres or more in size. They may be owned and operated by county or local units of government as well as by the Wisconsin Department of Natural Resources.

Map 3

### PARK AND OPEN SPACE PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035



### Areawide Recreation Trails

The plan recommends a 700-mile area-wide recreation trail system within the Region to accommodate such activities as bicycling, hiking, nature study, and ski touring. The plan recommends that, to the extent possible, such trails be provided within scenic areas or areas of natural, cultural, or historic interest, including environmental corridors. The trails may be owned and maintained by county or local units of government as well as by the Wisconsin Department of Natural Resources.

### Lake and River Access

The plan recommends that major lakes—lakes with a surface water area of 50 acres or more—be provided with adequate boat access facilities consistent with safe and enjoyable participation in various boating activities. Under the plan, needed boat access facilities are recommended to be provided by the Wisconsin Department of Natural Resources. The plan also recommends the provision of canoe/kayak access sites at intervals of no more than 10 miles on major streams.

While it is primarily concerned with sites and facilities for resource-oriented activities, the regional park and open space plan also recognizes the importance of providing sites and facilities for nonresource-oriented outdoor recreation activities, such as baseball, tennis, and playground activities. In comparison to sites and facilities for resourceoriented activities, sites and facilities for nonresource-oriented activities rely less heavily on natural resource amenities; generally meet a greater need, and are more efficiently provided, in urban than rural areas; and have a relatively small service area. For these reasons, responsibility for providing such sites and facilities appropriately rests, for the most part, with city, village, and town governments. Thus, the regional plan recommends the provision of a full range of community and neighborhood parks sites and facilities within urban areas throughout the Region and recommends that this be achieved through community-level planning and plan implementation. The regional plan includes related planning standards to help guide communities in these efforts.

More information about the regional park and open space plan may be found at

www.sewrpc.org/regionalparkplan.

### REGIONAL NATURAL AREAS AND CRITICAL SPECIES HABITAT PLAN

The regional natural areas and critical species habitat plan was adopted by the Commission in 1997 (see SEWRPC Planning Report No. 42, A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin, September 1997) and has been amended from time to time, most recently in December 2010. This planning effort identified the most significant remaining natural areas—essentially, remnants of the pre-European-settlement landscape—as well as other areas vital to the maintenance of endangered, threatened, and rare plant and animal species in the Region. Focused on addressing issues relating to biodiversity, the plan as amended is graphically summarized on Map 4. The plan stands as an important supplement to the open space preservation recommendations of the regional land use and park and open space plans.

Under the plan, natural areas are defined as tracts of land or water so little modified by human activity, or which have sufficiently recovered from the effects of such activity, that they contain intact native plant and animal communities believed to be representative of the pre-European-settlement land-scape. Critical species habitats are defined as additional tracts of land or water which support endangered, threatened, or rare plant or animal species. The protection and preservation of these sites to the greatest extent possible is key to efforts to retain and strengthen the natural ecosystems that, research shows, provide: 1) direct use values (e.g., developing pharmaceutical products, maintaining the genetic basis for agriculture, providing bench marks for restoration efforts elsewhere); 2) ecosystem services (e.g., converting sunlight to energy, moderation of climate extremes, pollination of crops); 3) aesthetic, recreation, and cultural heritage values (e.g., hiking, bird watching, fishing); and 4) consideration of intangible factors (e.g., protection

of nature, human obligation to prevent extinction of other species). The key recommendations of the plan are:

### **Natural Areas**

A total of 494 natural areas have been identified in the seven-county Region, ranging from one to 3,026 acres in size. Collectively, these areas total about 101 square miles or about 4 percent of the area of the Region. About 51 percent of the collective areal extent of these areas was in either public or private protective ownership as of 2009. These natural area sites have been classified as either of statewide or greater significance (NA-1), countywide or regional significance (NA-2), or local significance (NA-3). The plan recommends that the protection of such lands in public or protective private ownership be increased over time to about 98 percent. The plan identifies responsible agencies and organizations for carrying out these recommendations, including Federal and State agencies, county and local governments, and private organizations such as land trusts. Thus, the focus is not solely on public ownership of these sites, but rather on employing a range of methods to protect these sites in perpetuity, and through proper management of such sites seeking to insure site integrity in terms of biodiversity and, in many cases, the preservation of habitat that supports the continued existence of rare, threatened, and endangered plant and animal species.

### **Critical Species Habitat Sites**

A total of 271 critical species habitat sites lying outside of identified natural areas have been identified in the Region. These sites range from one to 5,021 acres in size. Collectively, these sites total about 31 square miles or about 1 percent of the area of the Region. About 74 percent of the collective areal extent of these sites was in either public or private protective ownership as of 2009. The plan recommends that the protection of such sites in public or protective private ownership be increased over time to about 95 percent. The plan identifies both public and private organizations to be responsible for carrying out these recommend-dations.

### **Grassland Re-establishment Sites**

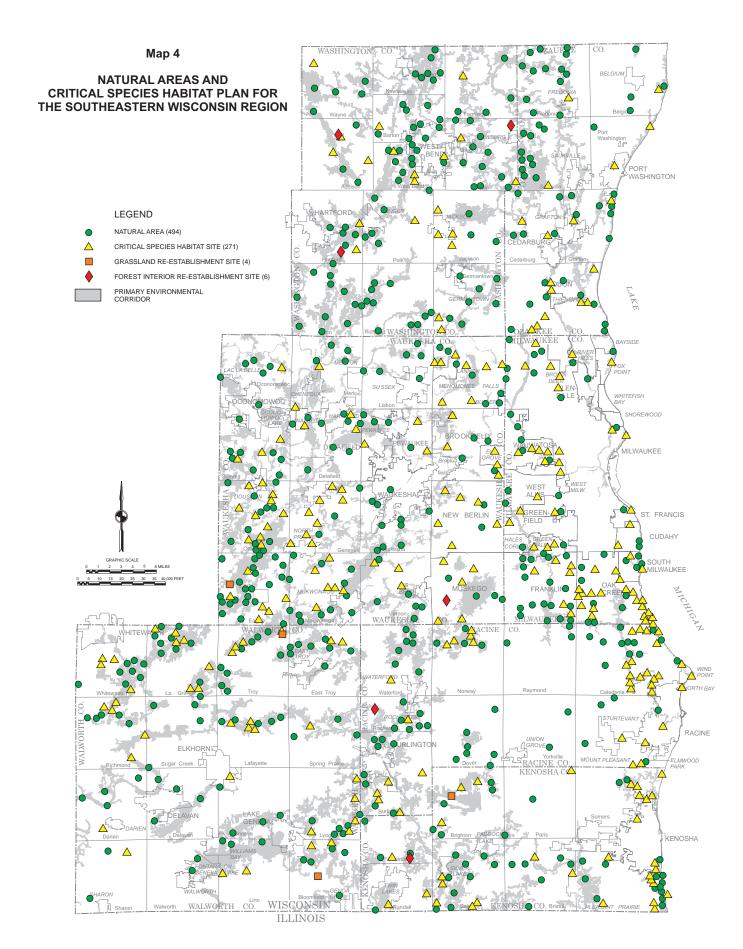
In recent decades, research has shown that grassland nesting bird populations have significantly declined throughout the North American continent. Examples of grassland nesting birds are the meadow lark, bob-o-link, short-eared owl, and Henslow's sparrow. To help stem this decline, the plan recommends that efforts be made, primarily by the Wisconsin Department of Natural Resources, to re-establish and manage about 29 square miles of suitable nesting habitat for such grassland nesting birds at four sites in the Region.

#### **Forest Interior Re-establishment Sites**

Decades of development throughout the Region have significantly reduced the number and size of large forest tracts that provide important migratory habitat for forest interior and other migrant birds in southeastern Wisconsin. Examples of such birds include the scarlet tanager, wood thrush, and hooded warbler. Particularly important to these types of birds for breeding and nesting are relatively large, i.e. at least 100 acres, forest tracts that are circular or blocky in shape and thus provide a nesting and breeding habitat that discourages the predation that takes place along forest edges. Accordingly, the plan recommends that the Wisconsin Department of Natural Resources, together with other entities, seek to re-establish over time forest interior bird habitat at six sites throughout the Region. Together these relatively large tracts would add about two square miles of appropriately sized and shaped forest interior bird habitat.

The regional natural areas plan also includes ancillary elements attendant to 14 archaeological and 87 geological sites. Such sites are of significance in terms of their cultural, scientific, and educational values and are recommended to be preserved and protected to the greatest extent possible.

More information about the regional natural areas plan may be found at www.sewrpc.org/naturalareasplan.



### REGIONAL TRANSPORTATION PLAN

As the Federally recognized metropolitan planning organization (MPO) for the Census-defined urbanized areas in Southeastern Wisconsin, the Commission prepares and maintains current a multimodal regional transportation plan. The regional transportation planning process carried out by the Commission addresses the Federally specified planning and programming requirements and, as such, ensures that Federal transportation funds routinely flow to the transportation agencies that provide the infrastructure so essential to the day-to-day functioning of the Region. As the MPO, the Commission is also required to ensure that the Region's transportation plans conform to the State of Wisconsin air quality implementation plan. More information on the MPO function may be found at www.sewrpc.org/mpo.

The regional transportation plan is prepared and adopted approximately every 10 years in conjunction with the update of the regional land use plan, and was most recently updated, as fully documented in SEWRPC Planning Report No. 49, A Regional Transportation System Plan for Southeastern Wisconsin: 2035, adopted by the Commission in 2006. That plan—in order to meet Federal requirements—is subject to review, update, and reaffirmation every four years, with the most recent such action taken in June 2010. The regional transportation plan is designed to serve the planned development pattern of the regional land use plan. That development pattern seeks to preserve the Region's prime farmland and best natural areas, and accommodate new urban development through the infilling and renewal of existing urban service areas and through the orderly expansion of such areas. Each time the regional transportation plan is developed, elements of the plan which can help reduce the need for investments in the improvement and expansion of the arterial street and highway network are first considered: namely public transit facilities and services, bicycle and pedestrian facilities, transportation systems management, and travel demand management. The process concludes with consideration of arterial street and highway improvement and expansion projects to address the residual highway traffic volumes and attendant traffic congestion expected in the design year of the plan.

The current plan has a design target year of 2035, and as updated and reaffirmed in 2010, includes the following key recommendations:

### **Public Transit**

Public transit is considered a vital element of the regional transportation plan, providing an alternative mode of travel in heavily travelled corridors within and between the Region's urban areas and in the Region's densely developed urban communities and activity centers. The plan recommends a near doubling of transit services by the year 2035, with implementation dependent upon the State's continued commitment to funding transit facilities and services, and upon attaining dedicated local funding for public transit. A regional transit authority, if created, could also greatly aid in implementation. The public transit element of the regional transportation plan is graphically summarized on Map 5 and includes the following aspects:

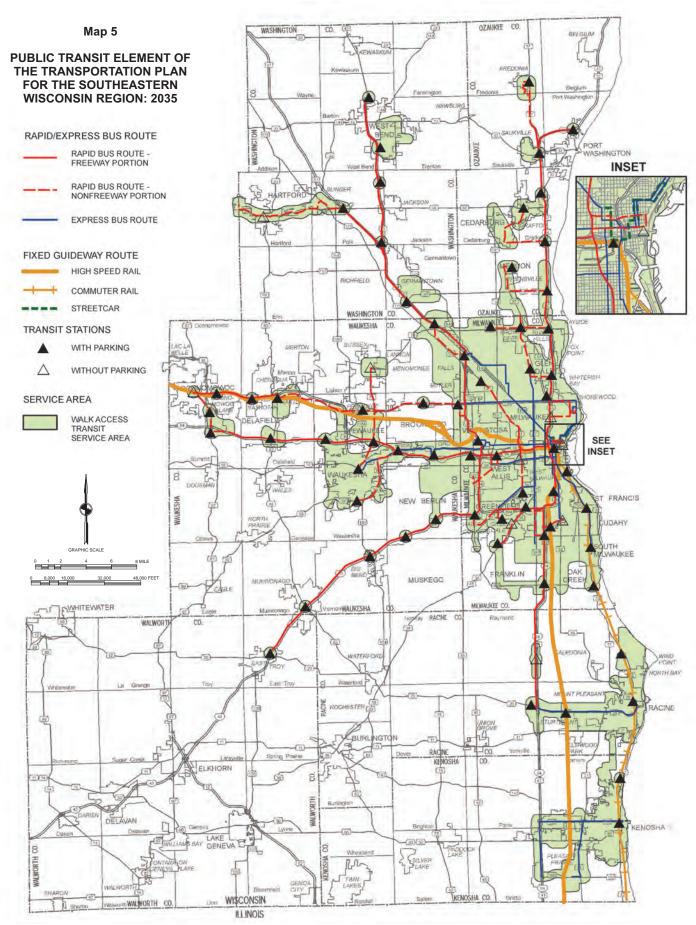
### Rapid Transit

Recommended rapid transit services would principally consist of buses operating over freeways that connect the Milwaukee central business district, the urbanized areas of the Region, and the urban centers and outlying counties of the Region. Under the plan, bus rapid transit services would operate in both directions during all time periods of the day and evening, thereby providing both traditional commuter and reverse-commute services. The frequency of service provided would be every 10 to 30 minutes in weekday peak travel periods, and every 30 to 60 minutes in weekday off-peak periods and on weekends.

Commuter rail rapid transit services are recommended to be provided between Milwaukee, Racine, and Kenosha, connecting to the Chicago area through the existing Chicago-Kenosha Metra commuter rail service, providing traditional and reverse commuting services in this interstate travel corridor. The plan also identifies conceptual commuter rail alignments in heavily travelled corridors of the Region that should be further studied for potential implementation.

### Express Transit

Recommended express transit services would consist of a grid of limited stop, higher speed bus routes



located largely within Milwaukee County, connecting major employment centers, shopping centers, and other major activity centers. These express transit services would operate in both directions during all periods of the day and evening to serve both traditional and reverse commuters. The frequency of service would be about every 10 minutes during weekday peak travel periods, and about every 20 to 30 minutes during weekday offpeak periods and on weekends. The plan also proposes that the eventual upgrading of these routes to fixed guideways, including the construction of bus guideways and/or light rail/streetcar lines, be considered on a corridor-by-corridor basis.

### **Local Transit**

Significant improvements and expansion in local bus transit services over arterial and connector streets throughout the Kenosha, Milwaukee, and Racine urbanized areas are also recommended in the plan. These recommendations include expansion of service area and hours, and significant improvements in the frequency of local service, particularly on major routes.

### **Paratransit**

Consistent with the Federal Americans with Disabilities Act of 1990, the plan recommends that complementary paratransit services be provided to serve persons with disabilities who are unable to access and use fixed-route transit services.

### **Intercity Rail**

The plan includes improvements to the existing Hiawatha Amtrak train service between Milwaukee and Chicago and the extension of similar service to Minneapolis-St. Paul, with trains reaching maximum speeds of 110 miles per hour.

### **Bicycle and Pedestrian Facilities**

The regional transportation plan helps promote the safe accommodation of bicycle and pedestrian travel on streets and highways, while encouraging such travel as an alternative to personal vehicle travel. The plan recommends that, as each segment of the surface arterial street system in the Region is

resurfaced, reconstructed, or newly constructed, bicycle accommodations be considered and—if feasible—implemented through bicycle lanes, widened outside travel lanes, widened shoulders, or separate bicycle paths. This element of the regional transportation plan also recommends that a 586-mile system of off-street bicycle paths be provided to serve the urbanized areas and larger cities and villages throughout the Region. About 238 miles of this planned off-street system exists today (see Map 6) The pedestrian facilities recommendation consists of a set of policies and a series of recommendations and guidelines proposed to be followed in implementing such policies.

### **Transportation Systems Management**

The regional transportation plan includes a series of measures aimed at managing and operating existing transportation facilities to their maximum carrying capacity and traveling efficiency. This element of the plan includes the following aspects:

### Freeway Traffic Management

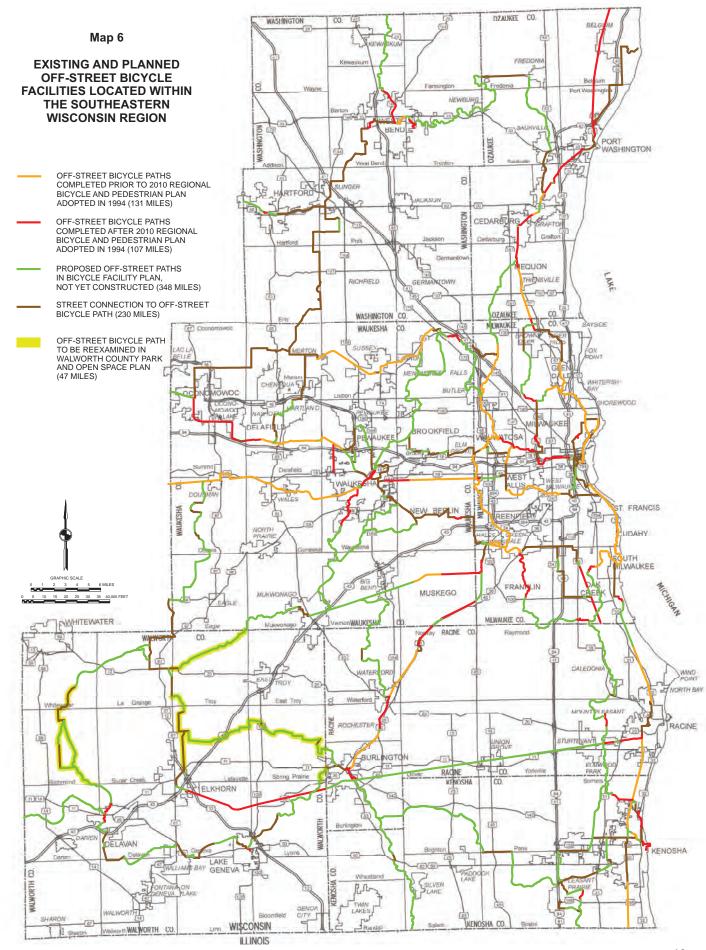
Freeways carry about one-third of all daily travel in the Region, and thus warrant a significant management effort to ensure their optimum utilization. Recommended freeway traffic management measures include operational control, advisory information, and systems management. The plan also recommends a traffic operations center supporting these measures, which is operated by the Wisconsin Department of Transportation.

### **Operational Control**

The plan specifies a number of measures to improve freeway operations by monitoring operating conditions and controlling freeway traffic. These measures include embedded traffic detectors, freeway on-ramp meters, and a set of ramp meter control strategies.

### **Advisory Information**

Providing updated information to motorists helps achieve the efficient use of the freeway system. Measures toward such end set forth in the plan include the provision of permanent variable message signs, the maintenance of a website



identifying current travel times and delays and views of traffic congestion maps, and the extensive provision of traffic information to the media and through automated messages available to the dial-in public.

### **Incident Management**

Incident management measures set forth in the plan are aimed at the timely detection, confirmation, and removal of freeway incidents. Such measures include closed-circuit television cameras providing live video images to system management and law enforcement personnel, a relatively dense system of reference markers allowing motorists to specify incident locations, the provision of off-line crash investigation sites, the provision of automated ramp closure devices, and the provision of freeway service patrols to rapidly remove disabled vehicles and aid disabled motorists.

### <u>Surface Arterial Street and</u> <u>Highway Traffic Management</u>

A number of recommendations are included in the regional transportation plan to improve the operation of the regional surface arterial street and highway network, attempting to maximize the efficient use of that network and, where possible, avoid significant capital expenditures. These recommendations include coordinated traffic signal systems to provide for the efficient progression of traffic; intersection improvements, including adding right- and/or left-turn lanes and intersection traffic control improvements; implementation of curb-lane parking restrictions to provide additional peak period traffic carrying capacity; improved management of access to arterial streets from adjacent parcels; and enhanced advisory information for motorists along key routes.

### Major Activity Center Parking Management and Guidance

The plan recommends that traffic operation conditions at major activity centers, such as the Milwaukee central business district, be improved by reducing the traffic circulation of motorists seeking parking spaces. Recommended measures relate to providing motorists with real-time information about available parking through

strategically located message signs and mobile transmittal of information.

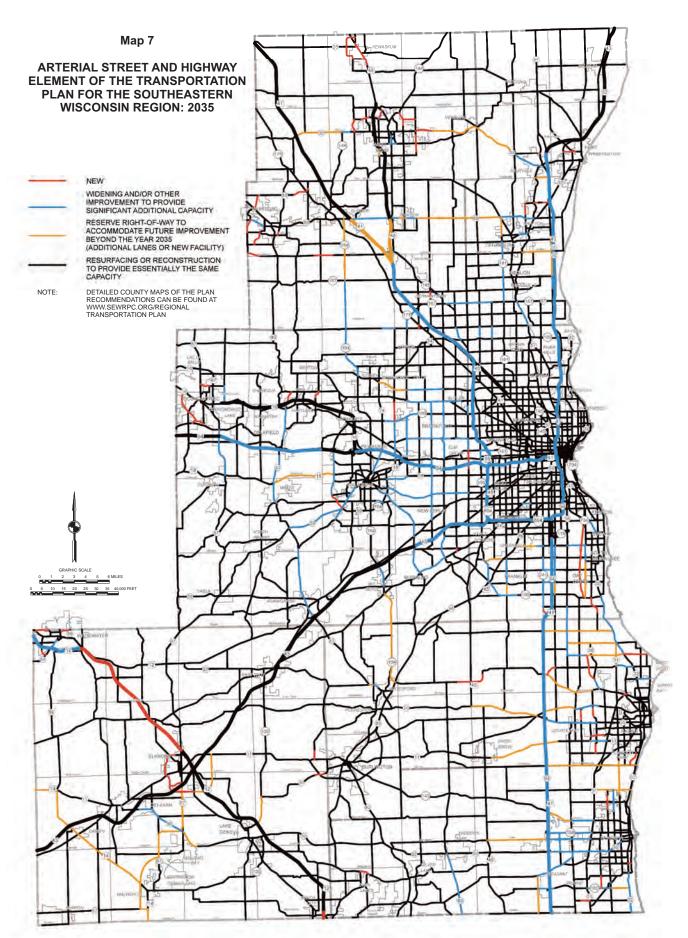
### **Travel Demand Management**

The plan identifies measures that could be taken to reduce personal and vehicular travel or to shift such travel to alternative times and routes, thereby allowing for more efficient use of the existing capacity of the transportation system. In addition to the public transit and pedestrian and bicycle plan element recommendations noted above, this element of the plan includes preferential treatment of high occupancy vehicles, the provision of parkride lots, transit pricing measures, the provision of real-time transit information, and personal vehicle pricing actions, among other measures.

### **Arterial Street and Highway Element**

The arterial street and highway element of the recommended year 2035 regional transportation plan as amended, and adjusted to account for plan implementation through 2010, totals 3,652 routemiles (see Map 7). Approximately 88 percent, or 3,228 of these route-miles, are recommended to be re-surfaced and reconstructed with no additional capacity. Approximately 344 route-miles, or less than 10 percent of the total system, are recommended for widening upon reconstruction to provide additional through traffic lanes, including 127 miles of freeways. The remaining 80 routemiles, or about 2 percent of the total arterial street mileage, are proposed new arterial facilities. Thus, the plan recommends over the next 25 years a capacity expansion of 12 percent of the total arterial system, and—viewed in terms of added lane-miles of arterials—only about a 10 percent expansion over the next 25 years.

The 127 miles of freeway widening proposed in the plan, and in particular the 19 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), would undergo preliminary engineering and environmental impact statement preparation by the Wisconsin Department of Transportation. During preliminary engineering, alternatives would be considered, including rebuild-as-is, various options of rebuilding to modern design standards, compromises



to rebuilding to modern design standards, rebuilding with additional lanes, and rebuilding with the existing number of lanes. Only at the conclusion of the preliminary engineering process would a determination be made as to how a freeway segment would be reconstructed.

The regional transportation plan also includes recommendations attendant to the jurisdictional responsibility-State, county, or local-for each segment of the regional arterial street and highway network. Such jurisdictional plan recommendations are developed on a county-by-county basis and are intended to provide for the efficient development and management of the arterial street and highway system, helping to ensure that public resources are effectively invested in the provision of highway transportation, and that the costs associated with plan implementation are equitably borne among the levels and agencies of government concerned. More information relative to the jurisdictional highway system planning process may be found at www.sewrpc.org/jhp.

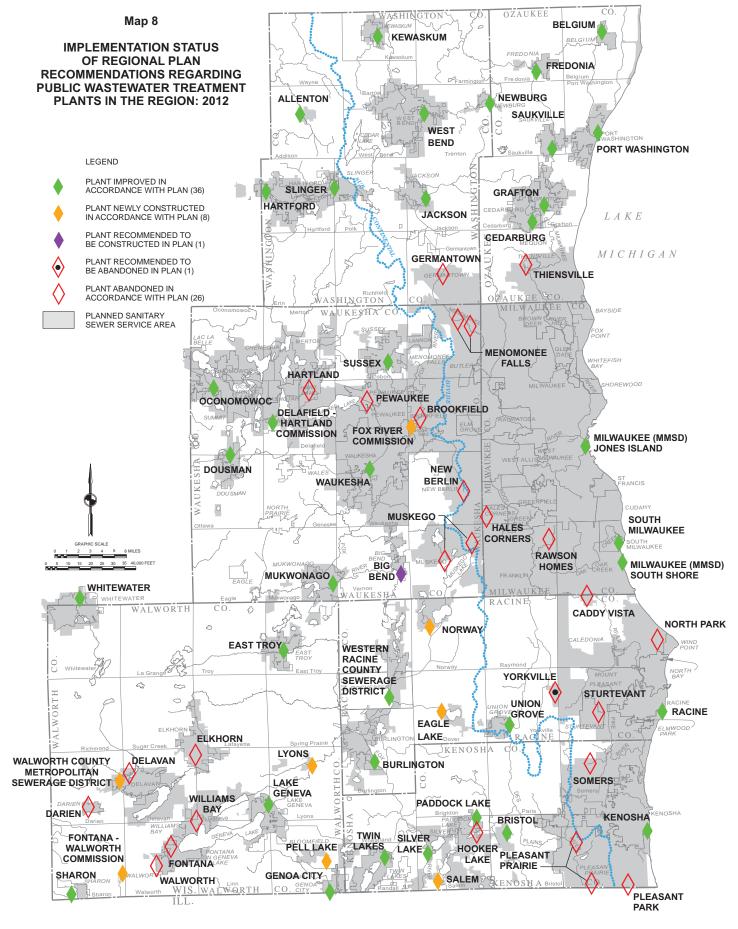
More information about the regional transportation plan, including county maps of recommendations attendant to the arterial street and highway system, may be found at <a href="https://www.sewrpc.org/rtp">www.sewrpc.org/rtp</a>.

# REGIONAL WATER QUALITY MANAGEMENT PLAN

As the gubernatorially designated water quality management planning agency for the seven-county Southeastern Wisconsin region pursuant to the provisions of the Federal Clean Water Act, the Commission has a responsibility to prepare, adopt, and amend as necessary a regional water quality management plan. The initial such plan was adopted in 1979 and was designed, in part, to meet a congressional mandate that the waters of the United States be made "fishable and swimmable" to the extent practicable. That initial plan is set forth in SEWRPC Planning Report No. 30, "A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000," Volume One, Inventory Findings, September 1978; Volume Two, Alternative Plans, February 1979; Volume 3, Recommended Plan, June 1979. That plan has been amended numerous times over the years, including a comprehensive update for the greater Milwaukee area watersheds comprised of the areas tributary to the Milwaukee, Menomonee, Kinnickinnic, and Root Rivers and the Oak Creek as well as the Milwaukee Harbor estuary and selected adjacent Lake Michigan direct drainage areas. That comprehensive update is set forth in SEWRPC Planning Report No. 50, "A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds," December 2007. The key recommendations of the water quality management plan are:

# Wastewater Treatment and Conveyance Facilities

This element of the plan seeks to abate water pollution from point sources, consisting of public and private wastewater treatment facilities and points of wastewater overflow discharge in sewerage systems, including the combined sanitary/storm sewer system found in a significant portion of east central Milwaukee County. Toward this end, the plan over the years made many recommendations to improve the Region's system of wastewater treatment facilities, including upgrading improvement of selected existing facilities, the construction of new facilities, and the abandonment of a series of relatively small and inefficient facilities. As shown on Map 8, there are 45 existing public wastewater treatment facilities in the Region, including 36 facilities that were improved and upgraded in accordance with regional plan recommendations, eight facilities that were newly constructed in accordance with those recommendations, and one facility that is proposed to be abandoned. In addition, Map 8 identifies 26 facilities that have been abandoned in accordance with plan recommendations. At present, the plan proposes the construction of one new wastewater treatment facility, that for the Village of Big Bend in Waukesha County. Over the years, carrying out these plan recommendations has also led to the construction of numerous major recommended intercommunity sewers to convey wastewater to the appropriate treatment facility. In addition, plan recommendations with respect to the very substantial abatement of overflows from the combined sewer system have been implemented by the Milwaukee Metropolitan Sewerage District through upgrades to its conveyance system and construction of an inline storage system (deep tunnel).



## **Planned Sanitary Sewer Service Areas**

Under State law, the Commission has a responsibility to work with local governments and wastewater treatment plant operators in identifying planned sanitary sewer service areas. Shown on Map 9 is a compilation of the areal extent of those areas, grouped by the named operator of the wastewater treatment plant concerned. Over the years, many area-wide wastewater treatment arrangements have been put in place in the Region to carry out plan recommendations, including the creation of the Fox River Water Pollution Control Commission in Waukesha County and the Walworth County Metropolitan Sewerage District. The individual documents that identify planned sanitary sewer service areas also identify the environmentally sensitive lands within those areas to which sanitary sewer service to serve new urban development is not permitted under State law. Detailed information relative to those sanitary sewer service areas may be found in a series of individual plan reports available from the Commission offices at

www.sewrpc.org/sewerserviceplanstatus.

#### **Runoff Pollution Abatement**

This element of the plan seeks to abate water pollution from nonpoint sources that show up in both urban and rural rainwater runoff. Toward this end, the initial regional plan identified target levels of reduction in such pollution, recommending that more detailed nonpoint source pollution abatement planning be undertaken for appropriate watersheds throughout the Region. Such planning was undertaken in many areas and more detailed runoff pollution abatement recommendations made, including refined pollutant runoff reduction targets.

In addition to such detailed planning, over time the Wisconsin Department of Natural Resources has put in place State regulations to address runoff to help meet the pollutant reduction goals concerned in both rural and urban environments. These rules in rural areas relate to such control measures as reducing soil erosion from cropland, properly managing manure storage and the land application of manure, barnyard runoff control, and restricting livestock access to streams, among others. In rural areas, implementation of certain best management practices to abate runoff pollution is only required if cost-share funding is available to the land owner. In urban areas, such rules address the control of construction site erosion, the control of stormwater pollution, and the infiltration of stormwater runoff, among others. Municipal separate storm sewer system owners are issued stormwater discharge permits under the Wisconsin Pollutant Discharge Elimination System, and those permits impose specific requirements for control of runoff pollution. Together with supplemental plan recommendations with respect to both rural and urban areas set forth in the detailed plans, these regulatory efforts are making progress in reducing runoff pollution.

## **Instream Water Quality Measures**

The regional plan sets forth a number of measures to enhance water quality through instream improvements in selected stream reaches. This includes rehabilitating streams where concrete lining removal can be accomplished without creating flood or erosion hazards; the establishment of riparian buffers to aid in improving water quality and terrestrial and aquatic habitat; the preparation of riverine restoration plans for dam abandonment proposals, specifically addressing sedimentation issues; the installation where feasible of constructed features to allow for the passage of aquatic organisms; and the restoration of instream habitat and enhancement of streambank stability; among others.

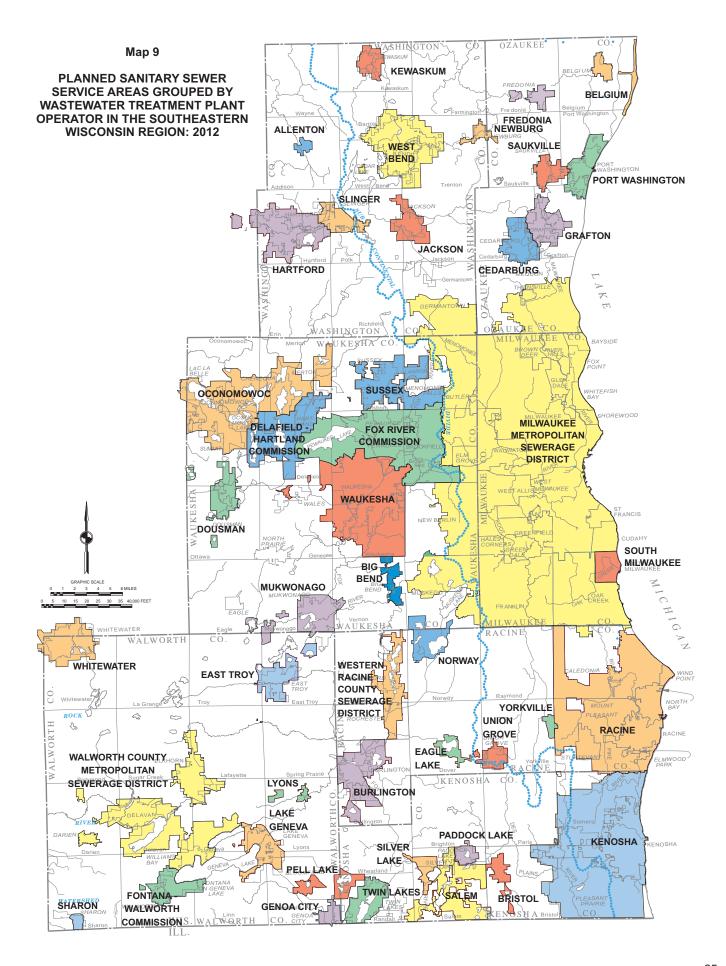
## **Inland Lake Quality Water Measures**

The plan recommends that detailed lake-focused planning efforts be undertaken for all inland lakes to address lake specific reductions in both urban and rural runoff pollution. Many lake water quality plans have been prepared and updated over time in cooperation with lake management districts, lake associations, the Wisconsin Department of Natural Resources, and the University of Wisconsin Extension. These plans include such recommendations as minimizing the use of phosphorus fertilizers on lands draining to lakes, which has now been incorporated in State law through adoption of a statute that essentially bans fertilizers containing phosphorus, and evaluating the effects on lakes of planned new development, among others.

### **Other Plan Recommendations**

The plan also sets forth a number of auxiliary measures relating to such issues as the collection of household hazard waste, collection programs for pharmaceutical and personal care products, water quality monitoring, and programs to reduce exotic invasive species, among others. More information about the regional water quality management plan may be found at

www.sewrpc.org/regionalwaterqualityplan.



#### REGIONAL WATER SUPPLY PLAN

The regional water supply plan was adopted by the Commission in 2010 and is documented in SEWRPC Planning Report No. 52, "A Regional Water Supply Plan for Southeastern Wisconsin." This plan addresses a number of water supply issues in the Region and is focused on meeting water demand in the Region through the plan design year 2035. Demand estimates are derived from the development recommendations set forth in the regional land use plan. The key recommendations of the water supply plan are:

## **Sources of Supply**

The 2,689 square mile southeastern Wisconsin region is bisected by a subcontinental divide separating the Great Lakes-St. Lawrence River Basin from the Mississippi River Basin. This divide has important natural resource and legal implications for water supply, implications that have long been recognized, most recently in the international Great Lakes-St. Lawrence River Basin Water Resources Compact ratified in 2008. From a land area perspective, about 1,011 square miles, or 38 percent of the Region, lies within the Great Lakes Basin, with the remaining 1,678 square miles, or 62 percent, lying within the Mississippi River Basin. About 73 percent of the 2010 population of the Region, or nearly 1.5 million persons, reside within the Great Lakes Basin portion of the Region, most of whom rely upon Lake Michigan as a source of water supply. West of the subcontinental divide, water supply is provided by tapping both shallow and deep groundwater aguifers that are divided by a layer of relatively impermeable shale. The Compact prohibits diversions of Lake Michigan water to serve areas west of the subcontinental divide, with exceptions to the prohibition only being possible for communities that straddle the divide or lie within a county that straddles the divide, and then only when such diversions meet stringent criteria and are approved, in the case of straddling communities by the state concerned, and in the case of non-straddling communities within a straddling county, by all of the Great Lakes states concerned.

The areas proposed to be served by public water utilities in the Region by 2035, and the sources of supply recommended in each case, are shown on Map 10. The plan recommends that nine water utilities that currently utilize ground water as a

source of supply convert over time to Lake Michigan as a source of supply. This includes six utilities— Brookfield-East, Cedarburg, Germantown, Grafton, Saukville, and Yorkville-that lie entirely within the Lake Michigan drainage basin. Two additional utilities-New Berlin-Central and Muskego-straddle the subcontinental divide, but are served by the Milwaukee Metropolitan Sewerage District and, therefore, could readily return the Lake Michigan water to the Lake Michigan Basin. The ninth utility-Waukesha-lies entirely west of the subcontinental divide and would have to put in place facilities to enable Lake Michigan water to be returned to Lake Michigan. One proposed new utility-Elm Grovelies in the Lake Michigan Basin and is recommended to use Lake Michigan water for supply. All of the remaining water utilities are recommended to continue to use their existing sources of supply.

#### **Water Supply Facilities**

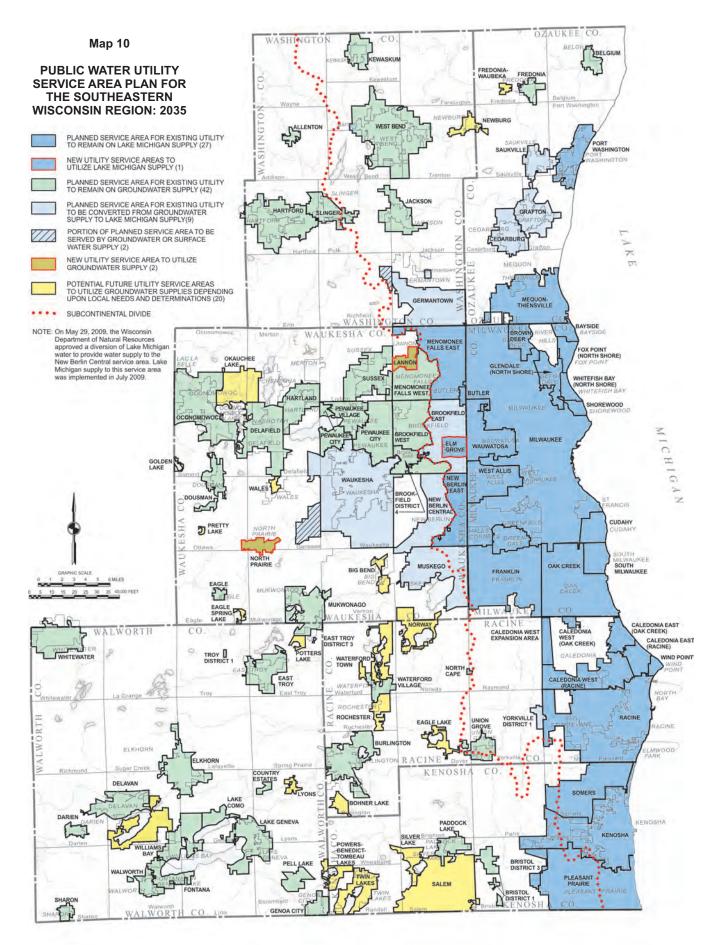
The major water supply facilities needed to implement the regional water supply plan are identified on Map 11. These facilities include municipal wells, both in the deep and shallow aquifers; reservoir storage facilities; new, expanded, or upgraded municipal water treatment plants; new or modified pump or metering stations; elevated tanks; repump reservoirs; and water transmission mains.

#### **Water Conservation Programs**

The regional plan recommends implementation of comprehensive water conservation programs, identifying both supply side efficiency measures and demand side conservation measures. Three program levels of effort were identified in the plan: base level, intermediate level, and advanced level. These program levels were then assigned to categories of utilities taking into account criteria related to the use of Lake Michigan as a source of supply and the extent of major infrastructure development needed to meet future demands, among others.

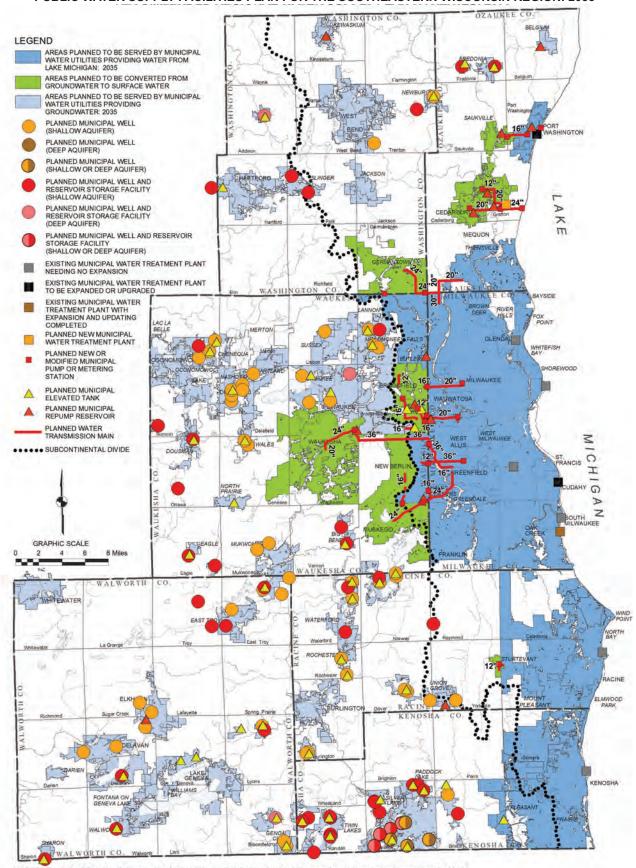
#### **Groundwater Recharge Areas Protection**

Another element of the regional plan consists of recommendations to protect those ground water recharge areas that were found to have a high or very high recharge potential (see Map 12). These recommendations include the protection of environmentally significant lands and the careful site design and use of selected stormwater management practices in those cases where new urban development would take place.



**Map 11** 

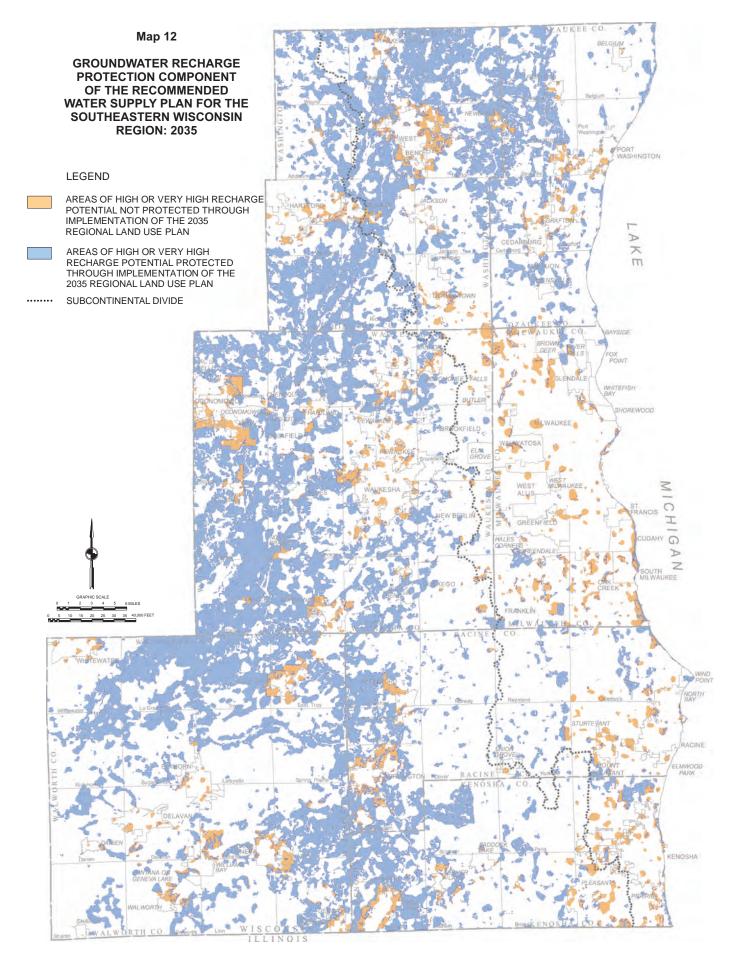
#### PUBLIC WATER SUPPLY FACILITIES PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035



NOTES: The City of Oak Creek Sewer and Water Utility completed expansion and upgrading of its water treatment plant in 2010.

The City of Hartford completed the recommended new well and storage tank in 2010.

This map does not indicate the return flow options of the recommended plan.



#### **Other Plan Recommendations**

The plan also sets forth a set of recommendations related to storm water management, the siting of high capacity wells, and the construction of rainfall infiltration facilities in selected areas. These recommendations are intended to form the basis for abating any negative impacts on surface water systems associated with high capacity well development. Finally, the plan sets forth a number of auxiliary recommendations related to water supply issues and concerns, including better winter management of chlorides applied for ice and snow control and the disposal of pharmaceutical and personal care products, among others. More information about the regional water supply plan can be found at <a href="https://www.sewrpc.org/regionalwatersupplyplan">www.sewrpc.org/regionalwatersupplyplan</a>.

## OTHER REGIONAL PLANS

In addition to the foregoing regional plan elements that today comprise the adopted regional comprehensive plan, there a number of other regional plan elements which have been prepared over the years and that, in many cases, continue to provide sound recommendations, but which: 1) have been incorporated into other ongoing regional plan efforts and elements in subsequent years; 2) have not been updated or maintained in a systematic way for programmatic or budgetary reasons; or 3) have been subject only to limited plan implementation activeities. These plans consist of:

### **Watershed Plans**

Comprehensive watershed plans-plans that address land use, park and open space, flood control, and surface quality water issues-were prepared and adopted for the Root, Fox, Milwaukee, Menomonee, Kinnickinnic, Pike, and Des Plaines River watersheds and for the Oak Creek watershed over the period 1966 to 2003. In addition, the three plans for the watersheds that drain to the Milwaukee harbor— Milwaukee, Menomonee, and Kinnickinnic—were supplemented by a comprehensive Milwaukee Harbor Estuary plan. Each watershed plan provided definitive information on the extent of floodplains throughout the watershed and a set of recommendations to preserve and protect those floodplains in natural open space use wherever possible. As appropriate, each plan also set forth a set of recommendations to address existing flooding problems. For example, the Fox River watershed plan recommended that over time about 180 residences be removed from extreme flood prone areas in Kenosha County near the Wisconsin/Illinois State line. Implementation of this particular recommendation continues to this date. Current regional planning efforts attendant to land use, water quality, and floodland management serve to refine and update the watershed specific recommendations contained in these historic watershed plans.

## Regional Elderly-Handicapped Transportation Plan

This plan, adopted in 1978, set forth a series of recommendations to address the mobility problems of elderly and disabled individuals. Many of the recommendations set forth in this plan have been implemented and the Commission continues to work with the Region's transit operators in considering necessary adjustments to the services being provided.

## Transportation Systems Management Plan

This plan, adopted in 1980, sets forth a series of recommendations to properly manage the existing transportation systems in the urbanized areas of the Region. Such planning efforts continue to this date, with any necessary updating work included in the broader regional transportation system plan.

## Regional Bicycle and Pedestrian Facilities Plan

This plan, adopted in 1995 and updated and extended in 2001, includes both system and policy recommendations relative to the accommodation of bicycle and pedestrian movements throughout the Region. Such planning efforts continue to this date, with any necessary updating work included in the broader regional transportation system plan.

## Regional Wastewater Sludge Management Plan

This plan, adopted in 1978, provided recommendations addressed to the owners of the public wastewater treatment plants throughout the Region. Many of the recommendations included in this plan remain relevant today. As may be appropriate, efforts to update these plan recommendations are being accommodated in the continuing regional water quality management planning effort.

#### **Regional Sanitary Sewerage System Plan**

This plan, adopted in 1974, provided recommendations for the abatement of water pollution from public wastewater conveyance facilities and treatment plants. These recommendations were further addressed in the continuing regional water quality management planning effort.

## **Regional Housing Plan**

This plan, adopted in 1975, provided a series of recommendations to address a variety of housing issues. As noted elsewhere in this report, a new regional housing plan was in preparation and will be ready for Commission adoption in 2013.

## **Regional Airport System Plan**

This plan, adopted in 1976, was updated and extended in 1987, and its plan recommendations incorporated into the State of Wisconsin Airport Plan. Many of the plan recommendations were implemented, but no continuing regional planning effort is underway to maintain or extend that plan.

## **Regional Telecommunications Plan**

This plan, adopted in 2007, provides recommendations attendant to the provision of broadband telecommunications facilities and services for the Region. These recommendations have been addressed to both the public and private sector interests concerned. No continuing planning effort is underway to maintain or extend that plan.

## **Regional Air Quality Plan**

This plan, adopted in 1980, comprehensively addressed the issues associated with attaining and

maintaining the Federal Clean Air Act objectives identified for the Region. Commission planning efforts since that time have been limited to demonstrating that the regional transportation plan and the periodically produced regional transportation improvement programs conform to the recommendations of the ongoing State of Wisconsin air quality implementation plan.

#### **Urban District Plans**

Comprehensive plans for urban planning districts were adopted in 1972 for the Kenosha planning district and 1975 for the Racine planning district. These planning efforts involved multiple communities lying east of IH 94 in Kenosha and Racine Counties. These cooperative local planning efforts have been supplanted by State-mandated individual "smart growth" plans.

## Regional Library Facilities and Services Plan

This plan, adopted in 1974, proposed a single sevencounty regional library federation. Implementation stopped short of that goal, resulting in the creation of several single-county or multi-county federated systems.

## **Report Availability**

Reports documenting all of the foregoing plans are available from Commission offices. Website links to these reports are available at

www.sewrpc.org/legacyregionalplans.

(This page intentionally left blank)

# PART TWO: THE YEAR IN REVIEW

This section of the 2012 SEWRPC Annual Report briefly documents the regional planning work activities undertaken during the year. The section is organized by the following regional planning work program categories: land use planning for development and preservation; transportation planning; environmental planning; housing planning; local planning assistance; surveying, mapping, and land information; and public involvement and outreach.

The section concludes with a list of SEWRPC publications during the year.

Part One of this Annual Report provides information about the Commission and includes a brief description of each of the elements of the comprehensive regional plan. That part begins on page 1. Part Three documents the results of Commission monitoring efforts during the year and begins on page 81.



## **TABLE OF CONTENTS**

LAND USE PLANNING	35	
TRANSPORTATION PLANNING	40	
ENVIRONMENTAL PLANNING	49	
HOUSING PLANNING	60	
LOCAL PLANNING ASSISTANCE	61	
SURVEYING, MAPPING, AND LAND INFORMATION	65	
PUBLIC INVOLVEMENT AND OUTREACH	73	
2012 PUBLICATIONS	78	

(This page intentionally left blank)

# LAND USE PLANNING FOR DEVELOPMENT AND PRESERVATION

The Commission undertook a wide range of activities related to land use planning—planning intended to help guide land use development and open space preservation in the Region—in 2012. These activities included the following:

#### **Growth and Change Forecasts**

The regional land use plan and other regional plans which together comprise the comprehensive plan for the seven-county Southeastern Wisconsin Region are designed to accommodate anticipated future growth and change in the Region's population and economy. Long-range projections of population, household, and employment levels and characteristics are thus required as a basis for preparing and updating regional plans. The Commission first prepared a set of long-range population and employment projections in the early 1960s, looking ahead to the year 1990. Since then, the Commission has updated and extended its projections every 10 years, initiating this work shortly after each ten-year Federal Census. The current Commission projections, prepared in 2004, extend to the year 2035.

The Commission has initiated the work involved in updating and extending the regional population and employment projections further into the future, to the year 2050. In 2012, Commission efforts in this regard were directed to the inventory and analysis work required as a basis for preparing the new projections. The demographic analyses focused on current conditions and historic trends in population and household levels and characteristics, as well as on trends in factors contributing to population change, including births, deaths, and natural increase. The economic analyses focused on current conditions and historic trends in labor force and employment levels and characteristics. The findings of this analysis work will provide the background and context needed for developing the new population, household, and employment projections for the year 2050. The new projections are scheduled to be completed in 2013.

## **Land Use Planning**

Much of the Commission's land use planning activity in 2012 was devoted to updating the plan-

ning database needed as a basis for the preparation of the next regional land use plan. In addition, the Commission continued to assist counties in the Region in the preparation of farmland preservation plans, which refine and detail the agricultural component of the regional land use plan.

### Regional Land Use Plan

The Commission reviews, reevaluates, updates, and extends the regional land use plan about every 10 years. The first regional land use plan had a design year of 1990 and was adopted by the Commission in 1966. The current regional land use plan has a design year of 2035 and was adopted by the Commission in 2006. The work required to update and extend the regional land use plan further into the future, to the year 2050 is underway. The process of updating and extending the regional land use plan begins with a major update of the land use-related inventory data required as a basis for preparing the new plan. Commission work on the inventory update began in 2011 and continued throughout 2012 as follows:

## Land Use Inventory

The Commission land use inventory identifies existing land uses throughout the entire Region using a classification system with over 60 land use categories. The land use inventory is critical not only to preparation of the regional land use plan but to virtually all of the Commission's planning work. The Commission has completed land use inventories for the Region for the years 1963, 1970, 1975, 1980, 1985, 1990, 1995, and 2000. The Commission is in the process of updating the land use inventory to 2010. Orthophotographs serve as the primary basis for identifying existing land use, augmented by available oblique aerial photographs, other online resources, and field surveys as needed. Work on the land use inventory update was initiated in 2011, continued throughout 2012, and is scheduled to be completed in 2013.

### **Environmental Corridor Inventory**

Environmental corridors are elongated areas in the landscape that contain concentrations of natural resource features such as wetlands, woodlands, surface water, and wildlife habitat. The preservation of environmental corridors is a key recommendation of the regional land use plan. The Commission

updates the inventory of environmental corridors in conjunction with the update of the regional land use inventory—taking into account changes in wetlands, woodlands, and surface water identified in the land use inventory update. The Commission is in the process of updating the environmental corridor inventory to 2010. Work on the environmental corridor inventory update was initiated in 2011, continued throughout 2012, and is scheduled to be completed in 2013.

## Inventory of Areas Served by Public Utilities

Information regarding the extent of the areas of the Region served by public utilities—including, most importantly, sanitary sewer and water supply services—is essential to the regional land use plan and other Commission planning work. The Commission is in the process of updating the inventory of areas served by public utilities to the year 2010. An inventory of areas served by public sanitary sewers was initiated in 2011 and completed in 2012. An inventory of areas served by public water supply was initiated in 2012 and is scheduled to be completed in 2013.

## Population and Household Ouarter Section File

Following each Federal Census, the Commission prepares a database file indicating estimated population and household levels by U.S. Public Land Survey quarter section throughout the Region. Work began in 2010 on the preparation of a year 2010 population/household quarter section file and was completed in 2012. The file is based primarily upon 2010 Census block data, supplemented by housing unit data from orthophotographs as needed. The resulting quarter section data may be aggregated to provide estimates of population and households for larger areas such as urban service areas, watersheds, and transportation corridors. The quarter section population and household file is used in the preparation of the regional land use and transportation plans and in other regional planning efforts, and may be used in county and local level land use and public facility planning.

## **Employment Quarter Section File**

On a similar ten-year cycle, the Commission prepares a database file indicating the estimated

employment level (number of jobs) by major industry category by U.S. Public Land Survey quarter section throughout the Region. The inventory relies upon a variety of data sources—including an employer-specific database obtained from Infogroup, Inc., directories of manufacturing and service companies, and State Unemployment Insurance Program data—to develop estimates of the existing number of jobs by quarter section. This file is used in the preparation of the regional land use and transportation plans and other regional planning work and may be used in various county and local planning activities. The Commission initiated work on the year 2010 employment quarter section file in 2012. The file is scheduled to be completed in 2013.

## Farmland Preservation Planning

The regional land use plan recommends the preservation of the most productive farming areas in the Region, emphasizing the preservation of areas covered by Class I and Class II soils in particular. The plan further recommends that counties in the Region take responsibility for preparing detailed farmland preservation plans that specifically identify farming areas which are recommended for long-term preservation. Moreover, State law requires that counties update their farmland preservation plans most of which were prepared in the 1980s—as a condition of landowner eligibility for tax credits under the Wisconsin Farmland Preservation Program. The Commission is assisting counties in the Region in the preparation of updated farmland preservation plans, including the following 2012 activities:

#### Ozaukee County

## Farmland Preservation Plan

The Commission completed work on a draft farmland preservation plan for Ozaukee County in mid-2012. The draft plan was submitted by the County to the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) for review and certification in the Fall. DATCP requested revisions and additional information in late 2012. County and Commission staff will make the requested changes in 2013 and re-submit the plan for DATCP certification following public review and approval by the County Board.

#### Racine County

#### Farmland Preservation Plan

The Commission initiated work on a farmland preservation plan for Racine County in 2012. By the end of 2012, all necessary inventory and analysis work had been completed and preliminary maps identifying farmland preservation areas on a parcel-by-parcel basis had been prepared and were ready for public review. The plan is scheduled to be completed by late 2013.

# Washington County

## Farmland Preservation Plan

The Commission worked with Washington County staff, who have taken the lead role in preparing the County farmland preservation plan, during 2011 to complete a draft plan. The draft was submitted to DATCP for certification in November 2011. During 2012, the Commission worked with County staff to respond to concerns raised by DATCP during its review of the draft plan. The revised plan is anticipated to be resubmitted to DATCP in early 2013.

## Park and Open Space Planning

The Commission adopted a regional park and open space plan in 1977. The plan includes recommendation for the preservation of environmentally significant open space lands and the provision of sites and facilities for resource-oriented outdoor recreation activities throughout the Region. Over time, the plan has been amended on a county-by-county basis, with most county plan updates prepared with the assistance of the Commission staff and adopted by the Commission as amendments to the regional park and open space plan. In 2012, the Commission continued to assist counties in updating their park and open space plans, including the following activities:

## Kenosha County Park and Open Space Plan

In 2012 the Commission completed work on an update of the park and open space plan for Kenosha County. The plan was adopted by the County Board and by the Regional Planning Commission. The plan is documented in SEWRPC Community Assistance Planning Report No. 131 (2nd Edition), *A Park and Open Space Plan for Kenosha County*.

## Racine County Park and Open Space Plan

The Commission completed most of the work involved in an update of the park and open space plan for Racine County in 2012. The plan was adopted by the County Board and will be considered for adoption by the Regional Planning Commission in 2013. The report documenting the plan—SEWRPC Community Assistance Planning Report No. 134 (3rd Edition), *A Park and Open Space Plan for Racine County*—is scheduled to be published in 2013.

## Walworth County Park and Open Space Plan

The Commission also continued the work involved in updating the park and open space plan for Walworth County in 2012. All inventory and analysis work has been completed and a set of preliminary plan recommendations has been prepared. The plan is expected to be completed in late 2013 or early 2014.

## **Natural Areas Planning**

The Commission adopted a regional natural areas and critical species habitat protection and management plan in 1997 and has amended the plan several times since, most recently in December 2010. The plan identifies, and includes recommendations for the preservation of, the most significant remaining natural areas—essentially, remnants of the pre-European settlement landscape—as well as other areas vital to the maintenance of endangered, threatened, and rare plant and animal species in the Region.

While no formal amendments to the regional natural areas plan were prepared during the year, Commission staff field work done at the request of the Wisconsin Department of Natural Resources relative to a parcel at the south end of Army Lake in the Town of East Troy led to the mapped expansion of the Army Lake Natural Area and its potential reclassification from a natural area of local significance (NA-3), to a natural area of countywide or regional significance (NA-2). The Department intends to use an already disturbed portion of the site for a boat launch on Army Lake. The expansion of the Army Lake Natural Area and its reclassification

will formally occur in a future amendment to the regional natural areas plan.

## Special Environmental Inventories, Assessments, and Evaluations

A continuing demand is placed upon the Commission to help Federal, State, and local units and agencies of government in evaluating and assessing the environmental significance and quality of specific development and preservation sites throughout the Region. Each of these evaluations involves field inspection work and requires that a report be prepared and transmitted to the requesting party. During 2012, the Commission fulfilled a total of 119 requests for such information, including the following (see Map 13):

## **Private Development Parcels**

During 2012, 24 requests were fulfilled for the field identification and staking of wetland and primary environmental corridor boundaries on individual parcels in order to facilitate consideration by local governments of private development proposals. Each of these requests was made by a county or local planner or engineer who needed detailed field information in order to properly carry out local planning and land use control responsibilities. Once delineated in the field by the Commission staff, the precise boundaries of environmentally significant areas were surveyed by private land surveyors retained by the local unit of government or landowner concerned and the results of the survey were placed on land subdivision plats, certified survey maps, and plats of survey.

#### Large Private Development Sites

During 2012, 41 requests were fulfilled for field evaluation, identification, and delineation of wetlands and primary environmental corridors on large sites proposed for residential, commercial, and industrial development to determine whether environmentally sensitive areas of concern occur on such sites. The Commission encourages such evaluations prior to any commitment to detailed site planning. Again, each such request came from a county or local planner or engineer. Once delineated in the field by the Commission staff, the precise boundaries of the environmentally significant areas concerned were surveyed by private land surveyors retained by the local unit of government or

landowner concerned and the results of the survey were placed on plats of survey.

## Transportation Sites and Corridors

During 2012, 39 requests were fulfilled for the field identification and evaluation of environmentally sensitive areas, including wetlands, associated with transportation improvement projects. These requests came from the Wisconsin Department of Transportation; Milwaukee, Washington, and Waukesha Counties; the Cities of Mequon, Milwaukee, Muskego, New Berlin, Oak Creek, Oconomowoc, Pewaukee, and Racine; the Villages of Germantown and Menomonee Falls; and the Town of Brookfield.

#### Utility and Public Facility Sites

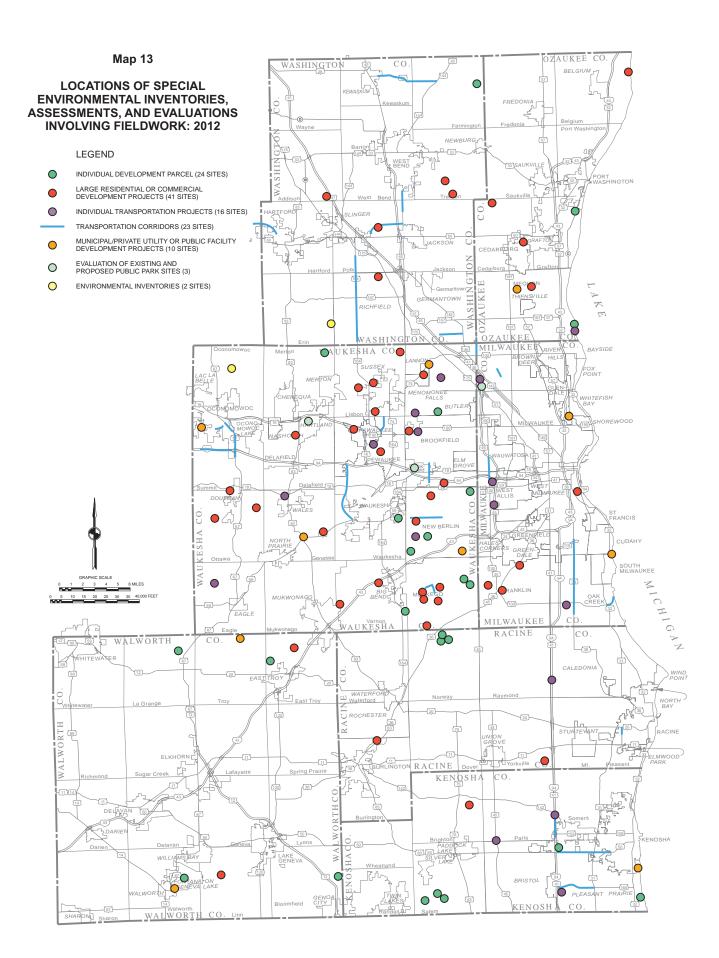
During 2012, 10 requests were fulfilled for the field identification and evaluation of environmentally sensitive areas, including wetlands, associated with municipal and private utility and community facility development projects. These requests came from utilities and agencies operating in Kenosha, Milwaukee, Ozaukee, Walworth, and Waukesha Counties.

#### **Public Park Sites**

During 2012, three requests were fulfilled for the identification and evaluation of environmentally sensitive areas, including wetlands, on public park sites. Particular attention for these evaluations was given to the flora and fauna present on each site in order to assist in the development, redevelopment, or disposal of such sites. These requests came from park agencies in Milwaukee and Waukesha Counties.

#### Other Sites

During 2012, two requests were fulfilled that consisted of specialized field evaluations. The Wisconsin Department of Natural Resources requested that a staff training site located at the Loews Lake Unit of the Kettle Moraine State Forest in Washington County be evaluated to identify flora and fauna, including any rare, threatened, or endangered species. The second site involved a request by the Department relative to the potential downstream effects on flora and fauna attendant to the proposed removal of the Monterey Dam near Ashippun Lake in Washington County.



#### TRANSPORTATION PLANNING

Transportation and related personal mobility issues represent a significant component of regional planning efforts in all metropolitan areas of the nation. As the regional planning agency for the seven-county Southeastern Wisconsin Region, the Commission has been engaged in multi-modal transportation planning since its inception in the early 1960s. In its efforts, the Commission works cooperatively with the U.S. Department of Transportation, Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), U.S. Environmental Protection Agency (EPA), Wisconsin Department of Transportation (WisDOT), Wisconsin Department of Natural Resources (WDNR), transit operators, and county and local units of government in the Region. As the Region's Federally-recognized Metropolitan Planning Organization (MPO), the Commission is responsible for conducting a continuing, co-operative, and comprehensive transportation planning process as prescribed in Federal laws and regulations. In 2012, the U.S. Department of Transportation (USDOT) conducted a quadrennial certification review of that process. The results of that review are scheduled to be provided to the Commission in 2013.

The Commission undertook a wide range of transportation planning activities in 2012. These activities are reported below in three major work program categories: short-range planning and programming, long-range planning, and technical assistance and data provision.

## **Short-Range Planning and Programming**

In support of implementation of the long-range regional transportation plan, the Commission is involved in extensive short-range transportation planning and programming activities each year. In 2012 these activities consisted of: 1) preparation of a four-year transportation improvement program; 2) preparation of short-range (three-to-five years) transit development plans for individual public transit operators; 3) preparation of seven county-based plans for the coordination of public transit with the provision of human services transportation; and 4) preparation of a short-range (five-year) regional transportation operations plan.

## Transportation Improvement Program

The transportation improvement program (TIP) is a listing of all arterial highway, public transit, and other transportation improvement projects proposed to be undertaken over a four-year period by county and local governments and WisDOT within the seven-county Southeastern Wisconsin Arterial highway and public transit projects proposed to be funded with USDOT FHWA (highway) and FTA (transit) funding must be listed in the TIP. The TIP is developed by the Commission working with WisDOT staff, area transit operators, and county and local units of government within the Region. The development of the TIP is guided by the Commission's Advisory Committees for Transportation System Planning and Programming in the Kenosha, Milwaukee, Racine, and Round Lake Beach Urbanized Areas (TIP Committees). These Committees are made up of local elected officials and staff, including all of the area transit operators.

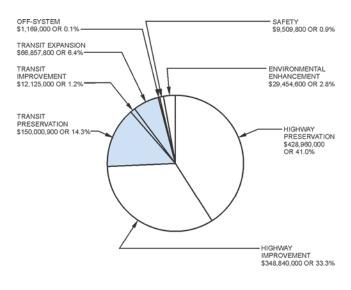
During 2012, the Commission initiated and completed preparation of an updated 2013-2016 TIP, which was adopted in October 2012 by the TIP Committees and the Commission and is set forth in a Commission document titled A Transportation Improvement Program for Southeastern Wisconsin: 2013-2016. Following its adoption, the TIP was both amended and administratively modified as requested by WisDOT and local units of government once during 2012, adding 16 projects and revising one project. As amended through the end of 2012, the TIP contains 491 projects within the Region for the four-year programming period of 2013 through 2016. The TIP represents a total potential investment in transportation improvements and services of \$3.27 billion. Of this total, \$1.31 billion, or about 40 percent, is proposed to be provided through Federal aids; \$1.65 billion, or about 50 percent through State funds; and \$311 million, or about 10 percent, through county and local monies.

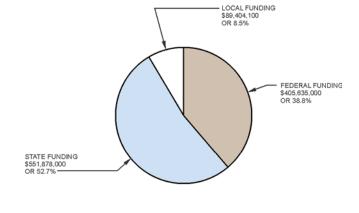
Almost one-third of the four-year TIP proposed expenditures, or about \$1.05 billion, is programmed in 2013, the first year of the TIP. As derived from the data shown in Figure 3:

 About \$579 million, or 55 percent of all expenditures, are devoted to the preservation of

Figure 3

PROGRAMMED EXPENDITURES AND FUNDING SOURCES FOR TRANSPORTATION FACILITIES AND SERVICES IN THE SOUTHEASTERN WISCONSIN REGION





TOTAL: \$1,046,917,100

TOTAL: \$1,046,917,100

NOTE: FOR 2013, NO EXPENDITURES ARE EXPECTED TO BE INCURRED FOR HIGHWAY EXPANSION

existing transportation facilities and services, including \$429 million for highways and \$150 million for transit, with the remaining 45 percent being programmed for service and facility improvement and expansion projects.

- In total, including the service and facility preservation, improvement, and expansion categories of projects, public transit systems, which serve about 2 percent of the approximately 6.5 million person trips made in the Region on an average weekday—are slated to receive about \$229 million in 2013, or 22 percent of total expenditures.
- In total, including the service and facility preservation, improvement, and expansion, categories of arterial projects, highways—which serve about 89 percent of the approximately 6.5 million person trips in the Region on an average weekday—are slated to receive about \$778 million in 2013, or 74 percent of total expenditures.

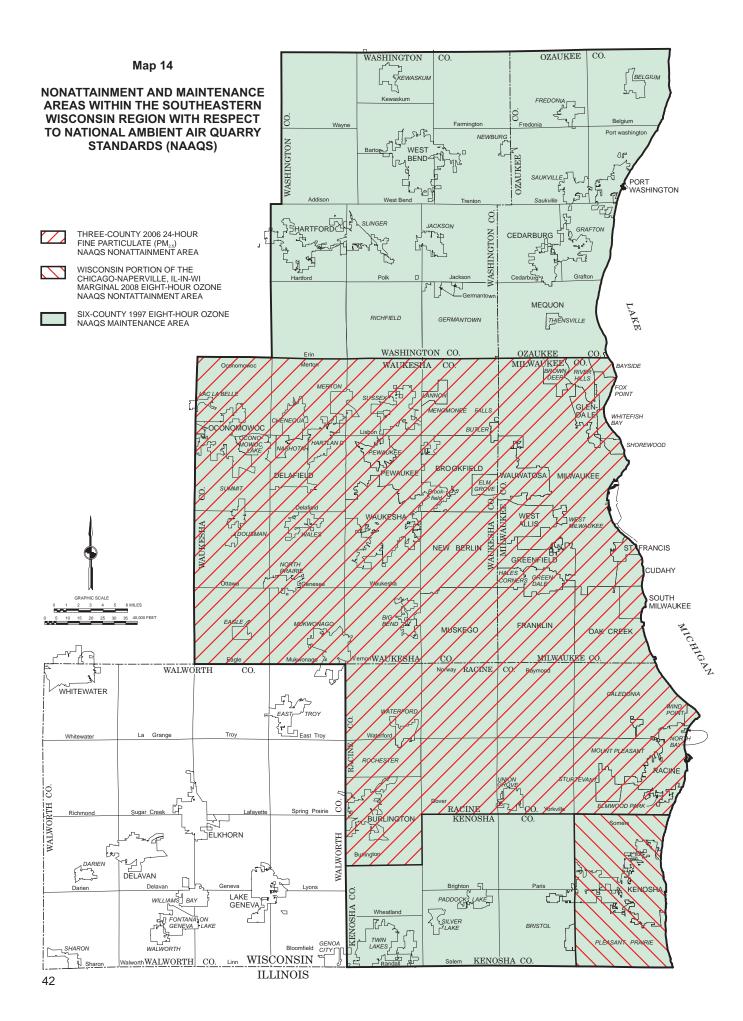
The remaining \$40 million in expenditures, or 4
percent of the total, would be expended on
highway safety, environmental enhancement,
non-arterial street and highway system projects.

The TIP document is available at the Commission offices and may be accessed at www.sewrpc.org/tip.

The following two additional work activities during 2012 are related to the preparation of the TIP and the project implementation activities drawn therefrom:

#### Air Quality Conformance

Given the presence within the Region of nonattainment and maintenance areas with respect to ozone and fine particulate matter (PM 2.5) (see Map 14), the TIP—as well as the long-range regional transportation plan—must conform to State of Wisconsin air quality maintenance plans for specified national ambient air quality standards. The Commission develops an assessment of conformity of the plan and TIP whenever an update to the TIP or regional



transportation plan would trigger the need to The assessment of reassess conformity. conformity is reviewed by FHWA, FTA, EPA, and WDNR, with FHWA and FTA making the final determination of conformity of the plan and TIP. The last such assessment occurred in October 2012 following development of the 2013-2016 TIP and resulted in a Federal finding of conformity. The air quality assessment document, SEWRPC Memorandum Report No. 205, Assessment of Conformity of the Year 2035 Regional Transportation System Plan and the Year 2013-2016 Transportation Improvement Program for the 1997 and 2008 Eight-Hour and 2006 24-Hour Fine Particulate National Ambient Air Quality Standards (October, 2012) is available from the Commission offices and may be accessed at

www.sewrpc.org/conformityassessment.

## Obligated Project Listing

The Commission, in accordance with Federal law, completes and makes available for public access a listing of projects each year for which the FHWA and FTA have obligated funds, drawing such projects listed in the preceding year of the TIP. The lists of obligated highway and transit projects for 2012 are available from the Commission offices and may be accessed at <a href="https://www.sewrpc.org/highwaylist">www.sewrpc.org/highwaylist</a> and <a href="https://www.sewrpc.org/transitlist">www.sewrpc.org/highwaylist</a> and <a href="https://www.sewrpc.org/transitlist">www.sewrpc.org/transitlist</a>, respectively.

## Public Transit Plans

Transit system development plans refine and detail the recommendations for transit services set forth in the regional transportation plan. These plans are prepared at the request of transit service providers in the Region. The plans evaluate the performance of an existing transit system, identify the transit service needs of residents not being met by the system, design and evaluate transit system improvement alternatives for addressing the identified unmet needs, and recommend a five-year plan of operating and capital improvements. The Commission was actively involved during 2012 in producing the following four transit system development plans.

#### Kenosha County Public Transit Plan

Work on the Kenosha County Public Transit Plan continued throughout 2012. The plan will include a full review of the Kenosha Area Transit system

operated by the City of Kenosha, which was last evaluated in a short-range transit plan for the years 1998-2002. In addition, the plan is also examining for the first time the operations of the Western Kenosha County Transit system, a rural fixed-route service that Kenosha County began operating in 2007. The plan will include recommendations for transit service and capital improvements for both the City and County transit systems over the period 2015 through 2019. During 2012, work on this plan included: 1) identifying and evaluating alternative transit service improvements for Western Kenosha County Transit and Kenosha Area Transit, and 2) identifying and evaluating alternatives for operating and funding the Western Kenosha County Transit system as it transitioned into the State of Wisconsin mass transit operating assistance program. The plan is scheduled to be completed in 2013. More information may be found at

www.sewrpc.org/kenoshatdp.

## Racine County Public Transit Plan

Work on the Racine County Public Transit Plan continued throughout 2012. The plan will include an update of the transit system development plan for the City of Racine's Belle Urban System, which was last updated for the years 1998-2002. The study is also investigating the potential need for public transportation service within the portion of Racine County west of IH 94; for service connecting Racine County to Milwaukee, Kenosha, and Walworth Counties; and for service connecting western and eastern Racine County. The plan will include recommendations for transit service and capital improvements for both the City and County transit systems over the period 2013 through 2017. During 2012, work on this plan consisted of developing and evaluating a series of alternatives for the City of Racine, Racine County, and inter-county public transit services. The plan is scheduled to be completed in 2013. More information may be found at www.sewrpc.org/racinetdp.

## Washington County Transit Development Plan

Work was initiated on the Washington County Transit Development Plan in 2012. The plan will include recommendations for transit service and capital improvements for the County transit system over the period 2015 through 2019. During 2012, a scope of work for the plan was prepared and an Advisory Committee was convened to guide preparation of the plan. The plan is scheduled to be completed in 2013. More information may be found at <a href="https://www.sewrpc.org/washingtontdp">www.sewrpc.org/washingtontdp</a>.

## City of Waukesha Public Transit Plan

Work on an update to the City of Waukesha public transit development plan was completed during 2012. The plan reviewed the operations of the Waukesha Metro Transit system and a series of alternative transit service improvements were evaluated. A public informational meeting was held on August 27, 2012, at the Waukesha Metro Downtown Transit Center to present the study findings and obtain comment on three alternative transit service improvement plans. A recommended transit development plan, including recommendations for transit service and capital improvements for the Waukesha Metro Transit System over the period 2013 through 2017, was prepared following the public meeting, which was reviewed and approved by the City of Waukesha Transit Commission in late 2012. The final study report, SEWRPC Community Assistance Planning Report No. 311. Waukesha Metro Transit Development Plan: 2013-2017, was scheduled for distribution early in 2013. More information may be found at www.sewrpc.org/waukeshatdp.

## <u>Public Transit-Human Services</u> Transportation Coordination Plans

The Commission facilitated a planning process and prepared new Public Transit-Human Services Transportation Coordination Plans for each of the seven counties during 2012. The coordination plans, updated every four years, are intended to provide a framework to assist community leaders, human services agencies, and public transit agencies to improve transportation services in each county and between counties. These Federally-required plans ensure the continued availability of Federal funding aimed at improving the mobility of seniors and people with disabilities. The Commission facilitated the coordination planning process at the request of WisDOT, with guidance and input provided by human services agencies and public and private transit operators. The plans assess the existing transportation needs and services in each county, identify unmet transportation needs or service gaps, and present a prioritized list of strategies to address those needs in a cost-effective manner. Documents for each county in the Region are available from the Commission offices and may be accessed at <a href="https://www.sewrpc.org/coordinationplans">www.sewrpc.org/coordinationplans</a>.

## Regional Transportation Operations Plan

The regional transportation operations plan (RTOP) is a short-range plan listing the transportation systems management actions, which are recommended for priority implementation over the next five years. The RTOP builds on the transportation systems management recommendations of the year 2035 regional transportation plan. In October 2011, the Commission asked county and local governments and State agencies to identify candidate transportation systems management projects for the years 2012 through 2016. The Commission's Advisory Committee on Regional Transportation System Planning reviewed and evaluated the list of projects received and developed a priority listing of projects for implementation, particularly with respect to the expenditure of Administration Congestion Federal Highway Mitigation and Air Quality Improvement Program (CMAQ) funds. The RTOP is scheduled to be updated every four years and will include solicitations for additional candidate transportation systems management projects proposed to be implemented in the subsequent five-year period. More information on the 2012-2016 Regional Transportation Operations Plan may be found at www.sewrpc.org/rtop.

## **Long-Range Transportation Planning**

Sound regional planning principles, as well as Federal law, require that the Commission prepare and adopt from time-to-time a long-range regional transportation plan with a minimum future time-frame at all times of 20 years. Good regional planning practice and Federal regulations also require that a long-range plan be reviewed and reevaluated from time-to-time to ensure that the plan remains relevant and, as well, realistic in terms of anticipated funding availability. Consequently, a major focus of the Commission's work program annually involves activities that relate to the preparation and evaluation of the long-range plan and to its implementation from year-to-year. In 2012 this work included:

## <u>Adopted Year 2035 Regional</u> Transportation System Plan

The adopted year 2035 regional transportation plan was summarized in Part One of this Annual Report. The plan was most recently fully documented in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin:* 2035, adopted by the Commission in 2006. An interim review, update, and reaffirmation of the plan was prepared in June 2010.

#### Amendments to Year 2035 Plan

The Commission initiated and completed work in 2012 on four amendments to the year 2035 regional transportation plan, which were considered and approved by the Advisory Committee on Regional Transportation System Planning and by the Commission. The four amendments included one adding to the plan an extension of the Lake Parkway between Edgerton Avenue and STH 100 in Milwaukee County; one adding the widening of USH 45/STH 100 from four to six traffic lanes between Drexel Avenue and Rawson Avenue in Milwaukee County; one adding the widening of STH 50 from two to four traffic lanes between CTH F (south) and STH 67 in Walworth County; and one adding Mound Road between STH 11 and STH 67 to the planned arterial street and highway system in Walworth County.

## Year 2050 Regional

## Transportation System Plan

The Commission initiated work in 2012 on a major review, reevaluation, and update of the regional transportation system plan, which will be prepared in conjunction with an updated regional land use plan. The new plan—expected to be completed in 2015 will replace the existing year 2035 regional transportation plan, and will serve as a guide to transportation system development to the year 2050. This periodic (every 10 years) major reevaluation of the regional transportation plan—incorporating new population, employment, and travel survey data and maintaining at least a 20-year future timeframe—is essential to ensure that State, county, and local governments maintain eligibility to obtain highway and transit project funding from the USDOT. During 2012, the Commission collected data on the existing transportation system supply and use in Southeastern Wisconsin, and worked on inventorying and analyzing implementation of the year 2035 regional transportation plan.

To prepare the year 2050 transportation plan, along with the regional land use plan, the Commission intends to use a visioning and scenario planning approach, which would identify a long-range future vision for land use and transportation for the Region. Initial visioning activities designed to engage and involve the public at the very beginning of the process to develop a consensus vision for the plan, will lead into a scenario planning effort, which will consider and evaluate a range of potential future scenarios relative to regional land use and transportation system development. The visioning and scenario planning results will form the basis for the preparation of alternative land use and transportation plans. Those plans will be compared and evaluated based on how well they meet established objectives for regional development. Ultimately, a final recommended year 2050 land use and transportation plan will be developed, representing a preferred comprehensive vision for the Region.

## **Regional Travel Survey**

A major work effort of the Commission in 2012 was a comprehensive travel survey to assist in the reevaluation of the existing regional transportation system plan and to aid in the design of a sixthgeneration transportation system plan to serve travel needs through the year 2050. The information obtained from the survey will be used to estimate the current travel habits and patterns of the population of the Region, identify trends in those travel habits and patterns, and assist in the development of mathematical models to project future travel behavior in the Region. Information collected as part of the new travel survey will be compared to data obtained during similar surveys conducted by the Commission in 1963, 1972, 1991, and 2001. Such a comparison will allow the identification of long-term trends in travel characteristics and patterns. Commission work on the survey began in 2011, continued throughout 2012, and is scheduled to be completed in 2013. Activities related to the five major elements of the survey are described below.

#### Household Travel Survey

Household travel represents approximately 89 percent of all travel within the Region. The household travel survey was conducted by telephone, mail-out/mail-back, and online survey methods during the spring and fall of 2011. For the

survey, all individuals of surveyed households reported their travel for one day. Travel data was collected for over 17,000 of the Region's households. In addition, approximately 165 households were given GPS units to correlate to their written travel data. Tabulation and analysis of these survey data was initiated in 2012 and is scheduled to be completed in 2013. Analysis of the survey data will, for example, permit establishing the trends in suburb-to-suburb travel and assist in identifying the need for, and location of, suburb-to-suburb and reverse-commute transportation facilities.

## **Group-Quartered Travel Survey**

While representing less than 1 percent of total travel within Southeastern Wisconsin, a survey of travel by group-quartered residents—such as those living in dormitories and nursing homes—was necessary to capture their unique travel habits and patterns. A survey of group-quartered residents was conducted in conjunction with the household travel survey in the fall of 2011, with surveyed residents reporting their travel for one day. The survey was conducted by contacting group-quartered facilities and delivering survey forms with instructions on how to complete and return the forms. In some cases, survey crews were placed at group-quartered facilities to obtain completed surveys from residents. Approximately 1,000 samples were obtained. Survey data was electronically encoded in 2012.

## External Travel Survey

External travel represents approximately 6 percent of regional travel, but represents a much higher percentage at areas near the Region's boundary. An external travel survey was conducted in 2011 and 2012, where motorists and bus, train, ferry, and airline passengers crossing the Region's boundary were surveyed. The external travel survey of motorists was conducted at 38 external survey sites at roadways crossing the Region's boundary. At 31 of the 38 sites surveyed, motorists were stopped and handed a questionnaire requesting that they complete it and return it by mail. At the remaining seven survey sites-freeways and higher-speed, highervolume arterial facilities—video cameras were deployed in May 2012 to capture the rear license plate number and a questionnaire and letter mailed to the owner of Wisconsin vehicles requesting that the data be furnished by the driver and returned by mail. Traffic count and vehicle classification information was also collected for the external travel survey sites in the spring of 2011 and spring of 2012. Approximately 24,000 survey forms were returned from the 38 external sites. The external travel surveys of bus, train, ferry, and airline passengers were conducted in September 2011. In total, approximately 1,400 airline samples were obtained from those surveys.

Electronic encoding of the survey data was completed in 2012. Tabulation and analysis of the survey data and count and classification data was initiated in 2012 and is scheduled to be completed in 2013. Analysis of the data will, for example, permit establishing the trends in residents of the Region working out of the Region and out-of-Region workers employed in the Region, and the locations of trip attractors frequented by residents of the Region.

## Public Transit Travel Survey

Travel by public transit represents approximately 2 percent of all travel within the Region. An on-board survey of public transit riders, where riders of transit are surveyed about transit usage, was conducted in October and November of 2012 on each of the public transit systems throughout the Region—including the City of Kenosha, City of Racine, City of Waukesha, Milwaukee County, Ozaukee County, Washington County, Waukesha County, and Milwaukee-Racine-Kenosha public transit systems. Approximately 17,000 on-board bus surveys were returned. Electronic encoding of the data was underway at the end of the year.

In conjunction with the on-board transit survey, shared-ride taxi systems in the Region were surveyed during the month of October 2012—including the City of Hartford, City of West Bend, City of Whitewater, Ozaukee County, and Washington County taxi systems. Approximately 500 survey forms were returned from taxi passengers. Electronic encoding of the data was underway at the end of the year.

#### Commercial Truck Travel Survey

Commercial truck travel within the Region is estimated to represent about 8 percent of all

intraregional travel. A truck survey, where commercially-owned trucks report their travel for one day, was conducted by mail-out/mail-back survey forms, hand-delivered GPS units to commercial truck owners, and by truck manifests. Commission staff collected over 2,000 separate vehicle days for the survey during the summer of 2012. Electronic encoding of the data was underway at the end of the year, and is scheduled to be completed in 2013.

## Screenline Traffic Counts

The collection of traffic count and classification data for the Milwaukee-Racine, Racine, Kenosha-Racine, and Kenosha screenlines was completed during the months of June through August of 2011. With regard to the Milwaukee screenline, a portion of the traffic count and classification data was collected during the summer of 2011 and was completed during the summer of 2012. The screenline data will be used to validate the accuracy of the travel survey data.

## <u>County Jurisdictional</u> <u>Highway System Plans</u>

Jurisdictional highway system plans contain specific recommendations as to which level of government— State, county, or local—should logically be responsible for each of the various facilities that make up the total arterial system. Updated year 2035 jurisdictional highway system plans were completed for Walworth and Washington Counties in 2011 and 2008, respectively. In 2012, the Commission continued preparation of the documents which will summarize the findings and recommendations of the updated plans for the remaining five counties— Kenosha, Milwaukee, Ozaukee, Racine, and Waukesha Counties—within Southeastern Wisconsin. Also in 2012, Commission staff completed work on an amendment to the year 2035 Walworth County jurisdictional highway system plan to include in the plan the widening of STH 50 from two to four traffic lanes between CTH F (north) and STH 67, as jointly requested by WisDOT and the Town of Delavan following a WisDOT preliminary engineering study. The amendment was approved by the Walworth County Jurisdictional Highway Planning Committee in May 2012 and by the Walworth County Board of Supervisors in September 2012. More information on the jurisdictional highway planning process may be found at www.sewrpc.org/jhp.

## **Congestion Management Process**

Federally-designated transportation management areas (TMAs), such as Southeastern Wisconsin, are required to develop and implement a congestion management process as part of the regional transportation planning process. The congestion management process should include methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions. and evaluate the effectiveness of implemented actions.

The preparation of the regional transportation plan for Southeastern Wisconsin, its reappraisal on a four-year cycle, its major reevaluation and extension on a ten-year cycle, and its refinement through more detailed planning and programming efforts, collectively provide the congestion management process for Southeastern Wisconsin, SEWRPC Memorandum Report No. 203. Congestion Management Process in Southeastern Wisconsin, prepared in 2012, summarizes how the Federallyrequired congestion management process for Southeastern Wisconsin has been incorporated into the year 2035 regional transportation plan completed in 2006, the regional transportation plan reappraisal completed in 2010, and the RTOP completed in 2012. In addition, the document summarizes the five elements of the congestion management process for Southeastern Wisconsin: 1) establishment of objectives and performance measures; 2) data collection and system performance monitoring; 3) testing and evaluation of alternative transportation plans and strategies; 4) identification of recommended actions and implementation schedules, responsibilities, and possible funding; and 5) periodic assessment of the effectiveness of implemented strategies, particularly with respect to established performance measures. More information on the congestion management process may be found at: www.sewrpc.org/cmp.

## <u>Adjustments to 2010 U.S. Census-defined</u> <u>Urbanized Area Boundaries</u>

After each decennial U.S. Census, urbanized areas are delineated by the U.S. Bureau of the Census based on resident population and population density,

and are intended to represent the intensively developed urban cores of metropolitan areas. Because the Census-defined urbanized areas are defined primarily by residential development, adjustments to the urbanized area boundary are necessary to include non-residential urban development—such as commercial and industrial areas—and to include segments of arterial facilities which would otherwise have irregular urban and rural segments. In 2012, the Commission initiated work, in cooperation with local officials and WisDOT staff, on identifying adjustments to the 2010 Census-defined boundaries for the long-established Kenosha, Milwaukee, Racine, and Round Lake Beach urbanized areas and the newly established West Bend urbanized area. The proposed adjustments to the Milwaukee urbanized area were reviewed and approved by the Milwaukee Area TIP Committee at its meeting in October 2012. Proposed adjustments for the remaining four urbanized areas are scheduled to be completed in 2013.

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

The Commission spends a considerable amount of time and effort each year in responding to requests for transportation data and technical assistance. Many transportation data requests involve obtaining existing or forecast traffic volumes on selected arterial facilities. Other requests are for data necessary for the support of special studies. These requests are typically made by local units of government, WisDOT, and private businesses and developers. The following summarizes the assistance provided in 2012:

## **Traffic Forecasts**

At the request of WisDOT or local or county governments, the Commission provides future year traffic forecasts in support of engineering studies throughout the Region. The types of forecasting services typically requested and provided include:

- During preliminary engineering, long-range future year traffic forecasts within the context of the year 2035 regional transportation plan for alternatives being considered. These forecasts are used to assess each alternative's traffic impacts and ability to accommodate future travel demand.
- Detailed origin-destination information for input into microsimulation models used for operational analysis.

- Upon selection of a preferred design, detailed traffic diversion forecasts to identify traffic impacts associated with potential constructionrelated closures so that mitigation measures can be identified and implemented.
- Data for use in project-level air quality impact assessments.

During 2012, numerous forecasts were prepared or underway for WisDOT and other agencies. Some of the projects for which forecasts have been developed were:

- STH 38 corridor study
- IH 94 east-west corridor study
- IH 43 north-south corridor study
- Lake Interchange reconfiguration study
- Lake Parkway extension study (Milwaukee County and the Cities of Cudahy, Oak Creek, St. Francis, and South Milwaukee)
- 124th Street extension analysis (City of West Allis)
- 39th Avenue between STH 165 and 93rd Street (Village of Pleasant Prairie)

## <u>Technical Assistance for</u> Transportation Projects

The Commission provides technical assistance in support of various specific transportation projects in the Region. This assistance often involves:

- Serving on technical advisory committees guiding the design of a specific project;
- Providing technical expertise, information, and materials during development of various elements of a project; and
- Reviewing study reports and other documents prepared for a project.

Some of the projects or studies that Commission staff provided technical assistance to in 2012 included:

- Kenosha streetcar extension
- Milwaukee streetcar project
- Zoo Interchange reconstruction
- STH 38 corridor study
- IH 94 east-west corridor study
- IH 43 north-south corridor study

- West Waukesha bypass study
- USH 41 interstate conversion study
- STH 60 corridor study
- Wisconsin State airport system plan

#### **Grant Application Review**

The Commission often assists in reviewing and evaluating applications for State or Federal transportation grants. In 2012, assistance was provided to WisDOT on the review and scoring of applications for transit funding under the WETAP program and the Federal Section 5317 New Freedom program that were submitted by agencies and organizations within the Milwaukee urbanized area.

## Other Data Requests

In addition to traffic forecasts, the Commission provides other transportation data upon request during special studies being conducted by other entities in the Region. For example, the Commission provided in 2012 transportation data for the Milwaukee County economic development planning effort and for the regional comprehensive economic development strategy being prepared by the Milwaukee 7 Regional Economic Development Partnership.

## ENVIRONMENTAL PLANNING

During 2012, the Commission's environmental planning activities were focused on water quality, including lake and stream management; water supply; floodplain and stormwater management; and coastal zone management.

## **Regional Water Quality Management Plan**

The adopted regional water quality management plan for Southeastern Wisconsin consists of five major elements: a land use element, a point source pollution abatement element, a nonpoint source pollution abatement element, a sludge management element, and a water quality monitoring element. Since the initial regional water quality management plan was adopted in 1979, it has been frequently updated and amended.

#### Plan Implementation Activities

A wide range of planning work is undertaken annually that is focused on implementing the regional water quality management plan. Among those in 2012 were the following activities:

## Southeastern Wisconsin Watersheds Trust

Implementation of the regional water quality management plan was fostered through active participation in the Southeastern Wisconsin Watersheds Trust, Inc. (SWWT). SWWT is a collaborative public/private effort to achieve healthy water resources through implementing the regional water quality management plan update for the greater Milwaukee watersheds (Kinnickinnic, Menomonee, Milwaukee, and Root River watersheds: Oak Creek watershed; the adjacent Lake Michigan direct drainage area; the Milwaukee Harbor estuary; and the associated nearshore Lake Michigan area). The Commission staff served on the SWWT Steering Council and the Policy, Science, and Strategic Planning Committees. More information about SWWT may be found at www.swwtwater.org.

## Southeast Fox River Partnership

The Southeast Fox River Partnership (SFRP), Inc. represents a wide range of Federal, state, county and local agencies, nonprofit organizations, and private sector interests. The partnership gives citizens, environmental and conservation groups, businesses, and local governments the ability to share resources while working toward common goals associated with the protection, restoration and enhancement of the natural resources in the Fox River watershed. The Commission staff is active in this effort, and helped organize a Fox River Summit conference in 2012 that brought together various interests from both the Wisconsin and Illinois portions of the Fox River watershed. More information about SFRP may be found at www.fyi.uwex.edu/southeastfox.

#### Root River Watershed Restoration

Work continued on a restoration plan for the Root River watershed in partnership with the municipalities and counties of the watershed, the Milwaukee Metropolitan Sewerage District (MMSD), WDNR, the Root-Pike Watershed Initiative Network, and SWWT. The plan is being developed within the framework of the regional water quality management plan update for the greater Milwaukee watersheds, and it focuses on water quality, habitat, recreation, and flooding issues. Report drafts and other pertinent information related to the planning process may be found at www.sewrpc.org/rrwr.

## Climate Change Effects

Collaboration continued during 2012 with the University of Wisconsin-Milwaukee (UWM) Great Lakes WATER Institute in the School of Freshwater Sciences, the UW-M Department of Civil Engineering and Mechanics, and the University of Wisconsin-Madison Center for Climatic Research in the Nelson Institute for Environmental Studies on a study of the potential effects of climate change on water quality conditions within the streams and rivers of the greater Milwaukee watersheds under a range of projected mid-century climate change conditions. This study applied the watershed water quality models developed under the 2007 MMSD/SEWRPC Water Quality Initiative. It is anticipated that the final report will be issued in 2013.

#### Estabrook Dam Assessment

The Commission assisted the Milwaukee County staff in the initial stages of preparation of an environmental assessment of the Estabrook dam on the Milwaukee River. This assessment is part of the evaluation of whether to restore or remove the dam.

## Milwaukee Harbor Estuary

The Commission assisted the WDNR and the Milwaukee Estuary Area of Concern (AOC) fish and wildlife technical team through the provision of habitat data and mapping of riparian and priority protection areas, and advised the WDNR AOC coordinator regarding fish and aquatic data recommendations, gave a presentation to the AOC Technical Advisory Committee on "Milwaukee River Estuary Area of Concern (AOC) Impairments: Degraded Fish Populations & Loss of Fish Habitat", and reviewed and provided comments on the fish and wildlife plan being developed as part of this project.

#### Fox River Commission

The Commission serves as a technical advisor to the Southeastern Wisconsin Fox River Commission (SEWFRC). The SEWFRC was created to address water resources problems in the Illinois-Fox River system, including restrictions on navigation, water uses, water quality, and flooding and drainage along the Fox River main stem and its impoundments. More information about SEWFRC may be found at <a href="https://www.sewfrc.org">www.sewfrc.org</a>.

## State Watershed Plans

The Commission provided assistance to the Wisconsin Department of Natural Resources in

updating the Department's watershed plans for the Des Plaines, Kinnickinnic, and Mukwonago River watersheds and the Sauk and Sucker Creeks watershed. Those updated plans incorporate information from Commission planning efforts, including the regional water quality management plan update for the greater Milwaukee watersheds, the Des Plaines River watershed study, and the Mukwonago River watershed protection plan.

## **Runoff Pollution Abatement Planning**

The Commission provides assistance in planning and project review activities for a number of programs which are steps toward implementation of the runoff, or nonpoint source, pollution abatement recommendations set forth in the regional water quality management plan. These include programs administered by the WDNR and the Wisconsin Department of Agriculture, Trade and Consumer Protection, which provide cost-sharing funds for individual projects or land management practices to local governments and private land owners; the stormwater discharge permit system administered by the WDNR; and local-level stormwater management and land and water resource management planning programs. Related activities undertaken in 2012 were:

#### Watershed-Based Permitting Framework

The Commission completed development of a watershed-based permitting framework for the Menomonee River watershed. The project, which was funded by the U.S. Environmental Protection Agency (USEPA), is one of three national pilot projects (the others are for the Ramsey-Washington Metro Watershed District in the St. Paul, Minnesota area and Albuquerque, New Mexico) intended to provide models for future watershed-based permit work throughout the U.S. Partners on this project include the municipalities of the watershed, WDNR, USEPA, MMSD, SWWT, 1000 Friends of Wisconsin, and Midwest Environmental Advocates. This project established a basis for collaboration by the participating municipalities to meet their municipal separate storm sewer system permit requirements. The study report may be found at www.sewrpc.org/stormwaterpermitframework.

#### Root River Watershed

The Commission incorporated runoff pollution abatement considerations in development of the Root River watershed restoration plan.

#### Root-Pike Watershed Initiative Network

The Commission continued service on the Root-Pike Watershed Initiative Network Agriculture and Urban Pollution Task Group and the Resource Group which approves funding of water quality-based projects. Commission staff gave technical presentations on *Agricultural Buffers* in January 2012 at UW-Parkside and on *Environmental Corridors, Park Land, and Public Access* in March 2012 in Kenosha County, in support of Root-Pike WIN's public informational meetings for the Pike River Watershed Restoration Planning project.

## Wastewater Facility Planning Activities

An important element of the regional water quality management plan relates to recommendations for wastewater treatment plants and the wastewater conveyance systems that flow to those plants. Planning activities in 2012 in this category were the following:

## Wastewater Treatment Plants

During 2012, the Commission continued to work with local engineering staffs and consultants in the preparation of detailed local sewerage facilities plans designed to meet the requirements of Section 201 of the Federal Clean Water Act, the requirements of the Wisconsin Clean Water Fund administered by the WDNR, and good engineering practice. A local facilities plan amendment was reviewed for the West Bend Sewer Utility.

## Sanitary Sewer Service Area Planning

The 1979 regional water quality management plan included preliminary recommended sanitary sewer service areas tributary to each recommended public sewage treatment plant within the Region. A total of 85 generalized sanitary sewer service areas were delineated in the adopted plan. Following adoption of the regional water quality management plan, work was undertaken to refine and detail these sewer service areas in cooperation with local units of government. Sewer service area maps have been adopted which identify not only the planned boundary of the sewer service area, but also the location and extent of the primary environmental corridors within that service area. Those corridors contain the best and most important elements of the natural resource base. Preserving the environmental corridor lands in essentially natural, open uses is considered essential to the maintenance of the overall quality of the environment and to avoidance of the creation of serious and costly developmental problems. Urban development is to be excluded from the corridors identified in the sewer service area plans, an important factor to be considered in the extension of sanitary sewer service.

During 2012, the Commission adopted amendments to the sanitary sewer service area plans for the greater Kenosha area in Kenosha County and the City of New Berlin in Waukesha County. Reports for all refined and detailed sanitary sewer service area plans are available from the Commission offices and may be accessed at

www.sewrpc.org/sewerserviceplanstatus.

## Sanitary Sewer Extension Reviews

Following the adoption of the 1979 regional water quality management plan, rules were promulgated by the WDNR requiring that the Commission review and comment on all proposed public sanitary sewer extensions. Such review and comment must relate a proposed public sewer extension to the sanitary sewer service areas identified in the adopted regional water quality management plan; and, under Section NR 110.08(4) of the Wisconsin Administrative Code, the WDNR may not approve any proposed public sanitary sewer extension unless such extension is found to be in conformance with the adopted areawide water quality management plan. In addition, rule changes promulgated by the then Wisconsin Department of Industry, Labor and Human Relations (subsequently renamed the Department of Commerce and then the Department of Safety and Professional Services) during 1985 require that the Commission comment on certain proposed private sanitary sewer extensions and large onsite sewage disposal systems and holding tanks relative to the adopted areawide water quality management plan. Under Section SPS 382.20(4) of the Wisconsin Administrative Code, the Wisconsin Department of Safety and Professional Services may not approve any proposed private main sewer or building sewer extension unless such extension is found to be in conformance with an adopted areawide water quality management plan. A similar finding must be made for large-scale onsite sewage treatment and disposal systems and holding tanks under a cooperative agreement between the Wisconsin Departments of Safety and Professional Services and Natural Resources.

Table 1

COMMISSION SANITARY SEWER
EXTENSION REVIEWS: 2012

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Kenosha	1	4	5
Milwaukee	7	13	20
Ozaukee	4	2	6
Racine	2	4	6
Walworth	4	0	4
Washington	2	4	6
Waukesha	14	14	28
Total	34	41	75

During 2012, review comments were provided on 34 proposed public sanitary sewer extensions and 41 proposed private main sewer or building sewer extensions, distributed by county as shown in Table 1.

## Lake Management Planning

The adopted regional water quality management plan recommends that lake management plans be prepared for the areas directly tributary to each of the 101 major lakes lying within Southeastern Wisconsin and for selected smaller lakes in the Region. The Commission and the WDNR work with local lake community organizations, including lake management associations and public inland lake protection and rehabilitation districts, to complete the preparation of such plans. The three types of plans prepared by the Commission staff are: 1) comprehensive lake management plans which serve as guides to making decisions concerning the use and management of specific lakes and which set forth recommended actions for the protection and rehabilitation of lake water quality through a combination of measures, 2) lake protection plans that address a case-specific range of concerns facing a given lake community, and 3) aquatic plant management plans and recreational boating access management plans that address single purpose planning needs. The following lake management activities were conducted by the Commission during 2012:

## **Aquatic Plant Management Plans**

The Commission completed an aquatic plant management plan for Fowler Lake in Waukesha County and continued work on such plans to Rock Lake (Kenosha County); the Waterford Impoundment (Racine County); Bark and Pike Lakes (Washington County); and Saratoga and School Section Lakes (Waukesha County).

#### Lake Protection Plans

The Commission continued work on two lake protection plans: a groundwater study of Gilbert Lake (Washington County), which is being conducted in collaboration with the U.S. Geological Survey, and a water resources management plan for the Chenequa area lakes (Beaver, Cornell, North, and Pine Lakes) in Waukesha County.

#### **Educational and Advisory Services**

Through staff efforts the Commission provides a wide range of educational and advisory services relative to lake management planning. Such efforts in 2012 included the following:

- Served on the planning committee, and coordinated workshops for, the Wisconsin Lakes Convention.
- Organized and attended quarterly meetings and served as Co-chairs for the 2012 North American Lakes Management Society (NALMS) 32nd International Symposium held in Madison, Wisconsin. Co-chairs responsibilities included assisting in development of the conference theme, the scientific program, and work-shops, as well as moderating sessions and making scientific presentations.
- Assisted the Walworth County Land Use and Resource Management Department in developing its successful application for a large-scale WDNR lake management planning grant to partially fund preparation of a Walworth County water conservation plan. This plan will aid the County in implementing the water conservation recommendations of the SEWRPC regional water supply plan, and will result in delineation of ground watersheds for selected lakes.
- Assisted in conducting/facilitating development of a comprehensive monitoring strategy/plan for

the Delavan area in an effort that included representatives from the Town of Delavan, Delavan Lake Sanitary District, Town of Delavan Lake Committee, Kettle Moraine Land Trust, and U.S. Geological Survey.

- Served on the Delavan Lake Watershed Initiative Network (WIN) Steering Committee and its land management work group and education and outreach work group.
- Participated in meetings of the Mukwonago River Initiative which includes representatives from the Friends of the Mukwonago River, Eagle Spring Lake Management District, Town of East Troy, Village of Mukwonago, Kettle Moraine Land Trust, The Nature Conservancy, and the Wisconsin Department of Natural Resources.
- Assisted the Pleasant Lake Protection and Rehabilitation District in developing a scope of work and applying for a WDNR Lake Management Planning Grant, which was awarded. An aquatic plant management plan for Pleasant Lake will be prepared by the Commission.

## Stream Management Planning

The Commission works with local units of government and the WDNR and Department of Transportation (WisDOT) to develop local stream system management plans and provide technical assistance for stream protection and restoration, including rehabilitation of impaired streams and recreation of streams that have historically been subjected to ditching or channelization. The following stream management planning activities were conducted by the Commission during 2012:

## Bridge and Culvert Replacement Projects

The Commission provided ongoing technical assistance relating to stream system management to WDNR, WisDOT, and certain municipalities and other organizations. The Commission conducted the physical, chemical, and biological assessment and prepared preliminary stream design recommendations, including special provisions to improve fish and other aquatic organism passage, for the bridge and/or culverts associated with the following projects:

- USH 12 triple cell box culvert in Jackson Creek, Walworth County;
- STH 60 single corrugated metal round pipe culvert in Lehner Creek, Washington County;
- Double cell corrugated metal arch pipes in Sugar Creek, Washington County;
- IH 94 North-South Freeway culverts in Kenosha County;
- Three box culvert extensions in tributaries to the Des Plaines River in Kenosha County;
- Seven Mile Road project, double box culvert in a tributary to the Root River in Racine County.

## Stream Relocation Projects

The Commission conducted stream channel surveys, completed data analysis, and prepared preliminary stream design recommendations, including special provisions to improve and restore fish and other aquatic organism habitat and streambed/bank stability, for stream relocations associated with the following projects:

- IH 94 North-South Freeway at Ryan Road Interchange, Tributary to Oak Creek, Milwaukee County. Included construction and restoration of about 1,100 linear feet of stream channel and adjacent wetland mitigation within a stormwater detention pond.
- IH 94 North-South Freeway at Drexel Road, Tributaries to the North Branch of Oak Creek, Racine County. Included construction and restoration of more than 1,900 linear feet of stream channel and adjacent wetland mitigation within a residential area, and specialized culvert fish passage design for low- and high-flow conditions.
- STH 100 roadway improvement project, Tributary to Underwood Creek, Milwaukee County. Included construction and restoration of about 250 linear feet of stream channel and adjacent wetland mitigation within a commercial area, and improvements to a pedestrian trail adjacent to the tributary.

## Dam Removal Project

The Commission evaluated the potential impact of the removal of the Monterey dam on water quality and water quantity in Ashippun Lake, including consideration of the effects on the Ashippun River, in Waukesha County.

#### Stream Protection Plans

During 2012, the Commission worked towards completing stream protection plans for the Pewaukee River (Waukesha County), cooperating with the Pewaukee River Partnership; Jackson Creek (Walworth County), cooperating with the Kettle Moraine Land Trust, the Delavan Lake Initiative Network, the Delavan Lake Sanitary District, and UW-Extension; and Mason Creek (Washington and Waukesha Counties), cooperating with the North Lake Management District, the Tall Pines Land Conservancy, Carroll University, and the University of Wisconsin-Milwaukee. Each of these projects was primarily funded by obtaining an NR 195 River Planning and Management Grant from the Wisconsin DNR. The planning projects consistent with the recommendations set forth in the regional water quality management plan and the county land and water resource management plans. Accomplishment of the goals for each plan will result in the development of frameworks to protect and maintain the long-term health of these vital stream ecosystems and to benefit the surrounding communities through preservation of resources.

# Educational and Technical Advisory Services

Through staff efforts the Commission provides a wide range of educational and technical services relative to stream management planning. Such efforts in 2012 included the following:

- Participated in the Mukwonago River Fisheries
  Committee meetings that are held quarterly in
  partnership with The Nature Conservancy,
  Friends of the Mukwonago River, Eagle Spring
  Lake Management District, University of
  Wisconsin-Waukesha, Wisconsin Lutheran
  College, and WDNR.
- Performed hydraulic analyses to characterize small-flood inundation areas along Fredonia, Mole, Pigeon, and Ulao Creeks for use in merging land-based quality habitats with streambased quality habitats as part of an Ozaukee County project to develop a geographic information system-based fish and wildlife tool. Provided technical assistance to MMSD for fish passage, concrete removal, and stream restoration projects in the Menomonee River near Miller Park, the Kinnickinnic River from

- S. 27th Street through Jackson Park, and Underwood Creek. Served as Co-Primary Investigator and provided technical assistance for the Gateway to Improved Long-term Spawning (GILS) project for Groundwork Milwaukee, Inc. The purpose of this project was to improve fish habitat within the sheet-pilinglined reaches of the Menomonee River, Kinnickinnic River, and Milwaukee River portions of the Milwaukee Harbor estuary by installing habitat underwater baskets. These devices are floating structures designed to introduce quality habitat for fish and to provide resting areas to facilitate fish passage from Lake Michigan to the upstream areas of these river systems. More than a dozen of these structures were installed and monitored in 2012. More information may be found at http://groundworkmke.org/projects.html.
- http://groundworkinke.org/projects.html.
- Served as Keynote speaker on "Effective Buffer Understanding, Structure, and Implementation in Southeastern Wisconsin" University of Minnesota, 5th Annual Wetlands Conference, Minneapolis, MN.
- Gave a presentation entitled "All Things Related to Water in Southeastern Wisconsin Flow through the Regional Planning Commission" at UW-Milwaukee, which was part of that institution's ongoing All Things Water Seminar Series, Milwaukee, WI.
- Gave presentations entitled "Practical Guidance on Stream Crossings to Protect Habitat & Meet Multiple Objectives" to the Wisconsin Association for Floodplain, Stormwater, and Coastal Managers (WAFSCM) and the Wisconsin Chapter of the Women's Transportation Seminar (WTS).
- Served as a guest lecturer on *Environmental Planning and Natural Resources Management* issues for Biological Sciences and Conservation and Environmental Sciences Departments in the following Institutions: University of Wisconsin-Milwaukee, Carroll University, and Wisconsin Lutheran College.
- Served as an instructor for a "Pontoon Classroom" on Eagle Spring Lake for the Eagleville Middle School, Village of Mukwonago.

## **Water Supply Planning**

The Commission's water supply planning program includes three elements. The first element—completed in 2002—consisted of basic groundwater resource inventories. The second element—completed in 2004—consisted of the development of a groundwater simulation model for the Region. The third element—completed in 2010—consisted of the preparation of a regional water supply plan. The completion of these elements involved interagency partnership programs with the U.S. Geological Survey (USGS), the Wisconsin Geological and Natural History Survey (WGNHS), the University of Wisconsin-Milwaukee (UWM), the WDNR, and the public water supply utilities serving the Region.

During 2012, the Commission staff responded to requests from local officials and the public regarding: 1) the plan recommendations related to the effects of high capacity wells on surface water resources; 2) the plan recommendations related to preservation of groundwater recharge areas; and 3) local issues related to the recommended water supply service area for the Waukesha Water Utility, which was delineated by the Commission in accordance with the *Wisconsin Statutes* and which is set forth in the City's application to the WDNR for a diversion of Lake Michigan water.

# Floodplain and Stormwater Management Planning

The Commission's floodplain management program was initiated through preparation of comprehensive watershed plans beginning in 1966 long before the concepts of local floodplain zoning and Federal flood insurance had been widely adopted—and extending through 2003. The major watersheds in the Region are shown on Map 15. During that time period, comprehensive plans were prepared for the following watersheds: Root River, Fox River, Milwaukee River, Menomonee River, Kinnickinnic River, Pike River, Oak Creek, and Des Plaines River. In addition to addressing issues attendant to land use development, park and open space development and preservation, water quality, and flooding, those plans included development of detailed flood profiles and floodplain maps along numerous streams and rivers within watersheds. That information has been refined and updated over time, and it has been, and continues to be, the basis for local floodplain zoning and Federal flood insurance mapping throughout much of the Region.

The following floodplain and stormwater management planning activities were undertaken by the Commission during 2012:

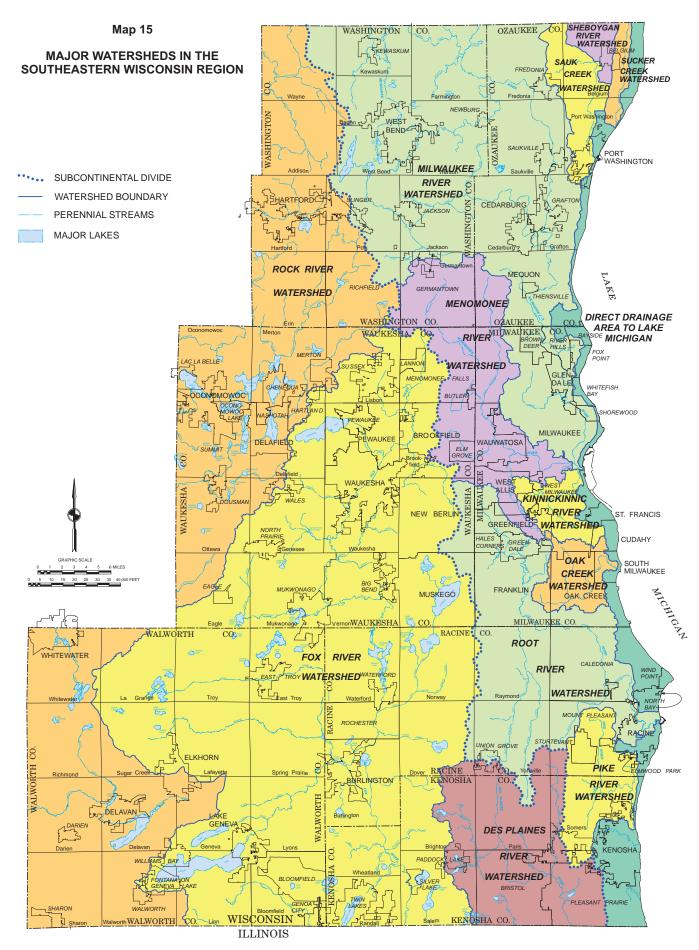
## Menomonee River Floodplain Revisions

A conditional letter of map revision (CLOMR) application for the floodplain along the main stem of the Menomonee River in the approximately 8.4mile-long reach extending from the confluence with Underwood Creek near W. North Avenue, downstream to the River's mouth at its confluence with the Milwaukee River in the Milwaukee Harbor estuary. The Commission staff created a hydraulic model of the River that incorporated numerous flood mitigation projects implemented over the last decade by MMSD and/or the Cities of Milwaukee and Wauwatosa along with projects committed to be implemented in the near future. The incorporation of those projects, representing over a decade of progress in flood mitigation, in a single hydraulic model is a major achievement that will greatly assist the cities in administering floodplain zoning and MMSD in completing additional flood mitigation projects.

# Milwaukee Area Floodplain Mapping Updates

The following work was performed under the MCAMLIS/MMSD/SEWRPC floodplain mapping program:

- Continued mapping the floodplain along the Little Menomonee River in Milwaukee County.
- Began revising and updating the U.S. Environmental Protection Agency HSPF calibrated and validated continuous simulation hydrologic model of the Root River watershed to reflect planned year 2035 land use conditions. The base model for that effort was developed for the MMSD/SEWRPC Water Quality Initiative (under which the regional water quality management plan update for the greater Milwaukee watersheds and the 2020 MMSD facilities plan were prepared).
- Prepared hydraulic models of the East Branch of the Root River and Unnamed Tributary No. 1 to the East Branch of the Root River (Woods Creek) using the U.S. Army Corps of Engineers HEC-GeoRAS model. HEC-GeoRAS enables use of a digital elevation model, developed from



the 2010 Milwaukee County LiDAR data, to automate the process of developing stream channel and overbank cross section geometries and mapping floodplain limits. Began developing HEC-GeoRAS models of the West Branch of the Root River and the Root River main stem.

• Prepared digital floodplain boundary maps along about 8.5 miles of streams in Milwaukee County, resulting in updated floodplain mapping for the areas concerned.

# Des Plaines River Watershed Planning

Coordinated with Kenosha County and the U.S. Army Corp of Engineers to ensure that the results of the Des Plaines River Watershed study are incurporated into the Corps by State (Illinois and Wisconsin) multi-purpose feasibility study of the upper Des Plaines River Watershed.

#### FEMA RiskMAP Program

The following work was performed in support of the Federal Emergency Management Agency (FEMA) Risk Mapping Assessment and Planning (RiskMAP) Program:

- Coordinated with FEMA, the Wisconsin Department of Natural Resources, and the concerned counties to address issues related to the RiskMAP Program for the Fox River Watershed in Kenosha and Racine Counties and the Rock River Watershed in Washington County.
- Coordinated with FEMA, their study contractor, and municipalities and counties in the Region along the Lake Michigan Coast regarding the Great Lakes Coastal Flood Hazard Study being conducted under the RiskMap Program.

# Stream Gaging Program

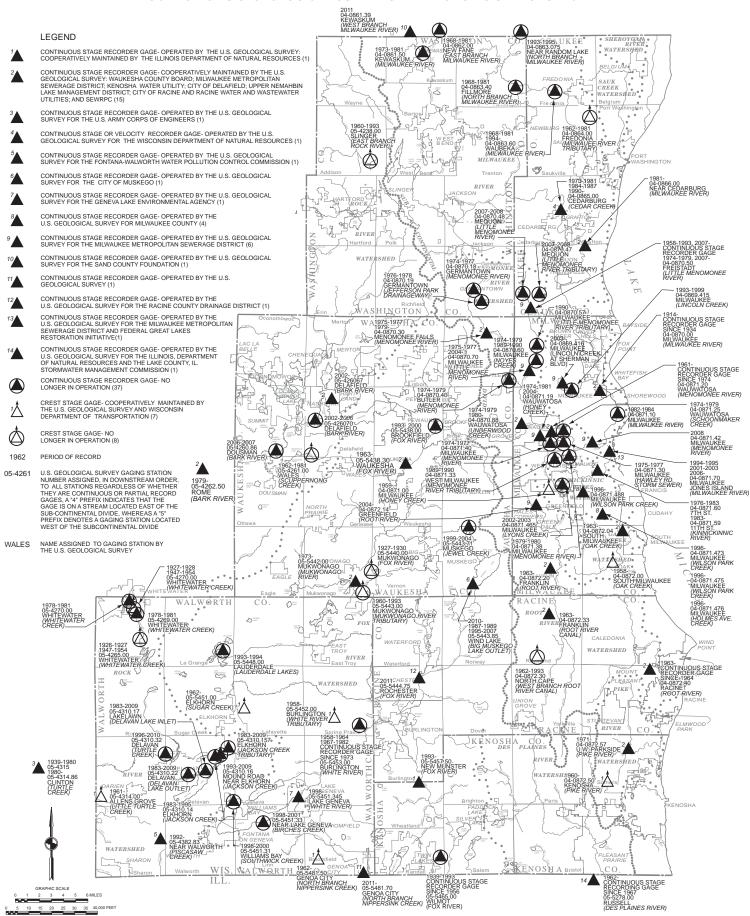
Streamflow data are essential to the sound management of the water resources of the Region. When the Commission began its regional planning program in 1960, only two continuous-recording streamflow gages were in operation within the Region. Since that time, the Commission has been instrumental in establishing, through cooperative, voluntary, intergovernmental action, a more adequate streamflow-gaging program (see Map 16).

The USGS assists in the funding of the stream gages, operates the gages, and annually publishes the data collected under the streamflow-monitoring program. In 2012, there were 36 continuousrecording streamflow gages in operation on stream reaches entering, lying within, or originating within the Region. Of the 36 gages, 15 were financially supported by the Waukesha County Board of Supervisors, the MMSD, the Kenosha Water Utility, the City of Delafield, the Upper Nemahbin Lake Management District, and the City of Racine and the Racine Water and Wastewater Utilities under the Commission's cooperative program. For the other 21 gages, the cooperating agencies with the USGS are indicated on Map 16 In addition, in 2012 there were two gages at which water levels, but not streamflow, were continuously recorded. These included one at Geneva Lake in the City of Lake Geneva and one at Wind Lake in the Town of Norway.

# Educational and Technical Advisory Services

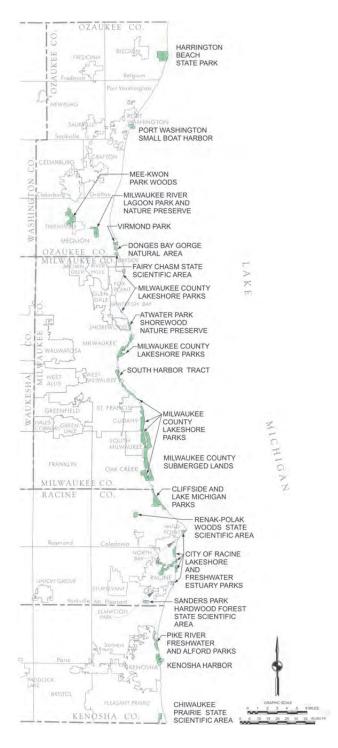
- Delineated the dam failure floodplain downstream from the dam in Kenosha County's KD Park.
- Reviewed a Pike River floodplain study for the reach of the stream in Kenosha County's Petrifying Springs Park.
- Assisted the City of Kenosha in coordinating with FEMA regarding floodplain issues along Center Creek in the Des Plaines River watershed.
- Reviewed a Pike River floodplain analysis for a Carthage College baseball field project in the City of Kenosha.
- Prepared a refined floodplain analysis for the downstream reach of Unnamed Tributary No. 1 to Hooker Lake in the Des Plaines River watershed in the Town of Salem.
- Provided FEMA with information from the Des Plaines and Pike River watershed studies in support of Kenosha County's application to join the FEMA Community Rating System and achieve reduced flood insurance premiums for properties in the County.

#### LOCATION OF U.S. GEOLOGICAL SURVEY STREAM-GAGING STATIONS: 2012



# Map 17

# DESIGNATED COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 2012



 Assisted the Village of Bristol with its application to FEMA for inclusion in the Federal flood insurance program by providing quantification of the land area and the number of habitable structures in the floodplain.

- Reviewed a proposal to place fill in the floodplain along Legend Creek in the City of Franklin.
- Served on the Advisory Committee for the MMSD Green Infrastructure Plan, and provided MMSD with extensive geographic information system-based data, including year 2000 land use, 2005 environmental corridors and planned environmental corridors, depth to bedrock, groundwater recharge, and historical urban growth.
- Assisted the City of West Bend with a hydraulic analysis of Silverbrook Creek.
- Completed substantial work on preparation of a floodplain letter of map revision application to FEMA and WDNR in support of a future Waukesha County request for revision of the floodplain maps for Pebble Creek and Brandy Brook.
- Prepared a FEMA LOMR application for Sussex Creek that was submitted to WDNR and FEMA by Waukesha County.
- Reviewed the floodplain and stormwater management aspects of construction of a proposed single-family residence near North Lake in the Town of Merton, Waukesha County.
- Responded to 29 requests for hydrologic and hydraulic data for 23 streams and rivers throughout the Region.

# **Coastal Management Planning**

During 2012, the Commission continued to provide assistance to the Wisconsin Department of Administration in the conduct of the Wisconsin Coastal Management Program. This program is intended to coordinate governmental activities in the management of the Lake Michigan and Lake Superior coastal zones of the State. The program is being carried out by the State pursuant to the Federal Coastal Zone Management Act of 1972 through the Wisconsin Coastal Management Council.

Under an agreement with the Wisconsin Department of Administration, the Commission maintains a Technical and Citizen Advisory Committee on Coastal Management in Southeastern Wisconsin. This Committee represents a variety of interests, including local elected and appointed officials, the university community, and recreational, naviga-

tional, and environmental interest groups. The primary function of this Committee is the review of State coastal studies and reports as they are proposed and produced.

One of the continuing functions of the Commission under the coastal management program is to assist the Wisconsin Coastal Management Program in the designation of special coastal areas (see Map 17). These special areas have natural, scientific, economic, cultural, or historical importance. Designation by the Wisconsin Coastal Management Council as a special coastal area ensures eligibility for financial or technical assistance for special coastal area management activities through the Wisconsin Coastal Management Program and focuses attention on a valuable coastal resource.

During 2012 Commission activities were focused on providing technical reviews of coastal management program grant applications for projects to be undertaken in the coastal management area over the 2013-14 time period, conducting field investigations attendant to wetlands and other sensitive lands in the coastal management area, reviewing proposed sanitary sewer extensions in the coastal management area, and briefing the Wisconsin Coastal Council on Commission planning activities under the coastal zone management program.

#### **HOUSING PLANNING**

Work continued on a new regional housing plan during 2012. A preliminary draft plan was completed during the year, and public meetings and a public hearing on the plan were held in late 2012. The Commission will consider adoption of the plan in 2013. The new plan will replace a regional housing plan adopted by the Commission in 1975. Housing planning work carried out during 2012 included the following:

#### **Data and Analysis**

Major topics addressed and analyzed as part of the housing planning process include the need for affordable housing for households of all income levels, the need for additional subsidized and tax credit housing, the balance between job wages and housing costs near major employment centers in the Region, fair housing, housing that is accessible to persons with disabilities, and housing development practices. Inventory and analysis work related to

accessible housing, subsidized and tax credit housing, and housing development practices was completed during 2012. Inventory and analysis work on the other three topics was completed in 2010 and 2011.

The Commission contracted with the National Association of Home Builders (NAHB) to analyze the costs for county and local governments to provide services to new housing development, and the economic benefits attributable to new housing development as part of the housing planning work. Reports documenting the analyses were completed in 2012. The NAHB conducted separate analyses of home building in the four-county Milwaukee metropolitan area, which includes Milwaukee, Ozaukee, Washington, and Waukesha Counties; Racine County; and Walworth County. Each analysis was based on information about new housing construction in 2010 compiled by SEWRPC and provided to NAHB. An analysis of impacts in Kenosha County could not be conducted because the data necessary to conduct the analysis was combined with data for Lake County, Illinois, and could not be isolated for Kenosha County.

#### **Plan Recommendations**

Preliminary plan recommendations were prepared during 2012. The recommendations are intended to achieve plan objectives for providing safe and decent housing for all residents of the Region and are grouped into the following six major topic areas addressed by the plan: affordable housing, fair housing, job/housing balance, accessible housing, subsidized and tax credit housing, and housing development practices. Units of government or agencies that would need to take action to carry out plan recommendations were also identified.

# **Socio-Economic Impact Analysis**

A socio-economic impact analysis (SEI) of preliminary housing plan recommendations was prepared by the University of Wisconsin–Milwaukee Center for Economic Development under contract to the Commission. The SEI assesses the social and economic impacts of the preliminary plan recommendations on the Region's minority and low-income populations and persons with disabilities (environmental justice populations). None of the preliminary plan recommendations were found to have a negative impact on environmental justice populations. The SEI report may be found at www.sewrpc.org/sei.

# **Public Review of the Preliminary Draft Plan**

Public meetings were held in November and December 2012 to present and obtain input on the regional housing plan preliminary recommendations and the findings of the socio-economic impact analysis of the preliminary recommendations. Nine meetings were held, including three in Milwaukee County and one in each of the other counties in the Region. Meetings were publicized through wide distribution of a Commission newsletter and through paid advertisements in newspapers. News releases were also sent to newspapers, radio stations, and television stations across the Region. In addition, a letter regarding the preliminary plan and meeting schedule was sent to about 90 organizations across the Region that represent environmental justice populations. In addition to providing comments at a public meeting, comments on the plan could be provided through mail, email, or telephone.

A meeting with county and local government planners was held in December. The focus of the meeting was on the preliminary recommendations and job/housing balance analysis included in the draft housing plan. A document providing an overview and findings of the job/housing analysis was prepared for the meeting and may be found at www.sewrpc.org/jobs-housingbalance.

A number of presentations regarding the housing plan findings and preliminary recommendations were given during the year, including presentations at a Public Policy Forum luncheon and to the Milwaukee Journal-Sentinel Editorial Board, the City of Milwaukee Plan Commission, the Ozaukee County First Friday Forum, and the Waukesha County Business Alliance.

#### **Next Steps**

The new regional housing plan will be completed in 2013. Remaining steps include revising preliminary plan recommendations to address comments submitted during the public comment period in late 2012, review of the revised plan by the Commission's Environmental Justice Task Force, and consideration of the revised plan by the Regional Housing Plan Advisory Committee. Following review and action by the Advisory Committee, the plan will be considered for adoption by the Commission.

#### LOCAL PLANNING ASSISTANCE

While the Commission's core mission involves the preparation and adoption of advisory regional plans, the State regional planning enabling legislation authorizes regional planning commissions to work closely with its member county and local units of governments in the implementation of those plans and in carrying out a wide variety of local planning and related activities, including economic development activities. Toward this end, the Commission assists the county and local governments in the Region in preparing and adopting local plans, in preparing and adopting local ordinances, in providing review comments on local development proposals, in providing a wide range of data related to planning, and in carrying out economic development work activities. The following summarizes these activities during 2012:

# **Local Plans**

- Worked on an amendment to the Washington County comprehensive plan to incorporate the land use plan maps adopted as part of city, town, and village comprehensive plans, and amendments adopted by a local government after the County plan was adopted in April 2008, into the County plan. This project will be completed in 2013, following certification of the County farmland preservation plan by the Wisconsin Department of Agriculture, Trade and Consumer Protection. to incorporate the farmland preservation plan into the County comprehensive plan.
- Provided information on amending comprehensive plans, including model resolutions, ordinances, and public participation procedures for plan amendments, to the Town of Jackson and the Village of Hartland.
- Provided information to the Town of Wheatland regarding the need for a comprehensive plan amendment related to a rezoning request.
- Provided information to the Village of Bristol regarding a proposed amendment to the Village and County comprehensive plan and a related rezoning.
- Provided advice to the City of Mequon regarding consistency between the housing and land use elements of the City comprehensive plan.

- Provided updated information at the request of the Wisconsin Department of Administration regarding the status of county and local government comprehensive plans and zoning, subdivision, and official mapping ordinances in the Region.
- Completed and published SEWRPC Community Assistance Planning Report No. 282, 2nd Edition, City of Milwaukee All Hazards Mitigation Plan, June 2012. The updated plan is necessary for the City to qualify for Federal disaster relief funds.

#### **Local Ordinances**

- Completed an update to the Village of Hartland zoning map for adoption by the Village Board.
- Updated and reprinted the Town of Polk zoning ordinance to include amendments adopted by the Town Board during 2010 and 2011.
- Completed a draft comprehensive update to the Village of Hartland land division ordinance in cooperation with Village staff. The updated ordinance will be reviewed by the Village Plan Commission and Village Board in 2013.
- Completed a draft version of an updated Town of Sugar Creek impact fee ordinance for review by the Town Attorney and Town Board.
- Updated a map showing classes of municipalities in the Region and provided the updated map to the City and the Town of Cedarburg.
  These classes have implications for extraterritorial zoning jurisdiction.
- Provided information to Ozaukee County regarding State regulations for accessory structures proposed to be located in flood-fringe areas and court decisions related to zoning of county-owned land by counties without a general zoning ordinance.
- Recommended zoning ordinance revisions to the Village of Elmwood Park pertaining to regulations for a potential new Planned Commercial zoning district.
- Provided planning and zoning related comments to the Village of Hartland pertaining to a commuter center or park-and-ride lot with

- retail/office uses proposed by the Wisconsin Department of Transportation near the STH 83 and STH 16 interchange.
- Provided information to the Town of Belgium on alternative conservancy zoning district regulations that could be used to regulate lowland and upland conservancy areas; on regulating nonconforming uses under new ownership; and on regulating all minor land divisions in the Town.
- Provided information to the Town of Polk pertaining to rezoning only part of a property, currently zoned for agriculture, to allow quarrying, which would result in two different zoning districts on separate areas of the property; on city and village extraterritorial authority with regard to Town rezonings; and on potential revisions and updates to the Town zoning ordinance for regulating nonconforming structures.

#### **Review Services**

- Reviewed and commented on 11 proposed subdivision plats and certified survey maps (CSMs) for Kenosha, Racine, and Walworth Counties, as well as a number of cities and villages. Plats and CSMs are reviewed against all regional plan elements, including the highway right-of-way recommendations of the regional transportation system plan.
- Reviewed and commented on a proposed disposition of undeveloped park land at the request of the Village of Silver Lake.

#### **Data Provision-Socioeconomic**

- Provided housing and daytime population Census data to the Village of Sussex for use in a study to determine demand for multi-family housing.
- Provided Census data of population with limited English-speaking proficiency to the Waukesha Metro Transit System for the Waukesha Metro and Waukesha County transit service areas for planning purposes.
- Provided 2010 Census population to the Elmbrook School District for a study of proposed Board of Education representation areas.

 Provided existing and planned population and households by quarter section to a consultant for the Town of Salem's wastewater treatment facility planning process.

#### **Data Provision-Natural Resources**

- Provided information to Waukesha County planning staff on SEWRPC documents related to planning "greenways," including preservation of environmental corridors and accommodating trail facilities.
- Provided the Milwaukee River Greenway Coalition a set of maps identifying public ownership/easements within a selected segment of the Milwaukee River corridor.
- Provided data to the City of Brookfield regarding the number of acres of environmental corridors in each of the greenways designated by the City comprehensive and park and open space plans.
- Provided GIS files of groundwater recharge areas in the Cedarburg Bog area to Ozaukee County.
- Provided information on environmental corridors to a private consultant to help integrate
  the protection of the corridor into a site plan for
  a potential development in the City of
  Burlington.
- Provided information on existing natural resource features to the City of Milwaukee related to a potential development site in the northern part of the City.
- Provided informal recommendations to the Town of Polk regarding the restoration of woodlands within a proposed quarry expansion area.

# **Data Provision-Housing**

- Provided information on housing occupancy characteristics in response to a request from Waukesha County staff, and information on monthly rents and vacancy information to a resident of Kenosha County.
- Provided data to a private developer regarding the potential need for affordable single-family

- housing in the Village of Germantown, based on analyses conducted as part of the regional housing plan.
- Provided information about the application process and data for Low Income Housing Tax Credit developments and rental cost data in response to a request from the City of Waukesha.

#### **Data Provision-General**

- Provided updated plant lists for landscaping and a list of invasive plants to the Village of Hartland for guidance and distribution to the public.
- Provided existing bicycle trail information to the cartographer and publisher of Eagle Eye Maps LLC, who plans to prepare a Milwaukee Area Bike Atlas for 2012 indicating bicycling routes in southeastern Wisconsin (Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, Waukesha, Sheboygan, Fond du Lac, Dodge, and Jefferson Counties).
- Provided digital files showing the locations of public park and open space sites in the Region to the Wisconsin Department of Natural Resources for use in the development of a statewide park database.
- Provided tabular data of 2010 land use acreage in Walworth County to the County staff for use in ongoing planning work.
- Provided digital map files of wetlands, groundwater recharge, environmental corridors, and land use for the Wind Point watershed in support of a watershed plan sponsored by the Root-Pike Watershed Initiative Network.
- Provided digital files showing the location of sanitary districts in Racine County at the request of the Wisconsin Government Accountability Board.
- Provided information regarding demographics, land use, natural resources, and soil characteristics for the Pike River watershed to a consultant for use in preparing a watershed plan.
- Prepared maps for the Racine County Economic Development Corporation for website use.

- Prepared an updated Farm Fresh Atlas of Southeastern Wisconsin for the UW Cooperative Extension in Kenosha and Racine Counties, an effort to help promote local food production and consumption by providing descriptions and locations of farms, farmers markets, and restaurants and businesses that use and sell locally produced food.
- Provided maps to Racine County for use in the preparation of an updated Racine County land and water resource management plan.
- Responded to 45 requests for digital land information sets to various municipalities, government agencies, and private consultants for use in their planning activities e.g. the provision of digital land use and wetland files for the entire Region to the Ozaukee County Planning and Parks Department to be used in wildlife habitat modeling.
- Provided digital orthophotography files to 16 requesting parties—including such interests as WE Energies and the Milwaukee Riverkeeper—for use in a variety of activities.
- Provided workplace location data for Village of Richfield residents to a Washington County elected official.

# **Economic Development**

The Commission assists county and local units of government in the Region in pursuing economic development activities and promotes the coordination of local economic development plans and programs. Assistance provided during 2012 included the following:

# **Program Planning**

Provided assistance to the Regional Economic Partnership, an economic development initiative of the seven counties in the Southeastern Wisconsin Region, the City of Milwaukee, We Energies, the Metropolitan Milwaukee Association of Commerce, and the Commission. During 2012, the Commission provided assistance in implementing the regional economic development initiative, and provided data and comments on an update of the initiative.

- The Commission provided support to the Milwaukee County Economic Development staff in the preparation of an economic development plan for Milwaukee County, in response to a request from the Milwaukee County Board of Supervisors and County Executive. Efforts for the plan included a review of economic conditions, an infrastructure assessment, analysis of existing economic development efforts, assessment of economic development needs, and formulation of a strategic economic development plan. The Commission staff also prepared a draft survey and materials for focus group meetings in anticipation of an outreach effort related to developing the final plan. However, changes to County staff and to the County Board of Supervisors prompted County staff to postpone the plan's completion. A primary rationale for delaying the plan is that it should reflect areas of emphasis consistent with the comprehensive economic development strategy (CEDS) for Southeastern Wisconsin. The Commission is currently working with the Milwaukee 7 Regional Economic Development Organization (M7) and the Regional Economic Partnership to review and update the CEDS, and will work with County staff to complete the economic development plan for Milwaukee County should the County determine to do so.
- Hosted a workshop for county and local economic development organizations and planners in cooperation with the Wisconsin Economic Development Corporation (WEDC) at the Commission office on WEDC local assistance programs.

# Economic Development Data

Made available the Economic Modeling Specialist International (EMSI) Analyst software to county and local governments and economic development organizations in cooperation with WEDC. EMSI Analyst is a web-based economic development tool that includes extensive industry, occupation, and workforce data, and is used in business and industry analysis and attraction. County and local economic development organizations and units of government can request SEWRPC staff to apply the software to conduct analyses.

 Provided maps and information on the location of business parks and Tax Increment Financing (TIF) Districts in the Region to the City of Brookfield.

# Federal and State Grant-In-Aid Support

- Administered for Kenosha County and the Town of Wheatland several Federal grant awards to acquire and remove homes located in the Fox River floodplain.
- Represented the Kenosha County Housing Authority in an effort by the Wisconsin Department of Administration to establish a multi-county region for the purpose of administering housing-related community development block grant funds.

# Revolving Loan Fund Support

- Provided assistance to the Kenosha County Housing Authority in administering a revolving loan fund program for housing rehabilitation. The Commission staffs the Housing Authority Office and is responsible for providing information to local residents, for the packaging and closing of new housing assistance loans, and for servicing outstanding loans. During 2012 five new loans were made and 131 loans were serviced.
- Provided assistance to Ozaukee County; the Cities of Cedarburg, Port Washington, and Muskego; and the Villages of East Troy, Menomonee Falls, and Shorewood in administering revolving loan fund programs that support business development. During 2012 a total of nine new business loans were made and 51 existing loans were serviced. This activity includes meeting with individuals in the private sector who seek information about these revolving loan programs.

# SURVEYING, MAPPING, AND LAND INFORMATION

#### **Background**

Since its inception in 1960, the Commission has recognized the need for accurate base maps to conduct not only a sound regional planning program, but to support sound county and local planning programs as well. Accurate base maps depict the shape of the surface of the land and the precise location of its physical features, both natural and

manmade. More specifically, information is required on relief; on the location of such natural features as lakes, streams, watercourses, drainage divides, and marshes and wetlands; on the location and extent of such manmade features as highways, railroads, airfields, and canals and drainage ditches; and on the location and orientation of real property boundary lines. For an area as large as the seven-county southeastern Wisconsin Region, such base maps must be constructed on map projections which recognize the curvature of the earth's surface and permit distances and areas to be accurately portrayed and measured. Adequate maps of this type were lacking for the Region and its counties in the early 1960s.

To address this void, the Commission prepared and maintains current general purpose base maps of the entire Region, and for subareas of the Region such as watersheds. In addition to such general purpose base maps, the Commission has long recommended that for more definitive planning at the county and local levels of government, maps with a higher degree of accuracy and precision than required for regional planning be prepared and maintained current. To be effective for planning and engineering purposes, such maps must permit the accurate correlation of property boundary line information with topographic data.

Any accurate mapping project requires the establishment of a basic system of survey control. This control consists of a framework of points whose horizontal and vertical positions and interrelationships have been accurately established by field surveys. Map details are adjusted to, and mapping checked against, these known points. In addition to permitting the accurate correlation of property boundary line information with topographic data, the control network must be permanently monumented on the ground so that lines established on the map during planning and engineering may be accurately reestablished on the ground.

Toward this end, the Commission recommended in 1964 that all planning base maps be prepared by photogrammetric methods using a then unique system of horizontal control based upon both the U.S. Public Land Survey System, a property-orientated legal system based on field monuments, and the State Plane Coordinate System, a scientific system for accurate topographic mapping and

engineering surveying. This control system would require relocating and permanently monumenting all section and quarter-section corners in the Region, and the utilization of these corners in the establishment of a field survey network tied to the North American Datum of 1927 (NAD 27) through the Wisconsin State Plane Coordinate System. This control system establishes the exact lengths and true bearings of all quarter section lines, as well as the geographic position—expressed in State Plane Coordinates—of the public land survey corner monuments. This horizontal control network provides the basis for subsequent topographic and cadastral (real property boundary) mapping. A further recommendation was made to determine the vertical position of each public land survey corner monument, as well as at least one attendant stable benchmark, using the National Geodetic Vertical Datum of 1929 (NGVD 29). This system of vertical control points would ensure that surveyors and engineers would have a known point of elevation on the NGVD 29 within about one-quarter mile of any point in the Region.

The Commission has continuously worked with its county and local governments to implement the foregoing survey control and mapping recommendations. This involved:

#### Corner Monumentation

The permanent monumentation of all U.S. Public Land Survey section and quarter section corners in the Region, totaling about 11,800 monuments.

# • Control Surveys

The conduct of field surveys to enhance each monument as a station of known horizontal and vertical positions on both the U.S. Public Land Survey System and the State Plane Coordinate System, together with documentation of the entire survey control network.

# • Topographic Mapping

The preparation of large-scale (one inch equals 100 feet, or one inch equals 200 feet) topographic base maps to Commission recommended standards for nearly 90 percent of the Region (see Maps 18 and 19).

# • Cadastral Mapping

The preparation of companion, correlated real property ownership maps based on Commission recommended standards for about 75 percent of the Region (see Maps 20 and 21).

While the foregoing base mapping and related control survey recommendations were advanced in the age of hard copy mapping products, the recommended approach to surveying and mapping provided a sound basis in the subsequent digital age for the creation by county and local governments in the Region of automated parcel-based land information systems and automated public works management systems.

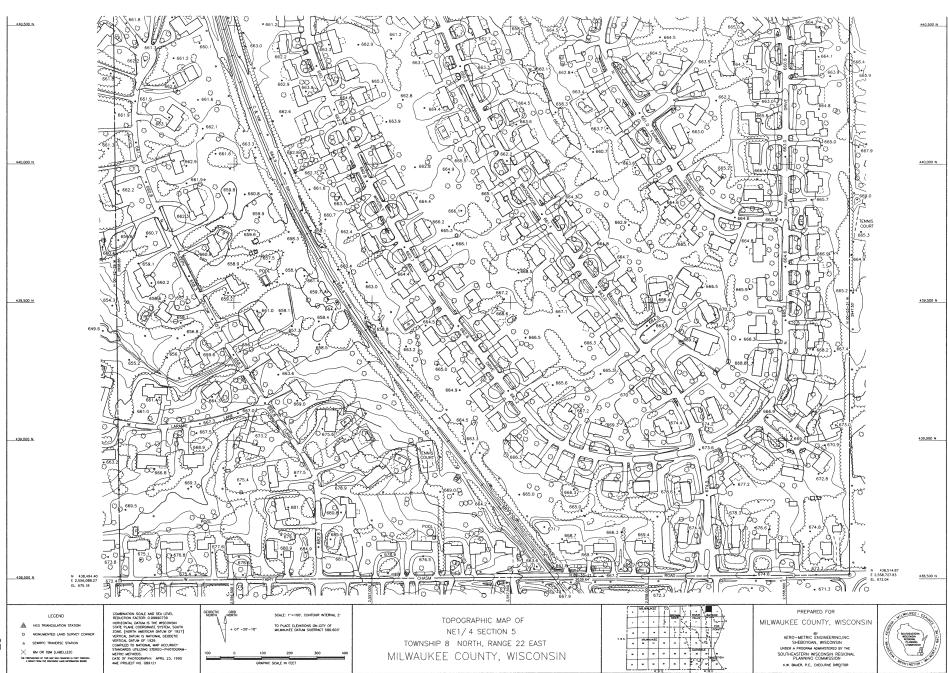
More information about this topic, including Commission recommendations relative to the transformation of data obtained on NAD 27 and NGVD 29 to newer Federal datums, may be found at <a href="https://www.sewrpc.org/surveyingandmapping">www.sewrpc.org/surveyingandmapping</a>. In this respect, the Commission prepared and published during 2012 SEWRPC Memorandum Report No. 206, Estimate of the Costs of Converting Foundational Elements of the Land Information and Public Works Management Systems in Southeastern Wisconsin from Legacy to New Datums.

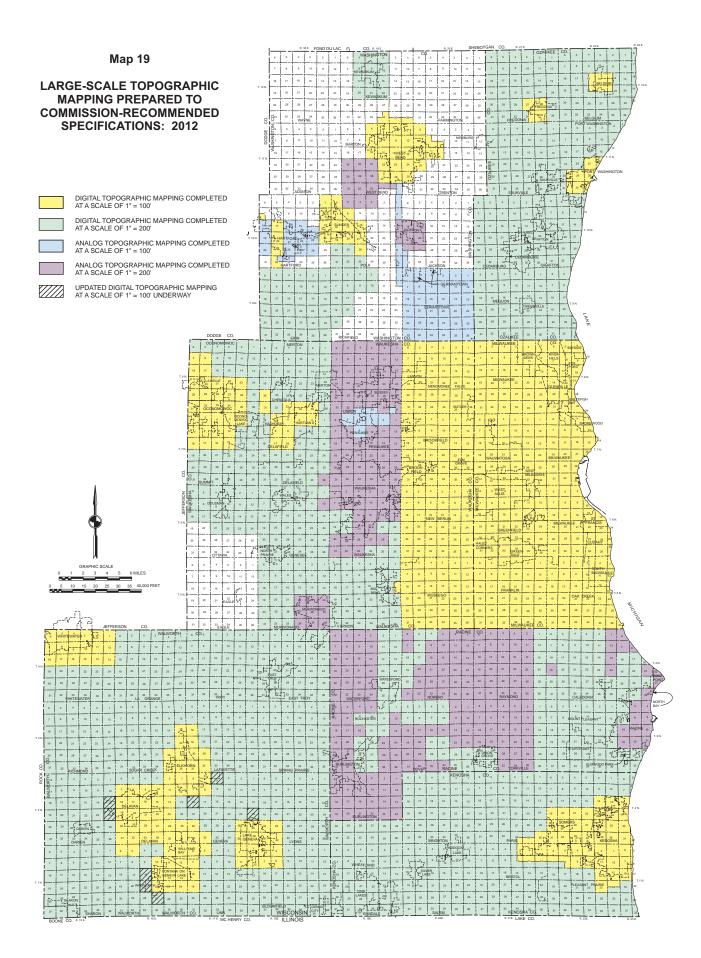
# **Regional Land Information**

The conduct of the Commission's regional planning program necessarily involves the creation and maintenance of a large data base of information about the Region. Increasingly, this information has become available in digital as well as hard copy form and is made available for use by others. Figure 4 identifies by category the data sets that are presently readily available in digital form, as well as those particular data sets that at present can be viewed on the Commission's website.

During 2012, significant efforts were underway to update a number of these data sets, including the Commission's 2010 inventories of land use and environmental corridors. Work was also completed during 2012 on the production of digital 2010 Wisconsin Wetland Inventory maps for the Region. This work was undertaken in partnership with the Wisconsin Department of Natural Resources and the results may be viewed online. These wetland inventory maps are used by the Department for wetland regulation purposes.

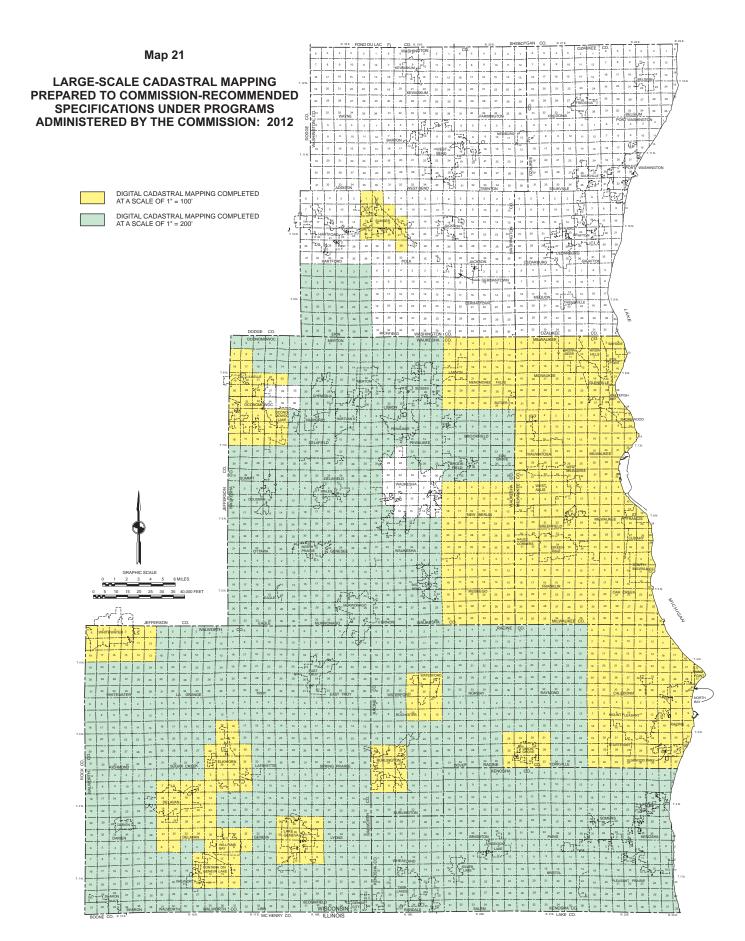
Map 18
PORTION OF TYPICAL TYPICAL TOPOGRAPHIC MAP





Map 20
PORTION OF TYPICAL CADASTRAL MAP





#### Figure 4

# SEWRPC REGIONAL LAND INFORMATION DIGITAL DATA SETS: 2012

#### Reference Data

- Aerial Orthophotography: 1995, 2000, 2005, 2007 (partial), 2010
- County Base Maps: 1985, 1990, 1995, 2000, 2005
- Civil Division Boundaries: 1985, 1990, 1995, 2000

#### **Environmental Resource Data**

- Inventory Environmental Corridors: 1990, 1995, 2000, 2010
- Planned Environmental Corridors
- Wetland Inventory: 2005, 2010
- Federal (EPA) Advanced Identification (ADID) Wetlands: 2005
- Vegetation: 1985, 1995 (partial)
- Wildlife Habitat: 1985, 1995 (partial)
- Pre-European-Settlement Vegetation: 1836
- Natural Areas: 1994, 2005 (distributed with permission from Wisconsin DNR)
- Critical Species Habitats: 1994, 2005 (distributed with permission from Wisconsin DNR)
- Grassland Sites
- Plant Community Areas
- · Soil Mapping Units

#### **Land Planning Data**

- Land Use: 1963, 1970, 1980, 1985, 1990, 1995, 2000, 2010
- Historical Urban Growth: 1995, 2000, 2010
- Regional Zoning Inventory: 2000
- Park and Open Space Sites
- Sewer Service Areas

#### **General Planning Data**

- Regional Land Use Plan: 2010, 2020, 2035
- Regional Transportation Plan: 2020, 2035
- Public and Private Water Supply Systems: 2000
- Archaeological Sites

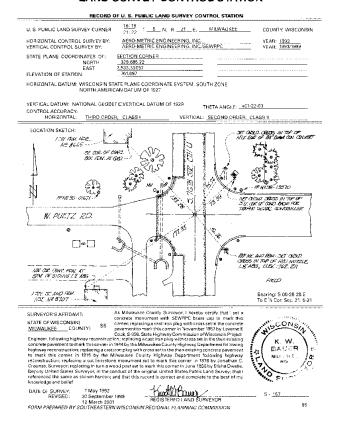
#### Geologic and Hydrologic Data

- · Depth to Bedrock
- Depth to Water Table
- Water Table Elevation
- Contaminant Attenuation Potential of Soils
- Estimated Permeability of the Unsaturated Zone
- Estimated Soil Percolation
- Significant Hydrologic Data Points
- Groundwater Contamination Potential
- Groundwater Recharge Potential
- Geologic Sites
- Floodplain Boundaries
- · Watershed, Subwatershed, and Subbasin Boundaries

Note: Those data sets shown in red are available for viewing on the SEWRPC Regional Land Information website (http://maps.sewrpc.org/regionallandinfo/).

Figure 5

# RECORD OF U.S. PUBLIC LAND SURVEY CONTROL STATION



The regional land information website

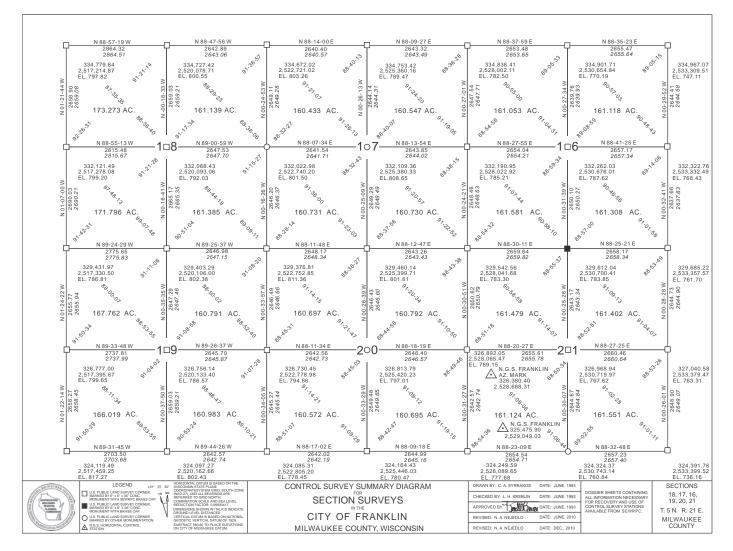
www.sewrpc.org/regionallandinfo represents a cooperative effort between the Commission and the Land Information Officers of the seven counties. The website provides access to the following:

#### • Survey Documents

Surveyors and engineers are able to search for two types of survey documents: control station (dossier) sheets and Control Survey Summary Diagrams (CSSDs). A dossier sheet is a record of a USPLSS control station, generally a section corner, quarter-section corner, center of section, or witness corner (see Figure 5). Each sheet contains an identification of the corner, a sketch of the location, witness monuments and ties, monument coordinates and elevations, and other surveyor's information. CSSDs summarize horizontal and vertical control survey information obtained from the high-order control surveys carried out within the Southeastern Wisconsin Region (see Figure 6). Each Control Survey Summary Diagram covers six USPLSS sections and shows the location and type of

Figure 6

TYPICAL CONTROL SURVEY SUMMARY DIAGRAM



corner monuments; coordinates and elevations of the located corners; and grid distances, bearings, and interior angles of all USPLSS section and quarter-section lines. As survey documents are updated, the revised dossiers and CSSDs are placed on the website to insure that the regional land information site is the best source for current survey documentation for the Region. During 2012 a total of 368 dossier sheets and 112 control survey summary documents were updated and placed on the website. The usefulness of this online service is demonstrated by the fact that on an average work-day, that site is accessed by 35 individuals working throughout the Region.

#### • Aerial Photography

The aerial photography portion of the regional land information website enables users to view 2010 as well as selected older orthophotography. Users can examine images of the Region and find out how the orthophotography is organized into digital files for distribution. An order form on the website can be used to request digital orthophoto files from the Commission for a nominal fee.

#### • Regional Map Server

The Regional Map Server is a mapping application providing access to selected planning and natural resource maps of the Region. This

application allows users to select and view different types of planning data sets, including detailed and generalized land use maps, environmental corridor maps, soils maps obtained from the Natural Resources Conservation Service. Wisconsin Wetland Inventory Maps, Federal EPA Wetland Advanced Identification Maps, and parcel mapping contributed by participating counties. Municipal boundaries and five years of orthophotography are also accessible on the mapping application. Metadata, providing detailed information about the origin, lineage, and content of the data sets, is available for the map layers displayed on the Regional Map Server.

The Commission, with the assistance of the counties, works to continually enhance the regional land information website with the addition of new orthophotography, updated resource inventories, and additional planning-related mapping.

# **County-Based Land Information Systems**

Historically, the Commission has worked closely with its constituent counties in their efforts to develop and deploy county-based, web delivered land information systems. Activities in this respect during 2012 included the following:

# Kenosha County Historical Aerial Photography Project

The Commission administered and completed a historical aerial photography scanning project for Kenosha County, using a contractor to perform the scanning work. The Commission provided aerial photography negatives from seven past aerial photography projects to create the desired digital data sets.

# Kenosha County Road Pavement Edge Project

The Commission digitized all road pavement edges in Kenosha County from the 2010 orthophotography data set.

# Service on County Land Information Committees

Through its County Surveyor program, the Commission continued to provide a representative to serve on the land information committees created by counties under the

Wisconsin Land Information Legislation. The Counties so served included Kenosha, Milwaukee, Walworth and Waukesha.

# • Walworth County Map Updating Project

During 2012 the Commission assisted Walworth County in formulating a program to begin updating its county large-scale base maps prepared to SEWRPC specifications. A specific project to do so was prepared and submitted to the County Board for funding and execution in 2013.

# **County Surveyor Activities**

State Legislation was enacted in 1984 which requires the Commission Executive Director to act in the capacity of County Surveyor for Milwaukee County. Since that time, the Commission has carried out those responsibilities, including ensuring the perpetuation of those corners of the U.S Public Land Survey that are destroyed, removed, or buried through construction or other activities. Given this State-mandated responsibility and the need to maintain a capable staff to perform the County Surveyor function, the Commission has offered to assume that function in the other six counties of the Region. Based upon that offer, the Commission during 2012 provided County Surveyor services to Kenosha, Walworth, and Waukesha Counties. In each case, such special services are provided under contract agreements.

In performing the duties of the County Surveyor in the four counties concerned, the Commission during 2012 remonumented a total of 217 U.S. Public Land Survey corners that had been disturbed or destroyed through a range of activities, primarily road reconstruction activities. These activities included not only field work, but also substantial office work to prepare updated documentation of the corners concerned, including new corner dossier sheets and updated control survey summary diagrams.

# PUBLIC INVOLVEMENT AND OUTREACH

The Commission carries out an extensive public involvement and outreach program annually. In part, these efforts are integrated with the production of regional plan elements and generally involve traditional methods of conveying Commission analytical findings and proposed plan recommendations to the general public through a variety of

application allows users to select and view different types of planning data sets, including detailed and generalized land use maps, environmental corridor maps, soils maps Natural obtained from the Resources Conservation Service, Wisconsin Wetland Maps, Federal Inventory **EPA** Wetland Advanced Identification Maps, and parcel mapping contributed by participating counties. Municipal boundaries and five years of orthophotography are also accessible on the mapping application. Metadata, providing detailed information about the origin, lineage, and content of the data sets, is available for the map layers displayed on the Regional Map Server.

The Commission, with the assistance of the counties, works to continually enhance the regional land information website with the addition of new orthophotography, updated resource inventories, and additional planning-related mapping.

# **County-Based Land Information Systems**

Historically, the Commission has worked closely with its constituent counties in their efforts to develop and deploy county-based, web delivered land information systems. Activities in this respect during 2012 included the following:

# • Kenosha County Historical Aerial Photography Project

The Commission administered and completed a historical aerial photography scanning project for Kenosha County, using a contractor to perform the scanning work. The Commission provided aerial photography negatives from seven past aerial photography projects to create the desired digital data sets.

# Kenosha County Road Pavement Edge Project

The Commission digitized all road pavement edges in Kenosha County from the 2010 orthophotography data set.

# • Service on County Land Information Committees

Through its County Surveyor program, the Commission continued to provide a representative to serve on the land information committees created by counties under the

Wisconsin Land Information Legislation. The Counties so served included Kenosha, Milwaukee, Walworth and Waukesha.

# • Walworth County Map Updating Project

During 2012 the Commission assisted Walworth County in formulating a program to begin updating its county large-scale base maps prepared to SEWRPC specifications. A specific project to do so was prepared and submitted to the County Board for funding and execution in 2013.

# **County Surveyor Activities**

State Legislation was enacted in 1984 which requires the Commission Executive Director to act in the capacity of County Surveyor for Milwaukee County. Since that time, the Commission has carried out those responsibilities, including ensuring the perpetuation of those corners of the U.S Public Land Survey that are destroyed, removed, or buried through construction or other activities. Given this State-mandated responsibility and the need to maintain a capable staff to perform the County Surveyor function, the Commission has offered to assume that function in the other six counties of the Region. Based upon that offer, the Commission during 2012 provided County Surveyor services to Kenosha, Walworth, and Waukesha Counties. In each case, such special services are provided under contract agreements.

In performing the duties of the County Surveyor in the four counties concerned, the Commission during 2012 remonumented a total of 217 U.S. Public Land Survey corners that had been disturbed or destroyed through a range of activities, primarily road reconstruction activities. These activities included not only field work, but also substantial office work to prepare updated documentation of the corners concerned, including new corner dossier sheets and updated control survey summary diagrams.

# PUBLIC INVOLVEMENT AND OUTREACH

The Commission carries out an extensive public involvement and outreach program annually. In part, these efforts are integrated with the production of regional plan elements and generally involve traditional methods of conveying Commission analytical findings and proposed plan recommendations to the general public through a variety of

#### Figure 7

# MAJOR OBJECTIVES OF SEWRPC TARGETED PUBLIC INVOLVEMENT AND OUTREACH PROGRAM

#### Outreach

- Build awareness and inform residents regarding SEWRPC purpose, activities, resources, and participation opportunities
- Achieved through media, mass distributions, and large public event exhibits

#### **Public Involvement**

- Targeted at key populations and organizations
- Encourage participation in SEWRPC planning efforts
- Promote understanding of SEWRPC advisory plan recommendations
- Collaboratively achieved through such group activities as organizations, committees, and task forces

#### Education

- Targeted at ages youth through adults
- Achieved through the development of materials and events designed to convey facts and analytical findings and thereby better equip audiences to understand and act upon SEWRPC plan recommendations

#### **Environmental Justice**

- Promote the consideration and integration of environmental justice principles throughout the SEWRPC planning process
- Achieved through the evaluation of plan recommendations, public involvement and outreach program, and the work of an Environmental Justice Task Force

including planning the Association's 11th Annual Community Development Summit. The theme for this event focused on household and employment patterns for the Southeastern Wisconsin Region: "Completing the Circuit; Electrifying the Job Market." The Commission also worked with the Association on its ongoing transit and jobs efforts through the closely affiliated Coalition for Advancing Transit. Commission partnering with UEDA extended to housing issues through the Association's collaborative "Take Root" effort, focused on the housing foreclosure problem. The 2012 UEDA Summit was attended by approximately

#### Figure 8

# SEWRPC PRIMARY ORGANIZATIONAL CONTACTS FOR OUTREACH AND INVOLVEMENT EFFORTS

- African American Chamber of Commerce
- Aurora Family Service
- Clark Square Layton Boulevard Neighborhoods Revitalization Initiative
- Community Brainstorming Forum
- Goodwill Industries of Southeastern Wisconsin
- Granville Brown Deer Chamber
- Groundwork Milwaukee
- Hispanic Chamber of Commerce
- Hispanic Roundtable of Racine
- Hmong American Friendship Association
- IndependenceFirst
- La Casa de Esperanza
- League of United Latin American Citizens
- Lindsay Heights Area—City of Milwaukee, Milwaukee Urban League
- National Association for the Advancement of Colored People
- Northeast Milwaukee communities area
- Racine/Kenosha Community Action Agency
- Repairers of the Breach (Homeless Shelter)
- Social Development Commission
- Southeastern Oneida Tribal Services
- The 30th Street Industrial Corridor revitalization area
- The Salvation Army of Greater Milwaukee
- United Migrant Opportunity Services
- United Way Affiliated Entities Within the Southeastern Wisconsin Region
- Urban Economic Development Association of Wisconsin
- Urban League of Racine and Kenosha

200 community and regional leaders. In preparation for the Summit, assistance was provided to the Association through service on the Summit Planning Committee and the Sponsorship Subcommittee. The Commission also printed the program booklet. As a follow-up to UEDA's prior Summit on regional food entrepreneurship, the Commission provided land use and environmental information relating to agricultural and water supply aspects of the food growing and production systems.

#### Granville Area

The Commission continued to work with the Granville Brown Deer Chamber and the Association for Northwest Milwaukee Advancement during 2012. An exhibit on the regional housing plan was developed and staffed during a reception associated with the Chamber's Annual Vision Series Luncheon, which in 2012 addressed the future of Milwaukee County's northwest side and regional cooperation in greater Milwaukee, including opportunities for reinvention.

# Social Development Commission

The Commission continued to work with the Social Development Commission on various programs that support a multi-year effort to address issues of poverty. Assistance related to the review of factors that impede individuals from finding jobs, notably transportation and housing, and of potential solutions to those problems.

#### Children's Environmental Health

The Commission continued to work on a multi-year, multi-disciplinary effort to address the environmental conditions impacting children and family health being coordinated by the UW-Milwaukee Children's Environmental Health Resource Center. The 2012 work effort remained focused on the 30th Street Industrial Corridor area to better connect entities involved with the subject of environmental health. The Commission provided information and assistance regarding water quality, housing, and transportation issues.

# Regional Housing Study

Materials featuring the Regional Housing Study were placed at selected organizational activities and events that SEWRPC continues to help strengthen via its partnership efforts. One of these efforts in 2012 resulted in an exhibit placed at the Milwaukee County Harvest Fair event held in September at the

Wisconsin State Fairgrounds, with the exhibit designed to help broaden public exposure to and possible comment on the Regional Housing Study.

#### Watershed Educational Tours

Continued Commission participation occurred in the interagency consortium known as "Testing the Waters," which has trained scores of teachers and nearly 30,000 high school students over the years, most from within the watersheds tributary to the Milwaukee Harbor Estuary. In 2012, the Commission again worked with the Washington County Land Conservation Department to plan and conduct two watershed bus tours for some 50 students and teachers to view land use changes, water quality problems, and solutions in the rural and developing landscape. Among the tour participants were attendees of Milwaukee public and private schools as well as high schools in Ozaukee and Washington Counties.

#### Water Quality Field Education

In conjunction with the Waukesha County Land Conservation Department, the Commission helped conduct educational sessions for 10 groups of Pewaukee Middle School students attending camp on Lake Keesus in Waukesha County, to sample lake-bottom organisms and learn about the impact of land use, roadways, planning, and personal actions on the aquatic environment. This annual event has taught over 3,000 youth and their leaders over the years, some 200 during 2012.

# **Focused Networking Activities**

In carrying out its targeted outreach program, the Commission also extensively engages in ongoing programs and activities related to the Commission work program through networking efforts. During 2012 these networking efforts included the following:

# Social Determinants of Health

The Commission networks with organizations that are addressing community health issues, including the Aurora Health Care Social Responsibility Committee; Lindsay Heights Neighborhood Health Alliance; Southeastern Wisconsin Blood Center Community Advisory Committee; Children's Environmental Health Center; Healthy Wisconsin Partnership Program; Havenwoods Environmental Awareness Center; Wisconsin Partners for Clean

Air; Community Advocates Public Policy Forums; Groundwork Milwaukee; and the Water Quality Policy Forum.

# Neighborhood and Community Economic Development

The Commission networks with organizations and activities that are addressing neighborhood and community economic development issues, including the North Avenue Marketplace and Center Street Business Improvement Districts; Marketplace Riverworks Development Corporation; Latino Build Entrepreneurial Network: Milwaukee Initiative; African American, Hispanic, and Hmong Chambers of Commerce; Commercial Corridors Consortium; Walnut Area Improvement Council; Hispanic Business and Professionals Association; Milwaukee and Racine/Kenosha Urban Leagues; 30th Street Industrial Corridor Corporation: LISC Milwaukee Community Forums and Events: Bronzeville District Revitalization; Clarke Square and Layton West Boulevard Area Revitalizations; and the Milwaukee Main Street Initiative.

# Workforce Development and Employment

The Commission networks with organizations and activities that are addressing workforce development and employment issues, including the Social Development Commission Job **Opportunities** Initiative; Black Men's Forum on Employment; Milwaukee and Racine/Kenosha Urban Labor Development Committees; State of Wisconsin Department of Corrections Job and Employment program; African American Male Unemployment Task Force; Southeastern Wisconsin Migrant and Workers Committee: Seasonal Black Achievement Forum at UW-Milwaukee; Ways to Work Program; Human Capital Development of Racine and Kenosha Corporation; and the Focus on Transitional Jobs Symposium.

# Environmental Justice and Quality of Life Enhancement

The Commission networks with organizations and activities that are addressing environmental justice and quality of life enhancement issues, including the Hmong American Friendship Association; Community Brainstorming Forum; Independence First (serving the Milwaukee and Waukesha areas); Real Assets (serving the Racine, Kenosha, and Walworth County areas); Granville Brown Deer Chamber

Diversity Dialog Initiative; Coalition for Advancing Transit; Common Ground Initiative; League of Latin American Citizens; Southeastern Wisconsin Faith Based Entities gatherings; NAACP Chapters in Milwaukee, Waukesha, Kenosha, and Ozaukee Counties; Neighborhoods Matter Symposium; Building a Better Milwaukee Symposium; Milwaukee Urban League Equal Opportunity Conference; Black Men's Forum; Milwaukee Asset Building Coalition; Milwaukee Alliance for Economic Inclusion; and the Fourth Street Forum.

#### **Education and Career Development**

The Commission networks with organizations and activities focusing on professional and collaborative efforts associated with education and career development issues, including The Business Council Strategic Partnerships Initiative; Future Milwaukee Leadership Program; Mahone Family Foundation Education Initiative; Black MBA Milwaukee Chapter; Milwaukee Boys and Girls Clubs Gathering on Education; Inventors and Entrepreneurs Forum; Young Professionals Network; United Negro College Fund; Fellowship Open Youth and Education Initiative; Concordia University Center for Environmental Studies; Milwaukee Chapter of the National Society of Black Engineers; Milwaukee Chapter of National Black Public Relations Society; Milwaukee Public Schools STEM Initiative; Stritch Leadership Center; and the UW-Milwaukee Community Design Solutions Program.

#### **SEWRPC Environmental Justice Task Force**

Under Federal law SEWRPC has a responsibility to help ensure the full and fair participation throughout the regional planning process of low income, minority, and disabled individuals and communities. In addition to the direct Commission outreach efforts to those communities noted above, the Commission has created an Environmental Justice Task Force to help ensure that this requirement is met. This Task Force presently consists of 13 representatives from throughout the Region who meet throughout each year to gain an understanding of the Commission's technical work program and to provide input to that program through the lens of environmental justice. The specific purposes of the SEWRPC Environmental Justice Task Force are summarized in Figure 9.

#### Figure 9

#### PURPOSES OF THE SEWRPC ENVIRONMENTAL JUSTICE TASK FORCE

# • Involvement and Participation

To facilitate the involvement of, and help ensure the full and fair participation of, low-income, minority, and disabled individuals and communities at all stages in relevant areas of regional planning as determined in consultation with them.

#### Address Relevant Issues

To make recommendations on, and help monitor, issues and analyses potentially relevant to the needs and circumstances of low-income, minority, and disabled communities.

#### • Identify Benefits and Effects

To help identify potential benefits and adverse effects of regional planning programs and activities with respect to minority, low-income, and disabled populations.

#### Advise and Recommend

To advise and recommend methods to prevent the denial of, reduction in, or significant delay in the receipt of benefits, and/or to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority, lowincome, and disabled populations.

# • Enhance Planning Awareness

To enhance awareness, understanding, appreciation, support, and implementation of planning recommendations and benefits, with emphasis on the needs of minority, low-income, and disabled populations.

A major work activity of the Task Force over the past several years has been the forthcoming regional housing plan. In prior years, the Task Force gave substantial input to the analytical work activity being conducted relative to housing issues. During 2012, the Task Force met three times and focused attention on the preliminary recommendations coming out of the regional housing study, as well as the socioeconomic analysis of those recommendations prepared by the UW-Milwaukee Center for Economic Development. All observations and comments of the Task Force attendant to the regional housing study were forwarded for consideration by the Commission's Regional Housing Planning Advisory Committee. During 2012 the Task Force also reviewed the draft Transportation Improvement Program for the Region for the period 2013-2016.

#### 2012 SEWRPC PUBLICATIONS

The following publications were issued by SEWRPC during the year:

# Community Assistance Planning Reports

- No. 131; A Park and Open Space Plan for Kenosha County (2nd Edition), April 2012, 140 pages
- No. 282; 2nd Edition, City of Milwaukee All Hazards Mitigation Plan, Milwaukee County, Wisconsin, June 2012, 396 pages
- No. 311, Waukesha Metro Transit Development Plan: 2013-2017, December 2012, 121 pages

# Memorandum Reports

- No. 134; 2nd Edition, An Aquatic Plant Management Plan for Fowler Lake, Waukesha County, Wisconsin, July 2012, 113 pages
- No. 201; Study of a Lake Parkway (STH 794) Extension from Edgerton Avenue to STH 100 in Milwaukee County, April 2012, 59 pages
- No. 202; Regional Transportation Operations Plan for Southeastern Wisconsin: 2012-2016, May 2012, 20 pages
- No. 203; Congestion Management Process in Southeastern Wisconsin, April 2012, 121 pages
- No. 205; Assessment of Conformity of the Year 2035 Regional Transportation Plan and the Year 2013-2016 Transportation Improvement Program for the 1997 and 2008 Eight-Hour Ozone and 2006 24-Hour Fine Particulate National Ambient Air Quality Standards, October 2012, 152 pages
- No. 206; Estimate of the Costs of Converting the Foundational Elements of the Land Information and Public Works Management Systems in Southeastern Wisconsin from Legacy to New Datums, October 2012, 103 pages

# Annual Report

• 2011 Annual Report, October 2012, 244 pages

#### Newsletters

- City of Waukesha Transit Development, No. 1, August 2012, 4 pages
- Year 2035 Regional Housing Plan For Southeastern Wisconsin, No. 4, October 2012, 12 pages

# Other Reports

 Amendment to the Regional Water Quality Management Plan, Greater Kenosha Area, June 2012, 6 pages

- Amendment to the Regional Water Quality Management Plan, City of New Berlin, June 2012, 6 pages
- Record of Public Comments, Waukesha Transit Development Plan: Alternative Service Changes, Comments Received August 20 Through September 7, 2012, September 2012, 76 pages
- Record of Public Comments, Preliminary Recommendations of Lake Parkway (STH 794) Extension Study, March 2012, 119 pages
- A Transportation Improvement Program for Southeastern Wisconsin: 2013-2016, October 2012, 231 pages

(This page intentionally left blank)

# PART THREE: REGIONAL MONITORING ACTIVITIES

This final section of the 2012 SEWRPC Annual Report documents the results of Commission work efforts during the year relative to monitoring various aspects of regional growth and change. The topics covered include socioeconomic trends, land development activity, natural resource base preservation activity, and regional transportation system performance. Where applicable, these monitoring activities are reported in the context of Commission regional plan recommendations. Some

monitoring topics are reported on an annual basis and others as infrequently as ten-year intervals.

Part One of this Annual Report provides information about the Commission and includes a brief description of each of the elements of the comprehensive regional plan. That part begins on page 1. Part Two documents the regional planning work activities undertaken during the year. That part begins on page 33.



# **TABLE OF CONTENTS**

SOCIOECONOMIC TRENDS	83
LAND DEVELOPMENT ACTIVITY	90
NATURAL RESOURCE BASE PRESERVATION ACTIVITY	94
PECIONAL TRANSPORTATION SYSTEM PERFORMANCE	96

(This page intentionally left blank)

# SOCIOECONOMIC TRENDS

Each year the Commission gathers and analyzes available information on the Region's population and economic base. This monitoring relies primarily on annual estimates of population, housing, and employment prepared by State and Federal agencies. The employment-related estimates are subject to change and may be revised in future editions of the Commission *Annual Report*.

In 2004, the Commission prepared a set of population, household, and employment projections for the Region to the year 2035. Because of the uncertainty surrounding any effort to predict future socioeconomic conditions, the Commission projected a range of future population, household, and employment levels—high, intermediate, and low—for the Region. The intermediate projection is considered the most likely to be achieved for the Region overall, and, in this sense, constitutes the Commission's "forecast," serving as a basis for the year 2035 regional land use and transportation plans. The high and low projections are intended to provide an indication of the range of population, household, and employment levels which con-

ceivably could be achieved under significantly higher and lower, but nevertheless plausible, growth scenarios for the Region.

The following overview of socioeconomic trends in the Region includes comparisons of current population, household, and employment estimates for the Region with the Commission forecast levels, as appropriate. Trend data on the unemployment rate of the Region are also presented.

# **Population**

# **Change in Regional Population**

During the 2000s, the population of the Region increased by 88,800 persons, or 4.6 percent, from 1,931,200 persons in 2000 to 2,020,000 persons in 2010. Since the 2010 Federal Census, the Region's population has increased modestly—by 3,100 persons, or 0.2 percent—to an estimated 2,023,100 persons in 2012 (see Table 2).

# **Comparison to Forecast**

The estimated year 2012 population is slightly lower (by 1.5 percent) than the Commission forecast population level for 2012 of 2,054,200 persons (see Table 3 and Figure 10).

Table 2

POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2000, 2010, AND 2012

	Population			2000-201	0 Change	2010-2012 Change	
County	2000 Census	2010 Census	2012 Estimate	Number	Percent	Number	Percent
Kenosha	149,600	166,400	166,800	16,800	11.2	400	0.2
Milwaukee	940,200	947,800	948,300	7,600	0.8	500	0.1
Ozaukee	82,300	86,400	86,600	4,100	5.0	200	0.2
Racine	188,800	195,400	195,400	6,600	3.5	0	0.0
Walworth	92,000	102,200	102,600	10,200	11.1	400	0.4
Washington	117,500	131,900	132,500	14,400	12.3	600	0.5
Waukesha	360,800	389,900	390,900	29,100	8.1	1,000	0.3
Region	1,931,200	2,020,000	2,023,100	88,800	4.6	3,100	0.2

Figure 10

# **ACTUAL AND PROJECTED REGIONAL AND COUNTY POPULATION LEVELS: 1950-2035**

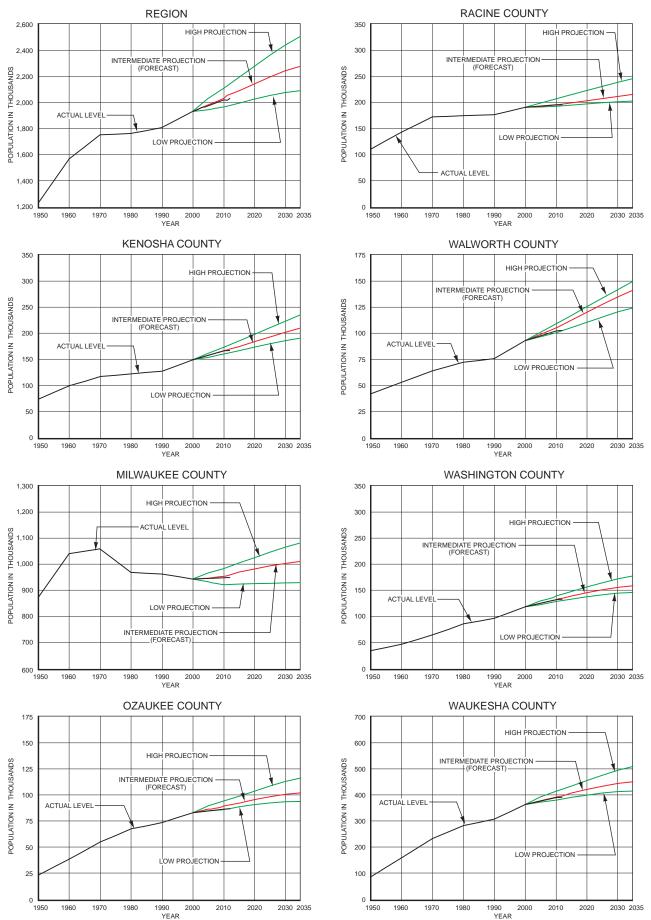


Table 3

ACTUAL AND PROJECTED POPULATION LEVELS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2012

		Projected 2012 Population				
County	2012 Population	High Projection	Intermediate Projection (Forecast)	Low Projection		
Kenosha	166,800	178,400	169,700	163,200		
Milwaukee	948,300	987,500	959,000	921,200		
Ozaukee	86,600	95,200	89,800	86,800		
Racine	195,400	208,500	196,800	191,800		
Walworth	102,600	111,300	108,100	102,600		
Washington	132,500	141,100	134,300	129,000		
Waukesha	390,900	418,500	396,500	383,000		
Region	2,023,100	2,140,500	2,054,200	1,977,600		

Table 4
HOUSEHOLDS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2000, 2010, AND 2012

	Households			2000-201	0 Change	2010-201	2 Change
County	2000 Census	2010 Census	2012 Estimate	Number	Percent	Number	Percent
Kenosha	56,100	62,600	63,000	6,500	11.6	400	0.6
Milwaukee	377,700	383,600	384,500	5,900	1.6	900	0.2
Ozaukee	30,900	34,200	34,400	3,300	10.7	200	0.6
Racine	70,800	75,700	75,900	4,900	6.9	200	0.3
Walworth	34,500	39,700	39,800	5,200	15.1	100	0.3
Washington	43,800	51,600	52,000	7,800	17.8	400	0.8
Waukesha	135,200	152,700	153,600	17,500	12.9	900	0.6
Region	749,000	800,100	803,200	51,100	6.8	3,100	0.4

NOTE: Year 2012 household estimates were prepared by applying housing vacancy rates from the year 2010 census to the estimated total number of housing units in 2012. Estimates of total housing units in 2012 are based upon total housing unit counts from the year 2010 census, updated by the Wisconsin Department of Administration's annual housing survey of Wisconsin municipalities through which it obtains data on changes in the housing stock.

#### Households

#### Change in Regional Households

During the 2000s, the number of households in the Region increased by 51,100, or 6.8 percent, from 749,000 households in 2000 to 800,100 households in 2010. Since the 2010 Federal census, the number of households in the Region has increased by 3,100, or 0.4 percent, to an estimated 803,200 households in 2012 (see Table 4).

#### Comparison to Forecast

The estimated number of households in the Region in 2012 is slightly lower (by 2.1 percent) than the Commission's forecast household level for 2012 of 854,500 households (see Table 5 and Figure 11).

#### **Employment**

# Change in Regional Employment

Total employment, or number of jobs, in the Region stood at 1,176,600 in 2010. Employment in the Region decreased during the early 2000s, increased through the mid-2000s, and then decreased near the end of the decade as a result of the economic downturn. Employment in the Region in 2010 was 46,200 jobs, or 3.8 percent, less than in 2000. Since 2010, total employment in the Region has increased by about 21,800 jobs, or 1.9 percent, from the low of 2010. Manufacturing and service jobs accounted for much of this increase (see Tables 6 and 7).

Figure 11

ACTUAL AND PROJECTED REGIONAL AND COUNTY HOUSEHOLD LEVELS: 1950-2035

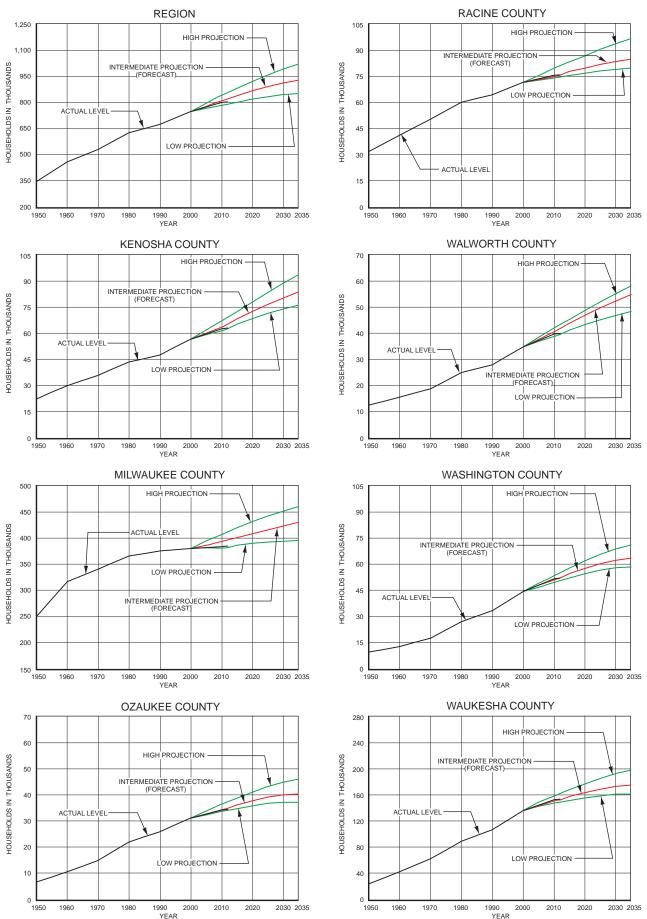


Table 5

ACTUAL AND PROJECTED HOUSEHOLD LEVELS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2012

		Projected 2012 Households				
County	2012 Households	High Projection	Intermediate Projection (Forecast)	Low Projection		
Kenosha	63,000	68,500	65,200	62,700		
Milwaukee	384,500	409,300	397,500	381,900		
Ozaukee	34,400	37,000	34,900	33,700		
Racine	75,900	80,300	75,800	73,800		
Walworth	39,800	43,000	41,800	39,600		
Washington	52,000	54,800	52,100	50,100		
Waukesha	153,600	161,600	153,200	147,900		
Region	803,200	854,500	820,500	789,700		

Table 6
EMPLOYMENT IN THE SOUTHEASTERN WISCONSIN REGION BY CATEGORY: 2000, 2010, AND 2012

	Employment (Jobs)						
			2012	2000-2010 Change		2010-2012 Change	
General Industry Group	2000	2010	Estimate	Number	Percent	Number	Percent
Agriculture, Forestry, Fishing, and Mining	17,600	17,200	16,300	-400	-2.3	-900	-5.2
Construction	53,800	41,200	38,100	-12,600	-23.4	-3,100	-7.5
Manufacturing	224,400	156,900	167,900	-67,500	-30.1	11,000	7.0
Transportation, Communication, and Utilities	54,800	48,000	47,200	-6,800	-12.4	-800	-1.7
Wholesale Trade	64,400	55,600	56,500	-8,800	-13.7	900	1.6
Retail	193,700	188,900	192,700	-4,800	-2.5	3,800	2.0
Services	499,700	556,600	569,400	56,900	11.4	12,800	2.3
Government and Government Enterprises	114,400	112,200	110,300	-2,200	-1.9	-1,900	-1.7
Total Jobs	1,222,800	1,176,600	1,198,400	-46,200	-3.8	21,800	1.9

NOTES: This table indicates the total number of employment opportunities, or jobs, in the Region by major industry group. The reported employment levels include full-time and part-time jobs and include both wage and salary jobs and self-employment. The retail category includes retail employment and employment in the food services and drinking places.

Table 7

EMPLOYMENT IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2000, 2010, AND 2012

	Employment (Jobs)						
			2012	2000-2010 Change		2010-2012 Change	
County	2000	2010	Estimate	Number	Percent	Number	Percent
Kenosha	68,700	74,900	73,900	6,200	9.0	-1,000	-1.3
Milwaukee	624,600	575,400	578,400	-49,200	-7.9	3,000	0.5
Ozaukee	50,800	52,500	54,200	1,700	3.3	1,700	3.2
Racine	94,400	88,300	91,000	-6,100	-6.5	2,700	3.1
Walworth	51,800	52,700	54,000	900	1.7	1,300	2.5
Washington	61,700	63,900	67,200	2,200	3.6	3,300	5.2
Waukesha	270,800	268,900	279,700	-1,900	-0.7	10,800	4.0
Region	1,222,800	1,176,600	1,198,400	-46,200	-3.8	21,800	1.9

Table 8

ACTUAL AND PROJECTED EMPLOYMENT IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2012

		Projected 2012 Employment (Jobs)				
County	2012 Employment (Jobs)	High Projection	Intermediate Projection (Forecast)	Low Projection		
Kenosha	73,900	79,300	78,000	74,500		
Milwaukee	578,400	624,800	606,200	587,900		
Ozaukee	54,200	57,400	55,700	53,900		
Racine	91,000	100,000	97,700	94,100		
Walworth	54,000	60,400	59,300	56,900		
Washington	67,200	71,900	69,700	67,700		
Waukesha	279,700	305,800	291,200	287,600		
Region	1,198,400	1,299,600	1,257,800	1,222,600		

# **Comparison to Forecast**

Despite the increases of the last two years, the employment level in the Region has not fully recovered from the effects of the recession of the late 2000s. The estimated total employment in the Region in 2012 (1,198,400 jobs) was below the Commission-projected employment range for the Region and was lower by 4.7 percent than the forecast level of 1,257,800 jobs (see Table 8 and Figure 12). In evaluating the Commission employment projections, it should be recognized that the projections are intended to provide an indication of the overall long-term future trend in the employment level in the Region, and do not reflect the fluctuation in the employment level that may be

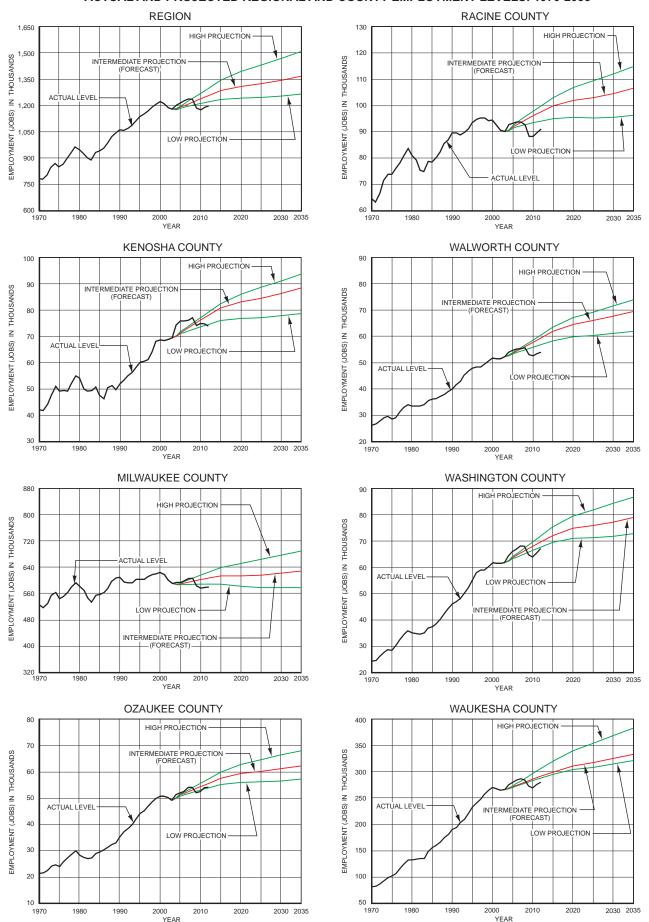
expected to occur as a result of periods of growth and decline in the economy typically associated with shorter-term business cycles.

# Change in Unemployment Rate

In addition to the employment level, the unemployment rate is another important measure of economic activity in the Region. The Region's unemployment rate (the unemployed labor force as a percent of the total resident labor force of the Region) increased dramatically during the late 2000s, rising to 9.2 percent in 2009 and 2010 (see Figure 13). The unemployment rate decreased somewhat over the next two years, to a level of 7.6 percent in 2012.

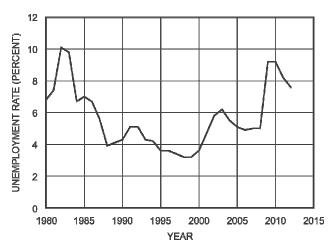
Figure 12

ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2035



UNEMPLOYMENT RATE
IN THE REGION: 1980-2012

Figure 13



#### LAND DEVELOPMENT ACTIVITY

Each year, the Commission gathers and analyzes information on residential subdivision activity in the Region. The Commission also monitors annual changes in the Region's housing stock, relying upon data prepared by the Wisconsin Department of Administration.

# Residential Subdivision Platting

# New Residential Lots

Between 1990 and 2005, the number of new residential lots annually created through residential subdivision plats in the Region ranged from about 2,800 to 5,500 lots. Platting activity was significantly lower during the economic downturn of the late 2000s and has remained low since. Just over 200 residential lots were created by subdivision plats in 2012, roughly the same level as in 2011 and 2010 (see Figure 14). The location of the residential lots created in 2012 is shown on Map 22.

#### Sewered/Unsewered

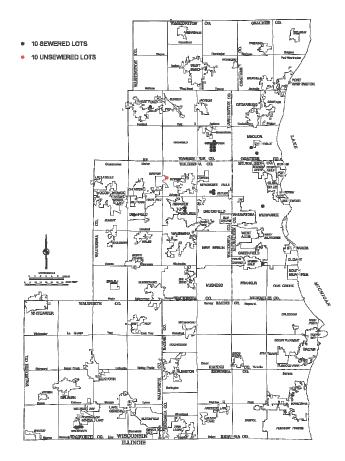
All but seven of the lots created in 2012 were intended to be served by centralized public sanitary sewer service (see Table 9).

# **Residential Housing Units New Housing Construction**

During the 1990s and early 2000s, the number of new housing units provided on an annual basis in the

**Map 22** 

# RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 2012



Region fluctuated between about 8,300 and 10,900 (see Figure 15). Housing construction decreased substantially—to less than 3,000 units per year—during the economic downturn of the late 2000s. About 3,000 new housing units were added in 2012, including 1,370 single-family units, 110 units in two-unit structures, and 1,520 units in multi-family structures (see Table 10).

# Net Change in Housing Units

A number of housing units are lost each year due to demolition, destruction by fire or flooding, or conversion to nonresidential use. Since 1990, the average annual loss ranged between about 700 and 1,300 housing units (see Figure 16). A total of 1,190 housing units were lost in 2012, including 340 single-family units, 360 units in two-unit structures, and 490 units in multi-family structures. The net change in housing units in 2012 was a gain of 1,809.

Figure 14

RESIDENTIAL LOTS PLATTED IN THE REGION AND ITS COUNTIES: 1960-2012

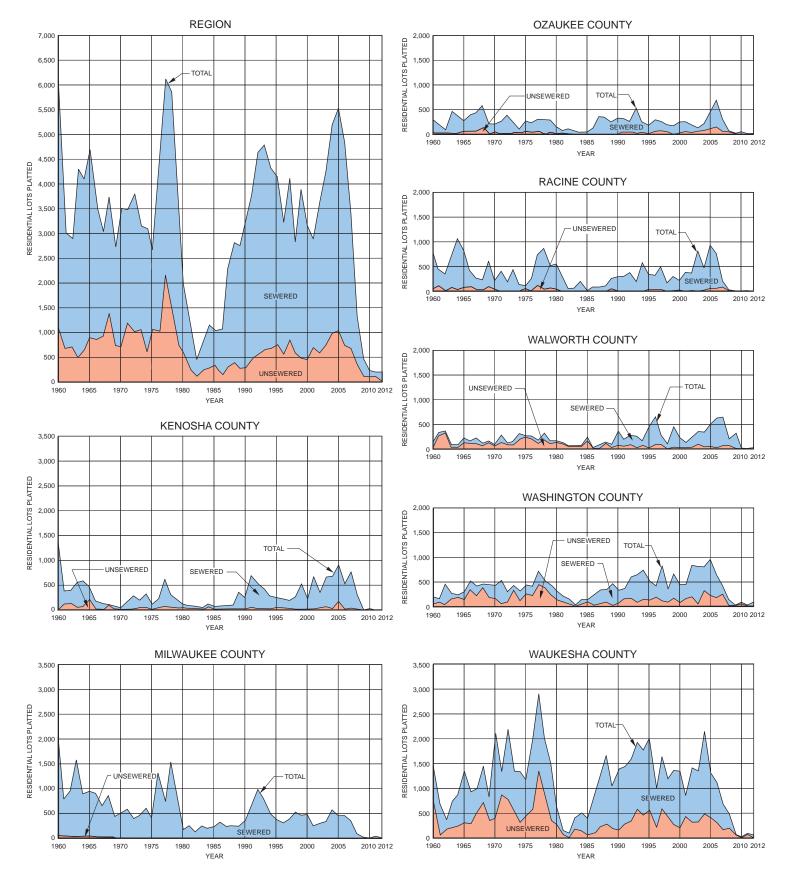


Figure 15

NEW HOUSING UNITS IN THE REGION AND ITS COUNTIES: 1990-2012

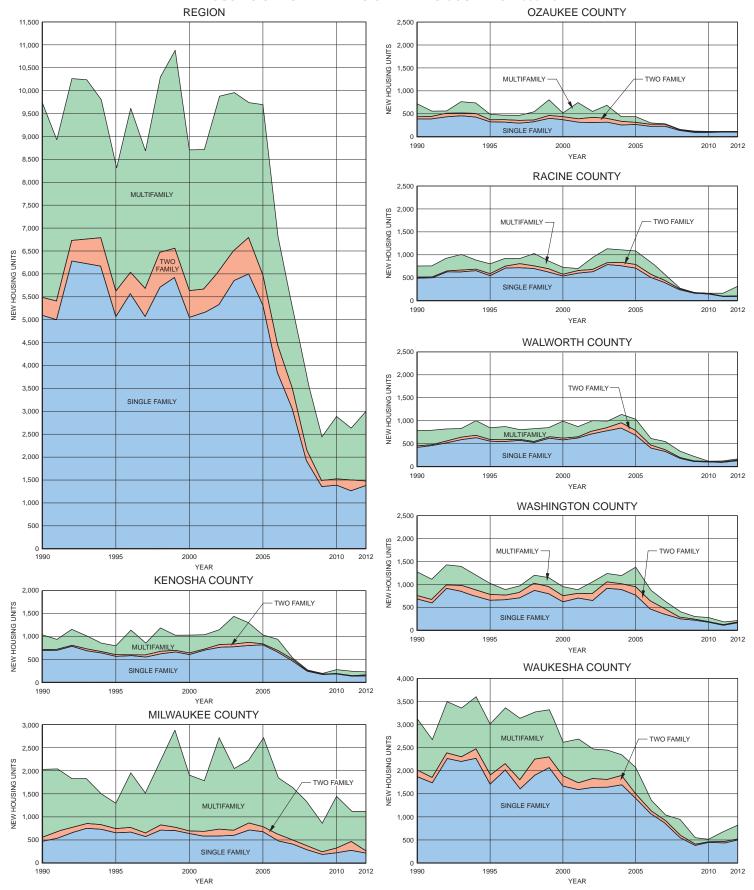


Table 9

RESIDENTIAL SUBDIVISION
PLATTING ACTIVITY IN THE REGION: 2012

	Sewered Lots		Unsewe	red Lots	Total Lots		
County	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region	
Kenosha	0	0.0	0	0.0	0	0.0	
Milwaukee	16	100.0	0	0.0	16	7.6	
Ozaukee	19	100.0	0	0.0	19	9.1	
Racine	0	0.0	0	0.0	0	0.0	
Walworth	32	100.0	0	0.0	32	15.2	
Washington	88	100.0	0	0.0	88	41.9	
Waukesha	48	87.3	7	12.7	55	26.2	
Region	203	96.7	7	3.3	210	100.0	

NOTE: This table indicates the number of lots created by residential subdivision plats in 2012.

Figure 16
HOUSING UNITS LOSSES IN THE REGION
BY STRUCTURE TYPE: 1990-2012

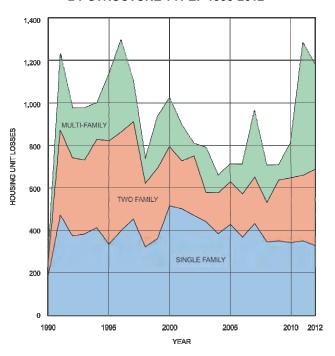


Table 10

CHANGE IN HOUSING UNITS BY STRUCTURE TYPE IN THE REGION: 2012

	New Housing Units					Housing Unit Losses				Net Change in Housing Units			
County	Single Family	Two Family	Multi- Family	Total	Single Family	Two Family	Multi- Family	Total	Single Family	Two Family	Multi- Family	Total	
Kenosha	134	16	67	217	30	2	15	47	104	14	52	170	
Milwaukee	222	38	868	1,128	145	342	218	705	77	-304	650	423	
Ozaukee	106	6	4	116	12	2	0	14	94	4	4	102	
Racine	88	10	216	314	30	6	244	280	58	4	-28	34	
Walworth	140	6	26	172	55	4	7	66	85	2	19	106	
Washington	174	14	28	216	17	2	0	19	157	12	28	197	
Waukesha	506	16	311	833	47	2	7	56	459	14	304	777	
Region	1,370	106	1,520	2,996	336	360	491	1,187	1,034	-254	1,029	1,809	

NOTE: The Wisconsin Department of Administration conducts an annual survey of every municipality to collect data on the current housing stock. Respondents generally use building permits and demolition permits to report changes in housing units which are reported by structure type: single family (including mobile homes), two family, and multifamily buildings.

AND ISOLATED NATURAL RESOURCE AREAS IN THE REGION: 2006-2012 2,515 **PUBLIC AGENCY** 2,187 PRIVATE LAND TRUST 970 1,741 1,433 1,419 1,677 1,144 1,113 1,428 428 477 1.233 1 545 1.258

Figure 17

PUBLIC INTEREST ACQUISITION OF ENVIRONMENTAL CORRIDORS
AND ISOLATED NATURAL RESOURCE AREAS IN THE REGION: 2006-2012

Note: The indicated acreage represents the additional area protected through public interest acquisition or conservation easements for the year indicated. This acreage represents the total area of the parcels concerned, including the area within the environmental corridors, along with any agricultural or other open lands which are located outside the environmental corridors and which may be expected to become part of the corridors as they revert to more natural conditions in the years ahead.

313

2009

YEAR

510

2008

## NATURAL RESOURCE BASE PRESERVATION ACTIVITY

636

2006

2007

3,000

2,500

2,000

1,500

1,000

500

n

The Commission has monitored efforts by governmental agencies and private land trusts to ensure the long-term protection of open space lands through public interest ownership, including conservation easements, since 2006. This monitoring focuses on lands associated with Commission-identified environmental corridors and Commission-identified natural areas and critical species habitat sites. These publicly and private sponsored efforts help implement regional plan recommendations regarding the permanent preservation of environmental corridors, natural areas, and critical species habitat sites.

Figure 17 indicates the acreage of open space associated with environmental corridors and isolated natural resource areas in the Region protected through public interest acquisition or conservation easements since 2006. This acreage represents the total area of the parcels concerned, including the area within the environmental corridors, along with any agricultural or other open lands which are located outside the environmental corridors and

which may be expected to become part of the corridors as they revert to more natural conditions in the years ahead. The results of recent open space protection efforts may be summarized as follows:

716

2011

186

2012

### **Total Area Protected**

175

2010

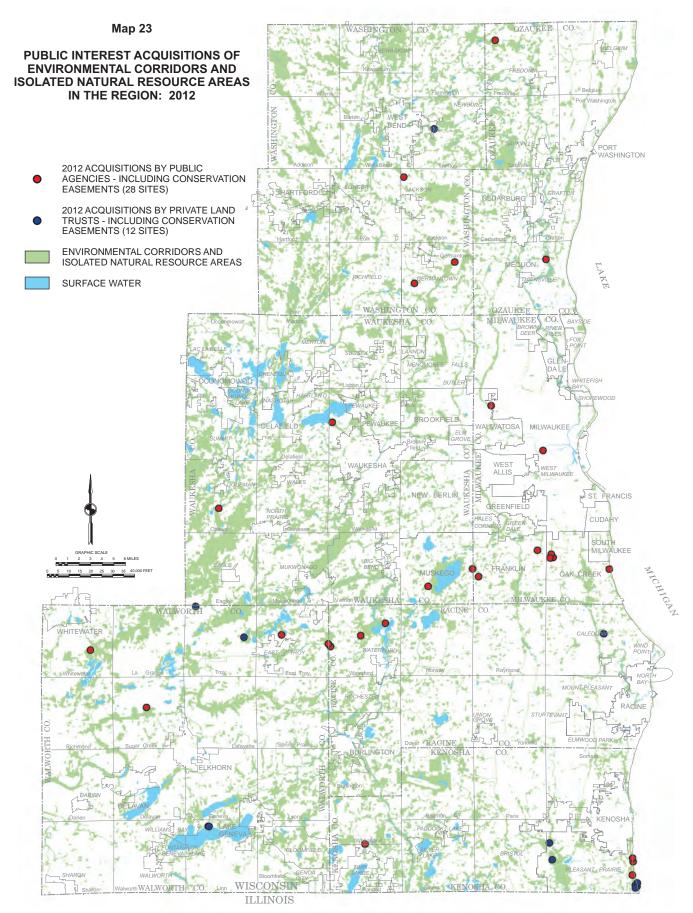
During 2012, 1,419 acres of open space associated with environmental corridors and isolated natural resource areas were protected through public interest acquisition or conservation easements (see location of sites on Map 23). This compares to an annual average of 1,585 acres of open space so protected over the five-year period 2008-2012.

### **Area Protected by Public Agencies**

Public agency efforts resulted in the protection of 1,233 acres during 2012, and an annual average of 1,205 acres over the five year period 2008-2012.

### Area Protected by Private Land Trusts

Private land trust efforts resulted in the protection of 186 acres in 2012, and an annual average of 380 acres over the past five year period 2008-2012. Open space acquisition by private land trusts is often supported by matching State or Federal grants.



### **Natural Areas Protected**

The lands protected in the public interest as described above during 2012 include a number of areas which have been identified as a natural area or a critical species habitat site in the SEWRPC natural areas and critical species habitat protection and management plan. Specifically, the Wisconsin Department of Natural Resources acquired four parcels encompassing seven acres in the Chiwaukee Prairie/Carol Beach area of Kenosha County; 227 acres of the Tichigan Marsh Natural Area in Racine County; 339 acres of the Lone Tree Trail Oak Woods Natural Area and three acres of the Turtle Valley Wildlife Area Critical Species Habitat Area. both in Walworth County; and 94 acres of the Big Muskego Lake Natural Area and 250 acres of the Paradise Valley/Pretty Lake Tamarack Relict Natural Area, both in Waukesha County. Finally, Milwaukee County acquired the Esch-Honadel Woods Natural Area as an addition to the Milwaukee County Parks system.

## REGIONAL TRANSPORTATION SYSTEM PERFORMANCE

Each year the Commission gathers and analyzes available information relative to the performance of the regional transportation system. During 2012 that performance monitoring focused on vehicle availability, public transit operations, park-ride facilities and transit stations, pavement and bridge conditions, traffic congestion and travel times, crashes, aviation activity, and freight rail lines. Monitoring data on these topics usually comes from secondary sources. On occasion, however, the Commission itself is the source of data, including travel origin—destination surveys directly conducted by the Commission at ten-year intervals, provided that fiscal resources are made available. Those surveys were underway in 2011-2012. The survey results are scheduled to be reported in 2013.

## Vehicle Availability<sup>1</sup> Personal-Use Vehicles

The number of personal-use vehicles—automobiles, trucks, and vans used by residents of the Region for personal transportation—remained virtually unchanged over the past year at a level of about 1.38 million vehicles (see Table 11). While the average annual rate of growth in personal-use vehicle

availability in the Region from 1963-2012 has been about 2 percent, that rate of growth is expected under the regional transportation plan forecast to lessen in the coming years (see Figure 18).

### Persons Per Personal-Use Vehicle

The number of persons per personal-use vehicle in the Region was estimated at 1.47 in 2012, unchanged from 2011 (see Figure 19). This ratio has been relatively stable for over a decade and the SEWRPC forecast expects continued long-term stability as well. The estimated 2012 level of personal-use vehicle availability was only slightly higher—about 3 percent—than the availability level envisioned in the regional transportation plan.

### **Commercial and Municipal Trucks**

As shown in Table 12, the number of commercial and municipal trucks available in the Region during 2012 was estimated at about 121,400, only slightly less than the 2011 estimate. Light commercial trucks continue to account for about 55 percent of all commercial trucks. The number of commercial and municipal trucks available in the Region remains at a level somewhat below the forecast level included in the regional transportation plan (see Figure 20).

# **Public Transit Operations Transit Systems and Service Areas**

The Southeastern Wisconsin Region was served during 2012 by the following public transit systems (see Map 24):

• Fixed-route intracounty bus service sponsored by Milwaukee and Racine Counties and by the Cities of Kenosha, Racine, and Waukesha.

<sup>&</sup>lt;sup>1</sup>The classifications used to estimate vehicle availability in this Annual Report differ from those used in Commission Annual Reports for years prior to 1994. In this report, motor vehicles are divided into "personal-use vehicles" and "commercial trucks". Personal-use vehicles include not only automobiles, but also vans and light trucks available for personal use. Commercial trucks include municipal trucks and light and heavy trucks available for commercial use. In Annual Reports for years prior to 1994, vans and light trucks available for personal use were classified with light trucks available for commercial use.

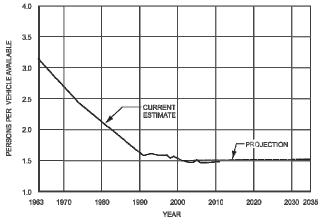
Table 11

PERSONAL-USE VEHICLE AVAILABILITY IN THE REGION<sup>a</sup>

County	1963	1972	2011	2012
Kenosha	37,240	51,100	120,050	120,110
Milwaukee	316,350	392,000	544,540	543,460
Ozaukee	16,780	28,030	70,280	70,390
Racine	52,040	73,350	146,840	147,010
Walworth	22,220	33,450	84,230	84,050
Washington	18,340	30,390	105,420	106,050
Waukesha	69,390	114,450	307,310	307,960
Total	532,360	722,770	1,378,670	1,379,030

<sup>&</sup>lt;sup>a</sup>The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, page 96.

Figure 18
PERSONS PER PERSONAL-USE VEHICLE

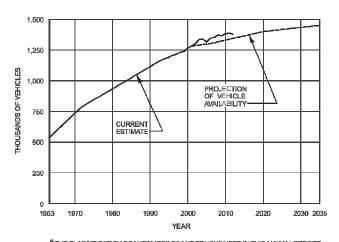


<sup>a</sup> THE CLASSIFICATION OF AUTOMOBILES AND TRUCKS USED IN THIS ANNUAL REPORT DIFFERS FROM THAT USED IN COMMISSION ANNUAL REPORTS FOR YEARS PRIOR TO 1994, FOR AN EXPLANATION OF THE DIFFERENCES, SEE FOOTNOTE 1 ON PAGE 96.

- Fixed-route intercounty bus service sponsored by the City of Racine for travel between Kenosha, Racine, and Milwaukee; by Ozaukee, Washington, and Waukesha Counties for travel between those counties and Milwaukee County; and by Kenosha County for travel within and between Kenosha and Walworth Counties).
- Shared ride taxi service sponsored by Ozaukee and Washington Counties and by the Cities of Hartford, West Bend, and Whitewater.

Figure 19

PERSONAL-USE VEHICLE AVAILABILITY<sup>a</sup>



<sup>8</sup> THE CLASSIFICATION OF AUTOMOBILES AND TRUCKS USED IN THIS ANNUAL REPORT DIFFERS FROM THAT USED IN COMMISSION ANNUAL REPORTS FOR YEARS PRIOR TO 1994. FOR AN EXPLANATION OF THE DIFFERENCES, SEE FOOTHOTE 1, PAGES IS

- Paratransit service for disabled persons unable to use fixed route bus services sponsored by Milwaukee and Waukesha Counties and by the Cities of Kenosha, Racine and Waukesha.
- Commuter rail service from Kenosha to the Chicago Loop sponsored by Metra, the commuter rail agency serving northeastern Illinois.
- Amtrak Hiawatha intercity rail service between Milwaukee and Chicago, sponsored by the

Table 12

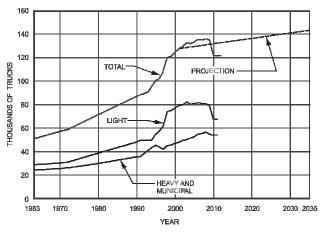
COMMERCIAL TRUCK AVAILABILITY IN THE REGION<sup>a</sup>

County	1963	1972	2011	2012
Kenosha	4,370	4,490	10,230	10,170
Milwaukee	25,910	26,710	42,230	42,330
Ozaukee	2,270	2,550	5,750	5,720
Racine	5,670	6,460	13,710	13,700
Walworth	4,190	4,840	10,130	10,090
Washington	3,210	4,080	10,090	10,060
Waukesha	7,780	10,280	29,480	29,330
Total	53,400	59,410	121,620	121,400

<sup>&</sup>lt;sup>a</sup>The classification of automobiles and trucks used in this Annual Report differs from that used in Commission Annual Reports for years prior to 1994. For an explanation of the differences, see footnote 1, page 96.

Figure 20

COMMERCIAL-USE TRUCK AVAILABILITY<sup>a</sup>



<sup>&</sup>lt;sup>8</sup> THE CLASSIFICATION OF AUTOMOBILES AND TRUCKS USED IN THIS ANNUAL REPORT DIFFERS FROM THAT USED IN COMMISSION ANNUAL REPORTS FOR YEARS PRIOR TO 1994. FOR AN EXPLANATION OF THE DIFFERENCES, SEE FOOTNOTE 1, PAGE 96.

States of Illinois and Wisconsin, and providing both connections to the national intercity Amtrak rail network and commuter service between Milwaukee, General Mitchell International Airport, and Sturtevant and the Chicago Loop.

### Notable Changes to Services

- The Racine Belle Urban System changed its hours of operation in January 2012, reducing service hours by about 8 percent, and modified Route No. 27 in September 2012.
- The Milwaukee County Transit System added three express routes and eliminated or modified several local routes in January 2012.
- The City of Port Washington ceased its sharedride taxi service at the end of 2011. The Ozaukee County shared-ride taxi service assumed responsibility for providing trips in Port Washington beginning in 2012.
- Racine County initiated a demonstration crosscounty shuttle—the Racine County Link—in June 2012. The Link operated between the City of Racine and areas in western Racine County, had relatively little ridership, and was terminated at the end of 2012.
- Several changes were made to the Milwaukee-Racine-Kenosha commuter bus route, sponsored by the City of Racine and operated by Wisconsin Coach Lines, including reducing the number of weekday round-trips from eight to seven and eliminating service to UW-Milwaukee in May 2012. Limited service to UW-Parkside was initiated in September 2012.

Map 24
PUBLIC TRANSIT SERVICES IN THE REGION: 2012

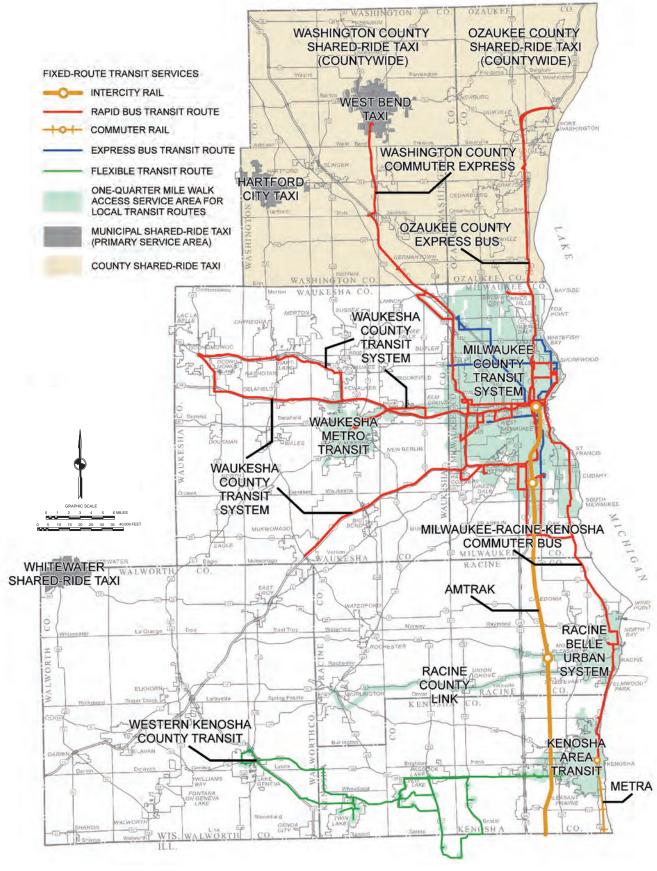


Table 13

REPORTED PUBLIC TRANSIT REVENUE RIDERSHIP IN THE REGION

			Po	venue Passenge	ore <sup>a</sup>		
			, Re	venue rassenge	15		Percent Change
Transit Services	1963	1972	1991	2001	2011	2012	2011-2012
Fixed Route Bus Systems							
Intracounty <sup>b</sup>							
City of Kenosha	1,876,000	503,000	1,128,000	1,805,200	1,427,900	1,374,400	-3.7
Milwaukee County	88,546,000	52,141,000	53,025,000	52,333,400	38,952,200	37,944,400	-2.6
City of Racine	2,907,000	526,000	1,829,000	1,437,200	1,248,500	1,093,100	-12.4
City of Waukesha	451,000	227,000	434,000	633,900	620,300	639,900	3.2
Subtotal	93,780,000	53,397,000	56,416,000	56,209,700	42,248,900	41,051,800	-2.8
Intercounty							
Kenosha-Racine-Milwaukee Counties	230,000 <sup>b</sup>	153,000	82,000	81,400	82,900	83,000	0.1
Ozaukee-Milwaukee Counties	127,000	64,000		91,600	113,900	117,500	3.2
Washington-Milwaukee Counties				67,500	127,600	127,500	0.1
Waukesha-Milwaukee Counties	534,000 <sup>b</sup>	240,000	290,000	667,700	500,200	496,200	-0.8
Western Kenosha County					15,000	18,100	20.7
Subtotal	891,000	457,000	372,000	908,200	839,600	842,300	0.3
Total Bus Systems	94,671,000	53,854,000	56,788,000	57,117,900	43,088,500	41,894,100	-2.8
Shared-Ride Taxi Systems							
City of Hartford			8,000	20,800	21,000	20,500	-2.4
Ozaukee County				57,300	79,900	90,800	13.6
City of Port Washington <sup>c</sup>				23,200	20,200	b	-100.0
Washington County				52,300	99,600	92,900	-6.7
City of West Bend				134,400	123,000	119,800	-2.6
City of Whitewater			38,000	19,700	32,800	31,900	-2.7
Subtotal			46,000	307,700	376,500	355,900	-5.5
Region Total	94,671,000	53,854,000	56,834,000	57,425,600	43,465,000	42,250,000	-2.8

<sup>&</sup>lt;sup>a</sup>From June of 2012 through January of 2013, Racine County operated a cross-county shuttle with Federal Section 5317 New Freedom funding. Called the Racine County Link, the service was open to the general public and was designed to serve cross-county trips between the City of Racine, the Village of Union Grove, and the Burlington/Rochester areas. Ridership on The Link was only about 450 revenue passengers during 2012 and Racine County eliminated the service in January 2013 because of its low ridership.

### Fixed-Route Bus Ridership

The total reported ridership on fixed-route public bus services declined from about 43.1 million revenue passengers in 2011 to 41.9 million revenue passengers in 2012, a decrease of nearly 3 percent (see Table 13 and Figures 21 through 29 for individual system data).

### Shared Ride Taxi Ridership

The total reported ridership on shared-ride public taxi services declined from about 377,000 in 2011 to

about 356,000 in 2012, a decrease of about 5 percent (see Table 13 and Figures 30 through 34 for individual system data).

### Paratransit Vehicle Ridership

Paratransit vehicles serve disabled persons unable to use fixed-route bus services. During 2012, about 653,100 one-way trips were made on paratransit services in the Region, a significant decline of about 32 percent from the 957,400 one-way trips made during 2011 (see Table 14 for individual system

<sup>&</sup>lt;sup>b</sup>The ridership figures shown in this table reflect transit revenue passengers as reported to the Wisconsin Department of Transportation by each transit operator. Since 1978, the annual revenue ridership figures reported to the State by the urban bus systems have included transfer trips made by passengers using a transit pass instead of a transfer slip to transfer between bus routes. The bus ridership figures shown here are somewhat higher than the estimates of linked transit passenger trips reported in other published Commission documents and reports. Linked passenger trips approximate the number of one-way trips made on the transit system between specific origins and destinations with transit passengers being counted only once for each origin and destination. Transfers between bus routes are not counted as they are a continuation of a single trip. By way of comparison with the transit revenue passengers shown in this table, the Commission estimated the total annual linked transit passenger trips in the Region at about 34.5 million in 2012 and 2011 and about 48.4 million in 1991.

<sup>&</sup>lt;sup>c</sup>The shared-ride taxi service operated by the City of Port Washington was merged with the Ozaukee County Taxi Service at the end of 2012.

Figure 21

TRANSIT REVENUE RIDERSHIP
CITY OF KENOSHA TRANSIT SYSTEM

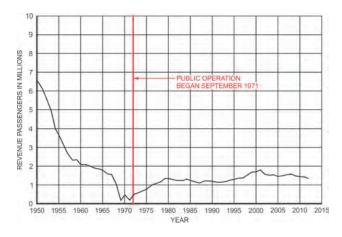
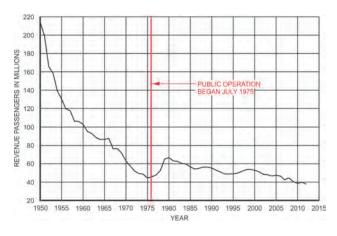


Figure 22

TRANSIT REVENUE RIDERSHIP
MILWAUKEE COUNTY TRANSIT SYSTEM

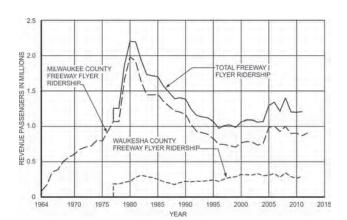


data). This decrease may be attributed to educational efforts made by Milwaukee County to encourage disabled persons to reduce their out-of-pocket costs by using the fixed-route bus system, rather than Transit Plus, the Milwaukee County paratransit system, and to human service agencies using alternate transportation services.

### Metra Ridership

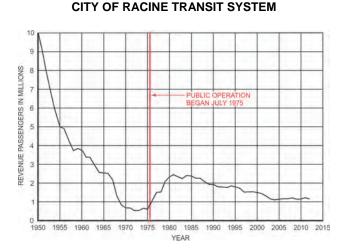
Metra operates eight trains on weekdays, five trains on Saturdays, and three trains on Sundays and holidays from the Kenosha station to the Chicago Loop. The base one-way fare is \$8.25. For regular riders who use the service 20 days per month, a \$235 monthly pass reduces the fare to \$5.88 per trip.

Figure 23
FREEWAY FLYER RIDERSHIP: MILWAUKEE



AND WAUKESHA COUNTY TRANSIT SYSTEMS

Figure 24
TRANSIT REVENUE RIDERSHIP



Metra last reported 842 average weekday departures/arrivals in 2006, an increase of about 60 percent over the period 1995-2006.

### Amtrak Ridership

Amtrak operates seven Hiawatha trains on weekdays and Saturdays and six trains on Sundays from Milwaukee to the Chicago Loop. The base one-way fare is \$24. For regular riders who use the service 20 days per month, a \$390 monthly pass reduces the fare to \$9.75 per trip. Over the 10-year period 2003-2012, annual ridership increased by about 92 percent to a level of about 832,500 passengers. In 2012, the State of Wisconsin provided about \$6 million to support Hiawatha operating services.

Figure 25

TRANSIT REVENUE RIDERSHIP
CITY OF WAUKESHA TRANSIT SYSTEM

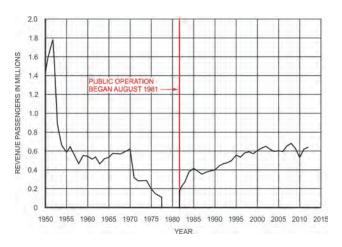
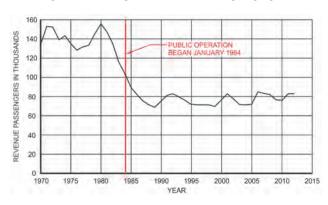


Figure 26

### TRANSIT REVENUE RIDERSHIP: KENOSHA-RACINE-MILWAUKEE AREA TRANSIT SYSTEM



### Bus and Taxi Vehicle Miles of Service

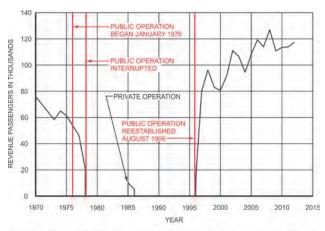
The number of vehicle-miles operated in revenue service by bus and taxi in the Region during 2012 totaled about 22.4 million, representing a decrease of less than 1 percent from the 22.6 million vehicle-miles operated during 2011 (see Figure 35 and Table 15 for individual system data).

### **Bus Vehicle Age and Reliability**

The average age of buses operated by transit operators in the Region in 2011 was 7.7 years, about the same as 2010. The number of transit service calls for those buses decreased by about 2 percent, from 3,351 in 2010 to 3,283 in 2011. Over the same period of time, the average revenue vehicle-miles

Figure 27

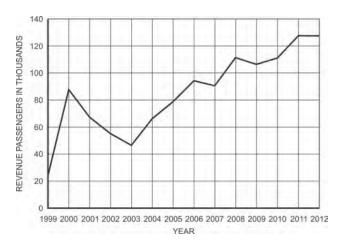
### TRANSIT REVENUE RIDERSHIP OZAUKEE COUNTY EXPRESS BUS SYSTEM



NOTE: THE GRAPH REFLECTS TWO PERIODS OF PUBLIC OPERATION: FROM JANUARY 1976 THROUGH JUNE 1978 DURING WHICH OZAUKEE COUNTY PROVIDED STATE AND COUNTY FUNDS TO A PRIVATE TRANSIT OPERATOR, WISCONSIN COACH LINES, INC., FOR AN EXISTING COMMUTER BUS ROUTE BETWEEN OZAUKEE AND MILWAUKEE COUNTIES: AND FROM AUGUST 1996 FORWARD DURING WHICH THE COUNTY HAS PROVIDED FEDERAL, STATE AND COUNTY FUNDS FOR A NEW COMMUTER BUS SERVICE BETWEEN THE TWO COUNTIES, FOR ABOUT NIRE MONTHS IN 1985 AND 1986, DIFFERENT PRIVATE COMPANY, OZAUKEE METROPOLITAN TRANSIT, PROVIDED COMMUTER BUS SERVICE BETWEEN THE TWO COUNTIES WITHOUT ANY PUBLIC SPONSORSHIP OR FUNDING.

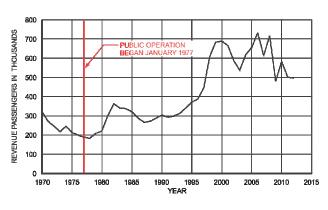
Figure 28

### TRANSIT REVENUE RIDERSHIP WASHINGTON COUNTY EXPRESS BUS SYSTEM



travelled between service calls decreased slightly, from 6,017 in 2010 to 6,000 in 2011. A service call is defined as any repair made to a bus correcting a mechanical failure that either prevents the bus from completing a scheduled revenue trip or from starting its next scheduled revenue trip.

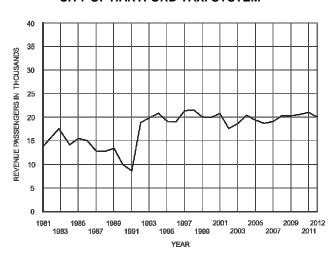
Figure 29
TRANSIT REVENUE RIDERSHIP



**WAUKESHA COUNTY TRANSIT SYSTEM** 

Figure 30

### TRANSIT REVENUE RIDERSHIP CITY OF HARTFORD TAXI SYSTEM



### **Transit Fares**

Fares for the Region's transit operators are presented in Table 16. Two transit operators raised fares in 2012:

- The base adult cash fare for local service provided by the City of Racine Belle Urban System increased by \$0.50 from \$1.50 to \$2.00 per one-way trip in January 2012. Fares in the other categories offered on the system were also increased.
- The base adult cash fare for commuter service provided by the Washington County Commuter Express bus system increased by \$0.50 from \$3.25 to \$3.75 per one-way trip in January 2012. Fares in the other categories offered on the system were also increased.

Figure 31

### TRANSIT REVENUE RIDERSHIP OZAUKEE TAXI SYSTEM

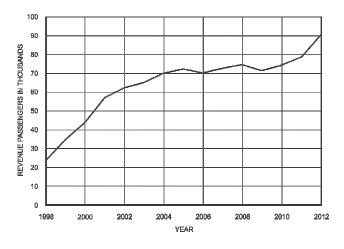
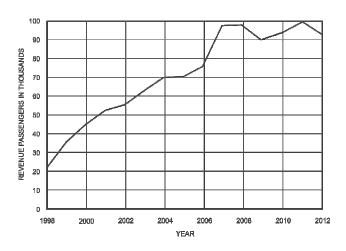


Figure 32

### TRANSIT REVENUE RIDERSHIP WASHINGTON COUNTY TAXI SYSTEM



### **Operating Assistance**

Public transit operating assistance in the Region, exclusive of Metra and Amtrak services, totaled about \$141.5 million in 2011, the most recent year for which data is available, virtually unchanged from 2010 (see Table 15 for individual system data). Table 17 also provides for each system the public subsidy provided per ride.

# Park-Ride Facilities and Transit Stations **Number and Location**

Progress in providing the 73 park-ride lots and transit stations recommended in the regional

Figure 33

TRANSIT REVENUE RIDERSHIP
CITY OF WEST BEND TRANSIT SYSTEM

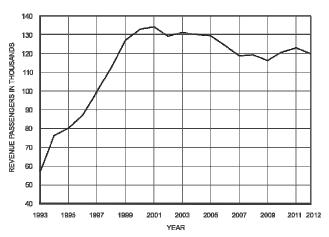


Figure 34

TRANSIT REVENUE RIDERSHIP
CITY OF WHITEWATER TRANSIT SYSTEM

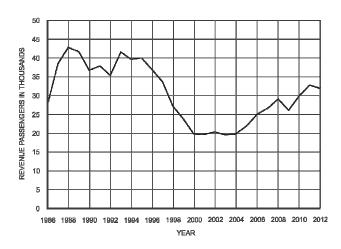


Table 14

REPORTED PARATRANSIT RIDERSHIP FOR FIXED-ROUTE TRANSIT SYSTEMS IN THE REGION

			Paratransit Trips		
Transit Operator	1991	2001	2011	2012	Percent Change 2011-2012
City of Kenosha	13,100	17,200	22,700	22,700	0.0
Milwaukee County	388,200	1,027,000	876,500	572,100	-34.7
City of Racine	32,900	19,600	31,500	32,400	2.9
City of Waukesha	11,000	13,000	18,400	16,800	-8.7
Waukesha County	1,200	11,200	8,300	9,100	9.6
Region Total	446,400	1,070,800	957,400	653,100	-31.8

Figure 35
HISTORICAL TREND IN ANNUAL PUBLIC TRANSIT VEHICLE-MILES OF SERVICE IN THE REGION

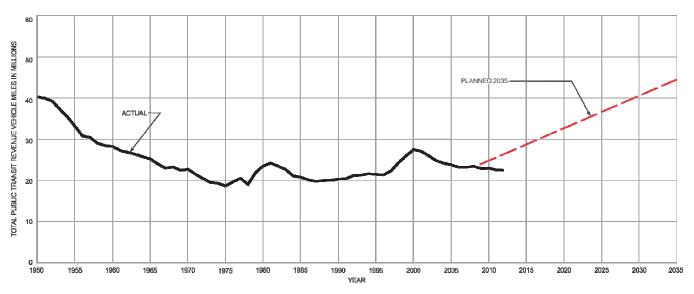


Table 15

REPORTED PUBLIC TRANSIT REVENUE VEHICLE MILES OF SERVICE IN THE REGION

	1						
			Revenue	e Vehicle Miles o	f Service		
Transit Services	1963	1972	1991	2001	2011	2012	Percent Change 2011-2012
Fixed Route Bus Systems							
Intracounty							
City of Kenosha	764,200	309,900	735,300	1,163,800	983,300	875,700	-10.9
Milwaukee County	24,279,300	18,883,700	17,161,200	19,246,100	15,291,600	15,509,700	1.4
City of Racine	1,099,800	461,600	1,258,500	1,416,400	1,120,200	1,102,100	-1.6
City of Waukesha	175,300	85,200	519,400	861,000	705,100	710,100	0.7
Subtotal	26,318,600	19,740,400	19,674,400	22,687,300	18,100,200	18,197,600	0.5
Intercounty							
Kenosha-Racine-Milwaukee Counties	N/A	N/A	253,300	381,600	265,000	240,400	-9.3
Ozaukee-Milwaukee Counties	N/A	110,000		224,200	179,100	182,400	1.8
Washington-Milwaukee Counties				339,800	254,400	248,900	-2.2
Waukesha-Milwaukee Counties	1,016,000	328,300	375,200	1,258,800	661,100	512,300	-22.5
Western Kenosha County					238,100	238,100	0.0
Subtotal	1,016,000	438,300	628,500	2,204,400	1,597,700	1,422,100	-11.0
Total Bus Systems	27,334,600	20,178,700	20,302,900	24,891,700	19,697,900	19,619,700	-0.4
Shared-Ride Taxi Systems							
City of Hartford			24,700	44,500	55,200	56,900	3.1
Ozaukee County				734,400	963,800	1,026,900	6.5
City of Port Washington				82,600	82,600	<sup>a</sup>	-100.0
Washington County				902,900	1,342,400	1,258,900	-6.2
City of West Bend				432,200	349,800	396,900	13.5
City of Whitewater			78,900	58,700	72,400	75,700	4.6
Subtotal			103,600	2,255,300	2,866,200	2,815,300	-1.8
Region Total	27,334,600	20,178,700	20,406,500	27,147,000	22,564,100	22,435,000	-0.6

<sup>&</sup>lt;sup>a</sup>The shared-ride taxi service operated by the City of Port Washington was merged with the Ozaukee County Taxi Service in January 2012.

Table 16

BASE ADULT FARES CHARGED BY PUBLIC TRANSIT SYSTEMS IN THE REGION 2011 AND 2012

	Fares Charged	Per One-way Trip	
Transit System	2011	2012	Change 2011-2012
Fixed Route Bus Systems			
Intracounty			
City of Kenosha	\$1.50	\$1.50	
Milwaukee County	\$2.25	\$2.25	
City of Racine	\$1.50	\$2.00	\$0.50
City of Waukesha	\$2.00	\$2.00	
Intercounty			
Kenosha-Racine-Milwaukee Counties	\$1.25-\$4.25	\$1.25-\$4.25	
Ozaukee-Milwaukee Counties	\$3.25	\$3.25	
Washington-Milwaukee Counties	\$3.25	\$3.75	\$0.50
Waukesha-Milwaukee Counties	\$3.25-\$4.00	\$3.25-\$4.00	
Western Kenosha County	\$2.00-\$3.00	\$2.00-\$3.00	
Shared-Ride Taxi Systems			
City of Hartford	\$2.75	\$2.75	
Ozaukee County	\$2.75-\$6.50	\$2.75-\$6.50	
City of Port Washington	\$3.25	a	<sup>a</sup>
Washington County	\$4.00-\$8.75	\$4.00-\$8.75	
City of West Bend	\$3.50	\$3.50	
City of Whitewater	\$3.00	\$3.00	

<sup>&</sup>lt;sup>a</sup>The service operated by the City of Port Washington was merged with the Ozaukee County Taxi Service in January 2012.

Table 17

PUBLIC TRANSIT OPERATING ASSISTANCE WITHIN THE REGION: 2010-2011

			Public	Transit Operatir	ng Assistance (	dollars)		
		2010 Actua	I/Estimated		,	2011 Actua	al/Estimated	
Transit Services	Federal	State	Local	Total	Federal	State	Local	Total
Fixed Route Bus Systems								
Intracounty								
City of Kenosha	2,320,000	1,662,200	1,497,500	5,479,700	2,246,800	1,890,100	1,468,200	5,605,100
Milwaukee County	25,950,300	72,975,700	16,497,100	115,423,100	20,590,200	77,189,800	16,915,000	114,695,000
City of Racine	2,576,600	1,813,900	1,560,000	5,950,500	2,494,700	1,878,400	1,606,700	5,979,800
City of Waukesha	591,300	2,360,700	1,232,700	4,184,700	513,900	2,325,900	1,346,800	4,186,600
Subtotal	31,438,200	78,812,500	20,787,300	131,038,000	25,845,600	83,284,200	21,336,700	130,466,500
Intercounty								
Kenosha-Racine-Milwaukee Counties		714,500	224,400	938,900		714,500	266,100	980,600
Ozaukee-Milwaukee Counties	103,000	507,800	258,800	869,600	109,300	521,300	249,400	880,000
Washington-Milwaukee Counties	208,600	480,100	56,800	745,500	233,400	592,100	52,600	878,100
Waukesha-Milwaukee Counties	522,400	2,107,800	805,600	3,435,800	473,000	2,597,400	729,400	3,799,800
Western Kenosha County	473,500	106,200	37,700	617,400	418,900	73,100	28,600	520,600
Subtotal	1,307,500	3,916,400	1,383,300	6,607,200	1,234,600	4,498,400	1,326,100	7,059,100
Total Bus Systems	32,745,700	82,728,900	22,170,600	137,645,200	27,080,200	87,782,600	22,662,800	137,525,600
Shared-Ride Taxi Systems								
City of Hartford	82,400	66,800	15,700	164,900	81,400	71,000	13,300	165,700
Ozaukee County	133,600	658,600	424,000	1,216,200	145,700	695,800	422,900	1,264,400
City of Port Washington	103,500	71,900	31,600	207,000	103,500	71,900	31,600	207,000
Washington County	387,400	891,300	402,700	1,681,400	401,000	1,017,300	389,800	1,808,100
City of West Bend	336,600	337,600		674,200	215,300	215,200		430,500
City of Whitewater	66,200	59,100	7,100	132,400	66,900	60,700	6,200	133,800
Subtotal	1,109,700	2,085,300	881,100	4,076,100	1,013,800	2,131,900	863,800	4,009,500
Region Total	33,855,400	84,814,200	23,051,700	141,721,300	28,094,000	89,914,500	23,526,600	141,535,100

			Public Trar	nsit Operating A	ssistance per R	ide (dollars)		
		2010 Actua	al/Estimated			2011 Actua	al/Estimated	
Transit Services	Federal	State	Local	Total	Federal	State	Local	Total
Fixed Route Bus Systems								
Intracounty								
City of Kenosha	\$ 1.58	\$1.13	\$1.02	\$ 3.73	\$ 1.57	\$ 1.32	\$1.04	\$ 3.93
Milwaukee County	0.67	1.89	0.43	2.99	0.53	1.98	0.43	2.94
City of Racine	2.24	1.57	1.35	5.16	2.00	1.50	1.29	4.79
City of Waukesha	1.11	4.44	2.32	7.87	0.83	3.75	2.17	6.75
Weighted Average	0.75	1.89	0.50	3.14	0.61	1.97	0.51	3.09
Intercounty								
Kenosha-Racine-Milwaukee Counties		9.39	2.95	12.34		8.62	3.21	11.83
Ozaukee-Milwaukee Counties	0.91	4.47	2.27	7.65	0.96	4.58	2.19	7.73
Washington-Milwaukee Counties	1.88	4.32	0.50	6.70	1.83	4.64	0.41	6.88
Waukesha-Milwaukee Counties	0.90	3.62	1.37	5.89	0.95	5.19	1.46	7.60
Western Kenosha County	32.88	7.38	2.62	42.88	27.93	4.87	1.91	34.71
Weighted Average	1.46	4.36	1.54	7.36	1.47	5.36	1.58	8.41
Total Bus Systems	0.77	1.94	0.51	3.22	0.63	2.04	0.52	3.19
Shared-Ride Taxi Systems								
City of Hartford	4.00	3.24	0.76	8.00	3.88	3.38	0.63	7.89
Ozaukee County	1.79	8.83	5.68	16.30	1.82	8.71	5.29	15.82
City of Port Washington	5.39	3.74	1.65	10.78	5.12	3.56	1.57	10.25
Washington County	4.12	9.48	4.29	17.89	4.03	10.21	3.91	18.15
City of West Bend	2.80	2.80		5.60	1.75	1.75		3.50
City of Whitewater	2.23	1.99	0.24	4.46	2.04	1.85	0.19	4.08
Weighted Average	3.10	5.82	2.45	11.37	2.69	5.66	2.30	10.65
Region Weighted Average	\$ 0.79	\$1.97	\$0.53	\$ 3.29	\$ 0.65	\$ 2.07	\$0.54	\$ 3.26

transportation plan is summarized on Map 25. In 2012, there were 53 park-ride lots in the Region, one less than in 2011. Service was discontinued to the Washington County Fair Park lot at the end of 2011. Of the 53 existing park-ride lots and transit stations in 2012, 39 were served by rapid transit service and 14 were used exclusively by carpoolers. Eight of the 53 park-ride lots and transit stations were shared-use facilities that were not specifically constructed to serve as a park-ride lot, such as a parking lot at a private retail business or a municipal parking lot or ramp.

### Capacity and Use

Table 18 provides data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 2012 at all park-ride lots and transit stations. The total number of spaces available at park-ride lots in the Region was 7,360 in 2012, including 6,695 at park-ride lots served by transit and 665 at the lots not served by transit. Of the 6,695 spaces available at the 39 parkride lots served by transit, 2,754 spaces were used on an average weekday during 2012, a utilization rate of about 44 percent. Of the 665 spaces available at the lots not served by transit, 307 spaces were utilized during 2012, a utilization rate of about 46 percent. Eight lots had utilization rates of 100 percent or higher, indicating they were at or over their rated capacity.

### Pavement and Bridge Conditions State Trunk Highway Pavements

All State trunk highways, including interstate highways, are assessed on the basis of the International Roughness Index (see Figure 36) with the results reported by the Wisconsin Department of Transportation at three-year intervals (see Table 19). In 2012, slightly over 80 percent of the state trunk highway system in the Region was determined to have few or no ride problems, a proportion that changed little over the six year period 2006-2012. This would indicate that, at least in recent years, from 15-20 percent of the state trunk highway system in the Region at any point in time experiences moderate to severe ride problems, with those highway segments being targeted by WisDOT in highway improvement programming efforts for the years ahead. The results of the 2012 pavement condition assessment in southeastern Wisconsin by state trunk highway facility are shown on Map 26.

### County and Local Arterial Road Pavements

State law requires counties and local municipalities to rate their arterial street and highway systems every two years. Counties and local municipalities uniformly use the Pavement Surface and Evaluation Rating (PASER) System (see Figure 37). The results of these ratings for the years 2005, 2007, and 2011 are shown in Table 20. The results of the 2011 rating by arterial facility are shown on Map 27. Over this six-year period 2005-2011, the collective number of miles of county and local arterials with PASER ratings one or two-those classifications that indicate severe deterioration and a need for reconstruction—significantly decreased from about 6 percent of all county and local arterials in 2005 to about 4 percent in 2011. This particular finding pertains, however, only to county and local arterial streets and highways, and does not include local non-arterial roads that have the primary function of providing access to properties.

### **Bridge Structures**

The condition of bridges is determined by a rating system having a scale of 0-100 (see Figure 38). The ratings for bridge structures located in the Region for 2006, 2010, and 2012 are shown in Table 21, while the 2012 ratings for individual bridge structures in the Region are shown on Map 28. The number of bridges in the Region having a rating less than 50, and therefore in need of replacement has declined by about 12 percent over the last six years. Similarly, the number of bridge structures with a rating from 50 to 80, indicating a need for rehabilitation, has declined by nearly 10 percent over that same sixyear period.

### **Traffic Congestion and Travel Times**

• Vehicle Miles of Travel: Table 22 presents the average weekday vehicle-miles of travel (AWDVMT) in the Region in 2008. The table shows that while freeways in the Region comprise a total of about 269 miles, representing only about 8 percent of the total arterial street and highway system, those freeway facilities carry about 38 percent of the over 43 million AWDVMT daily on the arterial system. Table 23 presents historical growth rates by county

**Map 25** 

### EXISTING AND PROPOSED PARK-RIDE LOTS AND TRANSIT STATIONS LOCATED WITHIN SOUTHEASTERN WISCONSIN

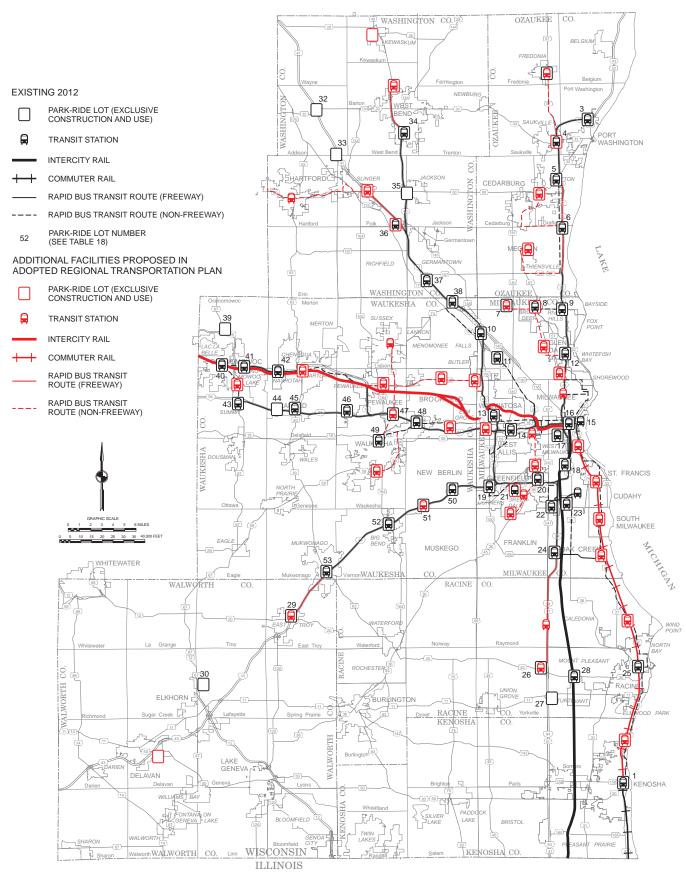


Table 18

AVERAGE WEEKDAY USE OF PARK-RIDE LOTS AND TRANSIT STATIONS: 2012

Number On Map 25	Location	Served by Transit	Not served by Transit	Shared Use	Available Parking Spaces	Autos Parked on an Average Weekday: 2012	Percent of Spaces Used
1	Kenosha County Metra Station (Kenosha)	x		x	145	<sup>a</sup>	<sup>a</sup>
	Ozaukee County						
2	STH 57 and CTH H (Fredonia)		X		60	10	17
3	IH 43 and STH 32-CTH H (Port Washington)	X			50	82	174
4	Wal-Mart (Saukville)	X		X	50	13	25
5	IH 43 and CTH V (Grafton)	X			85	30	35
6	IH 43 and CTH C (Grafton)	X			65	87	134
	Milwaukee County						
7	STH 100 and N. 85th Street (Milwaukee)		X		100	<sup>a</sup>	a
8	Kohl's (Brown Deer)	X		X	130	57	44
9	Brown Deer (River Hills)	X			360	98	27
10	W. Good Hope Road (Milwaukee)	X			135	36	27
11	Timmerman Field (Milwaukee)	X			140	6	4
12	North Shore (Glendale)	X			195	98	50
13	W. Watertown Plank Road (Wauwatosa)	X			240	90	38
14	State Fair Park (Milwaukee)	X			285	186	65
15	Downtown Milwaukee Intermodal Amtrak Station	X			240	<sup>a</sup>	a
16	Milwaukee County Transit System Downtown Transit Center (Milwaukee)	Х		X	b	a	a
17	National Avenue and IH 43/94 (Milwaukee)	X		X	55	<sup>a</sup>	<sup>a</sup>
18	W. Holt Avenue (Milwaukee)	X			235	87	37
19	Whitnall (Hales Corners)	X			360	205	57
20	W. Loomis Road (Greenfield)	X			410	75	18
21	Southridge (Greendale)	X		X	170	57	33
22	W. College Avenue (Milwaukee)	X			650	257	40
23	Mitchell Airport Amtrak Station (Milwaukee)	X			280	178	64
24	W. Ryan Road (Oak Creek)	Х			305	164	54
	Racine County						
25	Racine Metro Transit Center (Racine)	X			120	a	<sup>a</sup>
26	IH 94 and STH 20 (Ives Grove)		X		75	65	87
27	IH 94 and STH 11 (Mount Pleasant)		X		60	48	47
28	Sturtevant Amtrak Station (Sturtevant)	X			180	<sup>a</sup>	<sup>a</sup>
	Walworth County						
29	East Troy Municipal Airport (East Troy)		X		40	7	18
30	USH 12 and STH 67 (Elkhorn)		X		40	13	33
31	USH 12 and CTH P (Genoa City)		X		40	10	25
	Washington County						
32	USH 41 and STH 33 (Allenton)		X		35	48	137
33	USH 41 and CTH K (Addison)		X		50	11	22
34	USH 45 and Paradise Drive (West Bend)	X			100	123	123
35	STH 60 and CTH P (Jackson)		X		30	10	33
36	Pioneer Road and Mayfield Road (Richfield)	X			30	67	223
37	USH 41 and Lannon Road (Germantown)	X			100	132	132
	Waukesha County						
38	Pilgrim Road (Menomonee Falls)	X			70	36	51
39	STH 67 and Lang Road (Oconomowoc)		X		35	6	17
40	Collins Street Parking Lot (Oconomowoc)	X		X	b	<sup>a</sup>	a
41	STH 16 and CTH P (Oconomowoc)	X			45	9	20
42	STH 16 and CTH C (Nashotah)	X			60	13	22
43	STH 67 and CTH C (Deleticld)	X	_		100	56 25	56
44 45	IH 94 and CTH C (Delafield)IH 94 and STH 83 (Delafield)	x	×		30 200	25 70	83 35
46	IH 94 and CTH G/CTH SS (Pewaukee)	x			245	69	28
47	IH 94 and CTH F (Pewaukee)	'`	X		85	35	41
48	Goerke's Corners (Brookfield)	X			315	216	69
49	Waukesha Metro Transit	,		V	b	a	a
50	Downtown Transit Center (Waukesha)IH 43 and Moorland Road (New Berlin)	X X		X	175	33	ª 19
51	IH 43 and CTH Y (New Berlin)	^	×		45	19	42
52	IH 43 and STH 164 (Big Bend)	X	^		145	54	37
53	IH 43 and STH 83 (Mukwonago)	X			165	66	40
	Total				7,360	3,061	42
				_			

<sup>&</sup>lt;sup>a</sup>Data not available.

<sup>&</sup>lt;sup>b</sup>Parking available within larger public lot or structure.

Table 19
STATE TRUNK HIGHWAY PAVEMENT CONDITION IN THE REGION: 2006, 2009, AND 2012

	2006		20	09	20	12
International Roughness Index	State Trunk Highway (Miles)	Percent of Total	State Trunk Highway (Miles)	Percent of Total	State Trunk Highway (Miles)	Percent of Total
0.00 to 2.50	916	74.2	883	71.4	927	74.8
2.50 to 2.75	76	6.2	89	7.2	78	6.3
2.75 to 3.00	61	4.9	64	5.2	59	4.8
3.00 to 12.00	161	13.0	176	14.2	166	13.4
No Rating	20	1.6	25	2.0	9	0.7
Total	1,234	100.0	1,237	100.0	1,239	100.0

Figure 36
INTERNATIONAL ROUGHNESS INDEX
PAVEMENT RATING SYSTEM USED ON
STATE TRUNK HIGHWAYS IN WISCONSIN

International Roughness Index	Ride Assessment
0.00-2.50	No ride problems
2.50-2.75	Minor ride problems
2.75-3.00	Moderate ride problems
3.00-12.00	Severe ride problems

Roadway surface roughness data is obtained by the use of special equipment to physically measure the longitudinal profile of a roadway.

within Southeastern Wisconsin, which shows a decline in the average annual rate of increase in AWDVMT. The relative annual change in AWDVMT are consistent with historical changes in vehicle-miles of travel nationally. The growth in vehicle-miles of travel was attributed to a growth in person-trip making due to increases in the number of households and jobs. A decline in vehicle occupancy is due to growth in vehicle availability and changes in population lifestyles including household size and an increase in vehicle trip length.

 Congestion on Arterial Street and Highway <u>System</u>: Traffic congestion on the arterial street and highway system may be categorized as moderate, severe, or extreme with each level described by travel speed, operating conditions, and level of service, as shown in Table 24. The freeway system represents less than 10 percent of total arterial system mileage, but carries nearly 40 percent of total regional average weekday vehicle-miles of travel. A much greater proportion of the freeway system—as compared to the surface arterial street system—experiences extreme and severe peak hour traffic congestion, and experiences traffic congestion during hours of the weekday other than the peak traffic hours. Table 25 and Map 29 present the existing level of traffic congestion experienced in the year 2008 on the arterial street and highway system, and compare that level of congestion to the level experienced in 2001. Traffic congestion did not significantly change between 2001 and 2008.

Table 26 and Figure 39 compare the estimated change in traffic congestion on the arterial street and highway system over the years 1963, 1972, 1991, 2001, 2005, and 2008. The miles of arterials experiencing traffic congestion declined from 217 miles in 1963 to 160 miles in 1972, even though traffic increased during that period by over 50 percent. The decline in traffic congestion may be attributed to the completion of the freeway system during that period. Between 1972 and 1991, the miles of arterials experiencing traffic congestion is estimated to have increased from 160 miles to 273 miles, as traffic increased during that period by nearly 65 percent, as regional employment and households increased by about 30 percent, and vehicle occupancy and carpooling significantly declined. The decline in vehicle occupancy from an average of 1.39 persons per vehicle to 1.22



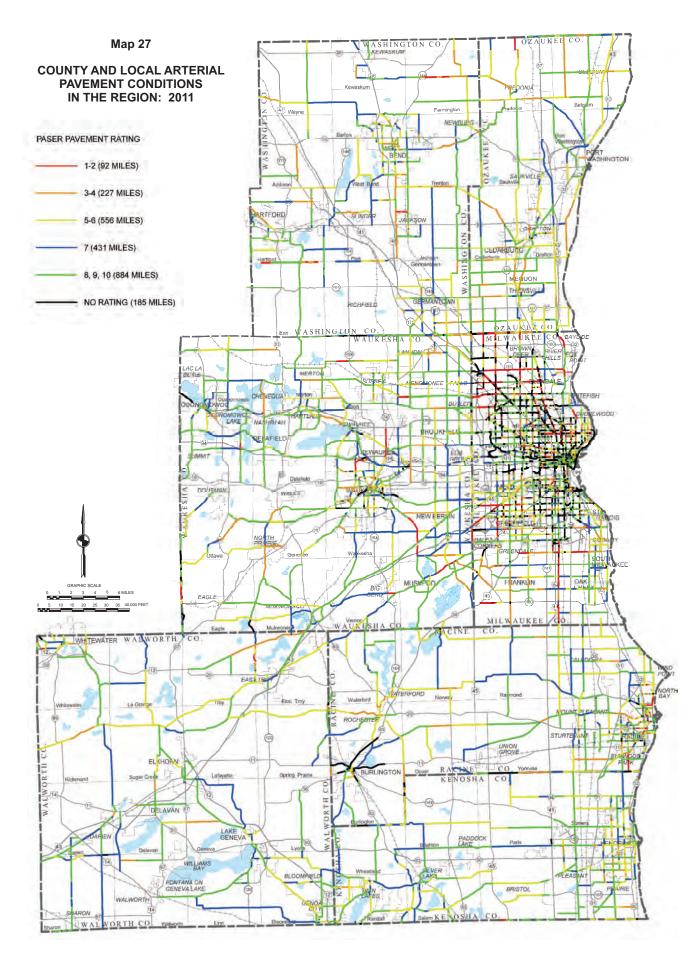


Table 20

COUNTY AND LOCAL ARTERIAL STREET AND HIGHWAY PAVEMENT CONDITION IN THE REGION: 2005, 2007, AND 2011

	20	05	20	07	2011		
PASER Pavement Rating	Local and County Arterial (Miles)	Percent of Total	Local and County Arterial (Miles)	Percent of Total	Local and County Arterial (Miles)	Percent of Total	
1 and 2	132	5.7	81	3.5	92	3.9	
3 and 4	233	10.2	212	9.2	227	9.6	
5 and 6	431	18.8	561	24.5	556	23.4	
7	376	16.4	423	18.4	431	18.1	
8, 9, and 10	907	39.5	846	36.9	884	37.2	
No Rating	215	9.4	171	7.5	185	7.8	
Total	2,294	100.0	2,294	100.0	2,375	100.0	

Table 21

SUFFICIENCY RATINGS FOR BRIDGE STRUCTURES
IN THE REGION: 2006, 2010, AND 2012

		Percent Change		
Sufficiency Rating	2006	2010	2012	2006-2012
Less than 50.0	98	68	86	-12.2
50.0 to 79.9	520	506	469	-9.8
80.0 to 100.0	1,244	1,313	1,363	9.6
Total	1,862	1,887	1,918	3.0

Figure 37

PAVEMENT SURFACE AND EVALUATION RATING (PASER) SYSTEM USED ON COUNTY AND LOCAL ROADS IN WISCONSIN

	ace Assessment tion Rating	Maintenance or Repair
Number	Classification	Requirements
1	Failed	Severely Deteriorated; Requires
2	Very Poor	Reconstruction
3	Poor	Structural Improvement such as
4	Fair	Recycling or Overlay
5	Fair	Preservation Treatments such as
6	Good	Sealcoating or Overlays
7	Good	Routine Maintenance such as crack filling
8	Very Good	Little to no Maintenance Required
9	Excellent	
10	Excellent	
The identified ma	aintenance or repair req	uirements apply to asphalt roads;

similar requirements exist for concrete roads.

Figure 38

### BRIDGE STRUCTURE SUFFICIENCY RATING SYSTEM USED IN WISCONSIN

Sufficiency Rating	Relationship to Federal Funding Eligibility for Rehabilitation or Replacement
Less than 50.0	Eligible for replacement funding
50.0 to 79.9	Eligible for rehabilitation funding
80.0 to 100.0	Not eligible for funding

Each bridge is rated from 0 to 100, with 0 being a failing structure and 100 being a structure in perfect condition. Ratings are based on four factors; structural adequacy and safety; serviceability and functional obsolescence; essentiality for public use; and special reductions.

persons per vehicle alone is estimated to have resulted in nearly a 15 percent increase in vehicle traffic. As well, limited transportation system improvement and expansion was com-

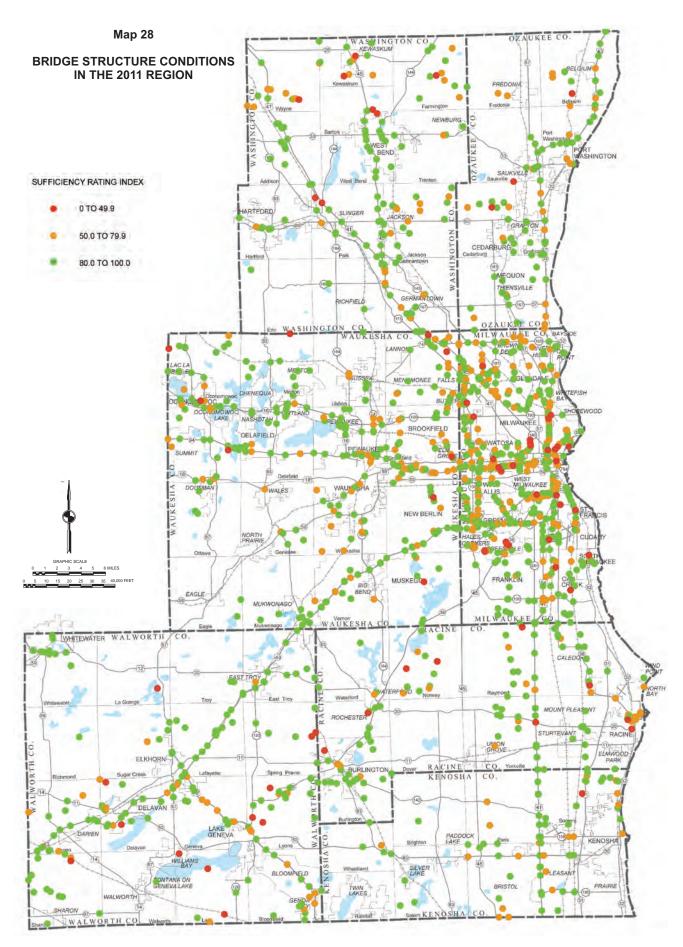


Table 22

ARTERIAL VEHICLE-MILES OF TRAVEL WITHIN THE REGION ON
AN AVERAGE WEEKDAY BY COUNTY: 1963, 1972, 1991, 2001, 2005, AND 2008

		Free	eway	Standard	d Arterial		
		Vehicle-Miles of		Vehicle-Miles of		Total Vehicle	
		Travel		Travel		Miles of Travel	
Year	County	(thousands)	Percent of Total	(thousands)	Percent of Total	(thousands)	
1963	Kenosha	204	21.7	734	78.3	938	
	Milwaukee	531	7.2	6,817	92.8	7,348	
	Ozaukee	20	4.1	464	95.9	484	
	Racine	203	18.0	922	82.0	1,125	
	Walworth			685	100.0	685	
	Washington	345	49.6	351	50.4	696	
	Waukesha	159	8.9	1,637	91.1	1,796	
	Region	1,462	11.2	11,610	88.8	13,072	
1972	Kenosha	382	26.8	1,046	73.2	1,428	
	Milwaukee	3,977	37.2	6,718	62.8	10,695	
	Ozaukee	223	26.2	627	73.8	850	
	Racine	415	22.9	1,398	77.1	1,813	
	Walworth	56	6.4	817	93.6	873	
	Washington	190	16.5	961	83.5	1,151	
	Waukesha	970	29.3	2,344	70.7	3,314	
	Region	6,213	30.9	13,911	69.1	20,124	
1991	Kenosha	675	27.0	1,825	73.0	2,500	
	Milwaukee	5,945	41.3	8,446	58.7	14,391	
	Ozaukee	762	39.2	1,180	60.8	1,942	
	Racine	708	23.9	2,258	76.1	2,966	
	Walworth	540	28.2	1,373	71.8	1,913	
	Washington	546	23.0	1,833	77.0	2,379	
	Waukesha	2,421	34.7	4,560	65.3	6,981	
	Region	11,597	35.1	21,475	64.9	33,072	
2001	Kenosha	805	25.8	2,321	74.2	3,126	
	Milwaukee	6,878	42.0	9,499	58.0	16,377	
	Ozaukee	951	42.1	1,308	57.9	2,259	
	Racine	864	25.5	2,519	74.5	3,383	
	Walworth	766	32.8	1,569	67.2	2,335	
	Washington	1,370	44.3	1,725	55.7	3,095	
	Waukesha	3,239	35.6	5,868	64.4	9,107	
	Region	14,873	37.5	24,809	62.5	39,682	
2005	Kenosha	913	26.6	2,523	73.4	3,436	
	Milwaukee	7,162	41.4	10,131	58.6	17,293	
	Ozaukee	1,008	42.9	1,344	57.1	2,352	
	Racine	948	25.7	2,744	74.3	3,692	
	Walworth	882	34.7	1,657	65.3	2,539	
	Washington	1,550	44.3	1,949	55.7	3,499	
	Waukesha	3,585	37.2	6,047	62.8	9,632	
	Region	16,048	37.8	26,395	62.2	42,443	
2008	Kenosha	961	26.8	2,623	73.2	3,584	
	Milwaukee	7,283	41.9	10,098	58.1	17,381	
	Ozaukee	1,090	42.6	1,469	57.4	2,559	
	Racine	1,041	26.3	2,923	73.7	3,964	
	Walworth	941	34.7	1,771	65.3	2,712	
	Washington	1,655	46.9	1,872	53.1	3,527	
	Waukesha	3,757	37.5	6,269	62.5	10,026	
	Region	16,728	38.2	27,025	61.8	43,753	

Table 23

AVERAGE ANNUAL GROWTH RATE OF AVERAGE WEEKDAY VEHICLE-MILES OF TRAVEL WITHIN SOUTHEASTERN WISCONSIN BY COUNTY

	Average Annual Growth Rate of Average Weekday Vehicle-Miles of Travel								
					200	00's			
County	1960's	1970's	1980's	1990's	2001 to 2005	2005 to 2008			
Kenosha	4.8	3.4	2.7	2.2	2.4	1.4			
Milwaukee	4.3	1.5	1.6	1.3	1.4	0.2			
Ozaukee	6.5	4.1	4.6	1.5	1.0	2.9			
Racine	5.4	2.7	2.5	1.3	2.2	2.4			
Walworth	2.7	5.3	3.3	2.0	2.1	2.2			
Washington	5.7	3.6	4.0	2.7	3.1	0.3			
Waukesha	7.0	4.2	3.7	2.7	1.4	1.3			
Region	4.9	2.7	2.6	1.9	1.7	1.0			

Table 24

FREEWAY AND SURFACE ARTERIAL TRAFFIC CONGESTION

	Freeway								
Level of Traffic Congestion	Level of Service	Average Speed	Operating Conditions						
None	A and B	Freeway free-flow speed	No restrictions on ability to maneuver and change lanes.						
None	С	Freeway free flow speed	Ability to maneuver and change lanes noticeably restricted.						
Moderate	D	1 to 2 mph below free flow speed	Ability to maneuver and change lanes more noticeably limited; reduced driver physical and psychological comfort levels.						
Severe	E	Up to 10 mph below free flow speed	Virtually no ability to maneuver and change lanes. Operation at maximum capacity. No usable gaps in the traffic stream to accommodate lane changing.						
Extreme	F	Typically 20 to 30 mph or less	Breakdown in vehicular flow with stop-and-go, bumper-to-bumper traffic.						

	Surface Arterial									
Level of Traffic Congestion	Level of Service	Average Speed	Operating Conditions							
None	A and B	70 to 100 percent of free flow speed	Ability to maneuver within traffic stream is unimpeded. Control delay at signalized intersections is minimal.							
None	С	50 to 100 percent of free flow speed	Restricted ability to maneuver and change lanes at midblock locations.							
Moderate	D	40 to 50 percent of free flow speed	Restricted ability to maneuver and change lanes. Small increases in flow lead to substantial increases in delay and decreases in travel speed.							
Severe	Е	33 to 40 percent of free flow speed	Significant restrictions on lane changes. Traffic flow approaches instability.							
Extreme	F	25 to 33 percent of free flow speed	Flow at extremely low speeds. Intersection congestion with high delays, high volumes, and extensive queuing.							

pleted between 1972 and 1991 in southeastern Wisconsin. The miles of arterials carrying traffic volumes exceeding their design capacity and experiencing traffic congestion is estimated to have increased modestly from 273 miles in 1991, to 290 miles in 2001, to 310 miles in 2005, and 333 miles in 2008. From 1991 to 2001, traffic is estimated to have increased by about 20 percent, and from 2001 to 2008 by

about 10 percent. The modest increase in traffic congestion from 1991 to 2008 may be attributed to the implementation of an extensive number of significant surface arterial street and highway widening and new construction projects between 1991 and 2008. The estimated modest increase in congestion between 1991 and 2008 is not uniform systemwide, as the extent and severity of congestion on the Milwaukee area freeway

Table 25

TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION BY COUNTY: 2001, 2005, AND 2008

2001

	Under or At Design		Over Design Capacity						
		acity	Moderate Congestion		Severe Congestion		Extreme Congestion		
County	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Total Mileage
Kenosha	303.2	95.5	9.9	3.1	1.5	0.5	3.0	0.9	317.6
Milwaukee	641.1	82.0	72.1	9.2	24.7	3.2	43.4	5.6	781.3
Ozaukee	244.2	97.4	4.3	1.7	1.5	0.6	0.8	0.3	250.8
Racine	341.3	96.8	9.4	2.7	0.5	0.1	1.4	0.4	352.6
Walworth	430.1	98.4	5.1	1.2	1.1	0.3	0.3	0.1	436.6
Washington	391.1	96.2	15.4	3.8					406.5
Waukesha	650.9	87.2	70.7	9.5	11.4	1.5	13.4	1.8	746.4
Region	3,001.9	91.2	186.9	5.7	40.7	1.2	62.3	1.9	3,291.8

2005

	Under or At Design		Over Design Capacity						
		acity	Moderate (	Moderate Congestion		Severe Congestion		Extreme Congestion	
County	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Total Mileage
Kenosha	303.6	94.9	12.8	4.0	1.0	0.3	2.6	0.8	320.0
Milwaukee	620.6	79.0	83.5	10.6	25.6	3.3	55.6	7.1	785.3
Ozaukee	243.4	97.0	6.6	2.6	0.1	0.0	0.7	0.3	250.8
Racine	338.1	95.9	9.3	2.6	1.1	0.3	4.1	1.2	352.6
Walworth	433.0	98.3	6.2	1.4	1.0	0.2	0.3	0.1	440.5
Washington	394.5	97.0	11.4	2.8			0.6	0.1	406.5
Waukesha	659.0	88.3	62.5	8.4	12.9	1.7	12.0	1.6	746.4
Region	2,992.2	90.6	192.3	5.8	41.7	1.3	75.9	2.3	3,302.1

2008

	Under or At Design		Over Design Capacity						
		acity	Moderate (	Moderate Congestion		Severe Congestion		Extreme Congestion	
County	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Total Mileage
Kenosha	301.1	94.0	11.9	3.7	1.5	0.5	5.6	1.8	320.0
Milwaukee	771.6	98.0	14.5	1.8	0.4		1.9	0.2	788.4
Ozaukee	223.3	89.0	20.6	8.2	2.4	1.0	4.5	1.8	250.8
Racine	189.1	52.8	84.0	23.5	30.6	8.5	54.5	15.2	358.3
Walworth	440.1	98.7	4.7	1.1			0.9	0.2	445.6
Washington	399.7	98.3	6.3	1.6			0.5	0.1	406.5
Waukesha	664.0	88.4	54.3	7.2	18.9	2.5	14.6	1.9	751.8
Region	2,988.8	90.0	196.3	5.9	53.8	1.6	82.4	2.5	3,321.4

system is estimated to have substantially increased between 1991 and 2008. Table 27, Figure 40, and Map 30 present more detail on existing and historic congestion on the freeway system, including the number of hours of congestion experienced on congested freeway segments on an average weekday.

 Congestion on Designated Truck Routes and National Highway System: Table 28 and Map 31 present the existing level of traffic congestion experienced on designated truck routes and the National Highway System in the year 2008 compared to the congestion level experienced in 2001. The State of Wisconsin maintains a truck

Map 29

CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: YEARS 2001 AND 2008

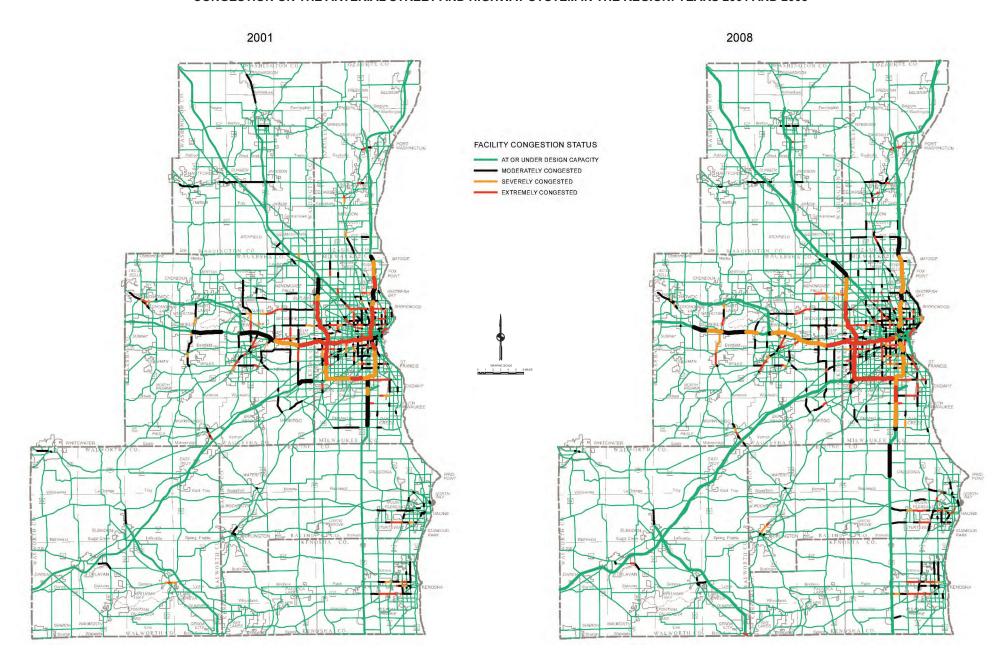


Table 26

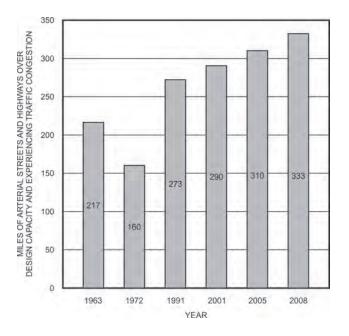
TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 1963, 1972, 1991, 2001, 2005, AND 2008

	Arterial Street and Highway Mileage					
Traffic Congestion	1963	1972	1991	2001	2005	2008
Under or At Design Capacity	2,971	2,959	2,986	3,002	2,993	2,998
Over Design Capacity and Experiencing Traffic Congestion	217	160	273	290	310	333
Total	3,188	3,119	3,259	3,292	3,303	3,321

Figure 39

TRAFFIC CONGESTION ON THE ARTERIAL
STREET AND HIGHWAY SYSTEM IN THE

STREET AND HIGHWAY SYSTEM IN THE REGION: 1963, 1972, 1991, 2001, 2005, AND 2008



operations map that identifies streets and highways for operation of vehicles and combination of vehicles for which the overall lengths cannot be limited. In addition, the truck operations map identifies restricted truck routes where the overall lengths are limited. The National Highway System (NHS) includes highways important to the nation's economy, defense, and mobility. The miles of designated truck routes and (NHS) facilities carrying traffic volumes exceeding their design capacity increased from 202 miles in 2001 to 223 miles in

2008, or by about 10 percent. As congestion on these roadways increase, the travel time of freight movement is adversely affected.

• Arterial Highway and Transit Travel Times: Map 32 compares the year 2001 and 2005 estimated peak hour travel speeds for selected freeway and surface arterial street segments. Map 16 compares estimated peak hour arterial street and highway travel time contours for years 2001 and 2005 for two locations: the Milwaukee central business district and the Milwaukee regional medical center. Year 2001 and 2005 arterial street and highway travel times are very similar, displaying little change.

Map 33 presents the ratio of total overall transit travel time to automobile travel time between selected locations during the weekday morning peak period and midday off-peak period in 2005. Transit travel time is longer than automobile travel time, because it includes not only the time spent in the transit vehicle, but also includes the time spent walking to a bus stop, waiting for a bus, transferring between routes including waiting for another bus, and walking to a destination. Much of the transit out-of-vehicle time is related to waiting time for each bus used. Automobile travel time includes the time spent in vehicle parking and walking between parking location and trip origin and destination.

The travel time ratios developed for travel between the selected locations indicate that the lowest ratios—and most competitive transit travel times—are for short transit trips made between areas within and adjacent to downtown Milwaukee, and the highest ratios—and least

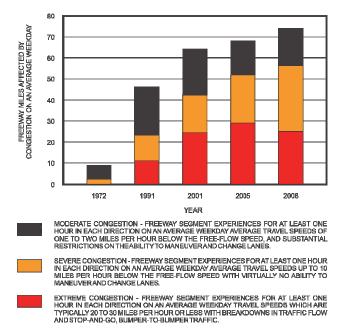
Table 27

ESTIMATED EXISTING SOUTHEASTERN WISCONSIN FREEWAY SYSTEM
TRAFFIC CONGESTION ON AN AVERAGE WEEKDAY: 1972, 1991, 2001, AND 2005

		Miles of	Congested Freeways	Average H	ours of Congesti	on on an Average	Weekday
Year	Highest Level of Hourly Congestion Experienced	Number	Percent of Freeway System	Extreme	Severe	Moderate	Total
	Extreme	25	9.4	1.3	2.8	3.8	7.9
0000	Severe	31	11.5		1.3	2.3	3.5
2008	Moderate	18	6.9			1.8	1.8
	Total	74	27.8				
	Extreme	29	10.7	1.2	2.7	3.7	7.6
2005	Severe	23	8.5		1.2	2.3	3.5
2005	Moderate	16	6.0			2.2	2.2
	Total	68	25.2				
	Extreme	24	8.9	1.4	3.3	4.4	9.1
2001	Severe	18	6.7		1.5	2.5	4.0
2001	Moderate	22	8.1			2.1	2.1
	Total	64	23.7				
	Extreme	11	4.4	1.0	2.1	3.1	6.2
4004	Severe	12	4.8		1.1	2.9	4.0
1991	Moderate	23	9.1			2.3	2.3
	Total	46	18.3				
	Extreme						
1070	Severe	2	1.2		1.0	3.0	4.0
1972	Moderate	7	4.3			2.8	2.8
	Total	9	5.5				

Figure 40

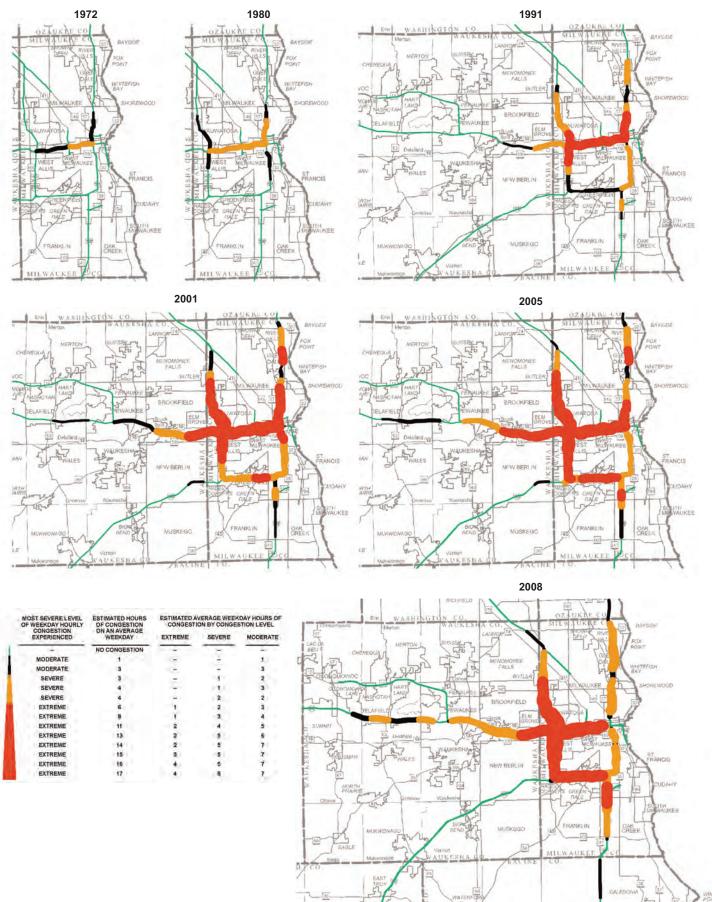
ESTIMATED EXISTING SOUTHEASTERN WISCONSIN
FREEWAY SYSTEM TRAFFIC CONGESTION ON AN
AVERAGE WEEKDAY: 1972, 1991, 2001, 2005, AND 2008



competitive transit travel times—are generally for transit trips to and from outlying portions of Milwaukee County, including locations in the northwest, southeast, and southwest portions of the Milwaukee County area. Some reduction in transit service has occurred since 2005; however, the travel time ratios from 2005 likely have not changed significantly.

Transportation Air Pollutant Emissions and Fuel Consumption: Table 29 presents the estimated transportation system air pollutant emissions and motor fuel consumption within southeastern Wisconsin for the years 2001 and 2010. Estimated air pollutant emissions have declined for all pollutants, particularly volatile organic compounds and nitrogen oxides due to cleaner, more efficient vehicles, with the exception being carbon dioxide emissions and ammonia which are estimated to have increased from 2001 to 2010 as fuel consumption has increased during these years.

### HISTORIC TRAFFIC CONGESTION ON THE SOUTHEASTERN WISCONSIN FREEWAY SYSTEM



Map 31

CONGESTION ON DESIGNATED TRUCK ROUTES AND THE NATIONAL HIGHWAY SYSTEM IN THE REGION: YEARS 2001 AND 2008

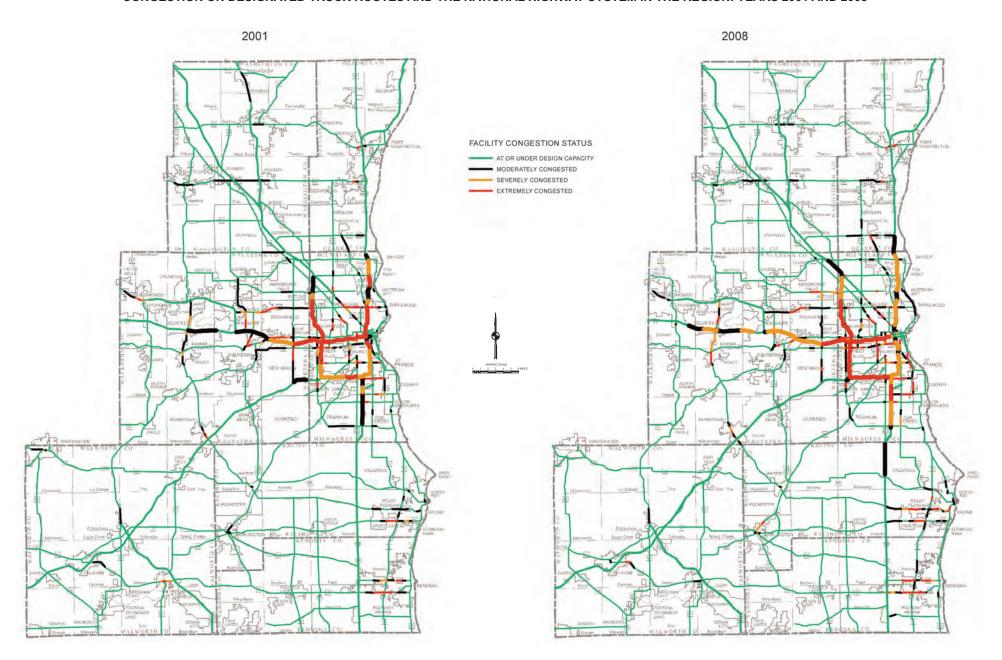


Table 28

TRAFFIC CONGESTION ON DESIGNATED TRUCK ROUTES AND THE NATIONAL HIGHWAY SYSTEM IN THE REGION: 2001 AND 2005

		Over Design Capacity						
Year	Under or At Design Capacity			Extreme Congestion	Total Mileage			
2001	1,114	119	32	51	1,316			
2008	1,108	111	47	65	1,331			

Table 29

ESTIMATED SOUTHEASTERN WISCONSIN REGION TRANSPORTATION SYSTEM AIR POLLUTANT EMISSION AND FUEL CONSUMPTION: 2001 AND 2010

	Estimated Air Pollutant Emissions (Tons per Hot Summer Weekday)									
Year	Volatile Organic Compounds <sup>a</sup>	Nitrogen Oxides <sup>a</sup>	Carbon Monoxide	Carbon dioxide	Fine Particulate Matter	Sulfur Dioxide	Ammonia			
2001	50.03	114.23	592.48	18,050	1.77	2.77	4.84			
2010	27.30	60.92	358.29	18,500	1.18	0.51	5.62			

	Esti	imated Air Pollutant	Estimated Fuel Consumption			
Year	Butadiene Acetaldehyde		Acrolein Benzene		Formaldehyde	(Gallons per Average Weekday)
2001	0.20	0.43	0.03	1.40	0.63	1,805,000
2010	0.09	0.20	0.01	0.66	0.30	1,865,000

<sup>&</sup>lt;sup>a</sup>Estimated 1990 emissions were 154.6 tons of volatile organic compounds and 136.3 tons of nitrogen oxides. Estimated 1999 emissions were 61.3 tons of volatile organic compounds and 118.0 tons of nitrogen oxides.

## Vehicular Crashes <u>Number of Crashes</u>

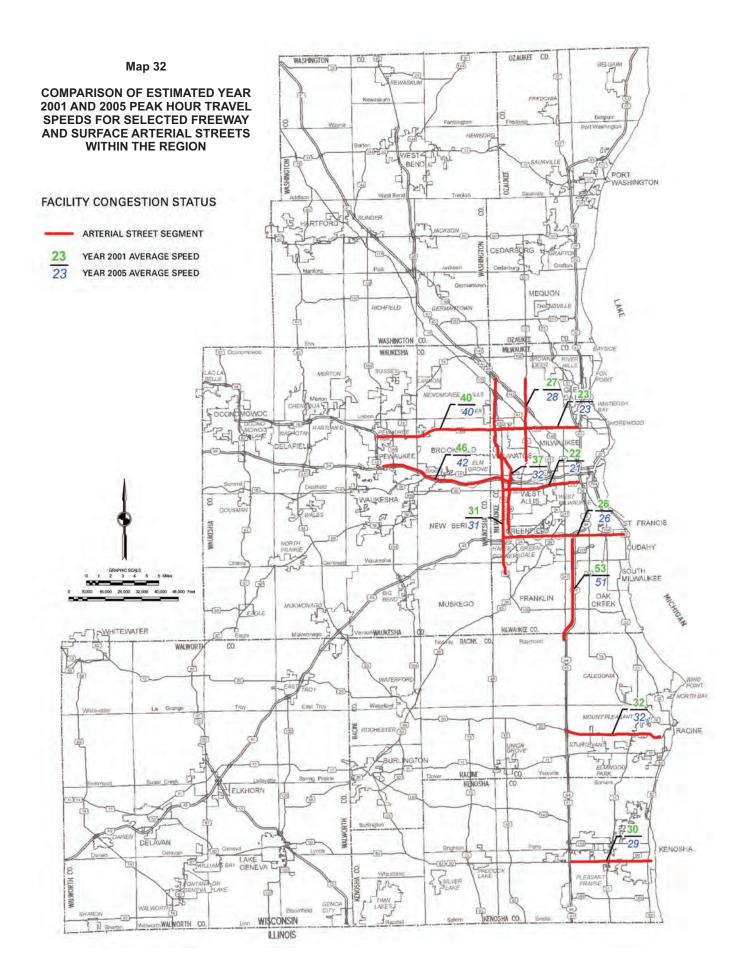
Vehicular crashes in the Region totaled about 35,600 in 2012, representing a nearly 3 percent decline over 2011. Over the 18-year period 1994-2012, the number of vehicular crashes in the Region decreased by about 27 percent (see Figure 41). Crashes involving an injury or a fatality increased slightly to about 11,500 crashes in 2012, representing about one-third of all crashes. Over the period 1994-2012, crashes involving an injury or a fatality have decreased by about 35 percent. Property damage only crashes decreased over the past year by about 4 percent to about 24,200 crashes, representing the remaining two-thirds of all crashes. The overall decrease in vehicular crashes since 1994 is particularly significant given the increase in annual vehicle miles traveled over that same period of about 17 percent.

### Fatal Crashes

There were 140 vehicular crashes in the Region in 2012 that resulted in 156 fatalities. As shown in Figure 42, roadway crash fatalities over the period 1994-2005 dropped from a peak of 190 in 2005 to a low of 130 fatalities in 2009, and then rose again by about 20 percent over the period 2009-2012. Figure 43 presents selected characteristics of vehicle crash related fatalities in the Region during 2012. About 17 percent of fatalities involved bicyclists and pedestrians and another 19 percent involved motorcyclists. Alcohol was cited as a contributing factor in about 40 percent of all fatalities.

### Serious Injury Crashes

There were in 2012 about 830 vehicle crashes in the Region that resulted in at least one serious injury. While serious injury vehicular crashes increased by about 3 percent since 2011 as shown in Figure 44,



Map 33

RATIOS OF OVERALL TRANSIT TRAVEL TIMES TO OVERALL AUTOMOBILE TRAVEL TIMES BETWEEN
SELECTED LOCATIONS IN MILWAUKEE COUNTY FOR WEEKDAY PEAK AND OFF-PEAK PERIODS: 2005

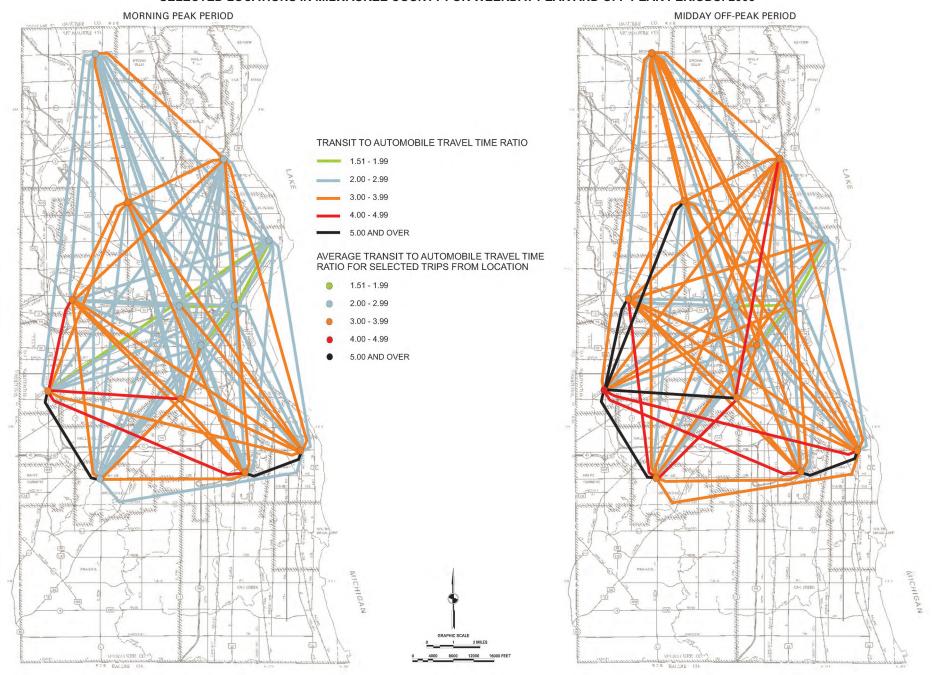


Figure 41

TOTAL, PROPERTY-DAMAGE ONLY, AND INJURY AND FATAL VEHICULAR CRASHES REPORTED IN THE REGION: 1994-2012

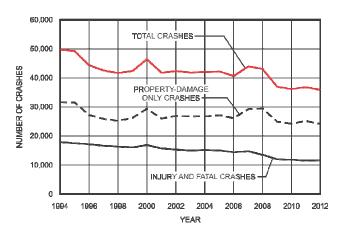


Figure 42

FATAL VEHICULAR CRASHES
AND FATALITIES REPORTED
IN THE REGION: 1994-2012

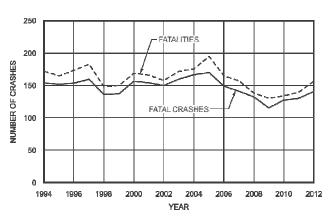
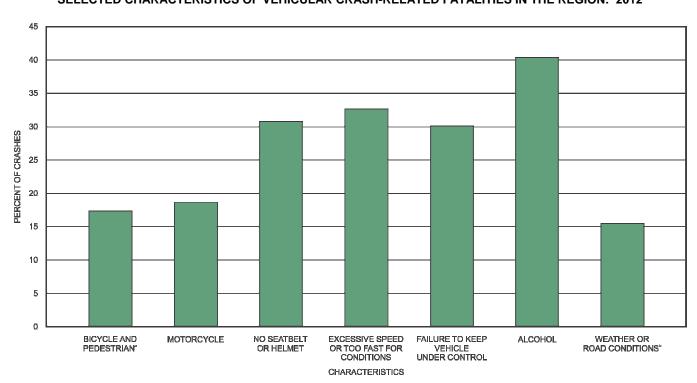


Figure 43
SELECTED CHARACTERISTICS OF VEHICULAR CRASH-RELATED FATALITIES IN THE REGION: 2012



'IN 2012, THERE WERE 4 BICYCLE FATALITIES (2.6 PERCENT OF TOTAL FATALITIES) AND 23 PEDESTRIAN FATALITIES (14.7 PERCENT OF TOTAL FATALITIES).

"THIS CATEGORY INCLUDES SNOWY, RAINY, AND FOGGY CONDITIONS AND SNOW-COVERED, ICY OR WET ROADS.

NOTE: FATALITIES ATTRIBUTABLE TO MULTIPLE CATEGORIES ARE COUNTED MORE THAN ONCE.

Table 30

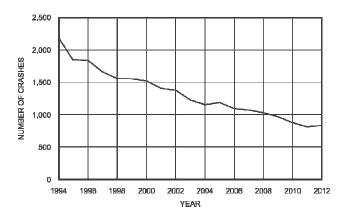
AVERAGE VEHICULAR CRASH RATE ON STATE TRUNK HIGHWAYS
BY ARTERIAL TYPE BY COUNTY IN SOUTHEASTERN WISCONSIN: 2005-2009 AND 2008-2012

	Crash Rate per 100 Million Vehicle Miles							
	Fre	eways	Standard	d Arterials				
County	2005-2009	2008-2012	2005-2009	2008-2012				
Kenosha	45.8	45.6	277.5	242.4				
Milwaukee	160.1	176.3	438.5	411.5				
Ozaukee	40.4	41.1	132.4	115.0				
Racine	40.4	33.8	267.4	201.8				
Walworth	44.4	42.6	141.3	133.0				
Washington	45.8	41.5	222.8	210.8				
Waukesha	46.2	46.5	205.0	202.9				
Region	71.7	71.4	264.9	237.5				
State	64.2	58.6	163.1	149.8				

Note: Only crashes that have occurred in years since a roadway segment was last reconfigured are included in the crash rates above.

Figure 44

TOTAL NUMBER OF CRASHES RESULTING IN A
SERIOUS INJURY REPORTED IN THE REGION: 1994-2012



such injury crashes have declined significantly – about 62 percent – since 1994.

### State Trunk Highway Vehicular Crash Rates

A summary of the five-year average annual crash rates on those freeways and standard arterials on the State Trunk Highway network in the Region is presented in Table 30 for two time periods—2005-2009 and 2008-2012. Crash rates, expressed on the basis of the number of crashes per 100 million vehicle miles driven, are increasing on the Region's

freeway system and declining on the State Trunk Highway portion of the Region's standard arterial system.

## Aviation Activity Change in GMIA Passenger Travel

The number of enplaning and deplaning passengers at General Mitchell International Airport (GMIA) decreased significantly in 2012 by 21 percent to a level of about 7.5 million passengers (see Table 31 and Figure 45). Over the ten-year period 2003-2012, passenger travel at GMIA has increased by about 22 percent, peaking at a level of about 9.8 million passengers in 2010.

### Change in GMIA Major Aircraft Operations

The number of scheduled air carrier and military aircraft operations (aircraft takeoffs and landings) at GMIA significantly decreased in 2012 by 25 percent, to a level of about 118,400 operations (see Table 32 and Figure 46). Over the ten-year period 2003-2012, scheduled air carrier and military aircraft operations at GMIA has declined by about 35 percent, peaking at a level of about 196,300 operations in 2005.

### **Change in General Aviation Aircraft Operations**

There are four airports in the Region that have Federally sponsored control towers: GMIA, Waukesha County-Crites Field, Kenosha Regional

Table 31

AIR CARRIER ENPLANING AND DEPLANING PASSENGERS
AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2003-2012

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Percent Change: 2011-2012	Percent Change: 2003-2012
6,142,100	6,661,100	7,268,000	7,299,300	7,713,100	7,957,000	7,946,000	9,848,000	9,522,000	7,515,000	-21.1	22.4

Table 32

AIR CARRIER AND MILITARY AIRCRAFT OPERATIONS
AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2003-2012

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Percent Change: 2011- 2012	Percent Change: 2003- 2012
182,100	191,200	196,300	181,600	179,800	166,900	154,000	176,600	158,600	118,400	-25.3	-35.0

Figure 45

AIR CARRIER ENPLANING AND DEPLANING PASSENGERS AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2003-2012

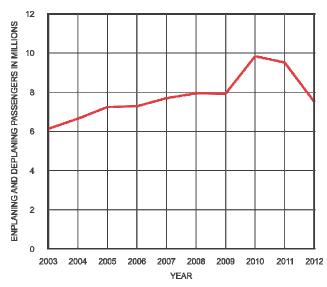


Figure 46

AIR CARRIER AND MILITARY AIRCRAFT
OPERATIONS AT GENERAL MITCHELL
INTERNATIONAL AIRPORT: 2003-2012

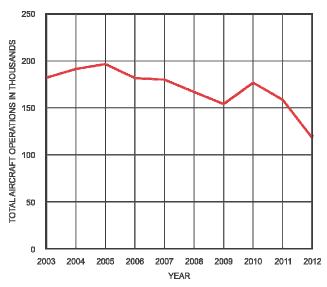


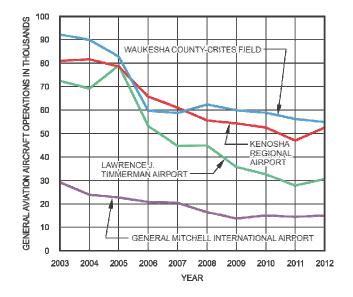
Table 33

GENERAL AVIATION AIRCRAFT OPERATIONS AT AIRPORTS IN THE SOUTHEASTERN WISCONSIN REGION WITH CONTROL TOWERS: 2003-2012

Airport	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Percent Change: 2011- 2012	Percent Change: 2003- 2012
Waukesha County- Crites Field	92,200	89,800	82,700	59,700	58,700	62,400	59,900	58,800	56,100	54,800	-2.3	-40.6
Kenosha Regional Airport	80,900	81,600	78,400	65,700	61,000	55,500	54,300	52,500	47,100	52,700	11.9	-34.9
Lawrence J. Timmerman Airport	72,500	69,100	79,100	53,000	44,600	44,900	35,600	32,600	27,800	30,800	10.8	-57.5
General Mitchell International Airport	29,300	24,000	22,800	20,900	20,400	16,400	13,700	15,000	14,400	15,000	4.2	-48.8

Figure 47

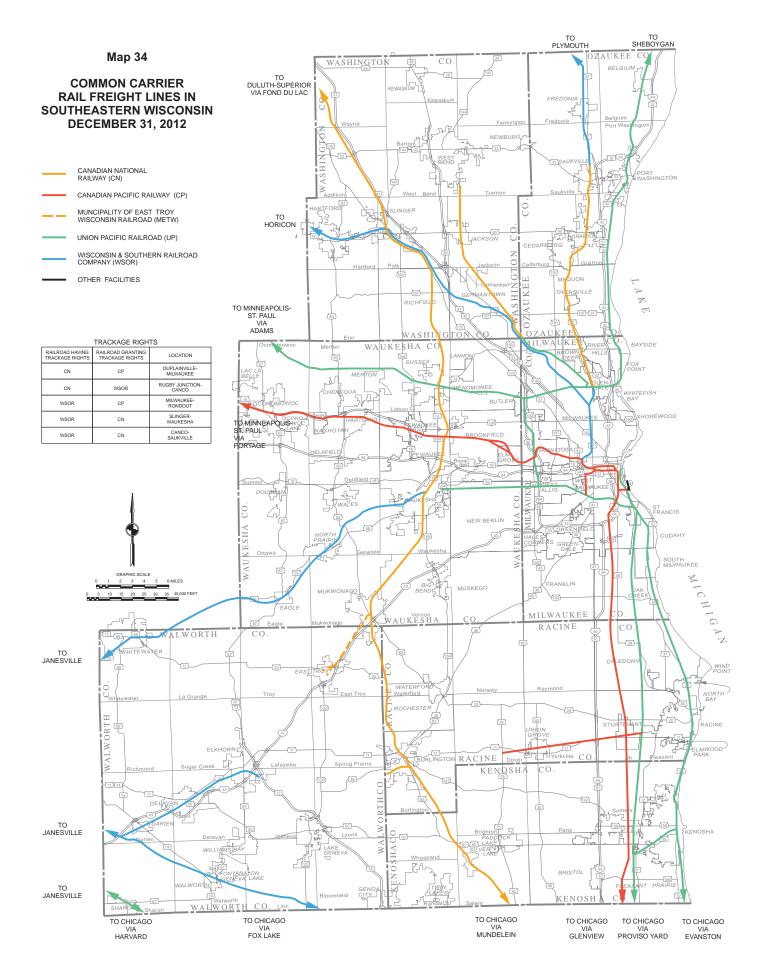
GENERAL AVIATION AIRCRAFT OPERATIONS
AT AIRPORTS IN THE SOUTHEASTERN WISCONSIN
REGION WITH CONTROL TOWERS: 2003-2012



Airport, and Lawrence J. Timmerman Airport. The annual number of general aviation aircraft operations at these four airports over the period 2003-2012 are shown in Table 33 and Figure 47. Over that ten-year period, general aviation aircraft operations at these airports have declined significantly, ranging from a decline of about 35 percent at Kenosha Regional Airport to a decline of nearly 58 percent at Lawrence J. Timmerman Airport. During 2012 general aviation aircraft operation activity increased at each airport except Waukesha County-Crites Field.

# Freight Rail Lines Active Main Lines

Freight rail service within the southeastern Wisconsin Region is provided over a total of about 492 miles of active main lines (see Map 34). During 2012 there was no change to the number of miles of active freight rail lines.





(This page intentionally left blank)

# Appendix A

# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: DECEMBER 2012

## **COMMISSIONERS**

### **COMMITTEES**

	Term	EXECUTIVE COMMITTEE
	Expires	David L. Stroik, Chairman
KENOSHA COUNTY	-	William R. Drew, Vice-Chairman
* Kimberly L. Breunig	2016	Gilbert B. Bakke
** Adelene Greene, Secretary		Thomas H. Buestrin
*** Robert W. Pitts		James T. Dwyer
TOOGIT TV. I NO	2010	Adelene Greene
		Nancy L. Russell
MILWAUKEE COUNTY		Daniel S. Schmidt
* William R. Drew, Vice-Chairman		Gustav W. Wirth, Jr.
*** John Rogers		
** Marina Dimitrijevic	2016	ADMINISTRATIVE COMMITTEE
		Adelene Greene, Chair
OZAUKEE COUNTY		James T. Dwyer, Vice-Chairman
** Thomas H. Buestrin	2014	Gilbert B. Bakke
*** William E. Johnson		Thomas H. Buestrin
* Gustav W. Wirth, Jr.		William R. Drew
Oddiav vv. vviitii, or	2014	Nancy L. Russell
		Daniel S. Schmidt
RACINE COUNTY		David L. Stroik
* Gilbert B. Bakke		Gustav W. Wirth, Jr.
*** David L. Eberle		
** Peggy L. Shumway	2018	INTERGOVERNMENTAL AND
		PUBLIC RELATIONS COMMITTEE
WALWORTH COUNTY		Michael A Crowley, Chairman
** Charles L. Colman	2014	Daniel W. Stoffel Vice-Chairman
* Nancy L. Russell, Treasurer		Gilbert B. Bakke
		Kimberly L. Breunig
*** Linda J. Seemeyer	2018	Marina Dimitrijevic
		Nancy L. Russell
WASHINGTON COUNTY		Daniel W. Stoffel
** Daniel S. Schmidt	2016	David L. Stroik
* Daniel W. Stoffel	2014	Gustav W. Wirth, Jr.
*** David L. Stroik, Chairman	2018	
,		PLANNING AND RESEARCH COMMITTEE
WALKESTA COUNTY		Daniel S. Schmidt, Chairman
WAUKESHA COUNTY	2040	Gilbert B. Bakke, Vice-Chairman
** Michael A. Crowley		Kimberly L. Breunig
*** Jose M. Delgado		Charles L. Colman
* James T. Dwyer	2018	Michael A. Crowley
		Jose M. Delgado
		William R. Drew
* Elected by County Board or appoint	ed by County	David L. Eberle
Executive and confirmed by County Bo		William E. Johnson
		Robert W. Pitts
** Appainted by the Covernor from a C	ounty ounniled	John Rogers
** Appointed by the Governor from a C	ourity-supplied	Nancy L. Russell
list of candidates.		Linda J. Seemeyer
		Peggy L. Shumway
*** Appointed by the Governor on his	own motion	Daniel W. Stoffel
without reference to any County-suppli	ed list.	David L. Stroik

(This page intentionally left blank)

# Appendix B

# **COMMISSION ADVISORY COMMITTEES: 2012**

# KENOSHA COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

# OZAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE (continued)

Raymond G. Arbet	Director of Public Works,
Chairman	Kenosha County
Kenneth R. Yunker	Executive Director,
Secretary	Southeastern Wisconsin
	Regional Planning Commission
	President, Village of Silver Lake
	Administrator, Village of Twin Lakes
	Chairman, Town of Brighton
Virgil D. Gentz	Chairman, Town of Paris
	Chairman, Town of Wheatland
	President, Village of Paddock Lake
Dewayne J. Johnson	Director, Southeast Region,
	Wisconsin Department of Transportation
	President, Village of Bristol
Michael M. Lemens	Director of Engineering/City Engineer,
	City of Kenosha
Dwight E. McComb	Planning and Program
	Development Engineer,
	U.S. Department of Transportation,
	Federal Highway Administration
George E. Melcher Directo	or, Department of Planning and Development,
	Kenosha County
	Village Engineer, Village of Pleasant Prairie
	Chairman, Town of Randall
	Chairperson, Town of Salem
	Chairman, Town of Somers
John P. Wrzeszcz	President, Village of Genoa City

# MILWAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Brian Dranzik	. Director, Department of Transportation,
Chairman	Milwaukee County
Kenneth R. Yunker	Executive Director,
Secretary	Southeastern Wisconsin
,	Regional Planning Commission
John M. Bennett	City Engineer, City of Franklin
Melinda K. Dejewski	
•	City of St. Francis
David Eastman	
Kim EganVillage	
Dewayne J. Johnson	
	Wisconsin Department of Transportation
Ghassan A. Korban	
	City of Milwaukee
Mary Jo Lange	
	City Engineer, City of Cudahy
Chris Lear	
Michael G. Lewis	
Michael J. Martin Director of	of Public Works, Village of Hales Corners
Robert B. McFaulDirec	
Daniel Naze	
	City Engineer,
	Village of Whitefish Bay
Michael J.Neitzke	
Andrew Pederson	
George Poirier	
	Federal Highway Administration,
	U.S. Department of Transportation
William Porter	
	City of Wauwatosa
Susan E. Robertson	
Michael C. Simmons	
M. Chris Swartz	Village Manager, Village of Shorewood
Russell Van GompelVillage Manage	
Kyle E. Vandercar	City Engineer, City of South Milwaukee

### OZAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Robert R. Dreblow	Highway Commissioner,
Chairman	Ozaukee County
Kenneth R. Yunker	Executive Director,
Secretary	Southeastern Wisconsin
	Regional Planning Commission
Lester A. Bartel, Jr	Chairman, Town of Grafton
	Director of Public Works/City Engineer, City of Mequon
Bill W. Cording	Clerk, Village of Newburg
Kathlyn Geracie	Chairman, Ozaukee County Public Works Committee
Richard C. Howells	President, Village of Belgium
Barbara J.Jobs	Chairman, Town of Saukville
Dewayne J. Johnson	Director, Southeast Region,
•	Wisconsin Department of Transportation
Kip Kinzel	Mayor, City of Cedarburg

Jim Melichar	President, Village of FredoniaChairman, Town of Port Washington
	President, Village of Thiensville
	Chairman, Town of Fredonia
David Murphy	Director of Public Works/
	Village Engineer, Village of Grafton
George Poirier	Wisconsin Division Administrator,
	Federal Highway Administration,
	U.S. Department of Transportation
David Valentine	Chairman, Town of Cedarburg
Robert Vanden Noven	City Engineer/Public Works Director,
	City of Port Washington
Rov Wilhelm	Director of Public Works/Engineer,
,	Village of Saukville
Thomas Winker	Chairman, Town of Belgium

# RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

	Director of Public Works, and Development Services
Chairman	Racine County
Kenneth R. Yunker	Executive Director, Southeastern
Secretary	Wisconsin Regional Planning Commission
Michael Aimone	President, Village of Union Grove
	President, Village of Rochester
	President, Village of Wind Point
	Administrator, Village of Waterford
	Village Engineer, Village of Caledonia
	President, Village of North Bay
	President, Village of Sturtevant
Dewayne J. Johnson	Director, Southeast Region,
	Wisconsin Department of Transportation
Gary Kastenson	Chairman, Town of Raymond
Jeffery Katz	Manager of Planning and Engineering Services,
	Public Works Department, Racine County
Thomas R. Kramer	Business Manager/Treasurer,
	Town of Norway
Robert E. Langmesser	Chair, Town of Waterford
	Chairman, Town of Dover
	Supervisor, Town of Yorkville
	President, Village of Mount Pleasant
	Mayor, City of Burlington
	Director of City Development, City of Racine
George Poirier	Wisconsin Division Administrator,
	Federal Highway Administration,
	U.S. Department of Transportation
David Prott	Manager of Highway Division,
	Public Works and Development
	Services Department, Racine County
	Chairman, Town of Burlington
	President, Village of Elmwood Park
Mark H. Yehlen	Commissioner of Public Works,
	City of Racine

# WALWORTH COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Kevin M. BrunnerDirector of Central Services, Department of Public Works, Chairman Walworth County Kenneth R. Yunker Executive Director, Southeastern
Kenneth R. Yunker Executive Director, Southeastern
Secretary Wisconsin Regional Planning Commission
Joseph Abell
Joy Bartelson
Richard Brandl
Thomas Brandemuehl
Village of Mukwonago
Cameron Clapper City Manager, City of Whitewater
Daniel Cooper Citizen, Town of Lafayette
David P. Duwe
Diana DykstraPresident, Village of Sharon
Evelyn Etten President, Village of Darien
Ron Fero Chairman, Town of Whitewater
Don HenningfeldChairman, Town of Spring Prairie
Patrick Hoffmann
Dewayne J. Johnson Director, Southeast Region
Wisconsin Department of Transportation
Dennis Jordan
John Kendall
Joseph Klarkowski
Joseph F. Kopecky
William R. Loesch

# WALWORTH COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE (continued)

	Chairman, Town of Darien uning and Program Development Engineer, U.S. Department of Transportation,
	Federal Highway Administration
Jerry Mehring	Director of Public Works,
	Village of Williams Bay
Kenneth Monroe	Chairman, Town of Bloomfield
David A. Rasmussen	President, Village of Walworth
Wayne Redenius	Chairman, Town of Richmond
Nancy Russell	Chairperson, Walworth County
•	Board of Supervisors and
	Public Works Committee
Ryan Simons	Chairman, Town of Delavan
Samuel E. Tapson	Administrator, City of Elkhorn
Mark E. Wendorf	Director of Public Works, City of Delavan
	Superintendent, Highway Department,
oamoo 11 ongram	Town of Linn
Craig Workman	Director of Public Works,
Oralg Workman	Village of Fontana-on-Geneva Lake
John B. Wrzeczez	President, Village of Genoa City
JUIIII F. WIZESZUZ	riesident, village of Genoa City

# WASHINGTON COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Jon E. Edgren	Highway Commissioner, Washington County
	Executive Director, Southeastern
Secretary	Wisconsin Regional Planning Commission
	Chairman, Town of Barton
	Chairman, Town of Addison
	President, Village of Slinger
	Mayor, City of Hartford
	City Planner, City of Hartford
	Chairman, Town of Hartford
	Director of Public Works, Village of Kewaskum
	Chairman, Town of Trenton
Daniel P. Gootz	Supervisor, Washington County
Danier K. Goetz	Board of Supervisors
Paymond Heidtke	Chairman, Town of Jackson
	President, Village of Newburg
	President, Village of Richfield
	Director, Southeast Region,
Dewayne 3. 301113011	Wisconsin Department of Transportation
Wendy Kannenhura	President, Village of Jackson
	Chairman, Town of Erin
	Chairman, Town of Wayne
	Planning and Program Development Engineer,
Dwight L. McComb	U.S. Department of Transportation,
	Federal Highway Administration
Paul I Metz	Chairman, Town of Germantown
	Administrator.
i aui L. Muellei	Planning and Parks Department,
	Washington County
Paul P. Pica	Chairman. Town of West Bend
	Mayor, City of West Bend
	Chairman, Town of Kewaskum
	Chairman, Town of Rewaskum
	rman, Washington County Board of Supervisors
	President, Village of Germantown
Doan Woller	resident, village of Germantown

# WAUKESHA COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

David W. Swan	Supervisor, Waukesha County Board
Chairman	Waukesha County Public Works Committee
Kenneth R. Yunker	Executive Director, Southeastern
Secretary	Wisconsin Regional Planning Commission
Fred V. Abadi	Director of Public Works, City of Waukesha
	Chairman, Town of Ottawa
	Town Engineer, Town of Delafield
	President, Village of Oconomowoc Lake
Allison M. Bussler	Director of Public Works, Waukesha County
Timothy J. Clark	President, Village of Lac La Belle
	Planner, City of Pewaukee
	Mayor, City of Oconomowoc
	Chairman, Town of Vernon
David Dubey	Chairman, Town of Mukwonago
Richard A. Ensslin	President, Village of Butler
	President, Village of Wales
Robert Foote, Jr	President, Village of Chenequa
Matthew Gehrke	Chairman, Town of Lisbon
Chris Genellie	Town Engineer, Town of Waukesha

# WAUKESHA COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE (continued)

Gregory Goetz Scott Gosse Deborah Hall Keith Henderson Robert C. Hultquist Arlyn Johnson.	Administrator, Village of PewaukeePresident, Village of North Prairie Chairman, Town of Brookfield Chairman, Town of Oconomowoc
Gregory W. KesslerDirect	
Robert Kwiatkowski	
David C. Lamerand	
Richard Lartz	
Sharon L. Leair	
Ed McAleer	
Dwight E. McComb Planning	and Program Development Engineer,
	U.S. Department of Transportation,
	Federal Highway Administration
Richard Nawrocki	
Jerry Newman	
Jack Nissen	
Neil H. Palmer	
Steven P. Ponto	
Jack Riley	
Sheri SchmitSystem	ns Planning Chief, Southeast Region, sconsin Department of Transportation
David Simpson Director of Public Work James S. Soneberg Richard A. Spurrell Robert W. Weber Fred Winchowky	s and City Engineer, City of Muskego President, Village of Big Bend President, Village of Eagle President, Village of Merton

# ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE RACINE URBANIZED AREA

Julie A. Anderson Director of	of Public Works and Development Services,
Chairman	Racine County
Kenneth R. Yunker	Executive Director, Southeastern
Secretary	Wisconsin Regional Planning Commission
	Director, Bureau of Planning, Division of
	Transportation Investment Management,
	Wisconsin Department of Transportation
William D. Bensman	President, Village of Wind Point
	President, Wisconsin Coach Lines, Inc.
	Village Engineer, Village of Caledonia
	President, Village of North Bay
	Administrator, Village of Sturtevant
	Director, Southeast Region,
,	Wisconsin Department of Transportation
Peter T. McMullen	Air Management Specialist,
	Bureau of Air Management,
W	/isconsin Department of Natural Resources
Cheryl L. Newton Env	rironmental Protection Specialist, Region V,
•	U.S. Environmental Protection Agency
George Poirier	Wisconsin Division Administrator
9	Federal Highway Administration
	U.S. Department of Transportation
William D. Sasse Dire	ector of Engineering, Village of Mt. Pleasant
Marisol Simón	Regional Administrator, Region V,
	Federal Transit Administration,
	U.S. Department of Transportation
Albert StanekParking an	d Transit Systems Manager, City of Racine
	President, Village of Elmwood Park
	ommissioner of Public Works/City Engineer,
	City of Racine

# ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE KENOSHA URBANIZED AREA

Kenneth R. Yunker Secretary	Executive Director, Southeastern Wisconsin Regional Planning Commission
Sandra K. Beaupre	Director, Bureau of Planning and
	Economic Development, Division of
	Transportation Investment Management,
	Wisconsin Department of Transportation
Shelly Billingsley	Director, Engineering Division,
	Public Works Department, City of Kenosha
Thomas Dieckelman	President, Wisconsin Coach Lines, Inc.
Ron Iwen	Director, Department of Transportation
	City of Kenosha
Dewayne J. Johnson	Director, Southeast Region,
	Wisconsin Department of Transportation
Jeffrey B. Labahn	Interim Director of Community Development
	and Inspections, City of Kenosha

# ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE KENOSHA URBANIZED AREA (continued)

Michael M. Lemens	Director of Public Works, City of Kenosha
Peter T. McMullen	Air Management Specialist,
	Bureau of Air Management,
	Wisconsin Department of Natural Resources
Cheryl L. Newton	Assistant Regional Administrator,
	Resource Management Division, Region V,
	U.S. Environmental Protection Agency
George Poirier	Wisconsin Division Administrator,
	Federal Highway Administration,
	U.S. Department of Transportation
Michael Spence	Village Engineer, Village of Pleasant Prairie
Marisol Simón	Regional Administrator, Region V,
	Federal Transit Administration,
	U.S. Department of Transportation
Gary A. Sipsma	Director, Division of Highways, and
•	Highway Commissioner, Department of
	Public Works, Kenosha County

# ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE MILWAUKEE URBANIZED AREA

Daire Daniell	Discourse Description of Transconnection
Chair	Director, Department of Transportation,
	Milwaukee CountyMilwaukee County Executive
	City Engineer/Director of Public Works,
John W. Bennett	City of Franklin
Coott Door door in	
Scott Brandmeter	Director of Public Works and Village Engineer,
Alliana M. Dunalan	Village of Fox Point Director of Public Works, Waukesha County
	Highway Commissioner, Ozaukee County Legislative Liaison Director,
Jennilei Gonda	City of Milwaukee
Lloyd Grant Ir	Managing Director, Milwaukee County
Lioyd Grant Jr	Transit System
Thomas M. Grisa	Director of Public Works, City of Brookfield
Pohort C. Johnson	Transit Director, Waukesha Metro Transit,
Robert C. Jornson	City of Waukesha
Chassan A Korban	Commissioner of Public Works,
Gliassali A. Rolbali	City of Milwaukee
Michael G. Lewis	City Engineer, City of West Allis
	Manager of Long-Range Planning,
WICHACI C. Walche	Department of City Development,
	City of Milwaukee
Michael Mayo, Sr.	Supervisor, Milwaukee County
Wildridge Waye, er.	Board of Supervisors
Michael J. Martin	Director of Public Works,
	Village of Hales Corners
Jeffrey S. Polenske	
	City of Milwaukee
William Porter	Director of Public Works,
	City of Wauwatosa

#### Nonvoting Technical Staff Members

Kenneth R. Yunker	Executive Director, Southeastern
Secretary	Wisconsin Regional Planning Commission
Sandra K. Beaupre	Director, Bureau of Planning and
	Economic Development, Division of
	Transportation Investment Management,
	Wisconsin Department of Transportation
Tom Dieckelman	President,
	Wisconsin Coach Lines, Inc.
Dewayne J. Johnson	Director, Southeast Region,
	Wisconsin Department of Transportation
Peter T. McMullen	Air Management Specialist,
	Transportation Section of Air Management,
	Wisconsin Department of Natural Resources
George Poirier	Wisconsin Division Administrator,
	Federal Highway Administration,
	U.S. Department of Transportation
Marisol Simón	Regional Administrator, Region V,
	Federal Transit Administration,
	U.S. Department of Transportation

# ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE ROUND LAKE BEACH-McHENRY-GRAYSLAKE, IL-WI URBANIZED AREA (WISCONSIN PORTION)

Kenneth R. Yunker	Executive Director, Southeastern
Secretary	Wisconsin Regional Planning Commission
Jeff Albrecht	President, Village of Silver Lake

### ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING AND PROGRAMMING FOR THE ROUND LAKE BEACH-McHENRY-GRAYSLAKE, IL-WI URBANIZED AREA (WISCONSIN PORTION) (continued)

Sandra K. Beaupre	Director, Bureau of Planning and Economic Development, Division of Transportation Investment
	Management, Wisconsin Department of Transportation
David N. DeVito	Chairman, Town of Brighton
William M. Glembocki	Chairman, Town of Wheatland
Marlene P. Goodson	President, Village of Paddock Lake
Dewayne J. Johnson	Director, Southeast Region,
•	Wisconsin Department of Transportation
Randall Kerkman	Administrator, Village of Bristol
Peter T. McMullen	Program and Planning Analyst,
	Bureau of Air Management,
	Wisconsin Department of Natural Resources
Cheryl L. Newton	Assistant Regional Administrator,
	Resources Management Division, Region V,
	U.S. Environmental Protection Agency
George Poirier	Wisconsin Division Administrator,
	Federal Highway Administration,
	U.S. Department of Transportation
Marisol Simón	Regional Administrator, Region V,
	Federal Transit Administration,
	U.S. Department of Transportation
Gary A. Sipsma	
	Highway Commissioner, Department of
	Public Works, Kenosha County
	President, Village of Twin Lakes
	Chairman, Town of Randall
Diann D. Tesar	Chairperson, Town of Salem

# ADVISORY COMMITTEE ON REGIONAL TRANSPORTATION SYSTEM PLANNING

TRANSF	PORTATION SYSTEM PLANNING
Brian Dranzik	Director, Department of Transportation,
Chair	Milwaukee County
Fred Abadi	Director of Public Works,
	City of Waukesha
Julie A. Anderson	. Director of Public Works, and Development Services
	Racine County
Sandra K. Beaupre	Director, Bureau of Planning and
	Economic Development, Division of
	Transportation Investment Management,
	Wisconsin Department of Transportation
John M. Bennett	City Engineer/Director of Public Works,
	City of Franklin
Scott Brandmeier	Director of Public Works and Village Engineer,
	Village of Fox Point
Allison Bussler	Director of Public Works,
	Waukesha County
Kevin M. Brunner	Director of Central Services,
D	Department of Public Works, Walworth County
David Cox	Village Administrator, Village of Hartland
Robert R. Dreblow	Highway Commissioner, Ozaukee CountyHighway Commissioner, Washington County
Jon Eagren	Highway Commissioner, washington County
Lloyd Grant Jr	Managing Director, Milwaukee County Transit System
Thomas M. Crisa	Director of Public Works, City of Brookfield
Cucan Hadman	
Susan Heuman	U.S. Environmental Protection Agency
	U.S. Department of Transportation
Ghassan A Korhan	Commissioner of Public Works.
	City of Milwaukee
Alexis Kuklenski	
	U.S. Department of Transportation,
	Federal Highway Administration
Michael M. Lemens	Director of Engineering, City of Kenosha
George E. Melcher	Director, Department of Planning and Development,
3	Kenosha County
Eric Nitschke, P.E	Southeast Region Director, Wisconsin
	Department of Natural Resources
Jeffrey S. Polenske	City Engineer, City of Milwaukee
William Porter	Director of Public Works, City of Wauwatosa
Sheri Schmit	Systems Planning Chief
	Southeast Region, Wisconsin
	Department of Transportation
Marisol Simón	Regional Administrator, Region V,
	Federal Transit Administration,
Deat Occasion	U.S. Department of Transportation
вап Sponseller	Director, Bureau of Air Management,
A - Jose Martille III	Wisconsin Department of Natural Resources
Andrea Weddle-Henning	
	Construction Engineering, Department of
Mark H. Vahlan	Transportation, Milwaukee County
wark m. Yenien	City of Racine
	City of Racine

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

Chairman	Professor, Department of Geological Sciences, University of Wisconsin-Milwaukee Director, Milwaukee County Department of Parks, Recreation, and Culture
Dr. Donald M. ReedSecretary	
	Sustainability and Environmental Engineer,
Otovari W. Polar	Milwaukee County Department of
	Transportation and Public Works
Ghassan A Korhan	
	Department of Public Works,
	City of Milwaukee
Mary Jo Lange	Director of Public Works,
, g	City Engineer, City of Cudahy
Tamara Mavzik	Administrative Coordinator,
,	City of South Milwaukee
Thomas Mlada	Mayor, City of Port Washington
Eric Nitschke, P.E	Regional Director, Southeast Region,
	Wisconsin Department of
	Natural Resources
Eric Reinelt	Municipal Port Director, Port of Milwaukee
	Manager, Village of Fox Point
Chad Sampson	County Conservationist,
	Racine County
Kevin L. Shafer	Executive Director, Milwaukee
	Metropolitan Sewerage District

### ADVISORY COMMITTEE ON REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS

Chairman	SEWRPC Commissioner
Michael G. Hahn Secretary	Chief Environmental Engineer, Southeastern Wisconsin Regional Planning Commission
Julio A Andorson	Director, Racine County Planning
Julie A. Ariderson	and Development
Michael I Ballwog	Crops and Soils Educator,
Wilchael J. Ballweg	University of Wisconsin-Extension,
	Sheboygan County
John P. Rehrens	Commissioner-Secretary, Silver Lake
John N. Demens	Protection and Rehabilitation District
John M. Rennett	
momas of Burner	Water and Wastewater Utility
Nathan Check	
Lisa Conley	Representative, Town and Country Resource
	Concervation and Development Inc
Joyce A. Fiacco	Director, Dodge County Land
-	Resources and Parks Department
Sharon I Gayan	
•	Department of Natural Resources
Shawn Graff	Executive Director, The Ozaukee
Gram Gram minimum	Washington Land Trust, Inc.
Jane Harrison	Social Science Outreach Specialist,
	University of Wisconsin Sea Grant Institute
Andrew A. Holschbach	Director, Ozaukee County,
	Land and Water Management Department
Stevan M. Keith	Sustainability and Environmental Engineer,
	Milwaukee County Department of
	Transportation and Public Works
Ghassan Korban	Commissioner, Department of Public Works,
	City of Milwaukee
Lynn Mathias	County Conservationist
	Fond du Lac County
J. Scott Mathie	Senior Director, Government Affairs, Metropolitan
	Builders Association of Greater Milwaukee
Charles S. Melching	Consultant and Former Associate
	Professor, Civil and Environmental
	Engineering, Marquette University
Paul E. Mueller	
	Planning and Parks Department
Patrick A. Murphy	Assistant State Conservationist,
	Natural Resources Conservation Service
Jeffrey S. Nettesheim	Director of Utilities,
	Village of Menomonee Falls
Judith A. Neu	City Engineer, City of West Bend
Charles A. Peters	Director, Wisconsin Water Science Center,
	U.S. Geological Survey
	Director of Public Works, City of Wauwatosa
Bruce W. Ramme	Vice-President, Environmental
	Department, We Energies
Karen M. Schapiro	Executive Director,
	Milwaukee Riverkeeper

# ADVISORY COMMITTEE ON REGIONAL WATER QUALITY MANAGEMENT PLAN UPDATE FOR THE GREATER MILWAUKEE WATERSHEDS (continued)

Kevin L. Shafer	Executive Director, Milwaukee
	Metropolitan Sewerage District
Dale R. Shaver	Director, Waukesha County
	Parks and Land Use Department
Peter G. Swenson	. Branch Chief, Watershed and Wetlands Branch,
	U.S. Environmental Protection Agency
Sam Tobias	Director of Planning and Development,
	Fond du Lac County
Shawn L. Wesener	Assistant Planning Director,
	Planning and Resources Department,
	Sheboygan County
Thomas A. Wiza	Director of Engineering and Public Works,
	City of Cedarburg

# ADVISORY COMMITTEE ON REGIONAL LAND USE PLANNING

Chairman	Director, Department of Planning and Development, Kenosha County
Julie A. Anderson	Director, Planning and Development, Racine County
Susan Black	Director, Milwaukee County
Months I. Brann	Department of Parks, Recreation and CultureDeputy Commissioner, Department of
Martna L. Brown	City Development, City of Milwaukee
John B. Capelle	Director of Community Development,
	City of West Bend
Krista Chapdelaine	Water Resources Planner
Hadaa E. Obalaahaaad	Milwaukee Metropolitan Sewerage District
Harlan E. Clinkenbeard	
Michael P. Cotter	and Planner, Town of Somers Director,
Michael F. Collei	Walworth County Land Use and
	Resource Management Department
Steven Crandell	Director of Community Development,
	City of Waukesha
	Village Administrator, Village of Summit
Charles Erickson	Director of Planning and Economic
	Development, City of Greenfield
Daniel F. Ertl	Director of Community Development,
	City of Brookfield
Robert Greenstreet	
0	City Development, City of Milwaukee
Gregory I. Igl	District Conservationist, Elkhorn Service Center U.S. Natural Resources Conservation Service
loffray D. Lababa	Interim Director of Community Development
Jenrey B. Labann	and Inspections, City of Kenosha
Peter T. McMullen	Program and Planning Analyst,
r eter 1. McMaileit	Wisconsin Department of Natural Resources
Paul F Mueller	
	Planning and Parks Department
Brian F. O'Connell	Director of City Development, City of Racine
Sheri Schmit	Systems Planning Group Manager,
	Southeast Region, Wisconsin
	Department of Transportation
Douglas Seymour	Director of Community Development,
Dolo B. Chover	City of Oak CreekDirector, Waukesha County Parks
Dale R. Shavei	and Land Use Department
John F. Stibal	Director of Community Development,
	City of West Allis
Andrew T. Struck	Director,
	Ozaukee County Planning and Parks Department
Randy L. Tetzlaff	Director of Planning and Development,
	City of Port Washington
Nancy L. Welch	Director of Community Development,
	City of Wauwatosa

# ADVISORY COMMITTEE ON REGIONAL POPULATION AND ECONOMIC FORECASTS

Andrew T. Struck	Director, Planning and Parks
Chairman	Department, Ozaukee County
Julie A. Anderson	Director, Public Works and Development
	Services Department, Racine County
Sandra A. Beaupré	Director, Bureau of Planning,
Divis	sion of Transportation Investment Management,
	Wisconsin Department of Transportation
	rector of Planning Operations, Kenosha County
Michael P. Cotter	Director, Walworth County Land Use and
	Resource Management Department
	Planning Manager, City of Franklin
John Flynn	Vice President, Strategy and Development,
	American Transmission Company

# ADVISORY COMMITTEE ON REGIONAL POPULATION AND ECONOMIC FORECASTS (continued)

David Egan-Robertson	Demographer, Applied Population, Laboratory, University of Wisconsin-Madison
Gordon Kacala	Executive Director, Racine County
Jedd Lapid	
Richard Marcoux	American Red Cross Of Eastern WisconsinCommissioner, City of Milwaukee,
Bret J. Mayborne	Department of City Development Director of Economic Research, Metropolitan
•	Milwaukee Association of Commerce
	Department, Washington County
Reggie Newson	Secretary, Wisconsin Department of Workforce Development
Francisco Sanchez	President, Waukesha-Ozaukee-
John Cohmid	Washington Workforce Development, Inc.
	Project Specialist, WE EnergiesDirector, Waukesha County
	Parks and Land Use DepartmentPresident/CEO, Milwaukee Area
	Workforce Investment Board, Inc.

# TECHNICAL ADVISORY COMMITTEE FOR THE PROTECTION AND MANAGEMENT OF NATURAL AREAS IN SOUTHEASTERN WISCONSIN

Dr. Susan E. Lewis	Professor of Biology, Carroll College;
Chairman	Director, Greene Field Station;
	Member, State of Wisconsin
	Natural Areas Preservation Council
	Chief Biologist, Southeastern Wisconsin
Secretary	Regional Planning Commission
	Urban Conservation Specialist, Walworth County
Dr. Philip J. Arnholt	Professor of Science, Biology
	Department, Concordia University
Dr. Owen D. Boyle	Regional Ecologist, Wisconsin
E: E 0 :	Department of Natural Resources
Erin E. Crain	
Inter Bounds In	Wisconsin Department of Natural Resources
John Dargle, Jr	Director, Milwaukee County
Carald II Francish In	Department of Parks, Recreation and Culture
Geraid H. Emmerich, Jr	Member, Board of Directors, Land Trust of Walworth County
Charrie Caaff	Executive Director, The Ozaukee
Snawn Graii	
Durana Cairana	Washington Land TrustWaukesha County Park System Manager
	Director, Ozaukee County, Land
Andrew A. Hoischbach	and Water Management Department
lossica lons	Executive Director, Riveredge Nature Center
R Martinus Johnson	Wildlife Manager, Wisconsin
D. Martinus Johnson	Department of Natural Resources
Marlin P. Johnson	Associate Professor Emeritus.
Widthirt : GOTHIOGH	Field Station Manager, Department of Biological
	Sciences, University of Wisconsin Waukesha Center;
	Vice President, Waukesha County Land Conservancy
Nicholas A. Miller	Director of Science, Wisconsin
	Chapter, The Nature Conservancy
James P. Morrissev	Land/Facilities Supervisor, Wisconsin
•	Department of Natural Resources
Paul E. Mueller	Administrator, Washington County
	Land Use and Park Department
Dr. Patricia Nagai	
	UW-Extension Service, Racine County
Jonathan Rudie	General Manager of Park Operations,
	Kenosha County Parks
Kevin L. Shafer	Executive Director, Milwaukee
	Metropolitan Sewerage District
Dr. Stephen L. Solheim	Associate Professor, Department of
	Biological Sciences, University of
5	Wisconsin-Whitewater
Dr. Joy J. Wolf	Associate Professor, Department of
	Geography, University of Wisconsin-Parkside

# REGIONAL WATER SUPPLY PLANNING ADVISORY COMMITTEE (continued)

	tive Director Emeritus, Southeastern Wisconsin
Chairman	Regional Planning Commission
Michael G. Hahn	Chief Environmental Engineer,
Secretary	Southeastern Wisconsin
	Regional Planning Commission
Julie A. Anderson	Director, Racine County
	Planning and Development
Kenneth R. Bradbury	Hydrogeologist/Professor Wisconsin
·	Geological and Natural History Survey
Thomas J. Bunker	Representative, Water and
	Wastewater Utility, City of Racine

# REGIONAL WATER SUPPLY PLANNING ADVISORY COMMITTEE

ADVISOR	Y COMMITTEE
•	Professor of Hydrogeology Emeritus, University of Wisconsin–Milwaukee
Lisa Conley	Representative, Town and Country Resource Conservation
Michael P. Cotter	and Development, Inc. Director, Walworth County
Charles A. Castlernald	Land Use and Resource Management DepartmentWater Supply Expert,
Charles A. Czarkowski	Wisconsin Department of Natural Resources, Southeast Region
Brian Dranzik	Interim Director, Milwaukee County Department of Transportation
Daniel S. Duchniak	and Public WorksGeneral Manager, Waukesha Water Utility,
	City of Waukesha
•	Manager, Worldwide S/H/E/Q Operations, S. C. Johnson & Son, IncWater Utility Superintendent,
_	City of Port Washington Director of Public Works,
	City of Brookfield Hydrogeologist Program Coordinator,
,	Wisconsin Department of Natural Resources, Madison
	Water Utility Superintendent, City of West Bend
Andrew A. Holschbach	Director, Ozaukee County, Land and Water
Eric J. Kiefer	Management DepartmentManager, North Shore
Thomas J. Krueger	Water Commission Water and Wastewater Utility Director, Village of Grafton
Carrie M. Lewis	Superintendent, Milwaukee Water Works, City of Milwaukee
,	Agricultural Business Operator, Lurvey Turf Nursery
J. Scott Mathie	Senior Director of Government Affairs, Metropolitan Builders
George E. Melcher	Association of Greater MilwaukeeDirector, Kenosha County Department of Planning and Development
Jeffrey Musche	Administrator/Clerk, Town of Lisbon President, City Water, LLC
	General Manager, Water Utility, City of Kenosha
	Department of Parks and Land Use
	Senior Environmental Engineer, MillerCoors, LLC
	Director of Public Works and Utilities, City of Lake Geneva
OLEVER IN. TILLI	General Manager, Water and Sewer Utility, City of Oak Creek

### ENVIRONMENTAL JUSTICE TASK FORCE

Adelene Greene Chair	Commissioner, Southeastern Wisconsin Regional Planning Commission; Director of Workforce Development, Kenosha County
Yolanda Adams	President and CEO, Urban
Ella Dunbar	League of Racine and Kenosha Program Services Manager,
	Social Development Commission, Milwaukee
	Attorney, Flores & Reyes Law Offices
Nancy Holmlund	President, WISDOM Interfaith Coalition
Darryl Johnson	Executive Director,
	Riverworks Development Corporation
Jedd Lapid	Regional Chief Development Officer,
·	American Red Cross of Eastern Wisconsin
N. Lynnette McNeely	Legal Redress Chair,
	Waukesha County—NAACP
Brian Peters	Housing Policy Advocate,
	Independence First
Guadalune "Wally" Rendon	Member Education/
Cudulator Wally Horidon	Outreach Representative,
	Racine Educator's Credit Union:
	Former Racine Police Officer
	Former Racine Police Officer

# ENVIRONMENTAL JUSTICE TASK FORCE (continued)

Jackie SchellingerIndian	Community School
Theresa SchuermanWalwor	th County Bilingual
Migrar	t Worker Outreach
Willie Wade Alderman	, City of Milwaukee

## REGIONAL HOUSING PLAN ADVISORY COMMITTEE

William R. Drew	Executive Director, Milwaukee County Research
Chairman	Park and Commissioner, Southeastern
	Wisconsin Regional Planning Commission
Julie A. Anderson	Director, Racine County, Department of
	Public Works and Development Services
Andy M. Buehler	Director of Planning Operations, Kenosha County
	Planning and Development Department
David Cappon	Executive Director, Housing Authorities
	of the City and County of Waukesha
Michael P. Cotter	Director, Walworth County Land Use and
	Resource Management Department
	President, Vangard Group, LLC, Milwaukee
Joseph G. Heck, Jr	Assistant Director (Retired), Racine
	Department of City Development
	President, Public Policy Forum, Milwaukee
	Planner, City of Waukesha
	City Administrator, City of Hartford
Jeffrey B. Labahn	Director of Community Development
	and Inspections, City of Kenosha
J. Scott Mathie	Senior Director, Government
	Affairs, Metropolitan Builders
	Association of Greater Milwaukee
Michael J. Murphy	Alderman, City of Milwaukee

# REGIONAL HOUSING PLAN ADVISORY COMMITTEE (continued)

Falamak Nourzad	Principal, Continuum Architects
T diditian 110dizad	& Planners, Milwaukee
Linda Olson	Director, Aging and Disability
	Resource Center, Washington County
Antonio M. Pérez	Executive Director, Housing Authority
	of the City of Milwaukee
Brian Peters	Housing Policy Advocate, Independence First,
	Milwaukee and Member, SEWRPC
	Environmental Justice Task Force
Kim Plache	Senior Community Relations Officer,
	Milwaukee Office of WHEDA
Maria Prioletta	Redevelopment and Special Projects Manager,
	Milwaukee Department of City Development
Welford Sanders	Executive Director, M.L. King Economic
	Development Corporation
Mary Kay Schleiter	Associate Professor,
	Department of Sociology-Anthropology,
	University of Wisconsin-Parkside
Kori Schneider-Peragine	Senior Administrator, Inclusive
	Communities Program, Metropolitan
D . D O.	Milwaukee Fair Housing Council
Dale R. Shaver	Director, Waukesha County
Mish and L. Online	Department of Parks and Land Use
	Director, Milwaukee Succeeds
Andrew 1. Struck	Director, Ozaukee County
Marna I Stüak	Planning and Parks Department Governmental Affairs Director.
Marrie J. Stuck	Greater Milwaukee Association of Realtors
Scott Thietle	Principal, Halen Homes, Brookfield
	Retired, Board of Ezekiel Community
rev. dames o. momas	Development Corporation
John F. Weishan Jr	Supervisor, Milwaukee County Board
	Dourd

# Appendix C

# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 2012

# **EXECUTIVE DIVISION**

Kenneth R. Yunker, PE Executive Director

Philip C. Evenson, AICP Special Projects Advisor

> Byron D. Guerra Land Survey

Richard J. Wazny

Print Shop

Supervisor

Assistant

**ECONOMIC DEVELOPMENT** 

**PLANNING DIVISION** 

Chief Economic

**Development Planner** 

John R. Meland

Debra D'Amico Executive Secretary

Dr. Kurt W. Bauer, PE, RLS, AICP Executive Director Emeritus

Executive Director Emeritus					
COMMUNITY ASSISTANCE PLANNING DIVISION	LAND USE PLANNING DIVISION	TRANSPORTATION PLANNING DIVISION	ENVIRONMENTAL PLANNING DIVISION		
Nancy M. Anderson, AICP Chief Community Assistance Planner	William J. Stauber Chief Land Use Planner	Christopher T. Hiebert, PE Chief Transportation Engineer	Michael G. Hahn, PE, PH Chief Environmental Engineer		
	David A. Schilling Principal Planner	Albert A. Beck	Dr. Donald M. Reed		
Richard R. Kania, AICP, RLA	Principal Planner	Robert E. Beglinger	Chief Specialist-		
Benjamin R. McKay	Kathryn E. Sobottke	Principal Planners	Biologist		
Principal Planners	Principal Specialist	Ryan W. Hoel, PE	Laura L. Kletti, PE, CFM		
	Frank G. Fierek, Jr.	Principal Engineer	Ronald J. Printz, PE		
Christopher D. Parisey Robbie L. Robinson	James P. Siegler	Ethan S. Johnson	Principal Engineers		
Planners	Planners	Eric D. Lynde	Joshua A. Murray, PE		
	Kaleb W. Kutz	Senior Engineers	Senior Engineer		
	Leroy Mims, Jr.	Victor Holin	Dr. Thomas M. Slawski		
CEOCRAPHIC	Land Use Mapping	Victor Helin Senior Planner	Dr. Jeffrey A. Thornton, CLM,		
GEOGRAPHIC INFORMATION SYSTEMS	Specialists		PH Principal Planners		
DIVISION	Joyce A. Gramz	Ajibola Ayanwale David J. Massey	Fillicipal Flatiliers		
	Senior GIS Specialist	Kevin J. Muhs	Dr. Lawrence A. Leitner		
John G. McDougall		Engineers	Principal Biologist		
Geographic Information Systems Manager		Ronald J. Klafka	Dr. Joseph E. Boxhorn		
Systems Manager	CARTOGRAPHIC AND	Kara W. Ottum	Senior Planner		
Paul J. Clavette	GRAPHIC ARTS DIVISION	Travel Survey Coordinators	Megan R. Bender		
John D. Harasha	Donald P. Simon, RLS	Coordinators	Engineer		
Principal Systems	Chief Planning	Dr. Gom B. Ale			
Analysts	Illustrator	Xylia N. Rueda Planners	Christopher J. Jors Kristin A. Sherfinski		
Michael G. Gosetti	Nancee A. Nejedlo	Reginald L. Mason	Specialists		
GIS Supervisor	Jean C. Peters Principal Planning	Research Analyst	Aaron W. Owens		
	Draftsmen	C. Terrence Anderson	Planner		
Bradley T. Subotnik		Peter E. Gill	Megan A. Beauchaine		
Senior GIS	LuAnn Sakale Senior Planning	Alexander C. Walker	Michael A. Borst		
Specialist	Draftsman	Engineering Technicians	Jennifer L. Dietl		
Detricia I. Devekard		ADMINISTRATIVE	Research Analysts		
Patricia L. Bouchard GIS Specialist	John T. Washburn, RLS Senior Specialist–	SERVICES DIVISION	Edward J. Schmidt GIS Specialist		
	Land Surveyor	Elizabeth A. Larsen	Ashton L. Douglas		
Timothy R. Gorsegner GIS Technician	Andrew J. Traeger	Business Manager	Engineering Technician		
GIS Technician	Certified Survey Technician	Linette G. Heis Secretary	Patricia M. Kokan		
	Duran D. Cuarra	Christine A. Kettner	Secretary		
	Byron D. Guerra	Accounting Clark/Llumon			

Accounting Clerk/Human Resource Assistant

Sylvia Carlson Receptionist

Robert J. Klatkiewicz

Office Clerk

PUBLIC INVOLVEMENT AND OUTREACH DIVISION

Stephen P. Adams Public Involvement and

Outreach Manager

(This page intentionally left blank)

## Appendix D

#### SCRIMA, KABITZKE & CO., S.C.

CERTIFIED PUBLIC ACCOUNTANTS 328 WEST SUNSET DRIVE WAUKESHA, WISCONSIN 53189

TELEPHONE (262) 542-8401 FAX 542-8713

MEMBER WISCONSIN INSTITUTE OF CPA'S

#### INDEPENDENT AUDITOR'S REPORT

To the Commissioners of Southeastern Wisconsin Regional Planning Commission Waukesha, Wisconsin

#### Report on the Financial Statements

We have audited the accompanying financial statements of Southeastern Wisconsin Regional Planning Commission, as of and for the year ended December 31, 2012, and the related notes to the financial statements, which collectively comprise the Commission's basic financial statements as listed in the table of contents

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of activities of Southeastern Wisconsin Regional Planning Commission, as of December 31, 2012, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### Other Matters

Management has omitted management's discussion and analysis and budgetary comparison information that accounting principles generally accepted in the United States of America require to be presented to supplement the basis financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by this missing information.

#### Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Southeastern Wisconsin Regional Planning Commission's basis financial statements. The schedule of expenditures of federal and state of Wisconsin awards, as required by Office of Management and Budget Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations are presented for purposes of additional analysis and are not a required part of the basic financial statements.

### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated May 21, 2013 on our consideration of Southeastern Wisconsin Regional Planning Commission's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Southeastern Wisconsin Regional Planning Commission's internal control over financial reporting and compliance.

Scrima, Kalette + Co., S.C.

Scrima, Kabitzke & Co., S.C. Waukesha, Wisconsin May 21, 2013

# Southeastern Wisconsin Regional Planning Commission Balance Sheet - All Fund Types December 31, 2012

	Governmental Fund Types Special			
	General	Revenue	2012 Total	2011 Total
Assets			2012 10111	
Pooled cash and cash equivalents	\$ 3,294,550	\$	\$ 3,294,550	\$ 2,741,279
Grants receivable	461,541	1,643,697	2,105,238	2,151,441
Other receivable	40		40	, ,
Prepaid expense	112,723		112,723	114,940
Property and equipment	3,053,655		3,053,655	3,194,632
Due from other funds	1,613,179		1,613,179	1,610,956
Total Assets	\$ 8,535,688	\$ 1,643,697	\$ 10,179,385	\$ 9,813,248
<u>Liabilities</u>				
State sales tax	\$ 75	\$	\$ 75	\$ 240
Accounts payable	123,352	30,518	153,870	344,872
Vacation accrual	260,432		260,432	252,610
Deferred revenue	808,007		808,007	737,077
Sick pay accrual	370,230		370,230	361,799
Due to other funds		1,613,179	1,613,179	1,610,956
Accrued payroll and taxes	188,731		188,731	112,190
Deposits and advance rents	3,333		3,333	3,333
Total Liabilities	1,754,160	1,643,697	3,397,857	3,423,077
Fund Equity				
Investments in fixed assets	3,330,106		3,330,106	3,194,632
Fund Balances - designated	2,245,539		2,245,539	1,976,137
- undesignated	1,205,883		1,205,883	1,219,402
Total Fund Equity	6,781,528		6,781,528	6,390,171
Total Liabilities and Fund Equity	\$ 8,535,688	\$ 1,643,697	\$ 10,179,385	\$ 9,813,248

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements

# Southeastern Wisconsin Regional Planning Commission

Statement of Revenues, Expenditures and Changes

 $\underline{in\ Fund\ Balance\ -\ All\ Governmental\ Fund\ Types}$ 

For the Year Ended December 31, 2012

	Governmental Fund Types			
n	G 1	Special	2012	2011
Revenues	General	Revenue	2012	2011
Contributions from counties	\$ 2,370,245	\$	\$ 2,370,245	\$ 2,370,245
Grant revenues		3,098,082	3,098,082	3,083,309
Service grants	326,006	. 1,315,951	1,641,957	2,109,369
Pass-through grants	96,775		96,775	506,496
Interest on invested funds	9,395		9,395	8,415
Other income	3,854		3,854	355,698
Rental income	77,478		77,478	65,559
Total Revenues	2,883,753	4,414,033	7,297,786	8,499,091
Expenditures				
Salaries and fringe benefits	2,880,194	2,377,725	5,257,919	5,186,788
Office and other expenses:				
Technical consultants	118,986	576,263	695,249	1,324,299
Technical consultants - pass-through	96,775		96,775	506,496
Office supplies	55,932	7,423	63,355	55,196
Insurance, audit, legal fees	56,903	15	56,918	66,398
Library acquisition and dues	29,544	5,925	35,469	41,317
Printing and graphics supplies	36,311	825	37,136	27,559
Postage expense	17,988	19,957	37,945	34,914
Travel expense	20,180	23,120	43,300	36,324
Telephone expense	31,179	414	31,593	30,032
Building usage	183,855	4,325	188,180	175,268
Building maintenance	177,315		177,315	402,239
Other operating expenses	30,061	19,361	49,422	27,766
Unemployment expense	582		582	
Software and equipment maintenance	126,630	45,230	171,860	253,231
Capital outlay	81,565	17,320	98,885	61,862
Total Expenditures	3,944,000	3,097,903	7,041,903	8,229,689
Excess (Deficit) Revenues Over Expenditures	(1,060,247)	1,316,130	255,883	269,402
Indirect Expense Allocation	1,316,130	(1,316,130)		
Fund Balance - beginning of year	3,195,539	-0-	3,195,539	2,926,137
Fund Balance - end of year	\$ 3,451,422	\$ -0-	\$ 3,451,422	\$ 3,195,539

# Southeastern Wisconsin Regional Planning Commission Statement of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual - All Governmental Fund Types

#### For the Year Ended December 31, 2012

			Variance Favorable
Revenues	Budget	Actual	(Unfavorable)
Contributions from counties	\$ 2,370,245	\$ 2,370,245	\$
Grant revenues	5,336,027	4,740,039	(595,988)
Pass-through grants		96,775	96,775
Interest on invested funds		9,395	9,395
Other income		3,854	3,854
Rental income	65,860	77,478	11,618
Total Revenues	7,772,132	7,297,786	(474,346)
Expenditures			
Salaries and fringe benefits	5,473,042	5,257,919	215,123
Office and other expenses:			
Technical consultants	1,194,000	695,249	498,751
Technical consultants - pass-through		96,775	(96,775)
Office supplies	55,000	63,355	(8,355)
Insurance, audit, legal fees	71,700	56,918	14,782
Library acquisition and dues	35,000	35,469	(469)
Printing and graphics supplies	55,000	37,136	17,864
Postage expense	108,500	37,945	70,555
Travel expense	36,500	43,300	(6,800)
Telephone expense	34,000	31,593	2,407
Building usage	172,260	188,180	(15,920)
Building maintenance	150,000	177,315	(27,315)
Other operating expenses	25,000	49,422	(24,422)
Unemployment compensation expense	5,000	582	4,418
Software and equipment maintenance	160,000	171,860	(11,860)
Capital outlay	182,130	98,885	83,245
Rent expense	15,000		15,000
Total Expenditures	7,772,132	7,041,903	730,229
Excess Revenues Over Expenditures	\$ -0-	255,883	\$ 255,883
Fund Balance - beginning of year		3,195,539	
Fund Balance - end of year		\$ 3,451,422	

The accompanying accountant's audit report and notes to financial statements are an integral part of these statements.

#### Southeastern Wisconsin Regional Planning Commission

### Combined Notes to the Financial Statements

### For the Year Ended December 31, 2012

The accompanying summary of Southeastern Wisconsin Regional Planning Commission's more significant accounting policies is presented to assist the reader in interpreting the financial statements and other data in this report. These policies, as presented, should be reviewed as an integral part of the accompanying financial statements. The accounting policies of Southeastern Wisconsin Regional Planning Commission conform to generally accepted accounting principles as applicable to governmental units.

### Note 1 - Summary of Significant Accounting Policies

# Reporting Entity

The Commission uses the criteria set forth by the Governmental Accounting Standards Board to determine the scope of the Commission's reporting entity. The accompanying financial statements reflect all significant operations of the Commission, which are under control of the Commissioners of Southeastern Wisconsin Regional Planning Commission.

#### Basis of Presentation

Southeastern Wisconsin Regional Planning Commission is a public agency serving the local communities within the counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha.

The accounts of the Commission are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, fund equity, revenues, and expenditures. Government resources are allocated to and accounted for in individual funds based upon the purposes for which they are to be spent and the means by which spending activities are controlled. The following funds are used by the Commission:

#### Governmental Funds

General Fund - The General Fund is the general operating fund of the Commission. It is used to account for all financial resources except those required to be accounted for in another fund.

Special Revenue Fund - Special Revenue Funds are used to account for the specific revenue sources (other than major capital projects) that are legally restricted to expenditures for specified purposes.

Total (Memorandum Only) - The column captioned Total (Memorandum Only) in the combined financial statements is a total of the columnar statements by fund type. The total column is not comparable to a consolidation and does not present financial position and results of operations in conformity with generally accepted accounting principles because the same basis of accounting is not used by all funds and interfund transactions and balancing accounts have not been eliminated.

#### Southeastern Wisconsin Regional Planning Commission

#### Combined Notes to the Financial Statements

#### For the Year Ended December 31, 2012

#### Note 1 - Summary of Significant Accounting Policies (Cont'd)

#### Budge

The Commissions annual budget is prepared principally on the cash basis and represents departmental appropriations as authorized and any authorized revisions during the year to reflect changes in programs and activities. The budget cash basis differs from generally accepted accounting principles (GAAP). Actual amounts in the accompanying budgetary comparison statement are presented on the modified accrual basis.

#### Cash and Cash Equivalents

In addition to bank accounts and petty cash, this classification includes all short-term investments.

#### Basis of Accounting

The modified accrual basis of accounting is followed by the governmental funds. Under the modified accrual basis those items of revenue for which a valid receivable can be determined in advance of their due date should be recognized on the accrual basis. All other items are recognized on the cash basis because the time of collection generally coincides with the determination of the amount. Expenditures are recognized when a liability to be met from fund assets is incurred.

#### Fixed Assets

Governmental general fixed assets acquired during the year ended December 31, 2012 are recorded as expenditures in the governmental funds. Generally accepted accounting principles require that these fixed assets be capitalized at cost.

#### Accrued Sick Leave

The Commission accrues up to 130 days for sick leave when an employee retires. The employee may use these funds to purchase health insurance after they retire.

#### Deferred Debt Expense and Bond Discount

Bond issuance costs and bond discount costs are capitalized and amortized over the terms of the bonds.

#### Accrued Vacation

The Commission accrues unused vacation time since the unused vacation time is cumulative from year to year. The maximum accrual per individual is 30 days.

### Southeastern Wisconsin Regional Planning Commission

#### Combined Notes to the Financial Statements

For the Year Ended December 31, 2012

#### Note 1 - Summary of Significant Accounting Policies (Cont'd)

#### Fund Balances

The Commission classifies its fund equity as follows:

Designated Fund Balances - indicates that portion of fund equity, which has been segregated for specific purposes.

Undesignated Fund Balances - indicates that portion of fund equity, which is available for budgeting or other uses in future periods.

#### Note 2 - General Fixed Asset Group

The following is a cost breakdown of fixed assets as of December 31 of the year indicated. Generally accepted accounting principles require that these fixed assets be capitalized at the original cost. Fair market value at liquidation would be different from these values.

	2012	2011
Land	\$ 335,300	\$ 335,300
Land improvements	213,655	213,655
Building and improvements	3,287,879	3,287,879
Office furniture	274,938	251,407
Computers and related equipment	297,309	319,653
Office equipment	367,896	337,207
Automobiles	172,976	181,962
Field equipment	75,292	66,899
	5,025,245	4,993,962
Less: Depreciation	(1,971,590)	(1,799,330)
Net Book Value	\$ 3,053,655	\$ 3,194,632

# Southeastern Wisconsin Regional Planning Commission Combined Notes to the Financial Statements

For the Year Ended December 31, 2012

#### Combined Notes to the Financial Statements

For the Year Ended December 31, 2012

#### Note 3 - Employee Retirement Plan

All eligible Southeastern Wisconsin Regional Planning Commission employees participate in the Wisconsin Retirement System, a cost-sharing multiple-employer public employee retirement system (PERS). The payroll for employees covered by the system for the year ended December 31, 2012 was \$3,606,397, the employer's total payroll was \$3,814,294.

All permanent employees hired before July 1, 2011, expected to work over 600 hours a year are eligible to participate in the System. All employees employed after July 1, 2011 and work at least 1200 hours are eligible to participate in the System. Covered employees in the general category are required by statute to contribute 5.9% of their salary (7.05% for Executives and Elected Officials, 5.9% for Protective Occupations with Social Security, and 5.9% for Protective Occupations without Social Security), to the plane. Employers may not make these contributions to the plan on behalf of employees. Total contributions for the years ending December 31, 2012 and 2011 were \$208,914 and \$312,864, respectively, equal to the required contributions for each year.

Employees, who retire at or after age 65, are entitled to receive a retirement benefit. Employees may retire at age 55, (50 for protective occupation employees), and receive actuarially reduced benefits. The factors influencing the benefit are: (1) final average earnings, (2) years of creditable service, and (3) a formula factor. Final average earnings is the average of the employees' three highest years earnings. Employees terminating covered employment before becoming eligible for a requirement benefit may withdraw their contributions and, by doing so, forfeit all rights to any subsequent benefit. For employees beginning participation after 1/1/90, creditable service in each of five years is required for eligibility for a retirement annuity. Participants employed prior to 1990 and on or after April 24, 1998 and prior to July 1, 2011 are immediately vested. Participants who initially become eligible on or after July 1, 2011 must have five vests of creditable service to be vested.

The System also provides death and disability benefits for employees. Eligibility for and the amount of all benefits is determined under Chapter 40 of the State Statutes.

Note 4 – Cash and Temporary Investments

Cash and temporary investment balances as disclosed on the accompanying financial statements are

Cash on hand and on deposit CDs	\$ 1,080,470
Temporary cash investments	2,214,080
	\$ 3,294,550

The temporary cash investments are invested in the Wisconsin Investment Pool. The pool was paying 0.18% as of December 31, 2012.

#### Note 5 - Cognizant Agency

comprised of the following:

The cognizant agency for the Single Audit report is the Wisconsin Department of Transportation.

#### Note 6 - Designated Funds

The Commission has designated the following funds for future purposes:

	2012	2011
Equipment replacement	\$ 334,000	\$ 234,000
Errors and Omissions Insurance	350,000	300,000
Building Improvement & Maintenance	822,539	753,137
Program Development Fund	739,000	689,000
	\$ 2,245,539	\$ 1,976,137

#### Note 7 - Long-Term Debt

The City of Pewaukee issued \$3,000,000 of Industrial Revenue bonds on March 1, 2001. These bonds were to be repaid within 20 years from the date of issue.

The commission had an option to prepay the balance of the bonds, at par, commencing March 1, 2011. With this option the Commission has deposited irrevocably with the bond trustee \$1,930,000 to be invested in U.S. Treasury notes. On March 1, 2011 this deposit and accrued interest was used to pay the remaining bonds outstanding and interest payment.

### Southeastern Wisconsin Regional Planning Commission

#### Combined Notes to the Financial Statements

For the Year Ended December 31, 2012

#### Note 8 - Cash Risks

As of the balance sheet date, balances of cash at a financial banking institution exceeded the federally insured limit. These balances fluctuate greatly during the year and can exceed this limit. Management monitors, regularly, the financial condition of the banking institution, and tries to keep this potential risk to a minimum.

#### Note 9 - Subsequent Events

Management of Southeastern Wisconsin Regional Planning Commission has evaluated all subsequent events through May 21, 2013, for possible inclusion as a disclosure in the notes to the financial statements. The Organization has no subsequent events that require disclosure in the notes to the financial statements.

# Appendix E

# PUBLICATIONS OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION: 1962-2012

(Titles of reports in red are those that can be accessed on the website at www.sewrpc.org.)

# **PROSPECTUSES**

Regional Planning Program, April 1962\*

Root River Watershed Planning Program, March 1963\*

Fox River Watershed Planning Program, October 1964\*

Continuing Land Use-Transportation Study, May 1965

Milwaukee River Watershed Planning Program, September 1966\*

Comprehensive Library Planning Program, April 1968

Community Shelter Planning Program, August 1968

Racine Urban Planning District Comprehensive Planning Program, November 1968

Regional Sanitary Sewerage System Planning Program, December 1968\*

Menomonee River Watershed Planning Program, November 1969

Comprehensive Regional Airport Planning Program, December 1969\*

Regional Housing Study, December 1969

Deep Sandstone Aquifer Simulation Modeling Program, October 1972

Regional Park, Outdoor Recreation, and Related Open Space Planning Program, March 1973

Preliminary Engineering Study for the Abatement of Pollution from Combined Sewer

Overflow in the Milwaukee Metropolitan Area, July 1973\*

Kinnickinnic River Watershed Planning Program Prospectus, November 1974\*

Regional Air Quality Maintenance Planning Program Prospectus, November 1974

Preliminary Engineering Study for the Abatement of Water Pollution in the Kenosha Urban Area, December 1975

Lake Michigan Estuary and Direct Drainage Area Subwatersheds Planning Program Prospectus, September 1978\*

Milwaukee Area Primary Transit System Alternatives Analysis Prospectus, October 1978

Milwaukee Northwest Side/Ozaukee County Transportation Improvement Study Prospectus, November 1978

Milwaukee Area Work Time Rescheduling Study Prospectus, December 1978

Pike River Watershed Planning Program Prospectus, April 1979

Milwaukee Area Freeway Traffic Management System Study Prospectus, June 1979

Oak Creek Watershed Planning Program Prospectus, December 1979

Prospectus for an Energy Emergency Contingency Plan for Southeastern Wisconsin, December 1983

Milwaukee River Priority Watersheds Program Prospectus, March 1985

Stormwater Drainage and Flood Control Planning Program Prospectus for the Milwaukee Metropolitan Sewerage District, March 1985

Infrastructure Study for the Southeastern Wisconsin Region, June 1986

Milwaukee High Lake Level Impact Study Prospectus, December 1987

Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Kenosha Area, June 1988

Prospectus for the Preparation of Coordinated Sanitary Sewer and Water Supply System Plans for the Racine Area, May 1989\*

Natural Area Protection and Management Planning Program Prospectus, August 1989\*

Prospectus for the Preparation of a Comprehensive Plan for the Kenosha Urban Planning District, December 1990

Des Plaines River Watershed Planning Program Prospectus, September 1991

## PROSPECTUSES—continued

Prospectus for a Study of Emergency Medical Services in Waukesha County, March 1992 Prospectus for the Preparation of a Sanitary Sewerage System Plan for the Northwestern Waukesha County Area, September 1993

Regional Aquifer Performance Simulation Modeling Program Prospectus, October 1998\* Regional Water Supply Planning Program Prospectus, September 2002 Prospectus for a Regional Telecommunications Planning Program, December 2003

# OVERALL WORK PROGRAMS

Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1976-1980, December 1975

Overall Work Program of the Southeastern Wisconsin Regional Planning Commission: 1977-1981, December 1976

Overall Work Program and Prospectus of the Southeastern Wisconsin Regional Planning Commission: 1978-1982, December 1977

Overall Work Program—1979	Overall Work Program—1991	Overall Work Program—2003
Overall Work Program—1980	Overall Work Program—1992	Overall Work Program—2004
Overall Work Program—1981	Overall Work Program—1993	Overall Work Program—2005
Overall Work Program—1982	Overall Work Program—1994	Overall Work Program—2006
Overall Work Program—1983	Overall Work Program—1995	Overall Work Program—2007
Overall Work Program—1984	Overall Work Program—1996	Overall Work Program—2008
Overall Work Program—1985	Overall Work Program—1997	Overall Work Program—2009
Overall Work Program—1986	Overall Work Program—1998	Overall Work Program—2010
Overall Work Program—1987	Overall Work Program—1999	Overall Work Program—2011
Overall Work Program—1988	Overall Work Program—2000	Overall Work Program—2012
Overall Work Program—1989	Overall Work Program—2001	Overall Work Program—2013
Overall Work Program—1990	Overall Work Program—2002	

### STUDY DESIGNS

Study Design for the Continuing Regional Land Use-Transportation Study: 1970-1974\*

Study Design for the Continuing Land Use-Transportation Study: 1972-1976\*

Study Design for the Areawide Water Quality Planning and Management Program or Southeastern Wisconsin: 1975-1977\*

Study Design for the Milwaukee Harbor Estuary Comprehensive Water Resources Planning Program, September 1981

Study Design for the Continuing Regional Land Use-Transportation Study: 1992-2000, February 1993

Waukesha County Development Plan Study Design, May 1993

Upland Environmental Corridor Protection Study Design, September 1995\*

### PLANNING REPORTS

No. 1 - Regional Planning Systems Study, December 1962\*

No. 2 - Regional Base Mapping Program, July 1963\*

No. 3 - The Economy of Southeastern Wisconsin, June 1963\*

No. 4 - The Population of Southeastern Wisconsin, June 1963\*

No. 5 - The Natural Resources of Southeastern Wisconsin, June 1963\*

No. 6 - The Public Utilities of Southeastern Wisconsin, July 1963\*

## PLANNING REPORTS—continued

- No. 7 The Regional Land Use-Transportation Study
  - Volume 1 Inventory Findings: 1963, May 1965\*
  - Volume 2 Forecasts and Alternative Plans: 1990, June 1966
  - Volume 3 Recommended Regional Land Use and Transportation Plans: 1990, November 1966\*
- No. 8 Soils of Southeastern Wisconsin, June 1966\*
- No. 9 A Comprehensive Plan for the Root River Watershed, July 1966\*
- No. 10 A Comprehensive Plan for the Kenosha Planning District Volume 1 - Inventory Findings, Forecasts, and Recommended Plans, February 1967\* Volume 2 - Implementation Devices, February 1967\*
- No. 11 A Jurisdictional Highway System Plan for Milwaukee County, March 1969\*
- No. 12 A Comprehensive Plan for the Fox River Watershed Volume 1 - Inventory Findings and Forecasts, April 1969\* Volume 2 - Alternative Plans and Recommended Plan, February 1970
- No. 13 A Comprehensive Plan for the Milwaukee River Watershed Volume 1 - Inventory Findings and Forecasts, December 1970\* Volume 2 - Alternative Plans and Recommended Plan, October 1971\*
- No. 14 A Comprehensive Plan for the Racine Urban Planning District
   Volume 1 Inventory Findings and Forecasts, December 1970
   Volume 2 The Recommended Comprehensive Plan, October 1972
   Volume 3 Model Plan Implementation Ordinances, September 1972
- No. 15 A Jurisdictional Highway System Plan for Walworth County, October 1972\*
- No. 15 2nd Edition, A Jurisdictional Highway System Plan for Walworth County, March 2011
- No. 16 A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974
- No. 17 A Jurisdictional Highway System Plan for Ozaukee County, December 1973
- No. 18 A Jurisdictional Highway System Plan for Waukesha County, January 1974
- No. 19 A Library Facilities and Services Plan for Southeastern Wisconsin, July 1974
- No. 20 A Regional Housing Plan for Southeastern Wisconsin, February 1975\*
- No. 21 A Regional Airport System Plan for Southeastern Wisconsin, December 1975
- No. 22 A Jurisdictional Highway System Plan for Racine County, February 1975
- No. 23 A Jurisdictional Highway System Plan for Washington County, October 1974\*
- No. 23 2nd Edition, A Jurisdictional Highway System Plan for Washington County, July 2008
- No. 24 A Jurisdictional Highway System Plan for Kenosha County, April 1975
- No. 25 A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000
   Volume 1 Inventory Findings, April 1975\*
   Volume 2 Alternative and Recommended Plans, May 1978\*
- No. 26 A Comprehensive Plan for the Menomonee River Watershed Volume 1 - Inventory Findings and Forecasts, October 1976\* Volume 2 - Alternative Plans and Recommended Plan, October 1976\*
- No. 27 A Regional Park and Open Space Plan for Southeastern Wisconsin: 2000, November 1977\*
- No. 28 A Regional Air Quality Attainment and Maintenance Plan for Southeastern Wisconsin: 2000, June 1980
- No. 29 A Regional Wastewater Sludge Management Plan for Southeastern Wisconsin, July 1978\*
- No. 30 A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000
   Volume 1 Inventory Findings, September 1978\*
   Volume 2 Alternative Plans, February 1979\*
   Volume 3 Recommended Plan, June 1979\*
- No. 31 A Regional Transportation Plan for the Transportation Handicapped in Southeastern Wisconsin: 1978-1982, April 1978
- No. 32 A Comprehensive Plan for the Kinnickinnic River Watershed, December 1978\*

### PLANNING REPORTS—continued

- No. 33 A Primary Transit System Plan for the Milwaukee Area, June 1982
- No. 34 A Transportation System Plan for the Milwaukee Northwest Side/Ozaukee County Study Area, August 1983
- No. 35 A Comprehensive Plan for the Pike River Watershed, June 1983\*
- No. 36 A Comprehensive Plan for the Oak Creek Watershed, August 1986
- No. 37 A Water Resources Management Plan for the Milwaukee Harbor Estuary Volume 1 Inventory Findings, March 1987\*

  Volume 2 Alternative and Recommended Plans, December 1987\*
- No. 38 A Regional Airport System Plan for Southeastern Wisconsin: 2010, May 1987
- No. 38 2nd Edition, A Regional Airport System Plan for Southeastern Wisconsin: 2010, November 1996\*
- No. 39 A Freeway Traffic Management System Plan for the Milwaukee Area, November 1988\*
- No. 40 A Regional Land Use Plan for Southeastern Wisconsin—2010, January 1992\*
- No. 41 A Regional Transportation System Plan for Southeastern Wisconsin: 2010, December 1994\*
- No. 42 A Regional Natural Areas and Critical Species Habitat Protection and Management Plan for Southeastern Wisconsin, September 1997
- No. 43 A Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2010, December 1994
- No. 44 A Comprehensive Plan for the Des Plaines River Watershed, June 2003
- No. 45 A Regional Land Use Plan for Southeastern Wisconsin: 2020, December 1997
- No. 46 A Regional Transportation System Plan for Southeastern Wisconsin: 2020, December 1997
- No. 47 A Regional Freeway System Reconstruction Plan for Southeastern Wisconsin, May 2003\*
- No. 48 A Regional Land Use Plan for Southeastern Wisconsin: 2035, June 2006
- No. 49 A Regional Transportation System Plan for Southeastern Wisconsin: 2035, June 2006
- No. 50 A Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds, December 2007
- No. 51 A Wireless Antenna Siting and Related Infrastructure Plan for Southeastern Wisconsin, September 2006
- No. 52 A Regional Water Supply Plan for Southeastern Wisconsin Volume 1 Chapters 1 2, December 2010 Volume 2 Appendices, December 2010
- No. 53 A Regional Broadband Telecommunications Plan for Southeastern Wisconsin, October 2007

### PLANNING GUIDES

- No. 1 Land Development Guide, November 1963\*
- No. 1 Second Edition, Land Division Control Guide, July 2001
- No. 2 Official Mapping Guide, February 1964
- No. 2 2nd Edition, Official Mapping Guide, June 1996
- No. 3 Zoning Guide, April 1964\*
- No. 4 Organization of Planning Agencies, June 1964\*
- No. 5 Floodland and Shoreland Development Guide, November 1968\*
- No. 6 Soils Development Guide, August 1969\*
- No. 7 Rural Cluster Development Guide, December 1996\*

# **TECHNICAL REPORTS**

- No. 1 Potential Parks and Related Open Spaces, September 1965\*
- No. 2 Water Law in Southeastern Wisconsin, January 1966\*
- No. 2 2nd Edition, Water Law in Southeastern Wisconsin, December 1977\*
- No. 3 A Mathematical Approach to Urban Design, January 1966\*

### TECHNICAL REPORTS—continued

- No. 4 Water Quality and Flow of Streams in Southeastern Wisconsin, November 1966\*
- No. 5 Regional Economic Simulation Model, October 1966\*
- No. 6 Planning Law in Southeastern Wisconsin, October 1966\*
- No. 6 2nd Edition, Planning Law in Southeastern Wisconsin, April 1977
- No. 7 Horizontal and Vertical Survey Control in Southeastern Wisconsin, July 1968\*
- No. 7 2nd Edition, Horizontal and Vertical Survey Control in Southeastern Wisconsin, August 1990
- No. 7 3rd Edition, Horizontal and Vertical Survey Control in Southeastern Wisconsin, August 1996\*
- No. 8 A Land Use Design Model
  - Volume 1 Model Development, January 1968
  - Volume 2 Model Test, October 1969
  - Volume 3 Final Report, April 1973
- No. 9 Residential Land Subdivision in Southeastern Wisconsin, September 1971
- No. 10 The Economy of Southeastern Wisconsin, December 1972\*
- No. 10 2nd Edition, The Economy of Southeastern Wisconsin, May 1984
- No. 10 3rd Edition, The Economy of Southeastern Wisconsin, October 1995
- No. 10 4th Edition, The Economy of Southeastern Wisconsin, July 2004
- No. 11 The Population of Southeastern Wisconsin, December 1972\*
- No. 11 2nd Edition, The Population of Southeastern Wisconsin, June 1984
- No. 11 3rd Edition, The Population of Southeastern Wisconsin, October 1995
- No. 11 4th Edition, The Population of Southeastern Wisconsin, July, 2004
- No. 12 A Short-Range Action Housing Program for Southeastern Wisconsin: 1972 and 1973, June 1972
- No. 13 A Survey of Public Opinion in Southeastern Wisconsin, September 1974
- No. 14 An Industrial Park Cost-Revenue Analysis in Southeastern Wisconsin: 1975, June 1975
- No. 15 Household Response to Motor Fuel Shortages and Higher Prices in Southeastern Wisconsin, August 1976
- No. 16 Digital Computer Model of the Sandstone Aquifer in Southeastern Wisconsin: April 1976
- No. 17 Water Quality of Lakes and Streams in Southeastern Wisconsin: 1964-1975, June 1978
- No. 18 State of the Art of Water Pollution Control in Southeastern Wisconsin
  - Volume 1 Point Sources, July 1977
  - Volume 2 Sludge Management, August 1977
  - Volume 3 Urban Storm Water Runoff, July 1977
  - Volume 4 Rural Storm Water Runoff, December 1976
- No. 19 A Regional Population Projection Model, October 1980
- No. 20 Carpooling in the Metropolitan Milwaukee Area, March 1977
- No. 21 Sources of Water Pollution in Southeastern Wisconsin: 1975, September 1978\*
- No. 22 Recent Population Growth and Change in Southeastern Wisconsin: 1970-1977, September 1979
- No. 23 Transit-Related Socioeconomic, Land Use, and Transportation Conditions and Trends in the Milwaukee Area, December 1980\*
- No. 24 State-of-the-Art of Primary Transit System Technology, February 1981
- No. 25 Alternative Futures for Southeastern Wisconsin, December 1980
- No. 26 Milwaukee Area Alternative Primary Transit System Plan Preparation, Test, and Evaluation, March 1982
- No. 27 Milwaukee Area Work Time Rescheduling Study, August 1981
- No. 28 Evaluation of the Milwaukee Area Rideshare Program: 1972-1982, May 1983
- No. 29 Industrial Land Use in Southeastern Wisconsin, November 1984\*
- No. 30 The Development of an Automated Mapping and Land Information System: A Demonstration Project for the Town of Randall, Kenosha County, Wisconsin, December 1985
- No. 31 Costs of Urban Nonpoint Source Water Pollution Control Measures, June 1991\*
- No. 32 General Mitchell International Airport Enplaning Passenger Survey Findings: 1989, August 1990

## TECHNICAL REPORTS—continued

- No. 33 Integration of the Computer-Assisted Management and Planning System with a Parcel-Based Land Information System: A Demonstration Project in Kenosha County, September 1992
- No. 34 A Mathematical Relationship between NAD27 and NAD83(91) State Plane Coordinates in Southeastern Wisconsin, December 1994
- No. 35 Vertical Datum Differences in Southeastern Wisconsin, December 1995
- No. 36 Lake Michigan Shoreline Recession and Bluff Stability in Southeastern Wisconsin: 1995, December 1997
- No. 37 Groundwater Resources of Southeastern Wisconsin, June 2002\*
- No. 39 Water Quality Conditions and Sources of Pollution in the Greater Milwaukee Watersheds, November 2007
- No. 40 Rainfall Frequency in the Southeastern Wisconsin Region, April 2000
- No. 41 A Regional Aquifier Simulation Model for Southeastern Wisconsin, June 2005
- No. 42 Municipal Fiscal Capacity Analysis for Southeastern Wisconsin, July 2005
- No. 43 State-of-the-Art of Water Supply Practices, July 2007
- No. 44 Water Supply Law, April 2007
- No. 45 Technical Review and Revaluation of the Regional Control Survey Program in Southeastern Wisconsin, March 2008
- No. 46 Groundwater Budget Indices and Their Use in Assessing Water Supply Plans for Southeastern Wisconsin, February 2010
- No. 47 Groundwater Recharge in Southeastern Wisconsin Estimated by a GIS Based Water Balanced Model, July 2008
- No. 48 Shallow Groundwater Quantity Sustainability Analysis Demonstration for the Southeastern Wisconsin Region, November 2009
- No. 49 Bidirectional Transformation of Legacy and Current Survey Control Data Within Southeastern Wisconsin, May 2010

## COMMUNITY ASSISTANCE PLANNING REPORTS

- No. 1 Residential, Commercial, and Industrial Neighborhoods, City of Burlington and Environs, February 1973
- No. 2 Alternative Land Use and Sanitary Sewerage System Plans for the Town of Raymond: 1990, January 1974
- No. 3 Racine Area Transit Development Program: 1975-1979, June 1974
- No. 4 Floodland Information Report for the Rubicon River, City of Hartford, Washington County, Wisconsin, December 1974
- No. 5 Drainage and Water Level Control Plan for the Waterford-Rochester-Wind Lake Area of the Lower Fox River Watershed, May 1975
- No. 6 A Uniform Street Naming and Property Numbering System for Racine County, Wisconsin, November 1975\*
- No. 7 Kenosha Area Transit Development Program: 1976-1980, March 1976\*
- No. 8 Analysis of the Deployment of Paramedic Emergency Medical Services in Milwaukee County, April 1976\*
- No. 9 Floodland Information Report for the Pewaukee River, Village of Pewaukee, Waukesha County, Wisconsin, October 1976
- No. 9 2nd Edition, Floodland Information Report for the Pewaukee River, Village of Pewaukee, Waukesha County, Wisconsin, March 1985
- No. 10 Land Use and Arterial Street System Plans, Village of Jackson, Washington County, Wisconsin, December 1976
- No. 11 Floodland Information Report for Sussex Creek and Willow Springs Creek, March 1977\*
- No. 12 Waukesha Area Transit Development Program: 1977-1981, January 1977\*
- No. 13 Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1977

- No. 13 2nd Edition, Flood Control Plan for Lincoln Creek, Milwaukee County, Wisconsin, September 1982\*
- No. 14 Floodland Management Plan for the Village of Pewaukee, February 1978
- No. 15 Off-Airport Land Use Development Plan for General Mitchell Field and Environs: 1977, May 1977\*
- No. 16 A Plan for the Whittier Neighborhood, City of Kenosha and Town of Pleasant Prairie, Kenosha County, Wisconsin, June 1977\*
- No. 17 A Plan for the Jefferson Park Neighborhood, Village of Germantown, Washington County, Wisconsin, March 1978
- No. 18 A Land Use Plan for the Town of Erin: 2000, July 1978\*
- No. 19 Storm Water Storage Alternatives for the Crossway Bridge and Port Washington-Bayfield Drainage Area in the Village of Fox Point, August 1977\*
- No. 20 A Rail Transportation Service Plan for the East Troy Area, September 1977
- No. 21 A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978, December 1977\*
- No. 22 Alternative and Recommended Land Use Plans for the Town of Genesee: 2000, February 1978
- No. 23 A Park and Recreation Plan for Ozaukee County, August 1978
- No. 24 A Park and Open Space Plan for the Village of Darien, December 1978\*
- No. 25 A Plan for the Delrock Neighborhood, City of Delavan, Walworth County, Wisconsin, January 1979\*
- No. 26 A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979, December 1978
- No. 27 A Park and Open Space Plan for the Town of Eagle, April 1979
- No. 28 Oconomowoc Area Traffic Management Plan, City of Oconomowoc, Waukesha County, Wisconsin, December 1979
- No. 29 A Development Plan for the Quarry Ridge Neighborhood, City of Burlington, Racine County, Wisconsin, July 1979\*
- No. 30 Whitewater Area Rail Service Plan, August 1979\*
- No. 31 Waukesha Area Transit Development Program: 1981-1985, February 1980\*
- No. 32 Recommended Electronic Data Processing and Transmittal System for Criminal Justice Agencies in Southeastern Wisconsin, September 1979\*
- No. 33 A Land Use Plan for the Town of Fredonia: 2000, September 1979
- No. 33 2nd Edition, A Land Use Plan for the Town of Fredonia: 2010, Ozaukee County, Wisconsin, January 1999
- No. 34 A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980, December 1979\*
- No. 35 Sanitary Sewer Service Area for the City of West Bend, Washington County, Wisconsin, December 1982
- No. 35 2nd Edition, Sanitary Sewer Service Area for the City of West Bend and Environs, Washington County, Wisconsin, June 1998\*
- No. 36 A Land Use Plan for the Village of Germantown: 2000, Village of Germantown, Washington County, Wisconsin, July 1980\*
- No. 37 A Nonpoint Source Water Pollution Control Plan for the Root River Watershed, March 1980\*
- No. 38 A Land Use and Traffic Circulation Plan for the Village of Fredonia: 2000, Ozaukee County, Wisconsin, September 1980\*
- No. 39 A Public Transit System Accessibility Plan
  - Volume 1 Kenosha Urbanized Area, June 1980
  - Volume 2 Milwaukee Urbanized Area, Milwaukee County, May 1980
  - Volume 3 Racine Urbanized Area, June 1980
  - Volume 4 Milwaukee Urbanized Area, Waukesha County, June 1980

- No. 40 Recommended Locations for Motor Vehicle Inspection and Emissions Test Facilities in the Southeastern Wisconsin Region, October 1980\*
- No. 41 A Park and Open Space Plan for the Kenosha Planning District, December 1980\*
- No. 42 A Park and Open Space Plan for the Town and Village of Pewaukee, Waukesha County, Wisconsin, October 1980
- No. 43 A Development Plan for the Woodview Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1980\*
- No. 44 Proposed Public Transit Service Improvements: 1980, Waukesha County, Wisconsin, July 1980\*
- No. 45 A Farmland Preservation Plan for Kenosha County, Wisconsin, June 1981\*
- No. 46 A Farmland Preservation Plan for Racine County, Wisconsin, August 1981\*
- No. 47 A Water Quality Management Plan for Lac La Belle, Waukesha County, Wisconsin, December 1980\*
- No. 47 2nd Edition, A Water Quality Management Plan for Lac LaBelle, Waukesha County, Wisconsin, May 2007
- No. 48 A Water Quality Management Plan for Ashippun Lake, Waukesha County, Wisconsin, January 1982
- No. 48 2nd Edition, A Lake Management Plan for Ashippun Lake, Waukesha County, Wisconsin, May 2007
- No. 49 A Land Use and Traffic Circulation Plan for the Village of Hartland: 2000, Waukesha County, Wisconsin, July 1981
- No. 50 A Transportation Systems Management Plan for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981, June 1981
- No. 51 A Land Use Plan for the Village of Sussex: 2000, Waukesha County, Wisconsin, January 1982\*
- No. 52 Housing Opportunities Guide for the Southeastern Wisconsin Region, December 1980
- No. 53 A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin, August 1981\*
- No. 53 2nd Edition, A Water Quality Management Plan for Okauchee Lake, Waukesha County, Wisconsin, December 2003
- No. 54 A Water Quality Management Plan for North Lake, Waukesha County, Wisconsin, July 1982\*
- No. 55 A Land Use Plan for the Village of Darien: 2000, Walworth County, Wisconsin, December 1981
- No. 56 Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, August 1981
- No. 56 2nd Edition, Sanitary Sewer Service Areas for the Walworth County Metropolitan Sewerage District, Walworth County, Wisconsin, November 1991\*
- No. 57 A Development Plan for the Forest Hills Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1983\*
- No. 58 A Water Quality Management Plan for Pewaukee Lake, Waukesha County, Wisconsin, March 1984
- No. 58 2nd Edition, A Lake Management Plan for Pewaukee Lake, Waukesha County, Wisconsin, May 2003\*
- No. 59 A Development Plan for the Whitnall Neighborhood, City of Franklin, Milwaukee County, Wisconsin, September 1985\*
- No. 60 A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin, October 1985
- No. 60 2nd Edition, A Water Quality Management Plan for Geneva Lake, Walworth County, Wisconsin, May 2008
- No. 61 A Public Transportation Service Plan for Washington County, October 1981\*
- No. 62 A Traffic Circulation Plan for the West Bend Central Business District, August 1981\*
- No. 63 A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1982\*
- No. 63 2nd Edition, A Development Plan for the Echo Lake Neighborhood, City of Burlington, Racine County, Wisconsin, August 1984\*
- No. 64 Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, February 1982\*

- No. 64 2nd Edition, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, March 1986
- No. 64 3rd Edition, Sanitary Sewer Service Area for the City of Muskego, Waukesha County, Wisconsin, December 1997\*
- No. 65 A Public Transportation Service Plan for Walworth County, January 1982
- No. 66 A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, October 1981
- No. 66 2nd Edition, A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, June 1995\*
- No. 66 3rd Edition, A Park and Open Space Plan for the City of New Berlin, Waukesha County, Wisconsin, May 2003
- No. 67 A Traffic Circulation Plan for Lac La Belle, Waukesha County, Wisconsin, March 1982\*
- No. 68 Upland Disposal Area Siting Study for Dredged Materials from the Port of Milwaukee, December 1981\*
- No. 69 A Land Use and Urban Design Plan for the City of Elkhorn: 2000, Walworth County, Wisconsin, January 1985
- No. 70 Sanitary Sewer Service Area for the Village of Germantown, Washington County, Wisconsin, July 1983\*
- No. 71 A Park and Open Space Plan for the Town of Waterford, Racine County, Wisconsin, January 1990
- No. 72 A Park and Open Space Plan for the City of Oconomowoc, Waukesha County, Wisconsin, November 1987
- No. 73 A Shoreland Development Management Study for Racine County, Wisconsin, January 1982
- No. 74 Kenosha County Overall Economic Development Program (OEDP) Update-1981, April 1982\*
- No. 74 2nd Edition, Kenosha County Overall Economic Development Program (OEDP) Plan-1986 Update, September 1986
- No. 75 A Solid Waste Management Plan for Walworth County, Wisconsin, September 1982
- No. 75 2nd Edition, A Solid Waste Management Plan for Walworth County, Wisconsin, December 1994
- No. 76 A Land Use Plan for the Town and Village of Pewaukee: 2000, December 1982\*
- No. 77 A Wetland Protection and Management Plan for the City of Waukesha and Environs, February 1983\*
- No. 78 Sanitary Sewer Service Area for the City of Burlington, April 1986\*
- No. 78 -2nd Edition, Sanitary Sewer Service Area for the City of Burlington and Environs, Racine County Wisconsin, December 2001
- No. 79 Racine Area Transit System Plan and Program: 1984-1988, May 1984
- No. 80 A Lake Michigan Public Access Study for Racine County, Wisconsin, September 1982\*
- No. 81 Hartford Area Traffic Management Plan, June 1983\*
- No. 82 A Central Transfer Site Location and Design Analysis for the City of Waukesha Transit System, December 1982
- No. 83 A Transit System Operations Analysis for the City of Waukesha Transit System, February 1983
- No. 84 -Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, February 1983\*
- No. 84 -2nd Edition, Sanitary Sewer Service Area for the Village of Sussex, Waukesha County, Wisconsin, September 1994
- No. 84 -3rd Edition, Sanitary Sewer Service Area for the Village of Sussex and Town of Lisbon, Waukesha County, Wisconsin, June 2011
- No. 85 A Land Use Plan for the Village of Eagle: 2000, Waukesha County, Wisconsin, September 1983
- No. 86 A Lake Michigan Coastal Erosion Management Study for Racine County, Wisconsin, October 1982\*
- No. 87 A Farmland Preservation Plan for Ozaukee County, Wisconsin, May 1983

- No. 88 A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin, February 1985\*
- No. 89 A Stormwater Management Plan for the Village of Sussex, Waukesha County, Wisconsin, October 1983
- No. 90 -Sanitary Sewer Service Area for the Village of Saukville, Ozaukee County, Wisconsin, September 1983
- No. 91 -Sanitary Sewer Service Area for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, May 1987
- No. 91 -2nd Edition, Sanitary Sewer Service Areas for the City of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, June 1996\*
- No. 92 Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, March 1984
- No. 92 -2nd Edition, Sanitary Sewer Service Area for the City of Hartford and Environs, Washington County, Wisconsin, June 1995
- No. 92 -3rd Edition, Sanitary Sewer Service Area for the City of Hartford, Washington County, Wisconsin, September 2001\*
- No. 93 -Sanitary Sewer Service Area for the Village of Hartland, Waukesha County, Wisconsin, April 1985\*
- No. 94 -Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, September 1987
- No. 94 -2nd Edition, Sanitary Sewer Service Area for the City of Whitewater, Walworth County, Wisconsin, March 1995
- No. 95 -Sanitary Sewer Service Area for the City of Port Washington, Ozaukee County, Wisconsin, September 1983
- No. 95 -2nd Edition, Sanitary Sewer Service Area for the City of Port Washington and Environs, Ozaukee County, Wisconsin, December 2000\*
- No. 96 -Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, July 1984
- No. 96 -2nd Edition, Sanitary Sewer Service Area for the Village of Fredonia, Ozaukee County, Wisconsin, March 2004
- No. 97 -Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, November 1984\*
- No. 97 -2nd Edition, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, June 1987
- No. 97 -3rd Edition, Sanitary Sewer Service Area for the Village of Belgium, Ozaukee County, Wisconsin, August 1993
- No. 98 A Water Quality Management Plan for Friess Lake, Washington County, Wisconsin, August 1983
- No. 98 -2nd Edition, A Lake Management Plan for Friess Lake, Washington County, Wisconsin, November 1997\*
- No. 99 -Sanitary Sewer Service Area for the Village of Butler, Waukesha County, Wisconsin, February 1984
- No. 100 Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, June 1985\*
- No. 100 -2nd Edition, Sanitary Sewer Service Area for the City of Waukesha and Environs, Waukesha County, Wisconsin, March 1999\*
- No. 101 Kenosha Area Transit System Plan and Program: 1984-1988, June 1984
- No. 102 City of Whitewater Overall Economic Development Program Plan, January 1985
- No. 103 -Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, September 1984
- No. 103 -2nd Edition, Sanitary Sewer Service Area for the Allenton Area, Washington County, Wisconsin, March 2004
- No. 104 A Park and Open Space Plan for the City of West Bend, Washington County, Wisconsin, June 1985
- No. 105 Waukesha County Transit Plan: 1988-1992, September 1988

- No. 106 -Sanitary Sewer Service Areas for the City of Kenosha and Environs, Kenosha County, Wisconsin, November 1985
- No. 107 East Moreland Boulevard Short-Range and Long-Range Highway Improvement Plan, April 1984
- No. 108 A Park and Open Space Plan for the City of Brookfield, Waukesha County, Wisconsin, August 1991
- No. 108 -2nd Edition, A Park and Open Space Plan for the City of Brookfield, Waukesha County, Wisconsin, March 2001\*
- No. 108 -3rd Edition, A Park and Open Space Plan for the City of Brookfield, Waukesha County, Wisconsin, August 2011
- No. 109 Sanitary Sewer Service Area for the City and Town of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, November 1991
- No. 110 A Lake Michigan Coastal Erosion and Related Land Use Management Study for the City of St. Francis, Wisconsin, August 1984
- No. 111 -Land Use and Urban Design Plan for the City of New Berlin: 2010, April 1987
- No. 112 Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, August 1984
- No. 112 -2nd Edition, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, June 1993
- No. 112 -3rd Edition, Sanitary Sewer Service Area for the Village of East Troy and Environs, Walworth County, Wisconsin, December 2000\*
- No. 113 -Sanitary Sewer Service Area for the Town of Pewaukee Sanitary District No. 3, Lake Pewaukee Sanitary District, and Village of Pewaukee, Waukesha County, Wisconsin, June 1985\*
- No. 114 Village of Shorewood Comprehensive Traffic Plan, Milwaukee County, Wisconsin, September 1984
- No. 115 A Fire Station Building Program and Site Analysis, Village of Sturtevant, Racine County, Wisconsin, September 1984
- No. 116 -Milwaukee County Overall Economic Development Program Plan, October 1985
- No. 117 Washington County Overall Economic Development Program Plan, December 1985\*
- No. 118 Waukesha County Overall Economic Development Program Plan, December 1985\*
- No. 119 Sanitary Sewer Service Area, Village of Silver Lake, Kenosha County, Wisconsin, May 1987
- No. 119 -2nd Edition, Sanitary Sewer Service Area for the Village of Silver Lake and Environs, Kenosha County, Wisconsin, December 1998\*
- No. 120 A Solid Waste Management Plan for Milwaukee County, Wisconsin, July 1987\*
- No. 121 A Stormwater Management Plan for the Village of Hales Corners, Milwaukee County, Wisconsin, March 1986
- No. 122 A Park and Open Space Plan for the Town of Vernon, Waukesha County, Wisconsin, March 1985
- No. 123 Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, May 1988
- No. 123 -2nd Edition, Sanitary Sewer Service Area for the Village of Darien, Walworth County, Wisconsin, July 1992\*
- No. 124 -Sanitary Sewer Service Area for the Village of Jackson, Washington County, Wisconsin, May 1985
- No. 124 -2nd Edition, Sanitary Sewer Service Area for the Village of Jackson and Environs, Washington County, Wisconsin, September 1997\*
- No. 125 A Transportation Plan for the Village of Germantown: 2000, Washington County, Wisconsin, October 1985
- No. 126 A Development Plan for Kenosha County, Wisconsin, Volume One, Inventory Findings, May 1987
- No. 127 -Sanitary Sewer Service Area for the City of Delafield and the Village of Nashotah and Environs, Waukesha County, Wisconsin, November 1992\*

- No. 128 Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin, November 1985
- No. 128 -2nd Edition, Sanitary Sewer Service Area for the Village of Slinger, Washington County, Wisconsin, September 1993
- No. 128 -3rd Edition, Sanitary Sewer Service Area for the Village of Slinger and Environs, Washington County, Wisconsin, December 1998
- No. 129 A Solid Waste Management Plan for Kenosha County, Wisconsin, May 1989
- No. 130 A Stormwater Drainage and Flood Control Policy Plan for the Milwaukee Metropolitan Sewerage District, March 1986\*
- No. 131 A Park and Open Space Plan for Kenosha County, November 1987\*
- No. 131 -2nd Edition, A Park and Open Space Plan for Kenosha County, April 2012
- No. 132 A Park and Open Space Plan for Milwaukee County, November 1991\*
- No. 133 A Park and Open Space Plan for Ozaukee County, July 1987
- No. 133 2nd Edition, A Park and Open Space Plan for Ozaukee County, June 2001\*
- No. 133 -3rd Edition, A Park and Open Space Plan for Ozaukee County, June 2011
- No. 134 A Park and Open Space Plan for Racine County, September 1988
- No. 134 2nd Edition, A Park and Open Space Plan for Racine County, July 2001
- No. 135 A Park and Open Space Plan for Walworth County, February 1991
- No. 135 -2nd Edition, A Park and Open Space Plan for Walworth County, September 2000
- No. 136 A Park and Open Space Plan for Washington County, March 1989
- No. 136 -2nd Edition, A Park and Open Space Plan for Washington County: 2010, August 1997
- No. 136 -3rd Edition, A Park and Open Space Plan for Washington County, March 2004
- No. 137 A Park and Open Space Plan for Waukesha County, December 1989\*
- No. 138 A Development Plan for the Franklin Industrial Park Neighborhood, City of Franklin, Milwaukee County, Wisconsin, July 1988
- No. 139 A Land Information System Plan for Walworth County, September 1991
- No. 140 A Park and Open Space Plan for the Town of Jackson, Washington County, Wisconsin, September 1986
- No. 141 Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, May 1986
- No. 141 -2nd Edition, Sanitary Sewer Service Area for the Waterford/Rochester Area, Racine County, Wisconsin, April 1996\*
- No. 142 A Land Information System Plan for Ozaukee County, April 1992
- No. 143 -Sanitary Sewer Service Area for the Town of Salem Utility District No. 2, Kenosha County, Wisconsin, February 1986
- No. 144 A Development Plan for the City of Cedarburg: 2010, February 1991\*
- No. 145 -Sanitary Sewer Service Area for the Town of Salem Utility District No. 1, Village of Paddock Lake, and Town of Bristol Utility District Nos. 1 and 1B, Kenosha County, Wisconsin, October 1986\*
- No. 146 A Wildlife Habitat Management Plan for the Nicholson Wildlife Center, Town of Caledonia, Racine County, Wisconsin, May 1986\*
- No. 147 -Sanitary Sewer Service Area for the City of Racine and Environs, Racine County, Wisconsin, November 1986\*
- No. 147 -2nd Edition, Sanitary Sewer Service Area for the City of Racine and Environs, Racine and Kenosha Counties, Wisconsin, June 2003
- No. 148 A Park and Open Space Plan, Village of Walworth, Walworth County, Wisconsin, November 1986\*
- No. 149 Sanitary Sewer Service Area, Village of Twin Lakes, Kenosha County, Wisconsin, May 1987
- No. 150 A Rapid Transit Facility Plan for the Milwaukee Northwest Corridor, January 1988
- No. 151 A Transportation System Plan for the Blue Mound Road (USH 18) Corridor, December 1987

- No. 152 A Stormwater Drainage and Flood Control System Plan for the Milwaukee Metropolitan Sewerage District, December 1990\*
- No. 153 Traffic Management and Control Plan for the Village of Whitefish Bay, July 1988\*
- No. 154 A Transit System Development Plan for the City of Waukesha: 1988-1992, December 1989
- No. 155 A Lake Michigan Shoreline Erosion Management Plan for Northern Milwaukee County, Wisconsin, December 1988
- No. 156 Waukesha County Animal Waste Management Plan, August 1987
- No. 157 Sanitary Sewer Service Area, City of New Berlin, Waukesha County, Wisconsin, November 1987\*
- No. 158 -Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, November 1987
- No. 158 -2nd Edition, Sanitary Sewer Service Area for the Town of Lyons Sanitary District No. 2, Walworth County, Wisconsin, August 1993\*
- No. 159 Waukesha County Agricultural Soil Erosion Control Plan, June 1988
- No. 160 Racine County Agricultural Soil Erosion Control Plan, July 1988
- No. 161 -Sanitary Sewer Service Area for the Village of Kewaskum, Washington County, Wisconsin, March 1988
- No. 162 A Land Use and Transportation System Plan for the Village of Menomonee Falls: 2010, April 1990
- No. 163 A Lake Michigan Shoreline Erosion Management Plan for Milwaukee County, Wisconsin, October 1989\*
- No. 164 Kenosha County Agricultural Soil Erosion Control Plan, April 1989
- No. 165 A Development Plan for the Burlington Industrial Park Neighborhood, City of Burlington, Racine County, Wisconsin, January 1991
- No. 166 A Park and Open Space Plan for the Village of Sussex, Waukesha County, Wisconsin, September 1988
- No. 167 A Land Use Plan for the City of West Bend: 2010, Washington County, Wisconsin, July 1992\*
- No. 168 A Land Use Plan for the Town of LaGrange: 2010, March 1991\*
- No. 169 A Land Use Plan for the City of Waukesha Planning Area: 2010, Waukesha County, Wisconsin, September 1993\*
- No. 170 Washington County Agricultural Soil Erosion Control Plan, March 1989
- No. 171 -Ozaukee County Agricultural Soil Erosion Control Plan, February 1989
- No. 172 Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, February 1989\*
- No. 172 -2nd Edition, Sanitary Sewer Service Area for the City of Oconomowoc and Environs, Waukesha County, Wisconsin, September 1999\*
- No. 173 A Stormwater Management Plan for the City of West Bend, City of West Bend, Washington County, Wisconsin
  - Volume 1 Inventory Findings, Forecasts, Objectives, and Design Criteria, October 1989\*
  - Volume 2 Alternatives and Recommended Plan for the Silver Creek Subwatershed, June 1990
  - Volume 3 Alternatives and Recommended Plan for the Milwaukee River Drainage Area, June 1995
  - Volume 4 Alternatives and Recommended Plan for the Quaas Creek Subwatershed, July 1996
- No. 174 An Evaluation of Alternative Means for the Governance of the Delavan Lake Area, Walworth County, Wisconsin, March 1989
- No. 175 -Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, February 1989
- No. 175 -2nd Edition, Sanitary Sewer Service Area for the Village of Genoa City, Kenosha and Walworth Counties, Wisconsin, May 1996

- No. 176 -Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, October 1990\*
- No. 176 -2nd Edition, Sanitary Sewer Service Area for the City of Franklin, Milwaukee County, Wisconsin, June 2011
- No. 177 -Feasibility Study for a Milwaukee County Automated Mapping and Land Information System, October 1989\*
- No. 178 A Park and Open Space Plan for the Village of Grafton, Ozaukee County, Wisconsin, March 1989
- No. 179 A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin, November 1989
- No. 179 -2nd Edition, A Park and Open Space Plan for the Town of Caledonia, Racine County, Wisconsin, April 2000\*
- No. 180 -Sanitary Sewer Service Area for the Village of Union Grove and Environs, Racine County, Wisconsin, August 1990\*
- No. 181 A Water Quality Management Plan for Oconomowoc Lake, Waukesha County, Wisconsin, March 1990\*
- No. 181 -2nd Edition, A Lake Management Plan for Oconomowoc Lake, Waukesha County, Wisconsin, July 2009
- No. 182 A Water Use Management Plan for Waubeesee Lake and the Anderson Canal, Racine County, Wisconsin, December 1990\*
- No. 183 Kenosha Transit System Development Plan: 1991-1995, City of Kenosha, Wisconsin, September 1991\*
- No. 184 A Land Information System Plan for Washington County, March 1992
- No. 185 A Plan for the Creation of an Automated Mapping and Parcel-Based Land Information System for Kenosha County, August 1990
- No. 186 A Land Use and Street System Plan for the Village of Slinger: 2010, Washington County, Wisconsin, August 1995\*
- No. 187 A Management Plan for Fowler Lake, Waukesha County, Wisconsin, March 1994
- No. 188 -Sanitary Sewer Service Area for the City of Mequon and the Village of Thiensville, Ozaukee County, Wisconsin, January 1992\*
- No. 189 A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996, February 1991
- No. 190 A Stormwater Management and Flood Control Plan for the Lilly Creek Subwatershed, Village of Menomonee Falls, Waukesha County, Wisconsin, February 1993
- No. 191 -Sanitary Sewer Service Area for the Village of Mukwonago, Waukesha County, Wisconsin, November 1990\*
- No. 192 Sanitary Sewer Service Area for the Village of Dousman, Waukesha County, Wisconsin, December 1990
- No. 192 -2nd Edition, Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin, March 2000
- No. 192 -3rd Edition, Sanitary Sewer Service Area for the Village of Dousman and Environs, Waukesha County, Wisconsin, March 2007
- No. 193 A Land Information System Plan for Waukesha County, April 1991\*
- No. 194 A Land Information System Plan for Racine County, August 1991
- No. 195 A Land Use, Urban Design, and Transportation Plan for Selected Arterial Street Corridors in the Village of Hales Corners, Milwaukee County, Wisconsin, May 1993\*
- No. 196 A Management Plan for Powers Lake, Kenosha and Walworth Counties, Wisconsin, November 1991\*
- No. 197 A Wildlife Habitat Management Plan for the General Electric Company, Medical Systems Group, Lands, City of Waukesha and Town of Pewaukee, Waukesha County, Wisconsin, June 1991\*

- No. 198 A Management Plan for Wind Lake, Racine County, Wisconsin, December 1991
- No. 198 -2nd Edition, A Management Plan for Wind Lake, Racine County, Wisconsin, June 2008\*
- No. 199 A Park and Open Space Plan for the Town of Mt. Pleasant, Racine County, Wisconsin, November 1991
- No. 199 -2nd Edition, A Park and Open Space Plan for the Town of Mt. Pleasant, Racine County, Wisconsin, April 2003
- No. 200 A Land Use and Transportation System Development Plan for the IH 94 South Freeway Corridor, Kenosha, Milwaukee, and Racine Counties, December 1991\*
- No. 201 A Land Use and Transportation System Development Plan for the IH 94 West Freeway Corridor: 2010, Waukesha County, Wisconsin, September 1994\*
- No. 202 A Park and Open Space Plan for the City of Muskego, Waukesha County, Wisconsin, January 1992
- No. 203 -Sanitary Sewer Service Area for the City of Lake Geneva and Environs, Walworth County, Wisconsin, December 1992\*
- No. 204 Racine Transit System Development Plan: 1993-1997, City of Racine, Wisconsin, June 1993
- No. 205 -Sanitary Sewer Service Area for the Village of Newburg, Ozaukee and Washington Counties, Wisconsin, March 1993
- No. 206 -Sanitary Sewer Service Area for the Eagle Lake Sewer Utility District, Racine County, Wisconsin, December 1992
- No. 207 A Park and Open Space Plan for the City of Wauwatosa, Milwaukee County, Wisconsin, March 1998\*
- No. 208 -Sanitary Sewer Service Areas for the Villages of Lannon and Menomonee Falls, Waukesha County, Wisconsin, June 1993\*
- No. 209 A Development Plan for Waukesha County, Wisconsin, August 1996\*
- No. 210 City of West Bend Transportation System Plan: 2010, Washington County, Wisconsin, March 1994
- No. 211 A Land Use Plan for the Town of Geneva: 2010, November 1997\*
- No. 212 A Comprehensive Plan for the Kenosha Urban Planning District, Kenosha County, Wisconsin, December 1995\*
- No. 213 Sanitary Sewer Service Area for the City of Oak Creek, Milwaukee County, Wisconsin, July 1994\*
- No. 214 A Land Use and Street System Plan for the Village of Kewaskum: 2010, Washington County, Wisconsin, September 1997\*
- No. 215 An Environmentally Sensitive Lands Preservation Plan for the Town of Norway Sanitary District No. 1, Racine County, Wisconsin, June 1996\*
- No. 216 A Land Use Plan for the Village of Sussex: 2010, Waukesha County, Wisconsin, December 1997\*
- No. 217 A Land Use Plan for the Town of Waterford: 2010, Racine County, Wisconsin, May 1995\*
- No. 218 A Transit Service Plan for Ozaukee County: 1996-2000, July 1995\*
- No. 219 Sanitary Sewer Service Area for the Villages of Fontana and Walworth and Environs, Walworth County, Wisconsin, June 1995
- No. 220 A Land Use Plan for the Town of Sugar Creek: 2010, Walworth County, Wisconsin, August 1995\*
- No. 221 A Park and Open Space Plan for the Village of Thiensville, Ozaukee County, Wisconsin, March 1996\*
- No. 222 A Lake Management Plan for Little Muskego Lake, Waukesha County, Wisconsin, June 1996
- No. 223 A Public Transit Service Plan for Washington County: 1998-2002, November 1996\*
- No. 224 A Lake Management Plan for Whitewater and Rice Lakes, Walworth County, Wisconsin, February 1997\*
- No. 225 -Sanitary Sewer Service Area for the Pell Lake Sanitary District No. 1, Walworth County, Wisconsin, June 1996
- No. 226 A Lake Management Plan for Eagle Spring Lake, Waukesha County, Wisconsin, October 1997\*
- No. 226 -2nd Edition, A Lake Management Plan for Eagle Spring Lake, Waukesha County, Wisconsin, June 2011

- No. 227 A Lake Management Plan for Lake Keesus, Waukesha County, Wisconsin, June 1998
- No. 228 A Land Use Plan for the Town of Sharon: 2010, Walworth County, Wisconsin, September 1998
- No. 229 A Land Use Plan for the Town of Troy: 2020, Walworth County, Wisconsin, January 1999
- No. 230 A Lake Management Plan for the Phantom Lakes, Waukesha County, Wisconsin Volume 1 Inventory Findings, January 2006

  Volume 2 Alternatives and Recommended Plan, January 2006
- No. 231 Kenosha Area Transit System Development Plan: 1998-2002, City of Kenosha, Wisconsin, April 1998\*
- No. 232 A Land Use Plan for the Town of Saukville: 2010, Ozaukee County, Wisconsin, September 1998
- No. 233 -Racine Area Transit System Development Plan: 1998-2002, City of Racine, Wisconsin, October 1997\*
- No. 234 A Land Use Plan for the Village of Saukville: 2010, Ozaukee County, Wisconsin, December 1998
- No. 235 A Land Use Plan for the Town of Wayne: 2020, Washington County, Wisconsin, February 1999
- No. 236 A Stormwater and Floodland Management Plan for the Dousman Ditch and Underwood Creek Subwatersheds in the City of Brookfield and the Village of Elm Grove, Waukesha County, Wisconsin, February 2000
- No. 237 A Land Use Plan for the Town and Village of Rochester: 2020, Racine County, Wisconsin, November 1999\*
- No. 238 A Land Use Plan for the Town of Trenton: 2010, Washington County, Wisconsin, December 1997
- No. 239 -Feasibility Study of Commuter Railway Passenger Train Service in the Kenosha-Racine-Milwaukee Corridor, June 1998\*
- No. 240 Walworth-Fox Lake Corridor Commuter Service Feasibility Study, August 2001
- No. 241 -Burlington-Antioch Corridor Commuter Rail and Bus Service Feasibility Study, April 2002
- No. 242 A Park and Open Space Plan for the City of Lake Geneva, Walworth County, Wisconsin, April 1999\*
- No. 243 A Land Use Plan for the Town of Dover: 2020, Racine County, Wisconsin, August 1999
- No. 244 A Park and Open Space Plan for the Village of Jackson, Washington County, Wisconsin, November 1998
- No. 245 Waukesha County Transit System Development Plan: 2002-2006, November 2001\*
- No. 246 Waukesha Area Transit System Development Plan: 2003-2007, October 2003
- No. 247 -Sanitary Sewer Service Area for the Town of Norway Sanitary District No. 1 and Environs, Racine and Waukesha Counties, Wisconsin, June 1999\*
- No. 248 A Master Plan for the Town of Belgium: 2020, Ozaukee County, Wisconsin, October 2000
- No. 249 A Land Use Plan for the Town of Lyons: 2020, Walworth County, Wisconsin, December 2000\*
- No. 250 A Park and Open Space Plan for the City of West Bend: 2020, Washington County, Wisconsin, April 1999
- No. 250 -2nd Edition, A Park and Open Space Plan for the City of West Bend: 2020, Washington County, Wisconsin, March 2008
- No. 251 A Master Plan for the Town of Spring Prairie: 2020, Walworth County, Wisconsin, January 2001\*
- No. 252 A Land Use Plan for Walworth County, Wisconsin, April 2001\*
- No. 253 A Lake Management Plan for Delavan Lake, Walworth County, Wisconsin, May 2002\*
- No. 254 A Master Plan for the Village of Hartland: 2020, Waukesha County, December 2004
- No. 255 A Land and Water Resource Management Plan for Kenosha County: 2000-2004, September 2000
- No. 255 -2nd Edition, A Land and Water Resource Management Plan for Kenosha County: 2008-2012, Kenosha County, Wisconsin, October 2007
- No. 256 A Master Plan for the Village of Wales: 2020, Waukesha County, Wisconsin, April 2004
- No. 257 Flood Mitigation Plan for the City of Brookfield, Waukesha County, Wisconsin, October 2000
- No. 258 A Park and Open Space Plan for the Town of Ottawa, Waukesha County, Wisconsin, November 2001
- No. 259 A Land and Water Resource Management Plan for Racine County: 2000-2004, September 2000
- No. 259 -2nd Edition, A Land and Water Resource Management Plan for Racine County: 2008-2012, Racine County, Wisconsin, October 2007\*

- No. 260 A Stormwater and Floodland Management Plan for the Butler Ditch Subwatershed, City of Brookfield and Menomonee Falls, Waukesha County, Wisconsin, July 2004
- No. 261 -Flood Mitigation Plan for the City of Milwaukee, Milwaukee County, Wisconsin, October 2000
- No. 262 A Lake Management Plan for Nagawicka Lake, Waukesha County, Wisconsin, March 2001\*
- No. 265 Ozaukee County Transit System Development Plan—2002-2005, October 2002\*
- No. 266 -Racine County Hazard Mitigation Plan, August 2004\*
- No. 266 2nd Edition, Racine County Hazard Mitigation Plan: 2010-2015, July 2010
- No. 267 -STH 36 North Corridor Design Plan, Racine County, November 2005
- No. 268 A Land Use Plan for the Town of Bloomfield: 2020, Walworth County, Wisconsin, August 2003
- No. 269 A Flood Mitigation Plan for Kenosha County, Kenosha County, Wisconsin, September 2001
- No. 270 A Park and Open Space Plan for the City of Racine, Racine County, Wisconsin, July 2003
- No. 270 -2nd Edition, A Park and Open Space Plan for the City of Racine, Racine County, Wisconsin, December 2011
- No. 271 A Park and Open Space Plan for the Village of Union Grove, Racine County, Wisconsin, July 2003
- No. 272 A Land Use Plan Implementation Strategy for the Rural Area of the Town of Caledonia, Racine County, Wisconsin, March 2004
- No. 273 A Lake Management Plan for Pike Lake, Washington County, Wisconsin, December 2005
- No. 274 Flood Mitigation Plan for the City of Oak Creek, Milwaukee County, Wisconsin, April 2004
- No. 275 A Park and Open Space Plan for the Town of Salem: 2020, Kenosha County, Wisconsin, March 2005
- No. 276 -Kenosha-Racine-Milwaukee Corridor Transit Study Summary Report and Recommended Plan, August 2003
- No. 277 A Land Use Plan for the Village of Union Grove and the Town of Yorkville: 2020, Racine County, Wisconsin, December 2003
- No. 278 Kenosha County Hazard Mitigation Plan, April 2005
- No. 278 -2nd Edition, Kenosha County Hazard Mitigation Plan Update: 2011-2015, June 2010
- No. 279 Milwaukee County Transit System Development Plan, October 2010
- No. 280 A Master Plan for the Town of Lafayette: 2020, Walworth County, Wisconsin, September 2005
- No. 282 City of Milwaukee All Hazards Mitigation Plan, Milwaukee County, Wisconsin, May 2005
- No. 282 -2nd Edition, City of Milwaukee All Hazards Mitigation Plan, Milwaukee County, Wisconsin, June 2012
- No. 283 A Lake Management Plan for the Waterford Impoundment, Volume I, Inventory Findings, Volume II, Alternatives and Recommended Plan, Racine County, Wisconsin, October 2007
- No. 284 Pebble Creek Watershed Protection Plan Part One, Waukesha County, June 2008
- No. 285 -A Multi-Jurisdictional Comprehensive Plan for Ozaukee County: 2035, April 2008, amended May 2009
- No. 287 A Multi-Jurisdictional Comprehensive Plan for Washington County: 2035, April 2008
- No. 288 A Multi-Jurisdictional Comprehensive Plan for Walworth County: 2035, November 2009
- No. 289 A Comprehensive Plan for the Town of Addison: 2035, Washington County, Wisconsin, June 2009
- No. 290 A Comprehensive Plan for the Town of Barton, Washington County, Wisconsin, April 2008
- No. 291 -A Comprehensive Plan for the Town of Erin: 2035, Washington County, Wisconsin, December 2009
- No. 292 A Comprehensive Plan for the Town of Farmington: 2035, Washington County, Wisconsin, January 2010
- No. 293 A Comprehensive Plan for the Town of Hartford: 2035, Washington County, Wisconsin, April 2009
- No. 294 A Comprehensive Plan for the Town of Kewaskum: 2035, Washington County, Wisconsin, October 2009
- No. 295 -A Comprehensive Plan for the Town of Polk: 2035, Washington County, Wisconsin, September 2009
- No. 296 A Comprehensive Plan for the Town of Trenton: 2035, Washington County, Wisconsin, April 2009
- No. 297 A Comprehensive Plan for the Town of Wayne: 2035, Washington County, Wisconsin, March 2009
- No. 298 A Comprehensive Plan for the Village of Kewaskum: 2035, Washington County, Wisconsin, November 2009
- No. 299 A Multi-Jurisdictional Comprehensive Plan for Kenosha County: 2035, April 2010

- No. 300 A Lake Management Plan for George Lake, Kenosha County, Wisconsin, August 2007
- No. 301 A Multi-Jurisdictional Comprehensive Plan for Racine County: 2035, November 2009
- No. 302 -A Lake Management Plan for Elizabeth Lake and Lake Mary, Kenosha County, Wisconsin, July 2009 Volume I, Inventory Findings,
  Volume II, Alternative and Recommended Plans
- No. 303 Proposed Redistricting Plan for Walworth County: 2007 Walworth County, Wisconsin, July 2007
- No. 304 Action Plan for the Revitalization of the 30th Street Industrial Corridor, City of Milwaukee, Milwaukee County, November 2008
- No. 305 A Comprehensive Plan for the City of Racine: 2035, November, 2009
- No. 306 A Comprehensive Plan for the Town of Salem: 2035, Kenosha County, Wisconsin, March 2010
- No. 307 A Comprehensive Plan for the Town of Wheatland: 2035, Kenosha County, Wisconsin, May 2010
- No. 308 -Sanitary Sewer Service Area for the Village of Big Bend and Environs, Waukesha County, Wisconsin, March 2010
- No. 309 Mukwonago River Watershed Protection Plan, June 2010
- No. 310 -A Comprehensive Plan for the Town of East Troy: 2035, Walworth County, Wisconsin, December 2010
- No. 311 -Waukesha Metro Transit Development Plan: 2013-2017, December 2012
- No. 312 -A Land and Water Resource Management Plan for Milwaukee County: 2012-2021, August 2011

## MEMORANDUM REPORTS

- No. 1 -Cedarburg Central Business District Parking Study, City of Cedarburg, Ozaukee County, Wisconsin, December 1986
- No. 2 -Courthouse Parking Study, Ozaukee County, Wisconsin, November 1986
- No. 3 -Alternative Industrial Park Site Location and Cost Estimate Analysis, City of Oconomowoc, Waukesha County, Wisconsin, December 1986\*
- No. 4 -Pilgrim Parkway Traffic Study, Village of Elm Grove, Waukesha County, Wisconsin, December 1986\*
- No. 5 -Capital Improvements Program: 1987-1991, Village of East Troy, Walworth County, Wisconsin, December 1986\*
- No. 6 -Report of the Hoan Bridge South Task Force, Milwaukee County, Wisconsin, December 1986
- No. 7 -Public Transit Ridership Trends in Southeastern Wisconsin: 1975-1986, May 1987
- No. 8 -Assessment of Transportation Needs of Elderly and Handicapped Residents of Ozaukee County, June 1987
- No. 9 An Arterial Highway System Plan for Eastern Racine County, April 1987
- No. 10 -City of Elkhorn Fact Book, Walworth County, Wisconsin, November 1986
- No. 11 -City of Elkhorn Overall Economic Development Program Plan, Walworth County, Wisconsin, December 1986\*
- No. 12 -Economic Development Fact Book, City of Oconomowoc, Waukesha County, Wisconsin, March 1987
- No. 13 -Overall Economic Development Program Plan, City of Oconomowoc, Waukesha County, Wisconsin, March 1987
- No. 14 -Village of Menomonee Falls Economic Development Fact Book, September 1991
- No. 15 -Overall Economic Development Program Plan, Village of Menomonee Falls, Waukesha County, Wisconsin, September 1987
- No. 16 -Unpolluted Dredge Materials Disposal Plan for the Port Washington Harbor, City of Port Washington, Ozaukee County, Wisconsin, May 1987
- No. 17 A Public Transit Program for Handicapped Persons—City of Waukesha Transit System Utility, May 1987\*
- No. 18 A Central Public Works Facility Building Program, Site Location Analysis, and Site Development Plan for the City of New Berlin, May 1987

- No. 19 -Overall Economic Development Program Plan, City of Burlington, Racine County, Wisconsin, March 1988
- No. 20 -CTH N Traffic Study, City of Cedarburg, Ozaukee County, Wisconsin, February 1987
- No. 21 A Public Transit Program for Handicapped Persons—Milwaukee County Transit System, June 1987\*
- No. 22 A Public Transit Program for Handicapped Persons—Waukesha County Transit System, June 1987
- No. 23 A Public Transit Program for Handicapped Persons—City of Kenosha Transit System, June 1987\*
- No. 24 A Public Transit Program for Handicapped Persons—City of Racine Transit System, June 1987\*
- No. 25 -Traffic Impact Study of Proposed Development along Paradise Drive between the USH 45 Bypass and S. Main Street, City of West Bend, Washington County, Wisconsin, September 1987\*
- No. 26 -Official Map, City of Burlington, Racine County, Wisconsin, December 1987
- No. 27 -Village of Mukwonago Industrial Park Development Plan, Waukesha County, Wisconsin, March 1988
- No. 28 -Streams and Watercourses for Which the Milwaukee Metropolitan Sewerage District Has Assumed Jurisdiction for Drainage and Flood Control Purposes, August 1987\*
- No. 29 A Plan for the Abatement of Through Traffic Problems in the Village of West Milwaukee, March 1988
- No. 30 -Overall Economic Development Program Plan, City of South Milwaukee, Milwaukee County, Wisconsin, March 1988
- No. 31 Analysis of the Conversion from One-Way to Two-Way Operation of Pine Street from State Street to Jefferson Street, City of Burlington, Racine County, Wisconsin, January 1988
- No. 32 -Traffic Engineering Study of West and North Beach Roads in the Village of Oconomowoc Lake, Waukesha County, Wisconsin, January 1991
- No. 33 -Traffic Engineering Study of Robinhood Drive in the Village of Menomonee Falls, Waukesha County, Wisconsin, December 1989
- No. 34 -Overall Economic Development Program Plan, City of West Allis, Milwaukee County, Wisconsin, September 1988
- No. 35 A Stormwater Management Plan for the Crayfish Creek Subwatershed, City of Oak Creek, Milwaukee County, Wisconsin, June 1988
- No. 36 -Traffic Engineering Study of Milwaukee Avenue (STH 36) between the Central Business District and the Northern Corporate Limits of the City of Burlington, Racine County, Wisconsin, August 1988
- No. 37 -Economic Development Fact Book, City of South Milwaukee, Milwaukee County, Wisconsin, May 1988
- No. 38 A Regional Transportation Authority Feasibility Study for Southeastern Wisconsin, November 1990
- No. 39 A Flood Control Plan for a Portion of the Menomonee River Estuary Area, June 1989
- No. 40 -An Inventory of Vacant or Underutilized Lands in the Riverine Areas of Central Milwaukee County, May 1989
- No. 41 A Traffic Safety Study of N. Berkeley Boulevard between E. Montclaire Avenue and E. School Road in the Village of Whitefish Bay, Milwaukee County, Wisconsin, November 1991
- No. 42 -Traffic Engineering Study of Grandview Boulevard—CTH T—from Northview Road to Fatima Drive, Waukesha County, Wisconsin, July 1989
- No. 43 Amtrak Milwaukee-Chicago Passenger Survey Findings: May 1989, August 1989
- No. 44 -Town of Lisbon Southeast Area Quarry Operations—Environmental Impact Evaluation, September 1990\*
- No. 45 -Overall Economic Development Program Plan, Village of Slinger, Washington County, Wisconsin, October 1989
- No. 46 -Traffic Impact Study of the Interchange of STH 33 and CTH LL, Ozaukee County, Wisconsin, September 1989

- No. 47 -Economic Development Fact Book, City of West Allis, Milwaukee County, Wisconsin, October 1989\*
- No. 48 Washington Avenue (STH 57) Traffic Study in the City of Cedarburg, Ozaukee County, Wisconsin, January 1991
- No. 49 -Overall Economic Development Program Plan, City of Brookfield, Waukesha County, Wisconsin, December 1989
- No. 50 -Traffic Engineering Study of County Line Road (CTH Q) between the Intersection with Appleton Avenue (STH 175) and USH 41/45, December 1990
- No. 51 -Traffic Study of W. Fond du Lac Avenue in the Village of Menomonee Falls between N. 124th Street (STH 145) and W. Main Street (STH 74), Waukesha County, Wisconsin, January 1991
- No. 52 -Traffic Impact Study of the Alpine Valley Music Theatre in the Town of LaFayette, January 1991
- No. 53 A Stormwater Drainage and Flood Control System Plan for Grantosa Creek, Cities of Milwaukee and Wauwatosa, Milwaukee County, Wisconsin, February 1992
- No. 54 -Traffic Engineering Study of E. Birch Avenue in the Village of Whitefish Bay, January 1991
- No. 55 -Traffic Engineering Study of Keup Road between Columbia Road (STH 57) and STH 60 in the City and Town of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, May 1995
- No. 55 -2nd Edition, Traffic Engineering Study of Keup Road between Columbia Road and STH 60 in the City and Town of Cedarburg and the Village of Grafton, Ozaukee County, Wisconsin, November 2000\*
- No. 56 A Lakefront Recreational Use and Waterway Protection Plan for the Village of Pewaukee, Waukesha County, Wisconsin, March 1996\*
- No. 57 Amtrak Milwaukee-Chicago Passenger Survey Findings: June 1991, January 1993
- No. 58 A Paratransit Service Plan for Disabled Persons—Milwaukee County Transit System, January 1992
- No. 59 A Paratransit Service Plan for Disabled Persons—City of Kenosha Transit System, January 1992
- No. 60 A Paratransit Service Plan for Disabled Persons—City of Racine Transit System, January 1992
- No. 61 A Paratransit Service Plan for Disabled Persons—City of Waukesha Transit System Utility, January 1992
- No. 62 -A Paratransit Service Plan for Disabled Persons—Waukesha County Transit System, January 1992
- No. 63 A Land Use-Transportation Study of the N. 76th Street Corridor, August 1991
- No. 64 -Lake Arterial Extension Planning Study, August 1991
- No. 65 Analysis of the Intersection of S. Pine Street (STH 83) and E. State Street (STH 83) in the City of Burlington, Racine County, Wisconsin, September 1991
- No. 66 -City of Cudahy Overall Economic Development Program Plan, Milwaukee County, Wisconsin, June 1992
- No. 67 -Central Area Parking Study, City of Lake Geneva, Walworth County, Wisconsin, April 1996
- No. 68 -Regional Land Use Plan Implementation in Southeastern Wisconsin: Status and Needs, May 1993\*
- No. 69 -Environmental Assessment of the Proposed Development of the Millard Sand and Gravel Pit, July 1992\*
- No. 70 A Wildlife Habitat Management Plan for the Franklin Lions Legend Park Study Area, August 1991
- No. 71 A Specialized Transportation Service Plan for Elderly and Disabled Persons within Waukesha County, June 1992\*
- No. 72 Analysis of Traffic Engineering Actions Proposed by City of Cedarburg Staff for S. Washington Avenue (STH 57/STH 143), Ozaukee County, Wisconsin, May 1995
- No. 73 A Paratransit Service Plan for Disabled Persons: 1993 Update/Milwaukee County Transit System, January 1993\*
- No. 74 A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Kenosha Transit System, January 1993\*
- No. 75 A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Racine Transit System, January 1993\*

- No. 76 A Paratransit Service Plan for Disabled Persons: 1993 Update/City of Waukesha Transit System Utility, January 1993\*
- No. 77 A Paratransit Service Plan for Disabled Persons: 1993 Update/Waukesha County Transit System, January 1993\*
- No. 78 -Traffic Study of STH 83 between the Illinois-Wisconsin State Line and STH 50 in Kenosha County, March 1993
- No. 79 An Agricultural Drainage and Urban Stormwater Management Plan for Racine County Farm Drainage District No. 1, Village of Waterford and Towns of Norway and Waterford, Racine County, Wisconsin, September 1993\*
- No. 80 A Development Plan for the Parkside East Neighborhood, Town of Somers, Kenosha County, Wisconsin, September 1993
- No. 81 Aquatic Plant Management Plan for Phantom Lakes, Waukesha County, Wisconsin, July 1993\*
- No. 82 A Lake Protection Plan for Silver Lake, Waukesha County, Wisconsin, July 1993\*
- No. 83 -City of Cudahy Economic Development Fact Book, Milwaukee County, Wisconsin, August 1993
- No. 84 -Transportation Impacts of W. Wisconsin Avenue Closure between N. 11th Street and N. 16th Street, City of Milwaukee, Milwaukee County, Wisconsin, August 1993
- No. 85 A Development Plan for the Endicott Neighborhood, City of Brookfield, Waukesha County, Wisconsin, September 1993
- No. 86 -Traffic Engineering Study of Ann Rita Drive, Coventry Drive, and Macaulay Drive in the Canterbury Hill Subdivision, City of Brookfield, Waukesha County, Wisconsin, July 1993
- No. 87 -Public Involvement in the Transportation System Planning and Programming Processes: Year 2010 Regional Transportation System Plan, January 1994\*
- No. 88 -A Paratransit Service Plan for Disabled Persons: 1994 Update/Milwaukee County Transit System, January 1994\*
- No. 89 A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Kenosha Transit System, January 1994\*
- No. 90 A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Racine Transit System, January 1994\*
- No. 91 A Paratransit Service Plan for Disabled Persons: 1994 Update/City of Waukesha Transit System Utility, January 1994\*
- No. 92 A Paratransit Service Plan for Disabled Persons: 1994 Update/Waukesha County Transit System, January 1994\*
- No. 93 A Regional Water Quality Management Plan for Southeastern Wisconsin: An Update and Status Report, March 1995\*
- No. 94 A Recommended Public Boating Access and Waterway Protection Plan for Big Muskego Lake, Waukesha County, Wisconsin, July 1994
- No. 95 -Traffic Engineering Study of W. Bender Road between Milwaukee River Parkway and Jean-Nicolet Road in the City of Glendale, Milwaukee County, Wisconsin, August 1994
- No. 96 A Paratransit Service Plan for Disabled Persons: 1995 Update/Milwaukee County Transit System, January 1995\*
- No. 97 A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Kenosha Transit System, January 1995\*
- No. 98 A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Racine Transit System, January 1995\*
- No. 99 A Paratransit Service Plan for Disabled Persons: 1995 Update/City of Waukesha Transit System Utility, January 1995\*
- No. 100 A Paratransit Service Plan for Disabled Persons: 1995 Update/Waukesha County Transit System, January 1995\*
- No. 101 Upper Nemahbin Lake Watershed Inventory Findings, Waukesha County, Wisconsin, May 1995
- No. 102 -Water Level Control Plan for the Waterford-Vernon Area of the Middle Fox River Watershed, Racine and Waukesha Counties, Wisconsin, March 1995

- No. 103 -Assessment of Conformity of the Year 2010 Regional Transportation System Plan and the 1995-1997 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan, December 1994
- No. 104 -Incorporation of the Federally Required Congestion Management System within the Year 2010 Regional Transportation System Plan and the Continuing Transportation System Planning Process, December 1994
- No. 105 -Traffic Study of the Intersection of Barker Road (CTH Y) and Watertown Road, Town of Brookfield, Waukesha County, Wisconsin, March 1995
- No. 106 A Paratransit Service Plan for Disabled Persons: 1996 Update/Milwaukee County Transit System, January 1996
- No. 107 A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Kenosha Transit System, January 1996
- No. 108 A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Racine Transit System, January 1996
- No. 109 A Paratransit Service Plan for Disabled Persons: 1996 Update/City of Waukesha Transit System Utility, January 1996
- No. 110 A Paratransit Service Plan for Disabled Persons: 1996 Update/Waukesha County Transit System, January 1996
- No. 111 Waukesha County Greenway Corridor Study, Towns of Waukesha and Vernon, May 1996
- No. 112 An Aquatic Plant Management Plan for Crooked Lake, Waukesha County, Wisconsin, April 2000
- No. 113 -Traffic Study of the Intersection of N. Port Washington Road (CTH W) and W. Highland Road for the City of Mequon: June 1995, Following Opening of St. Mary's Hospital, City of Mequon, Ozaukee County, Wisconsin, September 1996
- No. 114 -Traffic Control Study for the Village of Fox Point, Village of Fox Point, Milwaukee County, Wisconsin, August 1996
- No. 115 -Traffic Safety Study of the Segment of CTH BB between Brink Road and Hillside Road, Town of Linn, Walworth County, Wisconsin, September 1996
- No. 116 -Assessment of Conformity of the 1997-1999 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan, October 1996
- No. 117 -Traffic Study of Selected Intersections in the Village of Hartland, Waukesha County, Wisconsin, November 1996
- No. 118 -Traffic Study of the Intersections of N. Berkeley Boulevard and E. Silver Spring Drive and N. Diversey Boulevard, N. Consaul Place and E. Silver Spring Drive in the Village of Whitefish Bay, Milwaukee County, Wisconsin, November 1996
- No. 119 A Paratransit Service Plan for Disabled Persons: 1997 Update/Milwaukee County Transit System, January 1997
- No. 120 A Lake Protection and Recreational Use Plan for Hunters Lake, Waukesha County, Wisconsin, May 1997
- No. 121 -Traffic Engineering Study of N. 68th Street in the Village of Brown Deer, Milwaukee County, Wisconsin, December 1996
- No. 122 A Lake Protection Plan for Pretty Lake, Waukesha County, Wisconsin, April 1998\*
- No. 122 -2nd Edition, A Lake Protection Plan for Pretty Lake, Waukesha County, Wisconsin, May 2006
- No. 123 A Lake Protection and Recreational Use Plan for Silver Lake, Washington County, Wisconsin, September 1997
- No. 123 -2nd Edition, A Lake Protection and Recreational Use Plan for Silver Lake, Washington County, Wisconsin, December 2005
- No. 124 An Aquatic Plant Inventory for Pine Lake, Waukesha County, Wisconsin, December 1998
- No. 125 Assessment of Conformity of the Year 2020 Regional Transportation System Plan and the 1998-2000 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan, December 1997

- No. 126 -Traffic Engineering Study of Selected Intersections along Fond du Lac Avenue (USH 45) in the Village of Kewaskum: 1997, Washington County, Wisconsin, July 1998
- No. 127 A Transportation Study for the Core Area of the City of Delafield, Waukesha County, Wisconsin, November 1998
- No. 128 -Assessment of Travel through the Neighborhood Bounded by W. Silver Spring Drive, N. Port Washington Road, N. Lydell Avenue, and W. Henry Clay Street in the City of Glendale: 1997, Milwaukee County, Wisconsin, April 1998
- No. 129 -Inventory of Fire Protection and Emergency Medical Services for Western Racine County, December 1998
- No. 130 A Lake and Watershed Inventory for Nagawicka Lake, Waukesha County, Wisconsin, March 1999\*
- No. 131 -Environmental Analysis of the Lands at the Headwaters of Gilbert Lake and Big Cedar Lake, Washington County, Wisconsin, March 1999
- No. 132 Highway Maintenance Facility Location Study, Washington County, Wisconsin, December 1998
- No. 133 Review and Update of Regional Airport System Plan Forecasts, October 2004
- No. 134 An Aquatic Plant Management Plan for Fowler Lake, Waukesha County, Wisconsin, October 2000
- No. 134 -2nd Edition, An Aquatic Plant Management Plan for Fowler Lake, Waukesha County, Wisconsin, July 2012
- No. 135 A Lake Protection Plan for the Kelly Lakes, Milwaukee and Waukesha Counties, Wisconsin, October 2000
- No. 135 -2nd Edition, A Lake Protection Plan for the Kelly Lakes, Milwaukee and Waukesha Counties, Wisconsin, April 2007
- No. 136 Racine County Industrial Park Land Absorption Study, July 1999
- No. 136 -2nd Edition, Racine County Industrial Park Land Absorption Study, December 2005
- No. 137 A Water Quality Protection and Stormwater Management Plan for Big Cedar Lake, Volumes I and II, August 2001
- No. 138 Assessment of Conformity of the Year 2000-2002 Transportation Improvement Program and Year 2020 Regional Transportation System Plan with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Severe Ozone Nonattainment Area, March 2000
- No. 139 Surface-Water Resources of Washington County, Wisconsin, Lake and Stream Classification Project: 2000, September 2001
- No. 140 A Lake Protection Plan for Benedict and Tombeau Lakes, Kenosha and Walworth Counties, Wisconsin, May 2001
- No. 141 Analysis of Alternative Plans for Removal of the Concrete Lining in Underwood Creek in the City of Wauwatosa, Milwaukee County, Wisconsin, November 2000\*
- No. 142 -Identifying and Delineating Problem Wetlands in the Lake Michigan Basin Using an Integrated Approach: A Case Study of Two Seasonal Wetland Types, Kenosha County, Wisconsin, September 2004.\*
- No. 143 An Aquatic Plant Management Plan for the Lauderdale Lakes, Walworth County, Wisconsin, August 2001
- No. 143 -2nd Edition, An Aquatic Plant Management Plan for the Lauderdale Lakes, Walworth County, Wisconsin, July 2010
- No. 144 An Aquatic Plant and Recreational Use Management Plan for Booth Lake, Walworth County, Wisconsin, September 2003
- No. 145 -Lake and Stream Resources Classification Project for Waukesha County Wisconsin: 2000
- No. 146 An Aquatic Plant Management Plan for Little Cedar Lake, Washington County, Wisconsin, May 2004
- No. 147 -Assessment of Conformity of the Amended Year 2000-2002 Transportation Improvement Program and Amended Year 2020 Regional Transportation System Plan with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, January 2001
- No. 148 A Lake Protection Plan for Middle Genesse Lake, Waukesha County, Wisconsin, August 2003\*

- No. 149 A Lake Protection Plan for Spring Lake and Willow Spring Lake, Waukesha County, Wisconsin, August 2004\*
- No. 150 -Assessment of Conformity of the Year 2002-2004 Transportation Improvement Program and Year 2020 Regional Transportation System Plan with Respect to State of Wisconsin Air Quality Implementation Plan—Six-County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, April 2002
- No. 151 -Stream Channel Stability and Biological Assessment of Quaas Creek: 2002, Washington County, Wisconsin, July 2002
- No. 152 A Greenway Connection Plan for the Milwaukee Metropolitan Sewerage District, December 2002
- No. 153 -Results of Survey of Attitudes of Southeastern Wisconsin Residents Regarding Freeway Traffic Congestion and Freeway System Reconstruction: 2002, September 2002
- No. 154 -Assessment of Conformity of the Year 2002-2004 Transportation Improvement Program and the Regional Transportation Plan System Plan with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, March 2003
- No. 155 An Aquatic Plant Management Plan for Little Muskego Lake, Waukesha County, Wisconsin, January 2004
- No. 155 -2nd Edition, An Aquatic Plant Management Plan for Little Muskego Lake, Waukesha County, Wisconsin, February 2009
- No. 156 -Lake Park Bluff Stability and Plant Community Assessment: 2003, Milwaukee County, Wisconsin, September 2004
- No. 157 Review and Reaffirmation of Year 2020 Regional Land Use and Transportation Plans and Extension of Plan Design Year to 2025, April 2003
- No. 158 A Lake Protection and Recreational Use Plan for Pell Lake, Walworth County, Wisconsin, May 2006
- No. 159 An Aquatic Plant Management Plan for Voltz Lake, Kenosha County, Wisconsin, January 2005
- No. 160 -Assessment of Conformity of the Year 2002-2004 Transportation Improvement Program and the Regional Transportation System Plan as Amended with Respect to State of Wisconsin Air Quality Implementation Plan—Six-County Severe Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, October 2003
- No. 161 An Aquatic Plant Management Plan for Nagawicka Lake, Waukesha County, Wisconsin, March 2006
- No. 162 -Assessment of Conformity of the Year 2005-2007 Transportation Improvement Program and the Regional Transportation System Plan—Six County Ozone Nonattainment Area and Walworth County Ozone Maintenance Area, January 2005
- No. 163 A Hartland/Merton Cluster Development Plan, Waukesha County, December 2004
- No. 164 Potential Public Enterprise Telecommunications Networks for Southeastern Wisconsin, September 2005
- No. 165 -Assessment of Conformity of the 2035 Regional Transportation System Plan and the Year 2005-2007 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Southeastern Wisconsin Ozone Nonattainment Area, June 2006
- No. 166 -Sectoral Cellular Wireless Network Plan, April 2006
- No. 167 -Simulation of Shallow Groundwater Flow in the Vicinity of the Village of Eagle, Waukesha County, Wisconsin, June 2006
- No. 168 -Sectoral Cellular Wireless Network Plan Milwaukee North Shore Communities, August 2006
- No. 169 An Aquatic Plant Management Plan for Friess Lake, Washington County, Wisconsin, May 2008
- No. 170 -Land Evaluation and Site Assessment (LESA) Analysis of Farmlands in Ozaukee County, Wisconsin, January 2008
- No. 171 Assessment of Lake Michigan Shoreline Erosion Control Structures in Racine County, January 2008

- No. 172 A watercourse System Plan for the Milwaukee River in Milwaukee County Upstream of the Milwaukee Harbor Estuary, December 2010
- No. 173 An Aquatic Plant Management Plan for Pine and Beaver Lakes, Waukesha County, Wisconsin, October 2008
- No. 174 An Aquatic Plant Management Plan for Pleasant Lake, Walworth County, Wisconsin, December 2009
- No. 175 -An Aquatic Plant Management Plan for Lake Wandawega, Walworth County, Wisconsin, April 2009
- No. 176 A Lake Protection Plan for Upper Nemahbin Lake, Waukesha County, Wisconsin, December 2009
- No. 177 -An Aquatic Plant Management Plan for Whitewater and Rice Lakes, Walworth County, Wisconsin, March 2010
- No. 178 Public Transit Human Services Transportation Coordination Plan for Kenosha County: 2008, December 2008
- No. 179 -Public Transit Human Services Transportation Coordination Plan for Milwaukee County: 2008, December 2008
- No. 180 Public Transit Human Services Transportation Coordination Plan for Ozaukee County: 2008, December 2008
- No. 181 Public Transit Human Services Transportation Coordination Plan for Racine County: 2008, December 2008
- No. 182 Public Transit Human Services Transportation Coordination Plan for Walworth County: 2008, December 2008
- No. 183 Public Transit Human Services Transportation Coordination Plan for Washington County: 2008, December 2008
- No. 184 Public Transit Human Services Transportation Coordination Plan for Waukesha County: 2008, December 2008
- No. 185 Community Based Wireless Plan Implementation: Town of Wayne, Washington County, Wisconsin, January 2009
- No. 186 Assessment of Conformity of the Year 2035 Regional Transportation System Plan and the Year 2009-2012 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Southeastern Wisconsin Ozone Non-attainment Area, March 2009
- No. 187 Regional Wireless Plan Implementation Broadband Public Safety Communications Demonstration Project, Kenosha County, Wisconsin, May 2009
- No. 188 Troy Bedrock Valley Aquifer Model, Waukesha and Walworth Counties, Wisconsin, November 2009
- No. 189 Proposed North Lake Boat Launch Site Wetland Delineation, Waukesha County, Wisconsin, July 2009
- No. 190 An Aquatic Plant management Plan for Delavan Lake, Walworth County, Wisconsin, May 2011
- No. 191 A Lake Protection Plan for Cravath and Trippe Lakes, Walworth County, Wisconsin, April 2011
- No. 192 An Aquatic Plant Management Plan for Lake Shangrila and Benet Lake, Kenosha County, Wisconsin, March 2010
- No. 193 A Lake Protection Plan for Powers Lake, Kenosha and Walworth Counties, Wisconsin, November 2011
- No. 194 -Stream Habitat Conditions and Biological Assessment of the Kinnickinnic and Menomonee River Watersheds: 2000-2009, January 2010
- No. 196 -Assessment of Conformity of the Year 2035 Regional Transportation Plan and the Year 2009-2012 Transportation Improvement Program with Respect to the State of Wisconsin Air Quality Implementation Plan—Six County Southeastern Wisconsin Ozone Nonattainment Area and Three County Fine Particulate (PM<sub>2.5</sub>) Nonattainment Area, June 2010
- No. 197 Review, Update, and Reaffirmation of the Year 2035 Regional Transportation Plan, December 2010
- No. 199 Southeastern Wisconsin Fox River Commission Implementation Plan: 2011-2020, September 2011
- No. 200 Comparison of the Relationship of Alternative 2010 Orthophotographs for Milwaukee County to National Map Accuracy Standards, June 2011

- No. 201 -Study of a Lake Parkway (STH 794) Extension from Edgerton Avenue to STH 100 in Milwaukee County, April 2012
- No. 202 Comparison of the Relationship of Alternative 2010 Orthophotographs for Milwaukee County to National Map Accuracy Standards, June 2011
- No. 203 Regional Transportation Operations Plan for Southeastern Wisconsin: 2012-2016, May 2012
- No. 205 Assessment of Conformity of the Year 2035 Regional Transportation Plan and the Year 2013-2016 Transportation Improvement Program for the 1997 and 2008 Eight-Hour Ozone and 2006 24-Hour Fine Particulate National Ambient Air Quality Standards, October 2012
- No. 206 -Estimate of the Costs of Converting the Foundational Elements of the Land Information and Public Works Management Systems in Southeastern Wisconsin from Legacy to New Datums, October 2012

## **ECONOMIC DEVELOPMENT PROFILES**

Economic Development Profiles have been prepared for the Southeastern Wisconsin Region, for each of the seven counties in the Region, for the Milwaukee Metropolitan Statistical Area, and for the following communities within each of the seven counties:

Kenosha County	Ozaukee County	Walworth County	Waukesha County
City of Kenosha	City of Cedarburg	City of Delavan	City of Brookfield
Village of Pleasant Prairie	City of Mequon	City of Elkhorn	City of Delafield
Town of Bristol	City of Port Washington	City of Lake Geneva	City of Muskego
	Village of Belgium	City of Whitewater	City of New Berlin
Milwaukee County	Village of Fredonia	Village of Darien	City of Oconomowoc
City of Cudahy	Village of Grafton	Village of East Troy	City of Pewaukee
City of Franklin	Village of Saukville	Village of Walworth	City of Waukesha
City of Glendale	Village of Thiensville		Village of Butler
City of Greenfield			Village of Dousman
City of Milwaukee	Racine County	Washington County	Village of Eagle
City of Oak Creek	City of Burlington	City of Hartford	Village of Elm Grove
City of St. Francis	City of Racine	City of West Bend	Village of Hartland
City of South Milwaukee	Village of Rochester	Village of	Village of Menomonee Falls
City of Wauwatosa	Village of Sturtevant	Germantown Village of Jackson Village of Kewaskum Village of Slinger	Village of Mukwonago Village of Pewaukee Village of Sussex
City of West Allis	Village of Union Grove		
Village of Brown Deer	Village of Waterford		
Village of Hales Corners	Town of Caledonia		
Village of West	Town of Mt. Pleasant		
Milwaukee	Town of Yorkville		

## LAKE USE REPORTS-FOX RIVER WATERSHED

Kenosha County

No. FX-40, Benedict Lake

No. FX-34, Lilly Lake\*

No. FX-12, Camp Lake

No. FX-17, Marie Lake\*

No. FX-27, Center Lake

No. FX-35, Cross Lake

No. FX-35, Cross Lake

No. FX-45, Dyer Lake\*

No. FX-7, Elizabeth Lake

Racine County

No. FX-25, Bohner Lake
No. FX-15, Browns Lake
No. FX-6, Waterford-Tichigan Lakes\*

No. FX-9, Eagle Lake
No. FX-42, Echo Lake\*

No. FX-5, Waubeesee Lake
No. FX-5, Wind Lake\*

No. FX-32, Kee Nong Go-Mong Lake

Walworth County

No. FX-41, Army Lake
No. FX-40, Benedict Lake
No. FX-40, Benedict Lake
No. FX-7, Beulah Lake
No. FX-31, Booth Lake
No. FX-31, Booth Lake
No. FX-4, Como Lake\*
No. FX-4, Como Lake\*
No. FX-1, Lake Geneva
No. FX-24, Potters Lake\*

No. FX-1, Lake Geneva
No. FX-24, Potters Lake\*
No. FX-Lauderdale Lakes\*
No. FX-38, Silver Lake
(17, Green Lake,
No. FX-30, Wandawega Lake

20, Middle Lake, 18, Mill Lake)

Waukesha County

No. FX-3, Big Muskego Lake\*

No. FX-14, Lower Phantom Lake

No. FX-23, Denoon Lake

No. FX-19, Eagle Spring Lake\*

No. FX-34, Spring Lake

No. FX-10, Little Muskego Lake\*

No. FX-33, Upper Phantom Lake

#### LAKE USE REPORTS-MILWAUKEE RIVER WATERSHED

Fond du Lac County Washington County

No. ML-2, Long Lake\*

No. ML-3, Little Cedar Lake\*

No. ML-14, Green Lake\*

No. ML-14, Green Lake\*

No. ML-19, Lake Twelve\*

No. ML-12, Mauthe Lake\*

No. ML-13, Lucas Lake

No. ML-18, Mud Lake\*

No. ML-19, Wellege Lake\*

No. ML-5, Kettle Moraine Lake\*

No. ML-20, Wallace Lake\*

No. ML-15, Barton Pond

Ozaukee County
No. ML-13, Barton Fond
No. ML-13, Barton Fond
No. ML-14, Big Cedar Lake\*
No. ML-17, Spring Lake
No. ML-18, Silver Lake\*
No. ML-16, West Bend Pond

Sheboygan County

No. ML-6, Random Lake\* No. ML-10, Crooked Lake\*

No. ML-7, Lake Ellen\*

### **TECHNICAL RECORDS**

Volume 1-No. 1, October-November 1963\*

Regional Planning in Southeastern Wisconsin

by Kurt W. Bauer, Executive Director

The SEWRPC Land Use-Transportation Study

by J. Robert Doughty, Study Director

Home Interview Sample Selection-Part I

by Kenneth J. Schlager, Chief Systems Engineer

Truck and Taxi Sample Selection

by Thomas A. Winkel, Urban Planning Supervisor

A Backward Glance: Early Toll Roads in Southeastern Wisconsin

by Richard E. Rehberg, Editor

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

Arterial Network and Traffic Analysis Zones

by Richard B. Sheridan, Chief Transportation Planner

Conducting the Household Postal Questionnaire Survey

by Wade G. Fox, Cartography and Design Supervisor

Conducting the Home Interview Survey

by Sheldon W. Sullivan, Administrative Officer

Aerial Photographs and Their Use in the Land Use Inventory

by Harlan E. Clinkenbeard, Land Use Planning Chief

A Backward Glance: The U. S. Public Land Survey in Southeastern Wisconsin

by Richard E. Rehberg, Editor

## Volume 1-No. 3, February-March 1964

Conducting the Truck and Taxi Survey

by Sheldon W. Sullivan, Administrative Officer

Conducting the Truck and Taxi Postal Questionnaire Survey

by Wade G. Fox, Cartography and Design Supervisor

Conducting the External Survey

by William E. Creger, P.E., Traffic Operations Engineer

Rail and Transit Inventory and Design of the Transit Network

by David A. Kuemmel, P.E., Transportation Planning Engineer

A Backward Glance: The Man-Made Ice Age

by Richard E. Rehberg, Editor

#### Volume 1-No. 4, April-May 1964\*

The Application of Soil Studies to Regional Planning

by Kurt W. Bauer, Executive Director

Coding

by Wade G. Fox, Cartography and Design Supervisor, and Robert L. Fisher, Coding Supervisor

Inventory of Existing Outdoor Recreation Facilities and Historic Sites in Southeastern Wisconsin

by Theodore F. Lauf, Research Analyst

Inventory of Potential Park and Related Open Space Sites

by Karl W. Holzwarth, Landscape Architect

A Backward Glance: The Electric Interurban Railway

by Richard E. Rehberg, Editor

Volume 1-No. 5, June-July 1964

Reconciliation of Sample Coverage in the Internal O & D Surveys

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

The Contingency Check Program

by Wade G. Fox, Cartography and Design Supervisor

Inventory of the Arterial Street Network

by William T. Wambach, Jr., P.E.

A Backward Glance: The Milwaukee and Rock River Canal

by James E. Seybold, Editor

# Volume 1-No. 6, August-September 1964

Checking the Network Description for Arterial Highway and Transit Networks

by Richard B. Sheridan, Chief Transportation Planner

A Study of the Water Quality and Flow of Streams in Southeastern Wisconsin

by Roy W. Ryling, Hydrologist

Expanding the Origin-Destination Sample

by Richard B. Sheridan, Chief Transportation Planner, and

Wade G. Fox, Cartography and Design Supervisor

A Backward Glance: Greendale-Garden City in Wisconsin

by Kurt W. Bauer, Executive Director

## Volume 2-No. 1, October-November 1964\*

Simulation Models in Urban and Regional Planning

by Kenneth J. Schlager, Chief Systems Engineer

# Volume 2-No. 2, December 1964-January 1965

Capacity of Arterial Network Links

by Richard B. Sheridan, Chief Transportation Planner

The ABC Method of Current Population Estimating

by Donald L. Gehrke, Economics and Population Analyst, and

Orlando E. Delogu, Financial Resources and Legal Analyst

O & D Surveys Accuracy Checks

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

A Backward Glance: Railroad Transportation in Southeastern Wisconsin

by Patricia J. Tegge, Editor

# Volume 2-No. 3, February-March 1965

Determination of Historical Flood Frequency for the Root River of Wisconsin

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

The Regional Multiplier

by Kenneth J. Schlager, Chief Systems Engineer

A Backward Glance: The Street Railway in Milwaukee

by Henry M. Mayer, Administrative Assistant, Milwaukee & Suburban Transport Corporation

# Volume 2-No. 4, April-May 1965\*

Determination of Runoff for Urban Storm Water Drainage System Design

by Kurt W. Bauer, Executive Director

Volume 2-No. 5, June-July 1965

Screen Line Adjustment of Trip Data by Richard B. Sheridan, P.E., Chief Transportation Planner Inventory of Land Development Regulations in Southeastern Wisconsin by William J. Kockelman, Chief Community Assistance Planner A Backward Glance: Highway Development in Southeastern Wisconsin-Part I by Jean C. Meier, Librarian and Research Assistant

Volume 2-No. 6, August-September 1965

A Modal Split Model for Southeastern Wisconsin by Edward Weiner, Highway Engineer

Volume 3-No. 1, 1968

Transit System Development Standards
by Edward Weiner, Transportation Planning Engineer
Modified Rapid Transit Service in the Southeastern Wisconsin Region
by Sheldon W. Sullivan, Administrative Officer
A Backward Glance: Highway Development in Southeastern Wisconsin-Part II
by Jean C. Meier, Research Assistant, and Sheldon W. Sullivan, Administrative Officer

Volume 3-No. 2, 1969

Characteristics of Travel in the Milwaukee Central Business District by Sheldon W. Sullivan, Administrative Officer Computing the Center of Population and the Geographic Center by Wayne H. Faust, Associate Planner A Backward Glance: Downtown Yesterdays by Gerald P. Caffrey, Milwaukee Municipal Reference Librarian

Volume 3-No. 3, September 1971\*

Hydrogeologic Considerations in Liquid Waste Disposal, with a Case Study in Southeastern Wisconsin by Martha J. Ketelle, Department of Geology and Geophysics, University of Wisconsin-Madison

Volume 3-No. 4, September 1971

Characteristics of Air and Ground Travel Generated by General Mitchell Field Airport Terminal: May 1968 by Sheldon W. Sullivan, Chief of Data Collection
Shifts in Centers of Population within the Region: 1960-1970 by Wayne H. Faust, Associate Planner
A Backward Glance: The Development of General Mitchell Field by Sheldon W. Sullivan, Chief of Data Collection

Volume 3-No. 5, March 1973\*

Freeway Flyer Service in Southeastern Wisconsin-A Progress Report: 1964-1971

by Sheldon W. Sullivan, Chief of Data Collection

Development of Equations for Rainfall Intensity-Duration-Frequency Relationship

by Stuart G. Walesh, Water Resources Engineer

A Backward Glance: The American Automobile-A Brief History of the Development

of the American Automobile and the Growth of Automobile Registrations in the

United States, Wisconsin, and the Southeastern Wisconsin Region: 1896-1970

by Sheldon W. Sullivan, Chief of Data Collection

# Volume 3-No. 6, April 1976\*

Floodland Management: The Environmental Corridor Concept

by Stuart G. Walesh, SEWRPC Water Resources Engineer

Characteristics of Travel in the Milwaukee Central Business District: 1963 and 1972

by Sheldon W. Sullivan, SEWRPC Chief of Data Collection, and Jean Lusk, SEWRPC Research Analyst

The Changing Factorial Ecology of Milwaukee's Black Ghetto

by Harold McConnell, Richard A. Karsten, and Marilyn Ragusa

A Backward Glance: Environmental Corridors of Yesterday and Today

by Dr. Jeremy M. Katz, Research Psychologist, and Jeanne Sollen, Editor

#### Volume 4-No. 1, March 1978\*

A Backward Glance: Milwaukee's Water Story

by Milwaukee Water Works

Is There a Groundwater Shortage in Southeastern Wisconsin?

by Douglas S. Cherkauer and Vinton W. Bacon, University of Wisconsin-Milwaukee

An Overview of the Sources of Water Pollution in Southeastern Wisconsin

by Kurt W. Bauer, Executive Director, SEWRPC

The Effect of Sample Rate on Socioeconomic and Travel Data Obtained through Standard Home Interview by Jean Lusk, SEWRPC Planner

# Volume 4-No. 2, March 1981\*

Refining the Delineation of the Environmental Corridors in Southeastern Wisconsin

by Bruce P. Rubin, Chief Land Use Planner, SEWRPC, and

Gerald H. Emmerich, Jr., Senior Planner, SEWRPC

Water Quality and Quantity Simulation Modeling for the Areawide

Water Quality Management Planning Program for Southeastern Wisconsin

by Thomas R. Sear, P.E., Senior Water Resources Engineer, SEWRPC

Evaluation of a Water Quality Standard for Total Phosphorus

in Flowing Streams in Southeastern Wisconsin

by David B. Kendziorski, Senior Planner, SEWRPC

Bibliography of Lake Michigan Shore Erosion and Nearshore Process Studies

by Norman P. Lasca, Professor, Department of Geological Sciences and Center for Great Lakes Studies, University of Wisconsin-Milwaukee, and David Baier, Warren Baumann, Patrick Curth, and Jan H. Smith, Geologists, Department of Geological Sciences and Center for Great Lakes Studies, University of

Wisconsin-Milwaukee

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

Volume 4-No. 3, February 1982

Preservation of Scientifically and Historically Important Geologic Sites in Milwaukee County, Wisconsin by Donald G. Mikulic, Staff Geologist, Illinois State Geological Survey, and Joanne Kluessendorf, Geologic Research Assistant, Illinois State Geological Survey, Champaign, Illinois

Inventory of Solid Waste Management Facilities in Southeastern Wisconsin: 1980

by Robert P. Biebel, Principal Engineer, SEWRPC, and Joseph E. Stuber, Senior Engineer, SEWRPC Inventory Findings of Cannonball Passenger Surveys: 1980 and 1971

by Jean M. Lusk, SEWRPC Planner

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

Volume 4-No. 4, February 1984

Characteristics of Travel in Six Major Attractors in the Southeastern Wisconsin Region by Jean M. Lusk, SEWRPC Planner, and John L. Zastrow, SEWRPC Senior Specialist Shopping Centers: Characteristics of Travel–1963-1972

by Jean M. Lusk, SEWRPC Planner, and John L. Zastrow, SEWRPC Senior Specialist

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

Volume 4-No. 5, December 1989

Review and Analysis of Lake Michigan Water Levels at Milwaukee, Wisconsin

by David P. Kendziorski, SEWRPC Principal Planner

Lake Levels and Datum Differences

by Kurt W. Bauer, SEWRPC Executive Director

A Backward Glance—A History of Storm Damage and Protective Measures in Milwaukee Harbor by Bruce W. Jordan, M.A.

Volume 4-No. 6, December 1993\*

Interpreting Soils of Southeastern Wisconsin for Onsite Disposal of Household Sewage

by Marvin T. Beatty, Ph.D., Professor Emeritus of Soil Science, University of Wisconsin-Madison

Shifts in Centers of Population within the Region: 1963-1990

by Donald G. Dittmar, SEWRPC Senior Specialist

Methodology for Review of Challenges to Wetland Field Delineations Conducted

by the Southeastern Wisconsin Regional Planning Commission

by Donald M. Reed, SEWRPC Chief Biologist

A Backward Glance—Unincorporated Settlements in Southeastern Wisconsin

by Arno M. Klausmeier, SEWRPC Librarian, with Assistance from Scott K. Enk, SEWRPC Senior Editor

#### ANNUAL REPORTS

1961,\* 1962,\* 1963, 1964, 1965, 1966, 1967, 1968, 1969,\* 1970, 1971, 1972,\* 1973, 1974, 1975, 1976, 1977, 1978,\* 1979,\* 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, and 2011

## **CONFERENCE PROCEEDINGS**

1st Regional Planning Conference, December 6, 1961\*

2nd Regional Planning Conference, November 4, 1962\*

3rd Regional Planning Conference, November 20, 1963\*

4th Regional Planning Conference, May 12, 1965\*

5th Regional Planning Conference, October 26, 1966\*

6th Regional Planning Conference, May 6, 1969

7th Regional Planning Conference, January 19, 1972

8th Regional Planning Conference, October 16, 1974

Regional Conference on Sanitary Sewerage System User and Industrial Waste Treatment Recovery Charges, July 18, 1974

9th Regional Planning Conference, April 14, 1976

10th Regional Planning Conference, March 15, 1978

11th Regional Planning Conference, April 19, 1979

12th Regional Planning Conference, January 31, 1980\*

13th Regional Planning Conference, November 9, 1983

14th Regional Planning Conference, May 13, 1985

15th Regional Planning Conference, November 14, 1988

16th Regional Planning Conference, May 5, 1992

17th Regional Planning Conference, June 27, 1994

#### **NEWSLETTERS**

SEWRPC Newsletter, Volume 2 through Volume 42, Number 4

SEWRPC Freeway System Study Newsletter, Nos. 1 through 5

SEWRPC Review and Update of Regional Land Use and

Transportation System plans for Southeastern Wisconsin Nos. 1 through 4

Milwaukee County Transit System Development Plan: 2007-2011

Year 2035 Regional Land Use and Transportation System Plans for Southeastern Wisconsin, Number 5

Summary of Proposed Comprehensive Broadband Telecommunications Plan for Southeastern Wisconsin

Regional Water Supply Plan for Southeastern Wisconsin—Nos. 1 through 4

Summary of A Regional Water Quality Management Plan Update for the

Greater Milwaukee Watersheds

Assessment of Lake Michigan Shoreline Erosion Control Structures in Racine County

Milwaukee County Transit System Development Plan: 2009-2013, Transit Service Improvement

Natural Areas and Critical Species Habitat Plan Update for Southeastern Wisconsin

Year 2035 Regional Housing Plan for Southeastern Wisconsin—Nos. 1 through 3

Racine County Transit Plan: 2011-2015

Preliminary Recommended Jurisdictional Highway System Plan for Walworth County

Kenosha County Transit Development Plan: 2012-2016

Year 2035 Regional Housing Plan for Southeastern Wisconsin, Number 4

## TRANSPORTATION IMPROVEMENT PROGRAMS

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1978-1982, December 1977\*

A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1979-1983, December 1978\*

#### TRANSPORTATION IMPROVEMENT PROGRAMS—continued

- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1980-1984, December 1979\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1981-1985, December 1980\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1982-1986, December 1981\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1983-1987, December 1982\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1984-1988, December 1983\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1985-1989, December 1984\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1986-1990, December 1985\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1987-1991, December 1986\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1988-1992, December 1987\*
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1989-1993, December 1988
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1990-1994, December 1989
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1991-1995, December 1990
- A Transportation Improvement Program for the Kenosha, Milwaukee, and Racine Urbanized Areas in Southeastern Wisconsin: 1992-1996, October 1991
- A Transportation Improvement Program for Southeastern Wisconsin: 1993-1998, December 1992
- A Transportation Improvement Program for Southeastern Wisconsin: 1995-1997, November 1994
- A Transportation Improvement Program for Southeastern Wisconsin: 1997-1999, September 1996
- A Transportation Improvement Program for Southeastern Wisconsin: 1998-2000, November 1997
- A Transportation Improvement Program for Southeastern Wisconsin: 2000-2002, February 2000
- A Transportation Improvement Program for Southeastern Wisconsin: 2002-2004, February 2002
- A Transportation Improvement Program for Southeastern Wisconsin: 2004-2006, December 2003
- A Transportation Improvement Program for Southeastern Wisconsin: 2005-2007, January 2005
- A Transportation Improvement Program for Southeastern Wisconsin: 2007-2010, December 2006
- A Transportation Improvement Program for Southeastern Wisconsin: 2009-2012, March 2009
- A Transportation Improvement Program for Southeastern Wisconsin: 2011-2014, February 2010
- A Transportation Improvement Program for Southeastern Wisconsin: 2013-2016, October 2012

#### **OTHER**

## Twenty-Five Years of Regional Planning, December 1985

Economic Development Planning Staff Memorandum No. 94-01, Southeastern Wisconsin Region Industrial/Business Park Directory: July 1994, August 1994

Scope of Work for a Detailed Planning Study of Commuter Rail and Bus Alternatives in the Kenosha-Racine-Milwaukee Corridor, July 1998

Job Access and Reverse Commute Regional Transportation Plan, December 1998

Scope of Work, A Regional Freeway System Reconstruction Study for Southeastern Wisconsin, December 2000

<sup>\*</sup>Out of print.



KENNETH R. YUNKER, PE EXECUTIVE DIRECTOR

W239 N1812 ROCKWOOD DRIVE P.O. BOX 1607 WAUKESHA, WISCONSIN 53187-1607

PHONE: (262) 547-6721 FAX: (262) 547-1103 WWW.SEWRPC.ORG