

# 2013 ANNUAL REPORT



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

**SOUTHEASTERN WISCONSIN  
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## FIFTY-THIRD ANNUAL REPORT

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October 2014



U.S. Department of Transportation  
**Federal Highway Administration**



U.S. Department of Transportation  
**Federal Transit Administration**

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# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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Serving the Counties of:

KENOSHA  
MILWAUKEE  
OZAUKEE  
RACINE  
WALWORTH  
WASHINGTON  
WAUKESHA



October 1, 2014

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 53<sup>rd</sup> annual report not only summarizes our work in 2013, but it also contains a certified statement of our financial position as determined by an independent auditor.

The 2013 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 2013. Part Three documents the results of Commission monitoring efforts carried out during 2013 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 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

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# PART ONE: REGIONAL PLANNING IN SOUTHEASTERN WISCONSIN

This section of the 2013 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 housing 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 2013 and begins on page 35. Part Three documents the results of Commission monitoring efforts during the year and begins on page 83.



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## 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 that 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 [www.sewrpc.org/about](http://www.sewrpc.org/about).

### 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 \$166.0 billion, or about 35 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.

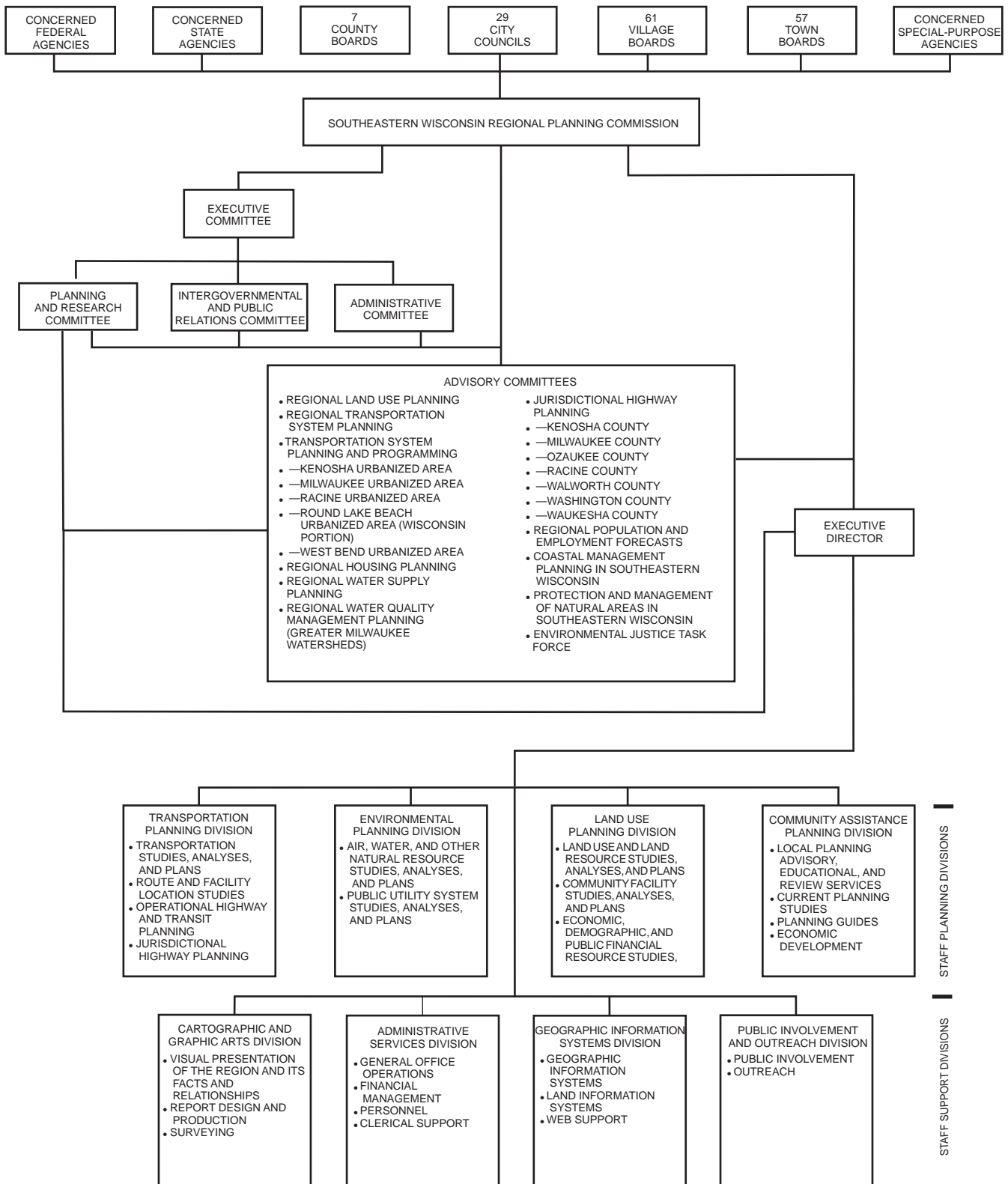
Private as well as public interests are vitally affected by these kinds of areawide problems and by proposed solutions to these problems. It appears neither desirable nor possible for any one level or agency of government to impose the decisions required to resolve these kinds of problems. It is better that these decisions 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 to a more efficient regional development pattern and a more desirable environment in which to live and work.



Figure 1

SEWRPC ORGANIZATIONAL STRUCTURE: 2013



## **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, area-wide 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 2013 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 2013 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 2013, the Commission staff totaled 72, including 66 full-time and six part-time employees. An organizational chart is shown on Figure 1. A list of Commission staff members for 2013 may be found in Appendix C.

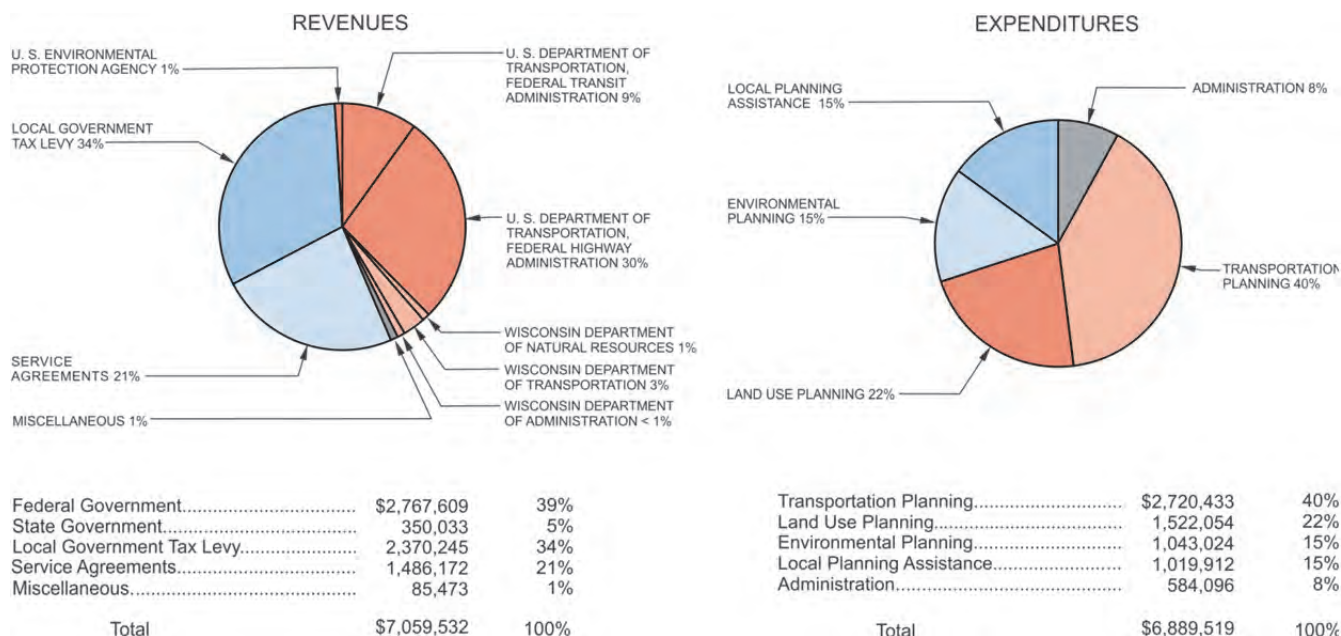
## **Funding**

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 2013 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 2013 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 2013 audit report is set forth in Appendix D.

Figure 2

SEWRPC REVENUES AND EXPENDITURES: 2013



**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 important, 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:

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

- Technical Reports, 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.
- Memorandum Reports, intended to document the results of locally requested special studies.
- Planning Program Prospectuses, prepared as a matter of policy as the initial step in undertaking any major new planning program.
- Annual Reports, intended to summarize the activities of the Commission in any given year.

A list of Commission publications is set forth in Appendix E and can be found at [www.sewrpc.org/publications](http://www.sewrpc.org/publications). All publications are available from the Commission offices and through the website.

## **THE REGIONAL COMPREHENSIVE PLAN 2013: 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 address 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 can be found at [www.sewrpc.org/planadoptions](http://www.sewrpc.org/planadoptions).

The Commission believes that the comprehensive plan is essential to coping with the developmental and environmental problems generated by areawide urbanization. The comprehensive plan provides the

necessary framework for coordinating and guiding growth and development within a multijurisdictional urbanizing region having essentially a single community of interest. The comprehensive plan 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 focuses on the design of physical systems. It seeks to achieve good design by setting viable 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 areawide systems planning and local project 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 floodplain 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 provides underlying data used as the basis for preparing the other elements of the regional plan, and 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 neighborhood-level 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 floodplains, 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.

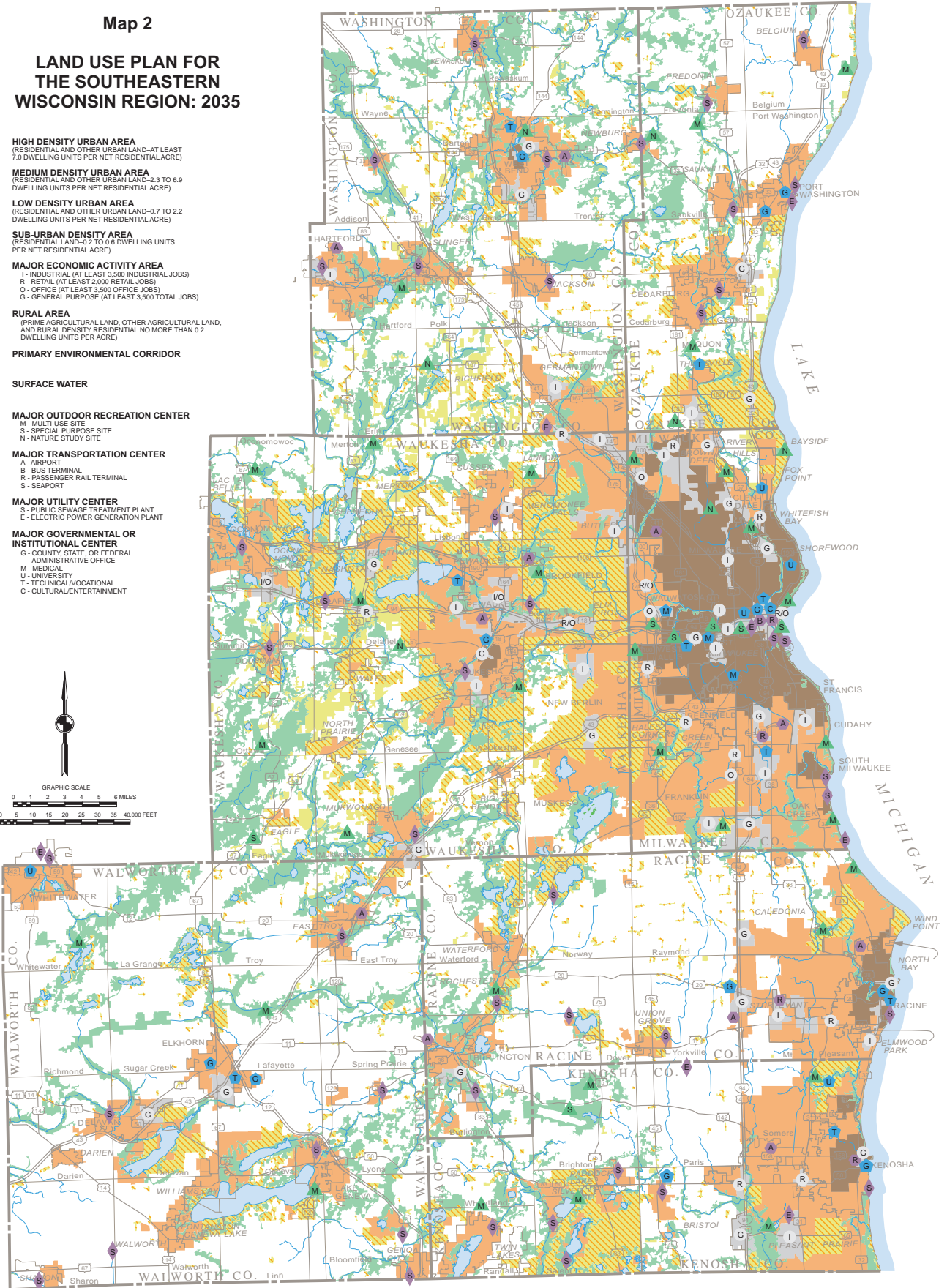
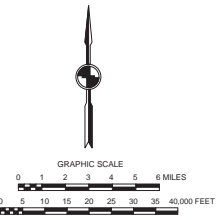
### Prime Agricultural Lands and Other Rural Lands

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

Map 2

**LAND USE PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035**

-  **HIGH DENSITY URBAN AREA**  
(RESIDENTIAL AND OTHER URBAN LAND-AT LEAST 7.0 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **MEDIUM DENSITY URBAN AREA**  
(RESIDENTIAL AND OTHER URBAN LAND-2.3 TO 6.9 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **LOW DENSITY URBAN AREA**  
(RESIDENTIAL AND OTHER URBAN LAND-0.7 TO 2.2 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **SUB-URBAN DENSITY AREA**  
(RESIDENTIAL LAND-0.2 TO 0.6 DWELLING UNITS PER NET RESIDENTIAL ACRE)
-  **MAJOR ECONOMIC ACTIVITY AREA**  
I - INDUSTRIAL (AT LEAST 3,500 INDUSTRIAL JOBS)  
R - RETAIL (AT LEAST 2,000 RETAIL JOBS)  
O - OFFICE (AT LEAST 3,500 OFFICE JOBS)  
G - GENERAL PURPOSE (AT LEAST 3,500 TOTAL JOBS)
-  **RURAL AREA**  
(PRIME AGRICULTURAL LAND, OTHER AGRICULTURAL LAND, AND RURAL DENSITY RESIDENTIAL NO MORE THAN 0.2 DWELLING UNITS PER ACRE)
-  **PRIMARY ENVIRONMENTAL CORRIDOR**
-  **SURFACE WATER**
-  **MAJOR OUTDOOR RECREATION CENTER**  
M - MULTI-USE SITE  
S - SPECIAL PURPOSE SITE  
N - NATURE STUDY SITE
-  **MAJOR TRANSPORTATION CENTER**  
A - AIRPORT  
B - BUS TERMINAL  
R - PASSENGER RAIL TERMINAL  
S - SEAPORT
-  **MAJOR UTILITY CENTER**  
S - PUBLIC SEWAGE TREATMENT PLANT  
E - ELECTRIC POWER GENERATION PLANT
-  **MAJOR GOVERNMENTAL OR INSTITUTIONAL CENTER**  
G - COUNTY, STATE, OR FEDERAL ADMINISTRATIVE OFFICE  
M - MEDICAL  
U - UNIVERSITY  
T - TECHNICAL/VOCATIONAL  
C - CULTURAL/ENTERTAINMENT



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 cluster or open space subdivision designs.

More information about the regional land use plan can be found at [www.sewrpc.org/regionallanduseplan](http://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 nonprofit 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 that 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

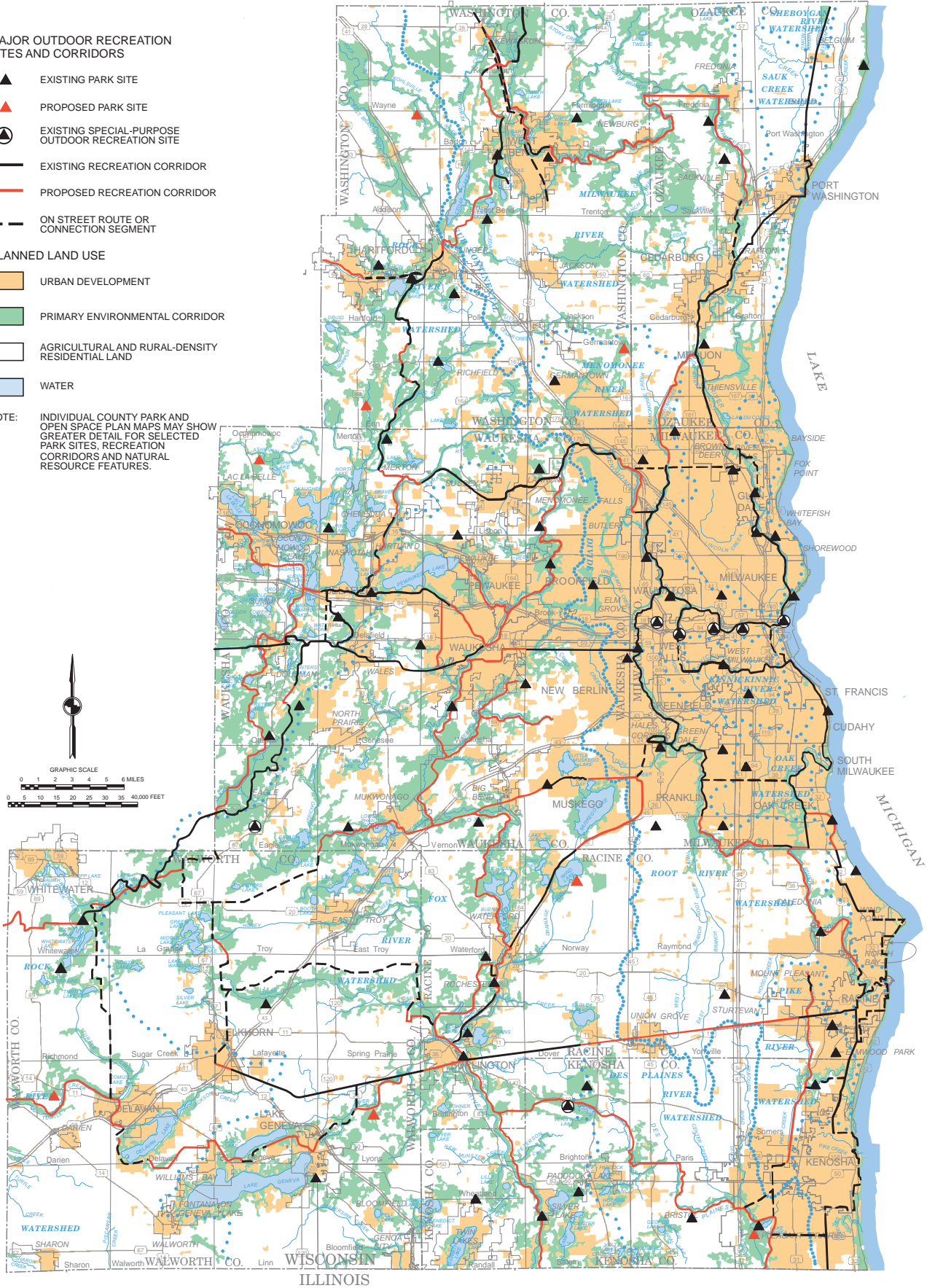
MAJOR OUTDOOR RECREATION SITES AND CORRIDORS

- ▲ EXISTING PARK SITE
- ▲ PROPOSED PARK SITE
- ⊙ EXISTING SPECIAL-PURPOSE OUTDOOR RECREATION SITE
- EXISTING RECREATION CORRIDOR
- PROPOSED RECREATION CORRIDOR
- - - ON STREET ROUTE OR CONNECTION SEGMENT

PLANNED LAND USE

- URBAN DEVELOPMENT
- PRIMARY ENVIRONMENTAL CORRIDOR
- AGRICULTURAL AND RURAL-DENSITY RESIDENTIAL LAND
- WATER

NOTE: INDIVIDUAL COUNTY PARK AND OPEN SPACE PLAN MAPS MAY SHOW GREATER DETAIL FOR SELECTED PARK SITES, RECREATION CORRIDORS AND NATURAL RESOURCE FEATURES.



ILLINOIS

### **Areawide Recreation Trails**

The plan recommends a 700-mile areawide 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 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 resource-oriented activities, sites and facilities for non-resource-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 can be found on the SEWRPC website at [www.sewrpc.org/regionalparkplan](http://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 landscape. Critical species habitats are defined as additional tracts of land or water that 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 benchmarks 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. These sites range 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. The focus is also on employing a range of methods to protect these sites in perpetuity, to ensure site integrity in terms of biodiversity through proper management, and, in many cases, to preserve 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 recommendations.

### **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. Large forest tracts provide 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.

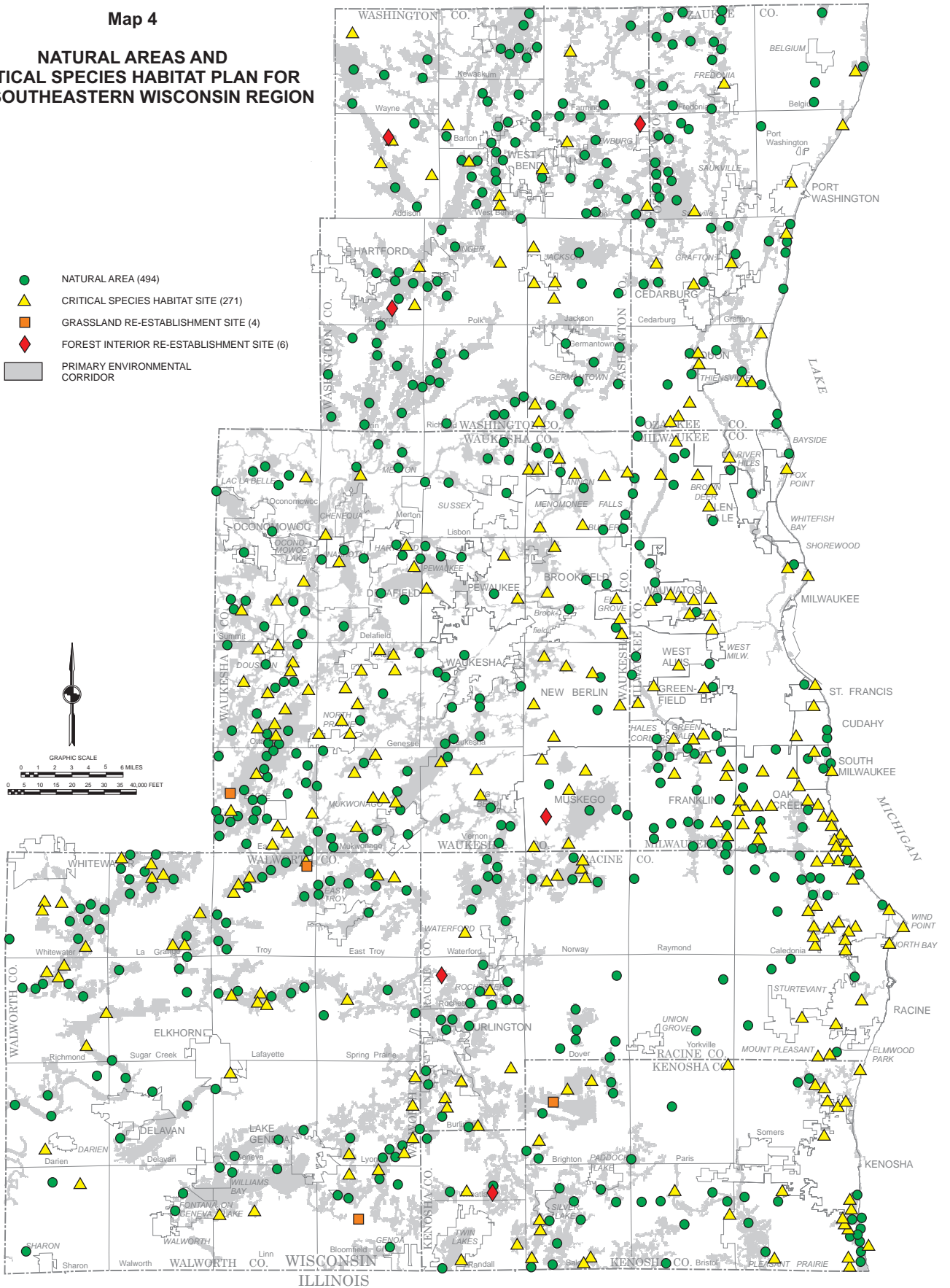
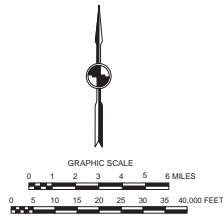
The regional natural areas plan also includes ancillary elements attendant to 14 archaeological and 87 geological sites. Such sites are of significance in terms of their cultural, scientific, and educational values and are recommended to be preserved and protected to the greatest extent possible.

More information about the regional natural areas plan can be found on the SEWRPC website at [www.sewrpc.org/naturalareasplan](http://www.sewrpc.org/naturalareasplan).

Map 4

**NATURAL AREAS AND  
CRITICAL SPECIES HABITAT PLAN FOR  
THE SOUTHEASTERN WISCONSIN REGION**

- NATURAL AREA (494)
- ▲ CRITICAL SPECIES HABITAT SITE (271)
- GRASSLAND RE-ESTABLISHMENT SITE (4)
- ◆ FOREST INTERIOR RE-ESTABLISHMENT SITE (6)
- PRIMARY ENVIRONMENTAL CORRIDOR



## **REGIONAL HOUSING PLAN**

A new regional housing plan was adopted by the Commission on March 13, 2013. The plan is documented in SEWRPC Planning Report No. 54, *A Regional Housing Plan for Southeastern Wisconsin: 2035*, March 2013. The plan refines the recommendations for residential development included in the Regional Land Use Plan, with a vision of providing financially sustainable housing for persons of all income levels, age groups, and special needs throughout the entire Region.

The housing plan recommendations address six major topic areas: housing affordability, job/housing balance, subsidized and tax credit housing, accessible housing for persons with disabilities, fair housing, and housing development practices.

### **Housing Affordability**

Housing affordability is closely related to the type and density of housing. Multi-family housing and smaller single-family homes on smaller lots tend to be more affordable to a wide range of households than larger single-family homes on large lots. The development of housing in the Region is greatly influenced by community comprehensive plans and by zoning, subdivision, and other ordinances that regulate land uses.

A key recommendation of the housing plan is that local governments with sanitary sewer service review their comprehensive plans and zoning ordinances, and change the plans and ordinances, as may be necessary, to address the need for additional affordable housing for lower- and moderate-income households. Housing costs are considered affordable if they do not exceed 30 percent of a household's monthly income. Specifically, the plan recommends that community plans and ordinances allow for the development of modest multi-family housing at a density of at least 10 housing units (apartments) per acre, and allow two-bedroom apartments to be 800 square feet or smaller, to provide market-rate (nonsubsidized) housing for households with incomes between 50 and 80 percent of the Region median income. About 16 percent of the Region's households fall within this income category. The plan also recommends that communities with sewer service allow the development of new single- and two-family homes at densities equivalent to lots of 10,000 square feet or less, with home sizes less than

1,200 square feet, to accommodate market-rate housing affordable to households with incomes between 80 and 135 percent of the Region median income. This income category includes about 24 percent of Region households.

The plan also recommends that county and local governments consider establishing programs and ordinances to stabilize and improve established neighborhoods with the intent of maintaining the quality and quantity of existing lower- and moderate-cost housing stock. Examples of programs and ordinances include property maintenance ordinances, weatherization and lead paint abatement programs, and use of Community Development Block Grant (CDBG) and other funding to assist low- and moderate-income households in making needed home repairs. Funds should also be made available to assist landlords in making needed repairs to apartments that would be affordable to low- and moderate-income tenants.

### **Job/Housing Balance**

An analysis was conducted as part of the housing plan to help determine the balance between job wages and housing costs. The job/housing balance analysis was based on a review of comprehensive plans adopted by communities with sanitary sewer service to determine the number and type of jobs and housing units that could be expected to be developed by the year 2035. Job wages, based on median incomes for various job categories in 2009, and housing costs, based on planned residential densities, were projected to the year 2035. The percentages of projected lower- and moderate-wage jobs were compared to the projected percentages of lower- and moderate-cost housing, respectively. Map 5 shows the results of the analysis, which was updated after the housing plan was adopted to show the projected job/housing balance for each sewered community. The analysis included in the housing plan report includes groups of nearby communities when reporting the results of the analysis.

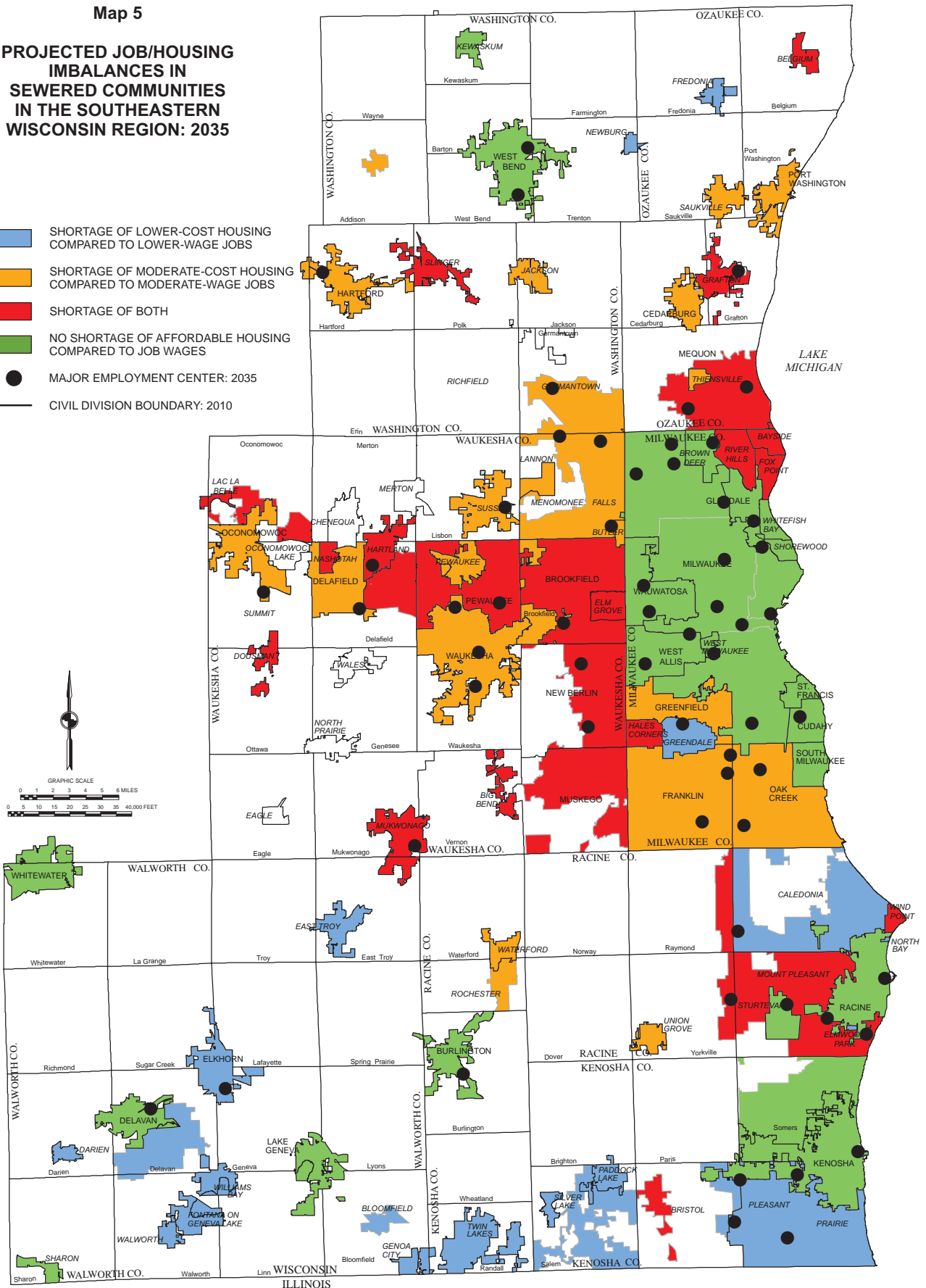
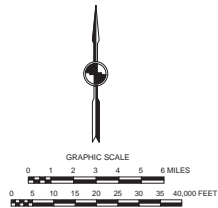
The housing plan recommends that sewered communities identified as having an imbalance between job wages and housing costs conduct a more detailed analysis based on specific conditions in their respective communities as part of their comprehensive plan updates. The local analysis could consider, for example, specific housing values based on local assessment data. If the local analysis confirms an



Map 5

### PROJECTED JOB/HOUSING IMBALANCES IN SEWERED COMMUNITIES IN THE SOUTHEASTERN WISCONSIN REGION: 2035

- SHORTAGE OF LOWER-COST HOUSING COMPARED TO LOWER-WAGE JOBS
- SHORTAGE OF MODERATE-COST HOUSING COMPARED TO MODERATE-WAGE JOBS
- SHORTAGE OF BOTH
- NO SHORTAGE OF AFFORDABLE HOUSING COMPARED TO JOB WAGES
- MAJOR EMPLOYMENT CENTER: 2035
- CIVIL DIVISION BOUNDARY: 2010



existing or future job/housing imbalance, it is recommended that the local government consider changes to the comprehensive plan that would provide housing appropriate for people holding jobs in the community, thereby supporting the availability of a workforce for the community's businesses and industries. Additional modest multi-family housing is recommended in communities where the local analysis indicates a shortage of lower-cost housing in relation to lower-wage jobs. Additional modest single-family housing is recommended in communities where the local analysis indicates a shortage of moderate-cost housing in relation to moderate-wage jobs.

The housing plan also recommends improving transit connections between areas of existing affordable housing and job locations. The Region's central cities have substantial concentrations of unemployed and under-employed individuals and low-income households. There are significant job concentrations in many communities surrounding these central cities. A portion of these jobs pay moderate and lower wages, and many of these communities lack the modest single-family and multi-family housing affordable to people who earn moderate and lower wages. Many of these communities also lack public transit service, even though in many instances they are immediately adjacent to the Region's public transit systems. Expansion of public transit service to these communities, in accordance with the recommendations of the regional transportation plan, will assist in providing employers with the necessary workforce, and will link moderate- and lower-income individuals with jobs in communities that have limited supplies of affordable housing.

Although the Cities of Kenosha, Milwaukee, and Racine do not have job/housing imbalances, these cities have the highest percentages of households with a high housing cost burden. These areas also have high unemployment rates and low median earnings compared to other portions of the Region. Although lower- and moderate-cost housing is plentiful, the high number of extremely and very-low-income households makes finding decent affordable housing difficult. The plan recommends that affordable housing strategies in these areas include economic and workforce development components to help reduce high housing cost burdens.

### **Subsidized and Tax Credit Housing**

Housing subsidized by the government or housing developed by nonprofit and faith-based organizations would likely be necessary to provide decent and affordable housing for households with incomes of less than 50 percent of the Region's median income. This is particularly true of housing for families that would require two or more bedrooms. Over 187,000 households, or 24 percent of households in the Region, have incomes of 50 percent or less than the Region's median income. In 2011, there were about 46,000 subsidized housing units and housing vouchers in the Region, or about 25 percent of the potential need.

The plan recommends additional Federal funding for housing vouchers, but also recognizes that public funding for the development of subsidized and tax credit housing and for housing vouchers is limited. The plan therefore recommends that the development of new subsidized and tax credit housing and the allocation of vouchers be targeted to areas with the greatest need. These areas include areas with high percentages of low-income households and areas with a major employment center and a shortage of lower-cost housing compared to lower-wage jobs.

The plan also recommends that a regional Housing Trust Fund for Southeastern Wisconsin be established to assist in the acquisition of land and the development of affordable housing. Housing trust funds typically provide "gap" financing, or funds to fill part or all of the gap remaining between the actual cost of producing housing and the amount raised after all other funding sources have been secured.

### **Accessible Housing for Persons with Disabilities**

An adequate number of accessible housing units should be available throughout the Region to provide persons with disabilities increased housing choices and access to employment opportunities. Accessible housing will become increasingly important as the number of elderly residents in the Region increases due to the aging of the baby-boom generation, because the incidence of disabilities increases as a person ages.

It is estimated that there are as many as 61,640 multi-family housing units in the Region constructed since 1991 that may be accessible to persons with

disabilities, due to accessibility requirements in Federal and State fair housing laws. In 2010, about 169,000 households in the Region reported a member with a disability, which shows a need for additional accessible housing. Housing affordability is also a concern to persons with disabilities, whose median annual earnings are about half those of persons without disabilities.

The plan recommends the development of additional modest multi-family housing that would help persons with disabilities obtain accessible and more affordable housing. Development of more multi-family housing outside the central cities of Kenosha, Racine, and Milwaukee would also increase the availability of accessible housing near job centers in outlying areas.

### **Fair Housing**

The Region's minority residents are concentrated in the central portions of the Cities of Milwaukee, Racine, and Kenosha. Areas with concentrations of minority residents also have concentrations of low-income households. Minority households in the Region are much more likely than non-minority households to have low incomes. About 41 percent of minority households have incomes below 50 percent of the Region median income, compared to about 20 percent of non-minority households.

Additional lower- and moderate-cost housing is recommended by the plan in seweried communities projected to have an inadequate supply of affordable housing through various plan analyses. This would increase housing opportunities for minority and low-income households near major employment centers outside central cities. It would also provide more housing opportunities for minority and low-income households in areas with better schools and safer neighborhoods. The plan also recommends a regional voucher program to make it easier for households with housing vouchers to move to less-impooverished areas, and programs to provide assistance to low-income families in moving to less impooverished areas. Such assistance could include helping people find suitable housing and jobs, and enrolling children in school.

### **Housing Development Practices**

Multi-family housing and higher-density single-family housing, as recommended in the housing plan, can help increase the supply of affordable housing for lower- and moderate-income households

and, at the same time, provide for a more compact urban development pattern. Compact development allows housing to be located closer to jobs and services, such as shopping and schools, which minimizes vehicle travel and provides increased opportunities for walking and bicycling. Compact development also minimizes the cost of providing new roads and extending public sewer and water to serve new development, and can be served more efficiently and economically by public transit. More compact urban development also helps to preserve farmland by minimizing the amount of land consumed by residential subdivisions and other urban development.

More information about the regional housing plan can be found on the SEWRPC website at [www.sewrpc.org/housing](http://www.sewrpc.org/housing).

## **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 multi-modal 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 can be found at [www.sewrpc.org/mpo](http://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*, and 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 the orderly expansion of such areas. Each time the regional transportation plan is developed, elements of the plan that can help reduce the need for investments in the improvement and expansion of the arterial street and highway network are first considered. These elements include 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 6 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 and reverse commuting 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 that would connect 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 off-peak 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 areas 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.

Map 6

**PUBLIC TRANSIT ELEMENT OF THE TRANSPORTATION PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035**

**RAPID/EXPRESS BUS ROUTE**

- RAPID BUS ROUTE - FREEWAY PORTION
- - - RAPID BUS ROUTE - NONFREEWAY PORTION
- EXPRESS BUS ROUTE

**FIXED GUIDEWAY ROUTE**

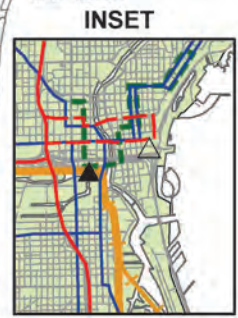
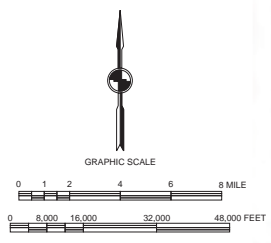
- HIGH SPEED RAIL
- + + + COMMUTER RAIL
- - - STREETCAR

**TRANSIT STATIONS**

- ▲ WITH PARKING
- △ WITHOUT PARKING

**SERVICE AREA**

- WALK ACCESS TRANSIT SERVICE AREA



**SEE INSET**

### **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 7). 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 travel 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. The plan includes 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.

#### **Surface Arterial Street and Highway Traffic Management**






A number of recommendations are included in the regional transportation plan to improve the operation of the regional surface arterial street and highway network. These recommendations attempt to maximize the efficient use of that network and, where possible, avoid significant capital expenditures. The 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.

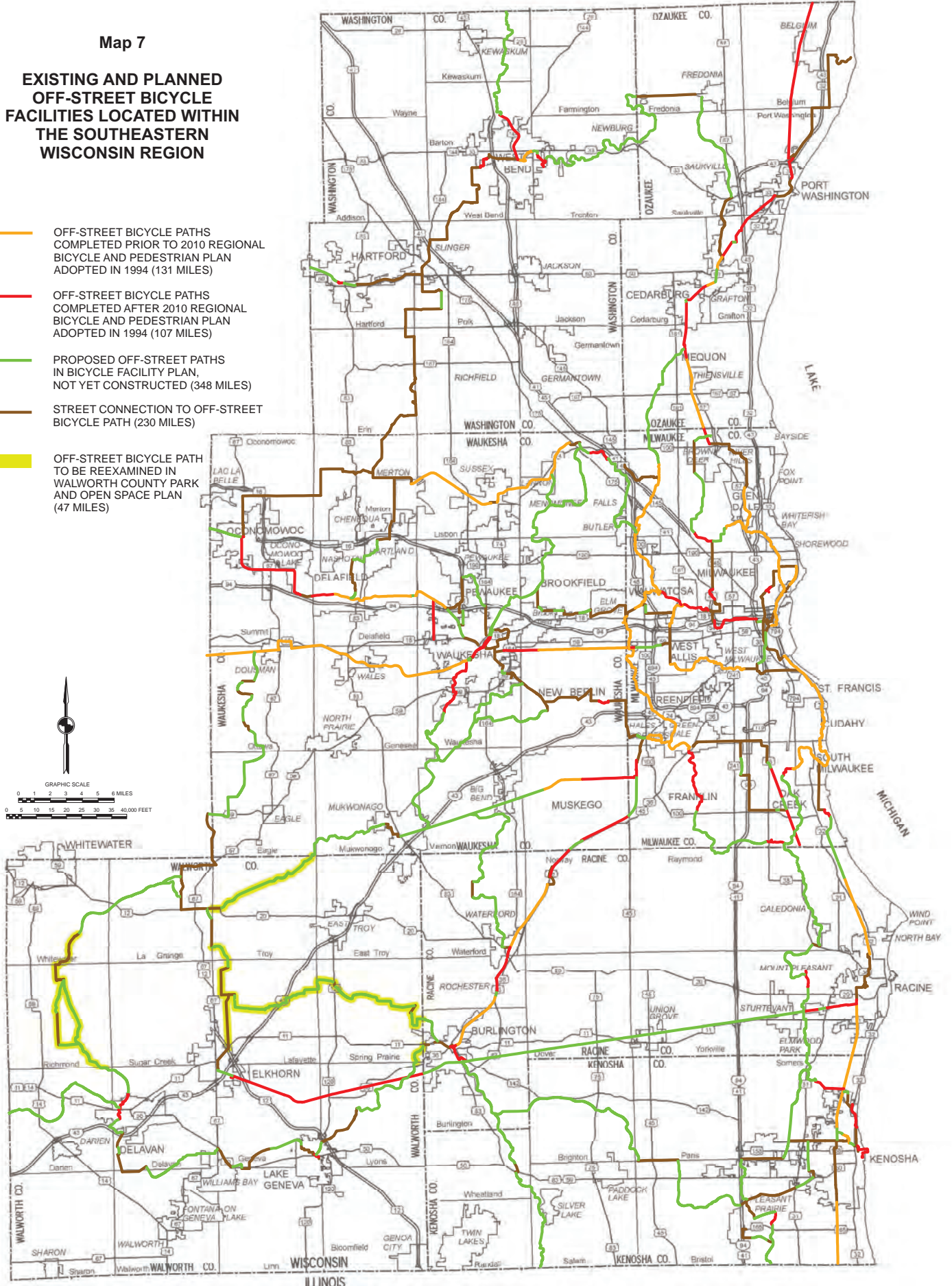
#### **Major Activity Center Parking Management and Guidance**

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 Internet updates.

Map 7

**EXISTING AND PLANNED  
OFF-STREET BICYCLE  
FACILITIES LOCATED WITHIN  
THE SOUTHEASTERN  
WISCONSIN REGION**

-  OFF-STREET BICYCLE PATHS COMPLETED PRIOR TO 2010 REGIONAL BICYCLE AND PEDESTRIAN PLAN ADOPTED IN 1994 (131 MILES)
-  OFF-STREET BICYCLE PATHS COMPLETED AFTER 2010 REGIONAL BICYCLE AND PEDESTRIAN PLAN ADOPTED IN 1994 (107 MILES)
-  PROPOSED OFF-STREET PATHS IN BICYCLE FACILITY PLAN, NOT YET CONSTRUCTED (348 MILES)
-  STREET CONNECTION TO OFF-STREET BICYCLE PATH (230 MILES)
-  OFF-STREET BICYCLE PATH TO BE REEXAMINED IN WALWORTH COUNTY PARK AND OPEN SPACE PLAN (47 MILES)



### **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 park-ride 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 route-miles (see Map 8). Approximately 88 percent, or 3,228 of these route-miles, are recommended to be resurfaced 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 route-miles, 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. This would help 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 can be found at [www.sewrpc.org/jhp](http://www.sewrpc.org/jhp).

More information about the regional transportation plan, including county maps of recommendations attendant to the arterial street and highway system, can be found at [www.sewrpc.org/rtp](http://www.sewrpc.org/rtp).





## **REGIONAL WATER QUALITY MANAGEMENT PLAN**

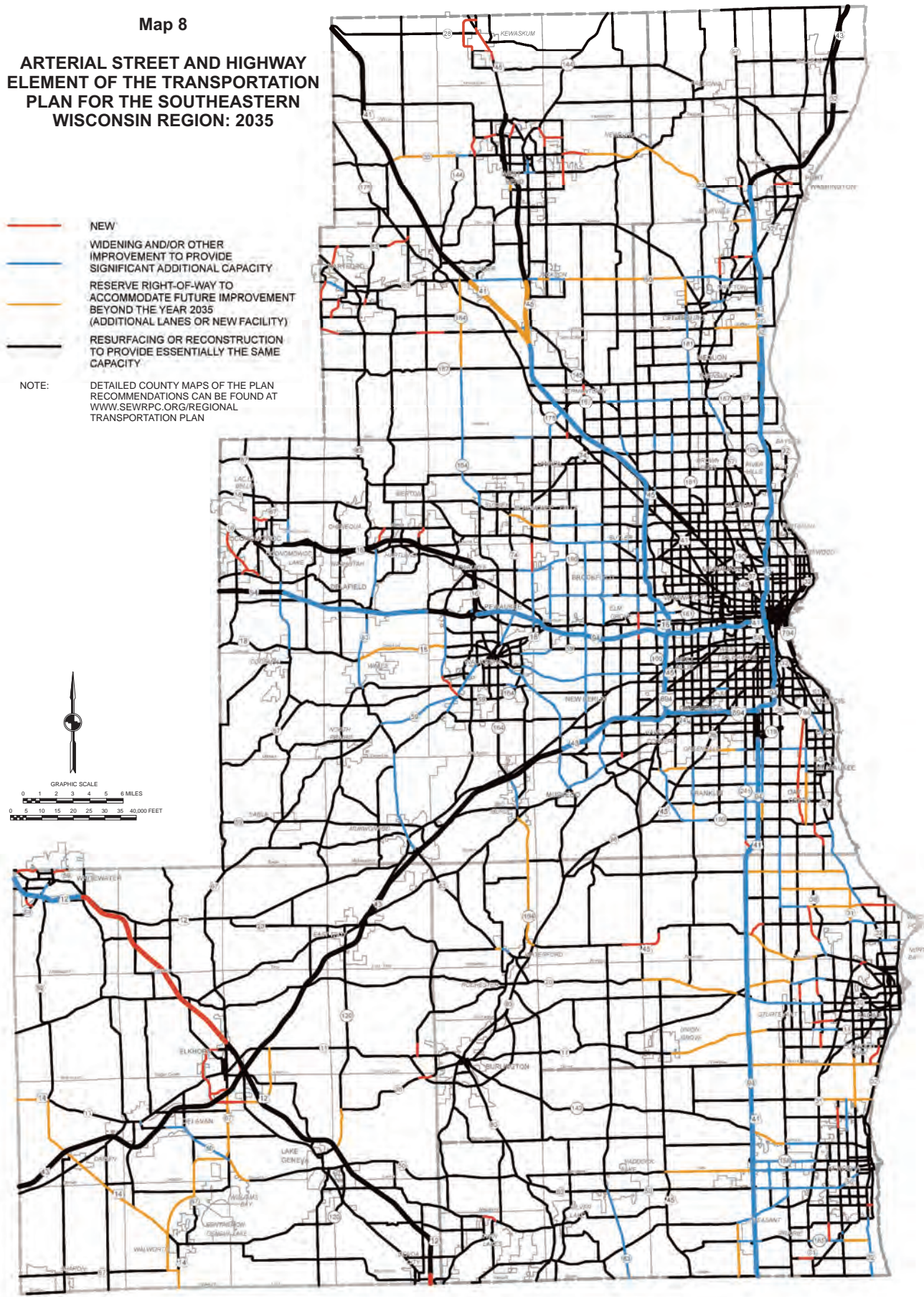
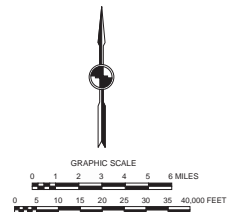
As the gubernatorially designated water quality management planning agency for the seven-county Southeastern Wisconsin region pursuant to the provisions of the Federal Clean Water Act, the Commission has a responsibility to prepare, adopt, and amend as necessary a regional water quality management plan. 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



Map 8

**ARTERIAL STREET AND HIGHWAY  
ELEMENT OF THE TRANSPORTATION  
PLAN FOR THE SOUTHEASTERN  
WISCONSIN REGION: 2035**

-  NEW
  -  WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
  -  RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT BEYOND THE YEAR 2035 (ADDITIONAL LANES OR NEW FACILITY)
  -  RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- NOTE: DETAILED COUNTY MAPS OF THE PLAN RECOMMENDATIONS CAN BE FOUND AT [WWW.SEWRPC.ORG/REGIONAL\\_TRANSPORTATION\\_PLAN](http://WWW.SEWRPC.ORG/REGIONAL_TRANSPORTATION_PLAN)



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 and 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 9, 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 9 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, 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 10 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 areawide wastewater treatment arrangements have

been put in place in the Region to implement plan recommendations, including 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 in which sanitary sewer service for new urban development is not permitted under State law. Detailed information relative to those sanitary sewer service areas can be found in a series of individual plan reports available from the Commission offices at [www.sewrpc.org/sewerserviceplanstatus](http://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.

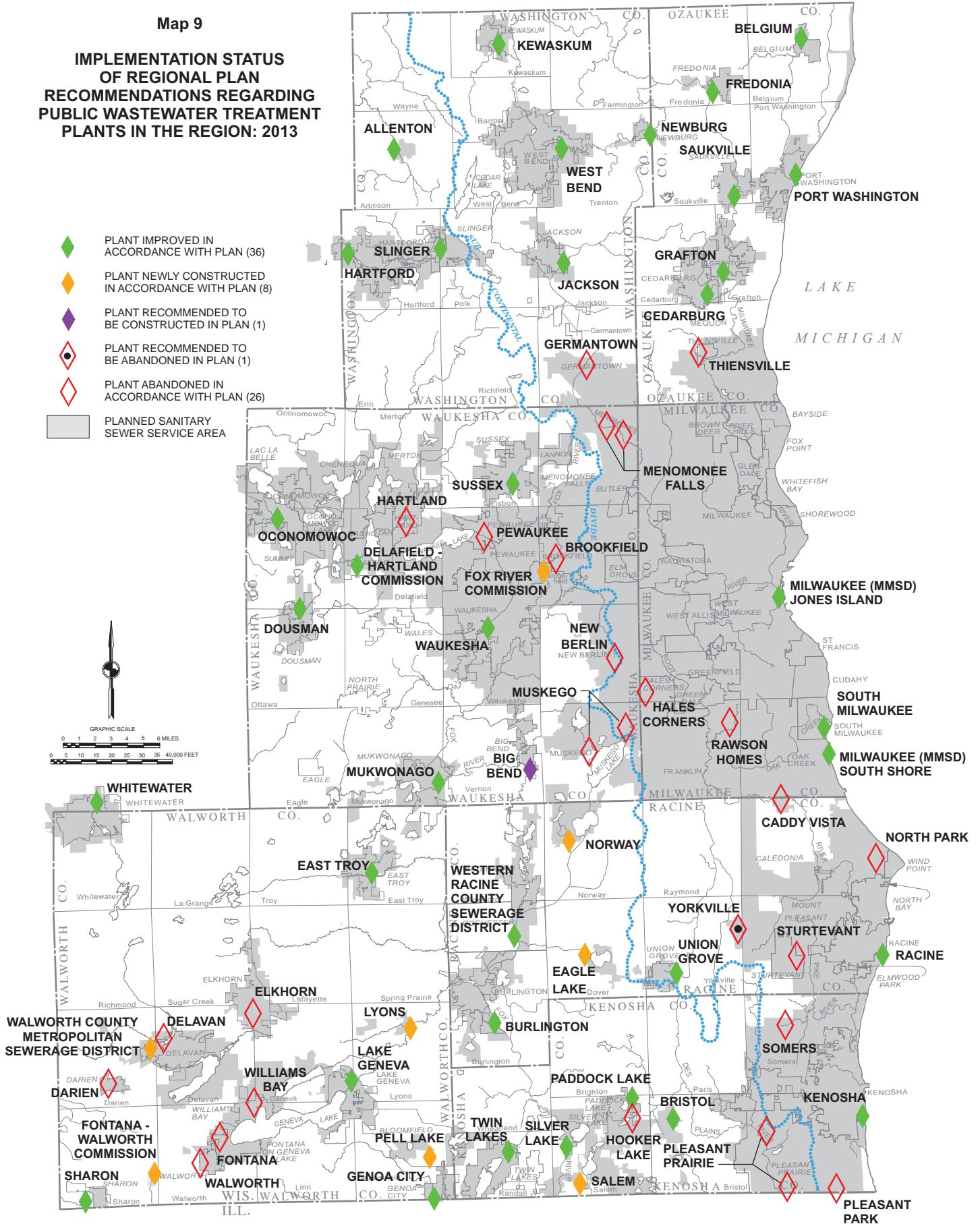
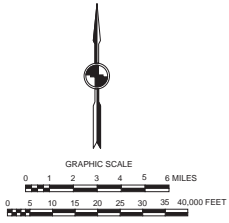
In addition to such detailed planning, over time the Wisconsin Department of Natural Resources has put in place State regulations to address runoff to help meet the pollutant reduction goals concerned in both rural and urban environments. These rules in rural areas relate to such control measures as reducing soil erosion from cropland, properly managing manure storage and the land application of manure, reducing barnyard runoff, 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.

Map 9

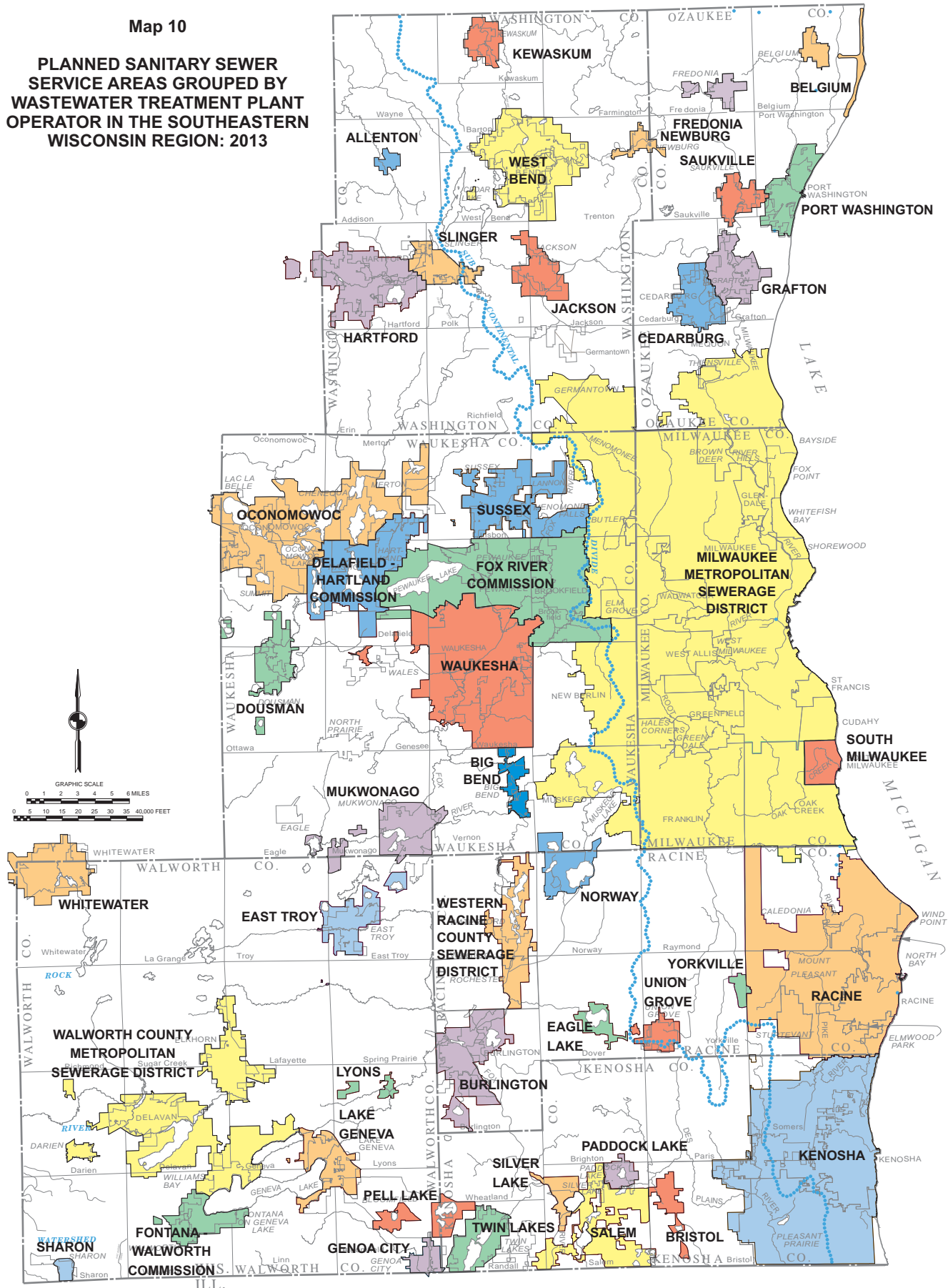
**IMPLEMENTATION STATUS  
OF REGIONAL PLAN  
RECOMMENDATIONS REGARDING  
PUBLIC WASTEWATER TREATMENT  
PLANTS IN THE REGION: 2013**

- ◆ PLANT IMPROVED IN ACCORDANCE WITH PLAN (36)
- ◆ PLANT NEWLY CONSTRUCTED IN ACCORDANCE WITH PLAN (8)
- ◆ PLANT RECOMMENDED TO BE CONSTRUCTED IN PLAN (1)
- ◆ PLANT RECOMMENDED TO BE ABANDONED IN PLAN (1)
- ◇ PLANT ABANDONED IN ACCORDANCE WITH PLAN (26)
- PLANNED SANITARY SEWER SERVICE AREA



Map 10

**PLANNED SANITARY SEWER SERVICE AREAS GROUPED BY WASTEWATER TREATMENT PLANT OPERATOR IN THE SOUTHEASTERN WISCONSIN REGION: 2013**



### **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 recommendations such 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 can be found on the SEWRPC website at [www.sewrpc.org/regionalwaterqualityplan](http://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. The remaining 1,678 square miles, or 62 percent, lies within the Mississippi River Basin. About 73 percent of the 2010 population of the Region, or nearly 1.5 million persons, resides within the Great Lakes Basin portion of the Region, most of which relies 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 aquifers 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. Exceptions are only possible 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.

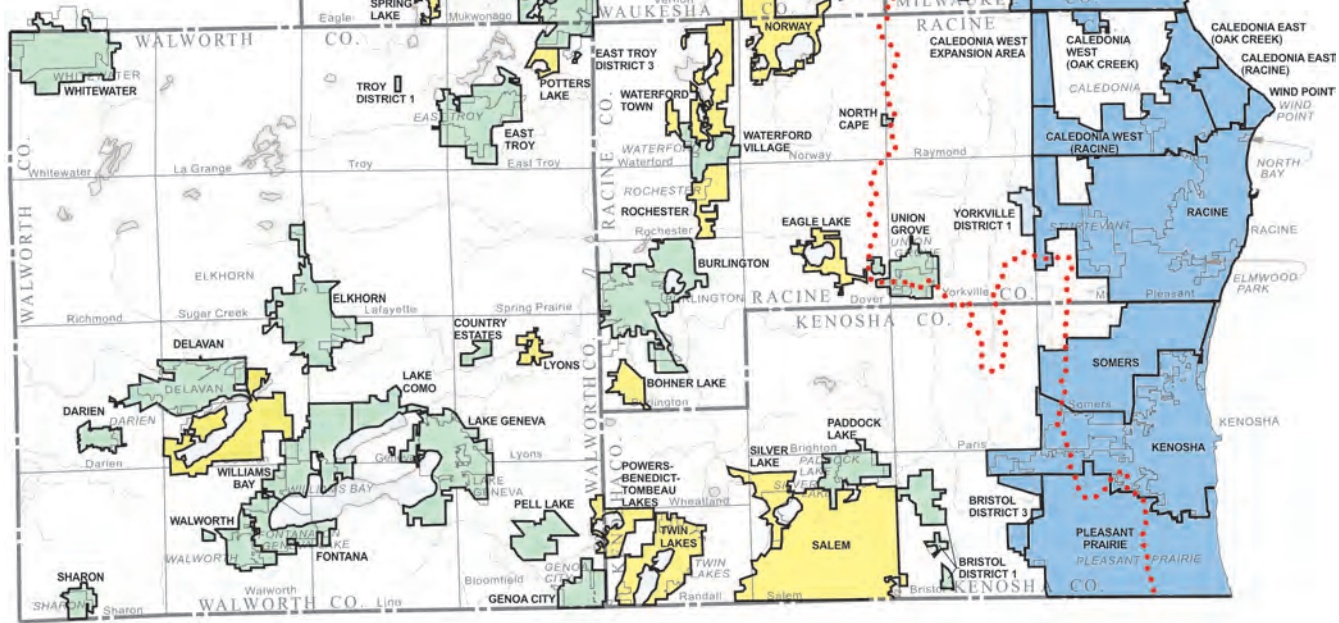
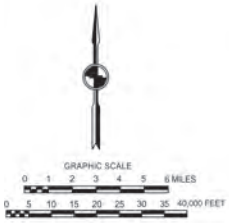
The areas proposed to be served by public water utilities in the Region by 2035, and the sources of supply recommended in each case, are shown on Map 11. The plan recommends that nine water utilities that currently utilize ground water as a source of supply convert over time to Lake Michigan as a source of supply. This includes six utilities—Brookfield-East, Cedarburg, Germantown, Grafton, Saukville, and Yorkville—that lie entirely within the Lake Michigan drainage basin. Two more utilities—New Berlin-Central and Muskego—straddle the subcontinental divide, but are served by the Milwaukee Metropolitan Sewerage District, and,

Map 11

**PUBLIC WATER UTILITY SERVICE AREA PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035**

-  PLANNED SERVICE AREA FOR EXISTING UTILITY TO REMAIN ON LAKE MICHIGAN SUPPLY (27)
-  NEW UTILITY SERVICE AREAS TO UTILIZE LAKE MICHIGAN SUPPLY (1)
-  PLANNED SERVICE AREA FOR EXISTING UTILITY TO REMAIN ON GROUNDWATER SUPPLY (42)
-  PLANNED SERVICE AREA FOR EXISTING UTILITY TO BE CONVERTED FROM GROUNDWATER SUPPLY TO LAKE MICHIGAN SUPPLY (9)
-  PORTION OF PLANNED SERVICE AREA TO BE SERVED BY GROUNDWATER OR SURFACE WATER SUPPLY (2)
-  NEW UTILITY SERVICE AREA TO UTILIZE GROUNDWATER SUPPLY (2)
-  POTENTIAL FUTURE UTILITY SERVICE AREAS TO UTILIZE GROUNDWATER SUPPLIES DEPENDING UPON LOCAL NEEDS AND DETERMINATIONS (20)
-  SUBCONTINENTAL DIVIDE

NOTE: On May 29, 2009, the Wisconsin Department of Natural Resources approved a diversion of Lake Michigan water to provide water supply to the New Berlin Central service area. Lake Michigan supply to this service area was implemented in July 2009.



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 Grove—lies in the Lake Michigan Basin and is recommended to use Lake Michigan water for supply. It is recommended that all of the remaining water utilities 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 12. 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 groundwater recharge areas that were found to have a high or very high recharge potential (see Map 13). 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.

### **Other Plan Recommendations**

The plan also sets forth recommendations related to stormwater 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 [www.sewrpc.org/regionalwatersupplyplan](http://www.sewrpc.org/regionalwatersupplyplan).

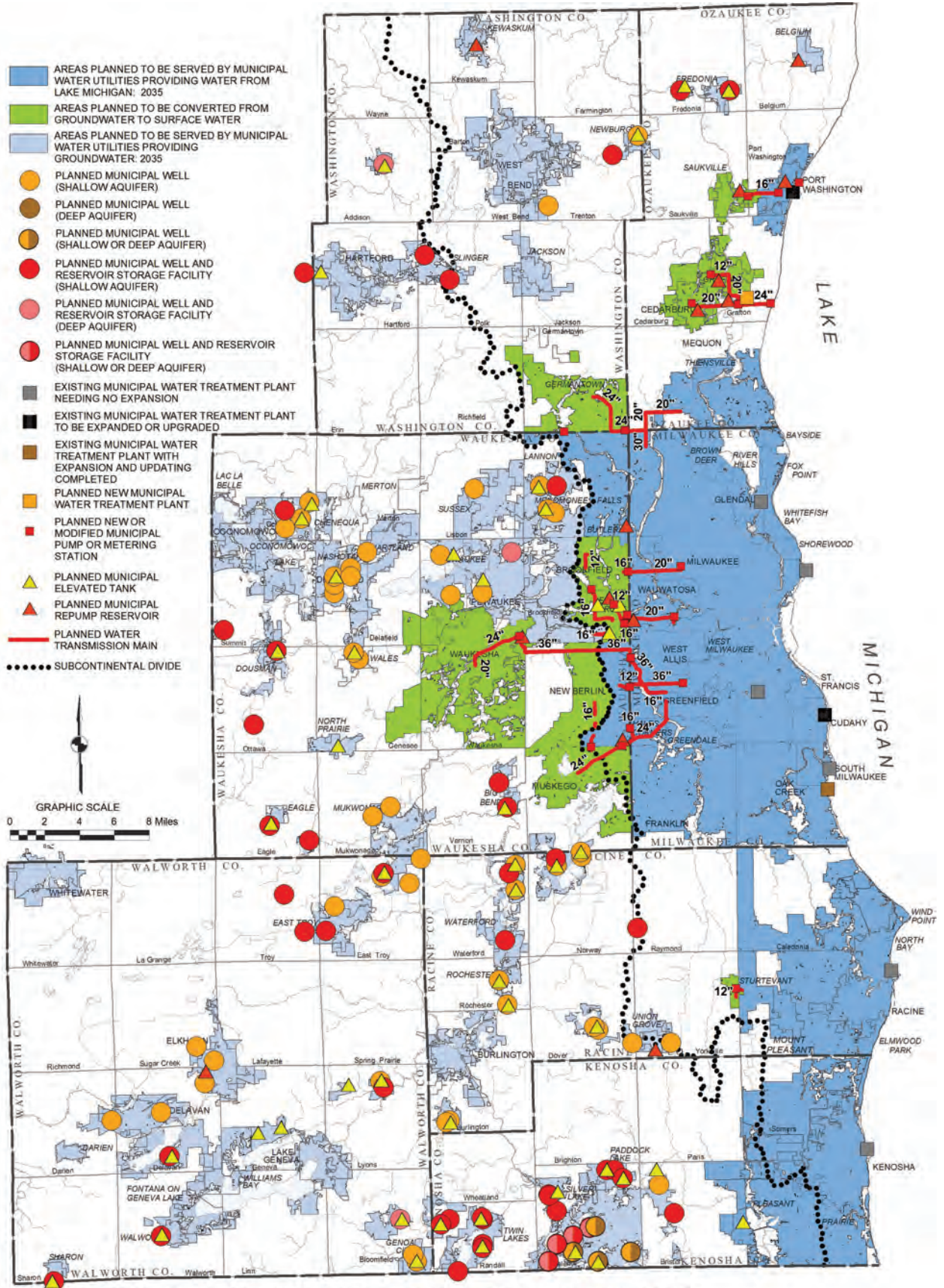
## **OTHER REGIONAL PLANS**

In addition to the foregoing regional plan elements that today comprise the adopted regional comprehensive plan, a number of other regional plan elements have been prepared over the years 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 activities. 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 recommendations to preserve and protect those floodplains in natural, open space use wherever possible. As appropriate, each plan also set forth 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 floodplain management serve to refine and update the watershed-specific recommendations contained in these historic watershed plans.

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






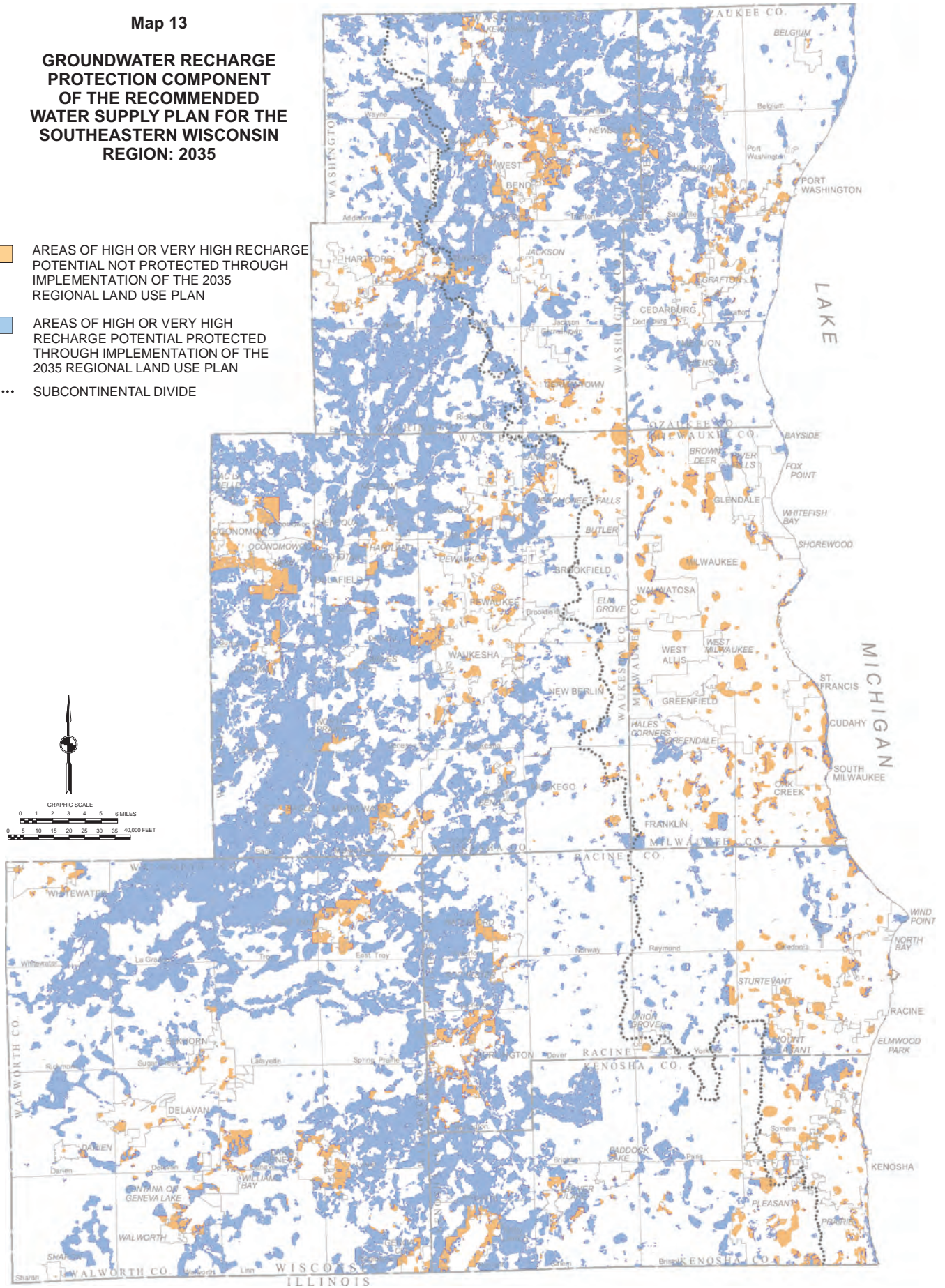
NOTES: The City of Oak Creek Sewer and Water Utility completed expansion and upgrading of its water treatment plant in 2010.  
 The City of Hartford completed the recommended new well and storage tank in 2010.  
 This map does not indicate the return flow options of the recommended plan.



Map 13

**GROUNDWATER RECHARGE PROTECTION COMPONENT OF THE RECOMMENDED WATER SUPPLY PLAN FOR THE SOUTHEASTERN WISCONSIN REGION: 2035**

-  AREAS OF HIGH OR VERY HIGH RECHARGE POTENTIAL NOT PROTECTED THROUGH IMPLEMENTATION OF THE 2035 REGIONAL LAND USE PLAN
-  AREAS OF HIGH OR VERY HIGH RECHARGE POTENTIAL PROTECTED THROUGH IMPLEMENTATION OF THE 2035 REGIONAL LAND USE PLAN
-  SUBCONTINENTAL DIVIDE



### **Regional Elderly-Handicapped Transportation Plan**

This plan, adopted in 1978, set forth 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, set forth 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 Airport System Plan**

This plan, adopted in 1976, was updated and extended in 1987, and its plan recommendations were incorporated into the State of Wisconsin

Airport Plan. Many of the plan recommendations were implemented, but no continuing regional planning effort is under way 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 under way 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 comprehensive plans.

### **Regional Library Facilities and Services Plan**

This plan, adopted in 1974, proposed a single seven-county 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 fore mentioned plans are available from Commission offices and on the website at [www.sewrpc.org/legacyregionalplans](http://www.sewrpc.org/legacyregionalplans).

## PART TWO: THE YEAR IN REVIEW

This section of the 2013 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 83.



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## **LAND USE PLANNING FOR DEVELOPMENT AND PRESERVATION**

In 2013, 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. These activities included the following:

### **Growth and Change Forecasts**

The regional land use plan and other regional plans that 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 10-year Federal Census. Current Commission regional plans are based on projections, prepared in 2004, that extend to the year 2035.

During 2013, the Commission completed the work involved in updating and extending the regional population and employment projections further into the future, to the year 2050. Commission efforts in this regard were focused on the completion of new projections of employment by county in the Region for the year 2050 and on publishing the fifth editions of SEWRPC Technical Reports No. 10, *The Economy of Southeastern Wisconsin*, and No. 11, *The Population of Southeastern Wisconsin*. These reports set forth new population, household, and employment projections for the Region by county to the year 2050. Figure 3 compares the regional growth projections for both the 2035 and 2050 plan design years. Monitoring data relative to the new projections are set forth in Part Three of this report.

The Commission initiated work in 2013 on the projection of personal income levels for the Region for use in the preparation of the forthcoming year 2050 regional land use and transportation plans.

### **Land Use Planning**

Much of the Commission's land use planning activity in 2013 was devoted to updating the planning 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 under way. 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 2013 as follows:

### ***Land Use Inventory***

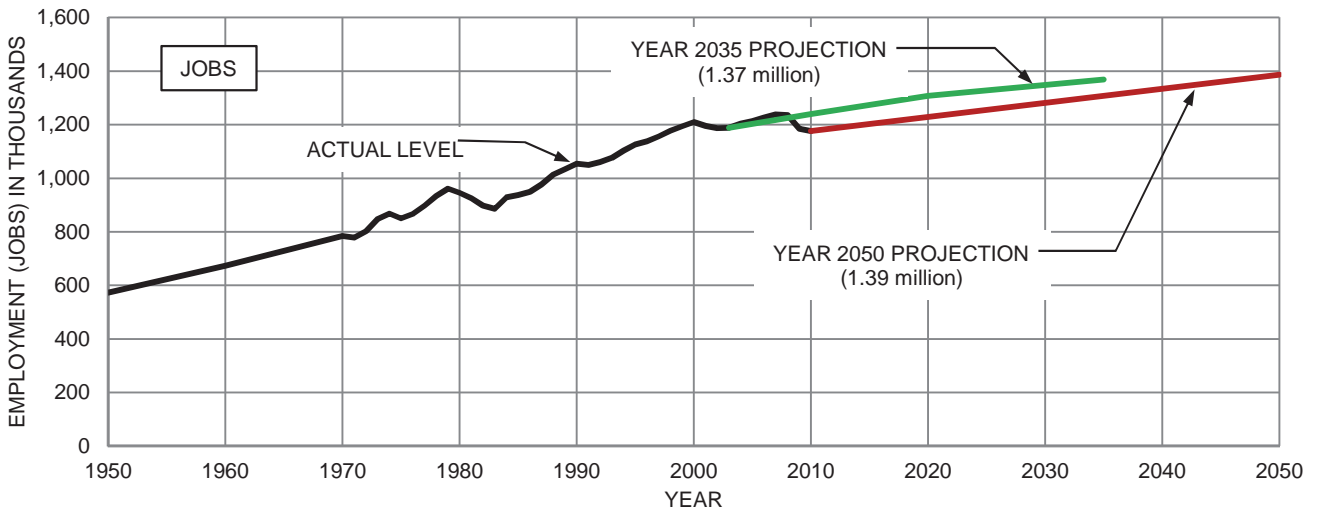
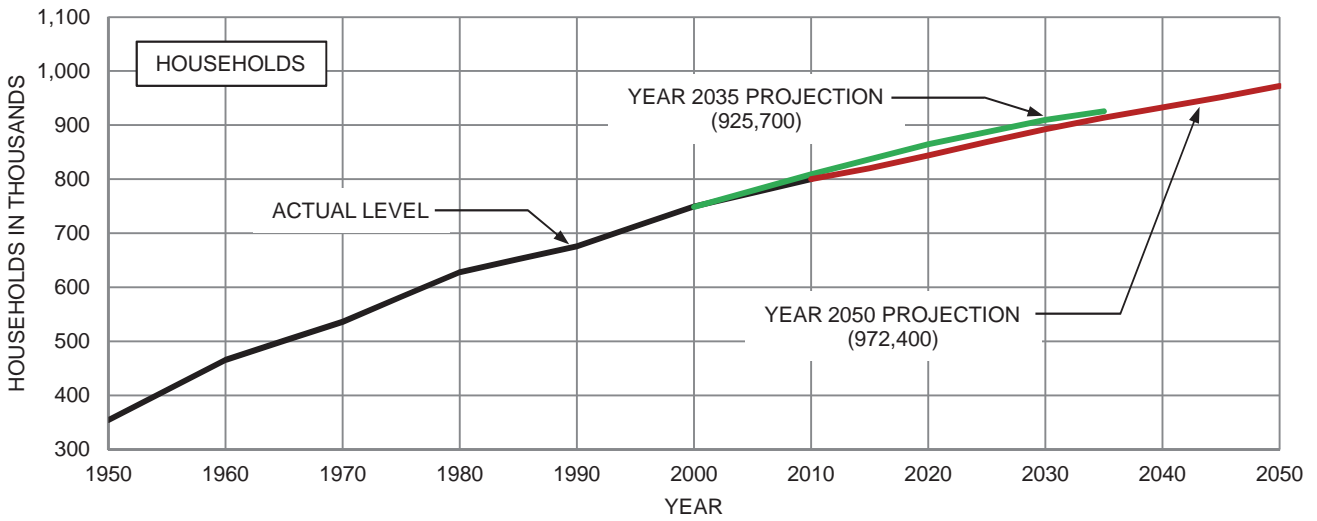
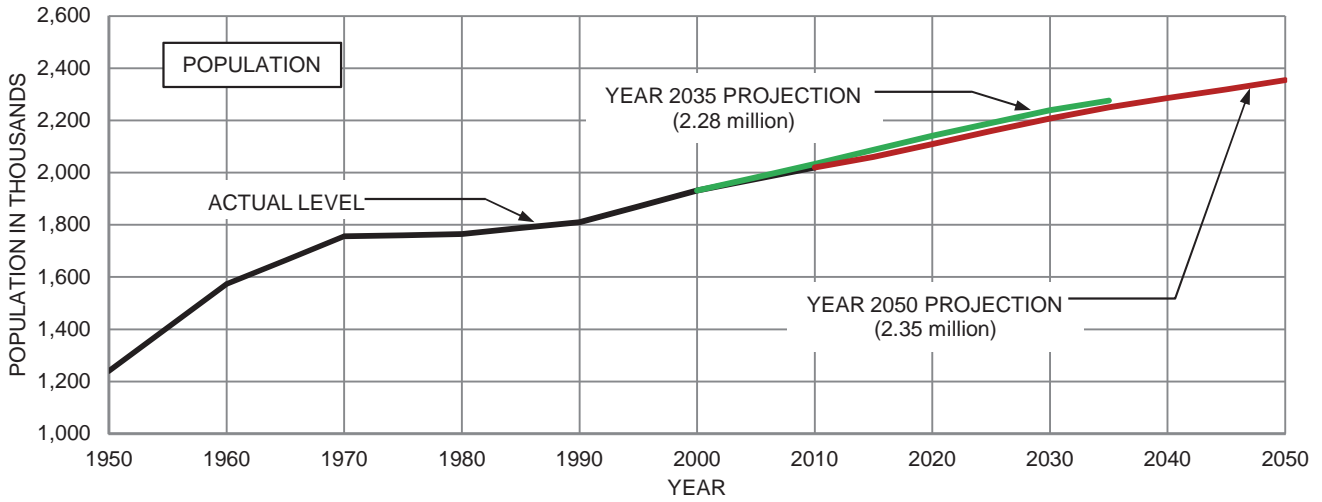
The Commission land use inventory identifies existing land uses throughout the entire Region using a classification system with over 60 land use categories. The land use inventory is critical not only to preparation of the regional land use plan but also to virtually all of the Commission's planning work. The Commission has completed land use inventories for the Region for the years 1963, 1970, 1975, 1980, 1985, 1990, 1995, and 2000. In 2013 the Commission completed 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. Key findings of this inventory are included in Part Three of this report.

### ***Environmental Corridor Inventory***

Environmental corridors are elongated areas in the landscape that contain concentrations of natural resource features such as wetlands, woodlands,

Figure 3

COMPARISON OF INTERMEDIATE GROWTH PROJECTIONS FOR THE SOUTHEASTERN WISCONSIN REGION: PLAN DESIGN YEARS 2035 AND 2050



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. In 2013 the Commission completed the process of updating the environmental corridor inventory to 2010. Key findings of this inventory are presented in Part Three of this report.

### ***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 was completed in 2013. Key findings of these inventories are presented in Part Three of this report.

#### ***Employment Quarter Section File***

On a 10-year cycle following each Federal Census, 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 completed work on the year 2010 employment quarter section file in 2013.

#### ***VISION 2050: Updated Regional Land Use and Transportation System Plans***

During 2013, the Commission continued work on a new regional land use plan (in conjunction with a new regional transportation plan) for the year 2050.

The new year 2050 companion regional plans—expected to be completed in 2015—have been labelled “VISION 2050.” The plans are being designed to accommodate growth in population, households, and employment in the Region to the year 2050. Work on the land use component of VISION 2050 during 2013 included the following:

- Reconstituted the Commission Advisory Committee on Regional Land Use Planning to oversee the preparation of the land use component of VISION 2050.
- Initiated an effort to meet with planners from each “urban” community to inform them of the regional land use plan update effort and to obtain information regarding recent development or commitments to development in their communities as well as information regarding where in their communities new development is most likely to occur in the years ahead. This information will be taken into account in the preparation of the VISION 2050 land use plan.
- Continued the inventory and analysis work necessary to assess the implementation status of the year 2035 regional land use plan.
- Completed work on the preliminary drafts of a number of chapters for Volume I of SEWRPC Planning Report No. 55, which will document VISION 2050 (see the transportation planning section for chapter details).
- Assisted in organizing initial visioning activities as part of the Commission’s visioning and scenario planning process that is being carried out for VISION 2050.

#### **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 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 assists counties in the Region, at their request, to prepare updated farmland preservation plans, including the 2013 activities summarized below.

### ***Ozaukee County***

#### ***Farmland Preservation Plan***

Work on a new farmland preservation plan for Ozaukee County was completed in 2013, following revisions to the draft plan to incorporate comments from the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP). The Ozaukee County Board adopted the farmland preservation plan as an amendment to, and a component of, the Ozaukee County Multi-Jurisdictional Comprehensive Plan in December 2013, and thereafter certified by DATCP. The plan is documented in SEWRPC Community Assistance Planning Report No. 87 (2nd Edition), *A Farmland Preservation Plan for Ozaukee County*.

### ***Racine County***

#### ***Farmland Preservation Plan***

Work on a new farmland preservation plan for Racine County was completed in 2013. The plan was adopted by the Racine County Board in December 2013 and thereafter certified by DATCP. The plan is documented in SEWRPC Community Assistance Planning Report No. 46 (2nd Edition), *A Farmland Preservation Plan for Racine County*.

### ***Washington County***

#### ***Farmland Preservation Plan***

The Commission worked with Washington County staff, which had the lead role in preparing the County farmland preservation plan, over the period 2011-2012 to complete a draft plan. The process included responding to concerns raised by DATCP during its review of the draft plan. The final plan was adopted by the Washington County Board in December 2013 as an amendment to, and a component of, the Washington County Multi-Jurisdictional Comprehensive Plan, and thereafter certified by DATCP.

### **Park and Open Space Planning**

The Commission adopted a regional park and open space plan in 1977. The plan includes a recommendation for the preservation of environmentally significant open space lands and the provision of sites and facilities for major 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 2013, the Commission continued to assist counties in updating their park and open space plans, including the plans that follow.

### **Racine County Park and Open Space Plan**

The Commission completed technical work on an update of the park and open space plan for Racine County in 2012. The plan was adopted by the Racine County Board in December 2012 and by the Regional Planning Commission as an amendment to the regional park and open space plan in March 2013. The plan is documented in SEWRPC Community Assistance Planning Report No. 134 (3rd Edition), *A Park and Open Space Plan for Racine County*.

### **Walworth County Park and Open Space Plan**

The Commission continued work in updating the park and open space plan for Walworth County throughout 2013. All inventory and analysis work has been completed and a set of preliminary plan recommendations prepared. The plan is scheduled for completion in 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.

No formal amendments to the regional natural areas plan were prepared during 2013. However, Commission staff field work done at the request of the Ozaukee County Land & Water Management Department, relative to a property located in the Town of Fredonia, led to the classification of a new natural area of local significance (NA-3). This area, to be known as the Anawa Road Conifer Swamp, is comprised of cedar swamp and black ash lowland hardwood forest and contains a number of plant species with northern Wisconsin affinities. The



formal classification of the Anawa Road Conifer Swamp will occur in a future revision to the Ozaukee County park and open space plan and in an amendment to the regional natural areas and critical species habitat 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 2013, the Commission fulfilled a total of 117 requests for such information, including the following (see Map 14):

#### **Private Development Parcels**

During 2013, 21 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 2013, 37 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 2013, 27 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; Kenosha, Milwaukee, Racine, Washington, and Waukesha Counties; the Cities of Delavan, Franklin, and Oak Creek; the Village of Brown Deer; and the Town of Oconomowoc.

#### **Utility and Public Facility Sites**

During 2013, 20 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 Milwaukee, Ozaukee, Walworth, and Waukesha Counties.

#### **Public Park Sites**

During 2013, 10 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, Walworth, Washington, and Waukesha Counties.

#### **Other Sites**

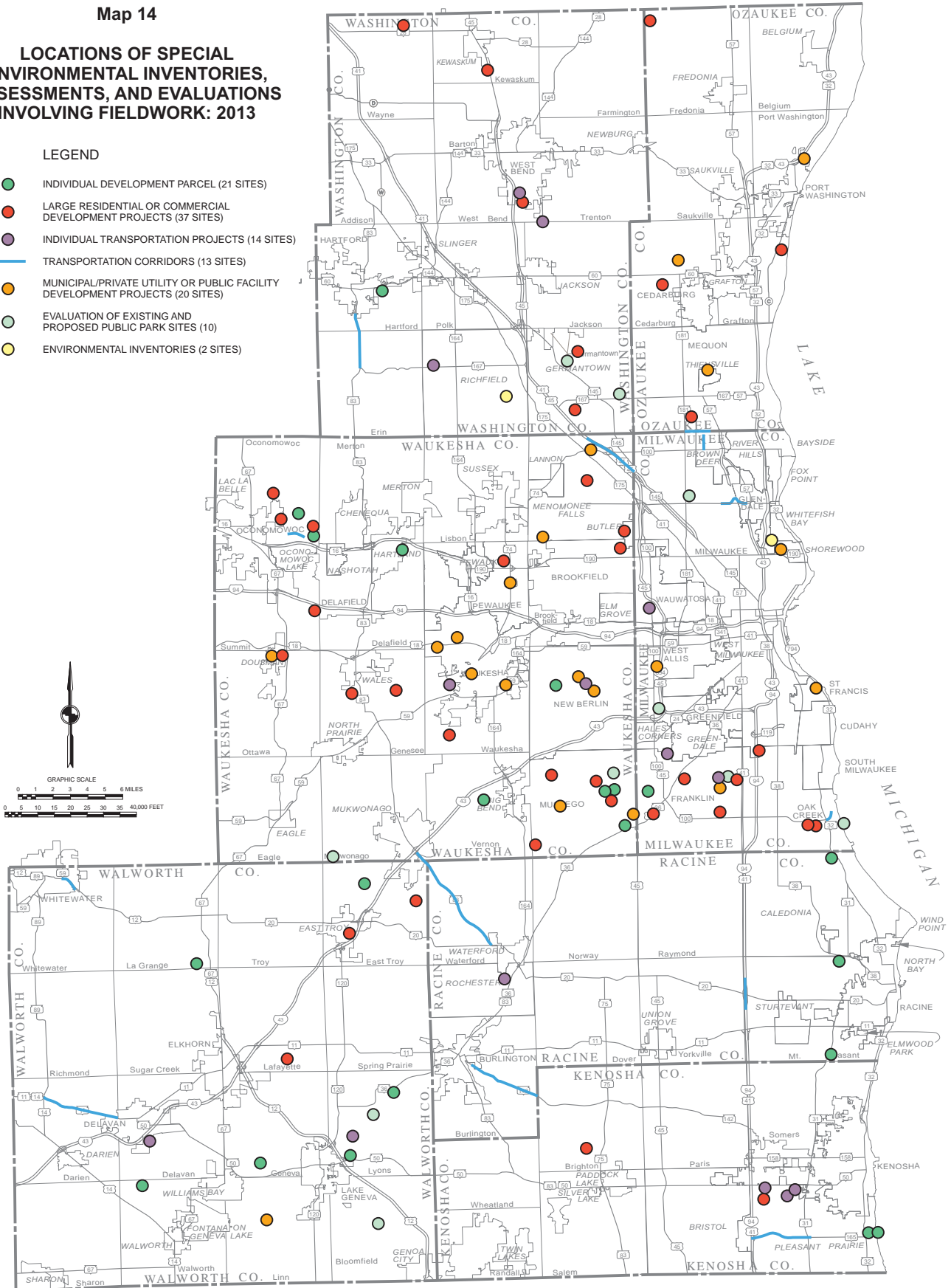
During 2013, two requests were fulfilled that consisted of specialized field evaluations. The Milwaukee County Parks Department requested a vegetation survey of an upland island adjacent to the Estabrook Dam within the Milwaukee River. The second site involved an evaluation of a wetland complex north of Bark Lake related to the Commission's preparation of a lake protection plan for Bark Lake now under way.

Map 14

**LOCATIONS OF SPECIAL ENVIRONMENTAL INVENTORIES, ASSESSMENTS, AND EVALUATIONS INVOLVING FIELDWORK: 2013**

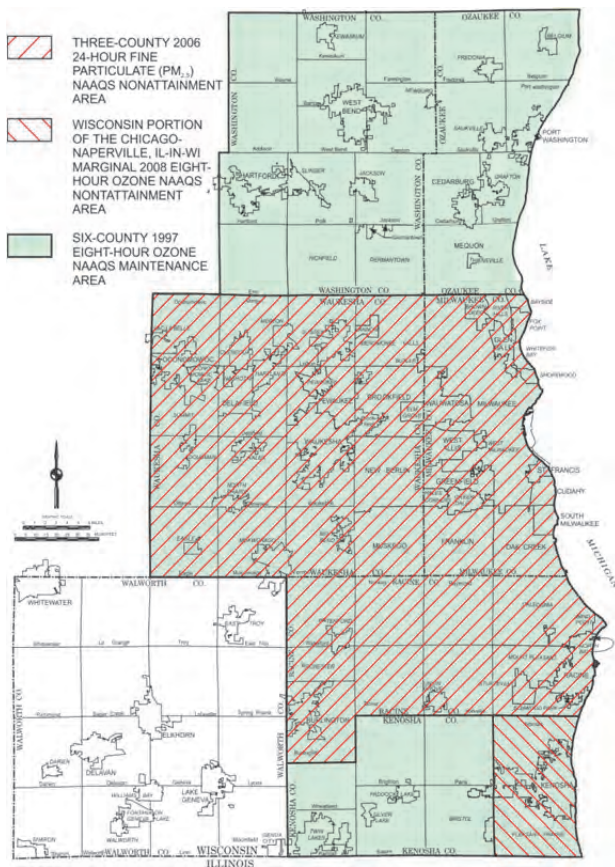
**LEGEND**

- INDIVIDUAL DEVELOPMENT PARCEL (21 SITES)
- LARGE RESIDENTIAL OR COMMERCIAL DEVELOPMENT PROJECTS (37 SITES)
- INDIVIDUAL TRANSPORTATION PROJECTS (14 SITES)
- TRANSPORTATION CORRIDORS (13 SITES)
- MUNICIPAL/PRIVATE UTILITY OR PUBLIC FACILITY DEVELOPMENT PROJECTS (20 SITES)
- EVALUATION OF EXISTING AND PROPOSED PUBLIC PARK SITES (10)
- ENVIRONMENTAL INVENTORIES (2 SITES)



Map 15

**NONATTAINMENT AND MAINTENANCE AREAS  
WITHIN THE SOUTHEASTERN WISCONSIN REGION  
WITH RESPECT TO NATIONAL AMBIENT AIR  
QUALITY STANDARDS (NAAQS)**



**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 (USEPA), 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, cooperative, 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 2014.

The Commission undertook a wide range of transportation planning activities in 2013. 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**

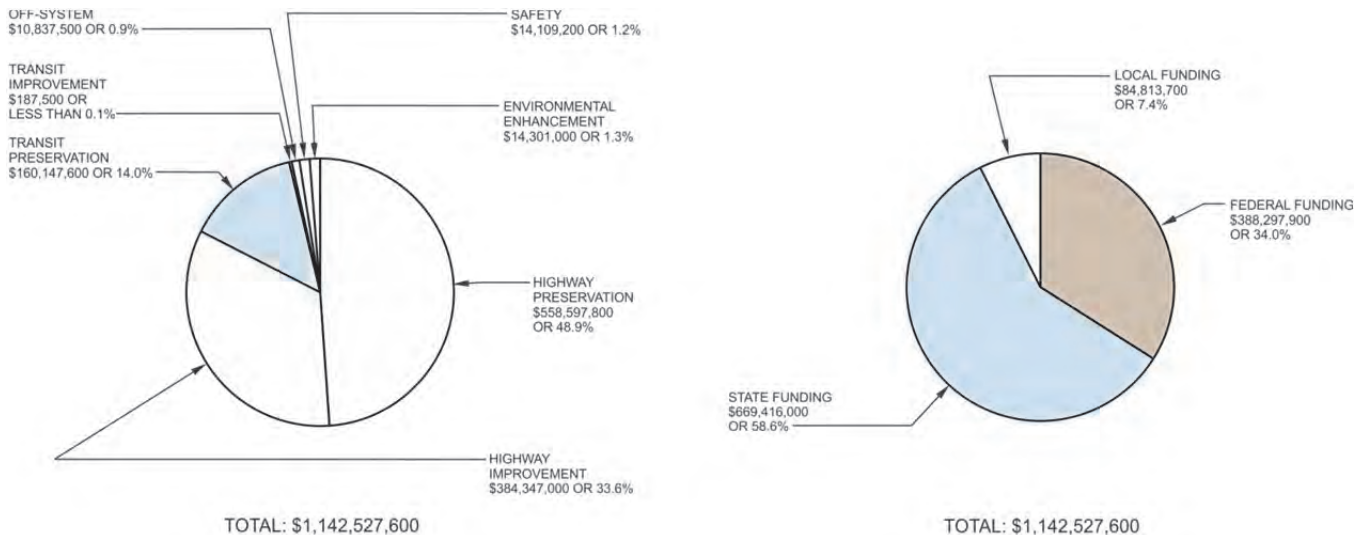
In support of implementation of the long-range regional transportation plan, the Commission is involved in extensive short-range transportation planning and programming activities each year. In 2013 these activities consisted of: 1) modifications to a four-year transportation improvement program; 2) preparation of short-range (five-year) transit development plans for individual public transit operators; and 3) 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 Region. 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, Round Lake Beach, and West Bend Urbanized Areas (TIP Committees). These Committees are made up of local elected officials and staff, including all of the area transit operators. Each TIP must be found to conform to State of Wisconsin air quality maintenance for specified national ambient air quality standards, given the presence in the Region of nonattainment and maintenance areas for ozone and fine particulate matter (PM<sub>2.5</sub>) (see Map 15).

Figure 4

**PROGRAMMED EXPENDITURES AND FUNDING SOURCES FOR TRANSPORTATION FACILITIES AND SERVICES IN THE SOUTHEASTERN WISCONSIN REGION: 2014**



NOTE: FOR 2014, NO EXPENDITURES ARE EXPECTED TO BE INCURRED FOR HIGHWAY EXPANSION NOR TRANSIT EXPANSION.

The Commission adopted the 2013-2016 TIP in October 2012, as set forth in a Commission document titled *A Transportation Improvement Program for Southeastern Wisconsin: 2013-2016*. During 2013, the TIP was both amended and administratively modified as requested by WisDOT and local units of government on eight occasions, adding 77 projects and revising 37 projects. As amended through the end of 2013, the TIP contains 548 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 \$3.39 billion. Of this total, \$1.33 billion, or about 39 percent, is proposed to be provided through Federal aids; \$1.72 billion, or about 51 percent, through State funds; and \$322 million, or about 10 percent, through county and local monies.

About \$1.14 billion is programmed in 2014, the second year of the TIP. As derived from the data shown in Figure 4:

- About \$719 million, or 63 percent of all expenditures, is devoted to the preservation of existing transportation facilities and services, including \$559 million for highways and \$160 million for transit, with 34 percent being

programmed for service and facility improvement and expansion projects. (It should be noted that much of the cost of a highway improvement project is attendant to reconstruction of the existing highway facility. The cost of additional traffic lanes provided may only represent 10 to 20 percent of the total costs of a highway improvement project.)

- 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 \$160 million in 2014, or 14 percent of total expenditures.
- In total, including the service and facility preservation, improvement, and expansion categories of arterial projects, highways are slated to receive about \$943 million in 2014, or 83 percent of total expenditures.
- The remaining \$39 million in expenditures, or 3 percent of the total, would be expended on highway safety, environmental enhancement, and non-arterial street and highway system projects.

The TIP document is available at the Commission offices and can be accessed at [www.sewrpc.org/tip](http://www.sewrpc.org/tip).

The following three additional work activities during 2013 were related to project selection and implementation activities drawn from the TIP:

- Congestion Mitigation and Air Quality

In 2013, the Commission staff initiated work with the TIP Committees, WisDOT, and WDNR to evaluate, prioritize, and recommend projects for Federal Highway Administration Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds. Based on the procedures previously developed and applied to evaluate and recommend projects for CMAQ funds, the staffs of the Commission, WisDOT, and WDNR independently rate each candidate CMAQ project. During 2013, under the guidance of the TIP Committees, the rating procedures used by the Commission staff were revised to include criteria related to the jobs/housing balance of a community and the provision of transit service in a community based on a recommendation included in the regional housing plan, adopted by the Commission in 2013. The rating procedures used by the Commission staff were also revised to include consideration of the implementation priority recommendations of the regional transportation operations plan (RTOP). The RTOP, completed in 2012, includes a solicitation of transportation systems management (TSM) projects from all local governments in Southeastern Wisconsin and WisDOT, an evaluation of TSM projects with respect to their potential to improve transportation operations and safety, and a priority listing of projects. The prioritization and final recommendation of candidate projects for years 2014-2018 CMAQ funds will be completed in early 2014.

- Surface Transportation Program – Milwaukee Urbanized Area

In 2013, Commission staff, under the guidance of the Milwaukee TIP Committee and the local governments within the Milwaukee urbanized area, revised the procedures used to evaluate, prioritize, and recommend county and local projects for Federal Highway Administration Surface Transportation Program – Milwaukee

Urbanized Area (STP-M) funds. The revised procedures were developed by Commission staff and reviewed and approved by the Milwaukee TIP Committee. The approved procedures include criteria intended to reflect the performance desired from the transportation system in the Milwaukee urbanized area, including the pavement condition of county and local arterial streets and highways, with priority given to routes with greater use measured by number of vehicles and transit riders that travel along the length of the project on an average weekday, and the length and function of the roadway facility. In the case of capacity expansion projects (widening and new facilities), priority would as well be given based on the level of existing congestion and average crash rate, along with the jobs/housing balance of a community and provision of transit service in a community based on the recommendations in the adopted regional housing plan. These procedures were used to select 23 candidate projects for the available \$82.2 million in years 2015-2018 STP-M funding.

- 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 2013 are available from the Commission offices and can be accessed at [www.sewrpc.org/2013highwaylist](http://www.sewrpc.org/2013highwaylist) and [www.sewrpc.org/2013transitlist](http://www.sewrpc.org/2013transitlist), 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 2013 in producing the following three transit system development plans.

### ***Kenosha County Public Transit Plan***

Work on the Kenosha County Public Transit Plan continued in 2013. 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 2013, 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 2014. More information can be found at [www.sewrpc.org/kenoshatdp](http://www.sewrpc.org/kenoshatdp).

### ***Racine County Public Transit Plan***

Work on the Racine County Public Transit Plan was completed in 2013. The plan updates a prior transit system development plan for the City of Racine's Belle Urban System. It includes recommendations for transit service and capital improvements for the City transit system over the period 2013 through 2017, and also includes recommendations for a potential Racine County transit system over the same period. The final plan was approved by the Advisory Workgroup guiding the plan in June 2013. The report documenting the plan—SEWRPC Community Assistance Planning Report No. 286, *Racine County Public Transit Plan: 2013-2017*—was published in October 2013. More information can be found at [www.sewrpc.org/racinetdp](http://www.sewrpc.org/racinetdp).

### ***Washington County Transit Development Plan***

Work on the Washington County Transit Development Plan continued in 2013. The plan will include recommendations for transit service and capital improvements for the County transit system over the period 2015 through 2019. During 2013, work on this plan included inventorying existing transit services, developing the objectives and standards for system operation, evaluating the existing system services, and developing an initial set of alternative

improvement plans. The plan is scheduled to be completed in 2014. More information can be found at [www.sewrpc.org/washingtontdp](http://www.sewrpc.org/washingtontdp).

### **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 2013 this work included:

#### **Adopted Year 2035 Regional 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.

In 2013, the Commission initiated work on another interim review and update to the adopted year 2035 plan. This work will include: 1) an examination of the forecasts underlying the plan; 2) measuring of transportation system performance in the Region; 3) an assessment of the implementation to date of the regional transportation plan recommendations; 4) a determination of whether achieving the recommendations of the plan remain feasible given existing and reasonably expected future funding; and 5) consideration of any necessary amendments to the year 2035 plan.

The interim review and update is being done concurrently with, but separate from, the next major update of the regional land use and transportation plans—VISION 2050—which is described in the following section of this report. While separate from the VISION 2050 effort, the review and update of the year 2035 regional transportation plan will inform the VISION 2050 planning work.

### **VISION 2050: Updated Regional Land Use and Transportation System Plans**

The Commission continued work in 2013 on a major review, reevaluation, and update of the regional transportation system plan, which is being prepared in conjunction with an updated regional land use plan. The new year 2050 companion regional plans—expected to be completed in 2015—have been labelled “VISION 2050.”

The transportation component of VISION 2050 will replace the existing year 2035 regional transportation plan, and will serve as a guide to transportation system development to the year 2050. The 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.

To prepare the VISION 2050 plans, the Commission initiated a visioning and scenario planning process in 2013 to 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 in order to develop a consensus vision for the plans—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, final recommended year 2050 land use and transportation plans will be developed, together representing a preferred comprehensive vision for the Region.

The Commission launched the initial visioning activities for VISION 2050 in fall 2013. These activities included:

- Two sets of interactive public visioning workshops in each county of the Region in October and December. Concurrent workshops were also held by eight partner community organizations targeted at their constituents, with

the purpose being to reach and engage minority populations, people with disabilities, and low-income individuals. Workshop activities were also made available online.

- A telephone survey conducted by the Department of Economics and the Center for Urban Initiatives and Research at UW-Milwaukee. The survey asked randomly selected residents in the Region about their land use and transportation preferences for the future; a similar survey was made available online.
- A *Portraits of the Region* photo contest, which asked residents to submit their favorite photos of the Region related to land use and transportation.

The results of these initial visioning activities were used to develop a series of Guiding Statements, which express a preliminary vision for land use and transportation in the Region and will guide the VISION 2050 process. More information can be found at [www.vision2050sewis.org](http://www.vision2050sewis.org).

The conduct of VISION 2050 is being guided by the Commission Advisory Committees on Regional Land Use Planning and Regional Transportation System Planning. During 2013, Commission staff prepared preliminary drafts of the following chapters of Volume I of SEWRPC Planning Report No. 55 for review by the Committees:

- [Chapter I, “Introduction”](#)
- [Chapter II, “Existing Conditions and Trends: Population, Employment, and Land Use”](#)
- [Chapter III, “Review of Currently Adopted Regional Land Use and Transportation System Plans”](#)
- [Chapter VI, “Future Population, Households, and Employment in the Region.”](#)

### **Regional Travel Survey**

A major work effort of the Commission in 2013 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 sixth-generation 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 2013, and is scheduled to be completed in 2014. 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 spring and fall 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 2014. 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 fall 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; analysis of the survey data will be completed in 2014.

### ***External Travel Survey***

External travel represents approximately 6 percent of total 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, higher-volume arterial facilities—video cameras were deployed in May 2012 to capture rear license plate numbers and questionnaires and letters were mailed to the owners of Wisconsin vehicles requesting that the data be furnished by the drivers and returned by mail. Traffic count and vehicle classification information was also collected for the external travel survey sites in spring 2011 and spring 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 2014. 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 completed in 2013. Tabulation and analysis of the survey data was initiated in 2013 and is scheduled to be completed in 2014.

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 completed in 2013. Tabulation and analysis of the survey data was initiated in 2013 and is scheduled to be completed in 2014.

#### ***Commercial Truck Travel Survey***

Commercial truck travel within the Region is estimated to represent about 8 percent of all intraregional travel. A truck survey, in which 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 completed in 2013. Tabulation and analysis of the survey data was initiated in 2013 and is scheduled to be completed in 2014.

#### **County Jurisdictional Highway System Plans**

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. The Commission held the first meeting on October 1, 2013, of the Ozaukee County Jurisdictional Highway Planning Committee to review report materials as part of the update to the jurisdictional highway system plan for Ozaukee County. Also in 2013, the Commission continued preparation of the documents that will summarize the findings and recommendations of the updated

plans for the remaining four counties—Kenosha, Milwaukee, Racine, and Waukesha Counties—within Southeastern Wisconsin. More information on the jurisdictional highway planning process can be found at [www.sewrpc.org/jhp](http://www.sewrpc.org/jhp).

#### **Adjustments to 2010 U.S. Census-defined Urbanized Area Boundaries**

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 2013, the Commission continued 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 2014.

#### **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. Summaries of the assistance provided in 2013 follow.

#### **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 construction-related closures so that mitigation measures can be identified and implemented.
- Data for use in project-level air quality impact assessments.

During 2013, numerous forecasts were prepared or under way for WisDOT and other agencies. Some of the projects for which forecasts have been developed were:

- Zoo Interchange Reconstruction
- IH 94 east-west corridor study
- IH 43 north-south corridor study
- Lake Interchange reconfiguration study.

#### **Technical Assistance for 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 2013 included:

- Kenosha streetcar extension
- Milwaukee streetcar project
- Zoo Interchange reconstruction
- 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.

#### **Other Activities**

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, in 2013 the Commission conducted a parking inventory for the City of Port Washington.

The Commission also conducts traffic engineering studies for local governments within the Region. In 2013, the Commission completed work on a traffic analysis of the roadways adjacent to the Vel R. Phillips Juvenile Justice Center to determine if changes were necessary to the existing parking lot to accommodate a change in traffic patterns resulting from the Zoo Interchange reconstruction project, as requested by Milwaukee County. In addition, in 2013 the Commission completed a traffic safety and engineering study of the local streets surrounding the Kewaskum Elementary School for the Village of Kewaskum. Also in 2013, the Commission initiated work on a traffic study for N. Lincoln Street in the City of Elkhorn to assess the traffic operations of the segment of roadway between N. Wisconsin Street and E. Geneva Street, and to evaluate potential new street extensions adjacent to N. Lincoln Street, along with alternative traffic engineering measures, to divert traffic from the study segment. The Commission completed the data collection element of the study during 2013, and is expecting to complete an analysis of the data collected and an evaluation of traffic engineering alternatives in 2014.

## ENVIRONMENTAL PLANNING

During 2013, 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. The activities related to this work in 2013 follow.

### ***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 implementation of 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 can be found at <http://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 and host the 1st Annual Fox River Summit conference in 2013 in Burlington, Wisconsin. The major goals of this summit follow.

- Share new tools and practices being developed to protect the Fox River watershed among communities in Wisconsin and Illinois.
- Continue a dialogue on shared challenges concerning recreation, economics, sustainable flows, surface water/groundwater interactions, sediment retention, and ecosystem services, such as runoff pollution reduction and recreational opportunities.
- Build trust among stakeholders and identify commonalities, project successes, and future challenges.

More information about SFRP can be found at <http://fyi.uwex.edu/southeastfox/about/>.

### ***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, while addressing the U.S. Environmental Protection Agency's nine elements for a watershed plan. Incorporating the nine elements is essential for future Federal grant eligibility during the plan implementation phase. The plan focuses on water quality, habitat, recreation, and flooding issues, and includes an evaluation of the status of Racine County's Horlick dam. The report and additional information related to the planning process can be found at [www.sewrpc.org/rwr/](http://www.sewrpc.org/rwr/).

### ***Climate Change Effects***

During 2013, a study was completed 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. The study

was a collaborative effort with the University of Wisconsin-Milwaukee (UWM) School of Freshwater Sciences, the UWM Civil and Environmental Engineering Department, the University of Wisconsin-Madison Center for Climatic Research in the Nelson Institute for Environmental Studies, and Tetra Tech engineers. This study applied the watershed water quality models developed under the 2007 MMSD/ SEWRPC Water Quality Initiative. The final report was issued in October 2013. This report can be found at [www.sewrpc.org/rainfallreport](http://www.sewrpc.org/rainfallreport).

#### ***Estabrook Dam Assessment***

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

#### ***Milwaukee Harbor Estuary***

The Commission continued to assist the WDNR and the Milwaukee Estuary Area of Concern (AOC) fish and wildlife technical team by participating in meetings and reviewing and commenting on the fish and wildlife plan being developed as part of this project.

#### ***Fox River Commission***

The Commission continued to serve 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 can be found at [www.sewfr.org](http://www.sewfr.org).

#### ***Runoff Pollution Abatement Planning***

The Commission provides assistance in planning and project review activities for a number of programs that 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. The programs 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 2013 follow.

#### ***Watershed-Based Permitting Framework***

The Commission completed development of a watershed-based permitting framework for the Menomonee River watershed in 2012. 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 in 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 can be found on the SEWRPC website at [www.sewrpc.org/stormwaterpermitframework](http://www.sewrpc.org/stormwaterpermitframework).

During 2013, the Commission staff served as a member of the Menomonee River Watershed-based Permit Partners Group working to meet the permit conditions.

#### ***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 that approves funding for water quality-based projects. Commission staff gave a technical presentation on riparian buffers in October 2013 in South Milwaukee in support of Root-Pike WIN's public informational meetings for the Wind Point Watershed Restoration Planning project. The Commission staff also worked with Root-Pike WIN on development of a watershed restoration plan for the Root River watershed. That plan incorporated runoff pollution abatement considerations.

### **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 2013 in this category follow.

#### ***Wastewater Treatment Plants***

During 2013, 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 addendum was reviewed for the Milwaukee Metropolitan Sewerage District, and population data and wastewater flows developed for a Town of Salem Utility District Master Plan were reviewed.

#### ***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 that identify the planned boundary of the sewer service area and also the location and extent of the primary environmental corridors within the service area. These 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 2013, the Commission adopted amendments to the sanitary sewer service area plans for the City of Muskego and the Villages of Hartland, Menomonee Falls, and Nashotah. Reports for all refined and detailed sanitary sewer service area plans are available from the Commission offices and can be found at [www.sewrpc.org/sewerserviceplanstatus](http://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.

During 2013, review comments were provided on 32 proposed public sanitary sewer extensions and 61 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:

**Table 1**

**COMMISSION SANITARY SEWER  
EXTENSION REVIEWS: 2013**

County	Public Sanitary Sewer Extensions	Private Main Sewer or Building Sewer Extensions	Total
Kenosha.....	2	6	8
Milwaukee.....	7	17	24
Ozaukee .....	5	4	9
Racine.....	1	6	7
Walworth.....	1	6	7
Washington.....	1	4	5
Waukesha.....	15	18	33
Total	32	61	93

1) comprehensive lake management plans that 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) specific topic plans that address single-purpose planning needs such as aquatic plant management or water quality evaluation. Lake management activities conducted by the Commission during 2013 follow.

***Lake Management Plans***

The Commission completed lake management plans for the Waterford Impoundment in Racine County and the Saratoga Lake/Barstow Impoundment in Waukesha County, and continued work on a water resources management plan for the Chenequa area lakes (Beaver, Cornell, North, and Pine Lakes) in Waukesha County. In addition, the Commission began or continued to work on planning efforts for Rock and Hooker Lakes (Kenosha County); Bark and Pike Lakes (Washington County); School Section, Denoon, Little Muskego, and Pewaukee Lakes (Waukesha County); and Pleasant and Whitewater-Rice Lakes (Walworth County).

***Other Lake Planning Efforts***

The Commission continued work on two topic-specific planning efforts, including: a groundwater study focused on Gilbert Lake (Washington County), which is being conducted in collaboration with the U.S. Geological Survey; and a pollution source evaluation for Silver Lake (Waukesha

County), which will help identify future planning and management needs. In addition, the Commission began work on a Kenosha County Lake Classification project to inform the County’s shoreline ordinance development efforts.

***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 2013 included the following:

- Served on the planning committee, and coordinated workshops for, the Wisconsin Lakes Convention. Participated in the Waterford Expo informational meeting hosted by the Waterford Waterway Management District to present preliminary findings on the ongoing dredging project.
- Assisted the Silver Lake Protection and Rehabilitation District (Walworth County) in developing an application for a small-scale WDNR lake management planning grant to partially fund preparation of a Silver Lake Protection plan.
- Participated in the annual meetings for the Waterford Waterway Management District, Hooker Lake Management District, School Section Lake Management District, North Lake Management District, and Springbrook Management District, which included formal presentations by the Commission staff for the North Lake and Springbrook annual meetings.
- Participated in meetings discussing an implementation strategy to improve water quality in Delavan Lake. This effort included representatives from the Town of Delavan, Delavan Lake Sanitary District, Kettle Moraine Land Trust, Wisconsin Department of Natural Resources, and U.S. Geological Survey.
- 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.

### **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 re-creation of streams that have historically been subjected to ditching or channelization. The stream management planning activities conducted by the Commission during 2013 follow.

### ***Bridge and Culvert Replacement Projects***

The Commission provides ongoing technical assistance relating to stream system management to WDNR, WisDOT, municipalities, and other organizations. The Commission conducts physical, chemical, and biological assessments and prepares preliminary stream design recommendations—including special provisions to improve fish and other aquatic organism passage—for bridges and/or culverts associated with construction projects. In 2013, such assistance was given to WisDOT in connection with a concrete box culvert carrying IH 43 over Ulao Creek in Ozaukee County.

### ***Stream Relocation Projects***

The Commission conducts stream channel surveys, completes data analysis, and prepares preliminary stream design recommendations, including special provisions to improve and restore fish and other aquatic organism habitat and streambed/bank stability, for stream relocation projects. In 2013 such assistance was provided relative to the following two projects:

- IH 94 North-South Freeway Ryan Road to Rawson Avenue roadway project, which includes box culvert extensions along three unnamed tributaries to Oak Creek in Milwaukee County.
- Donges Bay Road and Fond Du Lac Avenue improvement project, which includes stream relocation of an unnamed tributary to the Menomonee River and associated wetland mitigation in Washington County.

### ***Dam Evaluation Project***

Under the Root River watershed restoration plan, the Commission developed conceptual alternatives to address a WDNR order to upgrade or remove Racine

County's Horlick dam. The alternatives included modifications to the dam to increase the spillway discharge capacity and an alternative to remove the dam, the evaluations addressed environmental considerations related to flooding and upstream and downstream water quality, sediment quality, and fishery resources; cultural considerations related to public safety and recreation; and the estimated costs of each alternative plan.

### ***Stream Protection Plans***

During 2013, the Commission worked toward 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 are 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 these 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 2013 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.
- Participated in meetings relative to the Mukwonago River/Lulu Lake Master Planning project of the WDNR.

- Served as Peer Reviewer for the U.S. Environmental Protection Agency’s Science to Achieve Results (STAR) Fellowship Program.
- 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, the Burnham Canal sediment remediation and wetland restoration project, and the ongoing Corridor Study Update project relating to physical, chemical, and biological databases along stream corridors.
- Served as Co-Primary Investigator along with the Wisconsin Department of Natural Resources to provide 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-piling-lined 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 information can be found at <http://groundworkmke.org/projects.html>.
- Served as the keynote speaker presenting “Managing the Water’s Edge: Making Natural Connections, Case Study-Pewaukee River Watershed Protection Plan” on September 16, 2013. This webinar was the fourth in a four-part series titled Wetlands as Problem Solvers: New Tools to Help Communities Protect and Restore Wetlands to Address Watershed Needs, sponsored by the Rock River Coalition, the Environmental Law Institute, and Town and County Resource Conservation & Development in Waukesha.
- Conducted a half-day workshop titled “The Root River: From Headwaters to the Mouth of Lake Michigan” at the River Bend Nature Center in Racine. The workshop was part of the Nature Center’s ongoing series of lectures, which presents topics ranging from science to culture intertwined with current environmental issues.
- Gave a presentation titled “Understanding 21st Century Climate Effects on Cold and Warm-water Fisheries in Southeast Wisconsin” at the Riveredge Nature Center, which was part of that institution’s ongoing Science for Everyone Series, a collaborative effort of Riveredge Nature Center, Lac Lawrann Conservancy, and the University of Wisconsin-Milwaukee Field Station to engage, educate, and increase public awareness regarding a wide variety of topics related to science, history, and the environment.
- Served as a guest lecturer on environmental planning and natural resources management issues for the Biological Sciences and Conservation and Environmental Sciences Departments at the following Institutions: University of Wisconsin-Milwaukee, Carroll University, and University of Wisconsin-Whitewater.
- Served as an instructor for the “Green Apple Day of Service” for the Eagleville Middle School, Village of Mukwonago.
- Served as an instructor as part of the Watershed Management Planning Workshop Course developed by Commission staff and conducted in May 2013.

### **Water Supply Planning**

The Commission’s water supply planning program includes three elements. The first element was completed in 2002 and consisted of basic groundwater resource inventories. The second element was completed in 2004 and consisted of the development of a groundwater simulation model for the Region. The third element was completed in 2010 and 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 2013, the Commission staff: 1) incorporated in the Root River watershed restoration plan the regional water supply plan recommendations related to preservation of groundwater recharge areas; 2) coordinated with the City and Town of Waukesha on 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; 3) gave presentations on regional water supply planning to the Milwaukee 7 Council and to the Annual Meeting of the Wisconsin Chapter of the American Water Resources Association; and 4) participated in the activities of the Wisconsin Water Conservation Coalition.

### **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 16. From 1966 through 2003, 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 those watersheds. The 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 floodplain and stormwater management planning activities undertaken by the Commission during 2013 follow.

#### **Menomonee River Floodplain Revisions**

Continued coordination with WDNR regarding a conditional letter of map revision (CLOMR) application for the floodplain along the main stem of the Menomonee River in the approximately 8.4-mile-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. In 2010, the Commission staff created a hydraulic model of the River that incorporated numerous flood mitigation projects implemented over the past 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 floodplain mapping program for the Milwaukee County Automated Mapping and Land Information System (MCAMLIS) Steering Committee and the Metropolitan Milwaukee Sewerage District (MMSD):

- Continued work on developing the hydrologic and hydraulic models for the Root River watershed. The project involves mapping the 10-, four-, two-, one-, and 0.2 percent annual-probability (10-, 25-, 50-, 100-, and 500-year recurrence interval) floodplains along 28 streams in the watershed, including the main stem of the Root River. This project involves lands in Milwaukee County parks; the Cities of Franklin, Greenfield, Milwaukee, Muskego, New Berlin, Oak Creek, and West Allis; and the Villages of Greendale and Hales Corners. Work on the hydrologic model included updating meteorological data, preparing land use data by subbasin for planned year 2035 conditions, and developing flow-routing information for 11 of the 28 streams, including the entire Root River main stem.

Prepared hydraulic models of the West Branch of the Root River and the Dakota Street and 130th Street Tributaries to the West Branch of the Root River in the Cities of New Berlin and West Allis using the U.S. Army Corps of Engineers HEC-GeoRAS model. Began developing HEC-GeoRAS models of Ryan Creek in the City of Franklin, Tess Corners Creek in the Cities of Franklin and Muskego and the Village of Greendale, and Wildcat Creek in the Cities of Greenfield and New Berlin. Continued developing HEC-GeoRAS models of the Root River main stem, which flows through the Milwaukee County Root River Parkway in the Cities of Franklin, Greenfield, and West Allis, and the Village of Greendale. HEC-GeoRAS enables use of a digital elevation model, developed from 2010 Milwaukee and 2012 Waukesha County LiDAR data to automate the process of developing stream channel and overbank cross section geometries and mapping floodplain limits.



- Completed mapping the floodplain along the Little Menomonee River in the City of Milwaukee.
- Continued mapping the floodplain along Fish Creek in the Village of Bayside.

### **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 incorporated to the degree possible into the study documented in the Corps *Upper Des Plaines River and Tributaries, Illinois and Wisconsin-Integrated Feasibility Report and Environmental Assessment*.

### **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 Des Plaines River watershed in Kenosha County; Fox River Watershed in Kenosha, Racine, and Waukesha Counties; the Milwaukee River Basin (Kinnickinnic, Menomonee, and Milwaukee River watersheds) in Milwaukee, Ozaukee, Washington, and Waukesha Counties; and the Rock River watershed in Washington County.
- Coordinated with the FEMA study contractor 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 17).

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 2013, there were 39 continuous-recording streamflow gages in operation on stream reaches entering, lying within, or originating within the Region. Of the 39 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 24 gages, the cooperating agencies with the USGS are indicated on Map 16. In addition, in 2013 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**

- Assisted the Milwaukee County staff in 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.
- At the request of the City of Milwaukee, submitted to the WDNR an updated hydrologic analysis for the Kinnickinnic River watershed that was developed under the MCAMLIS/MMSD floodplain mapping program. This submittal is the first step in ultimately gaining approval of the updated floodplain maps for this watershed from the WDNR and FEMA.
- Continued work on a Honey Creek watercourse system plan for MMSD. The plan will address flooding mitigation and stream rehabilitation in the Cities of Greenfield, Milwaukee, Wauwatosa, and West Allis.
- Reviewed a proposal to replace a bridge deck and to construct the Victory Creek/Pleasant View recreational trail in the floodplain of the East Branch of the Root River in the City of Franklin.
- Assembled and submitted hydrologic model information requested by WDNR for its review of the Beaver Creek floodplain mapping project in the City of Milwaukee and the Village of Brown Deer.

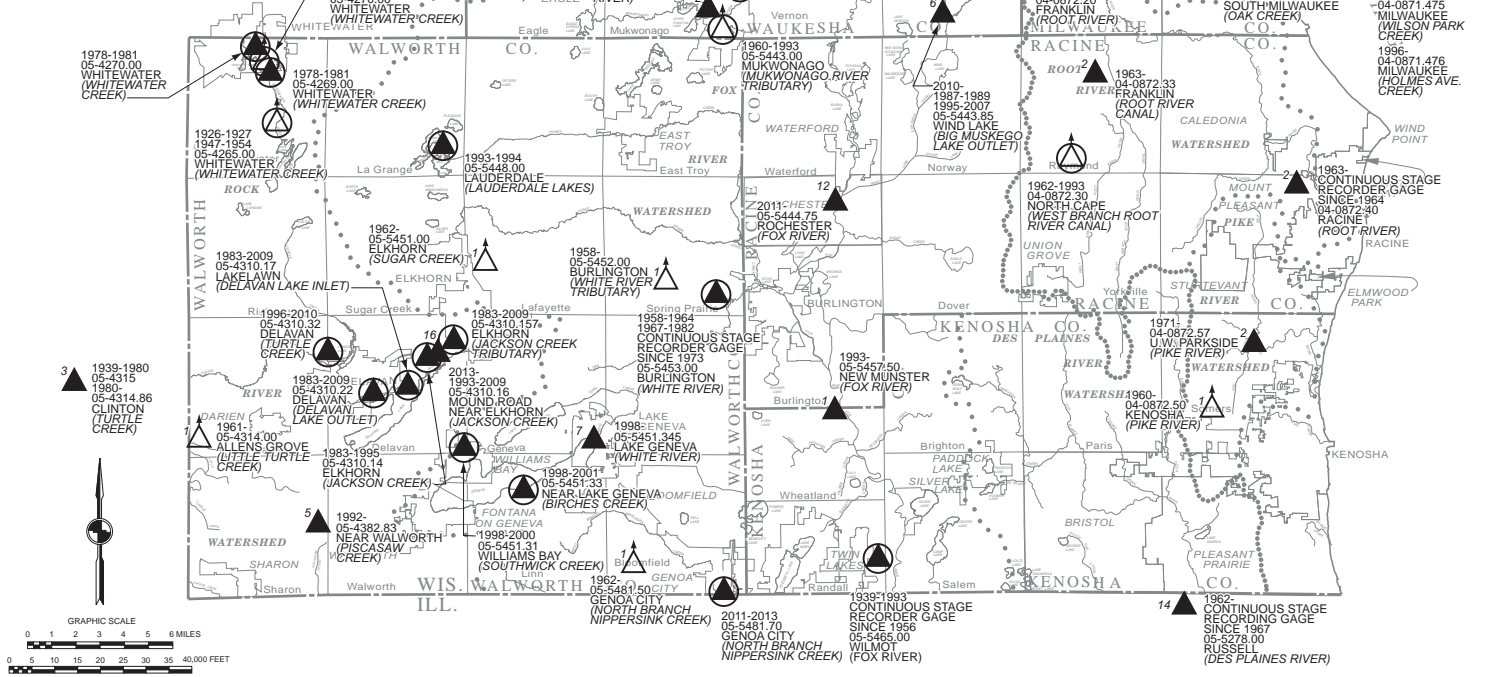
LOCATIONS OF U.S. GEOLOGICAL SURVEY STREAM-GAGING STATIONS: 2013

LEGEND

- 1 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY; COOPERATIVELY MAINTAINED BY THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES (1)
- 2 ▲ CONTINUOUS STAGE RECORDER GAGE- COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY; WAUKESHA COUNTY BOARD; MILWAUKEE METROPOLITAN SEWERAGE DISTRICT; KENOSHA WATER UTILITY; CITY OF DELAWARE; UPPER NEMAHBIN LAKE MANAGEMENT DISTRICT; CITY OF RACINE AND RACINE WATER AND WASTEWATER UTILITIES; AND SEWRPC (15)
- 3 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE U.S. ARMY CORPS OF ENGINEERS (1)
- 4 ▲ CONTINUOUS STAGE OR VELOCITY RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (1)
- 5 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE FONTANA-WALWORTH WATER POLLUTION CONTROL COMMISSION (1)
- 6 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE CITY OF MUSKEGO (1)
- 7 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE GENEVA LAKE ENVIRONMENTAL AGENCY (1)
- 8 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR MILWAUKEE COUNTY (4)
- 9 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT (6)
- 10 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE SAND COUNTY FOUNDATION (1)
- 11 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY (1)
- 12 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE RACINE COUNTY DRAINAGE DISTRICT (1)
- 13 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE MILWAUKEE METROPOLITAN SEWERAGE DISTRICT AND FEDERAL GREAT LAKES RESTORATION INITIATIVE(1)
- 14 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE ILLINOIS, DEPARTMENT OF NATURAL RESOURCES AND THE LAKE COUNTY, IL, STORMWATER MANAGEMENT COMMISSION (1)
- 15 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY AND THE UNIVERSITY OF WISCONSIN-EXTENSION (2)
- 16 ▲ CONTINUOUS STAGE RECORDER GAGE- OPERATED BY THE U.S. GEOLOGICAL SURVEY FOR THE DELAVAN LAKE SANITARY DISTRICT (1)
- ▲ CONTINUOUS STAGE RECORDER GAGE- NO LONGER IN OPERATION (37)
- ▲ CREST STAGE GAGE- COOPERATIVELY MAINTAINED BY THE U.S. GEOLOGICAL SURVEY AND WISCONSIN DEPARTMENT OF TRANSPORTATION (7)
- ▲ CREST STAGE GAGE- NO LONGER IN OPERATION (8)

1962 PERIOD OF RECORD  
05-4261 U.S. GEOLOGICAL SURVEY GAGING STATION NUMBER ASSIGNED, IN DOWNSTREAM ORDER, TO ALL STATIONS REGARDLESS OF WHETHER THEY ARE CONTINUOUS OR PARTIAL RECORD GAGES. A "4" PREFIX INDICATES THAT THE GAGE IS ON A STREAM LOCATED EAST OF THE SUB-CONTINENTAL DIVIDE, WHEREAS A "5" PREFIX DENOTES A GAGING STATION LOCATED WEST OF THE SUBCONTINENTAL DIVIDE

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



- Performed a hydraulic and scour analysis for a proposed new N. 45th Street bridge over the Menomonee River, performed hydraulic analyses of a proposed ramp for the Milwaukee River Riverwalk and proposed modifications to the S. 1st Street bridge over the Kinnickinnic River, and reviewed a hydraulic analysis of the W. Becher Street bridge over the Kinnickinnic River. All analyses were for the City of Milwaukee.
- Performed a hydraulic analysis of Mole Creek for a proposed WDNR stream rehabilitation project in the Town of Saukville.
- On behalf of Waukesha County, prepared a submittal to FEMA for a Letter of Map Revision (LOMR) to revise a portion of the floodplain along Sussex Creek in the Town of Lisbon to reflect a stream relocation project.
- Responded to 27 requests for hydrologic and hydraulic data for 18 streams, rivers, and lakes throughout the Region.

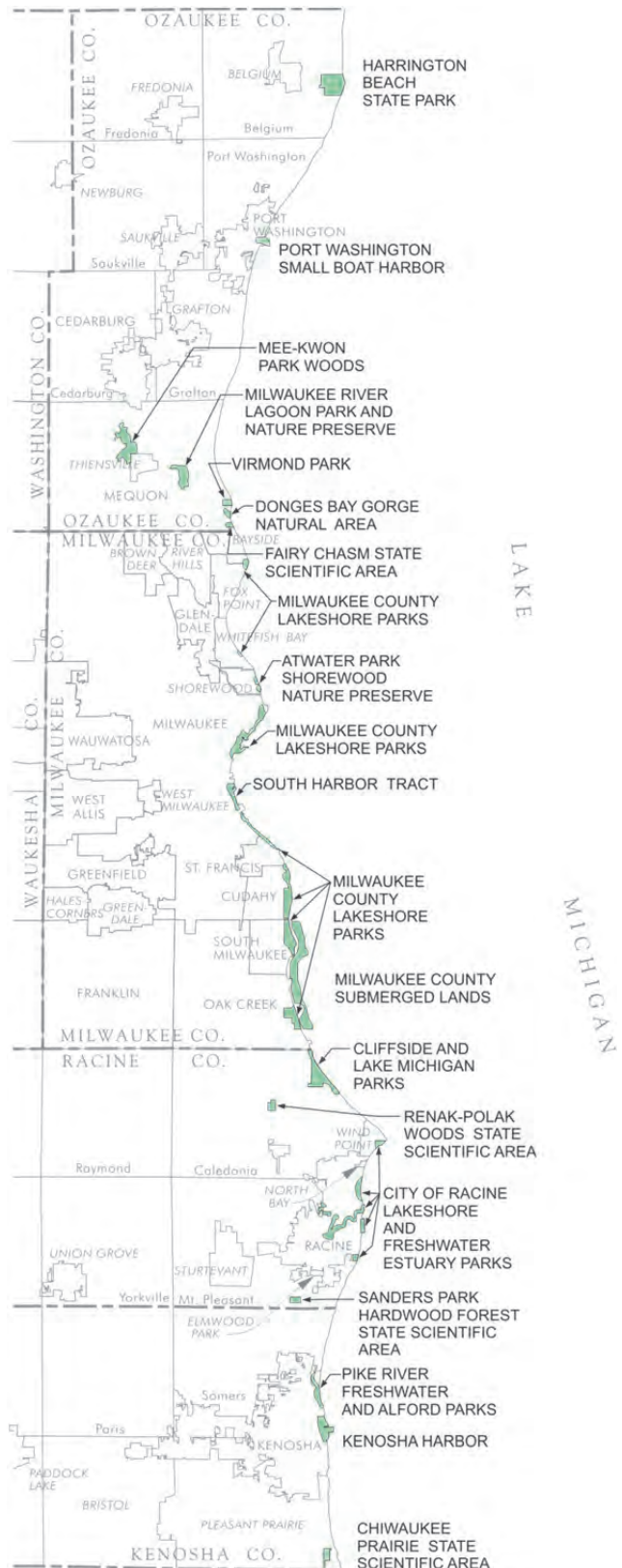
### Coastal Management Planning

During 2013, 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, navigational, and environmental interest groups. The primary function of this Committee is the review of State coastal studies and reports as they are proposed and produced.

One of the continuing functions of the Commission under the coastal management program is to assist the Wisconsin Coastal Management Program in the designation of special coastal areas (see Map 18).

**Map 18**  
**DESIGNATED COASTAL AREAS IN SOUTHEASTERN WISCONSIN: 2013**



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 2013, 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 2014-15 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 on a regional housing plan was completed in 2013. The plan was approved by the Regional Housing Plan Advisory Committee in January and was adopted by the Commission in March 2013. A summary of the plan recommendations is provided in Part One of this report. Monitoring activities related to the plan are included in Part Three of this report.

## **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 county and local plans, in preparing and adopting county and local land-use-related ordinances, in providing review comments on development proposals, in providing a wide range of data related to planning, and in carrying out economic development activities. The related activities conducted in 2013 follow.

### **Local Plans**

- Completed work on an amendment to the Washington County comprehensive plan to incorporate into the plan the land use plan maps adopted as part of city, town, and village comprehensive plans, as well as amendments adopted by a local government after the County plan was adopted in April 2008. The amendment also adopted the Washington County Farmland Preservation Plan (FPP) as a component of the comprehensive plan, including incorporation of the farmland preservation areas identified in the FPP into the County land use plan map. The amendment was adopted by the Washington County Board in December 2013.
- Completed work on an amendment to the Ozaukee County comprehensive plan to incorporate the Ozaukee County Farmland Preservation Plan (FPP) as a component of the comprehensive plan, including incorporation of the farmland preservation areas identified in the FPP into the County land use plan map. The plan amendment also incorporated the new County park and open space plan as a component of the comprehensive plan. The amendment was adopted by the County Board in December 2013.
- Initiated work on a park and open space plan for the Village of Mount Pleasant. The plan will refine and detail regional plan recommendations regarding the provision of local recreational sites and facilities and recommendations for the preservation of environmental corridors, natural areas, and other natural resources. The plan will also incorporate watershed and floodplain management plans conducted by the Village and the Root-Pike Watershed Initiative Network.
- Continued work on a memorandum report relating to industrial land development trends in Racine County. The report will analyze the historic rate of industrial land development at selected industrial/business parks in the County and will project the time frame within which existing industrial/business parks may be expected to be fully committed or developed for industrial uses. The report is intended to help Racine County and local units of government in assessing future industrial land development needs.

## Local Ordinances

- Prepared a County-Owned Lands Zoning Ordinance at the request of Ozaukee County for County-owned parcels in unincorporated areas of the County. An accompanying amendment to the County comprehensive plan as it pertains to County-owned lands was also prepared. The ordinance and comprehensive plan amendment were adopted by the County Board in May 2013.
- Updated zoning maps for the Towns of Erin and Polk to include recent rezonings approved by the respective Town Boards.
- Initiated work on a comprehensive update of the Town of Belgium zoning ordinance and zoning map, which will include recommended changes to enable landowners of parcels identified as farmland preservation areas in the Ozaukee County Farmland Preservation Plan to claim tax credits under the Wisconsin Farmland Preservation Program, provided all program requirements (such as preparation of a conservation plan) are met.
- Met with the Town of Hartford Plan Commission and the Joint City of Hartford-Town of Hartford Planning Committee to discuss potential amendments to the Town comprehensive plan and zoning ordinance and map to incorporate the farmland preservation areas identified in the Washington County Farmland Preservation Plan. Town zoning requirements must be updated in order for landowners to be eligible to claim tax credits under the Wisconsin Farmland Preservation Program.
- Provided sample deed restrictions to the Town of Belgium for subdivision plats and certified survey maps to control or prohibit development and/or future land divisions for certain areas of a development site. Also provided sample ordinance language to ensure that all land divisions require Town review and approval, in order to prevent the creation of new lots and parcels that do not meet the minimum size required by the zoning ordinance.
- Completed work on a comprehensive update to the Village of Hartland land division ordinance in cooperation with Village staff. The ordinance was adopted by the Village Board in April 2013.
- Completed work on an updated Town of Sugar Creek impact fee ordinance. The ordinance was adopted by the Town Board in June 2013.
- Assisted the Town of Polk in updating nonconforming use and structure regulations in the Town zoning ordinance to be consistent with recent changes to State law.

## Review Services

- Reviewed and commented on 18 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 the proposed acquisition of land by Walworth County for park and open space purposes.

## Data Provision-Local Planning and Zoning

- An updated list of data available from SEWRPC to assist with updating local comprehensive plans was prepared following completion of the 2010 inventories of land use and environmental corridor mapping and the allocation of population, households, and jobs in 2010 to each quarter section. Information about city and village extraterritorial authorities and the classes of cities within the Region was also updated. The information is available on the website at [www.sewrpc.org/projectplanning](http://www.sewrpc.org/projectplanning).
- Provided information on amending a comprehensive plan, including model resolutions, ordinances, and public participation procedures for plan amendments, to the Town of Kewaskum.
- Provided information on data available from the Commission to the Village of Richfield to assist in updating the Village comprehensive plan.
- Provided GIS mapping data and other information to the Village of Newburg regarding planned land uses within the Village's extraterritorial area for use in updating the Village comprehensive plan.

- Provided GIS mapping and tabular data to the City of Saint Francis for use in updating the City’s comprehensive plan. Housing-related data and recommendations from the regional housing plan were also provided.
- Provided information to Ozaukee County on existing and planned park and open space acreages and acres per 1,000 County residents for each county in the Region.
- Provided information to Kenosha County regarding the classification and regulation of certain stormwater basins as wetlands under Chapter NR103 of the Wisconsin Administrative Code, and the appropriate designation of stormwater basins on the land use plan map in the County comprehensive plan.
- Prepared a large-format wetland map for the City of Glendale showing updated 2010 wetland features and orthophotography.
- Provided information regarding job-housing balance recommendations and the costs of providing public services to new housing development from the regional housing plan to the City of Waukesha, along with data on median household incomes and housing vacancy rates within the City.
- Provided information on the potential need for additional affordable housing and subsidized housing in Walworth County to the County chapter of Habitat for Humanity.
- Provided data on housing characteristics, including information on subsidized and tax credit housing and housing for the elderly and people with disabilities, to the Villages of Rochester and Union Grove.

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

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

- Provided information on employers in Kenosha County to County staff, including employer locations and the general number of employees by numerical range.
- Provided existing and planned population, households, and land use by quarter section to a consultant for use in facilities planning for the Fox River Water Pollution Control Commission wastewater treatment plant.
- Provided county-level population projections by age and gender to the Milwaukee Area Technical College for enrollment projections.
- Provided 2010 population and housing unit data by quarter section to Waukesha County for their use in responding to requests from fire departments for such data as it relates to their fire districts.

#### **Data Provision-Housing**

- Provided information on housing construction and sanitary sewer extensions in the Region to the U.S. Department of Housing and Urban Development.

- Provided information and suggested edits to author Randall Arendt for his upcoming second edition of “Rural by Design” on greenway (environmental corridor) and trail planning and regulation in Southeastern Wisconsin, and provided a map prepared by SEWRPC for inclusion in the book.
- Provided an illustration from the Commission’s *Rural Cluster Development Guide* to the New York Department of State for use in a planning guide for local governments in New York.
- Provided a digital file of public parks in Milwaukee County that have tennis courts and the number of courts to Milwaukee County Parks for use in evaluating tennis court facilities at County-owned parks.
- Prepared an updated map of the Mid-Kettle Moraine area for use by the Washington County Planning and Parks Department in their Departmental newsletter.
- Provided 2010 land use inventory files to the UW-Milwaukee spatial data librarian for use by students and faculty in academic projects.



- Provided GIS data sets, including 2010 land use and 2010 wetlands, together with tabular data to the Wisconsin Department of Natural Resources for use in wetland change analysis.
- Provided land use, environmental corridor, and natural areas data sets to the Kettle Moraine Land Trust for mapping and conservation site identification.
- 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.
- Responded to an additional 54 requests for digital land information data sets to various municipalities, government agencies, and private consultants for use in their planning activities, such as the provision of digital land use and natural resource data sets to a Wisconsin Department of Transportation consultant for use in preparation of a Cumulative Effects analysis for the IH 43 and IH 94 corridors in the Region.
- Provided digital orthophotography files to six requesting parties—including such interests as the Riveredge Nature Center and the Ozaukee Washington Land Trust—for use in a variety of activities.

### **Economic Development**

The Commission assists county and local units of government and economic development organizations in the Region in pursuing economic development activities and promotes the coordination of local economic development plans and programs. Assistance provided during 2013 follows.

#### ***Project 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 Milwaukee 7 (M7) Regional Economic Development Organization, and the Commission. During 2013, the Commission

provided assistance in implementing the regional economic development initiative, and provided data and comments on a draft update of the initiative developed by the M7.

- Worked with M7 and other members of the Regional Economic Partnership (REP) to prepare a comprehensive economic development strategy (CEDS) for the Region. A draft CEDS was submitted by M7 to the U.S. Economic Development Administration (EDA) in 2012. EDA provided comments on the draft in October 2013. The REP will work to address the EDA comments in 2014.

#### ***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 the Wisconsin Economic Development Corporation. EMSI Analyst is a web-based economic development tool that includes extensive industry, occupation, and workforce data. County and local economic development organizations and units of government can request SEWRPC staff to apply the software to conduct analyses. SEWRPC staff responded to 13 requests for EMSI data during 2013.

#### ***Federal and State Grant-In-Aid Support***

- Administered for Kenosha County several Federal grant awards to acquire and remove homes located in the Fox River floodplain.
- Participated in the establishment of the 10-county Southern Housing Region by the Wisconsin Department of Administration for the purpose of administering housing-related Community Development Block Grant funds, as part of ongoing support to the Kenosha County Housing Authority.

#### ***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 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 2013, five new loans were made and 134 loans were serviced.

- Provided assistance to the City of Muskego and the Villages of Menomonee Falls and Shorewood in administering revolving loan fund programs that support business development. During 2013 a total of two new business loans were made and 42 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 a sound regional planning program and also to support sound county and local planning programs. 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 Map 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 Map 20).

While the foregoing base mapping and related control survey recommendations were advanced in the age of printed 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, can be found at [www.sewrpc.org/surveyingandmapping](http://www.sewrpc.org/surveyingandmapping).

### **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 printed form and is made available for use by others. Figure 5 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.

In 2013, work continued on updates to a number of regional planning data sets. The Commission completed the 2010 Land Use Inventory and the 2010 Environmental Corridor Inventory. The Civil Division boundary data set was also updated to 2010 currency. Work was initiated on an update to the Planned Environmental Corridor Inventory, with all county data sets to be completed in 2014.

The updated regional planning inventories will be used in a variety of regional and local planning activities.

The regional land information website at [www.sewrpc.org/regionallandinfo](http://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 6). 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 7). Each Control Survey Summary Diagram covers six USPLSS sections and shows the location and type of 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

PORTION OF TYPICAL SEWRPC-RECOMMENDED TOPOGRAPHIC MAP



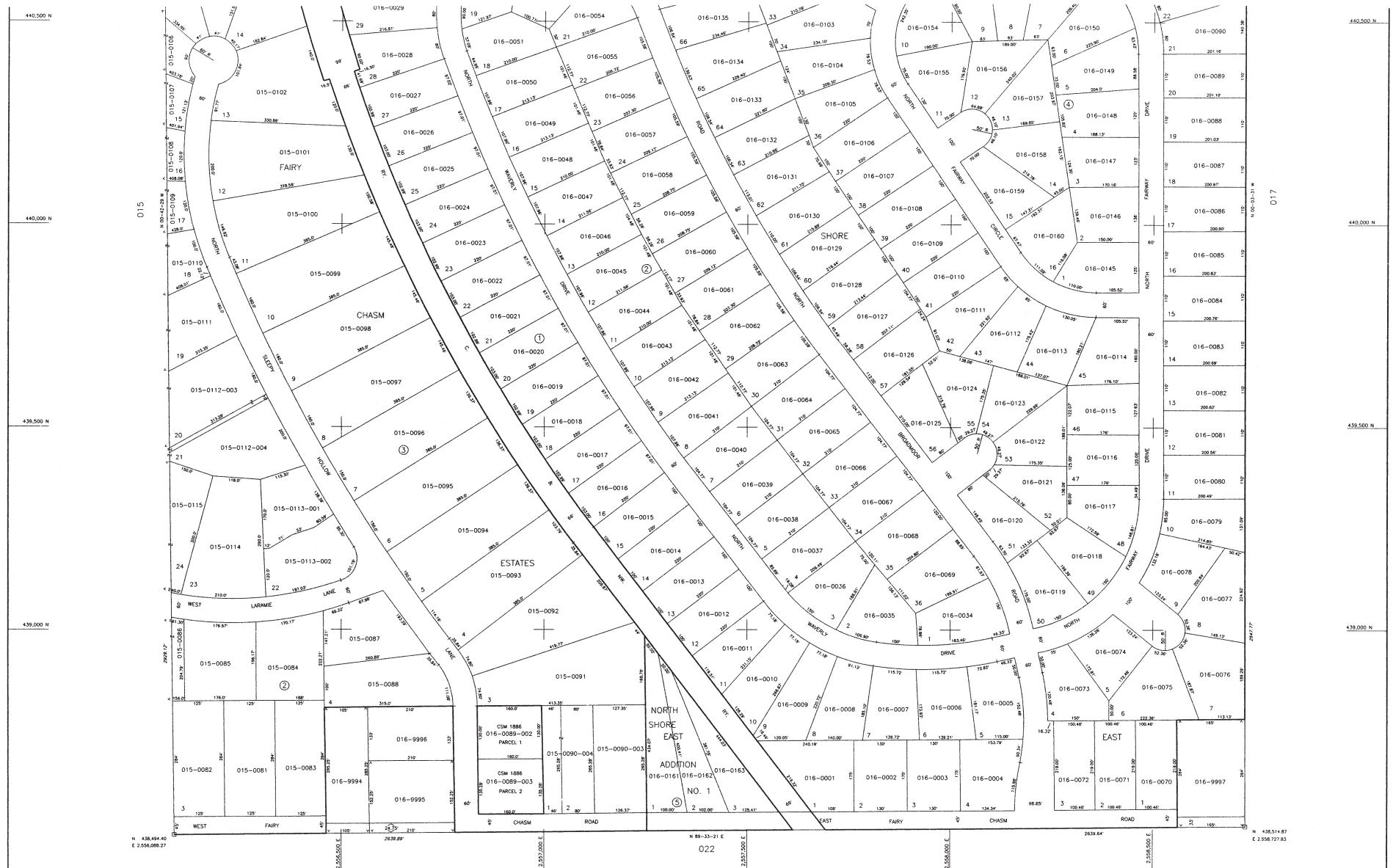
N 438,494.40  
E 2,558,088.27  
EL. 675.16

N 438,514.87  
E 2,558,727.83  
EL. 672.04

<p><b>LEGEND</b></p> <ul style="list-style-type: none"> <li>▲ NCS TRIANGULATION STATION</li> <li>□ MONUMENTED LAND SURVEY CORNER</li> <li>▲ SEWRPC TRVERSE STATION</li> <li>✕ BM OR TBM (LABELLED)</li> </ul>	<p>COMBINATION SCALE AND SEA LEVEL REDUCTION FACTOR: 0.99990739 HORIZONTAL DATUM IS THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NORTH AMERICAN DATUM OF 1927) VERTICAL DATUM IS NATIONAL GEODETIC VERTICAL DATUM OF 1928. COMPLIED TO NATIONAL MAP ACCURACY STANDARDS: HYBRID STEREO-PHOTOGRAM- METRIC METHODS. DATE OF PHOTOGRAPHY: APRIL 23, 1990 AME PROJECT NO. 089121</p>	<p>SCALE: 1"=100', CONTOUR INTERVAL 2' TO PLACE ELEVATIONS ON CITY OF MILWAUKEE DATUM SUBTRACT 580.603'</p> <p>GEODETIC NORTH GRID NORTH + 01° 26' 10"</p>	<p>TOPOGRAPHIC MAP OF NE1/4 SECTION 5 TOWNSHIP 8 NORTH, RANGE 22 EAST MILWAUKEE COUNTY, WISCONSIN</p>		<p>PREPARED FOR MILWAUKEE COUNTY, WISCONSIN</p> <p>BY AERO-METRIC ENGINEERING, INC. SHEBOYGAN, WISCONSIN UNDER A PROGRAM ADMINISTERED BY THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION</p> <p>K.W. BAKER, P.E., EXECUTIVE DIRECTOR</p>	
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Map 20

PORTION OF TYPICAL SEWRPC-RECOMMENDED CADASTRAL MAP



**LEGEND**

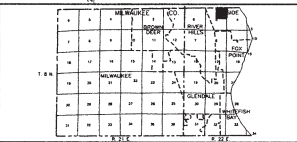
- MONUMENTED U.S.P.L.S. CORNER
- U.S.P.L.S. SECTION LINE
- U.S.P.L.S. QUARTER SECTION LINE
- GROUND LEVEL DISTANCE IN FEET
- 26.849' GROUND LEVEL DISTANCE IN FEET
- 26.849' GROUND LEVEL DISTANCE IN FEET

**COMPARISON SCALE AND SEA LEVEL**  
 REDUCTION FACTOR: 0.99999739  
 HORIZONTAL DATUM IS BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM, 5000 FT ZONE, NORTH AMERICAN DATUM OF 1927.  
 COMPILED FROM RECORDED SUBDIVISION PLATS, CERTIFIED SURVEY MAPS, RECORDED LEAS, DEEDS, PLATS, AND PRIVATE SURVEY RECORDS, AND LAND RECORDS OBTAINED FROM MILWAUKEE COUNTY REGISTER OF DEEDS OFFICE, SURVEYORS OFFICE, AND MUNICIPAL LAND RECORDS OFFICES.  
 DATE OF ORIGINAL MAPPING: WINTER 1993  
 DATE OF LATEST REVISION: DECEMBER 21, 1991

**GRAPHIC SCALE IN FEET**

0 100 200 300 400

CADASTRAL MAP OF  
 NE 1/4 SECTION 5  
 TOWNSHIP 8 NORTH, RANGE 22 EAST  
 MILWAUKEE COUNTY, WISCONSIN



PREPARED FOR  
 MILWAUKEE COUNTY, WISCONSIN  
 BY  
 SOUTHERN WISCONSIN REGIONAL  
 PLANNING COMMISSION  
 K.W. BAUER, P.E., EXECUTIVE DIRECTOR



Figure 5

**SEWRPC REGIONAL LAND INFORMATION DIGITAL DATA SETS: 2013**

<p><b>Reference Data</b></p> <ul style="list-style-type: none"> <li>• <b>Aerial Orthophotography:</b> 1995, 2000, 2005, 2007 (partial), 2010</li> <li>• <b>County Base Maps:</b> 1985, 1990, 1995, 2000, 2005</li> <li>• <b>Civil Division Boundaries:</b> 1985, 1990, 1995, 2000, 2010</li> </ul>
<p><b>Environmental Resource Data</b></p> <ul style="list-style-type: none"> <li>• <b>Inventory Environmental Corridors:</b> 1990, 1995, 2000, 2010</li> <li>• <b>Planned Environmental Corridors</b></li> <li>• <b>Wetland Inventory:</b> 2005, 2010</li> <li>• <b>Federal (EPA) Advanced Identification (ADID) Wetlands:</b> 2005</li> <li>• <b>Vegetation:</b> 1985, 1995 (partial)</li> <li>• <b>Wildlife Habitat:</b> 1985, 1995 (partial)</li> <li>• <b>Pre-European-Settlement Vegetation:</b> 1836</li> <li>• <b>Natural Areas:</b> 1994, 2005 (distributed with permission from Wisconsin DNR)</li> <li>• <b>Critical Species Habitats:</b> 1994, 2005 (distributed with permission from Wisconsin DNR)</li> <li>• <b>Grassland Sites</b></li> <li>• <b>Plant Community Areas</b></li> <li>• <b>Soil Mapping Units</b></li> </ul>
<p><b>Land Planning Data</b></p> <ul style="list-style-type: none"> <li>• <b>Land Use:</b> 1963, 1970, 1980, 1985, 1990, 1995, 2000, 2010</li> <li>• <b>Historical Urban Growth:</b> 1995, 2000, 2010</li> <li>• <b>Regional Zoning Inventory:</b> 2000</li> <li>• <b>Park and Open Space Sites</b></li> <li>• <b>Sewer Service Areas</b></li> </ul>
<p><b>General Planning Data</b></p> <ul style="list-style-type: none"> <li>• <b>Regional Land Use Plan:</b> 2010, 2020, 2035</li> <li>• <b>Regional Transportation Plan:</b> 2020, 2035</li> <li>• <b>Public and Private Water Supply Systems:</b> 2000</li> <li>• <b>Archaeological Sites</b></li> </ul>
<p><b>Geologic and Hydrologic Data</b></p> <ul style="list-style-type: none"> <li>• <b>Depth to Bedrock</b></li> <li>• <b>Depth to Water Table</b></li> <li>• <b>Water Table Elevation</b></li> <li>• <b>Contaminant Attenuation Potential of Soils</b></li> <li>• <b>Estimated Permeability of the Unsaturated Zone</b></li> <li>• <b>Estimated Soil Percolation</b></li> <li>• <b>Significant Hydrologic Data Points</b></li> <li>• <b>Groundwater Contamination Potential</b></li> <li>• <b>Groundwater Recharge Potential</b></li> <li>• <b>Geologic Sites</b></li> <li>• <b>Floodplain Boundaries</b></li> <li>• <b>Watershed, Subwatershed, and Subbasin Boundaries</b></li> </ul>

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

Figure 6

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

RECORD OF U. S. PUBLIC LAND SURVEY CONTROL STATION			
U. S. PUBLIC LAND SURVEY CORNER	161 15 211 22	T 5 N, R 21 E.	MILWAUKEE COUNTY, WISC
HORIZONTAL CONTROL SURVEY BY:	AERO-METRIC ENGINEERING, INC.		YEAR: 1993
VERTICAL CONTROL SURVEY BY:	AERO-METRIC ENGINEERING, INC./SEWRPC		YEAR: 1993/1999
STATE PLANE COORDINATES OF:	SECTION CORNER		
NORTH	329,685.22		
EAST	2,533,357.57		
ELEVATION OF STATION:	761.697		
HORIZONTAL DATUM: WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NORTH AMERICAN DATUM OF 1927			
VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM OF 1929		THETA ANGLE: +01-22-03	
CONTROL ACCURACY:		HORIZONTAL: THIRD ORDER, CLASS I	
		VERTICAL: SECOND ORDER, CLASS II	
LOCATION SKETCH:			
<p>BEARING: S 00-28-2 To E 1/4 Cor. Sec. 2</p>			
<p><b>SURVEYOR'S AFFIDAVIT:</b> As Milwaukee County Surveyor, I hereby certify that I set a concrete monument with SEWRPC brass cap to mark this corner; replacing a cast iron plug with cross set in the concrete pavement to mark this corner in November 1967 by Laverne F. Cook, S-988, State Highway Commission of Wisconsin Project Engineer, following highway reconstruction; replacing a cast iron plug with cross set in the then existing concrete pavement to mark this corner in 1944 by the Milwaukee County Highway Department following highway reconstruction; replacing a cast iron plug with cross set in the then existing concrete pavement to mark this corner in 1915 by the Milwaukee County Highway Department following highway reconstruction; replacing a cut limestone monument set to mark this corner in 1878 by Jonathan C. Crouse, Surveyor; replacing in turn a wood post set to mark this corner in June 1836 by Elisha Dwell, Deputy United States Surveyor, in the conduct of the original United States Public Land Survey; that I referenced the same as shown hereon, and that this record is correct and complete to the best of my knowledge and belief.</p>			
DATE OF SURVEY:	7 May 1992	REGISTERED LAND SURVEYOR	
REVISED:	30 September 1999	S - 157	
	12 March 2001		
FORM PREPARED BY SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION			

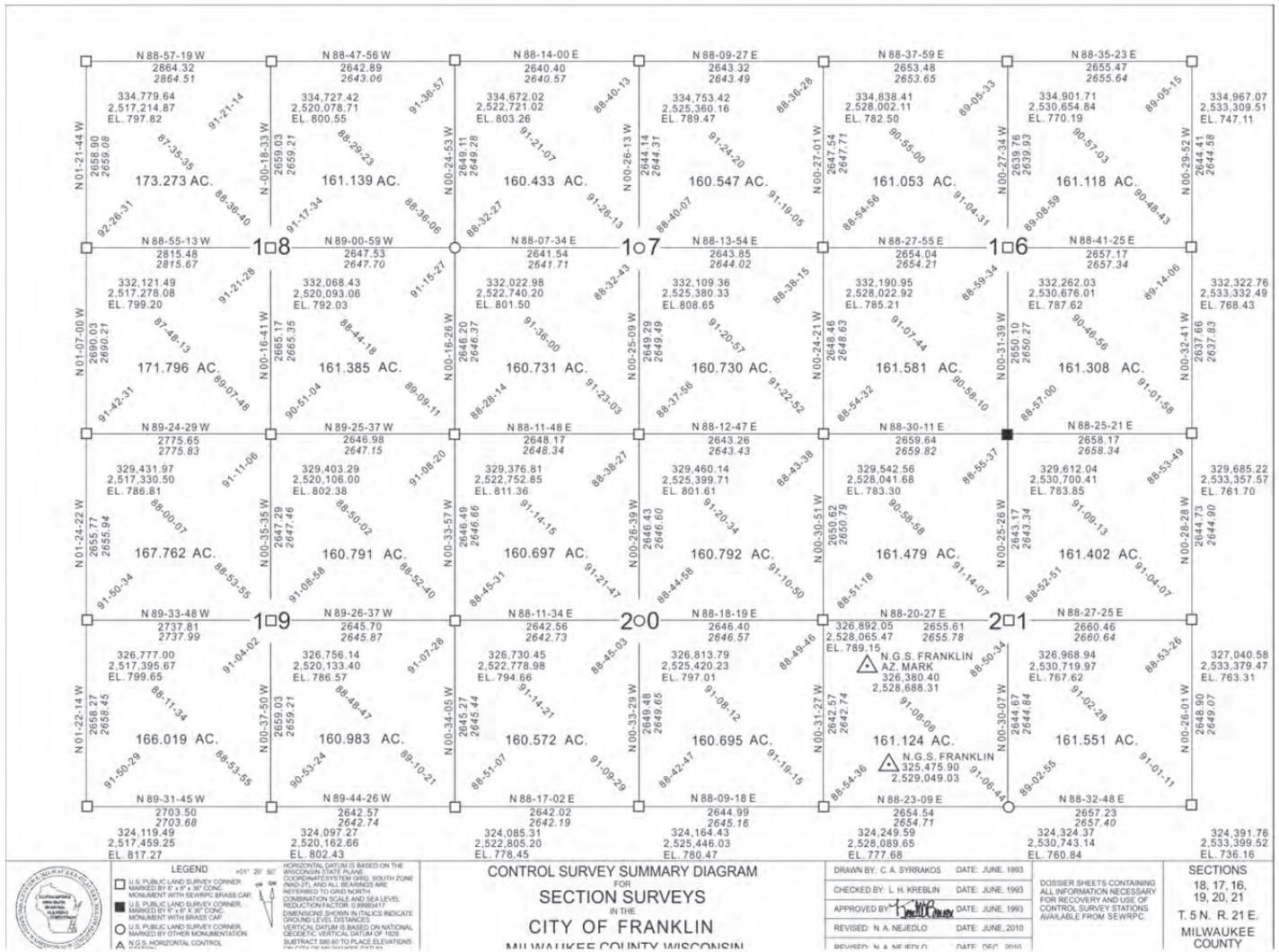
CSSDs are placed on the website to insure that the regional land information site is the best source for current survey documentation for the Region. During 2013 a total of 209 dossier sheets and 124 control survey summary documents were updated and placed on the website. The usefulness of this online service is demonstrated by the fact that on an average work day, the website is accessed by 22 individuals working in 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.

Figure 7

TYPICAL CONTROL SURVEY SUMMARY DIAGRAM



- 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. Each of the seven-county systems incorporates, as foundational elements, the survey control, topographic base mapping, and cadastral base mapping developed in cooperation with the Commission over many years. These county-based land information systems provide information developed through Commission planning efforts, e.g. land use and environmental corridors, as well as a broad array of land-based information necessary to support county and local government functions and to serve the general public.

Elevation data relative to the earth's surface, traditionally prepared as part of Commission recommended topographic mapping projects, increasingly is being made available by counties through the application of LiDAR (Light Detection and Ranging) technology. Map 21 identifies the availability of LiDAR and derived elevation data in the Region in 2013. Map 22 identifies the availability of topographic contour line data in the Region in 2013. All such data is available through the Land Information Office in each county.

From time to time the Commission provides assistance to counties as they update their land information data bases. Activities in this respect during 2013 included the following:

- **Racine County Elevation Mapping Project**  
The Commission administered and completed a project that acquired digital terrain model files and digital contour line files from LiDAR data for 225 square miles in the County.
- **Walworth County Map Updating Project**  
Walworth County began a program to update its county large-scale base maps in 2012. During 2013, the Commission staff administered a project that will result in the update of 10 square miles of topographic mapping in the County. The project was partially completed in 2013 and will be

entirely completed in spring 2014. Also in 2013, the Commission and the County initiated planning for a second update project that will acquire revised topographic maps for an additional 8.25 square miles in 2014.

- **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 served included Kenosha, Milwaukee, Walworth, and Waukesha.

### **County Surveyor Activities**






State Legislation was enacted in 1984 that requires the Commission Executive Director to act in the capacity of County Surveyor for Milwaukee County. Since then, 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 2013 provided County Surveyor services to Kenosha, Walworth, and Waukesha Counties, as well as field support services to the Ozaukee County Surveyor. In each case, such special services are provided under contract agreements.

In performing the duties of the County Surveyor in the four counties concerned and in supporting the Ozaukee County Surveyor, the Commission during 2013 remonumented a total of 162 U.S. Public Land Survey corners that had been disturbed or destroyed through a range of activities, primarily road reconstruction activities. These activities included field work as well as substantial office work to prepare updated documentation of the corners concerned, including new corner dossier sheets and updated control survey summary diagrams.



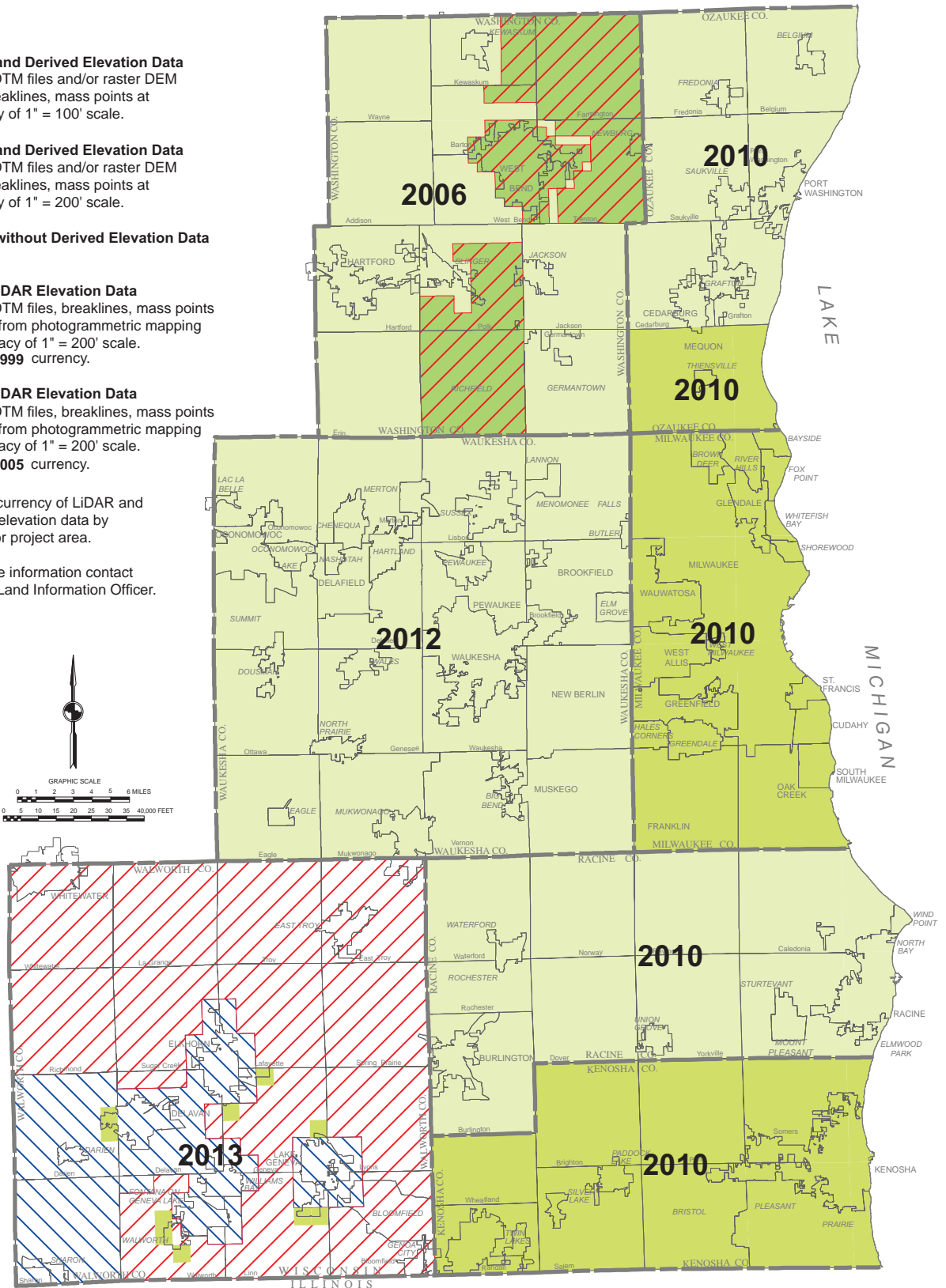
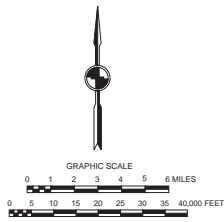
Map 21

AVAILABILITY OF LiDAR AND ELEVATION DATA  
IN THE SOUTHEASTERN WISCONSIN REGION: 2013

-  **LiDAR and Derived Elevation Data**  
Vector DTM files and/or raster DEM files, breaklines, mass points at accuracy of 1" = 100' scale.
-  **LiDAR and Derived Elevation Data**  
Vector DTM files and/or raster DEM files, breaklines, mass points at accuracy of 1" = 200' scale.
-  **LiDAR without Derived Elevation Data**
-  **Non - LiDAR Elevation Data**  
Vector DTM files, breaklines, mass points derived from photogrammetric mapping at accuracy of 1" = 200' scale. 1994 - 1999 currency.
-  **Non - LiDAR Elevation Data**  
Vector DTM files, breaklines, mass points derived from photogrammetric mapping at accuracy of 1" = 200' scale. 2000 - 2005 currency.





**2010** Year of currency of LiDAR and derived elevation data by county or project area.

For more information contact County Land Information Officer.



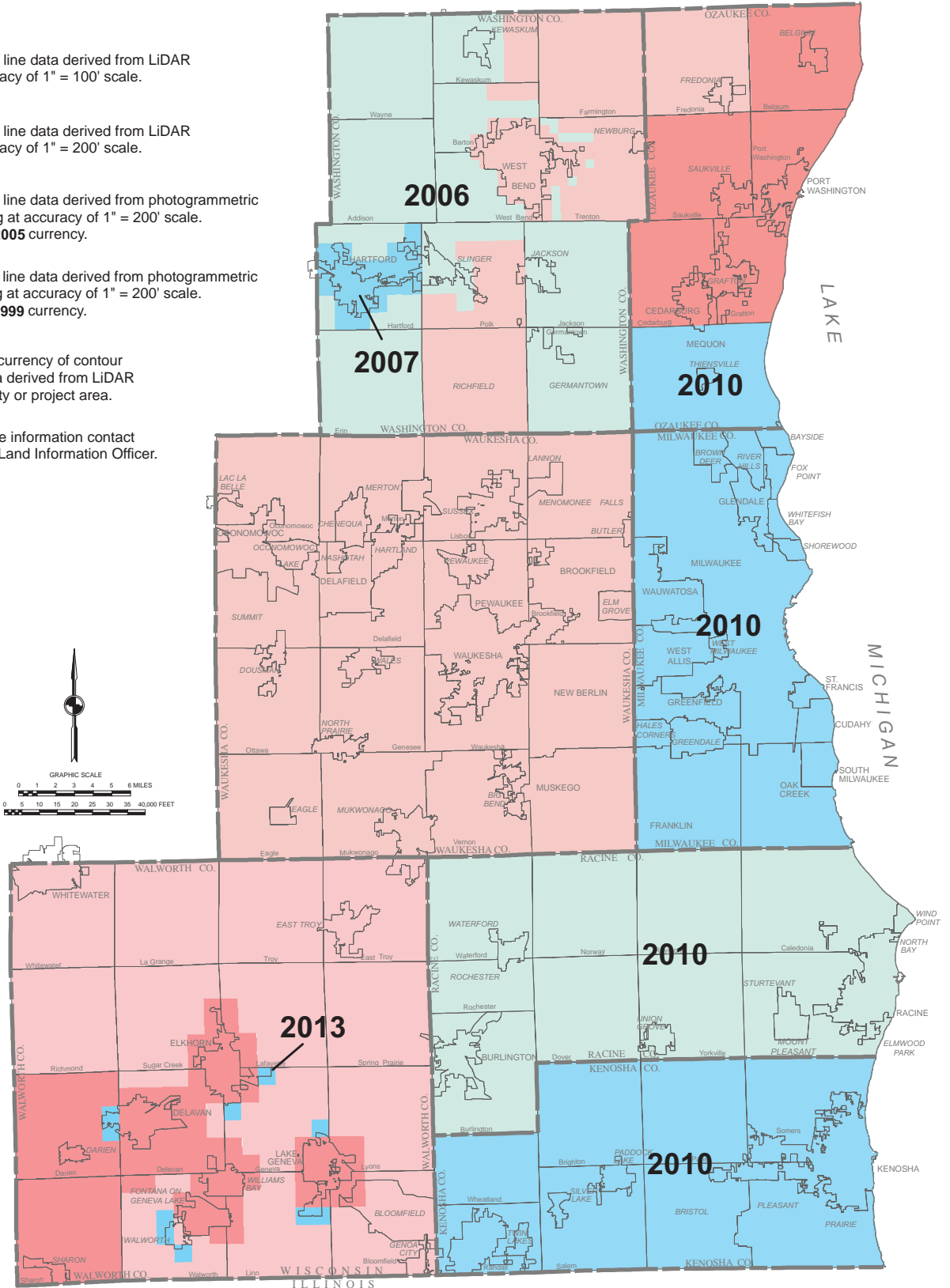
Map 22

AVAILABILITY OF CONTOUR LINE DATA  
IN THE SOUTHEASTERN WISCONSIN REGION: 2013

-  Contour line data derived from LiDAR at accuracy of 1" = 100' scale.
-  Contour line data derived from LiDAR at accuracy of 1" = 200' scale.
-  Contour line data derived from photogrammetric mapping at accuracy of 1" = 200' scale. 2000 - 2005 currency.
-  Contour line data derived from photogrammetric mapping at accuracy of 1" = 200' scale. 1994 - 1999 currency.

**2010** Year of currency of contour line data derived from LiDAR by county or project area.

For more information contact County Land Information Officer.



## **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 public through a variety of avenues, including website postings and updates, newsletters, presentations to governmental and civic organizations, public informational meetings, and public hearings. Other public participation efforts are directed at specific population subgroups, notably low-income and minority populations, persons with disabilities or other particular needs, and students. All public involvement and outreach work is carried out in accordance with a structured approach set forth in the document *Public Participation Plan for Regional Planning for Southeastern Wisconsin*. This document and a condensed summary brochure are available from the Commission office and can be accessed at [www.sewrpc.org/involvement](http://www.sewrpc.org/involvement).

The following summarizes the public involvement and outreach activities carried out during 2013 in three specific categories: 1) SEWRPC-sponsored public informational workshops, meetings, and hearings; 2) public involvement and outreach efforts directed to targeted population groups; and 3) the work of the SEWRPC Environmental Justice Task Force.

### **SEWRPC-Sponsored Public Informational Workshops, Meetings, and Hearings**

The ongoing technical work of the Commission includes many important public participation activities. Such activities tend to be focused on Commission findings and recommendations relative to new regional plans and updates to prior regional plans. There are standard Commission procedures for public meetings and public hearings, including widely disseminated meeting notifications and the provision of a variety of opportunities for members of the public to make their views known on the topic at hand. The Commission provides full documentation of comments coming out of all public meetings. Moreover, all comments are considered by the Commission advisory committees as well as the Commission itself.

In 2013 such general public structured participation efforts were focused largely on a major multi-year planning effort, VISION 2050, intended to result in a new set of coordinated regional land use and transportation plans for Southeastern Wisconsin. The initial phases of work in this effort involved visioning activities designed to engage the public early in the planning process with a view toward developing a shared vision of future land use and transportation that is widely understood and embraced by the Region's residents. Accordingly, a visioning and scenario planning process was initiated in 2013 explicitly designed to obtain greater public input into the specific design and evaluation of sketch-level year 2050 land use and transportation scenarios, detailed alternative plans derived from those scenarios, and a final set of recommended plans, all while expanding public knowledge of the implications of future land use and transportation development decision-making for the Region.

During 2013, public outreach and involvement activities attendant to the VISION 2050 process included the following:

- A branding effort, including a logo, a slogan, and a color scheme to be used throughout the process to make the planning effort more recognizable and appealing to the public.
- The creation of a website dedicated to this effort to serve as a centralized source for updated information: [www.vision2050sewis.org](http://www.vision2050sewis.org).
- A *Portraits of the Region* photo contest designed to increase public engagement and obtain images from residents to enhance VISION 2050 and other Commission publications.
- The creation of distribution lists, both conventional U.S. mail and e-mail, to serve as avenues of direct communication to thousands of residents throughout the Region.
- The production and distribution of the first five e-newsletters relative to the initial stages of the process.
- The identification of media contacts and distribution of two news releases to those contacts.

- The production of two printed brochures relative to the progress being made in the planning process which invited residents to attend two series of interactive public workshops.
- Presentations relative to the process to a wide range of groups and organizations including service clubs, business associations, community and neighborhood organizations, and environmental organizations.
- The establishment of partnerships with eight nonprofit community organizations to help specifically target outreach to their members and constituents, consisting of: Common Ground, Ethnically Diverse Business Coalition, Hmong American Friendship Association, Independence *First*, Milwaukee Urban League, Southside Organizing Committee, Urban Economic Development Association, and Urban League of Racine and Kenosha.
- The presentation of two rounds of interactive public workshops to engage residents in visioning for the future and to obtain initial input on a variety of land use and transportation issues and concerns. In each round, seven workshops were held for the general public, one each in the Southeastern Wisconsin counties. Eight similar workshops were held by the above named partner organizations targeted at their constituents. Additional individual workshops were held upon request for any interested group, organization, or local government. In total, 33 public, partner, and requested workshops were held in 2013.

All of the documentation developed as part of this public outreach involvement effort during the years is available on the VISION 2050 website noted above.

**Public Involvement and Outreach Efforts Targeted to Selected Population Groups**

Substantial work efforts are undertaken annually to engage members of specific population subgroups that, despite efforts to recruit the general public and its constituents, traditionally have had lower levels of participation than the population as a whole in regional planning activities and events. The major objectives of this targeted outreach program are set forth in Figure 8. The process carried out in this respect is characterized by the following:

**Figure 8**

**MAJOR OBJECTIVES OF SEWRPC TARGETED PUBLIC INVOLVEMENT AND OUTREACH PROGRAM**

<p><b>Outreach</b></p> <ul style="list-style-type: none"> <li>• Build awareness and inform residents regarding SEWRPC purpose, activities, resources, and participation opportunities</li> <li>• Achieved through media, mass distributions, and large public event exhibits</li> </ul>
<p><b>Public Involvement</b></p> <ul style="list-style-type: none"> <li>• Targeted at key populations and organizations</li> <li>• Encourage participation in SEWRPC planning efforts</li> <li>• Promote understanding of SEWRPC advisory plan recommendations</li> <li>• Collaboratively achieved through such group activities as organizations, committees, and task forces</li> </ul>
<p><b>Education</b></p> <ul style="list-style-type: none"> <li>• Targeted at ages youth through adults</li> <li>• 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</li> </ul>
<p><b>Environmental Justice</b></p> <ul style="list-style-type: none"> <li>• Promote the consideration and integration of environmental justice principles throughout the SEWRPC planning process</li> <li>• Achieved through the evaluation of plan recommendations, public involvement and outreach program, and the work of an Environmental Justice Task Force</li> </ul>

- **Broad Networking Contacts**  
The Commission staff regularly consults and meets with central city, minority, neighborhood-based, and/or low-income groups and individuals to share information about the Commission and its work and to learn about the interests and needs of the population. These groups are approached in terms of geography and community related to Commission initiatives.

Commission contacts with these groups and individuals are intentionally long-term, so as to generate lasting working relationships and familiarity with the Commission's work efforts. The contacts are arranged to fit the convenience of the organizations involved and often include events of importance to the organizations and their members. Commission updates and involvement opportunities regarding regional planning are designed to be useful to, and appear to be well-received by, these organizations. Outreach includes opportunities for feedback, personalized letters and e-mails, and follow-up as appropriate. Relationship building with these groups and individuals provides the Commission with a larger, more diverse population base for public participation in regional planning, and is an important strategy for reaching non-traditional groups and individuals.

These broad-based outreach efforts to minority, low-income, and neighborhood contacts are characterized by the following:

- Regularity of contacts;
- Variety and number of organizations participating;
- Multiple, ongoing opportunities;
- Comprehensive subject matter for feedback;
- Timely distribution of relevant materials;
- Variety of contact modes (printed materials, U.S. mail and e-mail);
- Participation in targeted events;
- Direct contacts with person(s) or group(s);
- Convenience for contacted groups and individuals; and
- Coordination with targeted groups' meetings and special events.

### **Primary Organizational Contacts**

The effort outlined above has led to the establishment of a contact list containing over 90 organizations that serve as a formal distribution network for information about Commission planning activities. The organizations on the contact list serve low-income areas, areas predominantly consisting of

communities of color and targeted ethnicities, individuals with disabilities, and/or communities or neighborhoods where issues related to employment, transportation, land use, and environmental deterioration relate directly to the Commission's planning efforts. Figure 9 provides a list of the organizations that have become a focus of the Commission and its targeted outreach efforts. This list of 27 primary organizational contacts was reviewed and augmented in 2013 by the Commission's Environmental Justice Task Force.

### **Partnership Building Activities**

In carrying out its targeted outreach efforts the Commission engages in extensive partnership-building activities. In addition to the targeted activities noted above in relation to the VISION 2050 planning efforts, such activities during 2013 included the following:

- **Urban Economic Development Association**  
For the fourth consecutive year, the Commission continued to work with the Urban Economic Development Association of Wisconsin (UEDA) which has its office headquartered in Milwaukee's central city. Participation occurred in a number of ways, including planning the Association's 12th Annual Community Development Summit, which was attended by over 145 community and regional leaders. In preparation for the Summit, Commission assistance was provided to the Association through service on the Summit Planning Committee and printing of the program booklet. SEWRPC provided a staffed exhibit table at the Summit. As a follow-up, this effort was expanded in working with the Ethnically Diverse Business Coalition, the UW-Extension Milwaukee Cooperative, various business improvement districts, and other entities involved in business development. As part of a collaborative approach, the Commission provided information involving transportation and land use planning.
- **Children and Family Health**  
The Commission continued to work on a multi-year, multi-disciplinary effort to address the environmental conditions impacting children and family health by providing information about the importance of transportation and housing planning to groups engaged in the

Figure 9

**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
- Independence*First*
- 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

Social Determinants of Health effort. Entities the Commission worked with include the Health and Wellness Commons Initiative, Aurora Health Care Social Responsibility Committee, the Lindsay Heights Neighborhood Health Alliance, the Southeastern Wisconsin Blood Center Community Advisory Committee, Froedtert Health System, and the Center for Urban Population Health.

- **Watershed Educational Tours**

The Commission continued to participate in the interagency consortium “*Testing the Waters*” which has trained scores of teachers and nearly 30,000 high school students over the years. In 2013, about 900 students drawn largely from schools lying within the watersheds tributary to the Milwaukee Harbor estuary were engaged in this effort. In addition, the Commission again worked with the Washington County Land Conservation Department to plan and conduct two watershed bus tours for about 110 students and teachers to view land use changes, and water quality problems and solutions in the rural and developing landscape. Among the tour participants were attendees of Milwaukee public and private schools and high schools in Ozaukee and Washington Counties. This partnership provides urban young people with an opportunity to experience the rural landscape, allows students and teachers from diverse backgrounds and geographies to interact with each other, and teaches regional planning principles.

- **Neighborhood and Community Economic Development**

The Commission networks with organizations and engages in activities that address neighborhood and community economic development issues. This effort includes ongoing interaction with the Local Initiatives Support Corporation (LISC-Milwaukee), the Commercial Corridors Consortium, various business improvement districts throughout the City of Milwaukee, and other community development organizations, with the goal of sharing the importance of transit, transportation, and housing planning as those matters relate to the local economy and regional economic development.

Figure 10

**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, low-income, 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.

- **Workforce Development and Employment**  
The Commission networks with organizations and engages in activities that address workforce development and employment issues. This effort includes the Workforce Regional Training Partnership, the African American Male Forum on Employment, the Milwaukee and Racine-Kenosha Labor Development Committees, the Southeast Wisconsin Migrant and Seasonal Workers Committee, Ways to Work, Human Capital Development of Racine and Kenosha, the Social Development Commission, the Racine County Workforce Development Center, and the Milwaukee Careers Cooperative.

- **Sustainable Communities and Quality of Life Enhancement**

The Commission networks with organizations and engages in activities that address efforts relative to building sustainable communities and enhancing the quality of community life. This effort involves liaison with Groundwork Milwaukee, the City of Milwaukee Green Team Sustainability Effort, Walnut Way Conservation Corporation, the Urban Ecology Center, Fondy Food Center, the Food Summit Leadership Group, and the Milwaukee HomeGrown Initiative.

- **Education and Career Development for Communities of Color**

The Commission networks with organizations and engages in activities focusing on building community leadership and developing organizational capacity for communities of color. This effort includes the following entities: The Milwaukee Regional Economic Partnership, the Global Human Capital Group, the Manufacturing Diversity Institute, the African American Leadership Group, the Ethnically Diverse Business Coalition, the Community Action Agencies of Milwaukee-Racine-Kenosha, the Urban Leagues of Milwaukee and Racine-Kenosha, the P3 Development Group, and the NAACP Chapters throughout the Region. Information was provided on transportation, land use, and environmental issues, as well as the VISION 2050 planning effort.

**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 and minority populations and persons with disabilities. In addition to the outreach efforts noted above, the Commission coordinates an Environmental Justice Task Force to help ensure that this requirement is met. This Task Force consists of 13 representatives from throughout the Region who meet regularly 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 purposes of the SEWRPC Environmental Justice Task Force are summarized in Figure 10.

The Task Force met four times in 2013 and focused attention on the regional housing plan and the VISION 2050 planning process. The regional housing plan has been a major work activity over the past several years. In prior years, the Task Force gave substantial input to the analytical work being conducted relative to housing issues and the regional housing plan recommendations. In 2013 the Task Force reviewed the draft plan recommendations and was given the opportunity to provide comments to the Regional Housing Plan Advisory Committee prior to plan adoption by the full Commission in March 2013. Task Force members were also given an overview of how specific plan recommendations were incorporated as factors into the Commission staff procedure for rating candidate projects for Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding.

VISION 2050 discussions included a review of the evaluation of impacts of the year 2035 regional transportation plan on minority and low-income populations to identify any additional analyses, or refinement of prior analyses, which should be undertaken as part VISION 2050 plan development. The Task Force was also provided an overview of the VISION 2050 visioning and scenario planning process and the initial series of visioning workshops.

## 2013 SEWRPC PUBLICATIONS

The following publications were issued by SEWRPC during the year:

### Planning Reports

- No. 54, *A Regional Housing Plan for Southeastern Wisconsin: 2035*, March 2013, 932 pages

### Technical Reports

- No. 10, 5th Edition, *The Economy of Southeastern Wisconsin*, April 2013, 46 pages
- No. 11, 5th Edition, *The Population of Southeastern Wisconsin*, April 2013, 109 pages

### Community Assistance Planning Reports

- No. 87, 2nd Edition, *A Farmland Preservation Plan for Ozaukee County, Wisconsin*, December 2013, 376 pages

- No. 134, 3rd Edition, *A Park and Open Space Plan for Racine County*, February 2013, 135 pages
- No. 286, *Racine County Public Transit Plan: 2013-2017*, October 2013, 263 pages
- No. 313, *Pewaukee River Watershed Protection Plan*, December 2013, 408 pages

### Memorandum Reports

- No. 204, *Development of a Framework for a Watershed-Based Municipal Stormwater Permit for the Menomonee River Watershed*, January 2013, 437 pages
- No. 207, *Public Transit–Human Services Transportation Coordination Plan for Kenosha County: 2012*, February 2013, 40 pages
- No. 208, *Public Transit–Human Services Transportation Coordination Plan for Milwaukee County: 2012*, February 2013, 40 pages
- No. 209, *Public Transit–Human Services Transportation Coordination Plan for Ozaukee County: 2012*, February 2013, 36 pages
- No. 210, *Public Transit–Human Services Transportation Coordination Plan for Racine County: 2012*, February 2013, 38 pages
- No. 211, *Public Transit–Human Services Transportation Coordination Plan for Walworth County: 2012*, February 2013, 36 pages
- No. 212, *Public Transit–Human Services Transportation Coordination Plan for Washington County: 2012*, February 2013, 38 pages
- No. 213, *Public Transit–Human Services Transportation Coordination Plan for Waukesha County: 2012*, February 2013, 40 pages



#### Annual Report

- *2012 Annual Report*, October 2013, 180 pages

#### Newsletters

- *A Regional Water Quality Management Plan Update for The Greater Milwaukee Watersheds*, May 2013, 24 pages
- *Year 2035 Regional Housing Plan For Southeastern Wisconsin, Plan Summary*, No. 5, June 2013, 12 pages
- *Racine County Public Transit Plan: 2013-2017, Transit Service Improvement Alternatives*, No. 2, February 2013, 12 pages
- *Racine County Public Transit Plan: 2013-2017, Recommended Transit Service Improvement Plan*, No. 3, September 2013, 8 pages

#### Brochures

- *VISION 2050: A Regional Land Use and Transportation System Plan for Southeastern Wisconsin, SEWRPC Launches VISION 2050!*, No. 1, October 2013, 3 pages
- *VISION 2050: A Regional Land Use and Transportation System Plan for Southeastern Wisconsin, VISION 2050 Visioning Continues...*, No. 2, October 2013, 3 pages

#### Other Reports

- *Amendment to the Regional Water Quality Management Plan, City of Muskego*, March 2013, 5 pages
- *Amendment to the Regional Water Quality Management Plan Update for the Greater Milwaukee Watersheds*, May 2013, 294 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls*, September 2013, 8 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Hartland*, September 2013, 8 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Menomonee Falls*, December 2013, 10 pages
- *Amendment to the Regional Water Quality Management Plan, Village of Nashotah*, December 2013, 10 pages
- *Record of Public Comments, A Regional Housing Plan for Southeastern Wisconsin: 2035, November 13, 2012 Through December 21, 2012*, January 2013, 124 pages
- *Record of Public Comments, Racine County Public Transit Plan: 2013-February 7, 2013 Through March 15, 2013*, March 2013, 97 pages

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# PART THREE: REGIONAL MONITORING ACTIVITIES

This final section of the 2013 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, regional transportation system performance, and implementation of the regional housing plan. 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 10-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 35.



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Table 2

POPULATION IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2000, 2010, AND 2013

County	Population			2000-2010 Change		2010-2013 Change	
	2000 Census	2010 Census	2012 2013 Estimate	Number	Percent	Number	Percent
Kenosha.....	149,600	166,400	166,900	16,800	11.2	500	0.3
Milwaukee.....	940,200	947,800	950,400	7,600	0.8	2,600	0.3
Ozaukee .....	82,300	86,400	86,700	4,100	5.0	300	0.3
Racine.....	188,800	195,400	195,200	6,600	3.5	-200	-0.1
Walworth.....	92,000	102,200	102,600	10,200	11.1	400	0.4
Washington.....	117,500	131,900	132,600	14,400	12.3	700	0.5
Waukesha.....	360,800	389,900	391,500	29,100	8.1	1,600	0.4
Region	1,931,200	2,020,000	2,025,900	88,800	4.6	5,900	0.3

**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 2013, the Commission completed two studies that resulted in new projections of population, households, and employment for the Region to the year 2050. The two studies, which were prepared under the guidance of the Commission’s Advisory Committee on Regional Population and Economic Forecasts, are documented in SEWRPC Technical Report No. 10 (Fifth Edition), *The Economy of Southeastern Wisconsin*, and SEWRPC Technical Report No. 11 (Fifth Edition), *The Population of Southeastern Wisconsin*.

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, will constitute the Commission’s “forecast,” serving as a basis for the forthcoming year 2050 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 that conceivably 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 for 2050, 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 5,900 persons, or 0.3 percent—to an estimated 2,025,900 persons in 2013 (see Table 2).

**Comparison to Forecast**

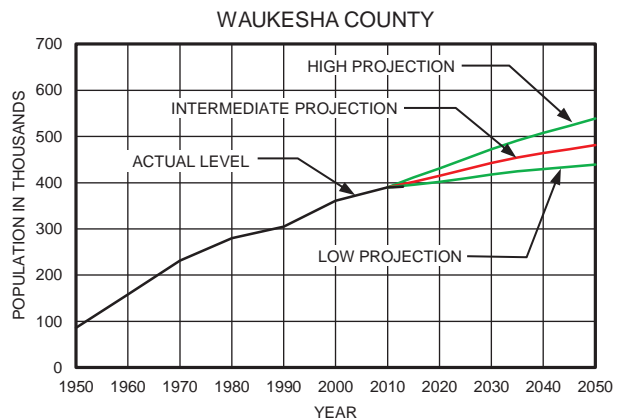
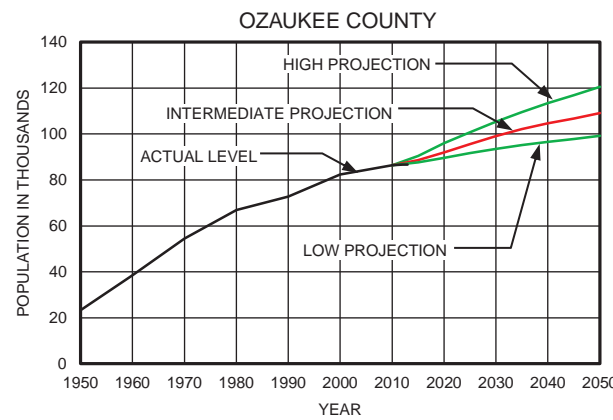
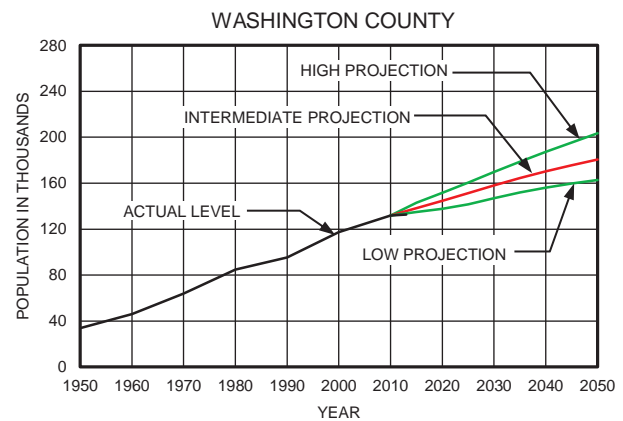
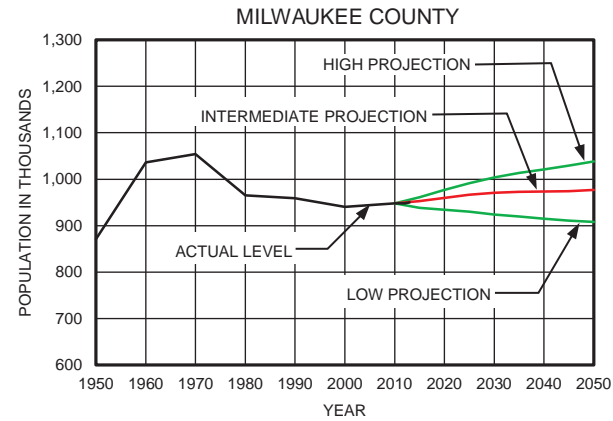
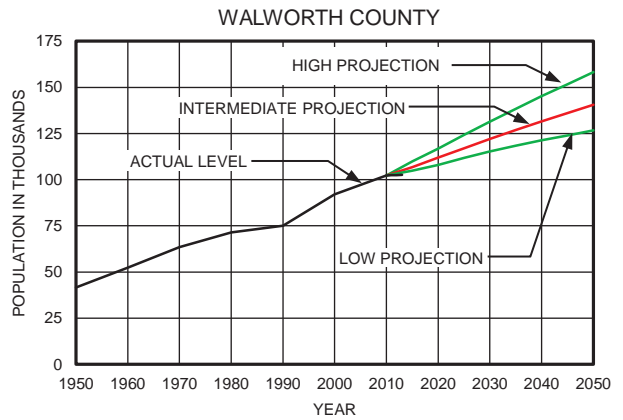
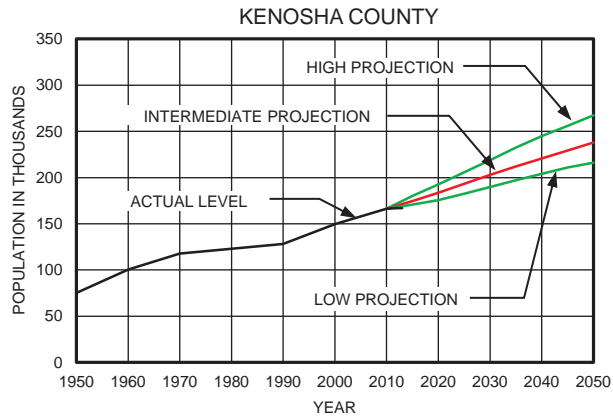
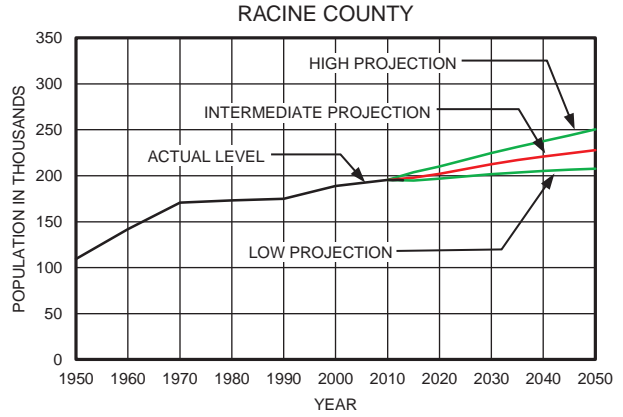
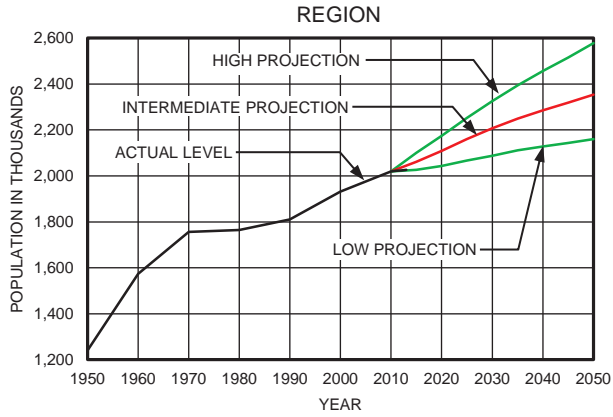
The estimated year 2013 population is slightly lower (by 0.9 percent) than the Commission’s forecast population level for 2013 of 2,044,500 persons (see Table 3 and Figure 11).

**Change in Regional Households**

During the 2000s, the number of households in the Region increased by 51,100, or 6.8 percent, from

Figure 11

ACTUAL AND PROJECTED REGIONAL AND COUNTY POPULATION LEVELS: 1950-2050



**Table 3**

**ACTUAL AND PROJECTED POPULATION LEVELS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2013**

County	2013 Population	Projected 2013 Population		
		High Projection	Intermediate Projection (Forecast)	Low Projection
Kenosha .....	166,900	174,600	171,400	169,000
Milwaukee.....	950,400	955,800	950,700	942,100
Ozaukee .....	86,700	88,900	87,700	87,200
Racine .....	195,200	200,500	197,000	195,100
Walworth.....	102,600	106,800	105,000	103,800
Washington.....	132,600	138,600	135,600	133,700
Waukesha.....	391,500	402,800	397,100	393,300
Region	2,025,900	2,068,000	2,044,500	2,024,200

**Table 4**

**HOUSEHOLDS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2000, 2010, AND 2013**

County	Households			2000-2010 Change		2010-2013 Change	
	2000 Census	2010 Census	2013 Estimate	Number	Percent	Number	Percent
Kenosha .....	56,100	62,600	63,200	6,500	11.6	600	1.0
Milwaukee.....	377,700	383,600	384,900	5,900	1.6	1,300	0.3
Ozaukee .....	30,900	34,200	34,500	3,300	10.7	300	0.9
Racine .....	70,800	75,700	75,900	4,900	6.9	200	0.3
Walworth.....	34,500	39,700	39,900	5,200	15.1	200	0.5
Washington.....	43,800	51,600	52,200	7,800	17.8	600	1.2
Waukesha.....	135,200	152,700	154,400	17,500	12.9	1,700	1.1
Region	749,000	800,100	805,000	51,100	6.8	4,900	0.6

NOTE: Year 2013 household estimates were prepared by applying housing vacancy rates from the year 2010 census to the estimated total number of housing units in 2013. Estimates of total housing units in 2013 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.

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 4,900, or 0.6 percent, to an estimated 805,000 households in 2013 (see Table 4).

**Comparison to Forecast**

The estimated number of households in the Region in 2013 is slightly lower (by 0.9 percent) than the Commission's forecast household level for 2013 of 812,100 households (see Table 5 and Figure 12).

**Employment**

**Change in Regional Employment**

Total employment, or number of jobs, in the Region stood at 1,176,600 in 2010. Employment in the

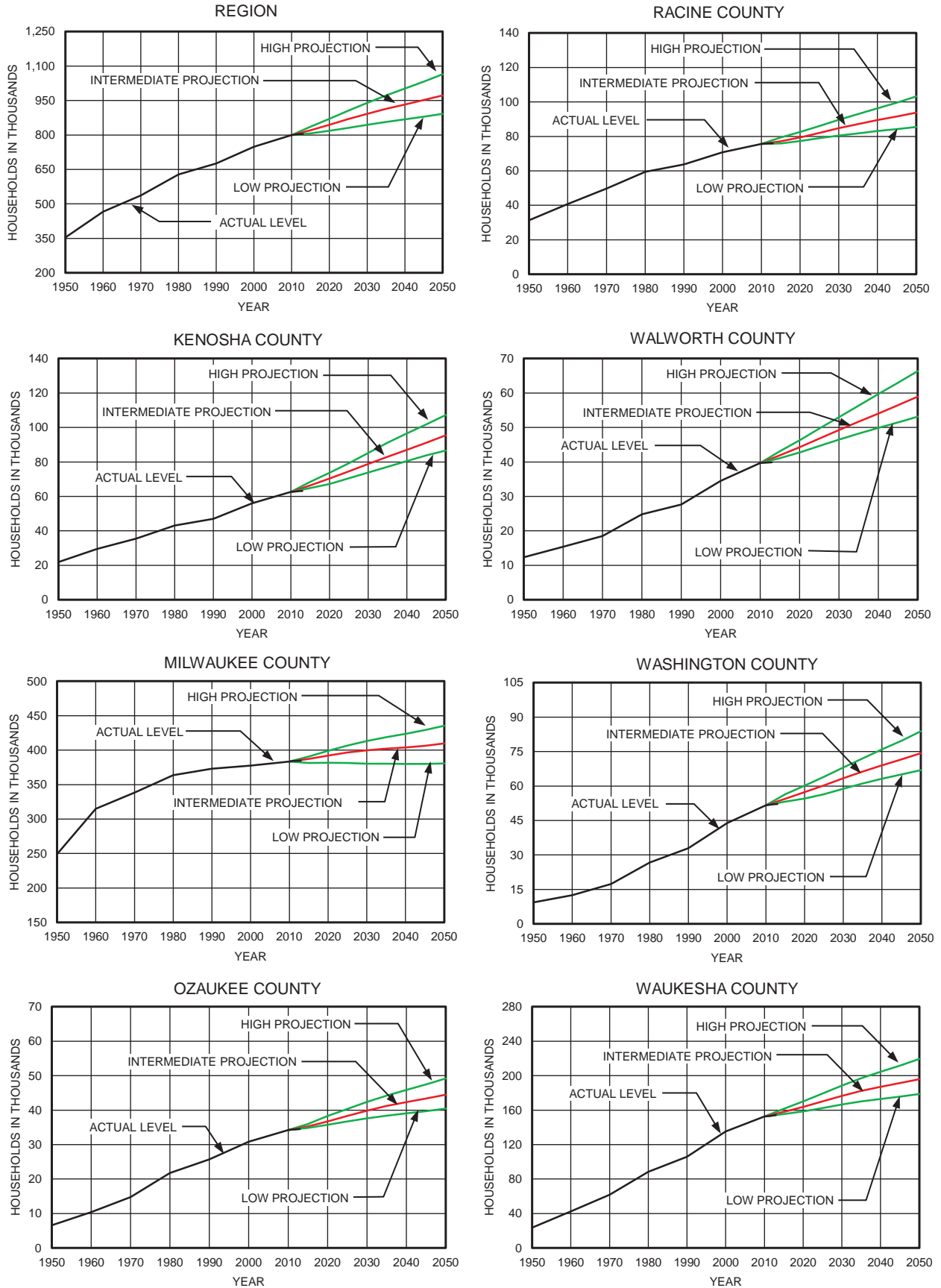
Region decreased during the early 2000s, increased through the mid-2000s, and then decreased near the end of the decade as a result of the economic downturn. Employment in the Region in 2010 was 33,200 jobs, or 2.7 percent, less than in 2000. Since 2010, total employment in the Region has increased by about 33,600 jobs, or 2.9 percent, from the low of 2010. Manufacturing and service jobs accounted for much of this increase (see Tables 6 and 7).

**Comparison to Forecast**

Despite the increases of the last three years, the employment level in the Region has not fully recovered from the effects of the recession of the late 2000s. However, the estimated total employment in the Region in 2013 (1,210,200 jobs)

Figure 12

ACTUAL AND PROJECTED REGIONAL AND COUNTY HOUSEHOLD LEVELS: 1950-2050





**Table 5**

**ACTUAL AND PROJECTED HOUSEHOLD LEVELS IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2013**

County	2013 Households	Projected 2013 Households		
		High Projection	Intermediate Projection (Forecast)	Low Projection
Kenosha.....	63,200	66,100	64,900	64,000
Milwaukee.....	384,900	387,800	385,700	382,300
Ozaukee .....	34,500	35,300	34,800	34,600
Racine.....	75,900	77,900	76,600	75,800
Walworth.....	39,900	41,700	41,000	40,500
Washington.....	52,200	54,500	53,300	52,500
Waukesha.....	154,400	158,000	155,800	154,300
Region	805,000	821,300	812,100	804,000

**Table 6**

**EMPLOYMENT IN THE SOUTHEASTERN WISCONSIN REGION BY CATEGORY: 2000, 2010, AND 2013**

General Industry Group	Employment (Jobs)			2000-2010 Change		2010-2013 Change	
	2000	2010	2013 Estimate	Number	Percent	Number	Percent
Agriculture.....	5,900	5,200	5,000	-700	-11.9	-200	-3.8
Construction.....	53,000	45,900	44,500	-7,100	-13.4	-1,400	-3.1
Manufacturing .....	214,500	148,100	159,100	-66,400	-31.0	11,000	7.4
Wholesale Trade.....	53,700	48,800	49,500	-4,900	-9.1	700	1.4
Retail.....	190,800	185,800	195,100	-5,000	-2.6	9,300	5.0
Services .....	531,900	584,400	602,300	52,500	9.9	17,900	3.1
Government and Government Enterprises ...	116,400	117,700	115,500	1,300	1.1	-2,200	-1.9
Other.....	43,600	40,700	39,200	-2,900	-6.7	-1,500	-3.7
Total Jobs	1,209,800	1,176,600	1,210,200	-33,200	-2.7	33,600	2.9

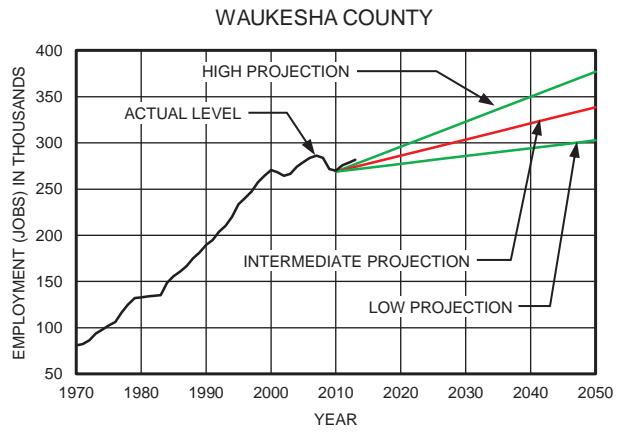
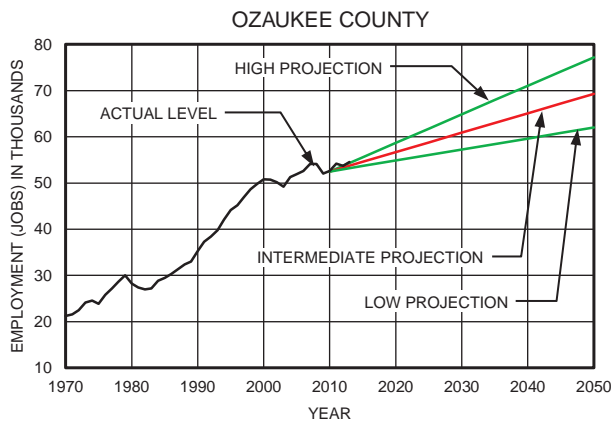
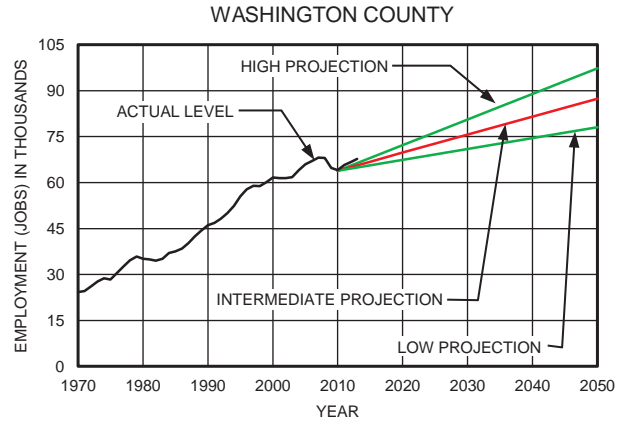
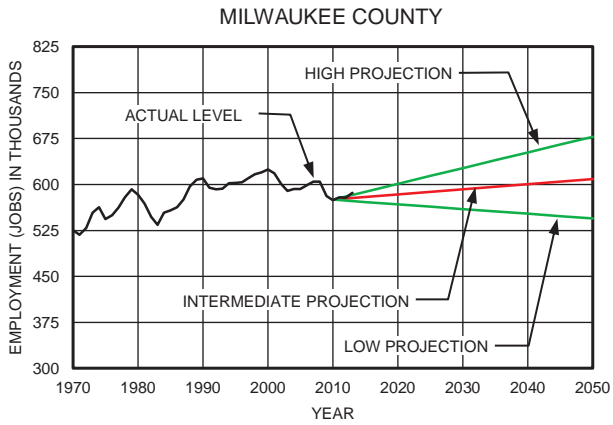
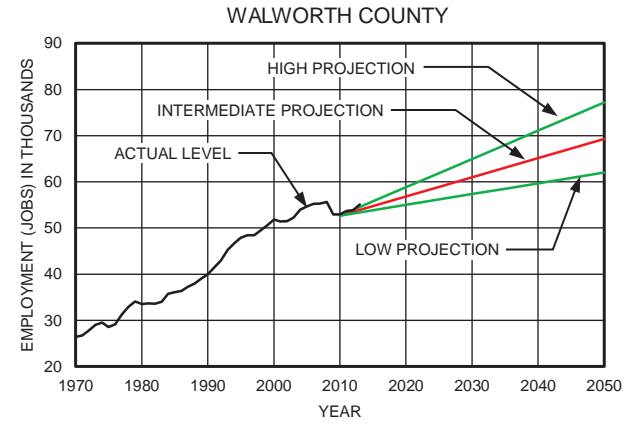
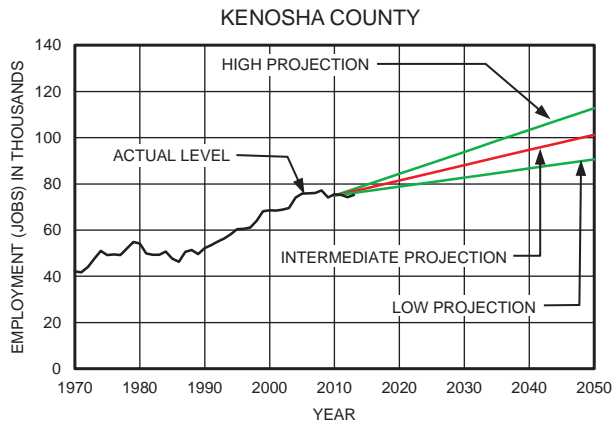
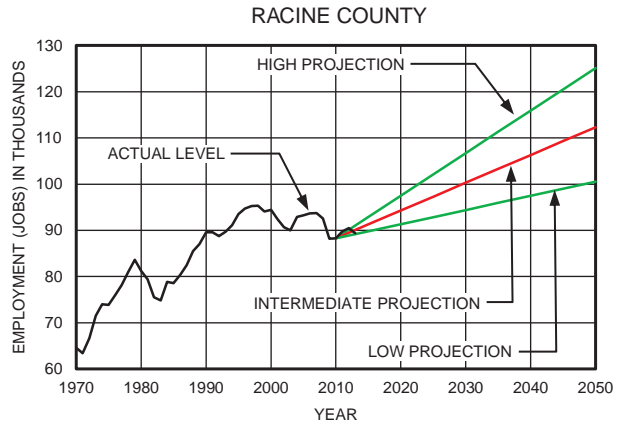
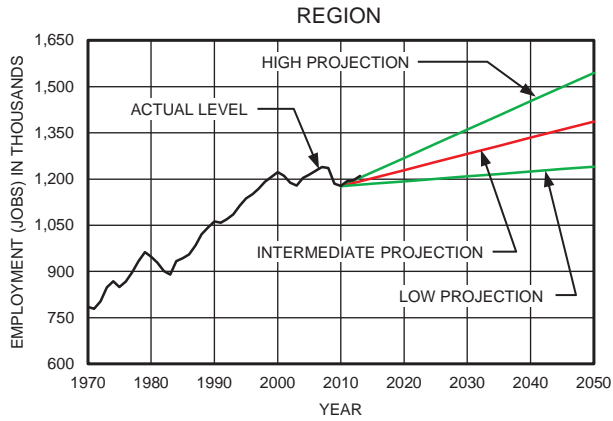
NOTES: This table indicates the total number of employment opportunities, or jobs, in the Region by major industry group. The reported employment levels include full-time and part-time jobs and include both wage and salary jobs and self-employment. The retail industry group includes retail employment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

was above the Commission’s intermediate projection employment level by about 1.5 percent, or 17,800 jobs (see Table 8 and Figure 13). 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 business cycles.

Figure 13

ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2050



**Table 7**

**EMPLOYMENT IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2000, 2010, AND 2013**

County	Employment (Jobs)			2000-2010 Change		2010-2013 Change	
	2000	2010	2013 Estimate	Number	Percent	Number	Percent
	Kenosha .....	67,900	74,900	75,300	7,000	10.3	400
Milwaukee.....	618,300	575,400	586,300	-42,900	-6.9	10,900	1.9
Ozaukee .....	50,400	52,500	54,600	2,100	4.2	2,100	4.0
Racine .....	93,800	88,300	89,400	-5,500	-5.9	1,100	1.2
Walworth.....	51,200	52,700	55,100	1,500	2.9	2,400	4.6
Washington.....	60,300	63,900	67,700	3,600	6.0	3,800	5.9
Waukesha.....	267,900	268,900	281,800	1,000	0.4	12,900	4.8
Region	1,209,800	1,176,600	1,210,200	-33,200	-2.7	33,600	2.9

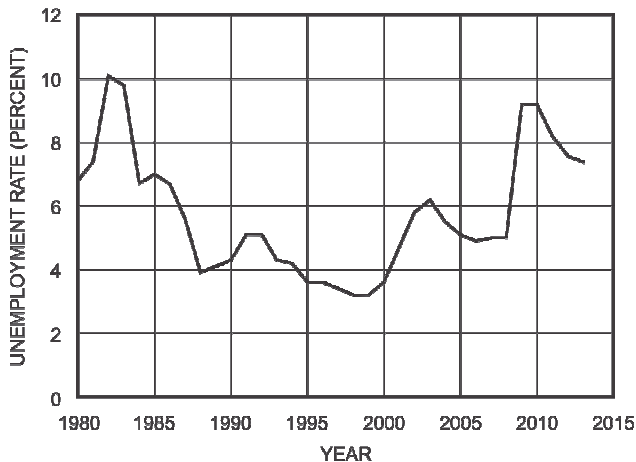
**Table 8**

**ACTUAL AND PROJECTED EMPLOYMENT IN THE SOUTHEASTERN WISCONSIN REGION BY COUNTY: 2013**

County	2013 Employment (Jobs)	Projected 2013 Employment (Jobs)		
		High Projection	Intermediate Projection	Low Projection
Kenosha .....	75,300	77,700	76,900	76,100
Milwaukee.....	586,300	583,100	577,900	573,100
Ozaukee .....	54,600	54,400	53,800	53,200
Racine .....	89,400	91,100	90,100	89,200
Walworth.....	55,100	54,500	53,900	53,400
Washington.....	67,700	66,400	65,700	65,000
Waukesha.....	281,800	277,000	274,100	271,400
Region	1,210,200	1,204,200	1,192,400	1,181,400

**Figure 14**

**UNEMPLOYMENT RATE IN THE REGION: 1980-2013**



**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 14). The unemployment rate decreased over the next three years, to a level of 7.4 percent in 2013.

**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. In addition, once every 10 years the Commission updates the major regional inventories of land use, environmental corridors, and areas served by centralized sewer and water supply services. During 2013, the Commission completed updates of those inventories from 2000 to 2010, with a summary of the findings presented below. More detailed information relative to these inventories is set forth in SEWRPC Planning Report No. 55, *Vision 2050: Regional Land Use and Transportation System Plans for Southeastern Wisconsin* (forthcoming).

### 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. In the Region, 246 residential lots were created by subdivision plats in 2013, roughly the same annual level since 2010 (see Figure 15). Over 90 percent of the new lots were created in Waukesha County. The location of the residential lots created in 2013 is shown on Map 23.

#### Sewered/Unsewered

All but 41 of the lots created in 2013 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 Region fluctuated between about 8,300 and 10,900 (see Figure 16). Housing construction decreased substantially—to less than 3,000 units per year—during the economic downturn of the late 2000s. About 3,180 new housing units were added in 2013, including 1,880 single-family units, 180 units in two-unit structures, and 1,120 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

**Table 9**

### RESIDENTIAL SUBDIVISION PLATTING ACTIVITY IN THE REGION: 2013

County	Sewered Lots		Unsewered Lots		Total Lots	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Region
Kenosha.....	0	0.0	0	0.0	0	0.0
Milwaukee.....	6	100.0	0	0.0	6	2.4
Ozaukee .....	9	100.0	0	0.0	9	3.7
Racine.....	5	100.0	0	0.0	5	2.0
Walworth.....	0	0.0	0	0.0	0	0.0
Washington.....	3	100.0	0	0.0	3	1.2
Waukesha.....	182	81.6	41	18.4	223	90.7
Region	205	83.3	41	16.7	246	100.0

NOTE: This table indicates the number of lots created by residential subdivision plats in 2013.

conversion to nonresidential use. Since 1990, the average annual loss ranged between about 700 and 1,300 housing units (see Figure 17). A total of 1,030 housing units were lost in 2013, including 380 single-family units, 330 units in two-unit structures, and 320 units in multi-family structures. The net change in housing units in 2013 was a gain of about 2,150.

### Summary Findings of 2010

#### Regional Land Use Inventory

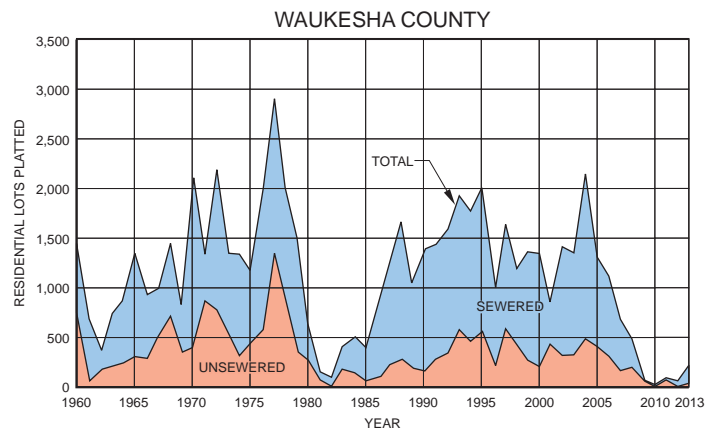
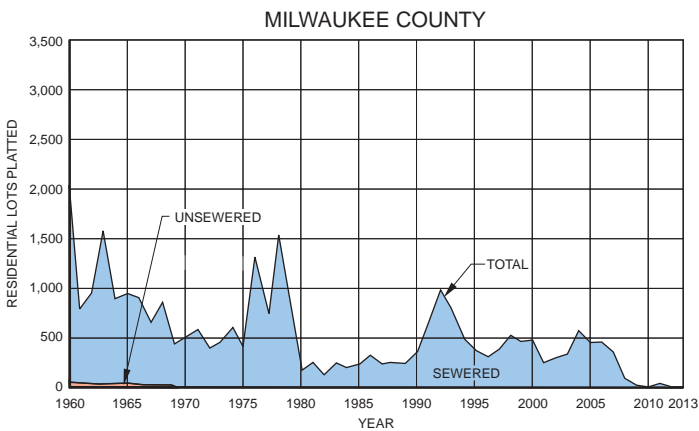
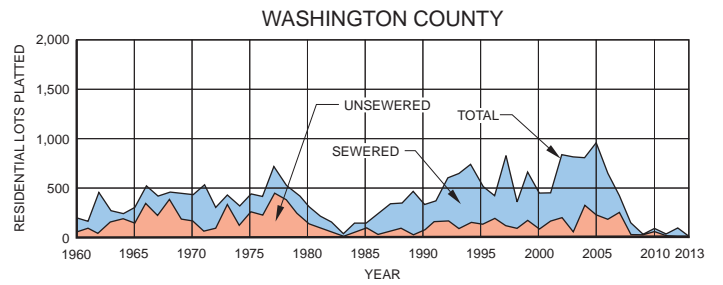
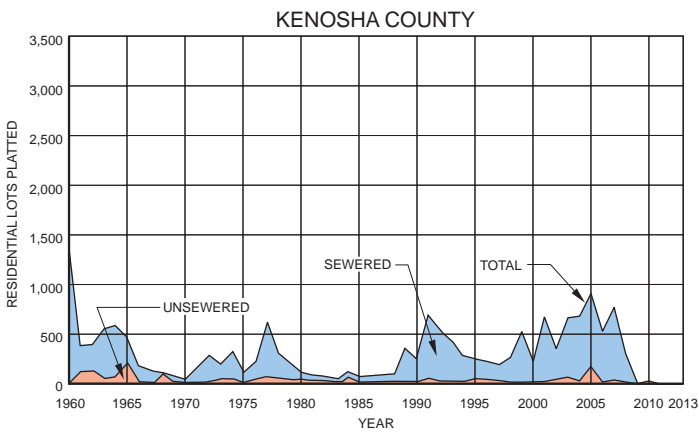
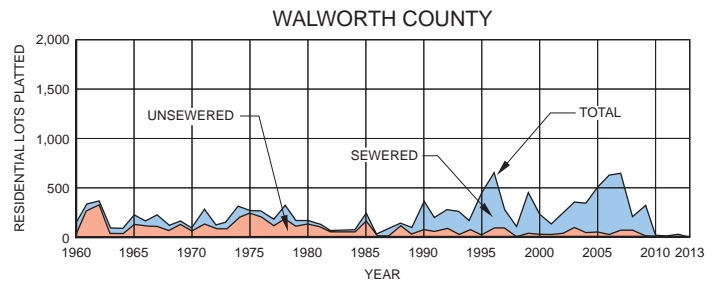
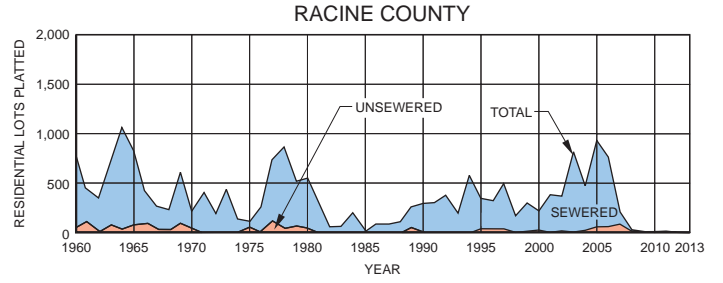
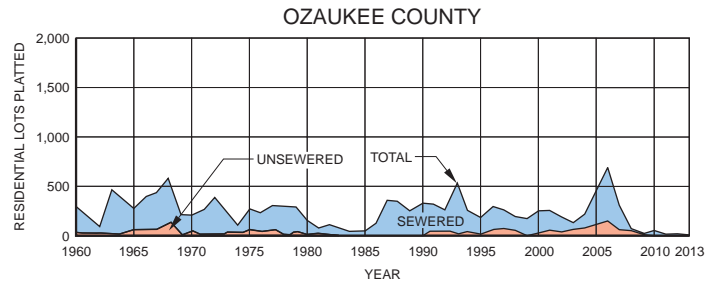
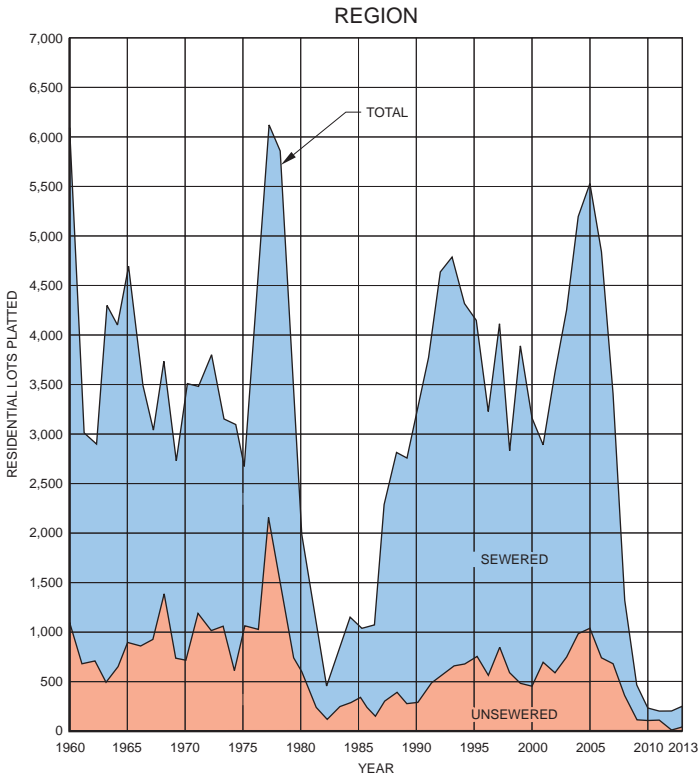
##### Developed Land

Between 2000 and 2010, the developed land area of the Region increased by about 67 square miles, or 9.4 percent, including the following:

- Residential land: 39.2 square miles (10.8 percent increase)
- Commercial land: 5.4 square miles (17.9 percent increase)
- Industrial land: 2.3 square miles (7.0 percent increase)
- Transportation, communication, and utility land: 11.1 square miles (5.5 percent increase)
- Governmental and institutional land: 3.3 square miles (9.8 percent increase)
- Recreational land: 5.6 square miles (11.1 percent increase)

Figure 15

RESIDENTIAL LOTS PLATTED IN THE REGION AND ITS COUNTIES: 1960-2013



Map 23

RESIDENTIAL PLATTING ACTIVITY IN THE REGION: 2013

- 10 SEWERED LOTS
- 10 UNSEWERED LOTS
- 10 UNSEWERED LOTS-  
OVERALL DENSITY OF  
NO MORE THAN ONE  
DWELLING UNIT PER  
FIVE ACRES

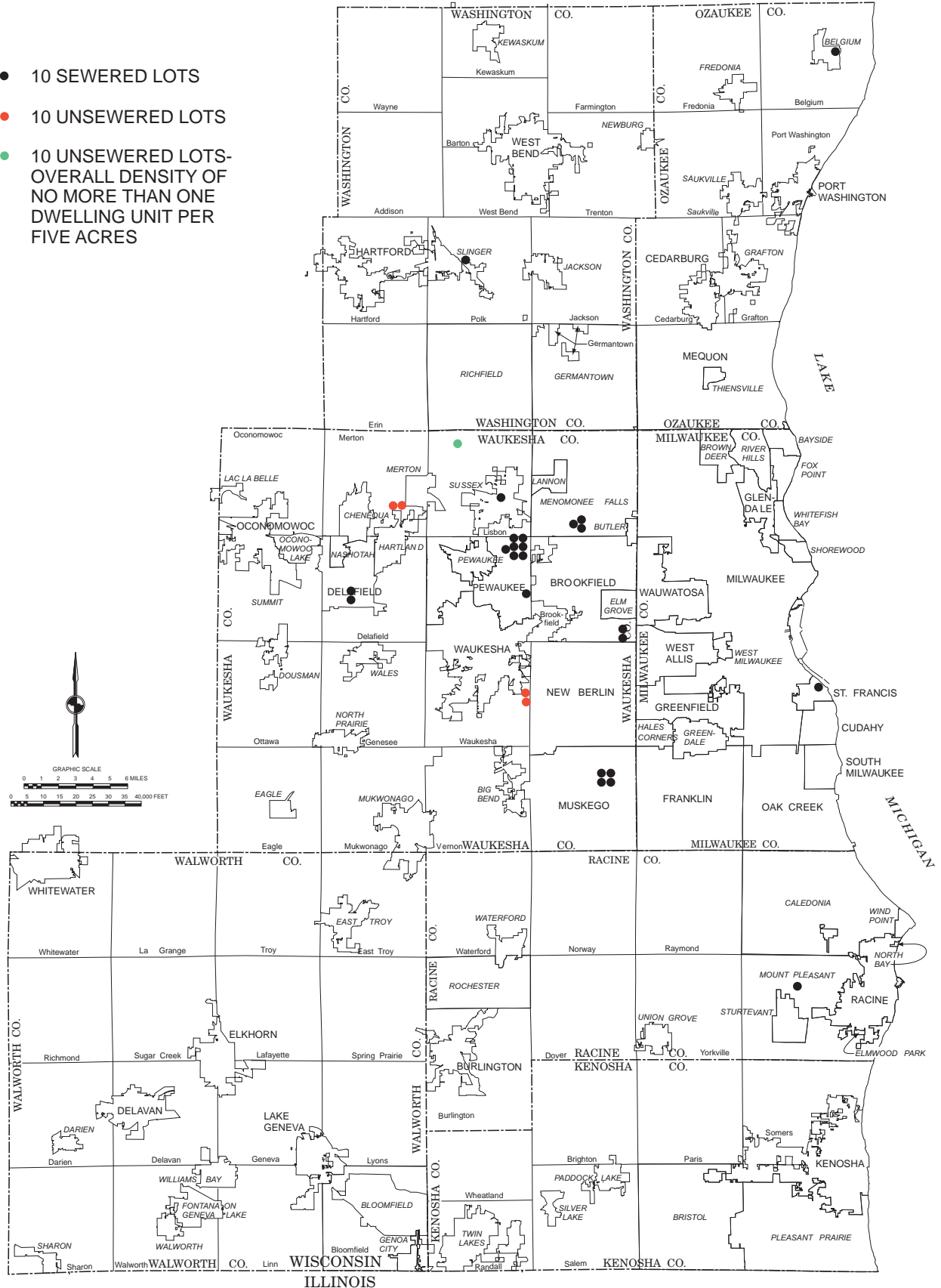


Figure 16

NEW HOUSING UNITS IN THE REGION AND ITS COUNTIES: 1990-2013

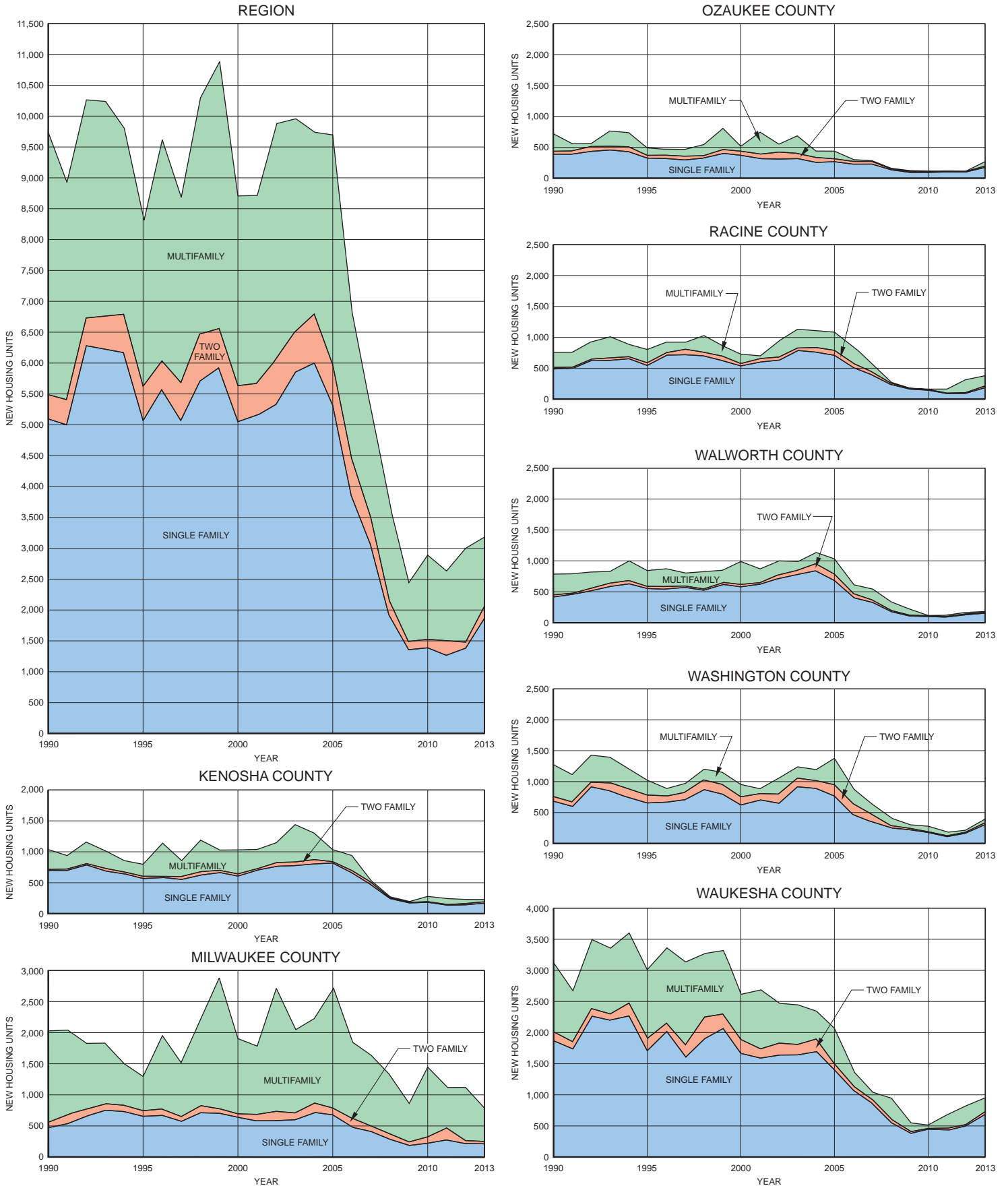


Table 10

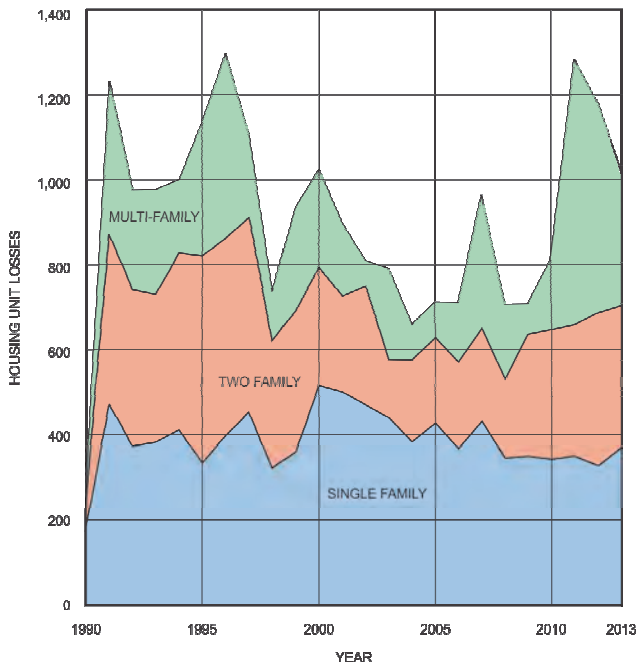
CHANGE IN HOUSING UNITS BY STRUCTURE TYPE IN THE REGION: 2013

County	New Housing Units				Housing Unit Losses				Net Change in Housing Units			
	Single Family	Two Family	Multi-Family	Total	Single Family	Two Family	Multi-Family	Total	Single Family	Two Family	Multi-Family	Total
Kenosha.....	160	20	36	216	33	2	40	75	127	18	-4	141
Milwaukee.....	215	38	542	795	144	320	79	543	71	-282	463	252
Ozaukee.....	176	22	68	266	18	0	0	18	158	22	68	248
Racine.....	178	28	168	374	25	4	194	223	153	24	-26	151
Walworth.....	160	8	16	184	56	2	3	61	104	6	13	123
Washington.....	301	28	56	385	20	4	0	24	281	24	56	361
Waukesha.....	687	40	229	956	86	0	0	86	601	40	229	870
Region	1,877	184	1,115	3,176	382	332	316	1,030	1,495	-148	799	2,146

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 multi-family buildings.

Figure 17

HOUSING UNITS LOSSES IN THE REGION BY STRUCTURE TYPE: 1990-2013



**Undeveloped Land**

Between 2000 and 2010, the overall area of undeveloped lands in the Region decreased by about 67 square miles, or 3.4 percent, including the following:

- **Wetlands and surface water:** Increased by 46.0 square miles (13.0 percent). As part of the 2010 land use inventory, wetlands and surface water areas were mapped at a much finer scale and level of detail as compared to prior inventories. This resulted in the identification of numerous small wetlands and surface water areas than in the past, contributing to the reported overall increase in wetland and surface water areas. Consequently, the increase in the area of wetlands and surface water may be attributed both to the more comprehensive, precise mapping of such areas in 2010, as well as actual gains in excess of losses of such areas over the 10-year period.
- **Woodlands:** Increased by 7.1 square miles (3.9 percent). The increase in woodland area primarily reflects actual gains in woodlands in excess of woodland losses over the 10-year period.
- **Agricultural land:** Decreased by 100.9 square miles (8.0 percent). The decrease in agricultural area is attributable in part to the more comprehensive mapping of wetlands and surface water noted above; to the actual conversion of agricultural land to urban use; and to agricultural lands being taken out of production but remaining in open use—reverting to wetlands or woodlands or otherwise lying fallow.



- Unused and other open lands: Decreased by 19.2 square miles (10.5 percent). The decrease in unused and other open lands is generally attributable to the conversion of such lands to urban use.

### **Summary Findings of 2010 Regional Environmental Corridor Inventory**

The 2010 inventory of environmental corridors, consisting of primary and secondary environmental corridors and isolated natural resource areas, indicates that the areal extent of such areas increased from 600 square miles in 2000 to 640 square miles in 2010, an increase of 6.7 percent. This is generally consistent with the increase in the areal extent of wetlands and woodlands identified in 2010 compared to 2000, noted above. As a result, lands within an environmental corridor comprise 24 percent of the Region in 2010, compared to 22 percent in 2000.

### **Summary Findings of 2010 Regional Centralized Sanitary Sewer and Water Supply Service Areas**

Between 2000 and 2010, the area served by public sanitary sewers increased by 48 square miles, or about 10 percent. The population served increased by 90,000 people, or 5 percent. The percentage of the regional population served remained steady at about 90 percent over the 10-year period.

There was also a significant increase in the area and population served by public water supply utilities between 2000 and 2010. The area served by public water supply utilities increased by 54 square miles, or about 14 percent. The population served increased by 100,000 people, or about 6 percent. The percentage of the regional population served increased slightly between 2000 and 2010, from 82 to 83 percent.

Of the estimated 84,100 new housing units built in the Region between 2000 and 2010, about 86 percent were provided with public sanitary sewer service.

## **NATURAL RESOURCE BASE PRESERVATION ACTIVITY**

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 privately sponsored efforts help implement regional plan recommendations regarding the permanent preservation of environmental corridors, natural areas, and critical species habitat sites.

Figure 18 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 located outside the environmental corridors that may be expected to become part of the corridors as they revert to more natural conditions in the years ahead. Summaries of recent open space protection efforts follow.

### **Total Area Protected**

During 2013, 2,079 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 24). This compares to an annual average of 1,563 acres of open space so protected over the five-year period 2009-2013.

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

Public agency efforts resulted in the protection of 1,704 acres during 2013, and an annual average of 869 acres over the five-year period 2009-2013.

### **Area Protected by Private Land Trusts**

Private land trust efforts resulted in the protection of 375 acres in 2013, and an annual average of 353 acres over the past five-year period 2009-2013. 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 2013 include a number of areas that have been identified as natural areas or critical species habitat sites in the SEWRPC natural areas and critical species habitat protection and

Map 24

**PUBLIC INTEREST ACQUISITIONS OF ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS IN THE REGION: 2013**

- 2013 ACQUISITIONS BY PUBLIC AGENCIES - INCLUDING CONSERVATION EASEMENTS (17 SITES)
- 2013 ACQUISITIONS BY PRIVATE LAND TRUSTS - INCLUDING CONSERVATION EASEMENTS (10 SITES)
- ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS
- SURFACE WATER

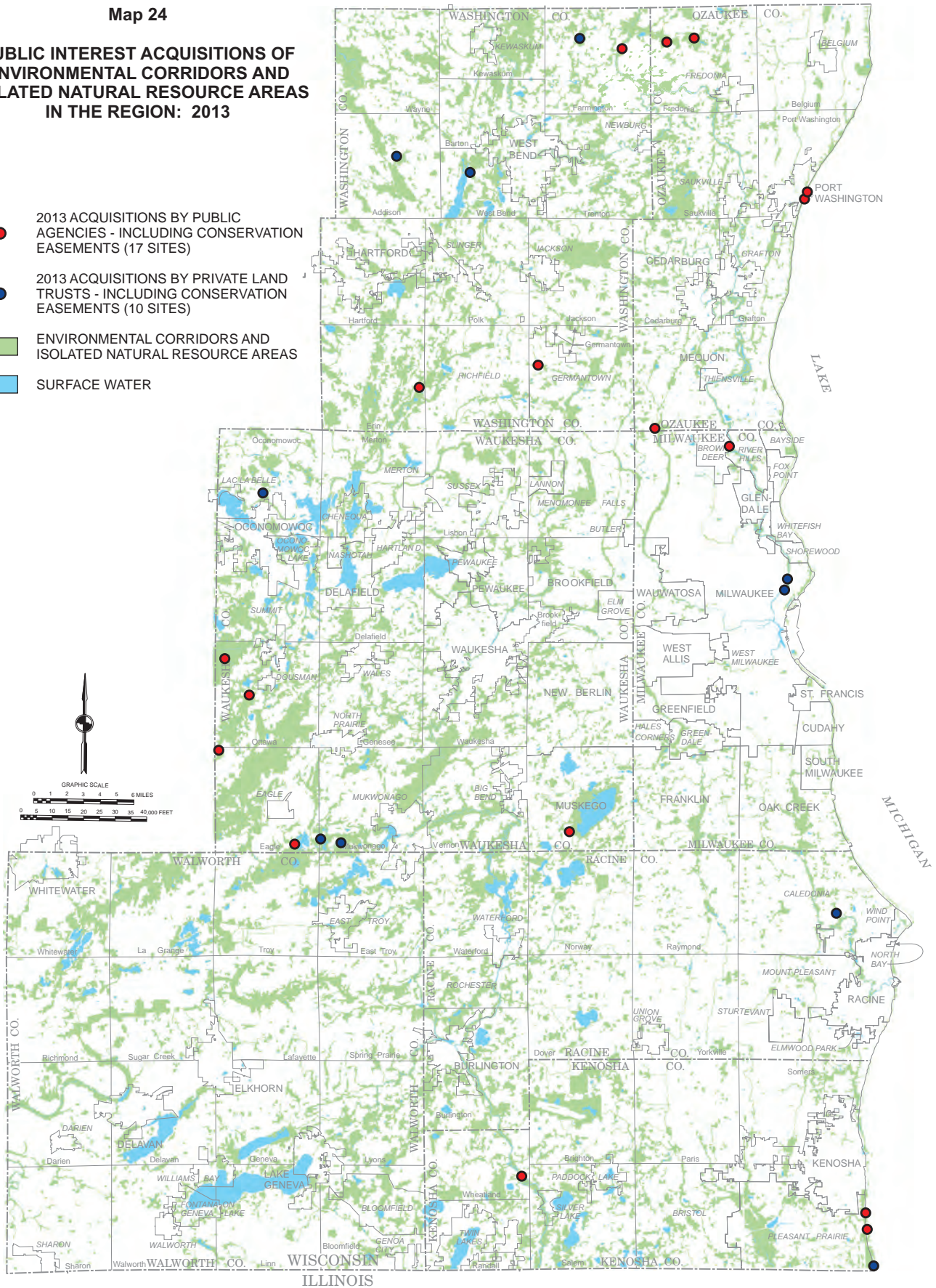
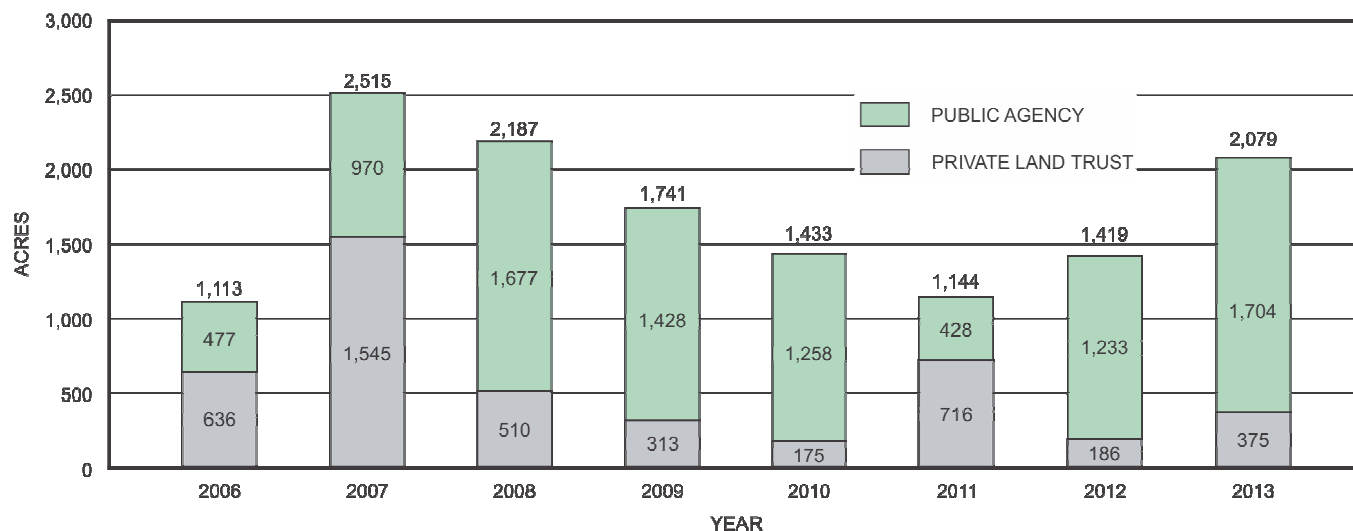


Figure 18

**PUBLIC INTEREST ACQUISITION OF ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS IN THE REGION: 2006-2013**



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.

management plan. Specifically, the Wisconsin Department of Natural Resources acquired just under one acre of the Barnes Creek Dunes and Panne in Kenosha County; five acres of the Department of Natural Resources Lowlands in Ozaukee County; 24 acres of the Donegal Road Woods, nine acres of the St. Augustine Road Sedge Meadow, nine acres of the Friess Lake Tamarack Swamp, and six acres of the Loew’s Lake Wetland Complex, in Washington County; and 18 acres of the Lulu Lake and Eagle Spring Lake Wetland Complex and Adjacent Uplands in Waukesha County.

**REGIONAL TRANSPORTATION SYSTEM PERFORMANCE**

Each year the Commission gathers and analyzes available information relative to the performance of the regional transportation system. During 2013 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 10-year intervals, provided that fiscal resources are made available. Those surveys were undertaken in 2011-2012. The survey results are scheduled to be reported in 2014.

**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

<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 automobiles, 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

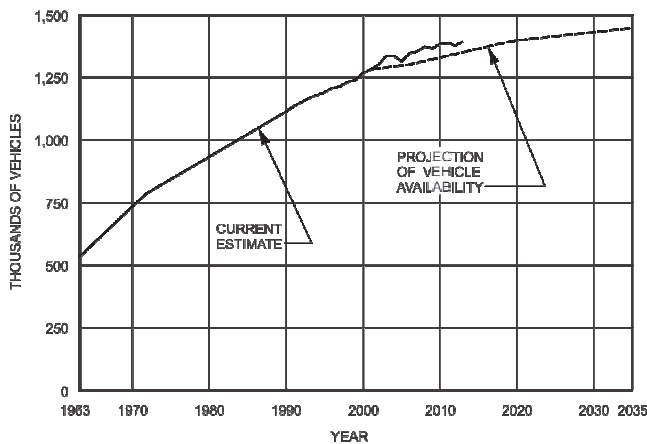
PERSONAL-USE VEHICLE AVAILABILITY IN THE REGION<sup>a</sup>

County	1963	1972	2012	2013
Kenosha.....	37,240	51,100	120,110	121,610
Milwaukee.....	316,350	392,000	543,460	550,960
Ozaukee.....	16,780	28,030	70,390	71,190
Racine.....	52,040	73,350	147,010	148,630
Walworth.....	22,220	33,450	84,050	85,250
Washington.....	18,340	30,390	106,050	107,170
Waukesha.....	69,390	114,450	307,960	311,820
Total	532,360	722,770	1,379,030	1,396,630

<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 99.

Figure 19

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



<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 99.

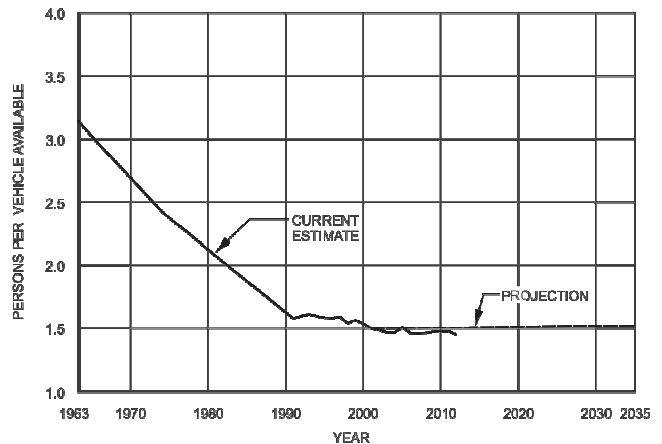
personal transportation—increased over the past year to a level of about 1.40 million vehicles (see Table 11). While the average annual rate of growth in personal-use vehicle availability in the Region from 1963 to 2013 has been about 2 percent, that rate of growth is expected under the regional transportation plan forecast to lessen in the coming years (see Figure 19).

Persons Per Personal-Use Vehicle

The number of persons per personal-use vehicle in the Region was estimated at 1.45 in 2013, a slight

Figure 20

PERSONS PER PERSONAL-USE VEHICLE<sup>a</sup>



<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 99.

decrease from 2012 (see Figure 20). This ratio has been relatively stable for over a decade and the SEWRPC forecast expects continued long-term stability as well. The estimated 2013 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 2013 was estimated at about 122,430, slightly more

Table 12

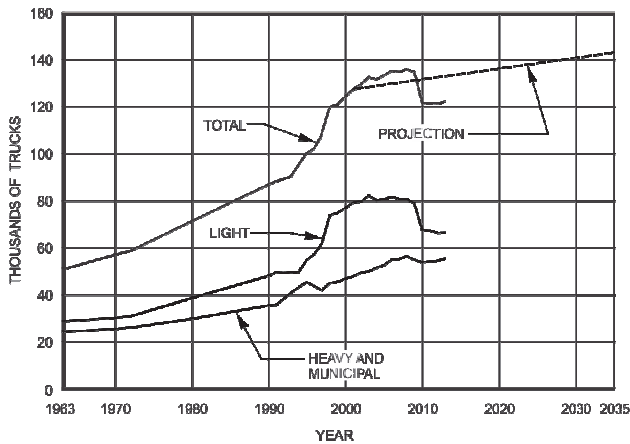
COMMERCIAL TRUCK AVAILABILITY IN THE REGION<sup>a</sup>

County	1963	1972	2012	2013
Kenosha.....	4,370	4,490	10,170	10,500
Milwaukee.....	25,910	26,710	42,330	42,380
Ozaukee.....	2,270	2,550	5,720	5,870
Racine.....	5,670	6,460	13,700	13,830
Walworth.....	4,190	4,840	10,090	10,190
Washington.....	3,210	4,080	10,060	10,120
Waukesha.....	7,780	10,280	29,330	29,540
Total	53,400	59,410	121,400	122,430

<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 99.

Figure 21

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



<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 99.

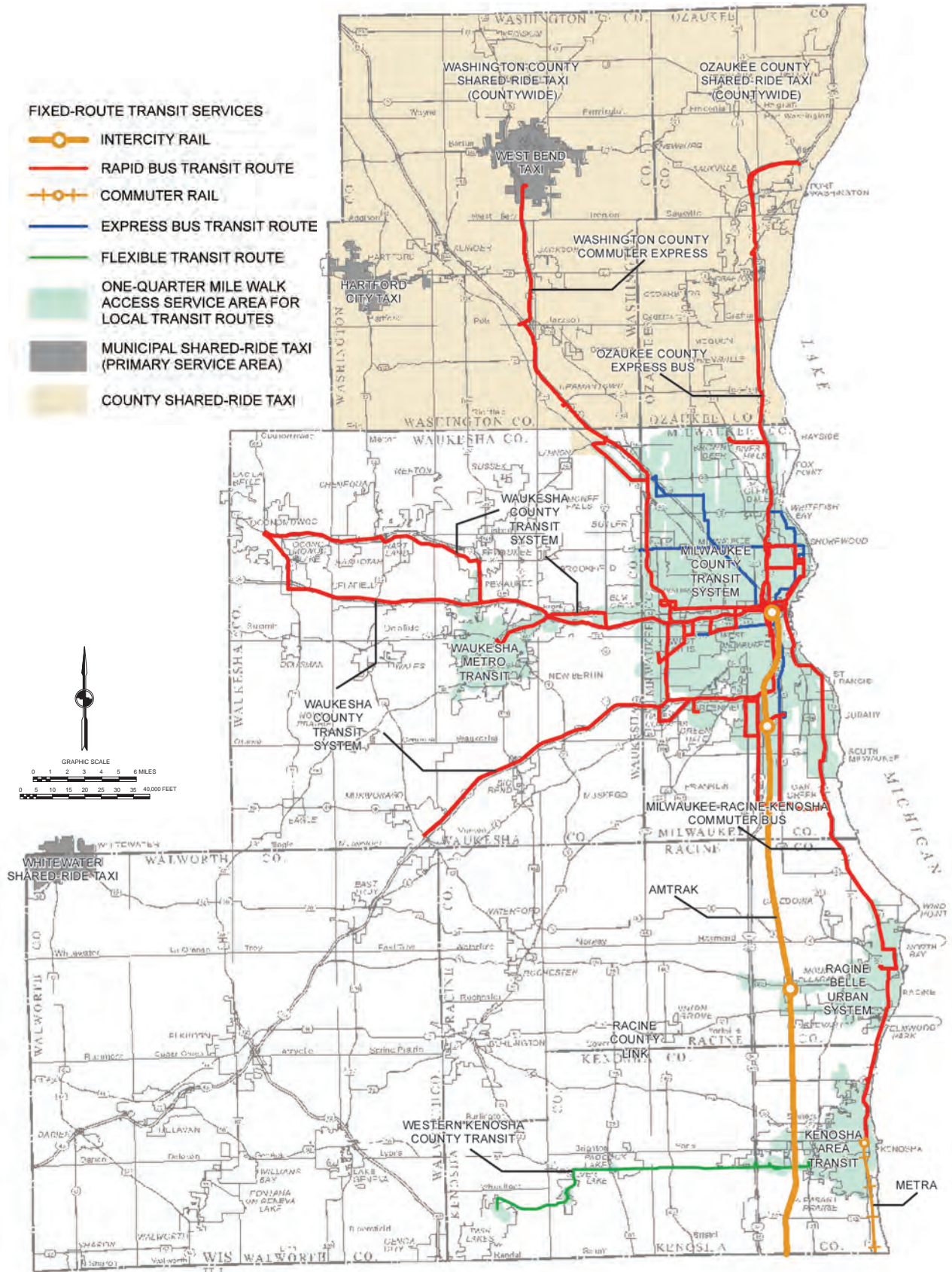
than the 2012 estimate. Light commercial trucks continue to account for about 55 percent of all commercial trucks. The number of commercial and municipal trucks available in the Region remains at a level somewhat below the forecast level included in the regional transportation plan (see Figure 21).

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

The Southeastern Wisconsin Region was served during 2013 by the following public transit systems (see Map 25):

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

PUBLIC TRANSIT SERVICES IN THE REGION: 2013



### **Notable Changes to Services**

- The Racine Belle Urban System changed its hours of operation in 2013, reducing service hours by about 4 percent.
- The Kenosha Area Transit System restored the Saturday service to one-hour service for four routes for a seven-hour window of service.
- Western Kenosha County Transit eliminated two of three fixed routes while doubling service on the remaining route and reducing the headway from two hours to one.
- Ridership on Route 79 decreased dramatically for the Waukesha County Transit System due to the Zoo Interchange construction and the temporary closing of the Watertown Plank Park-Ride, moving it to Burleigh St. for the duration of the reconstruction project. Waukesha County Transit also reduced its service area for Waukesha County paratransit service to ¾ mile.
- The Whitewater Taxi System extended its Monday through Wednesday evening hours from 7:00 pm to 9:30 pm during the UW-Whitewater spring and fall semesters. Moreover, the City is now serviced by the Janesville-Milton-Whitewater express, which is operated by Janesville Transit.

### **Fixed-Route Bus Ridership**

The total reported ridership on fixed-route public bus services declined from about 41.8 million revenue passengers in 2012 to 40.7 million revenue passengers in 2013, a decrease of nearly 3 percent (see Table 13 and Figures 22 through 29 for individual system data).

### **Shared-Ride Taxi Ridership**

The total reported ridership on shared-ride public taxi services grew from about 356,000 in 2012 to about 359,000 in 2013, an increase of about 1 percent (see Table 13 and Figures 30 through 34 for individual system data).

### **Paratransit Vehicle Ridership**

Paratransit vehicles serve people with disabilities unable to use fixed-route bus services. During 2013, about 610,500 one-way trips were made on paratransit services in the Region, a decline of about

7 percent from the 653,500 one-way trips made during 2012 (see Table 14 for individual 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 nine trains on weekdays, six 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.

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 2004-2013, annual ridership increased by about 74 percent to a level of about 819,125 passengers. In 2013, the State of Wisconsin provided about \$5.4 million to support Hiawatha operating services.

### **Bus and Shared-Ride Taxi Vehicle Miles of Service**

The number of vehicle-miles operated in revenue service by bus and taxi in the Region during 2013 totaled about 22.3 million, representing a decrease of less than 1 percent from the 22.4 million vehicle-miles operated during 2012 (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 2012 was seven years. The number of transit service calls for those buses decreased nearly 14 percent, from 3,283 in 2011 to 2,835 in 2012. Over the same period of time, the average revenue vehicle-miles traveled between service calls increased by about 15 percent, from

Table 13

## REPORTED PUBLIC TRANSIT REVENUE RIDERSHIP IN THE REGION

Transit Services	Revenue Passengers <sup>a</sup>						Percent Change 2012-2013
	1963	1972	1991	2001	2012	2013	
<b>Fixed Route Bus Systems</b>							
<b>Intracounty<sup>b</sup></b>							
City of Kenosha .....	1,876,000	503,000	1,128,000	1,805,200	1,374,400	1,138,800	-17.1
Milwaukee County .....	88,546,000	52,141,000	53,025,000	52,333,400	37,944,400	36,995,700	-2.5
City of Racine .....	2,907,000	526,000	1,829,000	1,437,200	1,093,100	1,048,900	-4.0
City of Waukesha.....	451,000	227,000	434,000	633,900	639,900	632,900	-1.1
Subtotal	93,780,000	53,397,000	56,416,000	56,209,700	41,051,800	39,816,300	-2.8
<b>Intercounty</b>							
Kenosha-Racine Milwaukee Counties .....	230,000 <sup>b</sup>	153,000	82,000	81,400	83,000	76,800	-7.5
Ozaukee-Milwaukee Counties .....	127,000	64,000	--	91,600	117,500	116,600	-0.8
Washington-Milwaukee Counties.....	--	--	--	67,500	127,500	116,100	-8.9
Waukesha-Milwaukee Counties.....	534,000 <sup>b</sup>	240,000	290,000	667,700	496,200	562,100	13.3
Western Kenosha County.....	--	--	--	--	18,100	14,500	-19.9
Subtotal	891,000	457,000	372,000	908,200	714,800	886,100	5.2
<b>Total Bus Systems</b>	<b>94,671,000</b>	<b>53,854,000</b>	<b>56,788,000</b>	<b>57,117,900</b>	<b>41,766,600</b>	<b>40,702,400</b>	<b>-2.8</b>
<b>Shared-Ride Taxi Systems</b>							
City of Hartford .....	--	--	8,000	20,800	20,500	22,000	7.3
Ozaukee County.....	--	--	--	57,300	90,800	96,300	6.1
City of Port Washington <sup>c</sup> .....	--	--	--	23,200	--	--	--
Washington County .....	--	--	--	52,300	92,900	94,500	1.7
City of West Bend.....	--	--	--	134,400	119,800	114,500	-4.4
City of Whitewater .....	--	--	38,000	19,700	31,900	31,900	0.0
Subtotal	--	--	46,000	307,700	355,900	359,200	0.9
<b>Region Total</b>	<b>94,671,000</b>	<b>53,854,000</b>	<b>56,834,000</b>	<b>57,425,600</b>	<b>42,122,500</b>	<b>41,061,600</b>	<b>-2.8</b>

<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.

<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>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.

6,000 in 2011 to 6,921 in 2012. 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.

### Transit Fares

Fares for the Region's transit operators are presented in Table 16. Three transit operators raised fares in 2013:

- The base adult cash fare for local service provided by the Kenosha Area Transit System increased by \$0.25 from \$1.50 to \$1.75 in 2013. Fares in the other categories offered on the system were also increased.
- The fare for the on-demand door-to-door service provided by the Western Kenosha County Transit increased from \$3.00 to \$5.00.



Figure 22

**TRANSIT REVENUE RIDERSHIP  
CITY OF KENOSHA TRANSIT SYSTEM**

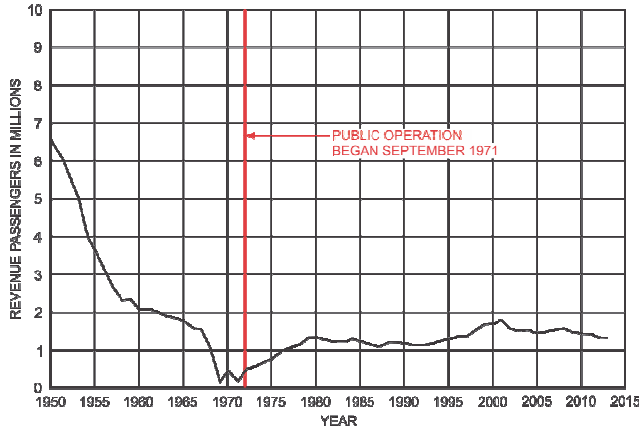


Figure 24

**TRANSIT REVENUE RIDERSHIP  
CITY OF RACINE TRANSIT SYSTEM**

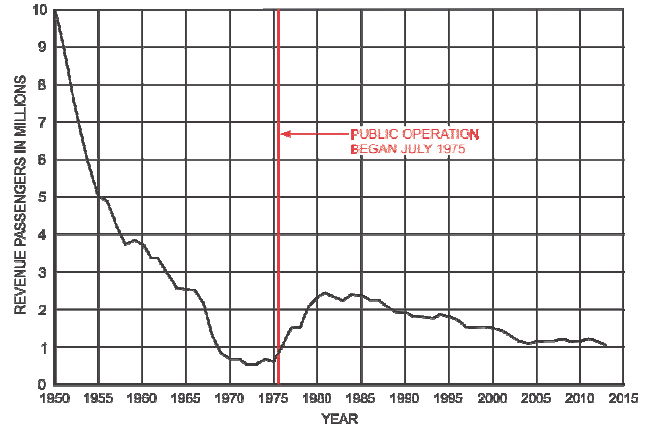


Figure 23

**TRANSIT REVENUE RIDERSHIP  
MILWAUKEE COUNTY TRANSIT SYSTEM**

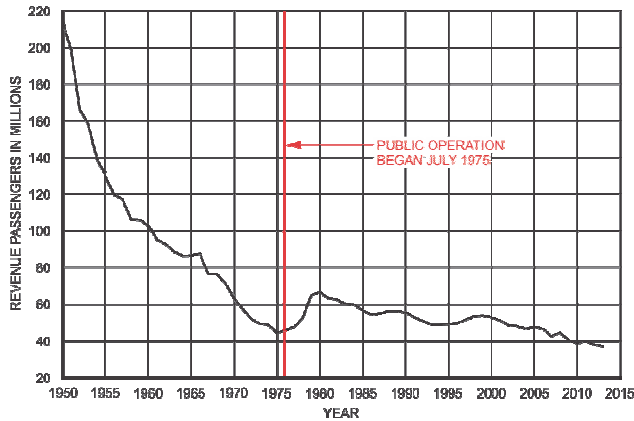
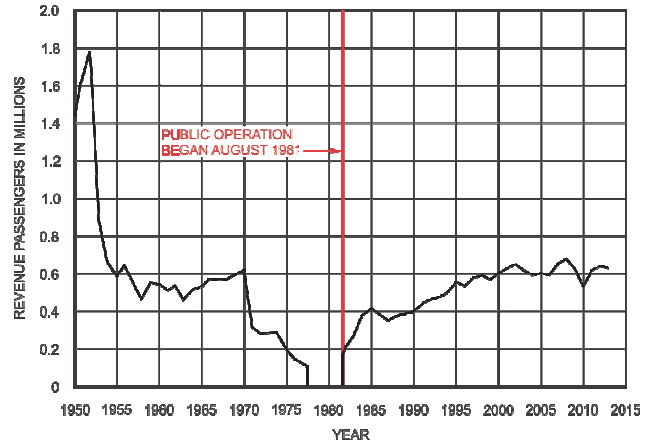


Figure 25

**TRANSIT REVENUE RIDERSHIP  
CITY OF WAUKESHA TRANSIT SYSTEM**



- The Ozaukee County Shared Ride Taxi increased the base adult case fare by \$0.25.

**Operating Assistance**

Public transit operating assistance in the Region, exclusive of Metra and Amtrak services, totaled about \$132.9 million in 2012, the most recent year for which data is available, a 6 percent decrease from 2011 (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 transportation plan is summarized on Map 26. In 2013, there were 53 park-ride lots in the Region, the same number as in 2012. Of the 53 existing park-ride lots and transit stations in 2013, 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

Figure 26

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

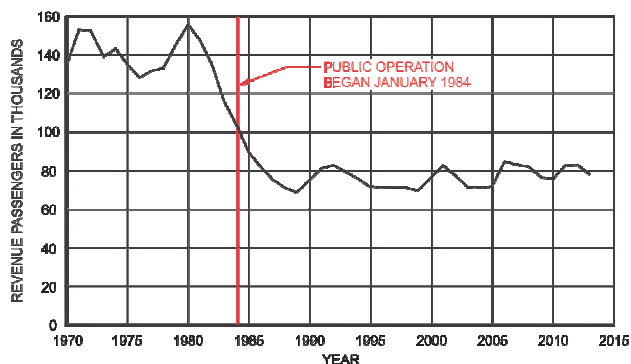
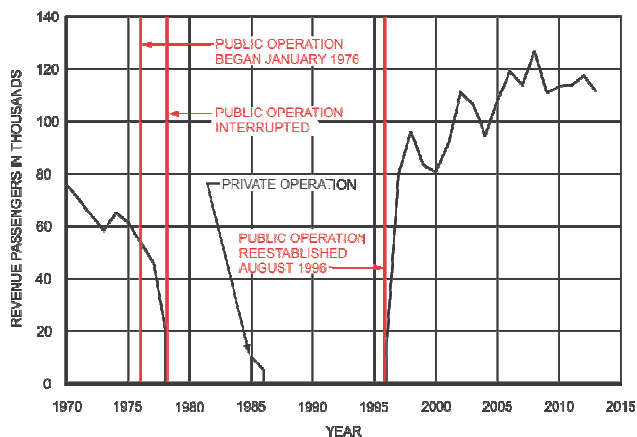


Figure 27

**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 NINE MONTHS IN 1985 AND 1986, A 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**

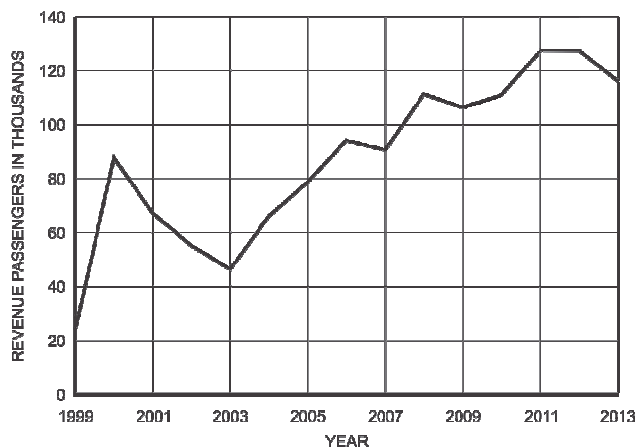


Figure 29

**TRANSIT REVENUE RIDERSHIP WAUKESHA COUNTY TRANSIT SYSTEM**

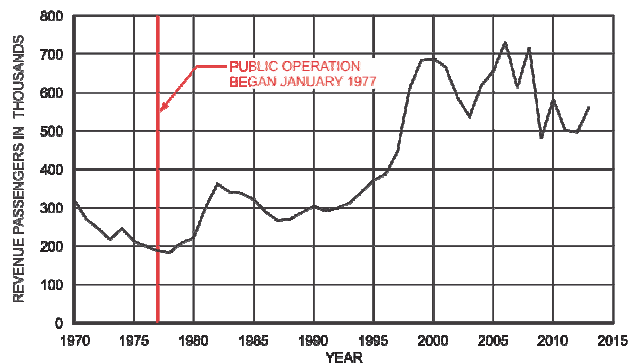
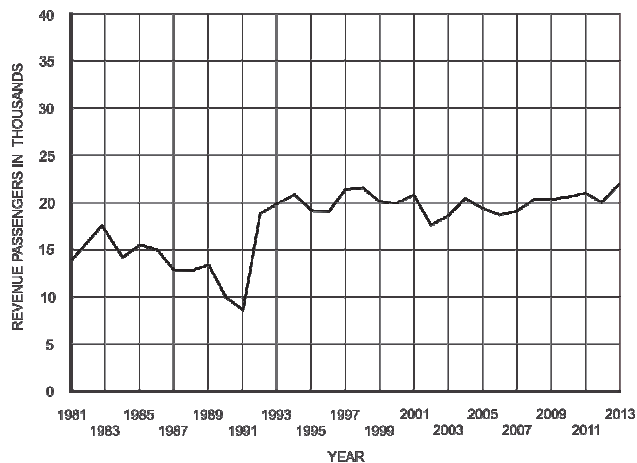


Figure 30

**TRANSIT REVENUE RIDERSHIP CITY OF HARTFORD TAXI SYSTEM**



not specifically constructed to serve as park-ride lots, such as parking lots at private retail businesses or municipal parking lots or ramps.

**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 2013 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 2013, including 6,635 at park-ride lots served by transit and 725 at the lots not served by

Figure 31

TRANSIT REVENUE RIDERSHIP  
OZAUKEE COUNTY TAXI SYSTEM

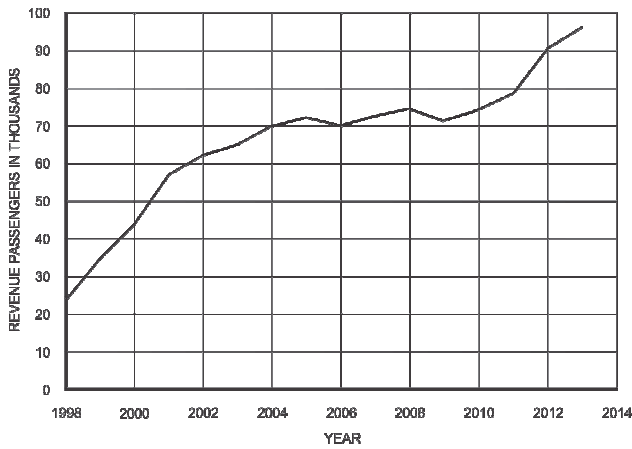


Figure 33

TRANSIT REVENUE RIDERSHIP  
CITY OF WEST BEND TAXI SYSTEM

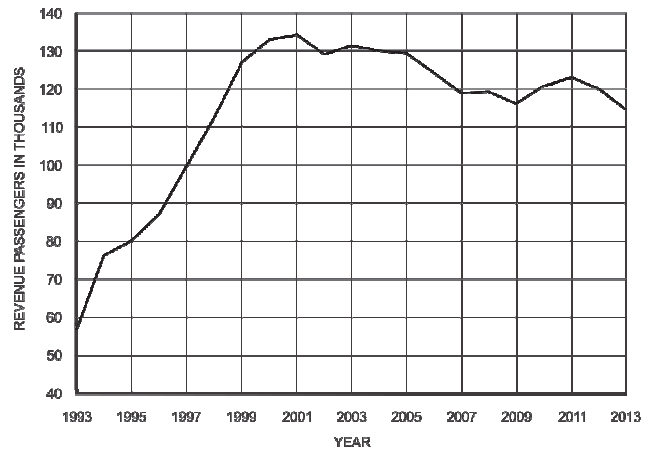


Figure 32

TRANSIT REVENUE RIDERSHIP  
WASHINGTON COUNTY TAXI SYSTEM

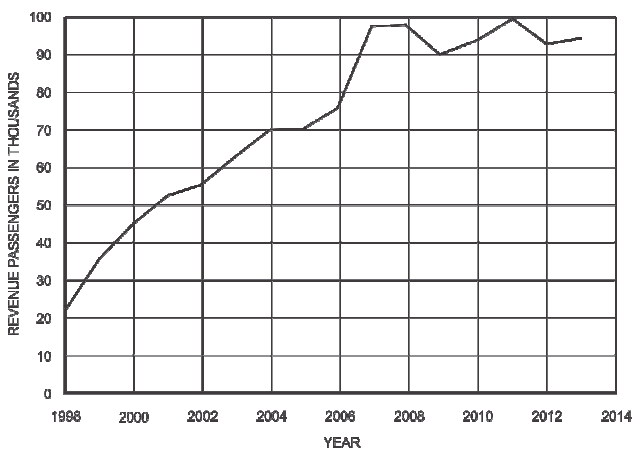
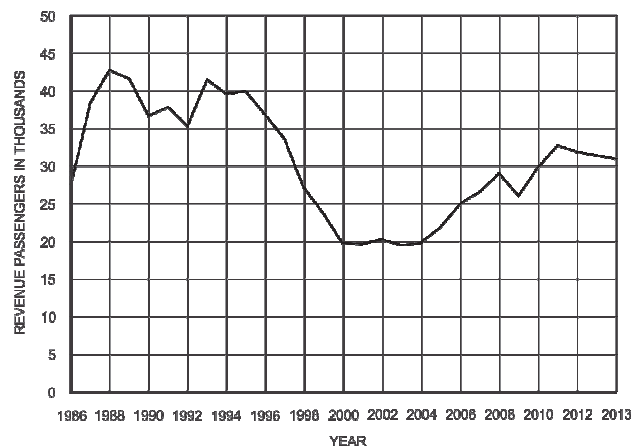


Figure 34

TRANSIT REVENUE RIDERSHIP  
CITY OF WHITEWATER TAXI SYSTEM



transit. Of the 6,635 spaces available at the 39 park-ride lots served by transit, 2,471 spaces were used on an average weekday during 2013—a utilization rate of about 45 percent. Of the 725 spaces available at the lots not served by transit, 299 spaces were utilized during 2013—a utilization rate of about 48 percent. Six 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 and Table 19). In 2013, slightly over 85 percent of the state trunk highway system in the Region was determined to have few or no ride problems, a

Table 14

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

Transit Operator	Paratransit Trips				Percent Change 2012-2013
	1991	2001	2012	2013	
City of Kenosha .....	13,100	17,200	23,100	23,100	0.0
Milwaukee County .....	388,200	1,027,000	572,100	544,400	-4.8
City of Racine .....	32,900	19,600	32,400	25,500	21.3
City of Waukesha.....	11,000	13,000	16,800	11,600	-31.0
Waukesha County .....	1,200	11,200	9,100	5,900	-35.2
Region Total	446,400	1,070,800	653,500	610,500	-6.6

Table 15

## REPORTED PUBLIC TRANSIT REVENUE VEHICLE MILES OF SERVICE IN THE REGION

Transit Services	Revenue Vehicle Miles of Service						Percent Change 2012-2013
	1963	1972	1991	2001	2012	2013	
<b>Fixed Route Bus Systems</b>							
<b>Intracounty</b>							
City of Kenosha .....	764,200	309,900	735,300	1,163,800	875,700	889,600	1.6
Milwaukee County .....	24,279,300	18,883,700	17,161,200	19,246,100	15,509,700	15,337,200	-1.1
City of Racine .....	1,099,800	461,600	1,258,500	1,416,400	1,102,100	1,035,100	-6.1
City of Waukesha.....	175,300	85,200	519,400	861,000	710,100	710,600	0.1
Subtotal	26,318,600	19,740,400	19,674,400	22,687,300	18,197,600	17,972,500	-1.2
<b>Intercounty</b>							
Kenosha-Racine Milwaukee Counties .....	N/A	N/A	253,300	381,600	240,400	215,600	-10.3
Ozaukee-Milwaukee Counties .....	N/A	110,000	--	224,200	182,400	183,500	0.6
Washington-Milwaukee Counties.....	--	--	--	339,800	248,900	245,800	-1.2
Waukesha-Milwaukee Counties.....	1,016,000	328,300	375,200	1,258,800	512,300	548,200	7.0
Western Kenosha County.....	--	--	--	--	238,100	211,900	-11.1
Subtotal	1,016,000	438,300	628,500	2,204,400	1,422,100	1,405,000	-1.2
<b>Total Bus Systems</b>	27,334,600	20,178,700	20,302,900	24,891,700	19,619,700	19,377,500	-1.2
<b>Shared-Ride Taxi Systems</b>							
City of Hartford .....	--	--	24,700	44,500	56,900	56,900	0.0
Ozaukee County.....	--	--	--	734,400	1,026,900	1,070,800	4.3
City of Port Washington <sup>a</sup> .....	--	--	--	82,600	--	--	--
Washington County .....	--	--	--	902,900	1,258,900	1,290,200	2.5
City of West Bend.....	--	--	--	432,200	396,900	390,600	-1.6
City of Whitewater .....	--	--	78,900	58,700	75,700	83,200	9.9
Subtotal	--	--	103,600	2,255,300	2,815,300	2,891,700	2.7
Region Total	27,334,600	20,178,700	20,406,500	27,147,000	22,435,000	22,269,200	-0.7

<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.

proportion that has slightly increased over the seven-year period 2006-2013. This would indicate that about 15 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 2013 pavement condition assessment in southeastern Wisconsin by state trunk highway facility are shown on Map 27.

Figure 35

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

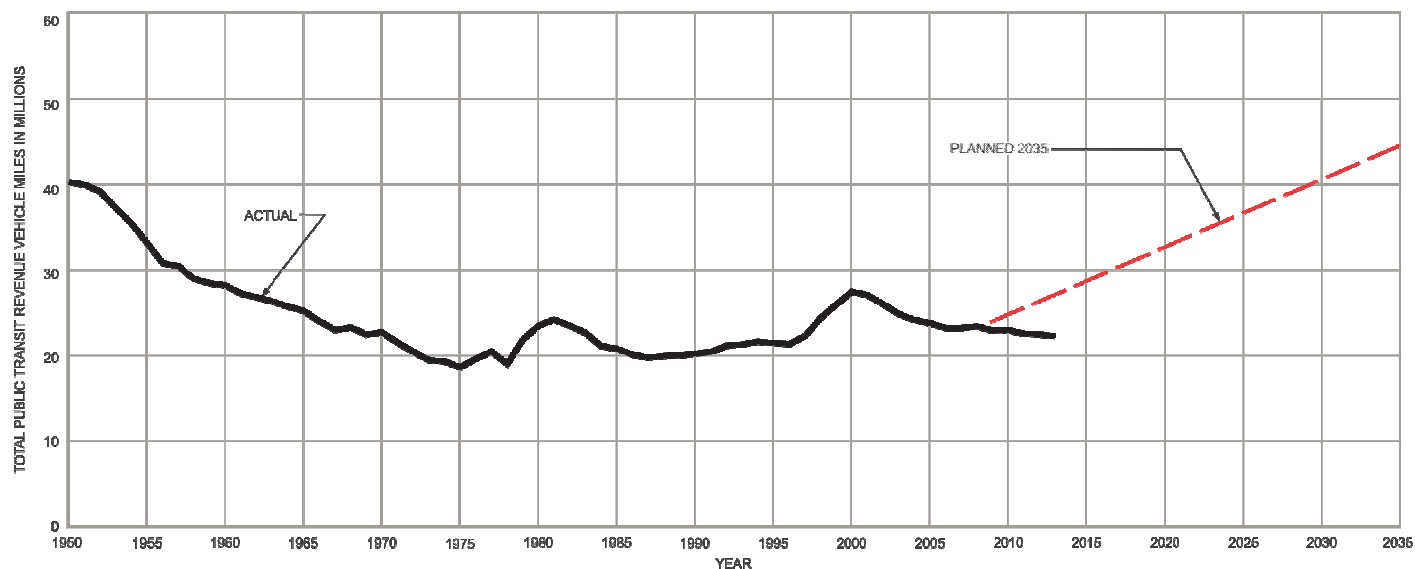


Table 16

BASE ADULT FARES CHARGED BY PUBLIC TRANSIT SYSTEMS IN THE REGION 2012 AND 2013

Transit System	Fares Charged Per One-way Trip		Change 2012-2013
	2012	2013	
<b>Fixed Route Bus Systems</b>			
<b>Intracounty</b>			
City of Kenosha .....	\$1.50	\$1.75	\$0.25
Milwaukee County .....	\$2.25	\$2.25	--
City of Racine .....	\$2.00	\$2.00	--
City of Waukesha.....	\$2.00	\$2.00	--
<b>Intercounty</b>			
Kenosha-Racine Milwaukee Counties .....	\$1.25-\$4.25	\$2.25-\$4.50	\$0.25-\$1.00
Ozaukee-Milwaukee Counties .....	\$3.25	\$3.25	--
Washington-Milwaukee Counties.....	\$3.75	\$3.75	--
Waukesha-Milwaukee Counties.....	\$3.25-\$4.00	\$3.25-\$4.00	--
Western Kenosha County.....	\$2.00-\$3.00	\$2.00-\$5.00	\$2.00 <sup>a</sup>
<b>Shared-Ride Taxi Systems</b>			
City of Hartford .....	\$2.75	\$2.75	--
Ozaukee County.....	\$2.75-\$6.50	\$3.00-\$6.75	\$0.25
Washington County .....	\$4.25-\$9.00	\$4.25-\$9.00	--
City of West Bend.....	\$4.00	\$4.00	--
City of Whitewater .....	\$3.00	\$3.00	--

<sup>a</sup> Door to Door Service fares increased from \$3.00 to \$5.00.

***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, 2011, and 2013

are shown in Table 20. The results of the 2013 rating by arterial facility are shown on Map 28. Over the eight-year period 2005-2013, 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

Table 17

## PUBLIC TRANSIT OPERATING ASSISTANCE WITHIN THE REGION: 2011-2012

Transit Services	Public Transit Operating Assistance (dollars)							
	2011 Actual/Estimated				2012 Actual/Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
<b>Fixed Route Bus Systems</b>								
<b>Intracounty</b>								
City of Kenosha.....	2,246,800	1,890,100	1,468,200	5,605,100	2,066,000	1,635,200	1,726,600	5,427,800
Milwaukee County.....	20,590,200	77,189,800	16,915,000	114,695,000	27,496,700	67,857,800	11,666,600	107,021,100
City of Racine.....	2,494,700	1,878,400	1,606,700	5,979,800	2,645,200	1,582,500	1,725,100	5,952,800
City of Waukesha.....	513,900	2,325,900	1,346,800	4,186,600	518,600	2,056,700	1,374,600	3,949,900
Subtotal	25,845,600	83,284,200	21,336,700	130,466,500	32,726,500	73,132,200	16,492,900	122,351,600
<b>Intercounty</b>								
Kenosha-Racine Milwaukee Counties.....	--	714,500	266,100	980,600	--	601,900	285,700	887,600
Ozaukee-Milwaukee Counties.....	109,300	521,300	249,400	880,000	89,200	421,100	391,000	901,300
Washington-Milwaukee Counties.....	233,400	592,100	52,600	878,100	322,600	535,400	56,700	914,700
Waukesha-Milwaukee Counties.....	473,000	2,597,400	729,400	3,799,800	477,400	2,296,800	744,400	3,518,600
Western Kenosha County.....	418,900	73,100	28,600	520,600	425,300	--	158,000	583,300
Subtotal	1,234,600	4,498,400	1,326,100	7,059,100	1,314,500	3,855,200	1,635,800	6,805,500
<b>Total Bus Systems</b>	<b>27,080,200</b>	<b>87,782,600</b>	<b>22,662,800</b>	<b>137,525,600</b>	<b>34,041,000</b>	<b>76,987,400</b>	<b>18,128,700</b>	<b>129,157,100</b>
<b>Shared-Ride Taxi Systems</b>								
City of Hartford.....	81,400	71,000	13,300	165,700	82,100	66,300	19,800	168,200
Ozaukee County.....	145,700	695,800	422,900	1,264,400	167,600	791,300	322,000	1,280,900
City of Port Washington <sup>a</sup> .....	103,500	71,900	31,600	207,000	--	--	--	--
Washington County.....	401,000	1,017,300	389,800	1,808,100	352,300	919,900	420,000	1,692,200
City of West Bend.....	215,300	215,200	--	430,500	273,500	194,500	35,700	503,700
City of Whitewater.....	66,900	60,700	6,200	133,800	66,000	55,500	14,600	136,100
Subtotal	1,013,800	2,131,900	863,800	4,009,500	941,500	2,027,500	812,100	3,781,100
<b>Region Total</b>	<b>28,094,000</b>	<b>89,914,500</b>	<b>23,526,600</b>	<b>141,535,100</b>	<b>34,982,500</b>	<b>79,014,900</b>	<b>18,940,800</b>	<b>132,938,200</b>







Transit Services	Public Transit Operating Assistance per Ride (dollars)							
	2011 Actual/Estimated				2012 Actual/Estimated			
	Federal	State	Local	Total	Federal	State	Local	Total
<b>Fixed Route Bus Systems</b>								
<b>Intracounty</b>								
City of Kenosha.....	\$ 1.57	\$ 1.32	\$1.04	\$ 3.93	\$ 1.50	\$ 1.19	\$1.26	\$ 3.95
Milwaukee County.....	0.53	1.98	0.43	2.94	0.72	1.79	0.31	2.82
City of Racine.....	2.00	1.50	1.29	4.79	2.42	1.45	1.58	5.45
City of Waukesha.....	0.83	3.75	2.17	6.75	0.81	3.21	2.15	6.17
Weighted Average	0.61	1.97	0.51	3.09	0.80	1.78	0.40	2.98
<b>Intercounty</b>								
Kenosha-Racine Milwaukee Counties.....	--	8.62	3.21	11.83	--	7.25	3.44	10.69
Ozaukee-Milwaukee Counties.....	0.96	4.58	2.19	7.73	0.76	3.58	3.33	7.67
Washington-Milwaukee Counties.....	1.83	4.64	0.41	6.88	2.53	4.20	0.44	7.17
Waukesha-Milwaukee Counties.....	0.95	5.19	1.46	7.60	0.96	4.63	1.50	7.09
Western Kenosha County.....	27.93	4.87	1.91	34.71	23.50	--	8.73	32.23
Weighted Average	1.47	5.36	1.58	8.41	1.56	4.58	1.94	8.08
<b>Total Bus Systems</b>	<b>0.63</b>	<b>2.04</b>	<b>0.52</b>	<b>3.19</b>	<b>0.81</b>	<b>1.84</b>	<b>0.43</b>	<b>3.08</b>
<b>Shared-Ride Taxi Systems</b>								
City of Hartford.....	3.88	3.38	0.63	7.89	4.00	3.23	0.97	8.20
Ozaukee County.....	1.82	8.71	5.29	15.82	1.85	8.71	3.55	14.11
City of Port Washington <sup>a</sup> .....	5.12	3.56	1.57	10.25	--	--	--	--
Washington County.....	4.03	10.21	3.91	18.15	3.79	9.90	4.52	18.22
City of West Bend.....	1.75	1.75	--	3.50	2.28	1.62	0.30	4.20
City of Whitewater.....	2.04	1.85	0.19	4.08	2.07	1.74	0.46	4.27
Weighted Average	2.69	5.66	2.30	10.65	2.65	5.70	2.28	10.62
<b>Region Weighted Average</b>	<b>\$ 0.65</b>	<b>\$ 2.07</b>	<b>\$0.54</b>	<b>\$ 3.26</b>	<b>\$ 0.83</b>	<b>\$ 1.87</b>	<b>\$0.45</b>	<b>\$ 3.15</b>

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







Map 26

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

EXISTING 2013

-  PARK-RIDE LOT (EXCLUSIVE CONSTRUCTION AND USE)
-  TRANSIT STATION
-  INTERCITY RAIL
-  COMMUTER RAIL
-  RAPID BUS TRANSIT ROUTE (FREEWAY)
-  RAPID BUS TRANSIT ROUTE (NON-FREEWAY)
- 52 PARK-RIDE LOT NUMBER (SEE TABLE 18)

ADDITIONAL FACILITIES PROPOSED IN ADOPTED REGIONAL TRANSPORTATION PLAN

-  PARK-RIDE LOT (EXCLUSIVE CONSTRUCTION AND USE)
-  TRANSIT STATION
-  INTERCITY RAIL
-  COMMUTER RAIL
-  RAPID BUS TRANSIT ROUTE (FREEWAY)
-  RAPID BUS TRANSIT ROUTE (NON-FREEWAY)

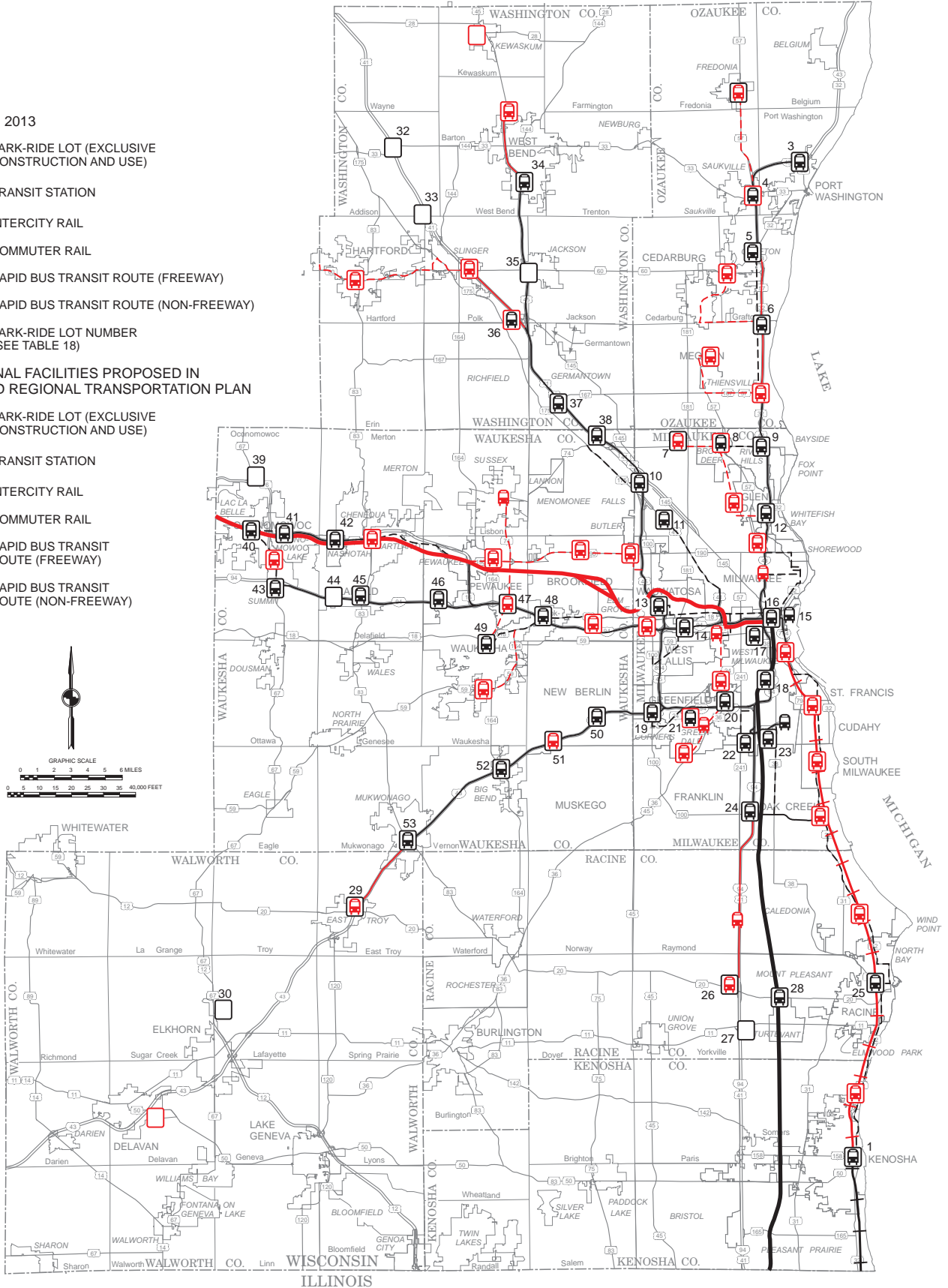


Table 18

## AVERAGE WEEKDAY USE OF PARK-RIDE LOTS AND TRANSIT STATIONS: 2013

Number On Map 7	Location	Served by Transit	Not served by Transit	Shared Use	Available Parking Spaces	Autos Parked on an Average Weekday: 2013	Percent of Spaces Used
1	<u>Kenosha County</u> Metra Station (Kenosha)	X		X	145	-- <sup>a</sup>	-- <sup>a</sup>
2	<u>Ozaukee County</u> STH 57 and CTH H (Fredonia)		X		60	10	17
3	IH 43 and STH 32-CTH H (Port Washington)	X			50	19	38
4	Wal-Mart (Saukville)	X		X	50	-- <sup>a</sup>	-- <sup>a</sup>
5	IH 43 and CTH V (Grafton)	X			85	37	44
6	IH 43 and CTH C (Grafton)	X			65	86	132
7	<u>Milwaukee County</u> STH 100 and N. 85th Street (Milwaukee)		X		100	-- <sup>a</sup>	-- <sup>a</sup>
8	Kohl's (Brown Deer)	X		X	130	-- <sup>a</sup>	-- <sup>a</sup>
9	Brown Deer (River Hills)	X			360	109	30
10	W. Good Hope Road (Milwaukee)	X			135	38	28
11	Timmerman Field (Milwaukee)	X			140	2	1
12	North Shore (Glendale)	X			195	81	42
13	W. Watertown Plank Road (Wauwatosa)	X			240	99	41
14	State Fair Park (Milwaukee)	X			285	173	61
15	Downtown Milwaukee Intermodal Amtrak Station	X			240	-- <sup>a</sup>	-- <sup>a</sup>
16	Milwaukee County Transit System Downtown Transit Center (Milwaukee)	X		X	-- <sup>b</sup>	-- <sup>a</sup>	-- <sup>a</sup>
17	National Avenue and IH 43/94 (Milwaukee)	X		X	55	-- <sup>a</sup>	-- <sup>a</sup>
18	W. Holt Avenue (Milwaukee)	X			235	75	32
19	Whitnall (Hales Corners)	X			360	184	51
20	W. Loomis Road (Greenfield)	X			410	69	17
21	Southridge (Greendale)	X		X	170	-- <sup>a</sup>	-- <sup>a</sup>
22	W. College Avenue (Milwaukee)	X			650	243	37
23	Mitchell Airport Amtrak Station (Milwaukee)	X			280	177	63
24	W. Ryan Road (Oak Creek)	X			305	144	47
25	<u>Racine County</u> Racine Metro Transit Center (Racine)	X			120	-- <sup>a</sup>	-- <sup>a</sup>
26	IH 94 and STH 20 (Ives Grove)		X		75	58	77
27	IH 94 and STH 11 (Mount Pleasant)		X		60	43	72
28	Sturtevant Amtrak Station (Sturtevant)	X			180	-- <sup>a</sup>	-- <sup>a</sup>
29	<u>Walworth County</u> East Troy Municipal Airport (East Troy)		X		40	6	15
30	USH 12 and STH 67 (Elkhorn)		X		40	12	30
31	USH 12 and CTH P (Genoa City)		X		40	10	25
32	<u>Washington County</u> USH 41 and STH 33 (Allenton)		X		35	42	120
33	USH 41 and CTH K (Addison)		X		50	13	26
34	USH 45 and Paradise Drive (West Bend)	X			100	124	124
35	STH 60 and CTH P (Jackson)		X		30	8	27
36	Pioneer Road and Mayfield Road (Richfield)	X			30	61	203
37	USH 41 and Lannon Road (Germantown)	X			100	124	124
38	<u>Waukesha County</u> Pilgrim Road (Menomonee Falls)	X			70	37	53
39	STH 67 and Lang Road (Oconomowoc)		X		35	6	17
40	Collins Street Parking Lot (Oconomowoc)	X		X	-- <sup>b</sup>	-- <sup>a</sup>	-- <sup>a</sup>
41	STH 16 and CTH P (Oconomowoc)	X			45	10	22
42	STH 16 and CTH C (Nashotah)	X			60	10	17
43	STH 67 and CTH DR (Summit)	X			100	53	53
44	IH 94 and CTH C (Delafield)		X		30	32	107
45	IH 94 and STH 83 (Delafield)	X			200	74	37
46	IH 94 and CTH G/CTH SS (Pewaukee)	X			245	78	32
47	IH 94 and CTH F (Pewaukee)		X		85	38	45
48	Goerke's Corners (Brookfield)	X			315	222	70
49	Waukesha Metro Transit Downtown Transit Center (Waukesha)	X		X	-- <sup>b</sup>	-- <sup>a</sup>	-- <sup>a</sup>
50	IH 43 and Moorland Road (New Berlin)	X			175	34	19
51	IH 43 and CTH Y (New Berlin)		X		45	21	47
52	IH 43 and STH 164 (Big Bend)	X			145	45	31
53	IH 43 and STH 83 (Mukwonago)	X			165	63	38
--	Total	--	--	--	7,360	3,057	42

<sup>a</sup>Data not available.<sup>b</sup>Parking available within larger public lot or structure.



Table 19

STATE TRUNK HIGHWAY PAVEMENT CONDITION IN THE REGION: 2006, 2012, AND 2013

International Roughness Index	2006		2012		2013	
	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	927	74.8	969	78.8
2.50 to 2.75.....	76	6.2	78	6.3	80	6.5
2.75 to 3.00.....	61	4.9	59	4.8	61	5.0
3.00 to 12.00.....	161	13.0	166	13.4	113	9.2
No Rating.....	20	1.6	9	0.7	9	0.6
Total	1,234	100.0	1,239	100.0	1,230	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.

6 percent of all county and local arterials in 2005 to 2.5 percent in 2013. 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, 2012, and 2013 are shown in Table 21, while the 2013 ratings for individual bridge structures in the Region are shown on Map 29. The number of bridges in the Region having a rating less than 50, and therefore in need of replacement, has declined by about 17 percent over the past seven years. Similarly, the number of bridge structures with a rating from 50 to 80, indicating a need for rehabilitation, has declined by nearly 15 percent over that same seven-year period.

**Volume of Travel**

The amount of travel within the Region on the arterial street and highway system on an average weekday is set forth in Table 22 for selected years from 1963-2011. The regional freeway system of about 269 miles, while representing only about 8 percent of the total arterial street and highway system in the Region, carried about 38 percent of the approximately 41 million vehicle miles of travel (VMT) on an average weekday in the Region in 2011. This proportion of travel on the freeway system has held relatively steady since the early 1990s and demonstrates the heavy reliance on that system for a wide variety of trip-making activities.

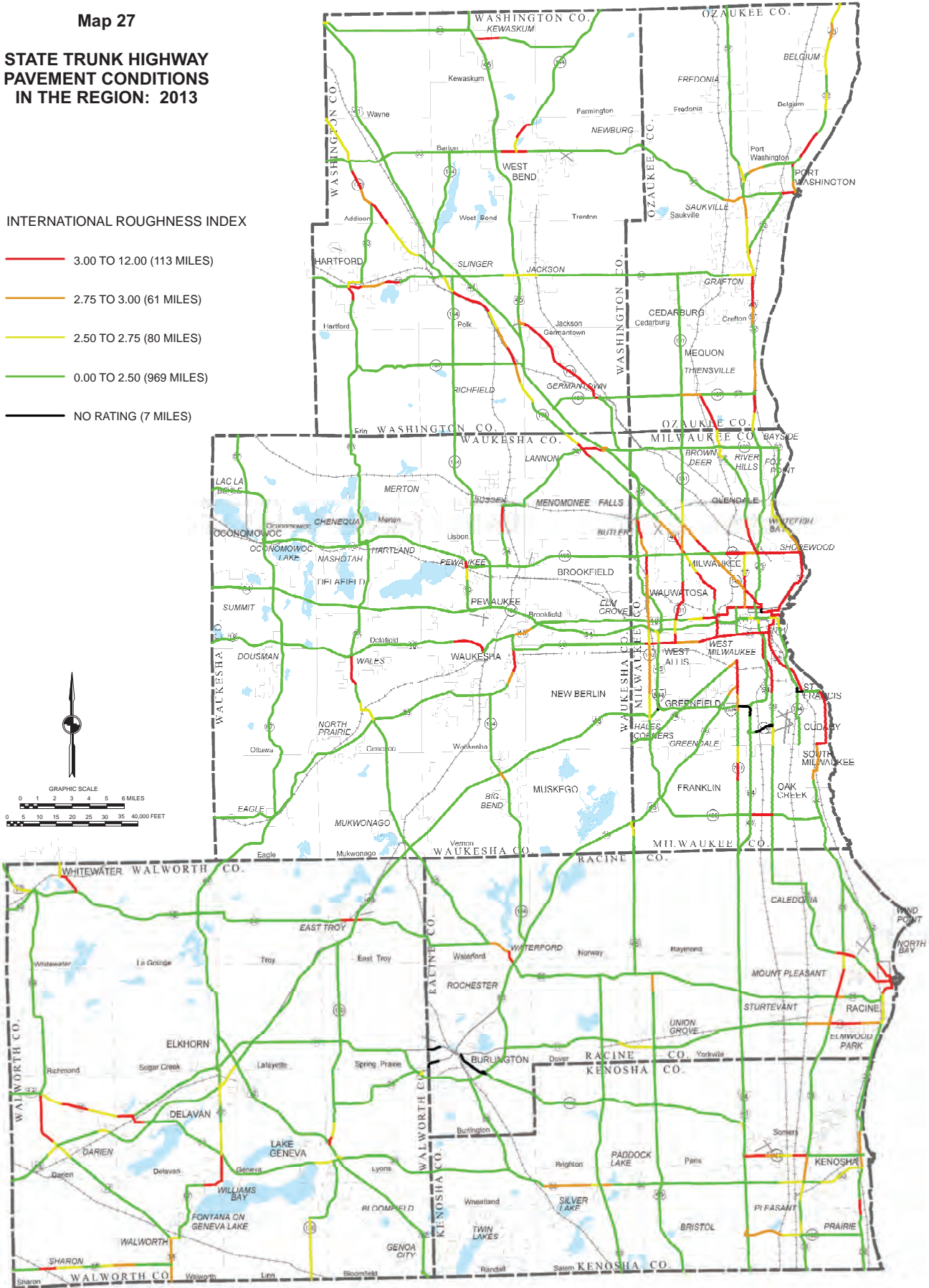
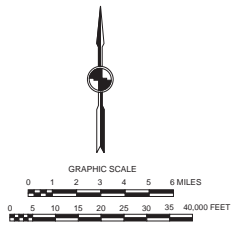
The average annual growth rate of average weekday travel by decade since the early 1960s is identified in Table 23. While the volume of travel significantly increased in each of the four decades prior to the turn of the 21st century, that increase has significantly slowed since then, averaging only a 0.3 percent annual increase. This significant decline in the rate of growth may be largely attributed to the economic downturn beginning in 2008, with attendant high unemployment, loss of jobs, and consequent significant decline in travel to and from work. Among other factors at play in this phenomenon are a slowing regional population growth rate and declining average household incomes in real dollar terms. Emerging preferences in lifestyle that favor more dense, compact living environments, shorter trip-making requirements, and consequent minimization of personal transportation expenditures have the potential to impact the overall amount of travel. Those factors, however, likely did not significantly contribute to an observed travel decline in the post-2008 period.

Map 27

STATE TRUNK HIGHWAY  
PAVEMENT CONDITIONS  
IN THE REGION: 2013

INTERNATIONAL ROUGHNESS INDEX

- 3.00 TO 12.00 (113 MILES)
- 2.75 TO 3.00 (61 MILES)
- 2.50 TO 2.75 (80 MILES)
- 0.00 TO 2.50 (969 MILES)
- NO RATING (7 MILES)



### **Congestion on Arterial Street and Highway System**

Traffic congestion on the arterial street and highway system may be categorized as moderate, severe, or extreme, with each level characterized by travel speed, operating conditions, and level of service, (see Table 24). The freeway system represents less than 10 percent of total arterial system mileage, but carries nearly 38 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, as well as experiencing traffic congestion during hours of the weekday other than the peak traffic hours. The existing levels of traffic congestion experienced in the years 2001 and 2011 are set forth in Table 25 and shown on Map 30.

The amount of traffic congestion on the arterial street and highway system for the years 1963, 1972, 1991, 2001, and 2011 is set forth in Table 26 and summarily shown in Figure 39. 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 each, and as vehicle occupancy and carpooling significantly declined. The decline in vehicle occupancy from an average of 1.39 persons per vehicle to 1.22 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 completed 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 and then decreased to 274 miles in 2011. From 1991 to 2001, traffic is estimated to have increased by about 20 percent, and then increased from 2001 to 2011 by about 3 percent. The decrease in traffic congestion between 2001 and 2011 may be attributed to the combination of a relatively modest increase in traffic coupled with the implementation of a number of

significant surface arterial street and highway widening and new construction projects over the same time period.

While the extent of congestion on the freeway system in Southeastern Wisconsin is estimated to have increased between 2001 and 2011, some segments of the freeway system have experienced a decrease in the severity of congestion. These decreases are likely attributed to lane closures associated with maintenance and reconstruction projects that were under way along the freeway system in recent years, particularly the resurfacing of IH 94 generally between STH 16 in Waukesha County and the Stadium Interchange in Milwaukee County and the reconstruction and reconfiguration of the Mitchell Interchange in Milwaukee County as part of the reconstruction and widening of the North-South segment of IH 94 between the Mitchell Interchange and the Illinois state line. It is expected that traffic volumes and attendant levels of congestion on the regional freeway system will continue to be impacted as that system is reconstructed segment by segment over the next 30 years. 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, is set forth in Table 27, Figure 40, and Map 31.

### **Congestion on Designated Truck Routes and National Highway System**

The levels of traffic congestion experienced on designated truck routes and the National Highway System for the years 2001 and 2011 are presented in Table 28 and Map 32. The State of Wisconsin maintains a truck operations map that identifies streets and highways for operation of vehicles and combinations 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 has remained relatively the same over the past 10 years, increasing only 1.5 percent from 202 miles in 2001 to 205 miles in 2011. As congestion on these roadways increases, the travel time of freight movement is adversely affected.

Table 20

**COUNTY AND LOCAL ARTERIAL STREET AND HIGHWAY  
PAVEMENT CONDITION IN THE REGION: 2005, 2011, AND 2013**

PASER Pavement Rating	2005		2011		2013	
	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	92	3.9	59	2.5
3 and 4.....	233	10.2	227	9.6	244	10.3
5 and 6.....	431	18.8	556	23.4	501	21.2
7.....	376	16.4	431	18.1	444	18.8
8, 9, and 10.....	907	39.5	884	37.2	935	39.7
No Rating.....	215	9.4	185	7.8	175	7.4
Total	2,294	100.0	2,375	100.0	2,358	100.0

Figure 37

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

Visual Surface Assessment Condition Rating		Maintenance or Repair Requirements
Number	Classification	
1	Failed	Severely Deteriorated; Requires Reconstruction
2	Very Poor	
3	Poor	Structural Improvement Such as Recycling or Overlay
4	Fair	
5	Fair	Preservation Treatments Such as Sealcoating or Overlays
6	Good	
7	Good	Routine Maintenance such as crack filling
8	Very Good	Little to no Maintenance Required
9	Excellent	
10	Excellent	

*The identified maintenance or repair requirements apply to asphalt roads; similar requirements exist for concrete roads.*

**Arterial Highway and Transit Travel Times**

The estimated peak-hour travel speeds for selected freeway and surface arterial street segments for 2001 and 2011 are shown on Map 33. Estimated peak-hour arterial street and highway travel time contours for 2001 and 2011 are shown on Map 34 for two locations: the Milwaukee central business district and the Milwaukee regional medical center. Year 2001 and 2011 arterial street and highway travel times are very similar, displaying little change.

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 2011 is shown on Map 35. Transit travel time is longer than automobile travel time because it includes the time spent in the transit vehicle and also 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 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 2011; however, the travel time ratios for 2011 likely have not changed significantly.

**Transportation Air Pollutant Emissions and Fuel Consumption**

The estimated transportation system air pollutant emissions and motor fuel consumption within southeastern Wisconsin for the years 2001 and 2010 are shown in Table 29. Estimated air pollutant emissions have declined for all pollutants—particularly volatile organic compounds and nitrogen oxides—owing to cleaner, more efficient vehicles,

Map 28

**COUNTY AND LOCAL ARTERIAL  
PAVEMENT CONDITIONS  
IN THE REGION: 2013**

PASER PAVEMENT RATING

- 1-2 (59 MILES)
- 3-4 (244 MILES)
- 5-6 (501 MILES)
- 7 (444 MILES)
- 8, 9, 10 (935 MILES)
- NO RATING (175 MILES)

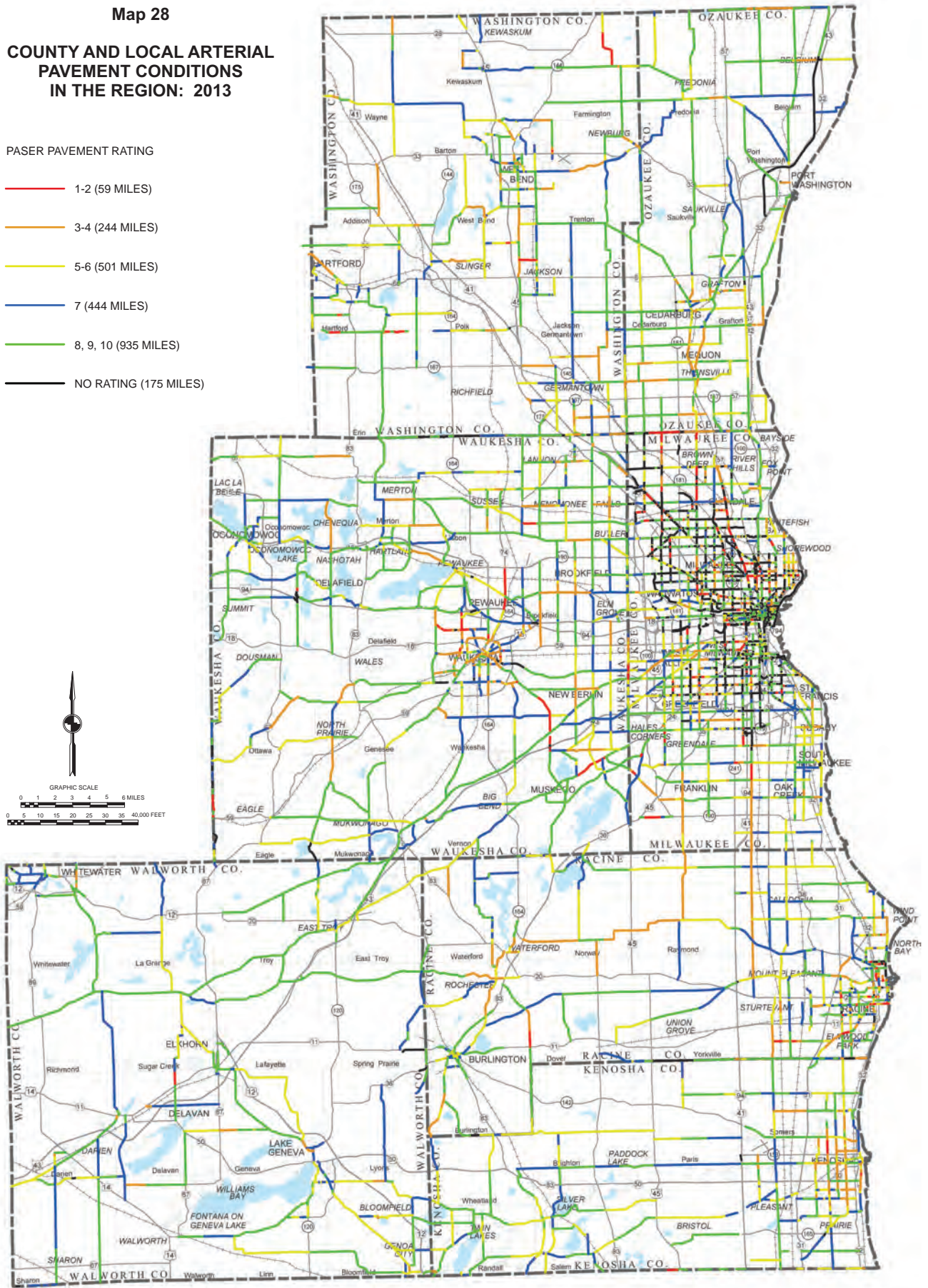
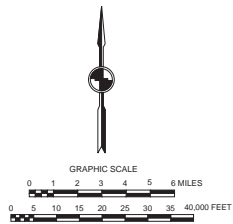


Table 21

**SUFFICIENCY RATINGS FOR BRIDGE STRUCTURES  
IN THE REGION: 2006, 2012, AND 2013**

Sufficiency Rating	Number of Bridges			Percent Change 2006-2013
	2006	2012	2013	
Less than 50.0 .....	98	86	81	-17.3
50.0 to 79.9.....	520	469	441	-15.2
80.0 to 100.0.....	1,244	1,363	1,372	10.3
Total	1,862	1,918	1,894	1.7

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.*

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).

**Vehicular Crashes**

**Number of Crashes**

Vehicular crashes in the Region totaled about 38,900 in 2013, representing a nearly 9 percent increase over 2012. Over the 19-year period 1994-2013, the number of vehicular crashes in the Region decreased by about 22 percent (see Figure 41). Crashes involving an injury or a fatality increased slightly to about 11,900 crashes in 2013, representing about one-third of all crashes. Over the period 1994-2013, crashes involving an injury or a fatality have decreased by about 34 percent. Property-damage-only crashes increased over the past year by about 12 percent, to about 27,000 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 a similar period of about 17 percent.

**Fatal Crashes**

There were 120 vehicular crashes in the Region in 2013 that resulted in 123 fatalities. As shown in Figure 42, before the decline of 21 percent between 2012 and 2013, roadway crash fatalities had increased each year since 2009. Figure 43 presents selected characteristics of vehicle crash related fatalities in the Region during 2013. About 14 percent of fatalities involved bicyclists and pedestrians and another 24 percent involved motorcyclists. Alcohol was cited as a contributing factor in about 37 percent of all fatalities.

**Serious Injury Crashes**

In 2013, there were about 780 vehicle crashes in the Region that resulted in at least one serious injury, representing a 6 percent decrease from 2012. As shown in Figure 44, over the period of 1994-2013 the number of crashes resulting in serious injury has declined significantly, by 64 percent.

**Bicycle and Pedestrian Crashes**

In 2013, there were 381 vehicular crashes involving bicycles and 712 vehicular crashes involving pedestrians. Over the past 20 years, the number of bicycle and pedestrian crashes has significantly decreased by nearly 46 percent and 42 percent, respectively (see Figure 45). The number of bicycle and pedestrian crashes resulting in a fatality or serious injury has also decreased substantially over the past 20 years, as seen in Figure 46. In 2013, there were 40 bicycle crashes and 128 pedestrian crashes resulting in a fatality or serious injury.

Map 29

**BRIDGE STRUCTURE CONDITIONS  
IN THE REGION: 2013**

**SUFFICIENCY RATING INDEX**

- 0 TO 49.9
- 50.0 TO 79.9
- 80.0 TO 100.0

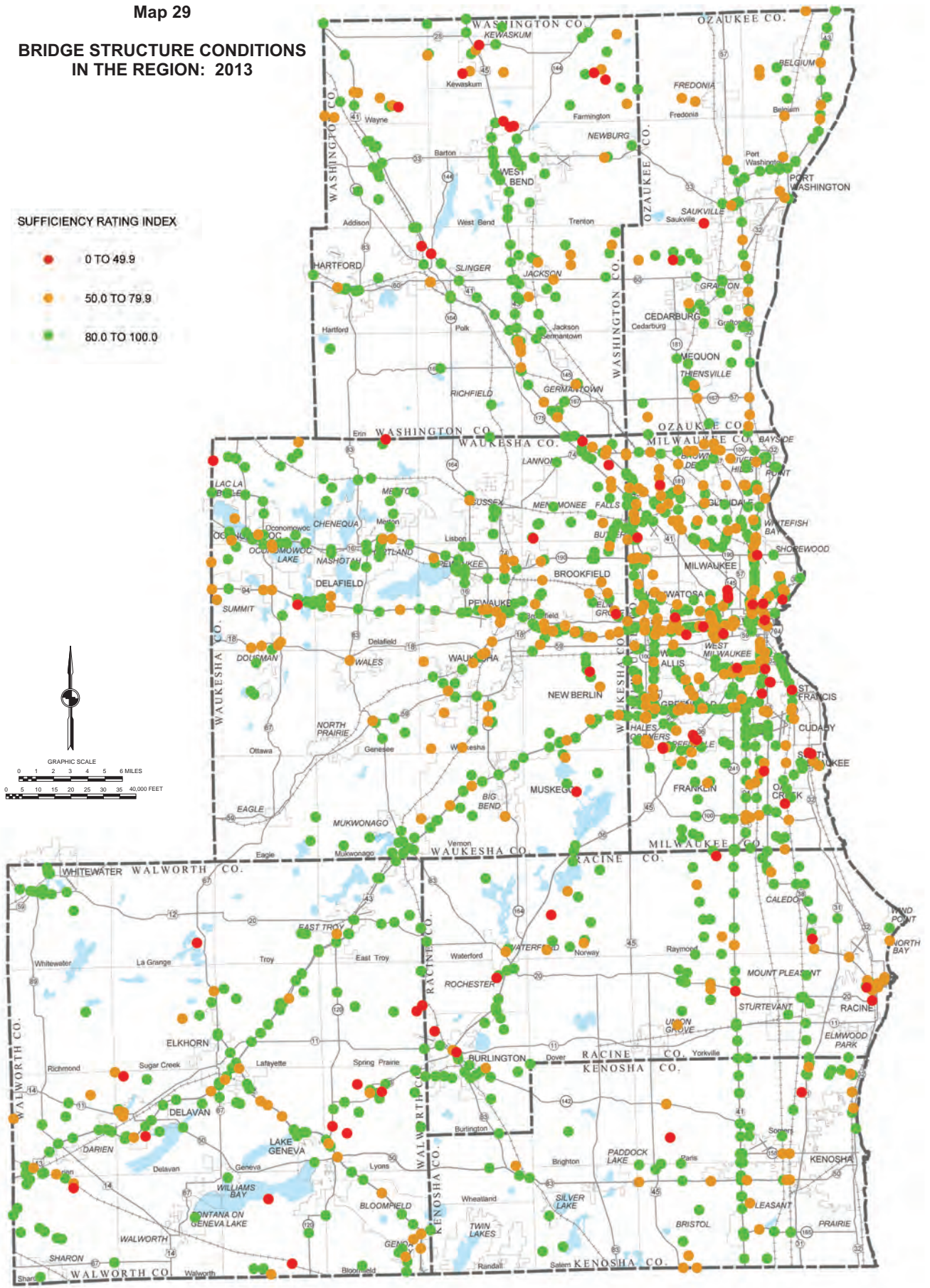
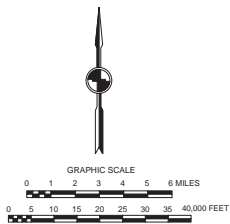


Table 22

**ARTERIAL VEHICLE-MILES OF TRAVEL WITHIN THE REGION ON  
AN AVERAGE WEEKDAY BY COUNTY: 1963, 1972, 1991, 2001, AND 2011**

Year	County	Freeway		Standard Arterial		Total Vehicle Miles of Travel (thousands)
		Vehicle-Miles of Travel (thousands)	Percent of Total	Vehicle-Miles of Travel (thousands)	Percent of Total	
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
2011	Kenosha.....	906	25.9	2,590	74.1	3,497
	Milwaukee.....	6,770	41.8	9,440	58.2	16,210
	Ozaukee.....	974	40.9	1,405	59.1	2,378
	Racine.....	930	26.8	2,537	73.2	3,468
	Walworth.....	877	35.8	1,576	64.2	2,452
	Washington.....	1,541	44.8	1,901	55.2	3,442
	Waukesha.....	3,362	35.7	6,053	64.3	9,415
	Region	15,361	37.6	25,502	62.4	40,862

Table 23

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

County	Average Annual Growth Rate of Average Weekday Vehicle-Miles of Travel				
	1960s	1970s	1980s	1990s	2000s
Kenosha.....	4.8	3.4	2.7	2.2	1.2
Milwaukee.....	4.3	1.5	1.6	1.3	-0.1
Ozaukee.....	6.5	4.1	4.6	1.5	0.5
Racine.....	5.4	2.7	2.5	1.3	0.3
Walworth.....	2.7	5.3	3.3	2.0	0.5
Washington.....	5.7	3.6	4.0	2.7	1.1
Waukesha.....	7.0	4.2	3.7	2.7	0.3
Region	4.9	2.7	2.6	1.9	0.3



**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	C	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	C	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	E	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.

**Table 25**

**TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION BY COUNTY: 2001 AND 2011**

2001

County	Under or At Design Capacity		Over Design Capacity						Total Mileage
			Moderate Congestion		Severe Congestion		Extreme Congestion		
	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	
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

2011

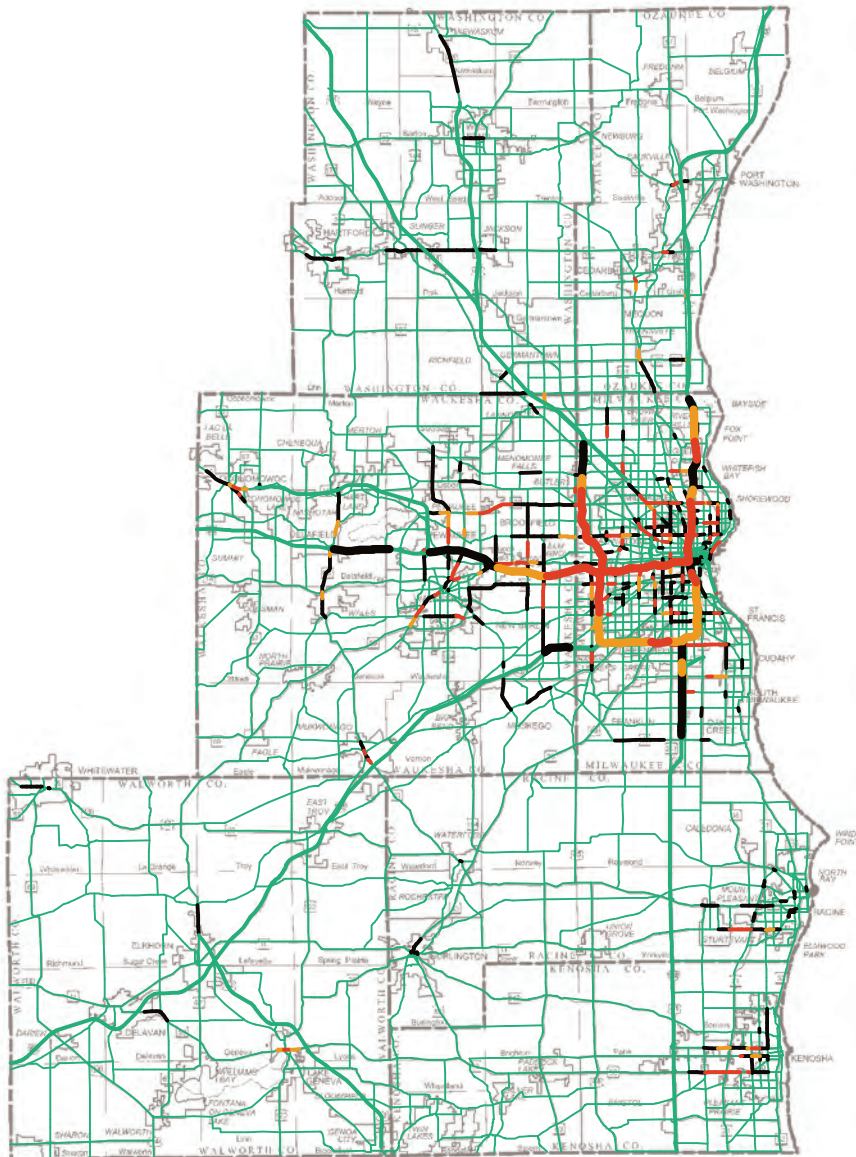
County	Under or At Design Capacity		Over Design Capacity						Total Mileage
			Moderate Congestion		Severe Congestion		Extreme Congestion		
	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	
Kenosha .....	303.2	94.8	11.3	3.5	4.9	1.5	0.6	0.2	320.0
Milwaukee.....	647.5	82.1	64.6	8.2	49.5	6.3	26.8	3.4	788.4
Ozaukee .....	236.2	94.2	9.6	3.8	4.7	1.9	0.3	0.1	250.8
Racine .....	345.0	96.3	9.5	2.7	2.5	0.7	1.3	0.4	358.3
Walworth.....	442.6	99.3	2.4	0.5	0.4	0.1	0.2	0.0	445.6
Washington.....	397.8	97.9	6.1	1.5	2.3	0.6	0.3	0.1	406.5
Waukesha.....	676.5	89.8	43.4	5.8	27.9	3.7	5.5	0.7	753.3
Region	3,048.8	91.8	146.9	4.4	92.2	2.8	35.0	1.1	3,322.9

Map 30

CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: YEARS 2001 AND 2011

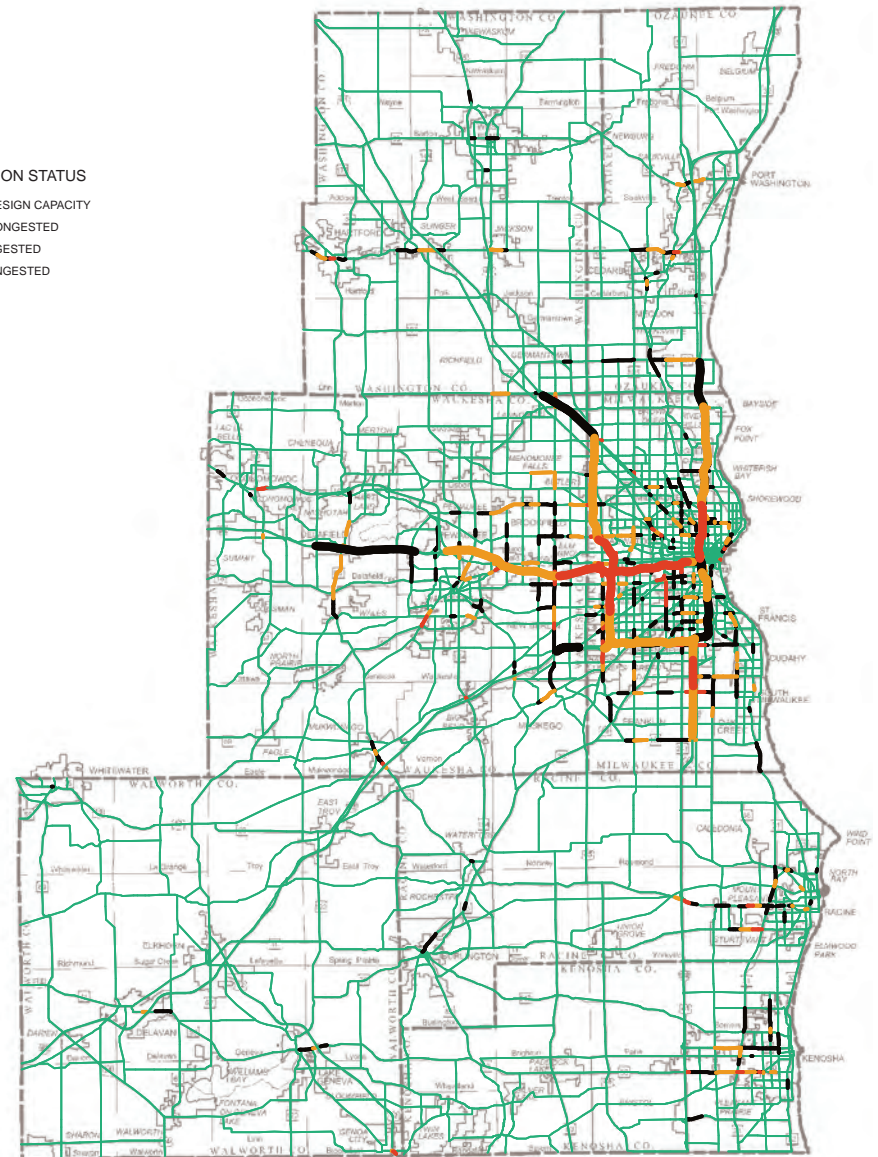
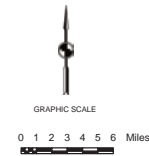
2001

2011<sup>a</sup>



FACILITY CONGESTION STATUS

- AT OR UNDER DESIGN CAPACITY
- MODERATELY CONGESTED
- SEVERELY CONGESTED
- EXTREMELY CONGESTED



Source: SEWRPC.

<sup>a</sup> DURING 2011, THE TRAFFIC VOLUME ON THE FREEWAY SYSTEM WAS IMPACTED BY LANE CLOSURES ATTENDANT TO THE RESURFACING OF IH 94 BETWEEN STH 16 AND THE STADIUM INTERCHANGE, AND THE RECONSTRUCTION OF THE MITCHELL INTERCHANGE.

Table 26

**TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 1963, 1972, 1991, 2001, 2005, AND 2011**

Traffic Congestion	Arterial Street and Highway Mileage					
	1963	1972	1991	2001	2005	2011
Under or At Design Capacity.....	2,971	2,959	2,986	3,002	2,993	3,049
Over Design Capacity and Experiencing Traffic Congestion.....	217	160	273	290	310	274
Total	3,188	3,119	3,259	3,292	3,303	3,323

Table 27

**ESTIMATED EXISTING SOUTHEASTERN WISCONSIN FREEWAY SYSTEM TRAFFIC CONGESTION ON AN AVERAGE WEEKDAY: 1972, 1991, 2001, 2005, AND 2011**

Year	Highest Level of Hourly Congestion Experienced	Miles of Congested Freeways		Average Hours of Congestion on an Average Weekday			
		Number	Percent of Freeway System	Extreme	Severe	Moderate	Total
2011	Extreme.....	18	6.8	1.3	2.9	3.9	8.1
	Severe.....	34	12.9	--	1.4	2.3	3.7
	Moderate.....	21	7.7	--	--	1.8	1.8
	Total	73	27.4	--	--	--	--
2005	Extreme.....	29	10.7	1.2	2.7	3.7	7.6
	Severe.....	23	8.5	--	1.2	2.3	3.5
	Moderate.....	16	6.0	--	--	2.2	2.2
	Total	68	25.2	--	--	--	--
2001	Extreme.....	24	8.9	1.4	3.3	4.4	9.1
	Severe.....	18	6.7	--	1.5	2.5	4.0
	Moderate.....	22	8.1	--	--	2.1	2.1
	Total	64	23.7	--	--	--	--
1991	Extreme.....	11	4.4	1.0	2.1	3.1	6.2
	Severe.....	12	4.8	--	1.1	2.9	4.0
	Moderate.....	23	9.1	--	--	2.3	2.3
	Total	46	18.3	--	--	--	--
1972	Extreme.....	--	--	--	--	--	--
	Severe.....	2	1.2	--	1.0	3.0	4.0
	Moderate.....	7	4.3	--	--	2.8	2.8
	Total	9	5.5	--	--	--	--

Figure 39

**TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 1963, 1972, 1991, 2001, 2005, AND 2011**

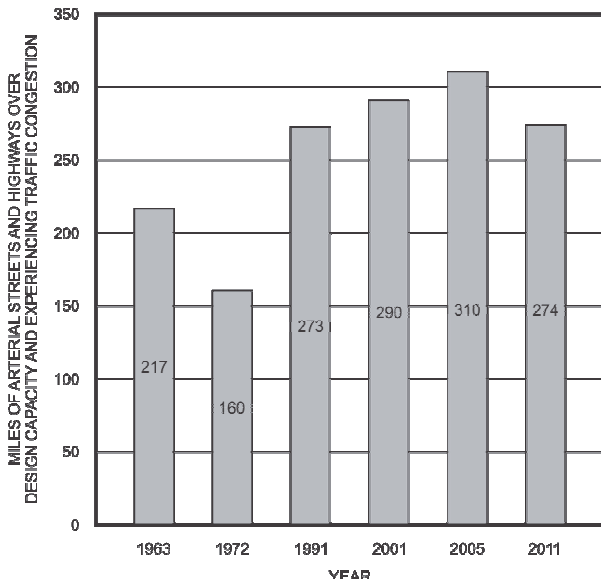
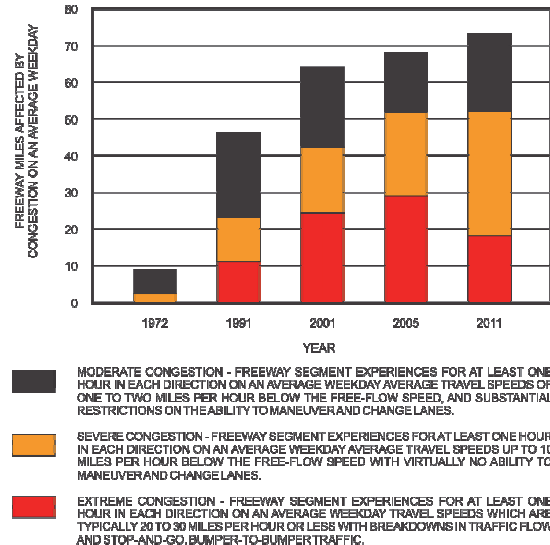


Figure 40

**ESTIMATED EXISTING SOUTHEASTERN WISCONSIN FREEWAY SYSTEM TRAFFIC CONGESTION ON AN AVERAGE WEEKDAY: 1972, 1991, 2001, 2005, AND 2011**

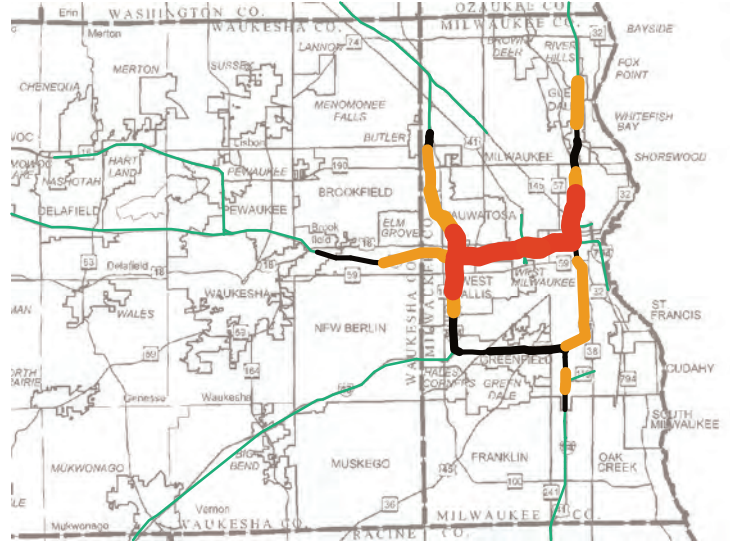
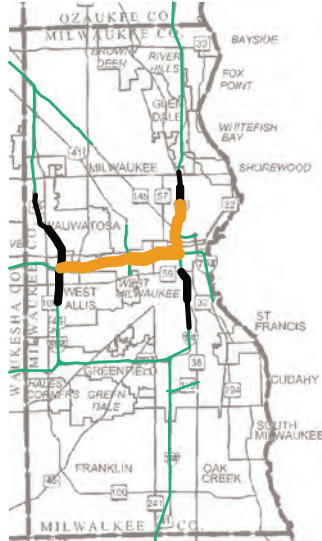
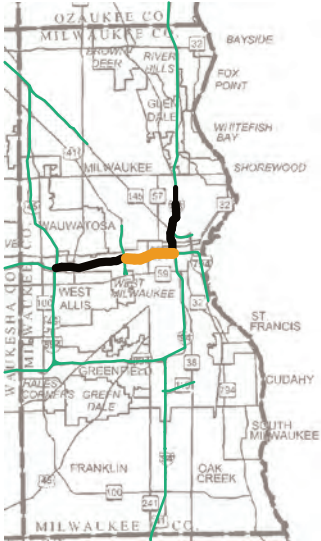


HISTORIC TRAFFIC CONGESTION ON THE SOUTHEASTERN WISCONSIN FREEWAY SYSTEM

1972

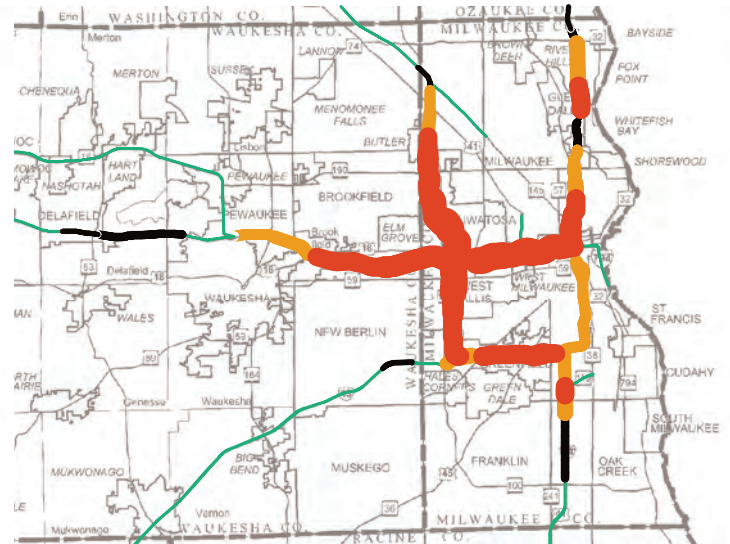
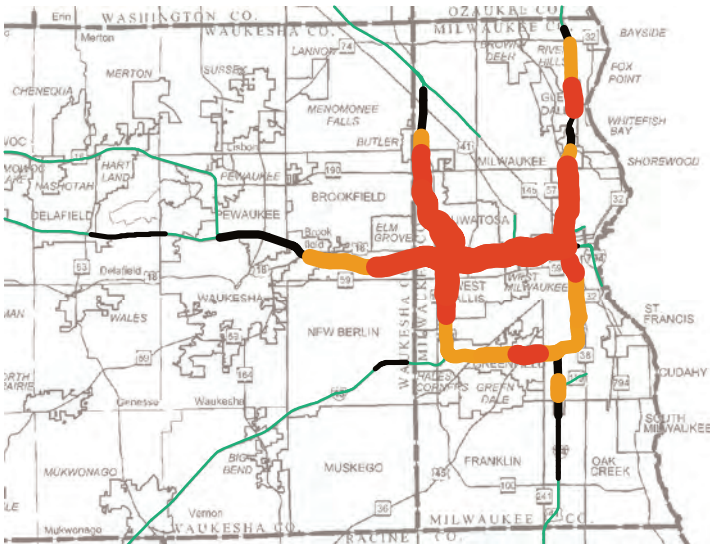
1980

1991

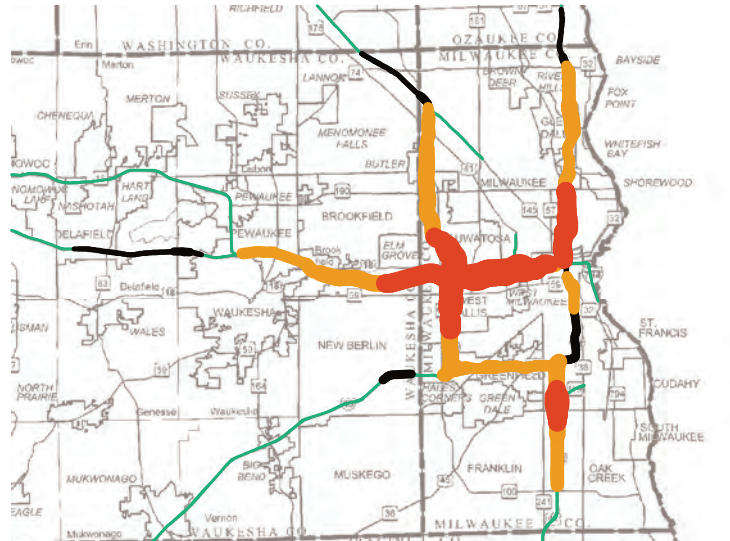


2001

2005



2011<sup>a</sup>



MOST SEVERE LEVEL OF WEEKDAY HOURLY CONGESTION EXPERIENCED	ESTIMATED HOURS OF CONGESTION ON AN AVERAGE WEEKDAY	ESTIMATED AVERAGE WEEKDAY HOURS OF CONGESTION BY CONGESTION LEVEL		
		EXTREME	SEVERE	MODERATE
NO CONGESTION	NO CONGESTION	--	--	--
MODERATE	1	--	--	1
MODERATE	3	--	--	3
SEVERE	3	--	1	2
SEVERE	4	--	1	3
SEVERE	4	--	2	2
EXTREME	6	1	2	3
EXTREME	8	1	3	4
EXTREME	11	2	4	5
EXTREME	13	2	5	6
EXTREME	14	2	5	7
EXTREME	15	3	5	7
EXTREME	16	4	5	7
EXTREME	17	4	6	7

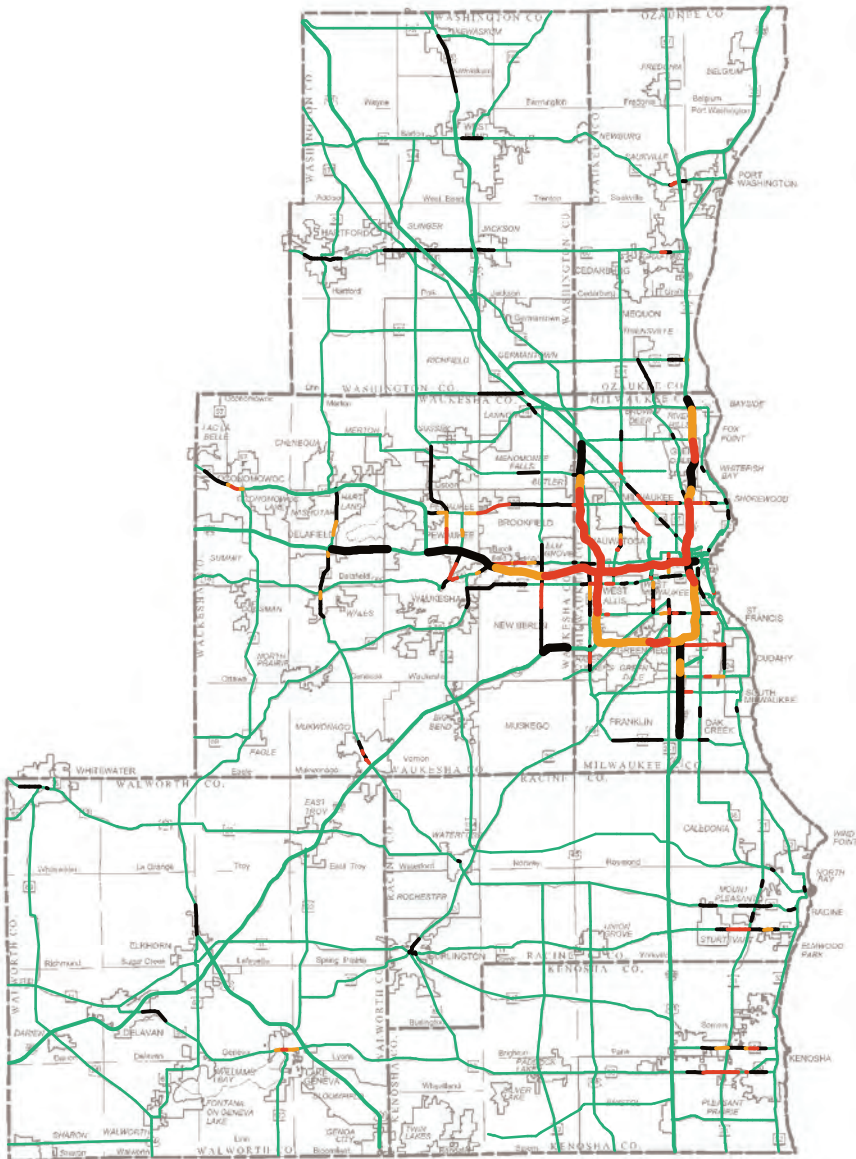
<sup>a</sup> DURING 2011, THE TRAFFIC VOLUME ON THE FREEWAY SYSTEM WAS IMPACTED BY LANE CLOSURES ATTENDANT TO THE RESURFACING OF IH 94 BETWEEN STH 16 AND THE STADIUM INTERCHANGE, AND THE RECONSTRUCTION OF THE MITCHELL INTERCHANGE.

Map 32

CONGESTION ON DESIGNATED TRUCK ROUTES AND THE NATIONAL HIGHWAY SYSTEM IN THE REGION: YEARS 2001 AND 2011

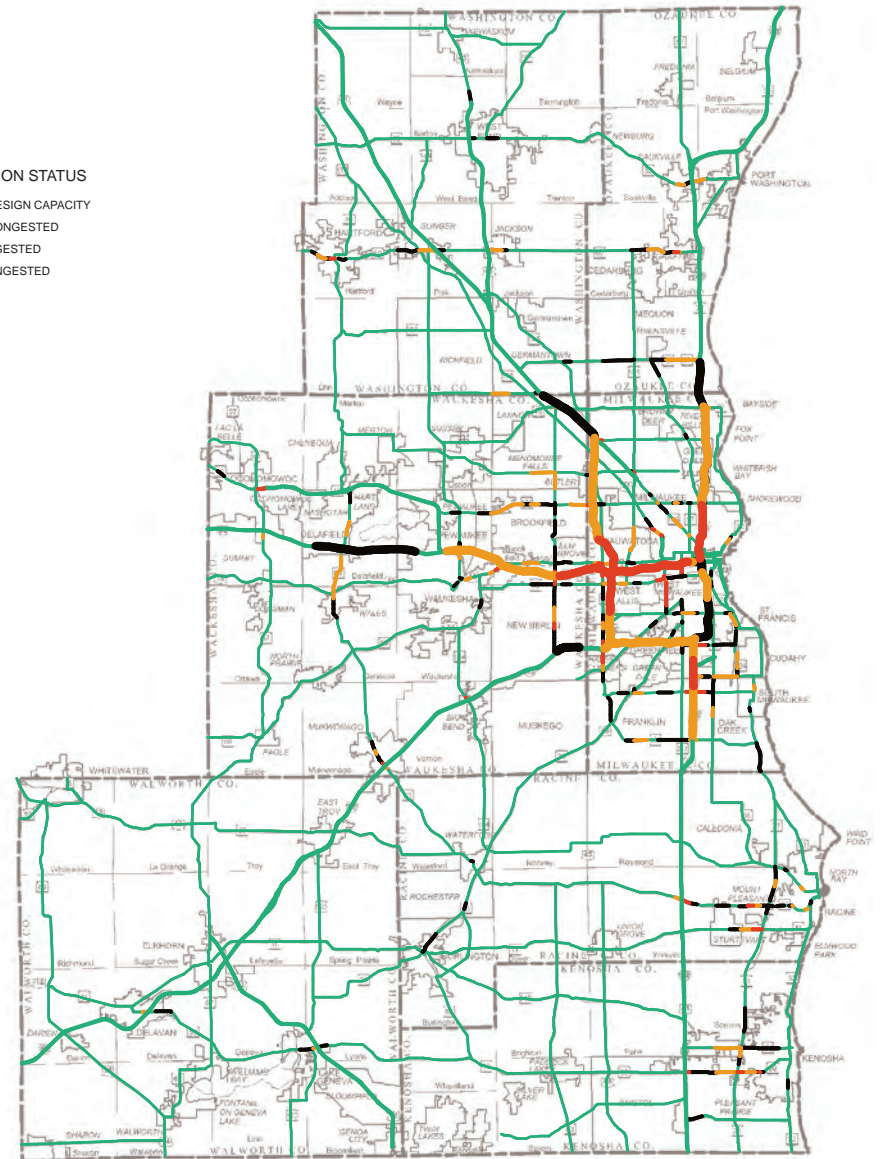
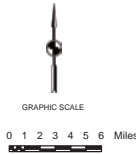
2001

2011<sup>a</sup>



FACILITY CONGESTION STATUS

- AT OR UNDER DESIGN CAPACITY
- MODERATELY CONGESTED
- SEVERELY CONGESTED
- EXTREMELY CONGESTED



<sup>a</sup> DURING 2011, THE TRAFFIC VOLUME ON THE FREEWAY SYSTEM WAS IMPACTED BY LANE CLOSURES ATTENDANT TO THE RESURFACING OF IH 94 BETWEEN STH 16 AND THE STADIUM INTERCHANGE, AND THE RECONSTRUCTION OF THE MITCHELL INTERCHANGE.

Table 28

**TRAFFIC CONGESTION ON DESIGNATED TRUCK ROUTES AND THE  
NATIONAL HIGHWAY SYSTEM IN THE REGION: 2001 AND 2011**

Year	Under or At Design Capacity	Over Design Capacity			
		Moderate Congestion	Severe Congestion	Extreme Congestion	Total Mileage
2001	1,114	119	32	51	1,316
2011	1,126	98	76	31	1,331

Table 29

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

Year	Estimated Air Pollutant Emissions (Tons per Hot Summer Weekday)						
	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

Year	Estimated Air Pollutant Emissions (Tons per Hot Summer Weekday)					Estimated Fuel Consumption (Gallons per Average Weekday)
	Butadiene	Acetaldehyde	Acrolein	Benzene	Formaldehyde	
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>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.

### **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 holding steady 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 2013—by 13 percent to a level of about 6.5 million passengers (see Table 31 and Figure 47). Since 2004, passenger travel at GMIA increased until 2010—peaking at a level of about 9.8 million—but has subsequently declined by 34 percent from 2010-2013.

#### **Change in GMIA Major Aircraft Operations**

The number of scheduled air carrier and military aircraft operations (aircraft takeoffs and landings) at GMIA decreased in 2013 by nearly 11 percent, to a level of about 105,900 operations (see Table 32 and Figure 48). Over the 10-year period 2004-2013, scheduled air carrier and military aircraft operations at GMIA have declined nearly 45 percent, peaking at a level of about 196,300 operations in 2005.

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

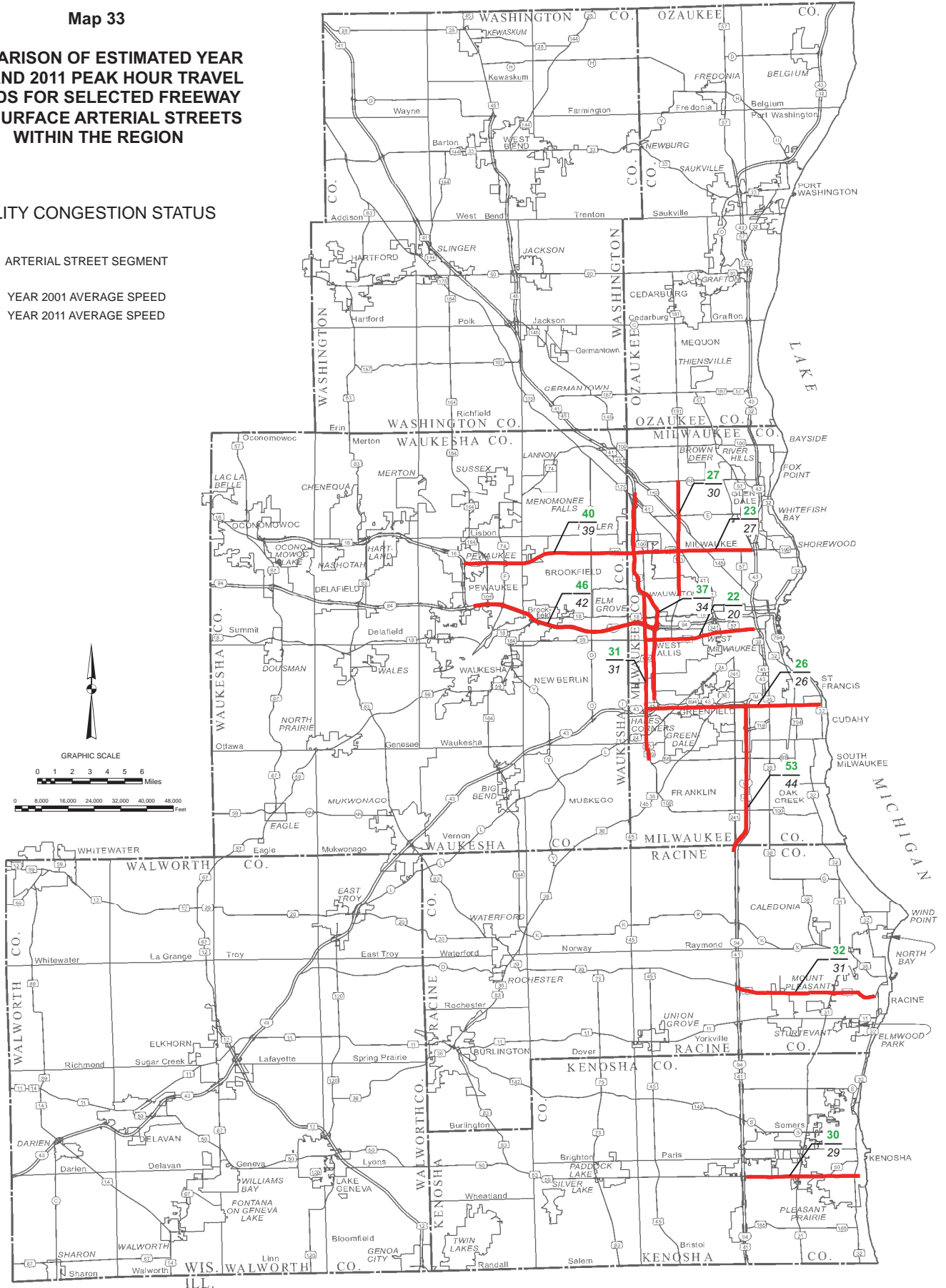
There are four airports in the Region that have Federally sponsored control towers: GMIA, Waukesha County-Crites Field, Kenosha Regional Airport, and Lawrence J. Timmerman Airport. The annual numbers of general aviation aircraft operations at those four airports over the period 2004-2013 are shown in Table 33 and Figure 49. Over that 10-year period, general aviation aircraft operations at those airports have declined significantly, ranging from a decline of about 31 percent at Kenosha Regional Airport to a decline

Map 33

**COMPARISON OF ESTIMATED YEAR 2001 AND 2011 PEAK HOUR TRAVEL SPEEDS FOR SELECTED FREEWAY AND SURFACE ARTERIAL STREETS WITHIN THE REGION**

**FACILITY CONGESTION STATUS**

- ARTERIAL STREET SEGMENT
- 23 YEAR 2001 AVERAGE SPEED
- 23 YEAR 2011 AVERAGE SPEED



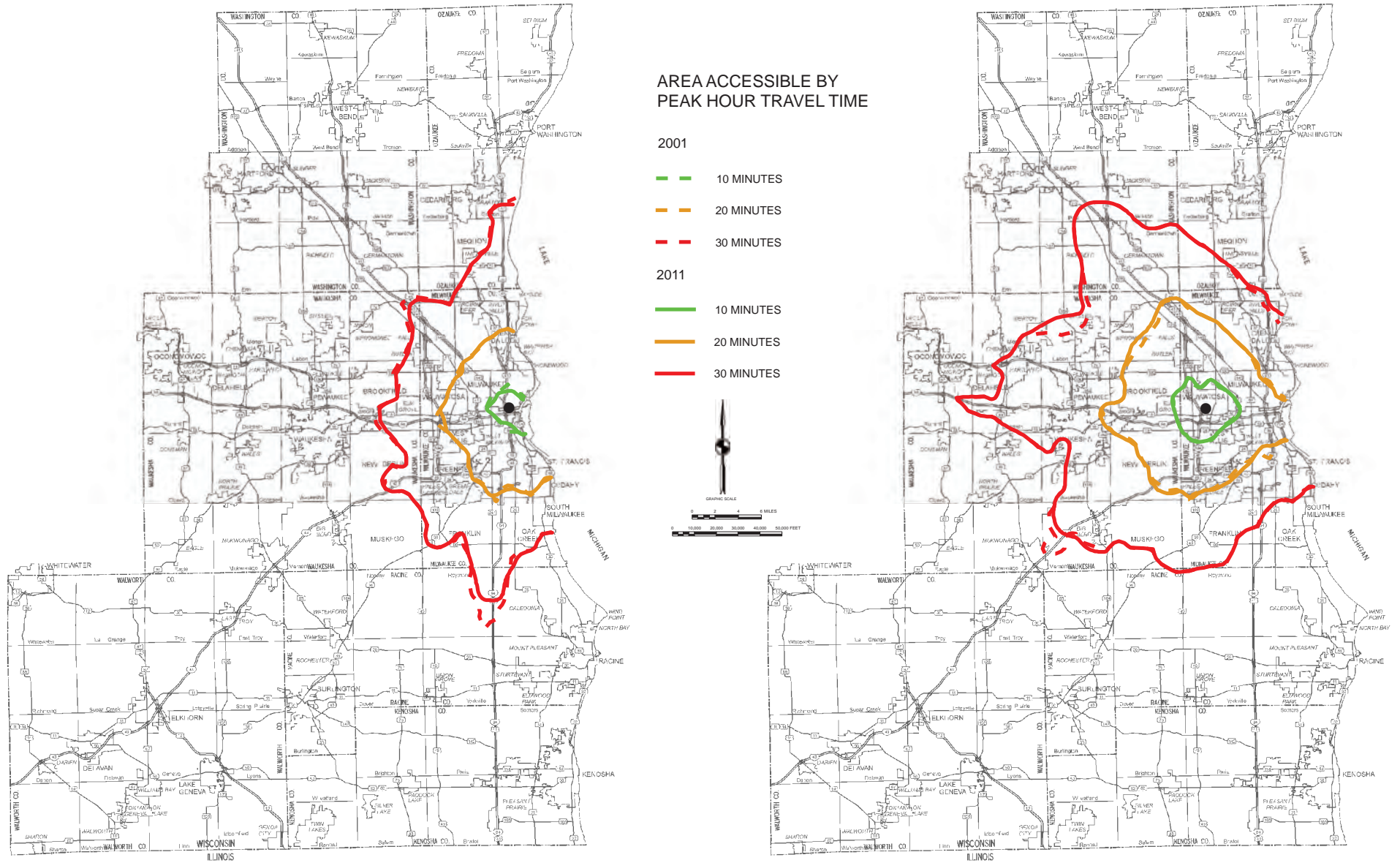
Source: Wisconsin Department of Transportation and SEWRPC.

Map 34

ESTIMATED PEAK HOUR ARTERIAL STREET AND HIGHWAY TRAVEL TIME CONTOURS: YEARS 2001 AND 2011

MILWAUKEE CENTRAL BUSINESS DISTRICT

MILWAUKEE REGIONAL MEDICAL CENTER



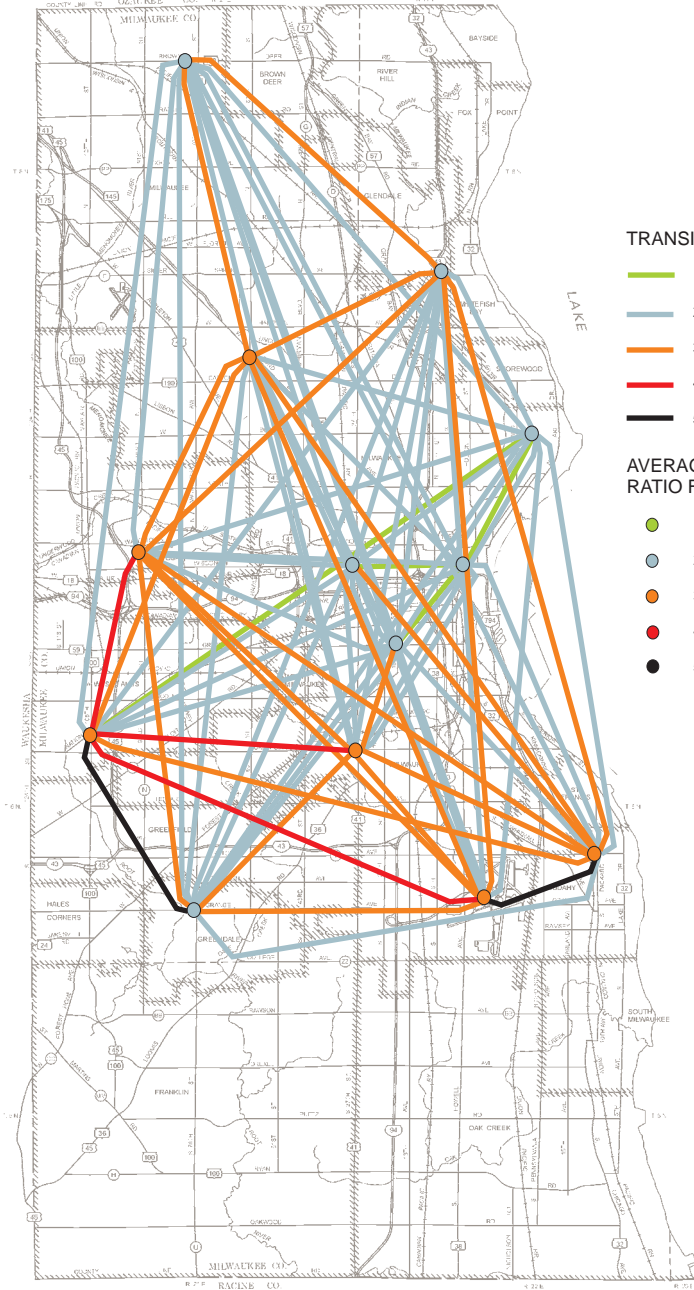
Source: SEWRPC



**RATIOS OF OVERALL TRANSIT TRAVEL TIMES TO OVERALL AUTOMOBILE TRAVEL TIMES BETWEEN  
SELECTED LOCATIONS IN MILWAUKEE COUNTY FOR WEEKDAY PEAK AND OFF-PEAK PERIODS: 2011**

MORNING PEAK PERIOD

MIDDAY OFF-PEAK PERIOD



TRANSIT TO AUTOMOBILE TRAVEL TIME RATIO

- 1.51 - 1.99
- 2.00 - 2.99
- 3.00 - 3.99
- 4.00 - 4.99
- 5.00 AND OVER

AVERAGE TRANSIT TO AUTOMOBILE TRAVEL TIME RATIO FOR SELECTED TRIPS FROM LOCATION

- 1.51 - 1.99
- 2.00 - 2.99
- 3.00 - 3.99
- 4.00 - 4.99
- 5.00 AND OVER

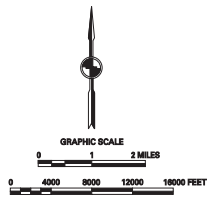
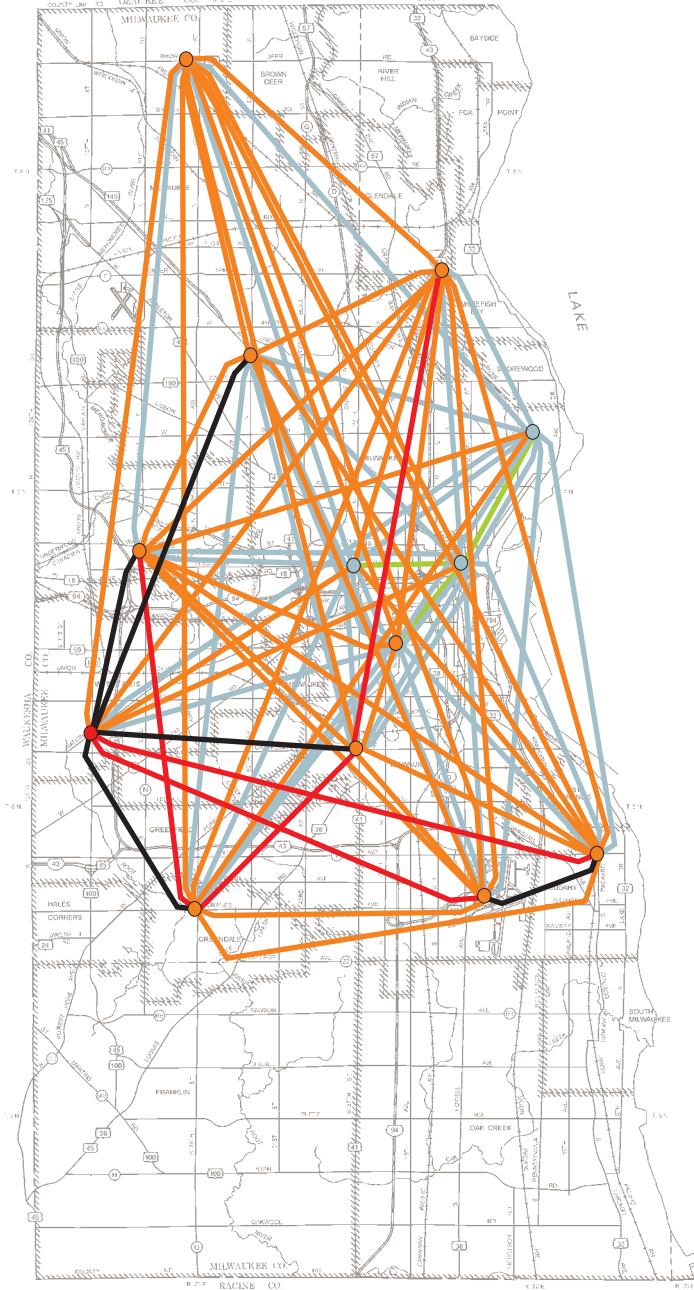


Figure 41

**TOTAL, PROPERTY-DAMAGE ONLY, AND INJURY AND FATAL VEHICULAR CRASHES REPORTED IN THE REGION: 1994-2013**

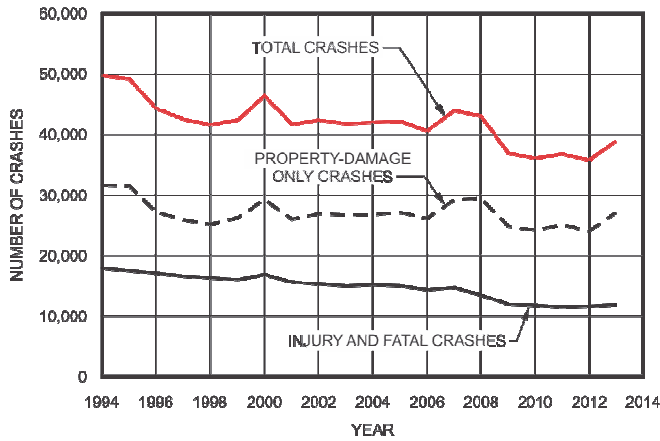


Figure 42

**FATAL VEHICULAR CRASHES AND FATALITIES REPORTED IN THE REGION: 1994-2013**

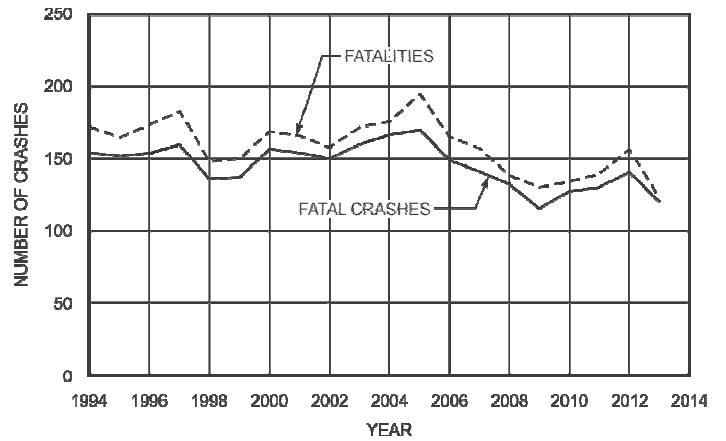
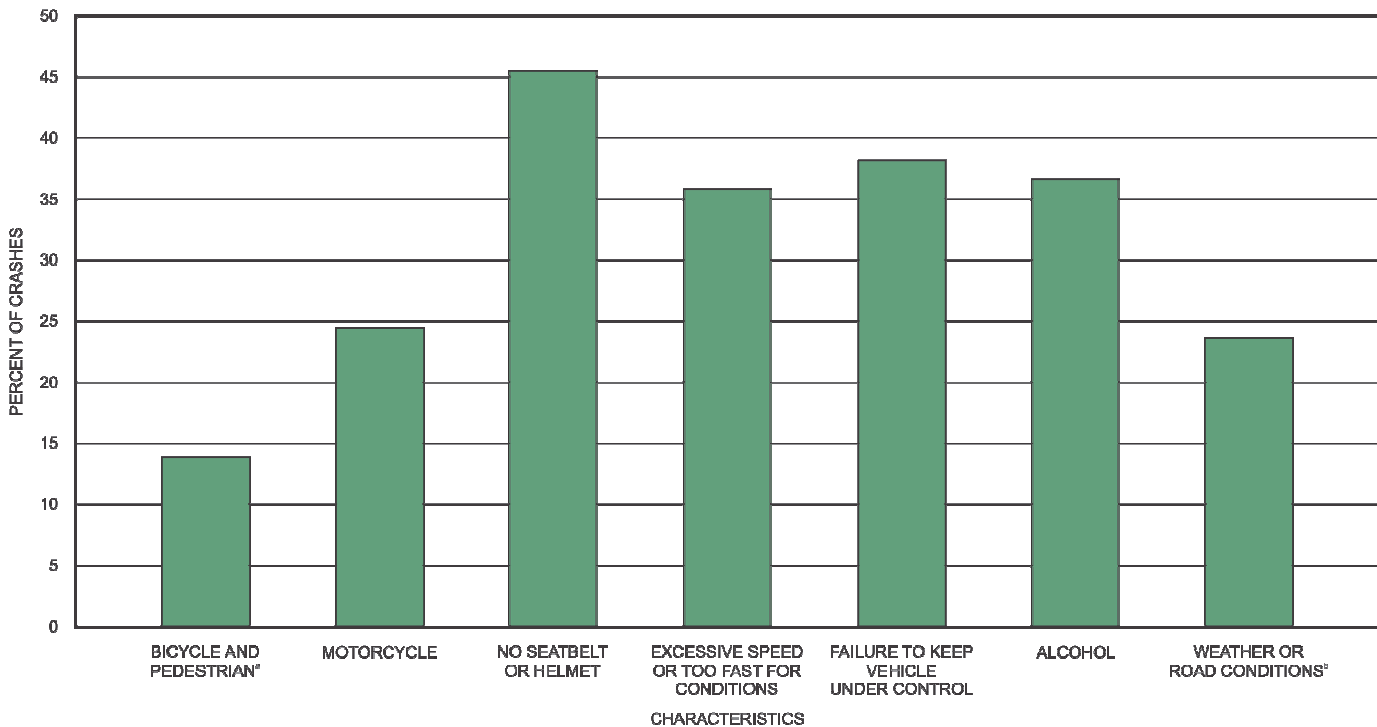


Figure 43

**SELECTED CHARACTERISTICS OF VEHICULAR CRASH-RELATED FATALITIES IN THE REGION: 2013**



\*IN 2013, THERE WERE 2 BICYCLE FATALITIES (1.6 PERCENT OF TOTAL FATALITIES) AND 15 PEDESTRIAN FATALITIES (12.2 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.

Figure 44

**NUMBER OF CRASHES RESULTING IN A SERIOUS INJURY REPORTED IN THE REGION: 1994-2013**

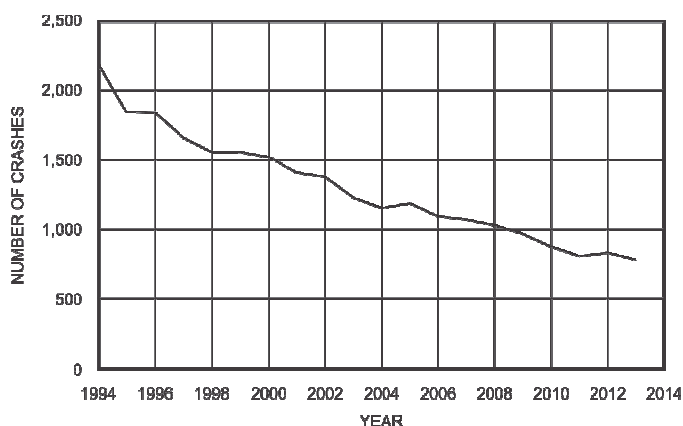


Figure 45

**NUMBER OF VEHICULAR CRASHES INVOLVING BICYCLES OR PEDESTRIANS IN THE REGION: 1994-2013**

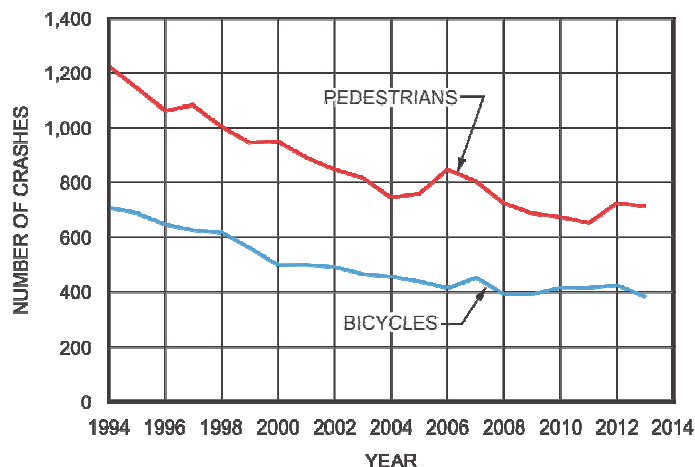


Table 30

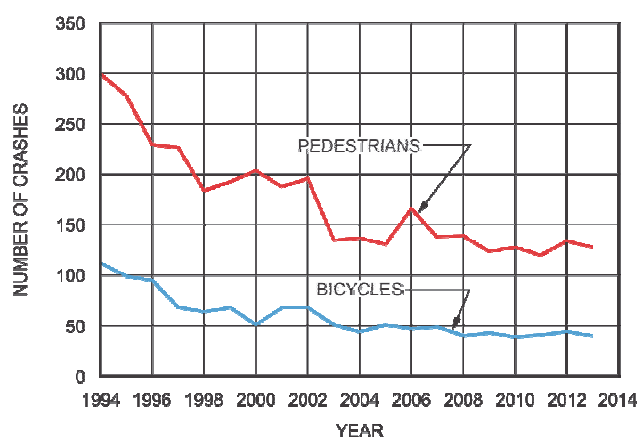
**AVERAGE VEHICULAR CRASH RATE OF STATE TRUNK HIGHWAYS BY ARTERIAL TYPE BY COUNTY IN SOUTHEASTERN WISCONSIN: 2005-2009 AND 2008-2012**

County	Crash Rate per 100 Million Vehicle Miles			
	Freeways	Arterials	Standard Arterials	Other
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 46

**NUMBER OF VEHICULAR CRASHES RESULTING IN A FATALITY OR SERIOUS INJURY INVOLVING BICYCLES OR PEDESTRIANS AS REPORTED IN THE SOUTHEASTERN WISCONSIN: 1994-2013**



of nearly 57 percent at Lawrence J. Timmerman Airport. During 2013, general aviation aircraft operation activity decreased at each airport except Kenosha Regional Airport.

**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 36). During 2013 there was no change to the number of miles of active freight rail lines.

**Table 31**

**AIR CARRIER ENPLANING AND DEPLANING PASSENGERS  
AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2004-2013**

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Percent Change: 2012-2013	Percent Change: 2004-2013
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	6,525,200	-13.2	-2.0

**Table 32**

**AIR CARRIER AND MILITARY AIRCRAFT OPERATIONS  
AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2004-2013**

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Percent Change: 2012-2013	Percent Change: 2004-2013
191,200	196,300	181,600	179,800	166,900	154,000	176,600	158,600	118,400	118,400	-10.6	-44.6

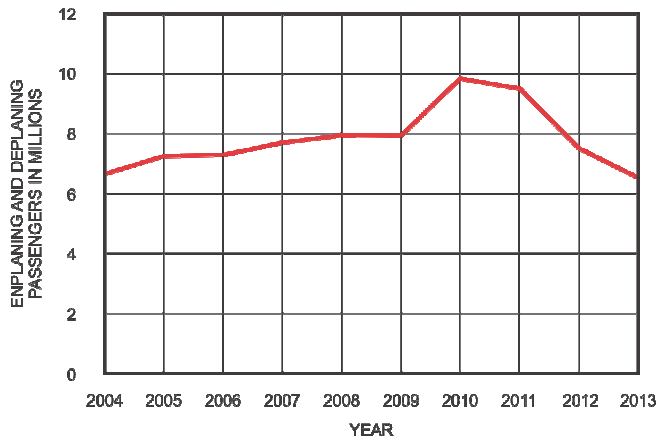
**Table 33**

**GENERAL AVIATION AIRCRAFT OPERATIONS AT AIRPORTS IN THE  
SOUTHEASTERN WISCONSIN REGION WITH CONTROL TOWERS: 2004-2013**

Airport	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Percent Change: 2012-2013	Percent Change: 2004-2013
Waukesha County-Crites Field .....	89,800	82,700	59,700	58,700	62,400	59,900	58,800	56,100	54,800	47,200	-13.9	-47.4
Kenosha Regional Airport.....	81,600	78,400	65,700	61,000	55,500	54,300	52,500	47,100	52,700	56,200	6.6	-31.1
Lawrence J. Timmerman Airport.....	69,100	79,100	53,000	44,600	44,900	35,600	32,600	27,800	30,800	29,900	-2.9	-56.7
General Mitchell International Airport .....	24,000	22,800	20,900	20,400	16,400	13,700	15,000	14,400	15,000	13,600	-9.3	-43.3

**Figure 47**

**AIR CARRIER ENPLANING AND DEPLANING PASSENGERS AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2004-2013**



**Figure 48**

**AIR CARRIER AND MILITARY AIRCRAFT OPERATIONS AT GENERAL MITCHELL INTERNATIONAL AIRPORT: 2004-2013**

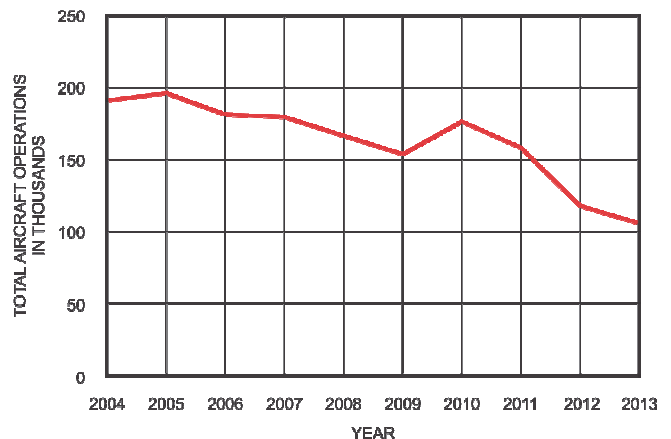
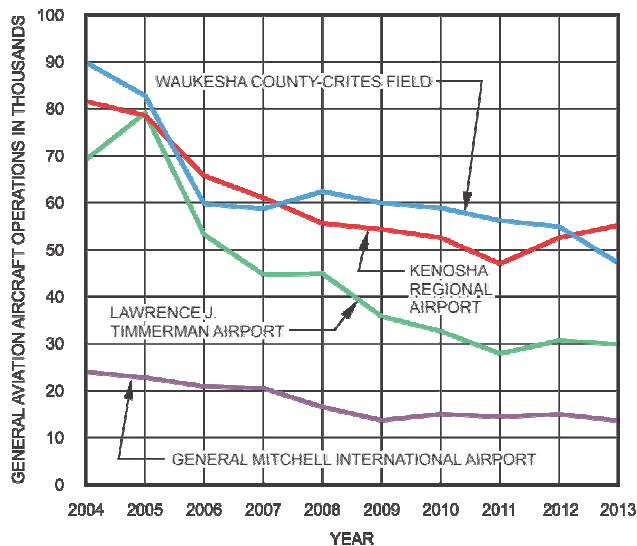


Figure 49

**GENERAL AVIATION AIRCRAFT OPERATIONS AT AIRPORTS IN THE SOUTHEASTERN REGION WITH CONTROL TOWERS: 2004-2013**



**REGIONAL HOUSING PLAN IMPLEMENTATION ACTIVITY**

As reported in Part One, a new regional housing plan was adopted by the Commission in early 2013. The housing plan recommends that implementation of the plan be monitored and the results reported every one, five, or 10 years, in accordance with a monitoring schedule included in the plan. The full 2013 Regional Housing Plan Implementation Report is available on the Commission website at [www.sewrpc.org/housing2013](http://www.sewrpc.org/housing2013) or can be requested by contacting the Commission office. A brief summary of implementation activities during 2013 associated with the regional housing plan is provided in this section.

**Housing Plan Endorsement and Presentations**

Following adoption of the regional housing plan in March 2013, the final plan report was published and distributed to all county and local governments in the Region, with a request that they consider endorsing the plan as a guide to housing and community development within their communities

or counties. By the end of 2013, four of the seven counties and 11 of the 147 cities, towns, and villages in the Region had formally endorsed the plan through adoption of a resolution.

During 2013, Commission staff made 12 presentations detailing the major findings and recommendations of the plan. Eleven of the presentations were made to county or local governments considering endorsement of the plan. The remaining presentation was an appearance on a panel as part of the Milwaukee-based 4th Street Forum public television program to discuss affordable housing in the Region.

**Implementation of Housing Plan Recommendations**

The following paragraphs describe activities undertaken by State and Federal agencies, county and local units of government, and SEWRPC to implement regional housing plan recommendations. Monitoring results are organized according to the six general topic areas addressed by housing plan recommendations. Only those recommendations that were fully or partially implemented during 2013 are included.

*Affordable Housing*

- The City of Oconomowoc adopted a new zoning ordinance that increases residential densities, allows a mix of housing types and sizes in most residential districts, and eliminates minimum home size requirements in all residential zoning districts. Five of the seven residential zoning districts in the new ordinance are consistent with regional housing plan recommendations for densities that would better accommodate affordable housing.
- The Wisconsin Department of Administration (DOA) established seven “Housing Regions” within the State to distribute funding for no-interest housing rehabilitation and down-payment assistance loans to low- and moderate-income households. The DOA distributes its Community Development Block Grant (CDBG) Housing program funds among the Housing Regions. In the Southern Housing Region, which includes the five non-entitlement

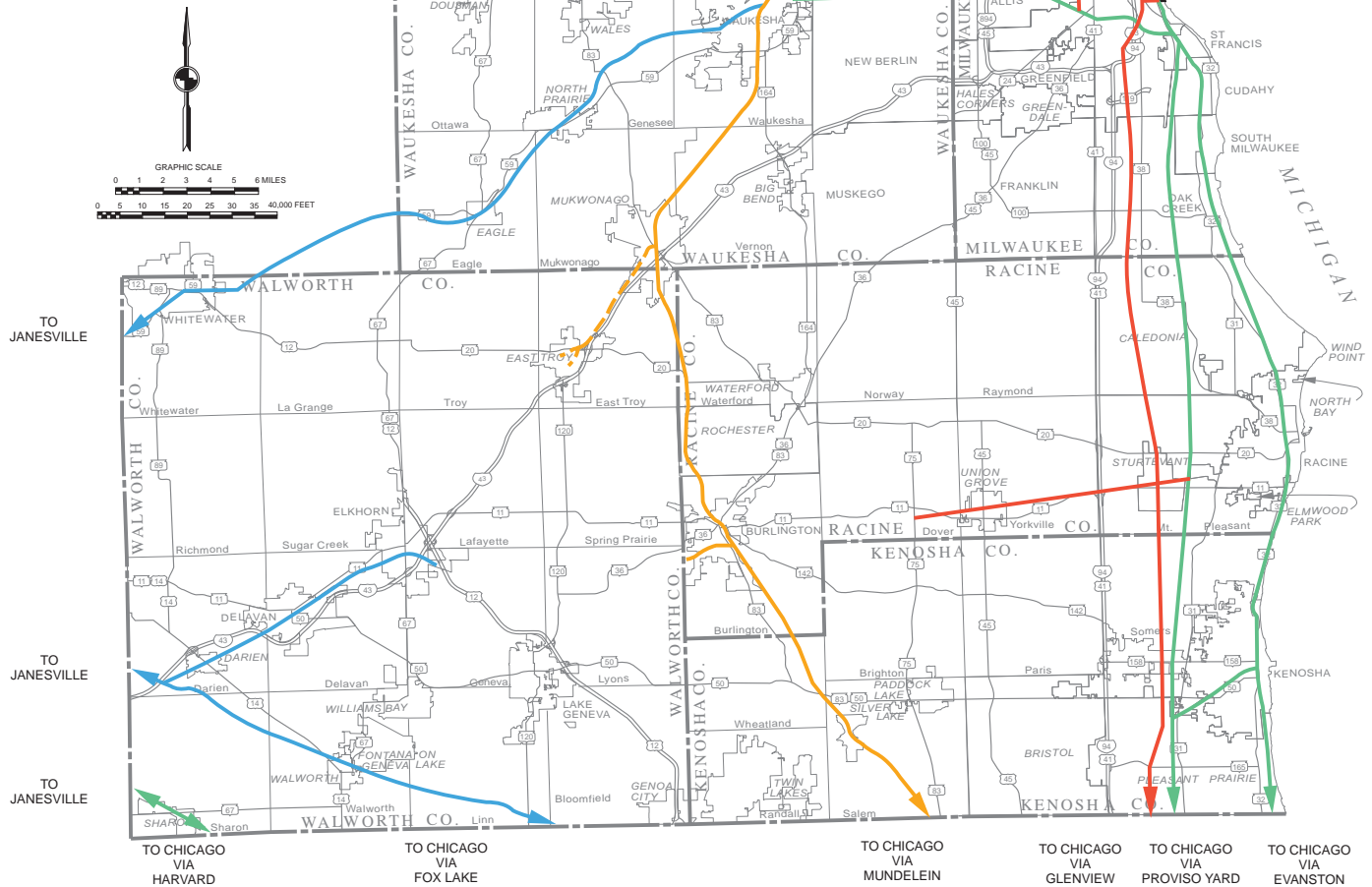
Map 36

**COMMON CARRIER  
RAIL FREIGHT LINES IN  
SOUTHEASTERN WISCONSIN: 2013**

- CANADIAN NATIONAL RAILWAY (CN)
- CANADIAN PACIFIC RAILWAY (CP)
- MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD (METW)
- UNION PACIFIC RAILROAD (UP)
- WISCONSIN & SOUTHERN RAILROAD COMPANY (WSOR)
- OTHER FACILITIES

TRACKAGE RIGHTS

RAILROAD HAVING TRACKAGE RIGHTS	RAILROAD GRANTING TRACKAGE RIGHTS	LOCATION
CN	CP	DUPLAINVILLE-MILWAUKEE
CN	WSOR	RUGBY JUNCTION-CANGO
WSOR	CP	MILWAUKEE-RONDOUT
WSOR	CN	SLINGER-WAUKESHA
WSOR	CN	CANCO-SAUKVILLE



Counties<sup>2</sup> in the Southeastern Wisconsin Region and five additional counties, the funds are evenly distributed among the 10 participating counties. About \$200,000 will be available for loans to eligible (low- and moderate-income) households in each of the non-entitlement counties in both fiscal years 2013-14 and 2014-15. This new DOA policy for distributing CDBG - Housing program funds provides an opportunity for all low- and moderate-income households in the participating counties to apply for housing rehabilitation loans.

### ***Fair Housing/Opportunity***

- As described in Chapter VI of the regional housing plan, States and entitlement jurisdictions must prepare a Consolidated Plan every five years in order to receive Community Planning and Development (CPD) block grant funding from the U.S. Department of Housing and Urban Development (HUD). CPD programs include the Community Development Block Grant (CDBG), HOME Investment Partnership (HOME), Emergency Solutions Grant (ESG), and Housing Opportunities for Persons with Aids (HOPWA) programs. HUD requires that a Consolidated Plan include a certification by the entitlement jurisdiction to affirmatively further fair housing. In July 2013, HUD issued proposed regulations that would require entitlement jurisdictions to prepare an Assessment of Fair Housing. HUD would provide standardized data to each entitlement jurisdiction to assist in the preparation of the assessment, which entitlement jurisdictions would use to develop fair housing goals and priorities to fulfill the requirement to affirmatively further fair housing. The fair housing goals and priorities would, in turn, be used to prepare the consolidated plan.

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<sup>2</sup>*Entitlement jurisdictions in the Region include the Cities of Kenosha, Milwaukee, Racine, Waukesha, Wauwatosa, and West Allis; and the Counties of Milwaukee and Waukesha. The City of Waukesha merged its entitlement status with Waukesha County in 1993. Entitlement jurisdictions receive CDBG funding directly from the U.S. Department of Housing and Urban Development.*

Comments on the proposed regulations were accepted until September 17, 2013. Final regulations had not been issued as of the end of 2013.

### ***Job/Housing Balance***

- The regional housing plan recommends that SEWRPC work with its Advisory Committees for Transportation System Planning and Programming to establish revised criteria that include job/housing balance and provision of transit for the selection of projects to be funded with Federal Highway Administration Surface Transportation Program (STP) – Milwaukee Urbanized Area funding (and potentially STP - Urbanized Area funding for the other urbanized areas in the Region) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funding. Revised criteria were developed by SEWRPC staff and approved by the Advisory Committee for the Milwaukee Urbanized Area in 2013. The Environmental Justice Task Force also reviewed and endorsed the revised criteria in 2013. Additional information is available on the Commission website at: [www.sewrpc.org/MKEUrbanizedArea](http://www.sewrpc.org/MKEUrbanizedArea).
- Projected job/housing imbalances in the regional housing plan were reported by regional housing analysis areas (sub-areas), which in several cases contain more than one sewer community. In order for the projected job/housing imbalances of each community to be used as criteria in the evaluation of street and highway capacity expansion projects, SEWRPC staff estimated the projected job/housing imbalance for each individual sewer community in the Region. The community-level projected job/housing imbalances are shown on Map 5 in Part One of this report. The job/housing imbalances projected as part of the regional housing plan may be refined by a local government, which would have access to more detailed information than was used in the development of the regional plan.
- Four sanitary sewer service area plan amendments were adopted by the Regional Planning Commission in 2013; two for the

Village of Menomonee Falls and one each for the Villages of Hartland and Nashotah. In accordance with a housing plan recommendation, information on the job/housing balance analysis conducted as part of the housing plan was provided as part of the review process for the sewer service area amendments. The intent of the recommendation was to remind local communities as they propose expansion of their sewer service areas of the findings of the plan for their communities with respect to job/housing balance, and to encourage them to consider job/housing balance in their next major updates and reconsideration of their comprehensive plans.

- During 2013, SEWRPC received 40 amendments to comprehensive plans adopted by 14 communities and five counties in the Region. Most of the amendments related to changes to land use plan designations pertaining to one parcel.

### ***Accessible Housing***

- The American Housing Survey (AHS) began collecting information on the number of households that include one or more persons with disabilities and certain accessibility features in housing units in 2011. The results of the 2011 survey were released in 2013, and include data for the Milwaukee Metropolitan Statistical Area (MSA), which includes Milwaukee, Ozaukee, Washington, and Waukesha Counties.
  - About 11 percent of households in the MSA reported having a household member with a physical disability, which was the most common type of disability reported. Most of the households that had a member with a physical disability (57 percent) were households with at least one member over the age of 65.
  - A high percentage of housing units sampled had no steps between rooms, and most housing units with two or more floors had an entry-level bathroom and bedroom. Only about 10 percent of housing units had extra-wide doors and hallways that would accommodate a wheelchair or walker. Ramps were present in a very small percentage of housing units sampled. Hand

rails and grab bars, which also assist persons with disabilities, were present in only about 20 percent of the housing units sampled.

- Milwaukee County and the Cities of Wauwatosa and West Allis updated their consolidated plans during 2013. All three plans include programs to use CDBG funding for accessibility modifications for low- and moderate-income households. Such modifications can also be funded with home rehabilitation loans available in the five non-entitlement counties through the Southern Housing Region.
- The Milwaukee County Department on Aging completed a three-year plan for 2013 through 2015 which outlines State and County goals to assist seniors. Based on outreach to seniors conducted as part of the planning process, reliable home repair services were identified as critical to enable seniors to maintain and remain in their homes. In addition to lower-income seniors who would require financial assistance for such repairs, residents who could afford to pay for repairs expressed a need for assistance with finding reliable contractors and assessing the need for repairs. As a result, the County has established a county-wide chore service/home repair program and has worked with community groups and foundations to help identify organizations to conduct home repairs and/or assist with funding the program.

### ***Subsidized and Tax Credit Housing***

- There was a modest increase in the number of vouchers allotted in the Region between 2011 and 2013—from 13,061 to 13,812—an increase of 751 vouchers or about 6 percent. A significant change in the administration of housing vouchers in the Region was the transfer of voucher administration in Washington County from the Cities of Hartford and West Bend to the Wisconsin Housing and Economic Development Authority (WHEDA).
- Housing developed under the Low-Income Housing Tax Credit (LIHTC) program has been a major source of new affordable housing provided in the Region. LIHTC funding was awarded for 1,153 low-income housing units in 2012 and 2013. During 2012 and 2013, there



was a marked increase in the number of LIHTC units for families built outside the Cities of Milwaukee, Racine, and Kenosha using LIHTC. In 2011, 48 percent of all LIHTC units in the Region were family units, but only 19 percent of LIHTC units outside the three major cities were family units (81 percent were units for the elderly or persons with disabilities). In 2012 and 2013, 47 percent of units outside the three major cities awarded low-income housing tax credits were family units (249 of 531 units). New family developments include duplex units in the Town of Salem, the Meadow Ridge Apartments in the City of Waukesha, the Oconomowoc School Apartments in Oconomowoc, the Fox Crossing Apartments in the City of Burlington, and the Beaver Creek Apartments in the Village of Brown Deer.

- Low-income housing tax credit allocations are awarded to proposed housing developments in Wisconsin by WHEDA through an annual competitive application process. Proposed developments receive points based on the Qualified Application Plan (QAP), which is updated by WHEDA every other year, with assistance from an Advisory Committee. The regional housing plan recommends that WHEDA consider changes to the QAP that would provide more housing to extremely low income households (households with incomes less than 30 percent of the area median income), and not to penalize developments due to a lack of community support. The housing plan also recommends that priority be given to awarding tax credits to housing developments proposed in areas with a job/housing imbalance, in communities with a shortage of affordable housing, and in communities with an economic need for

affordable housing based on the percentage of low-income households. The QAP approved by WHEDA for the 2013-2014 LIHTC cycle incorporated all of the housing plan recommendations.

### ***Housing Development***

- During 2013, the City of Brookfield worked with a developer to redevelop the site of a former school with 10,000-square-foot single-family lots. Typically, new residential lots in the City must be at least twice that size. Although the housing developed is not affordable to lower- and moderate-income households, it is substantially less expensive than other new single-family housing developed in the City.

### **Consolidated Plans**

- All of the entitlement jurisdictions in the Region and the State of Wisconsin have prepared consolidated plans. A consolidated plan identifies needs and priorities for housing and community development activities to principally benefit low- and moderate-income residents in the entitlement jurisdiction, and also identifies activities proposed to be funded using CDBG, HOME, ESG, and HOPWA programs to address the needs identified through the planning process. Consolidated plans are detailed through the preparation of annual action plans prepared by each entitlement jurisdiction. During 2013, Milwaukee County and the Cities of Wauwatosa and West Allis updated their plans for the years 2014 to 2018. Consolidated plans for the State of Wisconsin and the other entitlement jurisdictions in the Region are anticipated to be updated during 2014.

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## APPENDICES

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## Appendix A

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION COMMISSIONERS AND COMMITTEES: DECEMBER 2013

#### COMMISSIONERS

	Term Expires
<b>KENOSHA COUNTY</b>	
* Michael J. Skalitzky .....	2016
** Adelene Greene, Secretary .....	2016
*** Robert W. Pitts .....	2018
<b>MILWAUKEE COUNTY</b>	
* William R. Drew, Vice-Chairman .....	2014
*** John Rogers .....	2014
** Marina Dimitrijevic .....	2016
<b>OZAUKEE COUNTY</b>	
** David W. Opitz .....	2014
*** Thomas H. Buestrin .....	2018
* Gustav W. Wirth, Jr. ....	2014
<b>RACINE COUNTY</b>	
* Gilbert B. Bakke .....	2014
*** David L. Eberle .....	2016
** Peggy L. Shumway .....	2018
<b>WALWORTH COUNTY</b>	
** Charles L. Colman .....	2014
* Nancy L. Russell, Treasurer .....	2018
*** Linda J. Seemeyer .....	2018
<b>WASHINGTON COUNTY</b>	
** Daniel S. Schmidt .....	2016
* Daniel W. Stoffel .....	2014
*** David L. Stroik, Chairman .....	2018
<b>WAUKESHA COUNTY</b>	
** Michael A. Crowley .....	2016
*** Jose M. Delgado .....	2016
* James T. Dwyer .....	2018

\* Elected by County Board or appointed by County Executive and confirmed by County Board.

\*\* Appointed by the Governor from a County-supplied list of candidates.

\*\*\* Appointed by the Governor on his own motion without reference to any County-supplied list.

#### COMMITTEES

##### EXECUTIVE COMMITTEE

David L. Stroik, Chairman  
William R. Drew, Vice-Chairman  
Gilbert B. Bakke  
Thomas H. Buestrin  
Michael A. Crowley  
James T. Dwyer  
Adelene Greene  
Nancy L. Russell  
Daniel S. Schmidt  
Gustav W. Wirth, Jr.

##### ADMINISTRATIVE COMMITTEE

Adelene Greene, Chair  
James T. Dwyer, Vice-Chairman  
Gilbert B. Bakke  
Thomas H. Buestrin  
Michael A. Crowley  
William R. Drew  
Nancy L. Russell  
Daniel S. Schmidt  
David L. Stroik  
Gustav W. Wirth, Jr.

##### INTERGOVERNMENTAL AND PUBLIC RELATIONS COMMITTEE

Michael A. Crowley, Chairman  
Daniel W. Stoffel, Vice-Chairman  
Gilbert B. Bakke  
Marina Dimitrijevic  
Nancy L. Russell  
Michael J. Skalitzky  
David L. Stroik  
Gustav W. Wirth, Jr.

##### PLANNING AND RESEARCH COMMITTEE

Daniel S. Schmidt, Chairman  
Daniel W. Stoffel, Vice-Chairman  
Gilbert B. Bakke  
Charles L. Colman  
Jose M. Delgado  
William R. Drew  
David L. Eberle  
David W. Opitz  
Robert W. Pitts  
John Rogers  
Nancy L. Russell  
Linda J. Seemeyer  
Peggy L. Shumway  
Michael J. Skalitzky  
David L. Stroik

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## Appendix B

### COMMISSION ADVISORY COMMITTEES: 2013

#### KENOSHA COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Vacant ..... Director of Public Works,  
Chairman  
Kenosha County  
Kenneth R. Yunker ..... Executive Director,  
Secretary  
Southeastern Wisconsin  
Regional Planning Commission  
Bill Antti ..... President, Village of Genoa City  
Terry Burns ..... President, Village of Paddock Lake  
David N. DeVito ..... Chairman, Town of Brighton  
Michael Farrell ..... President, Village of Bristol  
Virgil D. Gentz ..... Chairman, Town of Paris  
Sue Gerber ..... President, Village of Silver Lake  
William M. Glembocki ..... Chairman, Town of Wheatland  
Ben Harbach ..... Chairman, Town of Somers  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
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  
Jennifer Pollitt ..... Administrator, Village of Twin Lakes  
Gary Sipsma ..... Director, Division of Highways, Highway Commission,  
and Department of Public Works, Kenosha County  
Michael R. Spence ..... Village Engineer, Village of Pleasant Prairie  
Robert M. Stoll ..... Chairman, Town of Randall  
Diann D. Tesar ..... Chairperson, Town of Salem

#### 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  
Thomas Czaja ..... Village Manager, Village of Fox Point  
Melinda K. Dejewski ..... City Engineer/Director of Public Works,  
City of St. Francis  
David Eastman ..... Director of Public Works, City of Glendale  
Kim Egan-Mueller ..... Village Administrator, Village of West Milwaukee  
Michael Hall ..... Village Manager/Clerk/Treasurer, Village of Brown Deer  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Ghassan A. Korban ..... Commissioner of Public Works,  
City of Milwaukee  
Mary Jo Lange ..... Director of Public Works, and  
City Engineer, City of Cudahy  
Chris Lear ..... Village Manager, Village of River Hills  
Michael G. Lewis ..... City Engineer, City of West Allis  
Michael J. Martin ..... Director of Public Works, Village of Hales Corners  
Robert B. McFaul ..... Director of Public Works, Village of Greendale  
Daniel Naze ..... Director of Public Works,  
City Engineer,  
Village of Whitefish Bay  
Andrew Pederson ..... Village Manager, Village of Bayside  
George Poirier ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
William Porter ..... Director of Public Works,  
City of Wauwatosa  
Michael C. Simmons ..... City Engineer, City of Oak Creek  
Richard Sokol ..... Director, Department of Neighborhood  
Development, City of Greenfield  
M. Chris Swartz ..... Village Manager, Village of Shorewood  
Kyle E. Vanderkar ..... 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  
Kathlyn Geracie ..... Chairman, Ozaukee County Public Works Committee  
Richard C. Howells ..... President, Village of Belgium  
William Janeshek ..... Supervisor, Town of Belgium  
Barbara J. Jobs ..... Chairman, Town of Saukville  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation

#### OZAUKEE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE (continued)

Kip Kinzel ..... Mayor, City of Cedarburg  
Chuck Lopicola ..... President, Village of Fredonia  
Andy LaFond ..... Director, Department of Public Works, Village of Thiensville  
Kristen Lundeen ..... Director of Public Works/City Engineer, City of Mequon  
Jim Melichar ..... Chairman, Town of Port Washington  
Richard Mueller ..... 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  
William R. Sackett ..... President, Village of Newburg  
David Valentine ..... Chairman, Town of Cedarburg  
Robert Vanden Noven ..... City Engineer/Public Works Director,  
City of Port Washington  
Roy Wilhelm ..... Director of Public Works/Engineer,  
Village of Saukville

#### RACINE COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Julie A. Anderson ..... 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  
Paul Beere ..... President, Village of Rochester  
Peter Christensen ..... President, Village of Wind Point  
Rebecca Ewald ..... Administrator, Village of Waterford  
Mark Gleason ..... President, Village of Mount Pleasant  
Michael A. Hayek ..... Village Engineer, Village of Caledonia  
Tom Hiacz ..... Chair, Town of Waterford  
Kristin Holmberg-Wright ..... President, Village of North Bay  
Steven D. Jansen ..... President, Village of Sturtevant  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Gary Kastenson ..... Chairman, Town of Raymond  
Thomas R. Kramer ..... Business Manager/Treasurer,  
Town of Norway  
Thomas P. Lembcke ..... Chairman, Town of Dover  
Terrence J. McMahon ..... Supervisor, Town of Yorkville  
Thomas Mills ..... President, Village of Elmwood Park  
Robert Miller ..... Mayor, City of Burlington  
Brian F. O'Connell ..... 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  
Ralph Rice ..... Chairman, Town of Burlington  
Mark H. Yehlen ..... Commissioner of Public Works,  
City of Racine

#### WALWORTH COUNTY JURISDICTIONAL HIGHWAY PLANNING COMMITTEE

Kevin M. Brunner ..... Director of Central Services, Department of Public Works,  
Chairman  
Walworth County  
Kenneth R. Yunker ..... Executive Director, Southeastern  
Secretary  
Wisconsin Regional Planning Commission  
Joseph Abell ..... Chairman, Town of Walworth  
Bill Antti ..... President, Village of Genoa City  
Joy Bartelson ..... Chairman, Town of Lyons  
Richard Brandl ..... Chairman, Town of Sharon  
Thomas Brandemuehl ..... Superintendent of Public Works,  
Village of Mukwonago  
Cameron Clapper ..... City Manager, City of Whitewater  
Daniel Cooper ..... Citizen, Town of Lafayette  
David P. Duwe ..... Chairman, Town of Sugar Creek  
Diana Dykstra ..... President, Village of Sharon  
Lowell Hagen ..... Chairman, Town of Whitewater  
Don Henningfeld ..... Chairman, Town of Spring Prairie  
Patrick Hoffmann ..... Highway Commissioner, Town of LaGrange  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
Dennis Jordan ..... Administrator, City of Lake Geneva  
Jeffery Karbash ..... Chairman, Town of Richmond  
John Kendall ..... Chairman, Town of Troy  
Joseph Klarkowski ..... Chairman, Town of East Troy

**WALWORTH COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE  
(continued)**

Joseph F. Kopecky ..... Chairman, Town of Geneva  
 Cecil R. Logterman ..... Chairman, Town of Darien  
 Dwight E. McComb ..... Planning and Program Development Engineer,  
 U.S. Department of Transportation,  
 Federal Highway Administration  
 Jerry Mehring ..... Director of Public Works,  
 Village of Williams Bay  
 Kenneth Monroe ..... President, Village of Bloomfield  
 Arvid Peterson ..... Director of Public Works,  
 Village of Fontana-on-Geneva Lake  
 David A. Rasmussen ..... President, Village of Walworth  
 Nancy Russell ..... Chairperson, Walworth County  
 Board of Supervisors and  
 Public Works Committee  
 Michael Schaid ..... Superintendent, Highway Department,  
 Town of Linn  
 Daniel Schoonover ..... Chairman, Town of Bloomfield  
 Ryan Simons ..... Chairman, Town of Delavan  
 Samuel E. Tapson ..... Administrator, City of Elkhorn  
 Randy Timms ..... President, Village of East Troy  
 Mark E. Wendorf ..... Director of Public Works, City of Delavan  
 Kurt Zipp ..... President, Village of Darien

**WASHINGTON COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE**

Thomas Wondra ..... Highway Commissioner,  
 Chairman Washington County  
 Kenneth R. Yunker ..... Executive Director, Southeastern  
 Secretary Wisconsin Regional Planning Commission  
 Richard L. Bertram ..... Chairman, Town of Barton  
 Robert A. Bingen ..... Chairman, Town of Addison  
 Russell Brandt ..... President, Village of Slinger  
 Joseph C. Dautemann ..... Mayor, City of Hartford  
 Justin Drew ..... City Planner, City of Hartford  
 Chris Elbe ..... Chairman, Town of Farmington  
 Jerry Gilles ..... Director of Public Works, Village of Kewaskum  
 Joseph C. Gonnering ..... Chairman, Town of Trenton  
 Daniel R. Goetz ..... Supervisor, Washington County  
 Board of Supervisors  
 Raymond Heidtke ..... Chairman, Town of Jackson  
 Mike Heli ..... President, Village of Newburg  
 John Jeffords ..... President, Village of Richfield  
 Dewayne J. Johnson ..... Director, Southeast Region,  
 Wisconsin Department of Transportation  
 Wendy Kannenburg ..... President, Village of Jackson  
 Dennis E. Kenealy ..... Chairman, Town of Erin  
 Carl Klemme ..... Chairman, Town of Wayne  
 Dwight E. McComb ..... Planning and Program Development Engineer,  
 U.S. Department of Transportation,  
 Federal Highway Administration  
 Paul J. Metz ..... Chairman, Town of Germantown  
 Paul E. Mueller ..... Administrator,  
 Planning and Parks Department,  
 Washington County  
 Paul R. Rice ..... Chairman, Town of West Bend  
 Kraig Sadownikow ..... Mayor, City of West Bend  
 Daniel H. Schmidt ..... Chairman, Town of Kewaskum  
 Albert Schulteis ..... Chairman, Town of Polk  
 Maurice Strupp ..... Chairman, Town of Hartford  
 Herbert J. Tennies ..... Chairman, Washington County Board of Supervisors  
 Dean Wolter ..... President, 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  
 Richard Arrowood ..... Chairman, Town of Ottawa  
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 Joseph Birbaum ..... President, Village of Oconomowoc Lake  
 Allison M. Bussler ..... Director of Public Works, Waukesha County  
 Timothy J. Clark ..... President, Village of Lac La Belle  
 Harlan E. Clinkenbeard ..... Planner, City of Pewaukee  
 David E. Cox ..... Administrator, Village of Hartland  
 James Daley ..... Mayor, City of Oconomowoc  
 David Dubey ..... Chairman, Town of Mukwonago  
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 Robert Foote, Jr. ..... President, Village of Chenequa  
 Matthew Gehrke ..... Chairman, Town of Lisbon

**WAUKESHA COUNTY  
JURISDICTIONAL HIGHWAY PLANNING COMMITTEE  
(continued)**

Chris Genellie ..... Town Engineer, Town of Waukesha  
 Gregory Goetz ..... President, Village of Sussex  
 Scott Gosse ..... Administrator, Village of Pewaukee  
 Deborah Hall ..... President, Village of North Prairie  
 Keith Henderson ..... Chairman, Town of Brookfield  
 Robert C. Hultquist ..... Chairman, Town of Oconomowoc  
 Arlyn Johnson ..... Director of Public Works,  
 Village of Menomonee Falls  
 Gregory W. Kessler ..... Director, Department of City Development,  
 City of New Berlin  
 Robert Kwiatkowski ..... Chairman, Town of Eagle  
 Richard Lartz ..... President, Village of Nashotah  
 Sharon L. Leair ..... Chairman, Town of Genesee  
 Ed McAleer ..... Mayor, City of Delafield  
 Dwight E. McComb ..... Planning and Program Development Engineer,  
 U.S. Department of Transportation,  
 Federal Highway Administration  
 David Nagler ..... President, Village of Lannon  
 Richard Nawrocki ..... Supervisor, Town of Merton  
 Jack Nissen ..... President, Village of Dousman  
 Neil H. Palmer ..... President, Village of Elm Grove  
 Steven P. Ponto ..... Mayor, City of Brookfield  
 Jack Riley ..... President, Village of Summit  
 Sheri Schmit ..... Systems Planning Chief, Southeast Region,  
 Wisconsin Department of Transportation  
 David Simpson ..... Director of Public Works and City Engineer, City of Muskego  
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 Richard A. Spurrell ..... President, Village of Eagle  
 Robert W. Weber ..... President, Village of Merton  
 Fred Winchowky ..... President, Village of Mukwonago

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

Julie A. Anderson ..... Director of Public Works and Development Services,  
 Racine County  
 Kenneth R. Yunker ..... Executive Director, Southeastern  
 Secretary Wisconsin Regional Planning Commission  
 Sandra K. Beaupre ..... Director, Bureau of Planning, Division of  
 Transportation Investment Management,  
 Wisconsin Department of Transportation  
 Peter Christensen ..... President, Village of Wind Point  
 Mary Cole ..... Administrator, Village of Sturtevant  
 Thomas Dieckelman ..... President, Wisconsin Coach Lines, Inc.  
 Michael A. Hayek ..... Village Engineer, Village of Caledonia  
 Kristin Holmberg-Wright ..... President, Village of North Bay  
 Dewayne J. Johnson ..... Director, Southeast Region,  
 Wisconsin Department of Transportation  
 Peter T. McMullen ..... Air Management Specialist,  
 Bureau of Air Management,  
 Wisconsin Department of Natural Resources  
 Thomas Mills ..... President, Village of Elmwood Park  
 Cheryl L. Newton ..... Environmental Protection Specialist, Region V,  
 U.S. Environmental Protection Agency  
 George Poirier ..... Wisconsin Division Administrator  
 Federal Highway Administration  
 U.S. Department of Transportation  
 William D. Sasse ..... Director of Engineering, Village of Mt. Pleasant  
 Marisol Simón ..... Regional Administrator, Region V,  
 Federal Transit Administration,  
 U.S. Department of Transportation  
 Albert Stanek ..... Parking and Transit Systems Manager, City of Racine  
 Mark H. Yehlen, PE ..... Commissioner of Public Works/City Engineer,  
 City of Racine

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

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  
 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 ..... Director, Department 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,  
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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  
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  
Michael Spence ..... Village Engineer, Village of Pleasant Prairie

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

Brian Dranzik ..... Director, Department of Transportation,  
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Milwaukee County  
Chris Abele ..... Milwaukee County Executive  
Fred V. Abadi ..... Director of Public Works, City of Waukesha  
Robert Bauman ..... Alderman, City of Milwaukee  
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 M. Bussler ..... Director of Public Works, Waukesha County  
Robert R. Dreblow ..... Highway Commissioner, Ozaukee County  
Michael Einweck ..... Director of Public Works, Village of Hartland  
Jennifer Gonda ..... Legislative Liaison Director,  
City of Milwaukee  
Gary Evans ..... Manager, Highway Engineering Division, Waukesha County  
Michael Giugno ..... Managing Director, Milwaukee County  
Transit System  
Thomas M. Grisa ..... Director of Public Works, City of Brookfield  
Ghassan A. Korban ..... Commissioner of Public Works,  
City of Milwaukee  
Michael G. Lewis ..... City Engineer, City of West Allis  
Michael J. Maierle ..... Manager of Long-Range Planning,  
Department of City Development,  
City of Milwaukee  
Michael Mayo, Sr. ..... Supervisor, Milwaukee County  
Board of Supervisors  
Jeffrey S. Polenske ..... City Engineer,  
City of Milwaukee  
William Porter ..... Director of Public Works,  
City of Wauwatosa  
Aaron Szopinski ..... Budget Analyst, Budget and Management  
Division, City of Milwaukee  
Thomas Wondra ..... Highway Commissioner, Washington County  
Clark Wontach ..... Director of Highway Operations, Department  
of Transportation, 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  
Bill Antti ..... President, Village of Genoa City  
Kevin Brunner ..... Director of Central Services and  
Highway Commissioner,  
Walworth County  
Sandra K. Beaupre ..... Director, Bureau of Planning and  
Economic Development, Division of  
Transportation Investment Management,  
Wisconsin Department of Transportation  
Terry Burns ..... President, Village of Paddock Lake  
David N. DeVito ..... Chairman, Town of Brighton  
Sue Gerkey ..... President, Village of Silver Lake  
William M. Glembocki ..... Chairman, Town of Wheatland  
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  
Kenneth Monroe ..... President, Village of Bloomfield  
Wisconsin Department of Natural Resources  
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Resources Management Division, Region V,  
U.S. Environmental Protection Agency  
George Poirier ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
Daniel Schoonover ..... Chairman, Town of Bloomfield  
Marisol Simón ..... Regional Administrator, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation  
Gary A. Sipsma ..... Director, Division of Highway, and  
Highway Commissioner, Department of  
Public Works, Kenosha County  
Howard K. Skinner ..... President, Village of Twin Lakes  
Robert M. Stoll ..... Chairman, Town of Randall  
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**ADVISORY COMMITTEE ON TRANSPORTATION SYSTEM PLANNING  
AND PROGRAMMING FOR THE WEST BEND URBANIZED AREA**

Thomas Wondra ..... Highway Commissioner,  
Chair  
Washington County  
Sandra K. Beaupre ..... Director, Bureau of Planning and  
Economic Development, Division of  
Transportation Investment Management,  
Wisconsin Department of Transportation  
Christopher R. Bertch ..... Community Planner, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation  
Richard L. Bertram ..... Chairman, Town of Barton  
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T.J. Justice ..... City Administrator and Director of  
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Jennifer Genkis ..... Legislative Liaison Director,  
City of Milwaukee  
Michael Giugno ..... Managing Director,  
Milwaukee County Transit System  
Thomas M. Grisa ..... Director of Public Works, City of Brookfield  
Susan Hedman ..... Deputy Regional Administrator, Region V,  
U.S. Environmental Protection Agency  
U.S. Department of Transportation  
Dewayne J. Johnson ..... Director, Southeast Region,  
Wisconsin Department of Transportation  
T.J. Justice ..... City Administrator and Director of  
Development, City of West Bend  
George Poirier ..... Wisconsin Division Administrator,  
Federal Highway Administration,  
U.S. Department of Transportation  
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Jason Schall ..... City Engineer,  
Engineering Department,  
City of Hartford  
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Albert Schulteis ..... Chairman, Town of Polk  
Maurice Strupp ..... Chairman, Town of Hartford  
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TRANSPORTATION 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  
Christopher R. Bertch..... Community Planner, Region V,  
Federal Transit Administration,  
U.S. Department of Transportation  
Scott Brandmeier..... Director of Public Works and Village Engineer,  
Village of Fox Point  
Kevin M. Brunner..... Director of Central Services,  
Department of Public Works, Walworth County  
Allison Bussler..... Director of Public Works,  
Waukesha County  
David Cox..... Village Administrator, Village of Hartland  
Robert R. Dreblow..... Highway Commissioner, Ozaukee County  
Gary Evans..... Manager, Highway Engineering Division, Waukesha County  
Jennifer Genkis..... Legislative Liaison Director, City of Milwaukee  
Michael Giugno..... Managing Director,  
Milwaukee County Transit System  
Thomas M. Grisa..... Director of Public Works, City of Brookfield  
Susan Hedman..... Deputy Regional Administrator, Region V,  
U.S. Environmental Protection Agency  
T.J. Justice..... City Administrator and Director of  
Development, City of West Bend  
Ghassan A. Korban..... Commissioner of Public Works,  
City of Milwaukee  
Nik Kovac..... Alderman, City of Milwaukee  
Alexis Kuklenski..... Community Planner  
U.S. Department of Transportation,  
Federal Highway Administration  
Michael M. Lemens..... Director of Engineering, City of Kenosha  
Michael Mayo Sr..... Supervisor, Milwaukee 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  
William D. Sasso..... Director of Engineers,  
Village of Mount Pleasant  
Sheri Schmit..... Systems Planning Chief  
Southeast Region, Wisconsin  
Department of Transportation  
Gary Sipsma..... Director, Division of Highways and  
Highway Commissioner,  
Kenosha County  
Bart Sponseller..... Director, Bureau of Air Management,  
Wisconsin Department of Natural Resources  
Aaron Szopinski..... Budget Analyst, Budget and Management  
Division, City of Milwaukee  
Andrea Weddle-Henning..... Manager, Transportation Design and  
Construction Engineering, Department of  
Transportation, Milwaukee County  
Willie Wade..... Alderman, City of Milwaukee,  
and liaison to Environmental  
Justice Task Force  
Thomas Wondra..... Highway Commissioner, Washington County  
Mark H. Yehlen..... Commissioner of Public Works/City Engineer,  
City of Racine

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

Dr. Norman P. Lasca..... Professor (Emeritus), Department of Geological  
Chairman Sciences, University of Wisconsin-Milwaukee  
John Dargle, Jr..... Director, Milwaukee County  
Vice-Chairman Department of Parks,  
Recreation, and Culture  
Dr. Donald M. Reed..... Chief Biologist, Southeastern Wisconsin  
Secretary Regional Planning Commission  
Stevan M. Keith..... Sustainability and Environmental Engineer,  
Milwaukee County Department of  
Transportation and Public Works  
Ghassan A. Korban..... Commissioner of Public Works,  
Department of Public Works,  
City of Milwaukee

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

Mary Jo Lange..... Director of Public Works,  
City Engineer, City of Cudahy  
Tamara Mayzik..... City Administrator,  
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  
Susan E. Robertson..... 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**

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Chairman  
Michael G. Hahn..... Chief Environmental Engineer, Southeastern  
Secretary Wisconsin Regional Planning Commission  
Julie A. Anderson..... Director, Public Works and Development  
Services Department, Racine County  
Michael J. Ballweg..... Crops and Soils Educator,  
University of Wisconsin-Extension,  
Sheboygan County  
John R. Behrens..... Commissioner-Secretary, Silver Lake  
Protection and Rehabilitation District  
John M. Bennett..... City Engineer, City of Franklin  
Thomas J. Bunker..... Representative, City of Racine  
Water and Wastewater Utility  
Nathan Check..... City Engineer, City of Mequon  
Lisa Conley..... Representative, Town and Country Resource  
Conservation and Development, Inc.  
Joyce A. Fiacco..... Director and Land Information Officer,  
Dodge County Land  
Resources and Parks Department  
Sharon L. Gayan..... Deputy Water Leader, Wisconsin  
Department of Natural Resources  
Shawn Graff..... Executive Director, The Ozaukee  
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  
Demaris Kenwood..... Interim Executive Director,  
Milwaukee Riverkeeper  
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..... Administrator, Washington County  
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  
William A. Porter..... Director of Public Works, City of Wauwatosa  
Bruce W. Ramm..... Vice-President, Environmental  
Department, We Energies  
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

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REGIONAL LAND USE PLANNING**

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Chairman  
Development Services, Racine County  
Jennifer Andrews..... City Planner, City of Waukesha  
Timothy R. Bate..... Director of Planning, Research and Sustainability,  
Milwaukee Metropolitan Sewerage District  
Robert J. Bauman ..... Alderman, City of Milwaukee  
Andy Buehler..... Director of Planning Operations,  
Kenosha County  
Milwaukee Metropolitan Sewerage District  
Harlan E. Clinkenbeard ..... Planner, City of Pewaukee  
Michael P. Cotter..... Director,  
Walworth County Land Use and  
Resource Management Department  
Brian Dranzik..... Director, Department of Transportation, Milwaukee County  
Henry Elling..... Administrator, Village of Summit  
Charles Erickson ..... Community Development Manager,  
City of Greenfield  
Daniel F. Ertl..... Director of Community Development,  
City of Brookfield  
Jason Fruth ..... Planning and Zoning Manager,  
Waukesha County  
Vanessa Koster..... Planning Manager, City of Milwaukee  
Department of City Development  
Jeffrey B. Labahn ..... Director, Department of  
Community Development  
and Inspections, City of Kenosha  
Paul E. Mueller..... Administrator, Planning and Parks Department  
Washington County  
Patricia T. Najera..... City Plan Commissioner, City of Milwaukee  
Eric A. Nitschke..... Regional Director, Southeast Region,  
Wisconsin Department of Natural Resources  
Mark Piotrowicz..... City Planner/Operations Manager, City of West Bend  
Brandi Richter..... District Conservationist, Kenosha- Racine-  
Milwaukee Counties, U.S. Natural  
Resources Conservation Service  
Matthew Sadowski ..... Assistant Director, City of Racine  
Department of City Development  
Steven J. Schaer ..... Manager of Planning and Zoning, City of West Allis  
Sheri Schmit ..... Systems Planning Chief, Southeast Region,  
Wisconsin Department of Transportation  
Douglas Seymour..... Director of Community Development,  
City of Oak Creek  
Andrew T. Struck ..... Director, Planning and Parks  
Department, Ozaukee County  
Todd Stuebe..... Director of Community Development,  
City of Glendale  
Randy L. Tetzlaff ..... Director of Planning and Development,  
City of Port Washington  
Teig Whaley-Smith ..... Economic Development Director,  
Milwaukee County

**ADVISORY COMMITTEE ON  
REGIONAL POPULATION AND ECONOMIC FORECASTS**

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Chairman  
Department, Ozaukee County  
Julie A. Anderson ..... Director, Public Works and Development  
Services Department, Racine County  
Sandra A. Beaupré..... Director, Bureau of Planning,  
Division of Transportation Investment Management,  
Wisconsin Department of Transportation  
Andy M. Buehler..... Director of Planning Operations, Kenosha County  
Michael P. Cotter..... Director, Walworth County Land Use and  
Resource Management Department  
Joel E. Dietl..... Planning Manager, City of Franklin  
John Flynn..... Vice President, Strategy and Development,  
American Transmission Company  
David Egan-Robertson..... Demographer, Applied Population,  
Laboratory, University of Wisconsin-Madison  
Gordon Kacala ..... Executive Director, Racine County  
Economic Development Corporation  
Jedd Lapid..... Regional Chief Development Officer,  
American Red Cross Of Eastern Wisconsin  
Richard Marcoux ..... Commissioner, City of Milwaukee,  
Department of City Development  
Bret J. Mayborne..... Director of Economic Research, Metropolitan  
Milwaukee Association of Commerce  
Paul E. Mueller..... Administrator, Planning and Parks  
Department, Washington County  
Reggie Newson ..... Secretary, Wisconsin Department of  
Workforce Development  
Francisco Sanchez..... President, Waukesha-Ozaukee-  
Washington Workforce Development, Inc.  
John Schmid..... Project Specialist, WE Energies  
Dale R. Shaver..... Director, Waukesha County  
Parks and Land Use Department  
Donald Sykes ..... President/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  
Dr. Donald M. Reed..... Chief Biologist, Southeastern Wisconsin  
Secretary  
Regional Planning Commission  
Fay U. Amerson ..... Urban Conservation Specialist, Walworth County  
Dr. Philip J. Arnholt..... Professor of Science, Biology  
Department, Concordia University  
Dr. Owen D. Boyle..... Species Management Section Chief,  
Wisconsin Department of Natural Resources  
John Dargle, Jr. .... Director, Milwaukee County  
Department of Parks, Recreation and Culture  
Gerald H. Emmerich, Jr. .... Member, Board of Directors,  
Land Trust of Walworth County  
Sharon G. Fandel ..... Southern District Ecologist,  
Wisconsin Department of Natural Resources  
Shawn Graff ..... Executive Director, The Ozaukee  
Washington Land Trust  
Duane Grimm ..... Waukesha County Park System Manager  
Andrew A. Holschbach ..... Director, Ozaukee County, Land  
and Water Management Department  
Jessica Jens..... Executive Director, Riveredge Nature Center  
B. Martinus Johnson..... Wildlife Manager, Wisconsin  
Department of Natural Resources  
Marlin P. Johnson..... Associate Professor Emeritus,  
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. Morrissey..... Land/Facilities Supervisor, Wisconsin  
Department of Natural Resources  
Paul E. Mueller..... Administrator, Washington County  
Land Use and Park Department  
Dr. Patricia Nagai ..... Horticulture Educator,  
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  
Wisconsin-Whitewater  
Dr. Joy J. Wolf ..... Associate Professor, Department of  
Geography, University of Wisconsin-Parkside

**REGIONAL WATER SUPPLY PLANNING  
ADVISORY COMMITTEE**

Dr. Kurt W. Bauer ..... Executive Director Emeritus, Southeastern Wisconsin  
Chairman  
Regional Planning Commission  
Michael G. Hahn..... Chief Environmental Engineer,  
Secretary  
Southeastern Wisconsin  
Regional Planning Commission  
Julie A. Anderson ..... Director, Public Works and Development  
Services Department, Racine County  
Kenneth R. Bradbury..... Hydrogeologist/Professor Wisconsin  
Geological and Natural History Survey  
Andy M. Buehler..... Director of Planning Operations, Kenosha County  
Thomas J. Bunker ..... Representative, Water and  
Wastewater Utility, City of Racine  
Douglas S. Cherkauer ..... Professor of Hydrogeology Emeritus,  
University of Wisconsin-Milwaukee  
Lisa Conley..... Representative, Town and  
Country Resource Conservation  
and Development, Inc.  
Michael P. Cotter..... Director, Walworth County  
Land Use and Resource  
Management Department  
Charles A. Czarkowski ..... Water Supply Specialist,  
Wisconsin Department of  
Natural Resources, Southeast Region  
Brian Dranzik..... Director, Milwaukee County  
Department of Transportation  
Daniel S. Duchniak..... General Manager,  
Waukesha Water Utility,  
City of Waukesha  
Charles P. Dunning ..... Hydrologist, U.S. Geological Survey  
Franklyn A. Ericson ..... Manager, Worldwide S/H/E/Q  
Operations, S. C. Johnson & Son, Inc.  
David Ewig ..... Water Utility Superintendent,  
City of Port Washington  
Thomas M. Grisa..... Director of Public Works,  
City of Brookfield  
Jeffrey A. Helmuth..... Hydrogeologist Program Coordinator,  
Wisconsin Department of Natural Resources, Madison

**REGIONAL WATER SUPPLY PLANNING  
ADVISORY COMMITTEE (continued)**

John Hemauer ..... Water Utility Manager,  
City of West Bend  
Andrew A. Holschbach ..... Director, Ozaukee County,  
Land and Water  
Management Department  
Eric J. Kiefer ..... Manager,  
North Shore  
Water Commission  
Thomas J. Krueger ..... Water and Wastewater Utility Director,  
Village of Grafton  
Carrie M. Lewis ..... Superintendent, Milwaukee Water Works,  
City of Milwaukee  
Mark Lurvey ..... Agricultural Business Operator,  
Lurvey Turf Nursery  
J. Scott Mathie ..... Senior Director of Government Affairs,  
Metropolitan Builders  
Association of Greater Milwaukee  
Paul E. Mueller ..... Administrator, Washington County  
Planning and Parks Department  
Jeffrey Musche ..... Administrator/Clerk, Town of Lisbon  
Michael P. Rau ..... President, City Water, LLC  
Edward St. Peter ..... General Manager,  
Water Utility, City of Kenosha  
Dale R. Shaver ..... Director, Waukesha County  
Department of Parks and Land Use  
Michael J. Sullivan ..... General Manager,  
Water and Sewer Utility,  
City of Oak Creek  
James Surfus ..... Senior Environmental Engineer,  
MillerCoors, LLC  
Daniel S. Winkler ..... Director of Public Works and Utilities,  
City of Lake Geneva

**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  
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  
Kalan R. Haywood, Sr. .... President, Vanguard Group, LLC, Milwaukee  
Joseph G. Heck, Jr. .... Assistant Director (Retired), Racine  
Department of City Development  
Rob Henken ..... President, Public Policy Forum, Milwaukee  
Douglas J. Koehler ..... Planner, City of Waukesha  
Gary Koppelberger ..... City Administrator, City of Hartford  
Jeffrey B. Labahn ..... Director, Department of  
Community Development  
J. Scott Mathie ..... Senior Director, Government  
Affairs, Metropolitan Builders  
Association of Greater Milwaukee  
Michael J. Murphy ..... Alderman, City of Milwaukee  
Falamak Nourzad ..... Principal, Continuum Architects  
& Planners, Milwaukee

**REGIONAL HOUSING PLAN ADVISORY COMMITTEE\*  
(continued)**

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  
Milwaukee Fair Housing Council  
Dale R. Shaver ..... Director, Waukesha County  
Department of Parks and Land Use  
Michael J. Soika ..... Director, Milwaukee Succeeds  
Andrew T. Struck ..... Director, Planning and Parks  
Department, Ozaukee County  
Marne J. Stück ..... Governmental Affairs Director,  
Greater Milwaukee Association of Realtors  
Scott Thistle ..... Principal, Halen Homes, Brookfield  
Rev. James C. Thomas ..... Retired, Board of Ezekiel Community  
Development Corporation  
John F. Weishan, Jr. .... Supervisor, Milwaukee County Board

**ENVIRONMENTAL JUSTICE  
TASK FORCE**

Adelene Greene ..... Commissioner, Southeastern Wisconsin Regional  
Chair  
Planning Commission; Director of Workforce  
Development, Kenosha County  
Yolanda Adams ..... President and CEO, Urban  
League of Racine and Kenosha  
Tyrone Dumas ..... Assistant and Educational Consultant,  
Growing Power  
Ella Dunbar ..... Program Services Manager,  
Social Development  
Commission, Milwaukee  
Ness Flores ..... Attorney, Flores & Reyes Law Offices  
Nancy Holmlund ..... Past President, Racine Interfaith Coalition  
Jedd Lapid ..... Regional Chief Development Officer,  
American Red Cross of Eastern Wisconsin  
N. Lynnette McNeely ..... Legal Redress Chair,  
Waukesha County—NAACP  
Guadalupe "Wally" Rendon ..... President, Hispanic  
Business and Professionals  
Association of Racine;  
Former Racine Police Officer  
Jackie Schellinger ..... Indian Community School  
Theresa Schuerman ..... Walworth County Bilingual  
Migrant Worker Outreach  
Willie Wade ..... Alderman, City of Milwaukee  
Wallace White ..... Principal/CEO, W2EXCEL, LLC

\*Committee Membership on the date the Regional Housing Plan was adopted by the Commission (March 13, 2013)

## Appendix C

### SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION STAFF: 2013

#### EXECUTIVE DIVISION

Kenneth R. Yunker, PE  
Executive Director

Philip C. Evenson, AICP  
Special Projects Advisor

Debra D'Amico  
Executive Secretary

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

#### COMMUNITY ASSISTANCE PLANNING DIVISION

Nancy M. Anderson, AICP  
Chief Community  
Assistance Planner

Richard R. Kania, AICP, RLA  
Principal Planner

John R. Meland  
Principal Specialist

Christopher D. Parisey  
Robbie L. Robinson  
Planners

#### GEOGRAPHIC INFORMATION SYSTEMS DIVISION

John G. McDougall  
Geographic Information  
Systems Manager

Paul J. Clavette  
John D. Harasha  
Principal Systems  
Analysts

Michael G. Gosetti  
GIS Supervisor

Bradley T. Subotnik  
Senior GIS  
Specialist

Patricia L. Bouchard  
GIS Specialist

Timothy R. Gorsegner  
GIS Technician

#### PUBLIC INVOLVEMENT AND OUTREACH DIVISION

Stephen P. Adams  
Public Involvement and  
Outreach Manager

Ann Dee Allen  
Senior Public Involvement  
and Outreach Specialist

#### LAND USE PLANNING DIVISION

William J. Stauber  
Chief Land Use Planner

Benjamin R. McKay  
David A. Schilling  
Principal Planners

Kathryn E. Sobottke  
Principal Specialist

Frank G. Fierek, Jr.  
James P. Siegler  
Planners

Kaleb W. Kutz  
Leroy Mims, Jr.  
Land Use Mapping  
Specialists

Joyce A. Gramz  
Senior GIS Specialist

#### CARTOGRAPHIC AND GRAPHIC ARTS DIVISION

Donald P. Simon, RLS  
Chief Planning  
Illustrator

Nancee A. Nejedlo  
Jean C. Peters  
Principal Planning  
Draftsmen

LuAnn Sakale  
Senior Planning  
Draftsman

John T. Washburn, RLS  
Senior Specialist–  
Land Surveyor

Andrew J. Traeger  
Certified Survey  
Technician

Byron D. Guerra  
Land Survey  
Assistant

Richard J. Wazny  
Print Shop  
Supervisor

#### TRANSPORTATION PLANNING DIVISION

Christopher T. Hiebert, PE  
Chief Transportation  
Engineer

Albert A. Beck  
Robert E. Beglinger  
Principal Planners

Ryan W. Hoel, PE  
Eric D. Lynde  
Principal Engineers

Ethan S. Johnson  
Nicholas A. Koncz  
Kevin J. Muhs  
Senior Engineers

Dr. Gom B. Ale  
Victor Helin  
Senior Planners

Ajibola Ayanwale  
David J. Massey  
Engineers

C. Terrence Anderson  
Laurie B. Miller  
Xylia N. Rueda  
Planners

Gary K. Korb  
Specialist

Reginald L. Mason  
Research Analyst

Andres Orrego  
Gabriel A. Rosenwald  
Engineering  
Technicians

#### ADMINISTRATIVE SERVICES DIVISION

Elizabeth A. Larsen  
Business Manager

Linette G. Heis  
Secretary

Christine A. Kettner  
Accounting Clerk/Human  
Resource Assistant

Robert J. Klatkiewicz  
Office Clerk

#### ENVIRONMENTAL PLANNING DIVISION

Michael G. Hahn, PE, PH  
Chief Environmental  
Engineer

Dr. Donald M. Reed  
Chief Specialist-  
Biologist

Laura L. Kletti, PE, CFM  
Ronald J. Printz, PE  
Principal Engineers

Joshua A. Murray, PE  
Senior Engineer

Dr. Thomas M. Slawski  
Principal Planner

Dr. Joseph E. Boxhorn  
Senior Planner

Dr. Daniel L. Carter  
Beverly A. Saunders  
Senior Specialists

Megan R. Bender  
Engineer

Christopher J. Jors  
Zofia Noe  
Specialists

Aaron W. Owens  
Planner

Megan A. Beauchaine  
Michael A. Borst  
Jennifer L. Dietl  
Research Analysts

Edward J. Schmidt  
GIS Specialist

Patricia M. Kokan  
Secretary

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## Appendix D

**SCRIMA, KABITZKE & Co., S.C.**  
CERTIFIED PUBLIC ACCOUNTANTS  
328 WEST SURGE DRIVE  
WAUKESHA, WISCONSIN 53189

TELEPHONE  
(262) 542-6400  
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, 2013, 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, 2013, 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 basic 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 basic 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 13, 2014 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, Kabitzke & Co., S.C.*

Scrima, Kabitzke & Co., S.C.  
Waukesha, Wisconsin  
May 13, 2014

Southeastern Wisconsin Regional Planning Commission

Balance Sheet - All Fund Types

December 31, 2013

	Governmental Fund Types			
	General	Special Revenue	2013 Total	2012 Total
<u>Assets</u>				
Pooled cash and cash equivalents	\$ 4,561,736	\$	\$ 4,561,736	\$ 3,294,550
Grants receivable	338,335	922,128	1,260,463	2,105,238
Other receivable				40
Prepaid expense	119,676		119,676	112,723
Property and equipment	2,915,216		2,915,216	3,053,655
Due from other funds	911,857		911,857	1,613,179
<b>Total Assets</b>	<b>\$ 8,846,820</b>	<b>\$ 922,128</b>	<b>\$ 9,768,948</b>	<b>\$ 10,179,385</b>
<u>Liabilities</u>				
State sales tax	\$ 42	\$	\$ 42	\$ 75
Accounts payable	121,503	10,271	131,774	153,870
Vacation accrual	279,027		279,027	260,432
Deferred revenue	869,294		869,294	808,007
Sick pay accrual	457,973		457,973	370,230
Due to other funds		911,857	911,857	1,613,179
Accrued payroll and taxes	136,264		136,264	188,731
Deposits and advance rents	3,333		3,333	3,333
<b>Total Liabilities</b>	<b>1,867,436</b>	<b>922,128</b>	<b>2,789,564</b>	<b>3,397,857</b>
<u>Fund Equity</u>				
Investments in fixed assets	3,357,949		3,357,949	3,330,106
Fund Balances - designated	2,501,422		2,501,422	2,245,539
- undesignated	1,120,013		1,120,013	1,205,883
<b>Total Fund Equity</b>	<b>6,979,384</b>		<b>6,979,384</b>	<b>6,781,528</b>
<b>Total Liabilities and Fund Equity</b>	<b>\$ 8,846,820</b>	<b>\$ 922,128</b>	<b>\$ 9,768,948</b>	<b>\$ 10,179,385</b>

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

in Fund Balance - All Governmental Fund Types

For the Year Ended December 31, 2013

	Governmental Fund Types			
	General	Special Revenue	2013	2012
<u>Revenues</u>				
Contributions from counties	\$ 2,370,245	\$	\$ 2,370,245	\$ 2,370,245
Grant revenues		3,117,642	3,117,642	3,098,082
Service grants	344,940	929,948	1,274,888	1,641,957
Pass-through grants	211,284		211,284	96,775
Interest on invested funds	7,619		7,619	9,395
Other income	6,336		6,336	3,854
Rental income	71,518		71,518	77,478
<b>Total Revenues</b>	<b>3,011,942</b>	<b>4,047,590</b>	<b>7,059,532</b>	<b>7,297,786</b>
<u>Expenditures</u>				
Salaries and fringe benefits	2,913,554	2,482,241	5,395,795	5,257,919
Office and other expenses:				
Technical consultants	79,496	157,616	237,112	695,249
Technical consultants - pass-through	211,284		211,284	96,775
Office supplies	42,964	3,801	46,765	63,355
Insurance, audit, legal fees	62,027		62,027	56,918
Library acquisition and dues	31,681	4,285	35,966	35,469
Printing and graphics supplies	48,777		48,777	37,136
Postage expense	18,329	2,590	20,919	37,945
Travel expense	26,575	18,018	44,593	43,300
Telephone expense	30,119		30,119	31,593
Building usage	175,822	9,135	184,957	188,180
Building maintenance	169,899	21,345	191,244	177,315
Other operating expenses	36,358		36,358	49,422
Unemployment expense			-	582
Software and equipment maintenance	104,896	30,887	135,783	171,860
Capital outlay	197,564	10,256	207,820	98,885
<b>Total Expenditures</b>	<b>4,149,345</b>	<b>2,740,174</b>	<b>6,889,519</b>	<b>7,041,903</b>
Excess (Deficit) Revenues Over Expenditures	(1,137,403)	1,307,416	170,013	255,883
Indirect Expense Allocation	1,307,416	(1,307,416)		
Fund Balance - beginning of year	3,451,422	-0-	3,451,422	3,195,539
<b>Fund Balance - end of year</b>	<b>\$ 3,621,435</b>	<b>\$ -0-</b>	<b>\$ 3,621,435</b>	<b>\$ 3,451,422</b>

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  
in Fund Balance - Budget and Actual - All Governmental Fund Types  
For the Year Ended December 31, 2013

	Budget	Actual	Variance Favorable (Unfavorable)
Revenues			
Contributions from counties	\$ 2,370,245	\$ 2,370,245	\$
Grant revenues	4,882,457	4,392,530	(489,927)
Pass-through grants		211,284	211,284
Interest on invested funds		7,619	7,619
Other income		6,336	6,336
Rental income	71,518	71,518	
Total Revenues	<u>7,324,220</u>	<u>7,059,532</u>	<u>(264,688)</u>
Expenditures			
Salaries and fringe benefits	5,798,780	5,395,795	402,985
Office and other expenses:			
Technical consultants	319,680	237,112	82,568
Technical consultants - pass-through		211,284	(211,284)
Office supplies	60,000	46,765	13,235
Insurance, audit, legal fees	124,500	62,027	62,473
Library acquisition and dues	41,500	35,966	5,534
Printing and graphics supplies	55,000	48,777	6,223
Postage expense	30,000	20,919	9,081
Travel expense	36,500	44,593	(8,093)
Telephone expense	30,000	30,119	(119)
Building usage	172,260	165,635	6,625
Building maintenance	160,000	191,244	(31,244)
Other operating expenses	30,000	36,358	(6,358)
Unemployment compensation expense	6,000		6,000
Software and equipment maintenance	161,500	135,783	25,717
Capital outlay	283,500	207,820	75,680
Rent expense	15,000	19,322	(4,322)
Total Expenditures	<u>7,324,220</u>	<u>6,889,519</u>	<u>434,701</u>
Excess Revenues Over Expenditures	<u>\$ -0-</u>	<u>170,013</u>	<u>\$ 170,013</u>
Fund Balance - beginning of year		3,451,422	
Fund Balance - end of year		<u>\$ 3,621,435</u>	

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, 2013

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, 2013

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

Budget

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, 2013 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.

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, 2013

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.

	2013	2012
Land	\$ 335,300	\$ 335,300
Land improvements	213,655	213,655
Building and improvements	3,287,879	3,287,879
Office furniture	270,154	274,938
Computers and related equipment	296,640	297,309
Office equipment	394,640	367,896
Automobiles	176,511	172,976
Field equipment	77,662	75,292
	<u>5,052,441</u>	<u>5,025,245</u>
Less: Depreciation	<u>(2,137,225)</u>	<u>(1,971,590)</u>
Net Book Value	<u>\$ 2,915,216</u>	<u>\$ 3,053,655</u>

Note 3 – Employee Retirement Plan

All eligible Southeastern Wisconsin Regional Planning Commission employees participate in the Wisconsin Retirement System, a cost-sharing multiple-employer, defined benefit, public employee retirement system (PERS). The payroll for employees covered by the system for the year ended December 31, 2013 was \$3,729,782, the employer's total payroll was \$3,894,422.

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 6.65% of their salary (7.00% for Executives and Elected Officials, 6.65% for Protective Occupations with Social Security, and 6.65% for Protective Occupations without Social Security), to the plan. Employers may not make these contributions to the plan on behalf of employees. Total contributions for the years ending December 31, 2013 and 2012 were \$248,040 and \$208,914, 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 years 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 comprised of the following:

Cash on hand and on deposit CDs	\$ 1,136,030
Temporary cash investments	<u>3,425,706</u>
	<u>\$ 4,561,736</u>

The temporary cash investments are invested in the Wisconsin Investment Pool. The pool was paying 0.09% as of December 31, 2013.

Note 5 – Cognizant Agency

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:

	<u>2013</u>	<u>2012</u>
Equipment replacement	\$ 374,000	\$ 334,000
Errors and Omissions Insurance	400,000	350,000
Building Improvement & Maintenance	898,422	822,539
Program Development Fund	829,000	739,000
	<u>\$ 2,501,422</u>	<u>\$ 2,245,539</u>

Note 7 – 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 8 - Subsequent Events

Management of Southeastern Wisconsin Regional Planning Commission has evaluated all subsequent events through May 13, 2014, 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](http://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

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- 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. Montclair 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

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- 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



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- 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\*

MEMORANDUM REPORTS—continued

- 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

MEMORANDUM REPORTS—continued

- 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

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- 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 Genesee 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 Quas 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

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- 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

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- 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. 204 - Development of a Framework for a Watershed-Based Municipal Stormwater Permit for the Menomonee River Watershed, January 2013
- 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
- No. 207 - Public Transit–Human Services Transportation Coordination Plan for Kenosha County: 2012, February 2013
- No. 208 - Public Transit–Human Services Transportation Coordination Plan for Milwaukee County: 2012, February 2013
- No. 209 - Public Transit–Human Services Transportation Coordination Plan for Ozaukee County: 2012, February 2013
- No. 210 - Public Transit–Human Services Transportation Coordination Plan for Racine County: 2012, February 2013

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No. 211 -Public Transit–Human Services Transportation Coordination Plan for Walworth County: 2012, February 2013

No. 212 -Public Transit–Human Services Transportation Coordination Plan for Washington County: 2012, February 2013

No. 213 -Public Transit–Human Services Transportation Coordination Plan for Waukesha County: 2012, February 2013

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 Germantown	Village of Menomonee Falls
City of Wauwatosa	Village of Sturtevant	Village of Jackson	Village of Mukwonago
City of West Allis	Village of Union Grove	Village of Kewaskum	Village of Pewaukee
Village of Brown Deer	Village of Waterford	Village of Slinger	Village of Sussex
Village of Hales Corners	Town of Caledonia		
Village of West Milwaukee	Town of Mt. Pleasant		
	Town of Yorkville		

## LAKE USE REPORTS-FOX RIVER WATERSHED

### Kenosha County

No. FX-40, Benedict Lake  
No. FX-12, Camp Lake  
No. FX-27, Center Lake  
No. FX-35, Cross Lake  
No. FX-45, Dyer Lake\*  
No. FX-7, Elizabeth Lake

No. FX-34, Lilly Lake\*  
No. FX-17, Marie Lake\*  
No. FX-13, Powers Lake\*  
No. FX-11, Silver Lake\*  
No. FX-45, Voltz Lake

### Racine County

No. FX-25, Bohner Lake  
No. FX-15, Browns Lake  
No. FX-9, Eagle Lake  
No. FX-42, Echo Lake\*  
No. FX-32, Kee Nong Go-Mong Lake

No. FX-29, Long Lake\*  
No. FX-6, Waterford-Tichigan Lakes\*  
No. FX-26, Waubeesee Lake  
No. FX-5, Wind Lake\*

### Walworth County

No. FX-41, Army Lake  
No. FX-40, Benedict Lake  
No. FX-7, Beulah Lake  
No. FX-31, Booth Lake  
No. FX-4, Como Lake\*  
No. FX-1, Lake Geneva  
No. FX-Lauderdale Lakes\*  
(17, Green Lake,  
20, Middle Lake,  
18, Mill Lake)

No. FX-39, Lulu Lake  
No. FX-21, North Lake  
No. FX-37, Pell Lake  
No. FX-43, Peters Lake\*  
No. FX-25, Pleasant Lake  
No. FX-24, Potters Lake\*  
No. FX-38, Silver Lake  
No. FX-30, Wandawega Lake

### Waukesha County

No. FX-3, Big Muskego Lake\*  
No. FX-23, Denoon Lake  
No. FX-19, Eagle Spring Lake\*  
No. FX-10, Little Muskego Lake\*

No. FX-14, Lower Phantom Lake  
No. FX-2, Pewaukee Lake\*  
No. FX-34, Spring Lake  
No. FX-33, Upper Phantom Lake

## LAKE USE REPORTS-MILWAUKEE RIVER WATERSHED

### Fond du Lac County

No. ML-2, Long Lake\*  
No. ML-9, Auburn Lake  
No. ML-21, Forest Lake  
No. ML-12, Mauthe Lake\*  
No. ML-18, Mud Lake\*  
No. ML-5, Kettle Moraine Lake\*

### Ozaukee County

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

### Sheboygan County

No. ML-6, Random Lake\*  
No. ML-10, Crooked Lake\*  
No. ML-7, Lake Ellen\*

### Washington County

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



## TECHNICAL RECORDS

### Volume 1-No. 1, October-November 1963\*

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

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

Arterial Network and Traffic Analysis Zones  
by Richard B. Sheridan, Chief Transportation Planner  
Conducting the Household Postal Questionnaire Survey  
by Wade G. Fox, Cartography and Design Supervisor  
Conducting the Home Interview Survey  
by Sheldon W. Sullivan, Administrative Officer  
Aerial Photographs and Their Use in the Land Use Inventory  
by 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. Kummel, P.E., Transportation Planning Engineer  
A Backward Glance: The Man-Made Ice Age  
by Richard E. Rehberg, Editor

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